

S T A T E   O F   M I C H I G A N  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of )  
**DTE ELECTRIC COMPANY** for authority to increase )  
its rates, amend its rate schedules and rules governing ) Case No. U-20561  
the distribution and supply of electric energy, and )  
for miscellaneous accounting authority. )  
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At the May 8, 2020 meeting of the Michigan Public Service Commission in Lansing,  
Michigan.

PRESENT: Hon. Sally A. Talberg, Chairman  
Hon. Daniel C. Scripps, Commissioner  
Hon. Tremaine L. Phillips, Commissioner

**ORDER**

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## I. HISTORY OF PROCEEDINGS

On July 8, 2019, DTE Electric Company (DTE Electric) filed an application requesting authority to increase its retail rates for the generation and distribution of electricity by \$351 million, effective as early as May 8, 2020.<sup>1</sup> DTE Electric also requested other forms of regulatory relief including miscellaneous accounting authority. The company is currently providing service pursuant to rates established by the May 2, 2019 order in Case No. U-20162 (May 2 order), and pursuant to various special contracts.

According to DTE Electric, the rate increase sought in this proceeding is based on the company's projections for relevant items of investment, expense, and revenue for a test year covering the 12-month period from May 1, 2020, through April 30, 2021. DTE Electric explained that the starting point for determining its revenue deficiency was the data from the year that ended on December 31, 2018. According to the company, this historical data was then normalized and adjusted for known and measurable changes to arrive at the company's projected test year.

In its application, the company stated that the rate increase was necessary to recover capital costs associated with additions to its generation and distribution system, capital structure cost changes, and increased operations and maintenance (O&M) expenditures due to inflation. The company also seeks tariff changes and certain billing rule waivers. DTE Electric proposed a return on equity (ROE) of 10.50% with an overall rate of return of 5.73% after-tax, which equates to 7.15% pre-tax. The utility explained that it was relying upon a permanent capital structure of approximately 50% equity and 50% long-term debt. DTE Electric's projected rate base for the test year in its initial filing was approximately \$18.3 billion.

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<sup>1</sup> In its reply brief and exceptions, DTE Electric supported a revised revenue deficiency of \$343.2 million, and supported a rate effective date seven days from the date of this order.

On July 31, 2019, Administrative Law Judge Sharon L. Feldman (ALJ) conducted a prehearing conference. The ALJ granted petitions to intervene filed by the Michigan Cable Telecommunications Association; The Kroger Co. (Kroger); Michigan Department of Attorney General (Attorney General); the Association of Businesses Advocating Tariff Equity (ABATE); Michigan Environmental Council (MEC), Natural Resources Defense Council, Sierra Club, and Citizens Utility Board (collectively, the MEC Coalition); Great Lakes Renewable Energy Association (GLREA); Residential Customer Group (RCG); Environmental Law and Policy Center (ELPC), Ecology Center, Solar Energy Industries Association, and Vote Solar (collectively, the ELPC Group); Local 223, Utility Workers Union of America, AFL-CIO (UWUA Local 223); Energy Michigan, and the Foundry Association of Michigan (jointly, Energy Michigan); Soulardarity; Central Transport, LLC; Central Transport Inc.; Crown Enterprises, Inc.; Detroit International Bridge Company; Universal Truckload Services, Inc.; and Wal-Mart Inc. (Walmart). The Commission Staff (Staff) also participated. A schedule for the proceeding was established by the ALJ in accordance with the 10-month rate case deadline required by MCL 460.6a(5).

On September 23, 2019, the ALJ adopted a protective order. Evidentiary hearings were held on December 13 and 16-20, 2019, where 22 witnesses appeared for cross-examination and the testimony of a further 46 witnesses was bound into the record. The ALJ also ruled on various motions.

The ALJ issued a Proposal for Decision (PFD) on March 5, 2020. On March 26, 2020, ABATE, DTE Electric, the Staff, the Attorney General, Kroger, RCG, GLREA, the MEC Coalition, the ELPC Group, Soulardarity, UWUA, and Energy Michigan filed exceptions. Replies

to the exceptions were filed by DTE Electric, the Staff, the Attorney General, the MEC Coalition, ABATE, the ELP Group, Soulardarity, RCG, and GLREA on April 7, 2020.

On April 17, 2020, ABATE filed a Motion to Strike or File Surrebuttal, addressing aspects of the Staff's replies to exceptions. On April 23, 2020, ABATE filed a letter directing the motion to the Commission rather than the ALJ. On April 29, 2020, the Staff and ABATE filed a Stipulation to Strike and Withdrawal (Stipulation). The Stipulation indicates that the Staff strikes Section II.A.2. of its replies to exceptions, and ABATE withdraws its Motion to Strike or File Surrebuttal. The Commission has not considered Section II.A.2. of the Staff's replies to exceptions and approves ABATE's request to withdraw the motion.

The record consists of 4,017 pages of transcript, with testimony from 68 witnesses and 403 exhibits received into evidence. The Commission's decisions herein are based upon the record, which closed on December 20, 2019.<sup>2</sup>

## II. LEGAL STANDARDS

DTE Electric argued that it must prevail on any issue for which it presented substantial evidence in support of its claim, and that substantial evidence, while requiring more than a mere scintilla of evidence, is a lighter standard of proof than preponderance of the evidence. DTE

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<sup>2</sup> On March 10, 2020, Governor Gretchen Whitmer, in response to the outbreak of novel coronavirus (COVID-19), issued Executive Order (EO) 2020-4 declaring a state of emergency across the state of Michigan and, on March 24, 2020, issued EO 2020-21 to temporarily suspend all activities within the state that are not required to sustain or protect life. While the impacts of COVID-19 will likely have a material effect on DTE Electric's operations and financial outlook, and the Commission has taken steps in response to COVID-19 in Case No. U-20757, its impacts are outside the scope of this proceeding.

Electric's initial brief, pp. 8-9. The Attorney General countered that the utility maintains the burden of proof throughout a rate case, and that, in any administrative case, the party seeking relief must prove its claims by a preponderance of the evidence. The Attorney General further argued that the Commission may reject a claim even where countervailing evidence has not been presented. Attorney General's reply brief, pp. 4-6.

The ALJ began her analysis of the arguments with a lengthy quote from the January 31, 2017 order in Case No. U-18014 (January 31 order), pp. 5-8, wherein the Commission thoroughly addressed this issue, and found that the "fact that the company has presented 'substantial evidence' (*i.e.*, 'more than a mere scintilla') on a particular proposal does not make the reasonableness and prudence of that proposal a forgone conclusion, as DTE Electric would have it, whether or not any other parties weigh in." January 31 order, p. 8. The ALJ found that, consistent with the law and precedent, the preponderance of the evidence standard is applied in rate cases. PFD, p. 63.

The ALJ next examined DTE Electric's argument that the Commission has an obligation to facilitate the utility's financial health for the benefit of customers and shareholders – an assertion with which the Attorney General took issue. The ALJ found the proposition to be incorrect to the extent that it is meant to assert the right to a fair return rather than the right to be given the opportunity to earn a fair return. PFD, pp. 67-68.

In its exceptions, DTE Electric states, "The Company has never disputed that the preponderance of evidence standard applies at the hearing stage before an agency such as the Commission. . . . [T]he APA [Administrative Procedures Act] empowers the Commission to exercise all the power which it would have if it had presided at the hearing for cross-examination." DTE Electric's exceptions, pp. 2-3.

In reply, the Attorney General and the MEC Coalition point out that the Commission unequivocally rejected DTE Electric's argument in Case No. U-18014, and argue that DTE Electric attempted to put forward the appellate standard of review, which is not relevant at this stage of the proceeding. Attorney General's replies to exceptions, p. 4; MEC Coalition's replies to exceptions, pp. 2-3. The Attorney General contends that the company is being disingenuous and misleading.

The Commission provided an exhaustive examination of this issue in Case No. U-18014, and sees no reason to deviate from its previous findings. *See*, January 31 order, pp. 5-8. Like all rate cases, the Commission's order herein represents a balance between customer and shareholder interests in the ratemaking process, and ensures that the utility has the opportunity to earn a reasonable return on its investments. *See, Fed Power Comm v Hope Natural Gas Co*, 320 US 591, 602; 64 S Ct 281; 88 L Ed 333 (1933); *Fed Power Comm v Natural Gas Pipeline Co of America*, 315 US 575, 585-586; 62 S Ct 736; 86 L Ed 1037 (1942); *Michigan Bell Tel Co v Pub Serv Comm*, 332 Mich 7, 38; 50 NW2d 826 (1952).

### III. TEST YEAR

In developing its rates for this proceeding, DTE Electric relied on a projected test year from May 1, 2020, through April 30, 2021, explaining that, in determining test year amounts, it began with the 2018 historical year, adjusted for known and measurable changes. DTE Electric's initial brief, p. 12. RCG, ABATE, the Attorney General, Soulardarity, and Walmart objected to the use of a test year that begins 16 months after the end of the historical year. While noting that MCL 460.6a(1) explicitly allows the utility to project costs for a "future consecutive 12-month period," RCG argued that utilities should be required to rely solely on a historical test year with adjustments for known changes. RCG's initial brief, p. 3. ABATE pointed out that revenue

deficiency projections are driven by projected costs not yet incurred, and that DTE Electric has earned a return in excess of the authorized ROE over most of the last five years. ABATE called for the Commission to initiate a generic proceeding to address this test year issue. ABATE's initial brief, pp. 8-9. The Attorney General noted that this case actually requires 28 months of projection (January 2019 to April 2021), not just 12. Attorney General's initial brief, pp. 24-25. Soulardarity argued that the length of the projected period particularly harms low-income customers through the associated and inevitable inaccuracies that arise. Soulardarity's reply brief, p. 16. Walmart argued that the length of the projected period should be considered when setting the ROE. Walmart's initial brief, p. 2.

The ALJ noted that the Commission rejected the identical argument made by RCG in the May 2 order, p. 4. Based thereon, the ALJ found that the company's projected test year complies with the requirements of MCL 460.6a(1). PFD, p. 75.

Turning to ABATE's request for a generic proceeding, the ALJ found merit in the proposal, based on the fact that, in the instant case:

DTE has departed from the "known and measurable" standard it purports to adopt, has frequently failed to provide supporting evidence for its projections, has failed to undertake certain analyses called for by the Commission, and has attempted to provide additional support for disputed cost elements in its rebuttal filing.

Additionally, DTE views its established rates, including projected rate base items for specific capital projects, as a budget within which it is free to "reprioritize" in part to protect its earnings level.

PFD, pp. 75-76. The ALJ noted that DTE Electric's total projected capital expenditures plus unaudited 2018 capital expenditures come to about \$6.3 billion, which is approximately one-third of total projected rate base; and include 151 non-nuclear generation capital projects (excluding projects under \$1 million), 143 distribution projects, and 138 information technology (IT) projects (excluding projects under \$250,000) – a total of 432 projects just in those three categories. PFD,

p. 76. The ALJ further noted that, in order to comply with the statutory deadline contained in MCL 460.6a(5), the parties to the case have only 120 days to review this massive application. The ALJ found that the utility bears the burden of establishing the reasonableness of its projections, and opined that a generic proceeding to explore test year issues may provide the Commission with an opportunity to articulate filing requirements regarding projected test year funding. However, she found that the timing of such a generic proceeding appeared to undercut its usefulness, and that it was unclear what such a proceeding could accomplish. The ALJ concluded by finding that the Commission “has broad authority to investigate utility costs and management decisions outside the context of a rate case.” PFD, p. 80.

In exceptions, RCG contends that the ALJ failed to understand its arguments. RCG maintains that the 12 consecutive months used for the projected test year must commence “with the date the utility filed its rate case, and not some longer timeframe disconnected from the date of the rate case filing.” RCG’s exceptions, p. 9. RCG notes that the test year herein extends 22 months after the filing date and 28 months after the end of the historical year, and argues that this violates the statutory mandate of MCL 460.6a(1). RCG asserts that its argument is supported by the fact that rate cases have a ten-month deadline with a two-month filing moratorium. MCL 460.6a(5), (6). RCG contends that test years which extend beyond 12 months from the filing date “cannot be verified by either audit or reason.” *Id.*, p. 12. RCG argues these attenuated projections unduly exaggerate the purported need for rate relief. 9 Tr 2813. RCG asserts that this is demonstrated by the fact that the projected test year results in a requested rate increase of about \$350 million, but the revenue deficiency based on the historical 2018 test year is \$111.5 million. RCG’s exceptions, pp. 14-16.

In its exceptions, ABATE contends that the ALJ should have provided more direction. ABATE emphasizes the importance of carefully scrutinizing the evidence presented in support of the projections. ABATE asserts that DTE Electric consistently earns returns in excess of its authorized ROE, and attributes this in some measure to the projected test year, pointing out, like RCG, that there is a \$239 million difference between the proposed revenue requirement based on the projected test year and the revenue requirement resulting from an historical test year. ABATE contends that, over the course of the four most recent rate cases, this difference has amounted to more than \$1 billion. “ABATE recommends that the Commission initiate a dedicated proceeding for the purpose of reassessing the merits of continuing to allow utilities to use projected test years as the basis for seeking rate increases as a matter of course.” ABATE’s exceptions, p. 11.

ABATE suggests that the dedicated proceeding be used to study ways to reduce the number of projections. ABATE notes that the Commission is not bound by any particular ratemaking method and has broad powers to initiate workgroups, comment proceedings, and contested cases. ABATE further contends that DTE Electric’s adjustments to its historical test year are falling outside the known and measurable standard, have become increasingly speculative, and also less likely to actually be spent as planned, with a correspondingly adverse impact on rates. 7 Tr 1645. ABATE provides a list of issues which could be explored in a dedicated proceeding. ABATE’s exceptions, p. 17.

In reply, DTE Electric argues that the ALJ properly rejected ABATE’s and RCG’s test year proposals and that she appropriately found the company’s proposed test year to be consistent with the statute. DTE Electric contends that the plain language of the statute must be applied, and that, in any case, RCG’s proposal would create a mismatch between the period on which rates are based and the period in which the new rates would be implemented. DTE Electric argues that it has

supplied an extensive record on which to base decisions regarding the strength of its projections. DTE Electric asserts that a generic proceeding would be a waste of time and resources, since the Commission must apply the Legislature's chosen language. *See*, DTE Electric's replies to exceptions, pp. 8-11.

In its reply, GLREA asserts that it was surprised to find that DTE Electric's exceptions failed to mention the fact that the company has, according to press reports, suspended all non-critical infrastructure and maintenance work as a result of COVID-19. GLREA notes that DTE Electric's proposed revenue requirement is based on projections of expenditures for just such work. GLREA urges the Commission to "consider this change in circumstances which further renders as unreliable DTE's projections of its investments and costs." GLREA's replies to exceptions, p. 1.

In its reply, RCG contends that the test year must start no later than the filing date, and argues that DTE Electric will not actually be incurring the amounts associated with its projected investments. RCG urges the Commission to resolve this issue of statutory interpretation.

In its reply, Soulardarity indicates its support for ABATE's proposal for a separate proceeding on the use of projected test years, which, it argues, disproportionately benefit the utility by introducing rate increases sooner than would be the case using an historical year.

The Commission again finds it necessary to highlight the statutory language. MCL 460.6a(1) provides that "[a] utility may use projected costs and revenues for a future consecutive 12-month period in developing its requested rates and charges." The statute contains no limitation on the future consecutive 12-month period, no requirement to use an historical test year, and no information or limitation regarding the relationship between the date of the application and the test year. The test year may be in the future, and the 12 months must be consecutive; those are the requirements of the statute. This was expressed by the Commission in the May 2 order as well;

however, none of the parties attempted to grapple with it in this case. May 2 order, p. 4. The burden is on the utility to prove the accuracy of each and every test year projection. The statutory language is clear, and, unless its clear meaning leads to an absurdity, the Commission is bound by its dictates. *Dewan v Khoury*, 477 Mich 888, 890; 722 NW2d 215 (2006) (finding that “departure from the literal construction of a statute is justified when such construction would produce an absurd and unjust result and would be clearly inconsistent with the purposes and policies of the act in question”).

The Commission is not persuaded to open a dedicated proceeding, but does favor directing the parties to the upcoming update of the rate case filing requirements to consider some of the issues raised by ABATE and RCG, including whether certain projected costs or investments should be excluded from a projected test year; the minimum evidentiary criteria required for a utility to demonstrate a commitment to incur a projected expense; how spending classifications from a previous rate case have changed between rate cases; and the maximum length of time between the end of an historical test year and the beginning of a projected test year that is appropriate. *See*, May 2 order, p. 20. The Commission recognizes that these may become legal issues in any given rate case. But, to the extent that stakeholders can agree on fundamental or minimum filing requirements, such a consensus will be useful to all concerned. Information regarding the update of the rate case filing requirements has been provided to all parties to Case No. U-18238, as well as to all participants in the last collaborative on this topic and other stakeholders. *See*, the July 31, 2017 order in Case No. U-18238 (July 31 order), p. 17. This process is expected to begin by inviting input from interested parties, after which the Staff will develop a proposal, take comments, and convene a collaborative. The Commission will take action thereafter to update the filing requirements.

The Commission recognizes the parties' arguments regarding the level of detail and certainty needed to support projected test year expenses. The Commission has previously laid out its standards for granting cost recovery using projected test years. As the Commission stated in the first rate case decided after the passage of 2008 PA 286:

For future guidance, the Commission's expectation is that the parties will fully document the basis for their test year projections by offering into evidence detailed supporting explanations and underlying assumptions rooted in expected business, financial, and economic circumstances. Rate applications may not rely on undocumented estimates of future ratemaking expenses and revenue criteria. When necessary, parties should provide competing projections, with a similar basis of support. The record thus created should lend itself to a comparative review of the reasonableness and prudence of the projections. Historical data may play a role, but ordinarily will not be the controlling factor except in circumstances that clearly demonstrate that it is a more fair and reasonable reflection of the utility's cost of service, relative to projected data.

November 2, 2009 order in Case No. U-15645, p. 9. *See also*, October 4, 2019 order in Case No. U-20322, pp. 10-11; and May 2 order, p. 4. These expectations continue to stand, and therefore the Commission has made numerous adjustments to DTE Electric's projected expenses and capital investments on this basis in the instant proceeding.

#### **IV. RATE BASE**

A utility's rate base consists of the capital invested in used and useful utility plant, plus the utility's working capital requirements, less accumulated depreciation. In its application, DTE Electric projected a total electric rate base of approximately \$18.25 billion, which the company revised to approximately \$18.17 billion in its initial brief. 9 Tr 3414; Exhibits A-11 and A-12, Schedule B1 (line 15, column (d)); DTE Electric's initial brief, p. 14, Attachment A, p. 1 (line 1, column (d)). The Staff calculated a rate base of approximately \$18.13 billion. Staff's reply brief, Appendix A and B. The Attorney General suggested an approximate \$420.8 million reduction to rate base. Attorney General's initial brief, pp. 89-90; Exhibit AG-1.11. ABATE recommended an

approximate \$105 million reduction. ABATE's initial brief, p. 20. The MEC Coalition, RCG, the ELPC Group, and Soulardarity also recommended various adjustments and/or expressed concerns relative to projected capital spending. The ALJ recommended a total rate base of \$17.10 billion. PFD, p. 255, Appendix A and B. DTE Electric excepts to the ALJ's recommendation, maintaining its rate base of approximately \$18.17 billion. DTE Electric's exceptions, p. 9. Further details are discussed below.

#### A. Net Plant

##### 1. Contingency

DTE Electric initially included approximately \$17.7 million in costs related to contingency for its Blue Water Energy Center and Headquarters Energy Center. 9 Tr 2970; Exhibit AG-1.2. In its initial brief, however, the company removed such costs from this case. DTE Electric's initial brief, pp. 1, 14. The ALJ found no dispute that the projected contingency expenses should be removed. PFD, p. 82. No exceptions were filed. With the issue now moot, and the expenses removed, the Commission finds no further discussion necessary.

##### 2. Capitalized Incentive Compensation Costs

DTE Electric included capitalized costs relative to short-term and long-term incentive compensation in its rate base projections (in addition to costs for incentive compensation under O&M, discussed later in this order). Proposing consistency with prior disallowance decisions made by the Commission on the issue of incentive compensation, the Attorney General recommended that \$44.4 million of the company's capitalized incentive compensation costs associated with financial measures (\$25.2 million for short-term compensation and \$19.2 million for long-term compensation) for 2018 through the end of projected test year be removed from rate base in this case. 9 Tr 3007, 3072-3073; Exhibits AG-1.11 and AG-1.40; Attorney General's

initial brief, pp. 58-61. The Attorney General further recommended that the Commission direct the company to identify, in future rate cases, the amount of capitalized incentive compensation included in projected rate base for the projected periods in the same detail as set forth in this case and for the company to affirm in filed testimony that incentive compensation previously disallowed by the Commission has been removed from historical rate base. 9 Tr 3073; Attorney General's initial brief, p. 59; 5 Tr 938. DTE Electric argued the Attorney General's proposal should be rejected but nevertheless asserted that, if adopted, such a change in ratemaking treatment should only be on a prospective basis, after rates in this case become effective, to avoid a significant write-off of related costs previously incurred and approved. 4 Tr 504-505; DTE Electric's reply brief, p. 88.

Finding no merit in the company's claim that it was entitled to treat incentive compensation for financial measures as a recoverable capital cost, the ALJ recommended that the Attorney General's proposed adjustment be adopted. PFD, p. 83. The ALJ recalled the Staff's catalogue of cases in which the Commission disallowed incentive compensation expenses associated with financial measures and stated that DTE Electric provided nothing to show that the Commission affirmatively approved this capitalization method as a way for the company to recover disallowed incentive compensation expenses. *Id.*, Staff's initial brief, pp. 75-76. Considering the information in Exhibit AG-1.40, among other evidence, the ALJ further recommended that the Commission:

direct DTE to immediately provide the Commission with a report in this docket identifying the amount of incentive compensation attributable to financial measures DTE has included in rate base at least over the last five years, and direct DTE to clearly exclude such amounts from rate base in its next rate application. The Commission may also want to initiate an investigation to determine what faulty managerial or other decision-making process led DTE to flagrantly ignore the Commission's numerous decisions on this expense category. Third, the Commission should also insist that DTE explain the apparent double-recovery of allowed incentive compensation costs through its capitalization of expenses funded through O&M in rates.

PFD, p. 85; 5 Tr 938; Exhibit A-21, Schedule K8.

DTE Electric disagrees with the ALJ's recommendations. The company reiterates that incentive compensation is a primary part of its employees' overall compensation and, as such, has historically been included in plant as well as in O&M, the former of which has not been previously disallowed by the Commission. DTE Electric maintains that the Attorney General's proposal "would be a significant departure from past ratemaking treatment" and would "result in a plant balance that does not reflect the full cost incurred by the Company." DTE Electric's exceptions, p. 128. The company recaps its assertion about the prospective nature of such a change, if applied, otherwise the consequence of significant write-offs. DTE Electric also asserts that the ALJ's recommendation for the Commission to direct the company to exclude prior, identified amounts from rate base in its next rate application "must be rejected as a matter of law because it constitutes prohibited retroactive ratemaking pursuant to the Michigan Supreme Court decision, *Michigan Bell Tel Co v Pub Serv Comm*, 315 Mich 533, 24 NW2d 200 (1946)." DTE Electric's exceptions, p. 129. As to the ALJ's recommendation for the Commission to initiate an investigation on this matter, DTE Electric argues:

This recommendation must [also] be rejected as a matter of law. First, the [ALJ's] recommendation is another *sua sponte* recommendation. Second, the [ALJ's] recommendation violates DTE Electric's constitutional right to due process since it was first raised in the PFD and not raised by any party during this proceeding. Consequently, DTE Electric was precluded from presenting evidence into the evidentiary record that would address and refute the premise for the [ALJ's] recommendation.

*Id.*, pp. 129-130 (footnotes omitted). The company continues its assertion that all incentives should be recoverable as part of total market-based compensation and argues that, while the Commission has rejected some incentives in the past, these decisions have not precluded the company from requesting the same in future filings. DTE Electric further argues that it did not

flagrantly ignore the Commission’s prior decisions on this expense category, as “[t]he adjustments made in the past by the Commission lowered projected revenue increases, but did not stop the payment and proper recording of all incentives earned.” DTE Electric’s exceptions, p. 130. The company contends that the ALJ’s double-recovery recommendation must be rejected as a matter of law, for the same reasons as set forth above. DTE Electric states it “records all incentive compensation costs to the same accounts in which base salary costs are charged, in accordance with the Uniform System of Accounts” and that its incentive compensation expense “is reduced by the portion of incentive compensation capitalized,” thus no double recovery of incentive compensation costs exists. DTE Electric’s exceptions, pp. 130-131 (footnote omitted), citing Uniform System of Accounts, Electric Plant Instruction 3, Components of Construction Costs, Part A(2), and Plant Instruction 4, Overhead Costs, Part A.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General’s \$44 million adjustment appropriate for purposes of this case (taking into consideration the company’s historical test year ended December 31, 2018, the bridge period of January 1, 2019 to April 30, 2020, and the projected test year proposed by the company in this case). While the Commission has not explicitly disallowed capitalized labor costs involving incentive compensation tied to financial measures in the past, this specific issue also has not been previously raised for the Commission’s consideration. Rather, this issue was previously raised in the context of O&M expenses. And, as outlined by the Staff in its initial brief, for over a decade, the Commission has unequivocally and consistently disallowed incentive compensation costs tied to financial measures, most recently in the company’s last rate case decided just two months prior to the filing of this case. Staff’s initial brief, pp. 75-76; May 2 order, p. 93. That being said, while the Commission is profoundly concerned as to why DTE Electric would think it would be

acceptable to capitalize financial-based employee compensation incentives under rate base, the Commission finds the Attorney General's \$44 million adjustment sufficient based on this record and accepts the company's explanation in exceptions that no double recovery has occurred. DTE Electric's exceptions, pp. 130-131.

DTE Electric's retroactive ratemaking argument is without merit. These incentive compensation costs—whether they were included in rate base to set rates previously or are part of rate base in the projected test year in the instant proceeding—are not reasonable and prudent to recover from ratepayers. The fact that DTE Electric booked these incentive compensation costs to rate base without being “caught” by parties or the Commission in prior proceedings does not render them reasonable and prudent now, nor does their removal from rate base for rates being set on a going-forward basis constitute retroactive ratemaking. The Commission is changing rates on a prospective basis using costs considered reasonable and prudent. It is not going back and revising existing rates to remove unreasonable costs. There are countless instances in which costs are booked one way and later reclassified based on subsequent review and regulatory decisions to set new rates. Errors are sometimes made and corrected, often changing regulatory classifications and cost recovery going forward. Oftentimes, rate base additions that are disallowed in one rate case are later permitted for cost recovery in a subsequent rate case based on new information to support recovery. Thus, the Commission is not limited to reviewing rate base items in a single proceeding with such ratemaking and accounting treatment forever cast in stone, despite new information being presented. Even if regulation were constrained in this manner as DTE Electric implies, in this particular instance DTE Electric's inclusion of these costs in rate base appears to be in defiance of the Commission's prior orders. The Commission clearly disallowed recovery of

these costs through O&M, and the issue of whether the costs should be capitalized was never raised.

The rates the Commission sets are forward looking and can only be based on costs that are reasonable and prudent. Therefore, financial-based incentive compensation costs—regardless of when and how they were incurred, the accounting treatment utilized, or whether they were classified as capital expenses or O&M—should not be included in the rates approved in this proceeding. *See, Michigan Bell Tel Co v Pub Serv Comm*, 315 Mich 533, 535; 24 NW2d 200 (1946); *Michigan Consol Gas Co v Pub Serv Comm*, 264 Mich App 424, 429; 691 N.W.2d 29, 32 (2004). The Commission realizes that this decision will result in an approximate \$31 million write-off for the company related to historical and bridge year capital expenditure disallowances, and an additional \$13 million of projected test year capital expenditure disallowance to be expensed in the test year, and does not make this decision lightly; however, the Commission has been unwaveringly clear that “incentive compensation tied to financial performance measures has not been shown to benefit ratepayers.” May 2 order, p. 93.

### 3. Production Plant (Exhibit A-12, Schedule B5, lines 2-4; Schedule B5.1)

DTE Electric projected capital expenditures for steam, hydraulic, and other production plant (power generation) to be approximately \$993 million for the bridge period and approximately \$520 million during the test year. Exhibit A-12, Schedule B5 (lines 2-4, columns (e) and (f)); Exhibit A-12, Schedule B5.1.

#### a. River Rouge Unit 3 Past and Projected Capital Expenditures

As a result of economic analyses and the decision to retire St. Clair Unit 1, DTE Electric proposed the continued operation of River Rouge Unit 3 (Unit 3) using gas. The company stated:

Based on several factors including economic value, reliability benefits, local community impacts, and environmental benefits, the Company has decided to alter

the previously planned retirement date of River Rouge Unit 3. While the unit will cease the utilization of coal as a fuel source in May 2020, the Company will continue to operate the unit through May 2022 fueled by recycled industrial gases (blast furnace gas (BFG) and coke oven gas (COG)) and natural gas. By utilizing existing gas-firing capabilities and equipment, River Rouge Unit 3 can provide approximately 100 MW [megawatts] of capacity, while discontinuing the use of coal.

5 Tr 577-578; *see*, 5 Tr 761-762; Exhibit A-12, Schedule B6.2. The MEC Coalition objected to the proposal for several reasons, objecting to both DTE Electric's request to recover costs to continue operating the unit and request to recover capital costs previously disallowed by the Commission. 9 Tr 3743-3783; Exhibit A-12, Schedule B5.1, p. 3 (line 5); Exhibits MEC-33, MEC-104, and MEC-105; MEC Coalition's initial brief, pp. 5-37; MEC Coalition's reply brief, pp. 5-16.

For reasons discussed more in her PFD as to the company's contentions regarding economics, grid reliability, the environment, and community impact, the ALJ found that DTE Electric has not supported its plan to extend the retirement of Unit 3. And, agreeing with the MEC Coalition, she recommended that capital costs associated with extending the operation of the unit beyond May 2020 be excluded from rate base. PFD, p. 88.<sup>3</sup>

Disagreeing, DTE Electric asserts that the Commission should fully approve its capital maintenance expenditures for the unit,<sup>4</sup> stating that such expenditures include the \$10.3 million previously denied by the Commission but on appeal from (and relevant to the test period in) Case

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<sup>3</sup> Per Appendix E to the PFD, the company's Unit 3 capital expenditures were reduced by \$10.314 million. PFD, Appendix E (line 5, column (c)).

<sup>4</sup> DTE Electric argues here that the Commission should fully approve both capital and O&M expenditures; however, because O&M expenditures relative to Unit 3 are separately discussed below under adjusted net operating income, this portion only addresses relevant capital expenditure as it pertains to rate base.

No. U-20162 (Court of Appeals Docket No. 349924). DTE Electric's exceptions, pp. 11, 22. The company argues:

When all possibilities and considerations are properly weighed and evaluated, DTE Electric's interest in pursuing the overall best outcomes for the communities served by DTE Electric and its customers maintaining reliable electric service through continued operation of an existing power plant with "close call" economics are plainly aligned, and support the Company's decision.

*Id.*, p. 20.

The MEC Coalition also excepts but only to seek clarification on the rate base disallowance amount set forth in Appendix E of the PFD. MEC Coalition's exceptions, p. 2. According to the MEC Coalition, to be consistent with the findings and recommendations of the ALJ, the disallowance amount in Appendix E should be \$11,379,000 rather than \$10,314,000. The MEC Coalition states:

In this case, DTE requested inclusion in rate base of two categories of capital expenditures associated with the River Rouge plant: first, the Company sought to recover \$10.3 million of capital costs that the Commission previously disallowed in Case No. U-20162. Those capital expenditures, which are identified in Exhibits MEC-105 and -104, were incurred prior to the projected test year for this case (5/1/20-4/30/21). Second, DTE sought to recover an additional \$1.065 million of routine capital costs in the projected test year. In testimony and briefing, MEC-NRDC-SC-CUB challenged both of DTE's requests.

MEC Coalition's exceptions, pp. 2-3.

In response to the MEC Coalition, DTE Electric argues that, because the PFD is internally inconsistent, it is unknown what disallowance the ALJ intended; notwithstanding, the key point is that no disallowance is justified or should be ordered. DTE Electric's replies to exceptions, p. 12.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7. More specific to this issue, she

avers that the ALJ was correct in her analysis and recommendation.<sup>5</sup> The Attorney General argues that DTE Electric failed to establish a net economic benefit and that such a finding is a sound basis upon which to reject the company’s proposal. She further asserts that, contrary to DTE Electric’s argument, “the ALJ [spent] almost 25 pages of the PFD thoroughly examining this [Unit 3] issue and [found] that, based on the entirety of the information available, DTE’s proposal is not reasonable.” Attorney General’s replies to exceptions, p. 8 (footnote omitted); PFD, pp. 86-110.

In other words, according to the Attorney General, the ALJ clearly found that DTE Electric:

failed to support the idea that continued operation of River Rouge will have an environmental net benefit, failed to support that continued operation of River Rouge is the only way to achieve a positive community impact, failed to support that the idling of U.S. Steel will not have a material impact on the entire analysis, and overall failed to support that the continued operation of River Rouge is reasonable and prudent.

Attorney General’s replies to exceptions, pp. 8-9 (footnote omitted); PFD, pp. 86-110.

Also responding, the MEC Coalition recaps information about DTE Electric’s continued operation of the uneconomic unit since at least 2016 and the Commission’s response to this in the company’s last three rate cases, most recently in Case No. U-20162. MEC Coalition’s replies to exceptions, pp. 6-7, 9-11; MEC Coalition’s initial brief, pp. 6-11; Case Nos. U-18014 and U-18255; May 2 order, p. 12. The MEC Coalition maintains, as explained in testimony and briefing, that the company’s proposal to continue operating the unit past May 2020 is unreasonable—with company justifications without merit or too uncertain considering U.S. Steel Company’s (U.S. Steel) idling of its Michigan operations—and that there is no basis to question or revisit the previous disallowances of capital costs, which was “unearthed in discovery” and which “should

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<sup>5</sup> Here, the Attorney General asserts that the ALJ was correct in her analysis and recommendation with regard to both capital and O&M expenditures. Attorney General’s replies to exceptions, p. 7.

and will be handled by the Court of Appeals . . . .” MEC Coalition’s replies to exceptions, pp. 7-8, 11-15 (footnote omitted); MEC Coalition’s initial brief, pp. 6-37; Exhibit MEC-104, p. 1, and Exhibit MEC-105. According to the MEC Coalition, “[a]lthough DTE lobs an array of criticisms at the ALJ’s reasoning in its exceptions, the Company’s arguments lack merit and, for the most part, have already been anticipated and refuted by [them].” MEC Coalition’s replies to exceptions, p. 8. The MEC Coalition contends that U.S. Steel’s announcement undercuts the central premise of this proposal that approximately 80% of the unit’s electric generation would come from industrial gases (BFG and COG): uncertainty which DTE Electric acknowledged, and of a type for which the Commission has disallowed expenditures in the past. *Id.*, p. 16; Exhibits MEC-46 and MEC-130; 9 Tr 3770; MEC Coalition’s initial brief, pp. 14-15. The MEC Coalition argues that the ALJ’s recommendation that the Commission disallow capital associated with the continued operation of the unit and the associated O&M costs discussed further below, are fully supported by the record and should be adopted.

Before addressing the specifics of net present value revenue requirement (NPVRR) assumptions and specific contested issues related to River Rouge Unit 3, the Commission finds it necessary to revisit the history behind this issue. Questions about the economic viability of DTE Electric’s Tier II coal plants, particularly River Rouge, have been raised in countless base rate and power supply cost recovery (PSCR) proceedings before the Commission over the past five years. In the December 11, 2015 order in Case No. U-17767 (December 11 order), the Commission refrained from disallowing incremental capital expense to retrofit the Tier II plants because most of the costs to extend operation of the plants under the new environmental requirements were for sorbents and recovered through the PSCR process, not capital expense. The Commission cautioned DTE Electric, however, that sorbent costs would be examined for reasonableness going

forward because the plants were not shown to be economic above a certain cost threshold for the sorbents.

In the January 31 order, DTE Electric's subsequent rate case, the Commission found that the company failed to demonstrate that incremental capital expenses for continued operation of River Rouge Unit 3 were economical in light of Unit 2's retirement. The Commission maintained its expectation for DTE Electric to provide NPVRR calculations with up-to-date information to support requests to recover capital costs going forward. The Commission found "it was incumbent on DTE Electric to update its NPVRR to reflect the additional costs assigned to River Rouge Unit 3 along with updating other assumptions in the analysis." January 31 order, p. 17.

In its application filed months later in Case No. U-18255, DTE Electric did not present the NPVRR for continued operation of River Rouge Unit 3 and instead argued that continued operation until 2020 was in the best interest of customers due to capacity outlooks, reliability, and community impacts. The Commission determined:

Despite having this cost category rejected in the [January 31] order due to the failure to provide the NPVRR, and despite having been directed to file the NPVRR with future requests, DTE Electric chose not to include the analysis. Reasonable and prudent capital expenditures are recoverable, but not when the Commission is deprived of evidence upon which to base the determination that they are reasonable and prudent. The Commission sees no reason to deviate from the decision made in the last rate case.

April 18, 2018 order in Case No. U-18255, p. 8; *see*, June 28, 2018 order in Case No. U-18255, p. 5. DTE Electric continued to operate the River Rouge Unit 3 plant and the Commission permitted recovery of O&M costs, but not any incremental capital.

The capital costs for River Rouge Unit 3 were again disallowed in the May 2 order, DTE Electric's subsequent rate case. The Commission found:

the decision to make capital investments in Unit 3 has not been adequately supported from the beginning. The Commission denies the requested \$8.45 million in past capital expense and \$1.87 million in future capital expense.

May 2 order, p. 12. Thus, in the past four rate cases, the Commission consistently found that DTE Electric had not justified incremental capital investments in River Rouge Unit 3.

Although DTE Electric's rehearing request in Case No. U-20162 stressed that power plant retirement decisions should be made in an integrated resource plan (IRP) proceeding, DTE Electric did not seek cost recovery for the conversion of River Rouge Unit 3 in its IRP filed months later in March 2019, and instead sought to recover these costs—and the \$10.3 million in previously disallowed capital expenses—in this rate case. However, DTE Electric's NPVRR analysis did not include these \$10.3 million in historical costs that it seeks to recover going forward. When the \$10.3 million is factored in, the NPVRR shows continued operation of the plant is not cost effective. Aside from this, there are other questions about market price assumptions and results as outlined by the ALJ. Parties also raised questions about the availability and pricing of industrial waste gases given that contracts were not in place as discussed below.

The Commission finds that DTE Electric did not make a convincing case to support the capital costs associated with the gas conversion project. And, as presented, it is difficult to separate the decision on the incremental capital costs to operate the plant using gas from the historical capital costs that have been incurred to continue the plant's operation until now. When all the capital costs proposed by DTE Electric are factored in, it is not cost-effective. As discussed above, the Commission maintains its position that ratepayers should not be saddled with these historical costs when they were repeatedly not shown to be economic.

If the historical costs remain disallowed, the conversion project alone appears to be economical under most scenarios, although there are disputes surrounding some of the inputs, and

the fate of the project is not entirely clear with the idling of U.S. Steel. The Commission is not deciding the optimal retirement date here, nor has it done so previously. The Commission's decision is focused on whether costs should be permitted for recovery from ratepayers. Should DTE Electric, given its current generation portfolio and other considerations, elect to proceed with the gas conversion project, it may seek to justify the recovery of the associated capital costs in a future case. The Commission considers the decision to operate the plant until now and the associated historical capital costs as distinct from the decision to convert the plant's fuel source, recognizing that DTE Electric could have arranged alternative supplies for the years in which the economics of the plant were in question and DTE Electric did not receive full cost recovery.

Accordingly, the Commission generally agrees with the ALJ, as further discussed below and considering all factors as a whole. However, as pointed out by the MEC Coalition, the Commission finds that the disallowed amount reflected in Appendix E to the PFD should be corrected to be \$11.379 million—to include not only the prior disallowed amount of \$10.314 million (currently on appeal) but also the additional \$1.065 million in routine capital costs for the projected test year at this time.

i. Economics

DTE Electric provided an NPVRR analysis with four different capacity price assumptions (sensitivities) comparing the economics of retiring the unit in 2022 versus 2020, and asserted \$14 million in favor of continued operation through May 2022 as opposed to \$1 million in favor of retiring the unit in May 2020. 5 Tr 761-762; Exhibit A-12, Schedule B6.2. The MEC Coalition took issue with assumptions, forecasts, and omissions in the analysis. 9 Tr 3749-3774; Exhibits MEC-42, MEC-44, MEC-45, MEC-104, MEC-130. The company defended its NPVRR analysis

on rebuttal. 5 Tr 658-659, 719, 773-778, 790, 821-825, 831; DTE Electric's reply brief, pp. 20-21, 24; Exhibit A-32, Schedule W2.

Agreeing with the MEC Coalition, the ALJ concluded that DTE Electric did not perform an objective analysis, finding omissions in costs, no sound basis for the company's fuel forecast, and that its capacity price forecasts did not represent a reasonable range, noting that the company's most recent 2020 PSCR plan forecast, filed in September 2019 in Case No. U-20527, was not included in this case. PFD, pp. 99-103; 5 Tr 784-785, 788. The ALJ found the MEC Coalition's revisions to the company's NPVRR analysis appropriate and demonstrated clear ratepayer benefits associated with a 2020 retirement in all scenarios other than the cost of new entry (CONE)—CONE, however, being a scenario the ALJ did not find highly probable. The ALJ further found that the November 2018 PACE forecast is "both stale and contains an error in mixing local reliability requirements and local clearing requirements measured in units of installed capacity with an unadjusted CIL [capacity import limit] that clearly reflects the difference between local reliability requirements and local clearing requirements measured in units of unforced capacity." PFD, p. 103 (footnote omitted). The ALJ concluded that, under the revised NPVRR analysis provided by the MEC Coalition and under the 100% CONE capacity cost scenario, ratepayers would still be worse off if the company continued to operate Unit 3—worse off by \$3.7 million (\$6.54 million revised economic benefit minus \$10.3 million), not considering the possible risk and associated higher costs associated with U.S. Steel's recent announcement that it will be idling operations. PFD, pp. 103-104.

DTE Electric recalls testimony regarding the company's NPVRR analysis showing \$14 million in favor of continued operation through May 2022 versus \$1 million in favor of retiring the unit in May 2020, depending on capacity price sensitivity inputs. DTE Electric's

exceptions, p. 12; 5 Tr 761-762; Exhibit A-12, Schedule B6.2, p. 2. The company avers that the MEC Coalition's criticisms of this analysis, which the ALJ was persuaded by, were overstated and based on a flawed premise "that the exercise was designed to determine the likelihood of any particular outcome." DTE Electric's exceptions, pp. 12-13; PFD, pp. 88-104; MEC Coalition's initial brief, p. 29; 5 Tr 790. DTE Electric asserts that the ALJ did not "offer a definitive recommendation on fuel assumptions" but appears to have been persuaded by risk concerns surrounding the U.S. Steel announcement. DTE Electric's exceptions, p. 13. The company further recalls that it evaluated multiple capacity price sensitivities to record a range of uncertainty with capacity prices, from \$0 to CONE (\$88.80 per kilowatt (kW)-year), with 50% of CONE (\$44.40 per kW-year) as a middle range sensitivity, and also using the November 2018 PACE forecast, as most recently available at the time of initial filing. DTE Electric's exceptions, p. 14; 5 Tr 772-773; Exhibit A-12, Schedule B6.2. Contrary to the MEC Coalition's assertion about these sensitivities representing the high end of capacity prices, DTE Electric states that the actual prices it paid in 2017 are close to the middle range sensitivity and the November 2018 capacity price forecast, and that the price of CONE is a very real possibility in planning years (PYs) 2020/2021 and 2021/2022,<sup>6</sup> thus supporting the continued operation of Unit 3 on industrial gases. DTE Electric's exceptions, pp. 14-16; PFD, pp. 100-105, 107; 5 Tr 773-774, 816, 822-825; 9 Tr 3752; Exhibit A-32, Schedules W1 and W3.

The company further refutes the merit given to the MEC Coalition's suggestion that additional price sensitivities should have been considered, arguing its range reflected a reasonable set of

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<sup>6</sup> Along the same line, DTE Electric additionally reiterates that, without River Rouge Unit 3, Zone 7 capacity resources offered into the planning reserve auction (PRA) for PY 2019/2020 would have only been 14 MW above the local clearing requirement. DTE Electric's exceptions, pp. 15-16; 5 Tr 823.

forecasts. DTE Electric's exceptions, p. 15; PFD, p. 100; 5 Tr 774-775; 9 Tr 3752, 3762. As additional support, DTE Electric recalls that its assumptions were based on the actual Midcontinent Independent System Operator, Inc. (MISO) PRA and loss of load expectation data, in addition to information provided by the Staff, and that its NPVRR results did not weigh one result more or less likely and were just one factor it considered in its retirement analysis. DTE Electric's exceptions, pp. 16-17; 5 Tr 775, 825.

As to the November 2018 PACE forecast, the company disputes it being stale and containing an error mixing local reliability and local clearing requirements. Per DTE Electric, this forecast was, again, the most recently available at the time of filing. DTE Electric's exceptions, p. 17; 5 Tr 772-773. Further:

[DTE Electric's witness] explained that MEC Witness Letendre's claim that the PACE forecast's treatment of CIL results in an overestimation of Zone 7 capacity prices is based on a flawed premise that is inconsistent with the purpose of CIL and its utilization by MISO. According to MISO (reflected at Exhibit A-32, Schedule W2), CIL is not a generation asset and is not determined on a UCAP [unforced capacity] or ICAP [installed capacity] basis. Instead, it is simply the MW transfer ability between MISO zones (5T 825).

DTE Electric's exceptions, p. 17 (footnote omitted). The company also notes, similarly, no merit to a mix of absolute values with difference values, as the results, "whether shown as an absolute value or as a difference, do not impact the overall merit or results of the NPVRR analysis, nor does the use of differences render the analyses meaningless as MEC Witness Letendre incorrectly suggested (5T 778)." DTE Electric's exceptions, p. 17, n. 20; 9 Tr 3764. DTE Electric argues that, even considering the MEC Coalition's adjustments, which are not appropriate, "[t]he range of NPVRR outcomes supports continued operation of River Rouge Unit 3 in the near term as the most reasonable and prudent path, particularly considering the other non-economic factors such as MISO grid reliability, resource adequacy, environmental considerations, and community impacts."

DTE Electric's exceptions, p. 20. The company further argues that the ALJ's statement that ratepayers would be worse off by \$3.7 million if the plant continues to operate is inaccurate "because the \$10.3 million was in support of the operation of River Rouge Unit 3 for the period prior to operating on industrial gases and natural gas (through the period covered by Case No. U-20162) and not relevant to the Company's proposed continuing operation of that unit." DTE Electric's exceptions, p. 22.

The MEC Coalition responds that economics favor full retirement in May 2020, maintaining that DTE Electric's NPVRR analysis was flawed in multiple respects—erroneous capital and O&M cost omissions, which the company acknowledged but failed to correct, and unrealistic assumptions about the cost of fuel and capacity price—leading to skewed results in favor of the 2022 retirement date. MEC Coalition's replies to exceptions, pp. 19-28; MEC Coalition's initial brief, pp. 16-30; 5 Tr 776; PFD, p. 98. The MEC Coalition reiterates that, when corrected, the NPVRR analysis shows that customers will likely save money if the unit is retired in May 2020, savings which the MEC Coalition avers are likely greater than those presented by their witness given his use of the company's unreasonably low natural gas price assumptions and his analysis preceding the U.S. Steel announcement. MEC Coalition's replies to exceptions, pp. 19, 21-23; 9 Tr 3766-3767, 3771-3774. The MEC Coalition asserts that DTE Electric's independent support argument (captured below under environmental considerations)<sup>7</sup> makes no sense because the company made the economics of this unit a central focus of its proposal. Further, according to the

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<sup>7</sup> In exceptions, DTE Electric misquotes the ALJ as having found that "DTE has not established a net economic benefit to its proposal." DTE Electric's exceptions, p. 11; PFD, p. 109. Rather, when addressing environmental considerations, the ALJ stated, "This PFD finds DTE has not established a net *environmental* benefit to its proposal." PFD, p. 109 (emphasis added). The MEC Coalition acknowledges this error but nevertheless agrees with the company that the ALJ found that its proposal would not provide an economic benefit to customers. MEC Coalition's replies to exceptions, p. 20, n. 80; PFD, p. 103.

MEC Coalition, the ALJ did not suggest that each rationale must provide independent support; instead, the ALJ evaluated each and found all the justifications lacking. The MEC Coalition additionally argues that the company downplays the net-present-value (NPV) impact of its first error (omitted O&M costs) in its NPVRR analysis in an attempt to limit the Commission's focus to just one of the many flaws, and that this downplaying attempt should be disregarded since the multiple flaws identified when corrected show “clear benefits to ratepayers from a 2020 retirement” under realistic capacity price assumptions.” MEC Coalition’s replies to exceptions, p. 21 (footnote omitted); PFD, p. 103.

The MEC Coalition further asserts that DTE Electric’s argument about a lack of a definitive recommendation by the ALJ about fuel assumptions is obviously wrong, as the ALJ found that the company’s fuel cost assumptions were unreasonable. MEC Coalition’s replies to exceptions, pp. 23-24. With regard to capacity price assumptions, the MEC Coalition contends that the ALJ’s findings are fully supported by the record and should be adopted. The MEC Coalition argues that the company’s exceptions were refuted by them, and the arguments were thoroughly considered by the ALJ. MEC Coalition’s replies to exceptions, pp. 25, 27-28; DTE Electric’s exceptions, pp. 14-18. The MEC Coalition emphasizes that the company “did not mention the [2020] PSCR Plan forecast at all.” MEC Coalition’s replies to exceptions, p. 26 (footnote omitted); 5 Tr 771-780, 784. The MEC Coalition states that, although not used by the ALJ as the deciding factor, the November 2018 PACE forecast has already been refuted by them and addressed by the ALJ. MEC Coalition’s replies to exceptions, pp. 26-27; MEC Coalition’s initial brief, pp. 24-29; DTE Electric’s exceptions, pp. 14-15; PFD, p. 103.

The MEC Coalition asserts DTE Electric’s arguments about Zone 7 possibly jumping to CONE were already addressed as failing to consider potential resource additions. MEC

Coalition’s replies to exceptions, p. 27; DTE Electric’s exceptions, p. 15-16; MEC Coalition’s initial brief, p. 33; MEC Coalition’s reply brief, pp. 12-13; PFD, pp. 100-102. The MEC Coalition states that “even if the Commission were to approve rate recovery of projected test year costs for River Rouge 3, that would not provide any basis for revisiting the Commission’s disallowances in Case No. U-20162 and prior cases.” MEC Coalition’s replies to exceptions, p. 29. The MEC Coalition further asserts that the ALJ’s consideration of this previously disallowed amount does not undercut her ultimate conclusion that the economics on this unit favor retirement in May 2020.

*Id.*

As summarized in the May 2 order and discussed above, the Commission has addressed the economics of Unit 3 over the course of the company’s last four rate cases, most recently denying the company’s total amount of \$10.314 million in past and future capital expenses (future expenses up until retirement in 2020) based on a failure by the company to demonstrate their cost-effectiveness—in Case Nos. U-17767, U-18014, U-18255, and U-20162. PFD, pp. 86-87; May 2 order, pp. 11-12. DTE Electric subsequently changed course in Case No. U-20471, wherein it first set forth this conversion proposal for the unit. In that case, however, the Commission found that the record was not robust enough to properly analyze the proposal, anticipating a cost recovery decision on the proposal in the instant case or a future case. February 20, 2020 order in Case No. U-20471 (February 20 order), p. 39.

Against this backdrop, and considering the evidence in this case, the Commission agrees with the MEC Coalition and the ALJ and finds the company’s NPVRR analysis unpersuasive to support its proposal at this time, given the identified issues with regard to omissions, assumptions, and forecasts. On this record, the Commission rather finds the MEC Coalition’s revised NPVRR analysis persuasive that it would be more economical to retire the unit in May 2020. As discussed

above, this finding is largely due to the proposed recovery of historical capital costs that are embedded in DTE Electric's proposal and yet left out of its NPVRR calculations. The Commission also observes uncertainty around fuel arrangements and costs that could affect the economics of the project, as discussed further below.

ii. Grid Reliability

DTE Electric contended that continued operation of the unit through May 2022 is needed for capacity and to ensure grid reliability, pointing to results obtained from the Attachment Y notification it sent to MISO in 2018, specifically concern within the results regarding potential load shed requirements to firm customers if certain units, including Unit 3, were to retire. 5 Tr 623-625; Exhibit A-6, Schedule F1. The MEC Coalition challenged this concern, arguing there was no support to show any actual need to load shed during 2020 to 2022 if the unit retired in May 2020. 9 Tr 3775. On rebuttal, the company averred that the unit provides critical capacity to Zone 7 and that it has no reason to believe the conditions identified by MISO in 2018 are no longer valid. 5 Tr 656, 822-824; Exhibit A-32, Schedule W3.

Considering her findings regarding the company's economic analysis, the ALJ found that DTE Electric's grid reliability contentions did not support its continued uneconomic operation of the unit. PFD, p. 106. The ALJ called the May 2 order as "one in a series of orders faulting DTE for an erroneous economic analysis;" highlighted discussion on load shedding in the PFD for that case (Case No. U-20162); noted that the Commission's November 7, 2019 letter to MISO was written well after its decision in Case No. U-20162; and also noted the Commission's explanation in Case No. U-20154 that resources for Zone 7 "may look tighter than they really are . . ." PFD, pp. 106-107; March 7, 2019 PFD in Case No. U-20162, pp. 47-48; Exhibit A-32, Schedule W3; August 8, 2019 order in Case No. U-20154, p. 3.

DTE Electric strongly disagrees with the ALJ. The company asserts reasonableness and prudence is not solely based on economics and, in this regard, recalls the MISO Attachment Y analysis for the unit that determined, if the unit retired in 2020, firm load shed would be required during certain conditions to maintain necessary transmission grid reliability, which DTE Electric does not believe to be in the best interest of customers nor something the Commission should take lightly. DTE Electric's exceptions, pp. 18-19; 5 Tr 576-579, 625-625, 655-658. DTE Electric maintains that service reliability is paramount when considering whether and when to retire a generating unit, highlighting the current real-time need for electricity. The company contends that the MEC Coalition's criticism over the MISO Attachment Y analysis is speculative, as the MEC Coalition provided no support that the potential load shed conditions might no longer exist. DTE Electric's exceptions, p. 19; 5 Tr 656; 9 Tr 3775. DTE Electric asserts "a very real threat to customer reliability" here and that "[t]he near-term shut down of River Rouge Unit 3 is not the conservative, reasonable or prudent course of action." DTE Electric's exceptions, p. 19.

In response, the MEC Coalition argues the company's assertions about continued operation of the unit benefiting local grid reliability and resource adequacy fail because of the impact on the availability and pricing of industrial gases given U.S. Steel's announcement and, setting that aside, because there is no meaningful benefit to reliability in continuing operation. MEC Coalition's replies to exceptions, pp. 26-27, 30; MEC Coalition's initial brief, pp. 31-33. Here, the MEC Coalition further notes that, despite the company's repeated mention of the unit being expected to provide up to 100 MWs of capacity, company testimony on cross indicated otherwise—77 zonal resource credits (ZRCs) in PY 2020/2021 and 83 ZRCs in 2021/2022. MEC Coalition's replies to exceptions, p. 30, n. 139; DTE Electric's exceptions, p. 15; 5 Tr 682-683. The MEC Coalition reiterates the company's local grid reliability argument as being similarly unavailing, arguing that

the Commission should reject DTE Electric’s “overblown rhetoric” about load shed considering the Attachment Y study having been issued in March 2018, and the lack of any assessment to ascertain whether those results from two years ago are still valid. MEC Coalition’s replies to exceptions, p. 31. The MEC Coalition asserts:

The Company simply put on blinders after receiving the March 2018 study results. DTE’s failure to seek more up-to-date information on this issue is especially striking given the Company’s readiness to communicate with MISO when it was looking for information to bolster its River Rouge 3 proposal.

MEC Coalition’s replies to exceptions, p. 31 (footnote omitted); Exhibit A-32, Schedule W-2; 5 Tr 678-679. The MEC Coalition contends that, contrary to the company’s argument asserting fault, there is nothing objectionable about the ALJ’s conclusion that, considering the economics, grid reliability does not support continued uneconomic operation of the unit—a conclusion that, as acknowledged by the company, followed the reasoning set forth in Case No. U-20162. MEC Coalition’s replies to exceptions, p. 32; DTE Electric’s exceptions, pp. 18-19; PFD, p. 106; May 2 order, pp. 11-12. The MEC Coalition argues, however, that even if load shed remains a possibility, there is little reason to believe that the unit would meaningfully address such an issue considering the unit’s high random outage rate of 20% and uncertain fuel supply. MEC Coalition’s replies to exceptions, p. 32; Exhibit MEC-94.

The Commission does not agree with the MEC Coalition and the ALJ on grid reliability considerations, but does not find that this issue should override the economic analysis when making decisions about cost recovery, and finds that other steps could have been taken years ago by DTE Electric to mitigate the potential risks. There are other ways to deal with potential grid stability issues, including through demand response (DR) (versus firm load shed) and collaborative planning with transmission owners. Further, despite consistent disallowances of capital investments due to the lack of justification for Unit 3, DTE Electric continued to operate the unit

and only just recently pursued this extension of the 2020 retirement date through the fuel conversion project. DTE Electric took the risk of the cost disallowances by continuing to operate the plant, presumably in part to mitigate community and worker impacts, and the fact that the company had not arranged replacement capacity. It is not apparent that much progress has been made to proactively address these community, worker, and reliability considerations during the intervening time even with a line of consistent Commission decisions denying cost recovery for continued plant operations.

### iii. Environment

DTE Electric contended that using recycled industrial gases as a fuel source for the unit provides an environmental benefit, because doing so would prevent these gases from being flared into the atmosphere. 5 Tr 579. The MEC Coalition disagreed with the company's environmental claims, asserting a negative environmental impact if operations continue. 9 Tr 3777-3778. In rebuttal, the company reiterated prior testimony about the gases being used to generate electricity instead of being flared, and pointed to evidence in Case No. U-20471 demonstrating that operation of the unit on gases will result in significantly less air emissions than operation using coal. 5 Tr 657-658.

Considering U.S. Steel's announcement, which calls into question the amount of industrial gas DTE Electric would actually be able to burn, the ALJ found that the company had not established a net environmental benefit to its proposal to continue operating the unit beyond May 2020. PFD, p. 109; Exhibit MEC-130.

DTE Electric takes issue with this finding, asserting no relevance and therefore no merit. DTE Electric's exceptions, p. 11. The company asserts that the various considerations favoring the continued operation of the unit do not have to each independently support that operation, as

suggested by the ALJ, but rather need to be considered as a whole. DTE Electric reiterates that industrial gases are a byproduct of the coke and steel-making process and that recycling these gases as a fuel allows energy to be recaptured versus wasted into the atmosphere through flaring. The company further recaps how recycling these gases eliminates the need to burn fuel at another location and how operating the unit on these gases will significantly reduce emissions as compared to current operations using coal. *Id.*, p. 12; 5 Tr 657-658. DTE Electric also contends that U.S. Steel’s announcement has no relevance to the reasonableness and prudence of the company’s prior expenditure of \$10.3 million in necessary maintenance and capital expense (i.e., maintenance-related asset replacements) to continue to operate the unit safely and in compliance with environmental regulations in the period prior to retirement. The company further asserts that the announcement primarily affects blast furnace gas, which represents the smallest supply portion of recycled industrial gas expected to be used for the unit, and also that the ALJ “ignores that power has to come from somewhere, that it will (at least for the short-term at issue here) involve burning fossil fuels, and that the River Rouge plant currently operates and will continue to operate under EGLE [Michigan Department of Environment, Great Lakes, and Energy]-issued air permits that include emissions limits.” DTE Electric’s exceptions, p. 14.

In response, the MEC Coalition asserts the company’s argument here about speculation is meritless, noting that the ALJ thoroughly considered this argument which is “simply [a] cut-and-paste . . . from its reply brief” and, again, a reality that the company itself acknowledged. MEC Coalition’s replies to exceptions, p. 17; DTE Electric’s exceptions, p. 13 and n. 15; DTE Electric’s reply brief, p. 19; PFD, p. 100; Exhibit MEC-130. The MEC Coalition further argues that there is no basis for knowing that the U.S. Steel closure would only affect the supply of BFG. The MEC Coalition argues that, if true, the idling would still have a major impact on the proposal

considering that 30% of the unit's generation would come from such fuel, possibly resulting in 50% then coming from higher-priced natural gas, and uncertainty affecting both fuel supply availability and price after May 2020. MEC Coalition's replies to exceptions, pp. 17-18; 5 Tr 693-694; 9 Tr 3769-3770; Exhibit MEC-46. The MEC Coalition also avers that the Commission should disregard the company's statements about the power needing to come from somewhere, involving the burning of fossil fuels, and that the unit currently operates and will continue to operate within emission limits. According to the MEC Coalition:

These assertions, none of which were the focus of the parties' testimony regarding DTE's proposal, have no bearing on whether cost recovery should be awarded for River Rouge 3's continued operation. Nor do these claims eliminate the uncertainty created by the U.S Steel announcement, which, standing alone, is reason enough to disallow DTE's cost recovery request.

MEC Coalition's replies to exceptions, p. 18.

The MEC Coalition reiterates that the company's environmental benefit claims are without merit. The MEC Coalition states the "proposal would necessarily result in an emission increase vis-à-vis a May 2020 retirement" and asserts that the idling of the U.S. Steel facilities eliminates much or all of the anticipated 80% supply of industrial gases which the company states, but for being used for generation, would otherwise be flared. *Id.*, p. 34; MEC Coalition's initial brief, pp. 35-36; Exhibit MEC-46. And, even if some industrial gases were still available, the MEC Coalition recalls that the company failed to consider the local community impact of burning these gases at Unit 3 as opposed to on Zug Island. MEC Coalition's replies to exceptions, pp. 34-35; MEC Coalition's initial brief, pp. 36-37.

The Commission agrees with the MEC Coalition and the ALJ and finds that U.S. Steel's idling announcement casts doubts on the environmental benefit on which the company relies (i.e., that the industrial gases will be used for generation as opposed to being flared). Given this uncertainty,

the Commission cannot conclude, on this record, that operating the converted unit until 2022 will be beneficial for the environment.

iv. Community Impact

DTE Electric contended that continued operation would provide the River Rouge community with two additional years to prepare for the loss of local tax revenues. 5 Tr 579. The MEC Coalition asserted that local tax impacts could be addressed alternatively through a payment in lieu of taxes and that this alone does not justify continued operation. 9 Tr 3776. On rebuttal, the company argued that gifting a payment that is not authorized or required by law would be “an unfair and unauthorized burden on our customers.” 5 Tr 657.

The ALJ found that DTE Electric had not established a community impact to justify the extended uneconomic operation of the unit. PFD, p. 109. The ALJ stated:

First, there has been no showing that the Commission did not adequately consider community impacts in its earlier determination. Second, where, as here, the economics do not support the project, DTE’s own argument against a payment in lieu of taxes indicates that it would not be appropriate to continue operation of the plant to mitigate community impacts.

*Id.*, pp. 109-110.

DTE Electric again asserts no relevance to the ALJ’s findings. DTE Electric’s exceptions, p. 19. The company reiterates its disagreement with the MEC Coalition’s suggestion that it gift a payment to the city equal to the property taxes lost for retiring the unit, maintaining that company property is subject to taxation pursuant to Michigan law and that customers should not be burdened with payments not authorized by law. *Id.*, pp. 19-20; 5 Tr 657, 715; 9 Tr 3776.

In response, the MEC Coalition asserts that the company’s burden argument has already been refuted and fully addressed by the ALJ. MEC Coalition’s replies to exceptions, p. 34; MEC Coalition’s initial brief, pp. 34-35; PFD, pp. 109-110.

The Commission agrees with the ALJ. The Commission is not convinced, on this record, that an additional two years of property tax for an operating unit in the City of River Rouge outweighs the uneconomic operation of the unit for the company's ratepayers during that time.

With that being said, however, the Commission is open to revisiting this proposal again in the company's next rate case, if DTE Electric decides to nevertheless move forward (knowing that it will be shouldering cost recovery of such a decision in the interim). If this Unit 3 proposal were to be revisited though, the Commission would expect a full, robust presentation by the company in support, including an NPVRR analysis with various fuel and capacity price sensitivities and updated grid reliability analysis, as well as consideration of alternatives. The Commission also notes that the issue of the historical disallowed capital costs should be decoupled from the conversion project, as even DTE Electric recognizes that they are separate decisions. *See*, DTE Electric's exceptions, p. 22.

b. Routine Projects

DTE Electric requested expenditures for fossil (power) generation capital projects classified as routine, "to maintain safe, environmentally compliant, reliable, and efficient operations," the majority of which involve the company's Tier 1 plants. 5 Tr 589-592, 599-616; Exhibit A-12, Schedule B5.1. The Attorney General took issue with several of these projects and recommended that a total of approximately \$43.0 million be removed. 9 Tr 2986-2994; Attorney General's initial brief, pp. 72-74; Exhibit AG-1.12. Further details are discussed below.

i. Belle River Unit 1 Turbine Steam Path Replacement

DTE Electric stated that it will spend approximately \$7.2 million in 2019 to engineer and procure the Belle River Unit 1 replacement high pressure turbine (project management planning (PMP) project 13739), due to "the risk of blade failures from loose stationary and rotating blades."

5 Tr 605; Exhibit A-12, Schedule B5.1, p. 5. The Attorney General objected to the expense, asserting a lack of spending in 2018, and uncertainty with dates as to when the project will begin and end. 9 Tr 2987; Exhibit AG-1.8, p. 2. In rebuttal, DTE Electric pointed to its evidence that it asserted was either misread or ignored, as this project has been completed as scheduled and thus appropriately included in this rate case. 5 Tr 643.

The ALJ accepted the company's evidence showing that the project was completed in 2019, with the ALJ noting expenditures in 2018 and 2019. PFD, p. 114; Exhibit A-12, Schedule B5.1, pp. 4-5 (lines 1 and 52). The ALJ did, however, remark about discrepancies with project costs included in Exhibit A-12, Schedule B5.1 versus those previously presented and significantly overstated by DTE Electric in its project authorization template (PAT) forms. PFD, pp. 114-115; Exhibit AG-1.8, p. 3.

In exceptions, DTE Electric asserts that the Commission should fully approve all routine capital expenditures for fossil generation, including this project that the ALJ appropriately recommended for inclusion, and asserts that the ALJ's heavy reliance on PAT forms to support recommended disallowances based on "insignificant variances" misconstrues the documentation upon which she relies and "elevates form over substance." DTE Electric's exceptions, pp. 22-24. For this project specifically, the company claims that the Attorney General's rationale for her \$7.2 million recommended disallowance here is "unremarkable" and that the recommended disallowance should thus be disregarded. *Id.*, p. 24.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendations regarding the company's projected capital expenditures for fossil generation,

including those classified as routine.<sup>8</sup> Attorney General’s replies to exceptions, pp. 7, 9. In response to the company’s assertions that the ALJ misconstrues documentation, relies too heavily on PAT forms, and that such reliance elevates form over substance, the Attorney General argues:

DTE is hoping to get approval for unsupported projections, “ballpark placeholders,” and money that will not be spent in the relevant timeframe. Like the AG [Attorney General], the ALJ recognized that DTE failed to support its projected costs, instead presenting the parties and Commission with projected numbers in testimony that are based on unverifiable, shifting forecasts.

\* \* \*

DTE asks the parties, ALJ, and Commission to rely upon different forms and projections, often varying by millions of dollars, and then dismisses the parties’ inability to reconcile differences because “facts and circumstances change in relatively non-material ways from time to time.” Such argument does not provide proper support for requested expenditures and is neither reasonable nor prudent to rely upon.

*Id.*, pp. 10-11 (footnote omitted); DTE Electric’s exceptions, pp. 22-23; 9 Tr 2986-2994. With regard to this project and the other remaining routine projects, wherein DTE Electric chiefly reiterates prior testimony and arguments, the Attorney General argues that the onus is on the company to properly support its projects. Further, contrary to DTE Electric’s suggestion, the Attorney General avers that no party is implying that there is a standard demanding an exact match between PAT forms and exhibits submitted in this case. The Attorney General asserts that this suggestion is, rather, “a red herring to distract from the numerous and substantial variances in the Company’s projections for these projects.” Attorney General’s replies to exceptions, pp. 11-12; DTE Electric’s exceptions, pp. 24-28.

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<sup>8</sup> While the bulk of the Attorney General’s replies to exceptions from page 9 to page 12 are captured here under the first routine project at issue, the Commission acknowledges that such sweeping remarks also have applicability to other remaining routine projects and are thus also taken into consideration elsewhere where appropriate, even if not repeated word for word in other portions of the order.

Given support in the record that this project was completed as scheduled in 2019, the Commission agrees with the ALJ's ultimate recommendation that the company's 2019 expenditures for this project be approved for inclusion in this case. PFD, p. 114; 5 Tr 643; Exhibit A-12, Schedule B5.1, p. 5 (line 52).

ii. Monroe Power Plant Unit 3 Selective Catalytic Reduction Catalyst Layers DTE Electric indicated that \$3.5 million was spent in 2018, and approximately \$6.8 million was to be spent in 2019 (PMP Project 13725), regarding the replacement of selective catalytic reduction catalyst layers "to comply with air permit emissions limits for NOx [nitrogen oxides] and ammonia slip guidelines." 5 Tr 601, 607. The Attorney General noted a difference in the forecasted amount of the project for 2019 in this case versus the 2019 amount on a prior PAT form and recommended that the unsupported difference of \$346,871 be removed in this case. 9 Tr 2987-2988; Exhibit AG-1.8, p. 4. The company argued that the disallowance is unwarranted. 5 Tr 648.

The ALJ found that DTE Electric did not address the cost estimate for 2019 and thus recommended that the Attorney General's adjustment for the discrepancy be adopted. PFD, p. 116. The ALJ also noted a further discrepancy between testimony and documents supplied by the company relative to actual expenses for this project in 2018. *Id.*; 5 Tr 601; Exhibit A-12, Schedule B5.1, p. 4 (line 13); Exhibit AG-1.8, p. 4.

DTE Electric asserts this recommendation to be misplaced, again as form over substance. The company argues the Attorney General's basis "appears to ignore the need of the project, the benefit to customers, and the 96.7% of the project funding that [she] supports for this project." DTE Electric's exceptions, p. 24.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7. Further, just because she did not object to all of the company's requested funding for this project does not make it unreasonable to not grant the company's entire request. *Id.*, p. 12. According to the Attorney General, "That is an inappropriate approach to ratemaking. If DTE has supported a certain amount of a request but has failed to support another portion, then it would be unreasonable to simply grant them the unsupported remainder. Doing so would encourage the Company to set exorbitant projections for all projects." *Id.*

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General's downward \$346,871 adjustment appropriate and supported by the amount internally approved by the company's board of directors (BOD), as evidenced by the PAT form signed May 8, 2019. PFD, p. 116; Exhibit AG-1.8, p. 4. *See also*, July 31, 2017 order in Case No. U-18124, p. 28. In this instance, the Commission additionally finds the PAT form more persuasive than the testimonial evidence provided to support the company's higher projected amount considering the further discrepancy noted by the ALJ with regard to 2018 expenditures. PFD, p. 116; 5 Tr 601; Exhibit A-12, Schedule B5.1, p. 4 (line 13); Exhibit AG-1.8, p. 4.

### iii. Monroe Unit 3 Expansion Joint Replacement

DTE Electric included the following project (PMP Project 13599) for execution during the periodic outage of Monroe Unit 3:

Boiler combustion control and unit reliability require that various expansion joints be replaced for \$5.1 million. The boiler flue gas system has over 100 expansion joints on each unit and these expansion joints have a finite life requiring a continuing replacement program. These replacements are part of that continuing program.

5 Tr 607; Exhibit A-12, Schedule B5.1, p. 5 (line 66). The Attorney General again took issue with expenditure discrepancies for 2019 and recommended that the unsupported amount of \$1,060,200 be removed in this case. 9 Tr 2988; Exhibit AG-1.8, p. 5.

The ALJ found the Attorney General's recommended adjustment appropriate. The ALJ stated, "DTE did not explain the basis for the higher projection in its rate case filing when only a few weeks before, DTE's filing projected a lower cost. Note that in its discovery response in Exhibit AG-[1.]8, page 1, DTE directed the Attorney General to this documentation." PFD, pp. 116-117.

DTE Electric objects, again asserting the recommended disallowance to be misplaced. DTE Electric's exceptions, pp. 24-25; 5 Tr 645-646. The company contends, "As previously stated, the rate case exhibits include the latest forecasted expenditures and will deviate from PAT forms as new information, such as a change in estimate due to as-found conditions, is available." DTE Electric's exceptions, p. 24.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General's downward \$1,060,200 adjustment appropriate. The Commission finds no specific support for the higher amount submitted in this case, especially when factoring in that the lower project amount of \$4,060,223 (not including calculated risk) was internally approved by the company a mere eight weeks prior to the filing of the company's application in this case. Exhibit AG-1.8, p. 5.

iv. Belle River Unit 13-1 Major Overhaul

DTE Electric included \$7.5 million “for turbine combustion cans and hot gas path overhaul on Belle River 13-1 that are required based on unit running hours and the number of unit startups.” 5 Tr 615; Exhibit A-12, Schedule B5.1, p. 5 (line 90). Noting another discrepancy between figures in prior documentation and those presented in this case, the Attorney General recommended that \$578,903 be removed. 9 Tr 2988; Exhibit AG-1.8, p. 6.

The ALJ recommended that, in the absence of alternative documentation to support DTE Electric’s higher rate case estimate, the Attorney General’s adjustment should be adopted. PFD, p. 117.

DTE Electric objects on the same grounds as before, asserting misplaced support for the recommended disallowance. DTE Electric’s exceptions, p. 25; 5 Tr 645-646. Also repeating a similar argument, the company states that “[t]his example further shows that chasing form over substance is a continuing theme of the [Attorney General] (and PFD) which appears to ignore the need of the project, the benefit to customers, and the 92.2% of the project funding that [she] supports for this project.” DTE Electric’s exceptions, p. 25.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric’s exceptions and adopt the ALJ’s recommendation. Attorney General’s replies to exceptions, p. 7. Again, just because she did not object to all of the company’s requested funding for this project does not make it unreasonable to not grant the company’s entire request. *Id.*, p. 12.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General’s downward \$578,903 adjustment appropriate. The Commission again finds a lack of specific support for the company’s higher projected amount presented in this case.

v. Delray Gas Compressor Replacement

DTE Electric indicated \$4 million to be spent “to engineer and procure a gas compressor at the Delray Peakers,” along with \$2.5 million “to execute the installation of a new gas compressor at Delray.” 5 Tr 615-616. Pointing to the project (PMP Project 10570) approved PAT form in Exhibit AG-1.8, p. 7, and the project description within, the Attorney General argued the company’s forecasted amount of \$4 million “appears to be a ‘ballpark’ amount as a placeholder for the purposes of preparing a rate case forecast.” 9 Tr 2989. Thus “premature for inclusion in this rate case,” the Attorney General recommended that the \$4 million be removed from the forecasted capital expenditures for 2019. *Id.*

Stating that DTE Electric did not specifically address this issue on rebuttal, the ALJ found that the company “did not support the reasonableness of this proposed expenditure, [that] in the absence of the referenced assessment and vendor bidding [in the project approved PAT form], it is premature to estimate costs for this project.” PFD, p. 118. The ALJ again noted the opportunity for DTE Electric to provide more information about this project during discovery, but that the company “did not provide any response other than a reference to the planned outage schedule and the PAT form documentation.” *Id.*

DTE Electric excepts and asserts the recommendation to disallow \$4 million should be disregarded because the PAT form for the project is fully executed and contains approval for the project. DTE Electric’s exceptions, p. 25; Exhibit AG-1.8, p. 7. The company further argues, “Additionally, the ball park estimate argument is incorrect because while the 2019 project approved amount can be mathematically rounded to \$4.0 million, the actual amount as shown on the PAT form is \$4,000,221 . . .” DTE Electric’s exceptions, p. 25.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ. While the PAT form for this project, as stated by DTE Electric, is fully executed and contains approval, notably for the same amount requested by the company for cost recovery in this case, the evidence shows no further advancements on the project as mentioned in the approval form. The Commission therefore finds that these expenditures are premature for inclusion in this case.

#### vi. Belle River Unit 2 Low Pressure Turbine Blade Replacement

Citing blade corrosion reasons in preparation for a future periodic outage in 2020, DTE Electric included approximately \$7.4 million for low pressure turbine blade replacements on Belle River Unit 2 in 2020. 5 Tr 609; Exhibit A-12, Schedule B5.1, p. 6 (line 103). Pointing again to the PAT form for this project (PMP Project 13574), the Attorney General recommended that at least \$1,247,393 be removed from the company's forecast for 2020. 9 Tr 2990; Exhibit AG-1.9, p. 2. The Attorney General asserted, however, that “[a] case could be made that the entire amount of \$7,448,100 should be removed given that there is no specific approval for spending this amount on the project in 2020.” 9 Tr 2990. ABATE also recommended that the company's \$3.1 million in expenditures in 2019 to engineer and procure replacement blades not be included in rates at this time. 7 Tr 1943; 5 Tr 606. ABATE stated, “DTE has not provided information showing that it will indeed incur the costs to engineer and procure the replacement blades during the bridge period or projected test year. ABATE has issued additional discovery on this topic, and is currently awaiting DTE's responses.” *Id.* In rebuttal, the company pointed to responses it provided during

discovery and stated that the outage for Belle River Unit 2 is scheduled from January-May 2020, within the timeframe of this case. 5 Tr 642-643; Exhibit A-39, Schedule DD2, p. 1.

The ALJ found that the Attorney General's adjustment of \$1,247,393 should be adopted. PFD, p. 120, Appendix E (line 11). The ALJ further found that, although the PAT form indicates that two of the four replacement blades being ordered may not be needed, and while inconsistent with testimony provided by the company, the evidence does show some work is nevertheless required.

In exceptions, DTE Electric argues that the Attorney General's recommendation to disallow \$1.2 million should be disregarded because it is again misplaced. DTE Electric's exceptions, p. 26. The company further accuses the Attorney General of cherry-picking numbers. *Id.*; Exhibit AG-1.9, p. 2. According to DTE Electric:

While it is true that the values for 2020 spending in the exhibits for this project are greater than the PAT form values by the referenced \$1.2 million, this is only part of the story. The same documents show that the 2019 data is also different for this project and in this case the 2019 exhibit values are \$0.7 million lower than the associated PAT form values. As demonstrated, the disallowances recommended by [the Attorney General] can simply [be] a shift in project values between years.

DTE Electric's exceptions, p. 26.

ABATE argues that the company failed to demonstrate by a preponderance of the evidence that its proposed costs for this capital project, along with others, are reasonable and prudent and should thus be disallowed. ABATE's exceptions, p. 39. For this project specifically, ABATE highlights the deficiency/inconsistency noted by the ALJ to assert that recovery of this expense should be fully disallowed. *Id.*, pp. 39-40; 7 Tr 1943; ABATE's initial brief, pp. 22-23.

Contrary to ABATE's exceptions, DTE Electric asserts that it provided details on the timing of the periodic outage associated with this project, which thus supports the ALJ's finding that some spending would occur. DTE Electric's replies to exceptions, p. 13; Exhibit A-39, Schedule

DD2, p. 1. While maintaining its position that no disallowance should have been recommended, DTE Electric avers that it is improper for ABATE to disregard evidence to assert that the company's cost recovery should be \$0.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

Also responding, ABATE asserts that a number of DTE Electric's capital expenditure proposals lack sufficient evidentiary support and should be rejected. Addressing generalized arguments made by the company in exceptions, ABATE avers that, while DTE Electric argues recommended adjustments are based on insignificant variances, the company failed to rectify the shortcomings of these proposals, and it is the company's burden to demonstrate by a preponderance of the evidence that its proposed costs are reasonable and prudent, including for this project and for the Greenwood project discussed below. ABATE's replies to exceptions, pp. 41-42; DTE Electric's exceptions, pp. 22-23. As to DTE Electric's argument about cost shifts between years, ABATE asserts this is notable to show inconsistency in cost projections over the years and warrants full cost disallowance. ABATE's replies to exceptions, pp. 42-43; 7 Tr 1943; 9 Tr 2990; ABATE's initial brief, pp. 22-23.

The Commission agrees with the ALJ and finds the Attorney General's \$1,247,393 downward adjustment for 2020 appropriate. The Commission further finds DTE Electric's 2019 expenditures reasonable and prudent in preparation for the unit's periodic outage in January to May 2020. 5 Tr 642-643; Exhibit A-39, Schedule DD2, p. 1. And while the same documents relied upon by the Attorney General and the ALJ do show an inverse situation for these 2019 expenditures (i.e., the PAT form for the project reflects a higher number than that requested in this case), the

Commission finds that DTE Electric has not substantiated its need for the additional requested amount for 2020 with any specifics, and, although obvious, the 2019 difference amount of \$0.7 million is not equivalent to the 2020 difference amount of \$1,247,993.

vii. Belle River Unit 2 Intermediate Pressure Turbine Blade Replacement

DTE Electric also included, in its 2020 forecast, projected capital expenditures of approximately \$4.9 million for blade replacements to address erosion damage on several rows of blades for the company's Belle River Unit 2 intermediate pressure turbine. 5 Tr 609; Exhibit A-12, Schedule B5.1, p. 6 (line 105). Noting another unsupported discrepancy, the Attorney General recommended that \$3,521,598 be removed. 9 Tr 2990; Exhibit AG-1.9, p. 3.

The ALJ found that DTE Electric failed to support its rate case projection and recommended that the Attorney General's adjustment be adopted. PFD, p. 120.

DTE Electric excepts, again arguing the recommended disallowance is misplaced. DTE Electric's exceptions, pp. 26-27; 5 Tr 645-646.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General's downward adjustment of \$3,521,598 appropriate. As highlighted by the ALJ, the PAT form for this project was approved by the company on May 9, 2019, about two months prior to the filing of this case, and DTE Electric provided no specific details to verify the need for recovery for over 350% more in requested expenditures in this case than those internally approved just before the filing of this case. PFD, p. 120; Exhibit A-12, Schedule B5.1, p. 6 (line 105); Exhibit AG-1.9, p. 3.

viii. Greenwood Unit 1 Main Unit Transformer Replacement

In preparation for a future periodic outage, DTE Electric included approximately \$1.2 million in 2019 and \$8 million in 2020 to engineer and procure a main unit transformer for Greenwood Unit 1. According to the company, “The existing Main Unit Transformer is gassing (a sign of degradation) and has reliability concerns.” 5 Tr 606, 610; Exhibit A-12, Schedule B5.1, p. 5 (line 61) and p. 6 (line 117). The Attorney General found another discrepancy pertaining to the company’s 2020 forecast and recommended that the unsupported difference amount of \$400,751 in 2020 be removed.<sup>9</sup> 9 Tr 2991; Exhibit AG-1.9, p. 4; Exhibit AG-12; Exhibit A-12, Schedule B5.1, p. 6 (line 117). ABATE recommended that the total amount of approximately \$9.2 million for 2019 and 2020 be disallowed at this time. 7 Tr 1944. ABATE stated that the company has not provided information showing that these costs will certainly be incurred during the bridge period or projected test year, and that it issued additional discovery on this topic and is currently awaiting the company’s responses.

The ALJ accepted testimony on behalf of the company indicating that the work will be performed but, in the absence of additional cost details, found that the Attorney General’s \$400,751 adjustment for 2020 should be adopted. PFD, p. 121, Appendix E (line 13).

In exceptions, DTE Electric argues the disallowance is misplaced.<sup>10</sup> DTE Electric’s exceptions, p. 27; 5 Tr 645-646.

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<sup>9</sup> As discussed under 2021 projects below, the Attorney General also addressed the company’s 2021 expenditure forecast for this project. *Infra*, section IV. A. 3. b. xiv.; 9 Tr 2994; Exhibit AG-1.10; Exhibit AG-1.12; Exhibit A-12, Schedule B5.1, p. 7 (line 148).

<sup>10</sup> The company’s arguments relative to 2021 expenditures for this project are also discussed under 2021 projects below. *Infra*, section IV. A. 3. B. xiv.; DTE Electric’s exceptions, p. 27.

ABATE asserts that the company did not adequately support this expense and that it should thus be fully disallowed. ABATE's exceptions, p. 40. In support, ABATE recalls testimony on its behalf and highlights the ALJ's note about "the absence of additional specific cost detail." *Id.*; 7 Tr 1944; ABATE's initial brief, p. 23; PFD, p. 121. ABATE argues that, contrary to the ALJ's recommendation, "[t]he Company's testimonial assurance, without any additional specific cost detail, is an inadequate basis upon which to permit cost recovery." ABATE's exceptions, p. 40.

In reply, DTE Electric asserts that it provided details on the timing of the periodic outage associated with this project, which supports the ALJ's finding that some spending would occur. DTE Electric's replies to exceptions, p. 13; Exhibit A-39, Schedule DD2, p. 2. While maintaining its position that no disallowance should have been recommended, DTE Electric avers that it is improper for ABATE to disregard evidence to assert that the company's cost recovery should be \$0.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

Also responding, ABATE maintains that cost recovery for this entire project should be rejected. ABATE argues that DTE Electric failed to adequately address the extent of the evidentiary deficiencies for this project in exceptions and misstated the ALJ's basis for disallowance. ABATE's replies to exceptions, pp. 43-44.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General's \$400,751 downward adjustment appropriate. The Commission finds this adjustment for 2020 expenditures supported by the expenditures internally approved by the company prior to the filing of this case, as evidenced by the PAT form containing details about the project. Exhibit

AG-1.9, p. 4. The Commission further finds this amount for 2020, along with 2019 expenditures, appropriate, considering the company's confirmation that the outage for this unit is scheduled for March to May 2021. 5 Tr 643; Exhibit A-39, Schedule DD2, p. 2.

ix. Monroe Unit 4 Secondary Superheat Inlet Pendant Replacement

DTE Electric identified approximately \$1.7 million spent in 2018 to procure secondary superheater (SSH) inlet pendant materials to prepare for an upcoming periodic outage, approximately \$3 million for 2019 "to replace the 53 SSH inlet pendants assemblies that are 46 years old and experiencing metallurgical failures," and approximately \$12.3 million more for the same in 2020. 5 Tr 602, 608, 611; Exhibit A-12, Schedule B5.1, p. 4 (line 19), p. 5 (line 75), and p. 6 (line 123). The Attorney General again found a discrepancy and recommended that the company's 2020 projection be reduced by \$585,529. 9 Tr 2991; Exhibit A-1.9, p. 5. The Attorney General further averred, however, that "[a] case could be made that the entire amount of \$12,281,614 should be removed given that there is no specific approval for spending this amount on the project for 2020." 9 Tr 2991.

The ALJ noted that DTE Electric did not specifically address this on rebuttal and, since the company did not provide any other supporting documentation for its cost estimate, found that the Attorney General's adjustment of \$585,529 should be adopted. PFD, p. 122, Appendix E (line 14).

DTE Electric excepts, again arguing the recommended disallowance is misplaced. DTE Electric's exceptions, pp. 27-28; 5 Tr 645-646. Echoing prior contentions, the company asserts that "[t]his example further shows that chasing form over substance is a continuing theme of the [Attorney General] (and PFD) which appears to ignore the need of the project, the benefit to

customers, and the 95.1% of the project funding that [she] supports for this project in 2020.” DTE Electric’s exceptions, p. 28.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric’s exceptions and adopt the ALJ’s recommendation. Attorney General’s replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General’s downward adjustment of \$585,529 for 2020 appropriate. The company internally approved a lower 2020 amount for this project just two months prior to the filing of this case and failed to provide specifics as to why its additional projected amount is necessary.

x. Monroe Unit 4 Generator Stator Rewind

DTE Electric stated that, for Monroe Unit 4, “the 45-year-old generator stator requires a rewind due to deterioration of the brazed joints of the winding. The deteriorated joints result in stator cooling water leaks and allow stator coil movement and vibrations.” 5 Tr 608. The company thus indicated that, in 2019, approximately “\$5.8 million will be spent for engineering and procurement to support future generator stator outage work,” with a projected need of \$8.4 million in 2020. *Id.*, pp. 608, 611; Exhibit A-12, Schedule B5.1, p. 5 (line 74) and p. 6 (line 125). Expanding, DTE Electric stated, “The generator is experiencing vibration caused by deteriorated retaining springs leading to insulation breakdown as well as stator cooling water system brazed joint leakage caused by corrosion allowing additional loss of insulation integrity leading to electrical failures.” 5 Tr 611. Both the Attorney General and ABATE recommended adjustments—the Attorney General recommending that at least \$288,663 be removed from the 2020 projection because of a discrepancy and lack of support and ABATE recommending that the \$5.8 million in 2019 not be included in rates at this time due to a lack of showing that such costs

will be incurred, stating that it issued additional discovery on this issue and is still awaiting a response from the company. 9 Tr 2992; Exhibit AG-1.9, p. 6; 7 Tr 1944. On rebuttal, DTE Electric stated that the outage for Monroe Unit 4 is scheduled for September-December 2020. 5 Tr 642-643; Exhibit A-39, Schedule DD2, p. 3.

The ALJ accepted testimony on behalf of the company that work will be performed during the periodic outage but nevertheless found that the Attorney General's adjustment of \$288,663 for 2020 should be adopted. PFD, p. 123, Appendix E (line 15).

In exceptions, DTE Electric again argues the Attorney General's recommended disallowance is misplaced, and that the ALJ "appears to ignore the need of the project, the benefit to customers, and the 96.4% of the project funding that [the Attorney General] supports for this project in 2020." DTE Electric's exceptions, p. 28; 5 Tr 645-646.

ABATE argues that the \$5.8 million proposed for engineering and procurement in 2019 was not sufficiently supported and should thus be fully rejected. ABATE's exceptions, p. 41. ABATE recalls testimony on its behalf in support of its arguments, and asserts that, similar to other recommendations on other projects, the ALJ "simply accepted DTE's assertion that work will be performed at the periodic outage while noting that the Company 'did not specifically address the project in any details.'" *Id.*; 7 Tr 1944; ABATE's initial brief, p. 23; PFD, p. 123. ABATE once more argues that "the Company's testimonial assurance that the work will be performed, without any additional specific cost detail, is an inadequate basis upon which to permit cost recovery."

ABATE's exceptions, p. 41.

In opposition to ABATE's exceptions, DTE Electric asserts that it provided details on the timing of the outage associated with this project, which thus supports the ALJ's finding that some spending would occur. DTE Electric's replies to exceptions, p. 13; Exhibit A-39, Schedule DD2,

p. 3. While maintaining its position that no disallowance should have been recommended, DTE Electric also avers that it is improper for ABATE to disregard evidence to assert that the company's cost recovery should be \$0.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

Also responding, ABATE maintains that proposed cost recovery for engineering and procurement in 2019 should be disallowed, reiterating a lack of evidence to show these costs will indeed be incurred during the relevant period. ABATE also asserts that DTE Electric's argument about need, benefit, and the Attorney General's support for the majority of the project's funding "again downplayed the degree of evidentiary deficiency for this project and subsumed DTE's evidentiary burden beneath the project's purported importance . . ." ABATE's replies to exceptions, p. 44. ABATE further argues, "Given the lack of supporting evidence, the Commission cannot permit cost recovery. The burden to adequately support its proposals and cost recovery rests with the Company; evidentiary deficiencies cannot be overcome by allusion to general project importance or purported customer benefits." *Id.*

The Commission agrees with the Attorney General and the ALJ and finds the Attorney General's downward adjustment of \$288,663 for 2020 appropriate. The PAT form setting forth project details shows a lower amount as having been internally approved prior to the filing of this case, and the company confirmed the periodic outage for the project is scheduled for September-December 2020. 5 Tr 642-643; 9 Tr 2992; Exhibit A-12, Schedule B5.1, p. 6 (line 125); Exhibit A-39, Schedule DD2, p. 3; Exhibit AG-1.9, p. 6.

xi. Monroe Turbine and Boiler House Roof Vent Fan Replacement

DTE Electric stated that, in 2020, \$3 million will be spent “to procure and install Turbine and Boiler Vent Fans” at its Monroe plant. 5 Tr 612; Exhibit A-12, Schedule B5.1, p. 6 (line 135).

The Attorney General argued that this amount is merely a “ballpark” figure for a project that is in the early stages of development and thus premature for inclusion in this case. 9 Tr 2992-2993; Exhibit AG-1.9, p. 7.

Absent additional supporting documentation, and considering statements made on the PAT form for this project, the ALJ found that the Attorney General’s recommendation to exclude this amount from the company’s projected spending is reasonable and should be adopted. PFD, p. 124.

In exceptions, DTE Electric argues that the Attorney General “mischaracterizes this project as utilizing ballpark estimates . . .” DTE Electric’s exceptions, p. 28. The company disputes this argument, asserting that “[a]ll values on the PAT form are shown to the nearest dollar, not the nearest thousand or nearest million dollars. The exhibit amount is simply a portion of the overall amount included in the fully executed and approved PAT form which can be found in . . . Exhibit AG1.9 page 7.” DTE Electric’s exceptions, p. 28.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric’s exceptions and adopt the ALJ’s recommendation. Attorney General’s replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds the exclusion of the projected spending for this project for 2020 appropriate. Given the details on the PAT form under reason for submittal, it is uncertain that the company’s requested expenditures will be used as indicated in 2020. 9 Tr 2992-2993; Exhibit AG-1.9, p. 7. The Commission further notes that the

PAT form also includes no internal BOD approval of any additional funds for 2020 or future years.

xii. Hancock 11-4 Peaker Hot Gas Path Overhaul

DTE Electric included, in its 2020 projections, “\$4.0 million to conduct a hot gas path inspection at Hancock 11-4.” 5 Tr 616; Exhibit A-12, Schedule B5.1, p. 6 (line 145). The Attorney General objected to the projection, stating that the PAT form for this project is neither dated nor signed and calling the \$4 million projection a “ballpark” amount that is premature for inclusion in this case. 9 Tr 2993; Exhibit AG-1.9, p. 8.

The ALJ stated that DTE Electric did not address this specific project on rebuttal. The ALJ further stated:

The PAT form cited by Mr. Coppola also states: “Based on the run hours and number of starts Hancock 11-4 Peaker has experienced, it is expected that the hot gas path components will need to be replaced in 2020.” The cost estimate includes \$1.8 million in materials as well as labor, and thus appears to include more than “inspection” costs, but to actually estimate the cost of replacement, in advance of an actual inspection.

PFD, p. 125. Based on this, and the absence of more detailed documentation, the ALJ found the Attorney General’s \$4 million adjustment should be adopted. *Id.*, Appendix E (line 17).

DTE Electric excepts and argues:

The recommendation to disallow \$4.0 million on the Hancock 11-4 Peaker Hot Gas Path Overhaul project should be disregarded because, as previously discussed, the Company’s CGB [capital governance board] approved the funding allocations shown on Exhibit A-12, Schedule B5.1 (5T 644, 646). Furthermore, as indicated in the PAT form (Exhibit AG-1.9 page 8), hot gas path overhauls on gas-fired peakers like Hancock 11-4 are based on number of run hours and starts. Hancock 11-4 is expected to trigger its hot gas path overhaul in 2020. This maintenance is required to maintain reliable operation.

DTE Electric’s exceptions, p. 29.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds the exclusion of the company's projected 2020 expenditures for this project appropriate. Considering the unsigned PAT form for this project, notably to obtain internal BOD approval for "project initiation," the Commission is not convinced that the requested expenditures for this project for 2020 are ripe for inclusion in this case. 9 Tr 2993; Exhibit AG-1.9, p. 8.

xiii. Renaissance Unit 1 Peaker Turbine Combustion Cans and Hot Gas Path Replacement

Also in 2020, DTE Electric included \$4 million "to engineer and procure material for a Renaissance Peaker Major Overhaul." 5 Tr 616; Exhibit A-12, Schedule B5.1, p. 6 (line 146). The Attorney General again took note that the PAT form for the project was neither dated nor signed and once more asserted that the 2020 forecast appears to be a "ballpark" amount premature for inclusion in this case. 9 Tr 2993; Exhibit AG-1.9, p. 9.

The ALJ highlighted the program description on the PAT form and, noting that "the unsigned form includes \$0 for 2020, and that the \$4 million for 2021 is primarily for materials," the ALJ found that the Attorney General correctly identified the 2020 rate case projection as "premature and merely a place holder." PFD, pp. 125-126; Appendix E (line 18).

DTE Electric excepts and argues:

The recommendation to disallow \$4.0 million on the Renaissance Unit #1 Peaker Turbine Combustion Cans and Hot Gas Path Replacement project should be disregarded because, as previously discussed, the Company's CGB approved the funding allocations shown on Exhibit A12, Schedule B5.1 (5T 644, 646). Furthermore, as indicated in the PAT form (Exhibit AG-1.9 page 9), major overhauls on gas-fired peakers like Renaissance Unit 1 are based on number of

starts. Renaissance 1 is expected to trigger a major overhaul in 2021. This maintenance is required to maintain reliable operation.

DTE Electric's exceptions, p. 29.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The Commission agrees with the Attorney General and the ALJ and finds exclusion of \$4 million in projected expenditures for 2020 appropriate. Similar to the last project discussed above, considering the unsigned PAT form for this project, also seeking internal BOD approval for "project initiation," the Commission is not convinced these expenditures are appropriate for this rate case, especially since the unsigned PAT form includes no expenditures in 2020 as requested by the company in this case, but rather only for 2021 and beyond—potentially outside the relevant time periods of this case.

#### xiv. 2021 Projects

For the first four months of 2021 (January-April), DTE Electric included \$12.8 million for seven routine maintenance projects associated with the company's Greenwood and Monroe facilities. 5 Tr 613; Exhibit A-12, B5.1, p. 7. Again asserting deficiencies with the projects' PAT forms, the Attorney General recommended that the projected "ballpark," "placeholder" expenses be rejected in their entirety as premature for inclusion in this case. 9 Tr 2994; Exhibits AG-1.10 and AG-1.12. On rebuttal, the company stated:

[M]anagement reviews and approves the rate case testimony and capital requests shown on the routine capital expenditure Exhibit A-12, Schedule B-5.1, pages 5 to 7 prior to filing. These projects were included in the review and approval. Additionally, the claim that some project cost estimates are premature for inclusion in the rate case is also incorrect. These projects' cost estimates have all been reviewed and received approval by the Fossil Generation Capital Governance Board during their monthly review meetings.

5 Tr 646. Providing further details about the projects, DTE Electric averred that the Attorney General's blanket disallowance is not warranted and should not be accepted. 5 Tr 647-648.

The ALJ found the Attorney General's recommended \$12.8 million adjustment consistent with company documentation, and found that it should be adopted. PFD, p. 127, Appendix E (lines 19-25). The ALJ stated:

As shown in Exhibit AG-1.10, DTE was asked specifically to establish that the projected amounts would be spent within the projected test year, and provided only the documentation in Exhibit AG-1.10. Mr. Morren's testimony acknowledges that the Greenwood outage may be within the test year, or may not be until May 2021. While Mr. Morren cites costs expected to be incurred in 2020 for the Greenwood transformer project, the 2020 spending projections are not covered by this adjustment, but are discussed in section viii) above. Note that if DTE follows its recent pattern of rate case filings and files its next rate case in July 2020, and can demonstrate actual capital expenditures planned for March-May 2021, it should be able to begin recovering those costs as soon as May 2021.

PFD, pp. 127-128.

DTE Electric disagrees with the recommended disallowance. The company reiterates that this funding was approved by its CGB and that the projects are not placeholders but are specific projects associated with the periodic outages for Greenwood (five of the projects) and Monroe (two of the projects). DTE Electric's exceptions, p. 30; 5 Tr 647-648. Here, DTE Electric recalls details of these projects and asserts that the Attorney General's proposed disallowance, and the ALJ's corresponding recommendation, is unwarranted and should be rejected. DTE Electric's exceptions, pp. 30-31; 5 Tr 646-648; Exhibit AG-1.10, pp. 9-10. The company argues that the Attorney General's recommendation is a broadbrush disallowance without any specific analysis or project-specific recommendation. As to its Greenwood Unit 1 main unit transformer replacement project, also discussed earlier, the company argues:

This recommendation to fully defund this project in 2021 ignores the fact that the project had uncontested funding requests and expenditures in 2019 and had

agreement from [the Attorney General] to fund 95% of the 2020 funding request ([she] only recommended a disallowance of \$0.4 million (9T 2991) out of \$7.6 million (Exhibit AG-[1.]9 page 4) planned for 2020). This effectively allows for procurement, fabrication, and shipment of the transformer to the plant, but not the actual installation of the transformer at the plant. Under this recommendation, the costs of this project are being realized but not the value.

DTE Electric's exceptions, p. 27.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7. The Attorney General further asserts that the company's arguments show "circular reasoning and also support intervenors' arguments regarding DTE's abuse of a projected test year." Attorney General's replies to exceptions, pp. 12-13; DTE Electric's exceptions, pp. 29-31. More specifically, the Attorney General avers:

DTE provides projections for projects that are several years in the future, typically where ground has yet to be broken. The Company states that its requests are reasonable and prudent but when questioned, argues that other parties are unable to provide concrete evidence that the money will not be spent (several years in the future) so it must be approved. The farther out in time DTE pushes its projections, the more difficult it becomes to reasonably analyze them and the more those costs, if approved, snowball on top of themselves.

Attorney General's replies to exceptions, p. 13. The Attorney General states, however, that while the company failed to support these 2021 projects in this filing, these projects will be recoverable in a future filing if supported.

The Commission agrees with the Attorney General and the ALJ and finds the company's \$12.8 million in projected expenditures for 2021 premature for inclusion in this case, considering the schedule for the Greenwood periodic outage and unsigned PAT forms, along with details therein, for the other projects. 9 Tr 2994; Exhibit A-39, Schedule DD2, p. 2; Exhibit AG-1.10. The Commission further agrees that these expenditures (and those associated with other projects)

can be requested again in DTE Electric's next rate case, which the company, pursuant to MCL 460.6a(6), can file 12 months after the filing of this case—expenditures which, if supported, will be recoverable through rates at that time, beginning as early as May 2021 as highlighted by the ALJ. PFD, p. 128.

c. Non-routine Projects (Monroe Coal Ash)

DTE Electric also requested expenditures for fossil (power) generation capital projects classified as non-routine. 5 Tr 589-599. The company stated:

Non-routine capital project expenditures are driven by steam power generation upgrades with a heavy focus on environmentally mandated work at our Tier 1 coal plants, decommissioning and environmental remediation projects at steam power generation plants, upgrades at the Ludington Pumped Storage Plant, and construction costs for the new CCGT [combined cycle gas turbine] and CHP [combined heat and power] plants.

5 Tr 589. The Attorney General and ABATE took issue with some of the requested expenditures and both recommended reductions, details of which are further discussed below. 9 Tr 2995; 7 Tr 1932.

i. Monroe Coal Ash Basin Closure

For capital spending to remove all bottom ash from the inactive bottom ash basin at Monroe to meet the Environmental Protection Agency's (EPA's) coal combustion residual (CCR) requirement, DTE Electric included approximately \$19.8 million in capital spending in the bridge period and approximately \$20.9 million during the projected test year. 5 Tr 595; Exhibit A-12, Schedule B5.1, p. 2 (line 13). The company stated:

This project includes engineering, road and bridge upgrades, and associated trucking to support transporting approximately 2 million cubic yards of bottom ash from the Monroe inactive bottom ash basin to Sibley Quarry.

5 Tr 595. The Attorney General argued that these expenditures are premature and recommended that they be entirely removed from this case. 9 Tr 2994-2997. The Attorney General stated:

The CCR requirements emanate from the Resource Conservation Recovery Act (RCRA). However, with the enactment of the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016, utilities can develop alternative CCR compliance programs working with state agencies. According to a discovery response from the Company on this matter, the Company stated that the Michigan Department of Environment, Great Lakes and Energy (EGLE) is working with Michigan utilities and other stakeholders to develop of a state program. Although there may be some similarities between the EPA compliance rules and the rules promulgated by EGLE, it is premature to spend over \$40 million over the next two years and four months for a program that still may change and has no definitive rules set by the state agency.

9 Tr 2995. The Attorney General additionally referenced discussion about these CCR requirements in Consumers Energy Company's last electric rate case, Case No. U-20134. 9 Tr 2996. ABATE also recommended that all projected capital expenditures associated with this project be disallowed as premature. However, if the Commission finds that some level of capital expenditures is appropriate, ABATE asserted that only \$4.13 million for the bridge period and \$7.77 million should be included. 7 Tr 1938-1942; Exhibit AB-8. ABATE stated:

As shown in the PMP documents provided by DTE in support of this project, DTE was targeting September 2019 for full BOD approval. However, as of the filing date of this testimony, DTE has not provided any updates, via supplementary audit responses, or otherwise, on the status of full BOD approval of its anticipated capital expenditures associated with this project. If the BOD has not approved DTE's requested capital expenditures for this project, then I recommend disallowing it in this case.

7 Tr 1940.

In rebuttal, DTE Electric pointed to discovery wherein it explained that the state's CCR permitting programs must at least be as protective as the federal CCR rule. 5 Tr 649; Exhibit A-39, Schedule DD3. The company also discussed the timing effect of the pre-publication draft rule released by the EPA in November 2019 on the project, noting that, whether October 2020 under the current rule or August 2020 under the draft rule, the Attorney General's proposed disallowance is not justified as the company only has months to initiate the closure of the basin. 5

Tr 650. And, in response to ABATE, DTE Electric stated its expectation to receive BOD approval of the project on December 4, 2019. 5 Tr 651. The company also indicated significant concerns with ABATE's alternative recommendation that ignored certain projects and focused on project approval documents that do not necessarily reflect the company's latest forecast. *Id.*, pp. 651-652.

In her brief, the Attorney General recalled testimony and reiterated her concern "that the program may change and that there are no definitive rules set by the state agency. Until EGLE issues new compliance rules that have been approved by the EPA, the AG feels that it is premature to spend millions of dollars on this project." Attorney General's initial brief, p. 74. And, in its reply brief, ABATE argued that, consistent with the May 2 order, pp. 6-8, and the company's failure to confirm necessary approvals were obtained, along with uncertainty surrounding project completion and cost incursion, DTE Electric's capital expenditures for this project should be disallowed, or, alternatively, partially recovered in accordance with its recommendation, which included the only projects that reasonably could be considered "'complimentary.'"<sup>11</sup> ABATE's reply brief, pp. 21-22.

Agreeing with the Attorney General and ABATE, the ALJ found that DTE Electric had not established that it will make the projected expenditures in accordance with the timing set forth in Exhibit A-12, Schedule B5.1. PFD, p. 133. The ALJ referenced company testimony acknowledging that the closure need not be completed in 2020 but rather by 2025, with extensions available under certain circumstances, and highlighted issues/deficiencies with project documentation. *Id.*, pp. 134; 5 Tr 749; Exhibit AB-8, pp. 12, 19, 20. Thus, except for \$800,000 for projected engineering expenditures, the ALJ recommended that the company's remaining

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<sup>11</sup> Both "complimentary" and "complementary" were used by the company in this context. The Commission believes the latter to have been the intended version of the word. 5 Tr 651, 654; DTE Electric's reply brief, pp. 14-15.

projected costs for this project be excluded from rate base. PFD, p. 135, Appendix E (line 27); Exhibit AB-8, p. 15. The ALJ also recommended, as discussed further in her PFD, that the Commission:

follow [the MEC Coalition’s] recommendations to begin tracking and planning for CCR closure costs, either through rate cases as . . . recommended or outside the context of a rate case, as part of a comprehensive effort to monitor what are predicted to be substantial environmental compliance costs over the next couple of decades . . .

PFD, p. 135. *See also, id.*, pp. 139-142.

DTE Electric excepts and maintains that its requested expenditures should be approved for recovery. DTE Electric’s exceptions, p. 32. The company cites to evidence that the state CCR permitting projects must be at least as protective as the federal CCR rule and reiterates that it only has months to initiate closure of the basin, by either August 2020 or October 2020. *Id.*; Exhibit A-39, Schedule DD3. DTE Electric therefore declares that the Attorney General’s proposed disallowance of “expenditures necessary for compliance is not reasonable, prudent or justified.” DTE Electric’s exceptions, p. 33; 5 Tr 649-650, 750. The company also recaps its disagreement with ABATE’s full disallowance recommendation, stating that it “expected full BOD approval on December 4, 2019, . . . that this is not an elective project,” and that “[t]he project is environmentally mandated by being subject to the ‘forced closure’ requirements of the CCR rules . . .” DTE Electric’s exceptions, p. 33; 5 Tr 651; 7 Tr 1940. DTE Electric additionally reiterates its objections to ABATE’s alternative partial recovery recommendation, again arguing that its project approval documents do not necessarily reflect its latest forecast and taking issue with ABATE’s inclusion of only two of the five “complementary” projects. DTE Electric’s exceptions, p. 33; 5 Tr 645-646, 651-652; 7 Tr 1940-1942; Exhibit A-12, Schedule B5.1 (line 13).

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric’s exceptions and adopt the ALJ’s recommendation. Attorney General’s replies to exceptions, p. 7. Similar to discussion on prior issues, the Attorney General asserts this to be “another instance where the Company provides vague, but substantial, projections for costs, with limited detail and almost no support.” *Id.*, p. 14 (footnote omitted); PFD, p. 134. The Attorney General avers that, in exceptions, DTE Electric merely reiterates testimony already addressed and glides over the fact that construction for the project is clearly expected to begin outside the test year for this case. The Attorney General states that the ALJ, after adequately considering testimony and arguments, correctly recommended that only engineering costs expected to be incurred during the test year be allowed.

Also responding, ABATE likewise contends that DTE Electric’s exceptions largely restate the company’s formerly rebutted and rejected positions. ABATE recaps excerpts from the PFD and asserts that “[g]iven this regulatory uncertainty, it would be unreasonable and imprudent to approve cost recovery for this project at this point.” ABATE’s replies to exceptions, p. 38. ABATE further reiterates the lack of internal approvals for this project, especially considering the original target date set for such approval over seven months ago (originally expected in September 2019 but later revised to December 4, 2019). ABATE argues that, “[i]f the Company cannot supply evidence that its own BOD has approved DTE’s requested capital expenditures for this project, it is premature, unreasonable, and imprudent for the Commission to do so. Such disallowance is consistent with past Commission practice.” *Id.*, p. 39; ABATE’s reply brief, pp. 20-22. And, as to its alternative recommendation, ABATE asserts that DTE Electric, in exceptions, effectively requested that the company’s own project approval documents be ignored. ABATE further reiterates that its “comparative analysis included the only two projects which had

approval documents that specifically showed projected capital expenditures occurring during the bridge period and test year in this case,” thus only two of which could reasonably be considered complementary. ABATE’s replies to exceptions, p. 39; 7 Tr 1941 (Table 4); Exhibit AB-8, pp. 12-15, 19-21; ABATE’s reply brief, pp. 21-22.

The Commission agrees with the ALJ and finds only the approval of \$800,000 for projected engineering expenditures reasonable and prudent at this time. *See*, PFD, p. 135, Appendix E (line 27); Exhibit AB-8, p. 15. At this point, it is uncertain if DTE Electric’s total projected expenditures for this project have received internal BOD approval, the CCR rules have not been solidified yet, and closure of the basin with removal of CCR material need only be initiated, not completed, during the test year. 9 Tr 2995; Exhibit AB-8; May 2 order, p. 8. And, as discussed further below, the Commission also agrees with the ALJ as to the MEC Coalition’s tracking and planning recommendation regarding CCR closure costs. *Infra*, section IV. A. 3. d.

ii. Monroe Dry Fly Ash Conversion

DTE Electric included projected capital spending of approximately \$18.4 million in the bridge period and approximately \$55.3 million in the test year for its Monroe Dry Fly Ash Conversion project, to convert the existing wet fly ash transport system at Monroe to a dry system. 5 Tr 593; Exhibit A-12, Schedule B5.1, p. 2 (line 4). According to the company:

The EPA’s fly ash Effluent Limitation Guidelines (ELG) rule promulgated in 2015 no longer permits liquid discharge from fly ash wastewater systems effective December 31, 2023. Conversion to a dry fly ash transport system will require installation of new systems to pneumatically transport ash from each generating unit’s precipitator to new storage silos.

5 Tr 593. ABATE recommended that all projected capital expenditures related to this project be disallowed but, in the alternative, asserted that if the Commission finds some level of expenditures appropriate, only \$11.47 million for the bridge period and \$34.80 million for the projected test

year be included. 7 Tr 1933-1938; Exhibits AB-8 and AB-9. ABATE stated that the company provided a copy of a proposal from an engineering firm to assist it with this project and that such proposal indicates construction is not expected to begin during the bridge period or the projected test year in this case. ABATE further stated that, per this proposal and document PMP #11511, the company is still awaiting BOD approval of this project. 7 Tr 1935; Exhibit AB-8, pp. 9-11, and Exhibit AB-9. In rebuttal, DTE Electric pointed to testimony discussing construction work in progress (CWIP), and noted that this category of expense is included in utility plant for ratemaking purposes. 5 Tr 653. The company also indicated its expectation to receive BOD approval of this project in January 2020 and expressed significant concerns over ABATE's alternative recommendation for partial approval—namely, that the basis for the partial disallowance ignores certain projects and that the project approval documents do not necessarily reflect the company's latest forecast. *Id.*, pp. 653-654.

In its reply brief, ABATE argued that, consistent with the May 2 order, pp. 6-8, and in light of the fact that BOD approval is uncertain, along with there being no dispute that the project will not become used and useful during the timeframe for this case, the Commission should deny recovery of these expenditures. ABATE's reply brief, pp. 23-24. And, with regard to its alternative recommendation, ABATE made clear that it "included the one project for which the project approval documents showed capital expenditure projections that were expected to occur during the bridge period and test year in this case." *Id.*, p. 24.

The ALJ found that the company failed to demonstrate a reasonable and prudent spending plan for this project. PFD, p. 138. In addition to highlighting the unsigned project form in Exhibit AB-8, p. 9, the ALJ also took issue with the lack of any breakdown in costs or schedule for engineering, procurement, or construction. The ALJ discussed the lack of a contract to support the

company's project estimate of \$103.7 million for contract labor. The ALJ further noted there was no evidence to suggest that construction beginning mid-2020 would be feasible. Lastly, the ALJ stated:

While Mr. Morren testified that "related projects" were included in Exhibit AB-8, the only projects in addition to the closure documents discussed above are for a groundwater mitigation plan with spending of \$244,000 for 2018 only, and investigatory work for the closure activities with spending of \$800,000 in 2019, as discussed above.

PFD, p. 138 (footnote omitted), citing Exhibit AB-8, pp. 15-18.

DTE Electric disagrees with the ALJ and asserts that ABATE's full disallowance recommendation "lacks merit because the project is required to comply with ELG regulations mandating zero liquid discharge from the Monroe Fly Ash Basin." DTE Electric's exceptions, p. 34. The company reiterates that it expected full BOD approval in January 2020, noting it explicitly being precluded from presenting new evidence without a motion to re-open the record, and confirms recoverable CWIP expenses associated with this project will occur during the projected test year. *Id.*, 5 Tr 653; 6 Tr 1536-1537; PFD, p. 133. DTE Electric argues that the ALJ again "elevates form over substance and unreasonably discounts the Company's reasonable explanation of the relevant facts and circumstances." DTE Electric's exceptions, p. 34. The company additionally repeats its objections to ABATE's alternative partial recovery recommendation. *Id.*; 5 Tr 654; 7 Tr 1936-1937; Exhibit A-12, Schedule B5.1, p. 2 (line 4).

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, pp. 7, 14.

ABATE asserts that the company simply restates arguments previously refuted and rejected and that the Commission should do the same, disallowing recovery for all capital expenditures for

this project. ABATE also defends its alternative recommendation. ABATE's replies to exceptions, p. 41; 7 Tr 1935-1936 (Table 3); Exhibit AB-8, p. 9; DTE Electric's initial brief, p. 26; DTE Electric's exceptions, p. 34.

The Commission agrees with ABATE, the Attorney General, and the ALJ and finds the company's entire projected expenditure for this project premature for inclusion in this case. Not only is the record lacking to establish internal BOD approval for this project, there is also a lack of detail surrounding the project and uncertainty as to use of the projected expenditures during the relevant periods for this case. 7 Tr 1934-1935; PFD, p. 138; Exhibits AB-8 and AB-9; May 2 order, p. 8. Supportable expenditures for this project in future filings, however, will be examined for reasonableness and prudence and may be authorized for recovery at that time.

d. Future Coal Combustion Residual Costs

Asserting inadequate tracking and planning, the MEC Coalition recommended that DTE Electric be required to provide, in its next rate case, a full accounting of current and future CCR costs, stating that “[t]his accounting should clearly identify CCR costs in the test year, projected future CCR costs, and funds collected for CCR management costs from ratepayers to date.” 9 Tr 3744-3745, 3788-3793; Exhibit MEC-54. The MEC Coalition averred that “[t]his information will allow for careful assessment of the Company’s CCR cost estimates and provide a basis for determining the appropriate level of funds to be collected from ratepayers to cover all prudent CCR compliance investments.” 9 Tr 3793. DTE Electric disagreed with the recommendation, calling it premature. According to the company, “Without the CCR regulations being completely final, the Company does not fully know the requirements that need to be satisfied nor the complete expenditures associated with meeting the uncertain requirements, so any relevance to the Company’s rates is indeterminate.” 5 Tr 661.

The ALJ recommended that the Commission adopt the MEC Coalition's proposal. The ALJ found the costs presented by DTE Electric here to be a "case in point," finding it reasonable and appropriate for the Commission to begin monitoring such costs considering the substantial amounts ratepayers may be asked to foot over years to come. PFD, pp. 141-142. In further support, the ALJ stated:

DTE proposes capital expenditures of at least \$225 million to address CCR issues at Monroe alone, as shown by the preliminary estimates in Exhibit AB-8, yet did not in its direct testimony present any comprehensive overview of the projects or total project costs, only identifying the yearly spending through the projected test year in this case with minimal explanation. No timelines or cost breakdowns were presented that would indicate separately the timing and cost of engineering studies, the projected costs of construction, the required environmental approval processes, etc. In addition, a note on the closure documents for Monroe indicates that "engineering or construction pertaining to the process waste water (chem ditch) project" is excluded from the closure project scope, and is "to be addressed under a separate project."

PFD, p. 141 (footnote omitted), citing Exhibit AB-8, p. 21.

DTE Electric disagrees with this recommendation, along with the ALJ's associated recommendation made earlier. DTE Electric's exceptions, pp. 34-35; PFD, pp. 135, 141-142. The company recalls testimony about the current status of the CCR rule and its plan for compliance. DTE Electric further maintains that the suggestion is premature, as certain CCR provisions are not final and some closure dates for CCR sites are decades into the future, a fact the ALJ appears to acknowledge. DTE Electric's exceptions, p. 35; 5 Tr 660-661, 723, 725; PFD, p. 135. The company also reiterates that it does not object to continuing to provide historical and projected test year cost information in rate cases, as was done here, but does object to "providing projections that 'would be way outside the test period for [its] rate case.'" DTE Electric's exceptions, p. 35; 5 Tr 724-725.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, pp. 7, 15. Agreeing with the MEC Coalition and the ALJ, the Attorney General further asserts that "there is significant risk that DTE will overcharge ratepayers for projected CCR costs and transparency in this area should not be optional." *Id.*, p. 15 (footnote omitted); PFD, pp. 140-142. Rather than the ALJ's recommendation being premature, the Attorney General contends that it is sensible to start gathering and presenting this information now, "so that parties are not trying to unravel this years down the road, after customers have been overcharged for years." Attorney General's replies to exceptions, p. 15. Moreover, "DTE's argument that it should have the ability to use a projected test year to push costs and projections farther and farther out, but that there is no need to provide transparency on CCR costs because doing so would be 'premature,' is disingenuous." *Id.*

Also in response, the MEC Coalition asserts that the company's arguments lack merit. The MEC Coalition reiterates that just because portions of the EPA's CCR rule may change in the future, it does not render the ALJ's recommendation premature; there are CCR requirements enforceable today for which the company should not be allowed to drag its feet in preparing an accounting of liabilities. MEC Coalition's replies to exceptions, pp. 38-39; MEC Coalition's initial brief, pp. 46-47; MEC Coalition's reply brief, pp. 19-22. The MEC Coalition further avers that the Commission's reasoning addressing a similar prematurity argument in Case No. U-18419 equally applies here. MEC Coalition's reply brief, pp. 21-22; April 27, 2018 order in Case No. U-18419, p. 46. Additionally, according to the MEC Coalition, just because closure dates for some CCR sites may be decades into the future, others will close much sooner, and impending closure "does not obviate the need for a proper accounting in the near term," to protect ratepayers

from being overcharged. MEC Coalition's replies to exceptions, p. 40; MEC Coalition's initial brief, p. 45; 9 Tr 3792-3793.

The Commission agrees with the MEC Coalition, the Attorney General, and the ALJ and finds the MEC Coalition's tracking and planning recommendation regarding CCR closure costs appropriate considering the significance and span of these requirements for the company and its ratepayers, along with the need for better transparency and a more holistic presentation of project components, costs, and timing. 9 Tr 3744-3745, 3788-3793; Exhibit MEC-54. Although DTE Electric contends this recommendation is premature, the Commission disagrees considering the company's substantial related projected expenditures requested and discussed above. In DTE Electric's next rate case, the company shall therefore provide a full accounting of current and future CCR costs—with such accounting clearly identifying funds collected to date, funds for the test year in that rate case, and funds projected for the future.

e. Belle River Retirement Analysis

The MEC Coalition asserted DTE Electric's capital expenditure planning for Belle River (Tier 1 coal units) through 2029/2030 is not robust, when compared to a 2025/2026 retirement scenario.<sup>12</sup> 9 Tr 3783-3784. Referencing the company's IRP in Case No. U-20471, the MEC Coalition argued that the decision to keep Belle River operational through 2029/2030 was based on a very limited retirement analysis finding savings (NPVRR) of \$39 million. The MEC

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<sup>12</sup> As stated by the MEC Coalition:

DTE is requesting \$103.47 million over a 28-month period (Jan. 1, 2019 – Apr. 30, 2021) for routine capital costs at Belle River. This is a significant increase (more than triple) in spending levels from the historical test year, in which the Company incurred \$12.9 million of routine capital costs.

9 Tr 3784 (footnotes omitted), citing Exhibit A-12, Schedule B5.1, page 3 (line 3).

Coalition shared modeling sensitivity concerns expressed in Case No. U-20471, and set forth two additional errors with the company's analysis: "(1) DTE mischaracterized the costs and benefits of continuing to operate the Belle River units by understating the peak capacity that Belle River units would provide under an early retirement scenario; and (2) DTE understated the fixed costs associated with continued operation of the Belle River units." 9 Tr 3785 (footnote omitted). The MEC Coalition contended that if these errors were corrected, DTE Electric's \$39 million in savings would be erased and would instead result in "a \$17 million savings (NPVRR) to ratepayers from retirement and replacement of Belle River with alternative resources in 2025/2026." *Id.* (footnote omitted). The MEC Coalition further asserted that, if the company started ramping down capital and major maintenance spending like it has done with its Tier 2 coal plants, reduced spending would start around 2020, lowering the projected spending in this case.

*Id.*, pp. 3787-3788. The MEC Coalition thus recommended that:

the Commission require DTE, in the next rate case, to provide a thorough, supported, and well-documented analysis of how capital and major maintenance spending on Belle River Units 1 and 2 should be assumed to ramp down in the years leading up to retirement in both 2025/26 and 2029/30 retirement scenarios. The Commission should further require DTE to evaluate, in light of such ramp down of capital and major maintenance spending, the most economic retirement date(s) for the Belle River units. The Commission should require that DTE ensure that cost recovery requested in that rate case reflects such ramp down and retirement date(s).

*Id.*, p. 3788. DTE Electric disagreed with the recommendation, asserting that it is apropos for an IRP case, not a rate case. 4 Tr 507-508; DTE Electric's reply brief, pp. 16-17.

The ALJ found the MEC Coalition's request reasonable and that it should be adopted. PFD, p. 143. The ALJ stated:

While DTE is obligated to file Integrated Resource Plans every 5 years, it is also obligated to establish the reasonableness and prudence of expenditures it seeks to recover in annual rate case filings. MEC's requested analysis of a 2025/2026 retirement date would fall within a five-year time frame of the expected filing of

DTE's next rate case, which might be expected to use a test year ending in 2022. A five-year planning period for a rate case is not extraordinary. DTE has to present a five-year plan in PSCR proceedings, and in Case No. U-18014, the Commission required DTE to prepare a five-year distribution plan. DTE recovers its capital investments over a period [of] years, using depreciation rates established periodically in depreciation cases. It is not unreasonable to expect DTE to justify any major capital investments in a plant as economical over the remaining expected life of the investment. Put another way, should conditions change following an IRP plan, DTE may not simply stick its head in the sand in reliance on a determination made in that case, without further considering ratepayers interests in light of current conditions.

PFD, pp. 143-144. The ALJ cited the Commission's finding in the February 20 order that the company failed to demonstrate that the 2029/2030 retirement date is reasonable and prudent. According to the ALJ, "In order to properly evaluate projected capital and O&M spending in future rate cases, DTE is clearly going to have [to] provide an economic analysis supporting continued operation of the unit, i.e. the retirement analysis requested by the MEC Coalition."

PFD, p. 145.

DTE Electric excepts, asserting that "retirement analyses are more comprehensive than simple economic calculations" and that "[a]dditional planning principles must be considered." DTE Electric's exceptions, p. 36. Pointing to MCL 460.6t, the company avers that the Legislature has decided the proper forum for evaluating a plant retirement is in an IRP case, which DTE Electric states it did and demonstrated, in Case No. U-20471, that continuing to operate Belle River to 2029/2030 is favorable to customers as compared to 2025/2026. The company further states:

The Commission did not find that demonstration adequate, but the Commission's remedy was to direct "DTE Electric to provide additional retirement information pursuant to [MCL 460.6t(5)(k) and (m)] as part of its next IRP filing" (February 20, 2020 Order in Case No. U-20471, p 37, further quoted at PFD, p 144). Thus, this issue has already been resolved in the IRP context.

DTE Electric's exceptions, p. 36 (alteration in original). DTE Electric asserts that this proposal by the MEC Coalition and recommendation by the ALJ is an improper attempt to litigate, or

re-litigate, Case No. U-20471 in this case, which the company contends the MEC Coalition acknowledged in its initial brief. *Id.*; MEC Coalition's initial brief, p. 37. DTE Electric further argues that this suggestion is improper, as well beyond the scope of a general rate case and beyond the Commission's statutory powers. DTE Electric's exceptions, p. 37, citing *Union Carbide Corp v Pub Serv Comm*, 431 Mich 135, 146; 428 NW2d 322 (1988); 4 Tr 507-508, 543. DTE Electric further argues:

The [ALJ] provides no sound basis for [her] recommendation that the Commission require the Company to conduct alternative retirement analyses in a rate case with immediate cost-recovery consequences. Instead, the [ALJ] attempts to support [her] position with inapt analogies to plans that are merely informative rather than binding. To the extent that these plans are even relevant, they support a contrary conclusion. Specifically, a five-year PSCR forecast is not approved, but merely accepted by the Commission, and is limited "in light of existing sources of electrical generation and sources of electrical generation under construction" under MCL 460.6j(4). . . . Similarly, when the Commission directed DTE Electric to submit a five-year distribution investment and maintenance plan, the Commission stated that it "does not expect to formally 'approve' the plan" (January 31, 2017 Order in Case No. U-18014, p 41, further quoted at PFD, p 147). The Commission later "clarifie[d] that the purpose of a framework for the next round of distribution plans is to provide focused discussion, longer-term visibility than what is available in a rate case, and better understanding, not to set prescriptive mandates on the utilities" (November 21, 2018 Order in Case No. U-20147, p 36). Most recently, the Commission further explained that a five-year plan is akin to IRP planning (rather than rate case analysis as the [ALJ] suggests). (September 11, 2019 Order in Case No. U-20147, pp 4-5, concluding: "Therefore, the Commission directs DTE Electric . . . to continue to develop detailed distribution plans over a five-year period, but also include in their plan their vision and high-level investment strategies 10 and 15 years out. This approach is consistent with the planning horizons used in IRPs").

DTE Electric's exceptions, pp. 37-38. The company also takes issue with the ALJ's statement about it sticking its head in the sand, arguing such expression is merely distracting from the fundamental point that this retirement issue is a management decision under *Union Carbide* and the proper forum for this type of analysis, and other long-term complex issues, is in an IRP case, not a general rate case. DTE Electric further avers that this recommendation is not in sync with

the Commission's directive in Case No. U-20471 but rather undermines that directive. DTE Electric's exceptions, pp. 38-39; PFD, p. 144; February 20 order, p. 37. In further support of its objections to the ALJ's recommendation on this issue, the company states:

It bears emphasis that Belle River is a large, high-value Tier 1 plant. The plant cannot simply be retired as the MEC Coalition advocates. Nor could Belle River simply be un-retired in the event it is needed after it is forced into early retirement through underfunding of the projects necessary for the plant to operate safely, reliably, and in an environmentally compliant manner. It is beyond credible dispute that reasonableness and prudence demands that the preferences of various interest groups are balanced against the need for reliable electricity to serve the Company's customers. Case in point, the planned Tier 2 retirements are contingent on the timely start-up of the Blue Water Energy Center (BWEC) and, in the case of Trenton Channel 9, the resolution of a MISO-declared System Support Resource (SSR).

DTE Electric's exceptions, p. 39 (footnote omitted). Citing MCL 460.6t(8), the company asserts that the whole point of an IRP case is to determine a utility's most reasonable and prudent means of meeting its energy and capacity needs, and thus, the recommendation to relitigate this issue in the context of a general rate case should be rejected.

The Attorney General responds that, for the reasons laid out in testimony, briefing, and the PFD, the Commission should reject DTE Electric's exceptions and adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 7.

The MEC Coalition disagrees that the ALJ's recommendation constitutes an improper re-litigation of this issue. The MEC Coalition asserts that the company "misapprehends the purpose of including an NPVRR analysis in [its] next rate case," which will not determine the retirement date of this plant and is thus not in tension with the company's assertions regarding reliability. MEC Coalition's replies to exceptions, p. 42. Rather, according to the MEC Coalition:

in that case – as in any rate case – the Commission will determine whether DTE's proposed O&M spending and proposed capital investments in Belle River are reasonable and prudent. That determination will hinge, in part, on whether such capital investments are "economical over the remaining expected life of the

investment.” Thus, an NPVRR analysis of Belle River that compares a 2025/26 retirement scenario to a 2029/30 scenario will enable the Commission to “properly evaluate projected capital and O&M spending” in the Company’s next rate case.

*Id.* (footnotes omitted), citing PFD, pp. 144-145. In a footnote, the MEC Coalition also addresses DTE Electric’s argument about IRP cases being the proper forum to make retirement decisions, pointing out that the company, in this very rate case, cited non-economic factors to justify retirement proposals relative to River Rouge Unit 3, Trenton Channel 9, and St. Clair. The MEC Coalition asserts, “The Company’s willingness to address both economic and non-economic factors to support its retirement decisions in this case underscores the reasonableness of the [ALJ’s] recommendation.” MEC Coalition’s replies to exceptions, p. 42, n. 202. The MEC Coalition further argues that the company misses the mark when characterizing the ALJ’s recommendation as undermining the Commission’s decisions in Case No. U-20471, as the ALJ cited that case in developing her fully consistent recommendation here. The MEC Coalition additionally avers that DTE Electric’s assertion that requiring an NPVRR analysis is outside the Commission’s authority is an equally meritless argument. As stated by the MEC Coalition:

the question in a rate case is whether the utility’s proposed capital and O&M spending is reasonable and prudent. To inform that decision, the Commission has often required utilities to submit economic analyses of potential retirement dates (i.e., NPVRRs) with the utility’s rate case. There is nothing unusual or improper about the Commission’s practice. Indeed, DTE itself has regularly submitted NPVRR analyses with its rate case applications – including this one.

*Id.*, pp. 43-44 (footnotes omitted); 4 Tr 532-534, 540-541; 5 Tr 758-769; Exhibit A-12, Schedules B6.2, 6.3, and 6.4; Case Nos. U-18014, U-18255, and U-20162. For similar reasons, the MEC Coalition additionally argues that PSCR and distribution plan forecasts are not formally approved but rather inform whether plans are reasonable, the same holding true for an NPVRR analysis filed in the company’s next rate case which would assist in that regard and ultimately reduce risk as it relates to stranded costs. The MEC Coalition therefore maintains that the Commission should

adopt the ALJ's recommendation and direct the company to submit an NPVRR analysis in its next rate case.

GLREA also responds and supports the ALJ's recommendation that the company should undertake a revised retirement analysis for this plant in its next rate case. GLREA's replies to exceptions, p. 2. While acknowledging that it may be true that plant retirement timing is best suited for an IRP case, GLREA states that the company's IRP in Case No. U-20471 was flawed, and, in that case, the Commission found the company's case to continue operating Belle River until 2029/2030 inadequate, leaving the prudence of further investment in doubt. GLREA argues that DTE Electric's assertion that the ALJ's recommendation will cause the retirement of this plant to be in every rate case is both speculative and unpersuasive, as the recommendation for a revised retirement analysis is a one-time event, resulting from the company's flaws and failures in its IRP. Citing the February 20 order, GLREA asserts that the Commission forewarned the company about the interim need to "carefully scrutinize near-term capital expense and O&M costs as part of the economic analysis necessary to making these investment and cost recovery decisions in *rate cases* . . ." and that, despite this warning, the company chose not to include a retirement analysis in this case. GLREA's replies to exceptions, p. 3; February 20 order, pp. 37-38 (emphasis added). GLREA moreover avers that the task of preparing and submitting this revised analysis in the company's next rate case cannot be regarded as being either burdensome or unreasonable, as "[t]he issue of the most cost-effective time to retire the Belle River Plant is relevant to both an IRP case and a rate case and is a matter that greatly affects the public interest." GLREA's replies to exceptions, p. 3.

The Commission agrees with the MEC Coalition, the Attorney General, GLREA, and the ALJ and finds it appropriate to require DTE Electric to file a revised NPVRR analysis for this plant

using alternative retirement dates in its next rate case. The Commission finds this decision consistent with Case No. U-20471 and further finds that such an analysis will assist in its reasonableness and prudence determination as to the company's requested expenditures for this plant in the next rate case. As noted in the Addendum to EGLE's Advisory Opinion in the IRP case, pending changes to environmental rules could present the opportunity to avoid significant capital expenditures at the plant over the next couple of years if the plant retires by 2028. *See*, filing #20471-0765, Case No. U-20471. This should be thoroughly examined, as it would impact the NPVRR analyses. Although the ALJ specifically referenced a 2025/2026 retirement date, the analysis need not be limited to that specific scenario and should consider other dates to determine the most cost-effective and reasonable approach.

4. Distribution Plant (Exhibit A-12, Schedule B5, line 7; Schedule B5.4)

a. Background

DTE Electric projected bridge period distribution spending of \$1.13 billion and projected test year distribution spending of \$854 million, for a total of approximately \$2 billion. Exhibit A-12, Schedule B5. The Commission has authorized the creation of a regulatory asset for Advanced Distribution Management System (ADMS) costs. In the January 31 order, the Commission commenced a requirement for DTE Electric to file five-year distribution plans. The ALJ noted that the Commission set this requirement based on several factors, including a trend of shifting amounts authorized for spending on reliability to spending on new business, load growth, and emergency repairs; the need for more comprehensive and forward-looking capital investment as part of the rate case process; and the need for increased visibility into system needs. January 31 order, pp. 39-41. The ALJ opined that the five-year distribution planning requirement did not result in any change to DTE Electric's rate case presentation, but noted "that the prefunded

amounts that DTE did not spend on system reliability in 2018 were significantly greater than the amounts discussed in Case No. U-18014.” PFD, p. 148.

DTE Electric presented evidence as to why its system average interruption duration index (SAIDI) has remained in the fourth quartile for the last several years, providing testimony that reasons include a tree trimming backlog, aging infrastructure, the need for additional capacity, and gaps in technology. 4 Tr 129. DTE Electric also indicated that actual reliability spending differs from the amounts forecasted in the prior rate case due to weather, permitting and right-of-way delays; changes in customer requests and in development planning; and changes in labor and material costs, with higher emergent replacements as the primary factor contributing to \$22.3 million more in spending than was forecasted in Case No. U-20162. 4 Tr 130-132. DTE Electric also presented the Electric Power Research Institute (EPRI) study (EPRI report) assessing the company’s five-year distribution plan filed in Case No. U-20147. Exhibit A-23, Schedule M9. DTE Electric’s next distribution and investment maintenance plan is due to be filed in June 2021.

b. General Concerns

The ALJ stated that the ELPC Group, the MEC Coalition, Soulardarity, and Kroger expressed general concerns with the utility’s distribution planning and projected spending, but did not recommend any spending adjustments. These concerns included: (1) inadequate planning for distributed energy resources (DERs) and non-wires alternatives (NWAs); (2) a general lack of description, detail, and transparency; (3) too much focus on immediate capital projects; (4) failure to prove that the company will actually spend the funds on what they have been requested for; (5) failure to consider interoperability testing; (6) a track record of poor reliability performance; (7) infrastructure planning that results in low-income communities experiencing more dangerous and less reliable service; (8) failure to address the 25% of Detroit-based customers who will

experience neither modernization nor hardening of infrastructure; and (9) failure to address high rates of outage, voltage fluctuation, and power sag events. Several parties asked the Commission to consider performance-based regulation (PBR), with outcome-based performance metrics and corresponding ratepayer protections (this issue is addressed below). PFD, pp. 145-162.

Having laid out these general concerns, the ALJ turned to specific requests for capital adjustments.

c. Projected Costs

i. Emergent Replacements

DTE Electric's projected capital expenditures are summarized in Exhibit A-12, Schedule B5.4. In the emergent replacements category, DTE Electric projected capital expenditures 40% above a five-year historical average level, which was arrived at by adjusting those five years to 2018 dollars through application of an inflation factor (the consumer price index (CPI)) and then averaging them. Exhibit A-31, Schedule V-2; 4 Tr 133, 211, 219-220, and 245-247. That amount was then reduced by \$9.1 million in savings attributed to strategic spending. *Id.*; Exhibit A-12, Schedule B5.4. The company argued that this method had been approved in past rate cases. 4 Tr 211, 228, 247-248.

The Attorney General objected to applying inflation to the five years of 2014 through 2018, and noted that the utility provided no evidence showing that it had experienced inflationary cost increases during the relevant time period. 9 Tr 2974. She offered an alternative, applying 2% inflation to the bridge period and test year, but not the 2014-2018 averaging period. Exhibit AG-13. DTE Electric countered that the averaged amounts must be brought to a constant dollar denomination. 4 Tr 244.

The ALJ agreed with DTE Electric and recommended that the Commission authorize the 2014-2018 adjustment for inflation, with the incorporation of the projected savings. PFD, p. 165. The ALJ also recommended use of the Attorney General's proposed inflation factors for 2019 through the end of the test year because they are more recent than the company's and reflect the CPI-urban index rather than the blended CPI index used by DTE Electric. Exhibit AG-1.30; PFD, p. 165, n. 272. The ALJ recommended approval of emergent replacement capital spending of \$324,699,000 for the bridge period, and \$242,250,000 for the test year, which reflects a reduction of \$3.6 million for the bridge period and \$5.1 million for the test year based on application of the Attorney General's inflation rate.

In exceptions, the Attorney General argues that the ALJ erred, and that DTE Electric should not be allowed to inflate historic expense levels to 2018 dollars and then inflate them again for the projected test year. The Attorney General argues that "the five-year normalization approach to forecasting capital expenditures in future years should be done using actual capital expenditures from prior years and not by recasting numbers with additional assumed costs for prior year inflation." Attorney General's exceptions, p. 6. She contends that if any inflation was experienced in those prior years, it is already reflected in the actual amounts. 9 Tr 2974-2977. The Attorney General supports the adoption of her more recent numbers for the bridge period and test year.

Though the ALJ agreed with DTE Electric's central argument – that the Commission should authorize the 2014-2018 adjustment for inflation – in exceptions DTE Electric characterizes the ALJ's decision to use the Attorney General's inflation factors and to revise the authorized capital spending using these factors as *sua sponte* and thus unlawful, contending that it was recommended by no party. DTE Electric's exceptions, p. 40.

In its reply, DTE Electric argues that the PFD is fully supported by the record and the Attorney General's argument should be rejected. DTE Electric's replies to exceptions, p. 14. DTE Electric again argues that prior years' expenditures must be expressed in a constant-dollar denomination because the value of the dollar changes over time; and notes that its proposed method has been approved in past rate cases.

In her reply, the Attorney General argues that no inflation should be applied to the 2014-2018 period because DTE Electric failed to show that it was subject to inflationary pressures.

The Commission adopts the findings and recommendations of the ALJ, which are based on her analysis of the evidence and argument presented by all of the parties. Adding inflation to the five-year historic actual spend is appropriate for calculating the starting point for normalized expenditures. 4 Tr 245-246. DTE Electric provided evidence that it experienced inflationary pressures during the 2014 through 2018 time period. 4 Tr 246-247, 250-251; 5 Tr 892-952. The Commission also agrees with the ALJ's recommendation to apply the CPI-urban inflation rate (the rate customarily applied by the Commission) to the later years using the Attorney General's more recent calculations. Exhibit AG-1.30. Regarding this inflation dispute, the Commission approves emergent replacement capital spending of \$324,699,000 for the bridge period, and \$242,250,000 for the test year, which reflects application of DTE Electric's inflationary adjustment to the historical amounts, and the Attorney General's CPI-urban adjustments to the bridge period and test year amounts.

But beyond the issue of inflation, the Commission is concerned with getting a better understanding of what expenses are assigned to this category, particularly in light of DTE Electric's arguments regarding strategic capital (discussed below). To that end, the Commission directs DTE Electric, in its next electric rate case filing, to provide a detailed description of each

type of expenditures assigned to the emergent replacements category, and directs the Staff to provide an analysis of the expenditures that are capitalized in this category.

ii. Customer Connections

For this expense subcategory, the Attorney General again objected to the application of inflation to the five-year average to bring the averaged years to 2018 dollars, and again offered an alternative (2% beginning in 2020). 9 Tr 2977-2978; Exhibit AG-1.4. As with emergent replacements, the ALJ recommended that the Commission approve use of its standard inflationary adjustment for all years using the Attorney General's projected inflation rates, with the same provisos, which results in a reduction of \$2.4 million for the bridge period and \$3.5 million for the test year. PFD, pp. 166-167.

In exceptions, the Attorney General makes the same objection as was made with respect to emergent replacements. 9 Tr 2978; Exhibit AG-1.4.

In exceptions, DTE Electric repeats its objections to the ALJ's commentary in the PFD. This issue is identical to the emergent replacements inflationary adjustment issue just discussed, and the Commission again adopts the findings and recommendations of the ALJ.

iii. Gordie Howe International Bridge

DTE Electric reported total capital spending of \$10.9 million for the Gordie Howe International Bridge (GHIB) project in 2018, and projected \$14.2 million for the bridge period and \$3.7 million for the test year in GHIB spending. The Attorney General proposed a \$9 million reduction to those projections, arguing that this amount is attributable to DTE Electric's decision to relocate its facilities after discovering that the original location was not appropriate. Exhibit AG-1.5; 9 Tr 2980-2981; 4 Tr 252-254. The Attorney General argued that ratepayers should not be responsible for poor decision-making by the Windsor Detroit Bridge Authority (WDBA).

The ALJ opined that the Commission has already approved expenditures for the relocation of the utility's facilities, with half of the \$18 million cost coming from the WDBA. PFD, pp. 168-169. The ALJ recommended that the company supply a more rigorous accounting in its next rate case of previously spent funds. *Id.*, p. 169. The ALJ recommended that the Commission reject the proposed reduction to capital expenditures.

In exceptions, DTE Electric objects to the ALJ's call for more rigorous accounting in the company's next rate case, arguing that there is no basis for further inquiry. DTE Electric argues that it has already taken all efforts to minimize costs.

In reply, the Attorney General supports the ALJ's recommendation for additional review. The Commission agrees with the ALJ and rejects the Attorney General's proposed disallowance. These asset relocation costs (half of which are supplied by the WDBA) are necessary to protect DTE Electric's infrastructure. Massive construction projects such as the GHIB routinely encounter necessary changes and the Attorney General failed to show that any funds have been imprudently spent by the company. The Commission approves DTE Electric's projected capital expenditures for this category.

#### iv. Strategic Capital

Strategic capital includes projected costs associated with infrastructure resilience and hardening, infrastructure redesign, and technology and automation, and include, for example, the system hardening in the City of Detroit and the 4.8 kilovolt (kV) conversion. DTE Electric reported that it spent \$280 million on these line items in 2018, and projects spending \$912 million through the bridge period and test year. Exhibit A-12, Schedule B5.4; Exhibit A-23, Schedules M4-M6. DTE Electric reported that, in 2018, it underspent its previous projection for strategic capital by \$126 million. 4 Tr 136-137, 149-154; Exhibit A-23, Schedule M1. The underspend

was reportedly due to emergent work and support for hurricane restoration efforts in Puerto Rico, as well as delays in permitting, new substation costs, and changes in customer requests. *Id.*

The Attorney General proposed a 20% reduction in projected strategic capital expenditures, or about \$182.3 million, based on the recent underspend and the company's apparent lack of real commitment to the projects. Exhibit AG-1.7. The Attorney General showed that, based on evidence filed in this case, DTE Electric underspent in this category by 21% in the first nine months of 2019. Exhibit AG-1.6; 9 Tr 2984-2985. The Attorney General argued that the company consistently reneges on its pledges in this category when other programs begin to require more funding as a result of weather events. DTE Electric countered that it cannot defer emergent replacements (replacement of equipment damaged by weather or other circumstances) in favor of strategic capital investments. 4 Tr 258-261.

The ALJ agreed with the Attorney General, noting that the Commission has required DTE Electric to show that amounts are not only reasonable and prudent, but will actually be spent. PFD, p. 175. The ALJ found that "DTE is essentially shifting weather-related risks to the ratepayers." *Id.* She further found that DTE Electric would not achieve its strategic capital spending goal for 2019, and that the proposed 20% reduction was warranted, but recommended, for 2020 and the remainder of the test year, that "in lieu of a further spending disallowance, the Commission provide more active oversight of DTE's efforts to meet its spending commitments in this area." *Id.*, p. 176. The ALJ recommended that the Commission adopt the 20% disallowance for 2019, which amounts to a \$70.4 million reduction, in addition to other adjustments related to advanced metering infrastructure (AMI) which are discussed in the next section.

In exceptions, the Staff disagrees with the ALJ's conclusion that DTE Electric will not be able to achieve its spending goal and argues that "the Company's actual distribution capital

expenditures in 2019 likely exceeded its forecast.” Staff’s exceptions, p. 3. The Staff points out that through September 2019, for distributions operations (DO) as a whole, the company is over its forecast by \$45.7 million. Exhibit A-31, Schedule V-1; 4 Tr 259. The Staff states that the overspend was due to emergent replacements overspending by \$114 million over that time period. 4 Tr 259. The Staff continues to recommend that \$850.752 million be approved for 2019. 9 Tr 3227-3228. The Staff further recommends that, in its next rate case, DTE Electric continue to explain any significant under-spending and over-spending in this category.

In its exceptions, DTE Electric also argues that the ALJ erred, stating that DO capital expenditures must be viewed in its entirety because the utility must allocate its resources to best serve customers based on the operational circumstances at any given time. 4 Tr 257-258. DTE Electric argues that it does not have the discretion to ignore outages or damage to the electrical system, and sometimes resources that would have been available for strategic capital work must be re-directed to emergent situations. Like the Staff, DTE Electric points out that through September 2019 total DO spending was \$45.7 million above forecast and emergent replacement spending was \$114 million above forecast. The company urges the Commission not to view base capital (the category that contains emergent work) as separate from strategic capital. DTE Electric emphasizes that it does not have the option of deferring emergent work, and contends that the reduction by 20% of its planned strategic capital for 2019 will affect projects aimed at improving reliability, reducing risk, and making the system more resilient.

In reply, the Attorney General argues that customers should not be obligated to pay for emergent work at the expense of the infrastructure programs that were authorized in a rate case.

In its reply, Soulardarity supports the reduction to strategic capital and states that, in recent press reports, DTE Electric has announced the suspension of all non-critical infrastructure and maintenance work. Thus, Soulardarity argues, spending is likely to decrease.

The Commission agrees with the ALJ and adopts the Attorney General's proposed 20% reduction to strategic capital spending for 2019 to reflect actual amounts spent on this category. The Commission is primarily concerned with the lack of detailed information regarding what expenditures are assigned to the emergent replacements category and, as discussed above, has directed the Staff to analyze that capitalized expense category in the company's next electric rate case. The Commission also disagrees with DTE Electric's view that DO capital expenditures should be treated as a single entity, putting, for all practical purposes, strategic capital and emergent replacements in the same bucket. This would erase the intended "strategy" of strategic capital – to improve future reliability and resiliency, and reduce risk. The Commission is reluctant to cut strategic capital funding which addresses such essential tasks. However, the evidence shows that strategic capital was underspent in 2019, while emergent replacements capital was overspent in 2019. The Commission would like to see these results reversed—strategic capital can and should be used to strengthen infrastructure resilience, hardening, technology, and automation in ways that will significantly reduce the need to throw out the company's prior test year projection for emergent replacements in every rate case due to unexpected emergency expenditures. As discussed more fully below, the Commission continues to have very real concerns over the long-standing poor reliability performance of the company's distribution system, and re-emphasizes its expectation that DTE Electric will use the dollars approved in rates tied to improving reliability for their intended purpose (i.e., strategic capital investments category), and not shift them to other categories such as emergent replacement and other reactive spending.

#### v. Power Quality Meters

The Staff proposed rejection of the expenditures associated with DTE Electric's plan to install 950 power quality (PQ) meters for its largest commercial and industrial (C&I) customers with loads of one MW or more as part of the 3G to 4G upgrade.<sup>13</sup> The Staff contended that the company failed to quantify the benefit associated with the plan and that the PQ meters are not necessary as part of the 3G to 4G communications upgrade. The Staff eventually proposed a capital expenditures reduction of \$3.82 million.

The ALJ recommended adoption of the Staff's proposed disallowance, finding that the utility failed to explain the need for the advanced PQ meters and failed to present any benefit-cost analysis. *See, Exhibit S-12.3; PFD, pp. 179-180.*

In exceptions, DTE Electric counters that this is a prudent investment for top-load customers which will help reduce the impact of damage to the circuit or to customer equipment when disturbances occur. DTE Electric argues that "alternatively (but not optimally)" it needs at least \$1,358,500 to cover the costs of replacing 3G meters with non-PQ 4G meters. DTE Electric's exceptions, p. 48; 9 Tr 2633-2634. DTE Electric notes that the Staff's adopted disallowance is based on use of the non-PQ meters.

In reply, the Staff states that the burden of proof remains with the utility to show that the investment is reasonable and prudent and argues that the utility provided scant evidence to support this investment.

The Commission agrees with the ALJ and adopts the Staff's proposed disallowance of \$3.82 million associated with approving the use of non-PQ 4G meters for this transition. The

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<sup>13</sup> DTE Electric provided testimony indicating that manufacturers of AMI equipment are not yet designing 5G products, and that 5G infrastructure is not available; but that "cellular providers have stated that 4G will be compatible with 5G." 9 Tr 2622.

Commission notes that DTE Electric simply posited that PQ meters can reduce damage to circuit equipment and customer equipment without providing the Commission with any evidence to support this claim, let alone any quantification of the alleged benefits. 9 Tr 2633-2634; 3365-3366. The Staff highlighted this lack of evidence, along with the fact that DTE Electric only has 739 customers with loads of 1 MW or higher. Exhibit S-12.3. The Commission is not averse to investments of this type, but must rely on evidence that the investment is reasonable and prudent and will be made. In particular, the Commission looks for evidence that the investment dovetails with the overall benefits afforded by the AMI system such as improved and increased communication between the utility and the customer and greater opportunity for customers to control their usage, resulting in long-term behavioral changes. Additionally, the Commission would like to see DTE Electric provide a better view and understanding of the state of power quality on the system as a whole, prior to authorizing funds that benefit only C&I customers. The Commission finds that the company needs to better define the current status of systemic power quality prior to determining the most appropriate and reasonable path forward for investing in improvements.

#### vi. Additional Mesh Network Relays

The Staff proposed a reduction to spending of \$2 million associated with the mesh network, specifically the cost of installing 300 relays in order to improve the meter read rate from 99.22% to 99.5%. 9 Tr 3363-3364; Exhibit S-12.10, p. 183. DTE Electric had proposed the additional relays to deal with an issue of seasonal vegetation. The Staff noted that the current read rate is well above the required 85% and that the expenditure does not appear to be efficient or needed. *See, Mich Admin Code, R 460.724(d) (Rule 24(d)).* The ALJ agreed with the Staff, noting that the

Commission rejected the same expenditures in the May 2 order, pp. 34-35. Exhibit S-12.1; PFD, p. 182.

In exceptions, DTE Electric contends that the 85% required performance level is out of date and thus irrelevant. The company notes that customers prefer actual reads, and argues that the main reason for strengthening the network is to sustain the current high read rate, not to improve it. DTE Electric contends that from May through October seasonal vegetation impacts about 13,000 meters, primarily from leaves blocking the radio signals from the AMI meters, resulting in more estimated bills. 9 Tr 2631-2638.

In reply, the Staff contends that these funds will be spent to improve the read rate and not to simply maintain it, and the company provided no evidence showing that the investment is reasonable and prudent. Staff's replies to exceptions, p. 20.

The Commission agrees with the ALJ and adopts the \$2 million disallowance proposed by the Staff. The current required read rate of 85% is out of date (it was last addressed in 2004), and the Commission has commenced an effort to thoroughly review the current Service Quality and Reliability Standards for Electric Distribution Systems (Mich Admin Code, R 460.701 through R 460.752). *See*, September 11, 2019 and April 15, 2020 orders in Case No. U-20629. The rule aside, however, the Commission rejected this same proposed investment in the May 2 order based on the company's failure to show the value to customers of the investment, and finds that it must do so again. As with the PQ meters discussed above, the Commission looks for evidence that the investment in the relays will strengthen the customer's ability to take advantage of the benefits offered by AMI. Finally, DTE Electric offered limited evidence to support its claims about problematic vegetation. The Commission also refers to the discussion of IT capital investments in

this order (below) and stresses how rate case presentations on IT hardware and software investments could benefit from a more holistic IT planning effort.

d. Customer Advances for Construction

The MEC Coalition noted that DTE Electric's proposed spending for connections and new load comprises 29% of the company's projected base capital program spending on distribution plant. In addition, the MEC Coalition asserted that the company's projected customer advances for construction set forth on Exhibit A-12, Schedule B5.4, page 2, line 15 is approximately 23% of the connections and new load spending, which means "that about 77% of capital expenditures for Connections and New Load are being added to rate base." 9 Tr 3815. According to the MEC Coalition, DTE Electric is not experiencing net load growth that would merit these increases and argued that the additions to rate base are causing unwarranted electric distribution rate increases.

The MEC Coalition also discussed the payback period to recover the line extension and other construction costs from customers. The MEC Coalition's witness, Douglas B. Jester, testified that:

The correct payback period to use for all rate schedules is the inverse of the economic carrying cost of distribution capital investments. Economic carrying cost is the life-cycle average revenue requirement for a given investment, divided by the average undepreciated balance of that investment. We can closely approximate this by dividing the Total Electric Distribution Rate Base in Exhibit A-16 Schedule F1.2, which is \$8,197.321 million by the Capital Rev [Revenue] Req [Requirement] for Total Electric that I compute above, which is \$1,254.415 million. That ratio is 6.58 years, which is significantly less than the 8.2 years average payback time based on expected annual distribution revenue that is the current average payback time under DTE Electric's current practices.

9 Tr 3819-3820. As a result of its analysis, the MEC Coalition recommended that the Commission approve a payback period of 4.5 years for distribution revenue and that the contributions in aid of construction (CIAC) policy be changed to limit DTE Electric's contribution to 4.5 times the estimated annual distribution revenue from the customer. The MEC Coalition contended that this would reduce the company's projected capital expenditures by approximately 20%.

DTE Electric disagreed, asserting that the MEC Coalition's proposed change would create a disincentive for new customers to locate in the company's service territory at a time when DTE Electric's customer growth rate is low. In addition, the company argued that the MEC Coalition's recommendation does not acknowledge the incremental contribution to fixed costs that is provided by new customer load and it "moves away from a long-standing policy and value proposition that existing customers have received and that new customers will not receive." 8 Tr 2293. Finally, DTE Electric claimed that subsidization is not a concern and, because residential and secondary commercial customers are the primary users of the distribution system, the cost allocation is appropriate.

The MEC Coalition disputed the company's claim that there is no subsidization, explaining that it takes almost two decades for new primary customers to reimburse the company for the capital necessary to connect those customers. Therefore, according to the MEC Coalition, residential and secondary commercial customers must be paying a higher proportion of the distribution system costs. In addition, the MEC Coalition contended that DTE Electric failed to present evidence that new customers chose to locate in the company's service area because of the economic benefit of its CIAC policy. The MEC Coalition stated that, "[m]oreover, even if there were evidence showing that the ratepayer contribution to new customer and load costs in fact increases economic development in DTE's service area, the evidence shows that the ratepayer contributions are increasing at a faster rate than the new customer counts . . ." MEC Coalition's initial brief, pp. 65-66.

The ALJ noted that the MEC Coalition provided uncontroverted testimony that DTE Electric has slow load growth and has increased customer rates due to significant customer connection costs. Accordingly, she found the MEC Coalition's proposal to revise the required new customer

contribution toward construction costs to be generally reasonable and properly designed to protect ratepayers from cost increases that lack a demonstrated benefit. However, she stated that “in view of the longstanding nature of the CIAC policy, and the value of transparency on this issue, this PFD recommends that the Commission delay the implementation of the revised proposal by one year, to give DTE the opportunity to implement it without unduly confusing people or companies currently pursuing new connections.” PFD, p. 188. The ALJ also opined that the company is distracted by the demand for relocations and new connections, which is preventing the company from making necessary capital investments and it is degrading the quality of service for other customers. As a result, the ALJ recommended that the Commission revise the CIAC policy.

In its exceptions, DTE Electric disagrees that the CIAC policy is out-of-date and should be changed. The company states that “subsequent to the advent of unbundled rates, the Commission approved a standard allowance table that is based on both production and distribution contributions provided by new load, and which provides transparency and consistency (October 31, 2012 Order in Case No. U-17055).” DTE Electric’s exceptions, p. 53 (footnote omitted). In addition, DTE Electric argues that the MEC Coalition and the ALJ provided no explanation or basis for finding that the current CIAC policy causes a subsidy. Rather, the company asserts that the record “reflects that the current CIAC policy is well-established and continues to have a sound basis. Therefore, the PFD’s recommendation to adopt the MEC Coalition’s proposed ‘CIAC reform’ should be rejected.” *Id.*, p. 54.

The MEC Coalition replies that “DTE’s argument that the cost-shifting issues lack sound foundation is disingenuous. MEC witness Jester presented substantial analysis, using DTE’s data, demonstrating that the CIAC policy disproportionately burdens residential and secondary commercial customers with the cost of new customer connections.” MEC Coalition’s replies to

exceptions, p. 47 (footnote omitted). The MEC Coalition reiterates that linking DTE Electric's contribution policy to 4.5 times new customer's distribution revenue is well-supported, reasonable, and prudent. The MEC Coalition requests that the Commission adopt the ALJ's recommendation with one year for implementation.

The Commission declines to adopt the ALJ's recommendation to modify the CIAC policy at this time. The Commission finds that the MEC Coalition's specific proposal to limit DTE Electric's contribution to 4.5 times the estimated annual distribution revenue from the customer was not sufficiently supported in this case. However, the Commission finds that it would benefit from additional information on whether the current CIAC policy fully reflects cost-of-service principles. As such, in the company's next rate case, the Commission directs DTE Electric to: (1) provide supplementary, substantial, and specific support of the current CIAC model, (2) demonstrate that the current CIAC model is cost-of-service based, (3) provide evidence specifically showing how the overall revenues from new customer connections help offset other customer costs, and (4) provide details regarding how new customer connections drive upgrades to the system that may benefit other customers.

e. Performance-based Regulation Mechanisms

According to Kroger, its retail outlets that are served by DTE Electric have "endured high outage rates, numerous single-phase outages, voltage fluctuations, and power sag events. These types of power quality issues can require equipment to be shut down or risk significant and expensive damage to the equipment." Kroger's initial brief, p. 1. In addition, Kroger contended that these service issues cause food spoilage, interrupt production, and disrupt sales, which results in significant, unreimbursed costs for Kroger.

Kroger explained that SAIDI is a reliability metric that measures the average time that customers are without power in a year. Kroger asserted that DTE Electric's SAIDI has been consistently in the fourth (worst) quartile for the last few years and that the company has not shown that it plans to improve its SAIDI metric in the near future. As a result, Kroger recommended a PBR-type mechanism called a "Reliability Improvement Mechanism ('RIM') that will provide a credit from the Company to its customers until it achieves at least one full year of average reliability performance or better." *Id.*, p. 3 (footnote omitted). Kroger stated that the RIM credit should be equal to the revenue requirement impact that would result from a 10-basis-point reduction in DTE Electric's ROE. Kroger contended that the RIM will incentivize the company to improve its reliability performance.

In its initial brief, the MEC Coalition noted that, in the January 31 order, the Commission directed DTE Electric to develop and submit a five-year distribution investment and maintenance plan, which could include PBR proposals and a foundation for the measures. However, according to the MEC Coalition, DTE Electric's first five-year plan filed in Case Nos. U-18014 and U-20147 "did not propose a PBR-type mechanism to tie future distribution spending to reliability or other performance metrics." MEC Coalition's initial brief, p. 52. Regardless, the MEC Coalition argued that distribution planning is simply a planning process and "it lacks the benefits of information exchange, alternative proposals, and Commission approval of proposed investments."

*Id.*

The MEC Coalition noted that, more recently in the MI Power Grid initiative, the Commission recognized an opportunity to explore earnings mechanisms through PBR. The MEC Coalition asserted that, although "MI Power Grid does not identify 'next steps' in the immediate future to tie distribution system investments to reliability or other output metrics," the initiative "may offer

future potential to explore distribution system PBR mechanisms.” *Id.*, p. 53. In the meantime, the MEC Coalition stated, DTE Electric is proposing, once again, to increase its distribution spending while its reliability remains poor. Therefore, the MEC Coalition requested that, in the immediate case, the Commission commence a separate, contested-case process that will create “‘outcome and output-based performance metrics and corresponding ratepayer protections’ so they will be considered for adoption in DTE’s next rate case.” *Id.*, p. 54.

Regarding Kroger’s claim of poor power quality, DTE Electric acknowledged its reliability performance but disputed that the proposed RIM will improve its SAIDI metric and disagreed that an incentive is necessary to improve reliability. DTE Electric asserted that the cause of low reliability is due mostly to trees and stated that “the Company is already under reporting requirements in connection with its tree-trimming surge program . . . .” DTE Electric’s reply brief, p. 30. In addition, the company contended that the RIM could penalize DTE Electric for events beyond its control, such as weather-related outages, and may withhold funding for systems requiring investment until the company improves performance, which the company alleged is counterproductive and illegal.

In response to the MEC Coalition’s proposal that DTE Electric file a distribution plan and a related PBR-type proposal in a separate contested case, the company objected, asserting that the Commission has already directed DTE Electric to file its next distribution plan by June 30, 2021, in Case No. U-20147. In addition, the company asserted that the “[i]ntervenors appear to envision ‘metrics’ that would violate well-established law and regulatory policy because they would be based on hindsight review of how investments (combined with weather events, etc.) perform in the future.” *Id.*, p. 29. Therefore, rather than tying spending to performance metrics, DTE Electric

requested that the Commission review the company's distribution investment proposals on their individual merits.

In the PFD, the ALJ stated that "DTE has not yet found an approach to strategic capital spending that enables it to demonstrate a firm commitment to the programs it acknowledges are necessary in order to significantly improve its distribution system performance." PFD, p. 189.

The ALJ noted that the Commission has approved substantial prefunding for specific capital expenditures, requested that the company design a five-year plan for distribution spending, and authorized sizeable ROEs to assist the company in making capital investments in its system.

However, in the ALJ's opinion, "[n]one of these beneficial approaches are working, because DTE's distribution system performance remains in the 4<sup>th</sup> quartile and DTE's strategic capital spending for 2019 is once again expected to be below projected levels." *Id.*, p. 190. Therefore, the ALJ recommended that the Commission adopt the MEC Coalition's proposal. However, because it will take significant time to implement the PBR measures, the ALJ recommended that DTE Electric present the metrics in a future rate case. In addition, the ALJ suggested that the Commission use the oversight authority set forth in MCL 460.56 to direct DTE Electric's management to explain how it will meet emergent capital needs and how it will address system maintenance obligations.

In its exceptions, DTE Electric reiterates that it will file its next distribution plan by June 30, 2021, in Case No. U-20147, wherein the company will address emergent capital needs and its system maintenance obligations. DTE Electric also argues that:

The MEC Coalition's concept of tying spending to performance metrics is contrary to the contested case provisions of the APA. Specifically, [in a contested case,] the Company proposes expenditures, other parties may challenge them, and then the Commission makes a decision based on the record, as discussed in Exception I.

DTE Electric's exceptions, p. 55. The company reiterates that the intervenors' proposed metrics would be based on a retrospective view of how investments perform in the future, which would violate well-established law and regulatory policy. Finally, DTE Electric states that the ALJ's recommendation that the Commission use the oversight authority set forth in MCL 460.56 is not a finding of fact or a conclusion of law and, therefore, is beyond the proper scope of a PFD. *Id.*

In its exceptions, the ELP Group states that, although it agrees with the ALJ's recommendation, it believes that the PFD lacks the specificity necessary to ensure that DTE Electric is held accountable for results. Therefore, the ELP Group recommends that, for 2020 and the last four months of the projected test year, the Commission should actively supervise the company's efforts to meet its strategic capital commitments. Furthermore, the ELP Group requests that DTE Electric "work with Staff and stakeholders to develop a proposal for outcome-based performance metrics, and file that proposal as a contested case within six months of the Commission's order in this proceeding . . ." ELP Group's exceptions, p. 4. The ELP Group provides a list of minimum components for its proposal on page 4 of its exceptions.

Kroger disagrees that the MEC Coalition's PBR proposal will more effectively address customer reliability concerns. Kroger explains that "MEC's proposal that the Commission '*work to develop targeted performance metrics and measures*,' will take significant time to develop and put in place and does [sic] provide much, if any, incentive for DTE to address its poor reliability performance in the short, or medium term." Kroger's exceptions, p. 4 (emphasis in original) (footnote omitted). Therefore, Kroger proposes a hybrid position: the Commission should approve implementation of Kroger's RIM proposal until DTE Electric improves reliability or until the company "develops targeted performance metrics and measures in accordance with [the MEC Coalition's] proposed performance-based rate making proposal." *Id.*, p. 5. In addition, if the

Commission is concerned that the RIM is insufficient to motivate the company to perform needed system maintenance, Kroger contends that the Commission could order a more significant penalty until DTE Electric improves performance or another PBR mechanism is implemented.

In response to Kroger's proposed hybrid position, DTE Electric asserts that the Commission should reject Kroger's proposed RIM because it will not incentivize the company to improve reliability. DTE Electric also requests that the Commission reject the ELPC Group's proposed performance-based metrics because they lack support on the record and were proposed for the first time in exceptions. DTE Electric's replies to exceptions, p. 19.

The ELPC Group disagrees with DTE Electric that the ALJ departed from the contested case process set forth in the APA. Rather, the ELPC Group argues that the ALJ is merely suggesting "that the Commission consider a new approach to facilitate DTE's strategic capital spending . . ." ELPC Group's replies to exceptions, p. 3. Additionally, the ELPC Group avers that MCL 24.281 provides the ALJ with authority to recommend a form of relief that may be granted by the Commission, based on her findings of fact. Finally, the ELPC Group disputes the company's claim that the PFD is inconsistent with *Union Carbide*. The ELPC Group asserts that the PFD "properly recommends [that] the Commission exercise its statutory authority to examine the accounts and records of any public utility pursuant to MCL 460.56—an authority that the Commission may exercise and has exercised through its orders in rate cases." *Id.*, p. 4.

In reply to DTE Electric's claim that this issue will be addressed in the company's next distribution investment and maintenance plan, the MEC Coalition contends that its proposed PBR docket will be complementary to, and not duplicative of, the ongoing distribution planning docket in Case No. U-20147. The MEC Coalition also objects to resolving reliability issues in the company's distribution investment and maintenance plan because it is merely a planning docket, it

does not permit project and cost approval/disapproval, it delays accountability, and it lacks meaningful ratepayer protections. In addition, the MEC Coalition disputes DTE Electric’s assertion that a PBR mechanism is contrary to law; the MEC Coalition recommends establishing a separate contested case docket and states that “[t]here is no legal prohibition on initiating the proceeding,” and any issues regarding the scope of jurisdiction and the legality “regarding a particular PBR mechanism would be appropriately considered in that proceeding.” MEC Coalition’s replies to exceptions, p. 53.

The MEC Coalition agrees with the ELP Group that, in this case, the Commission should specifically identify minimum components of a PBR mechanism, because “such specific instructions . . . would improve the robustness of the first PBR contested case docket. The utility’s filing is the starting point for the docket; a more developed and comprehensive initial filing provides the opportunity for stakeholders (intervenors) to propose improvements or modifications.” MEC Coalition’s replies to exceptions, p. 55. Therefore, the MEC Coalition requests that the Commission adopt the ELP Group’s proposed modifications to the ALJ’s recommendation.

In addition, the MEC Coalition concurs with Kroger’s request that the Commission adopt the proposed RIM as an interim PBR mechanism. The MEC Coalition states that “Kroger’s RIM proposal is a meaningful first step to tether distribution spending to customer benefits. The RIM should remain in effect, and subject to revision in subsequent rate cases and other dockets, until the Commission adopts a different PBR mechanism to tie distribution spending to output metrics with ratepayer protections.” *Id.*, pp. 55-56.

In its replies to exceptions, Soulardarity requests that the Commission approve: (1) the ALJ’s proposed reduction in the company’s forecasted amount of strategic capital; (2) the MEC

Coalition’s recommendation that distribution system expenditures be linked with performance metrics, particularly reliability improvement; and (3) the commencement of a related contested case within six months. If the MEC Coalition’s proposal does not improve DTE Electric’s investment in its distribution system needs, then Soulardarity recommends adopting ABATE’s proposal of reducing the company’s rate of return until it achieves average performance levels. Soulardarity’s replies to exceptions, p. 2. In addition, Soulardarity recommends that the Commission adopt the ELP Group’s request that the company develop more detailed performance metrics, which “will allow the Commission and other parties to understand better whether DTE’s investment choices are actually benefitting ratepayers and will increase the Commission’s ability to hold DTE accountable.” *Id.* Finally, Soulardarity recommends that the Commission adopt performance metrics that are specifically designed to consider safety, reliability, and quality-of-service in low-income and people-of-color communities.

The Commission agrees with the ALJ and the MEC Coalition that it is reasonable and prudent for DTE Electric to be more actively pursuing distribution system PBR mechanisms. As the ALJ rightly notes, “DTE has not yet found an approach to strategic capital spending that enables it to demonstrate a firm commitment to the programs it acknowledges are necessary in order to significantly improve its distribution system performance.” PFD, p. 189. Despite the Commission’s approval of a full suite of measures to address the continuing poor performance of DTE Electric’s distribution system, *see Id.*, p. 190, it is clear that more must be done to align DTE Electric’s business interests with the desire of its customers for a more reliable distribution system. As the ALJ opined, “[n]one of these beneficial approaches [authorized by the Commission] are working, because DTE’s distribution system performance remains in the 4<sup>th</sup> quartile and DTE’s strategic capital spending for 2019 is once again expected to be below projected levels.” *Id.* The

exploration of appropriate performance metrics is important to the Commission because it helps inform potential revisions to service quality/technical standards and it assists the Commission in reviewing the actions and investment proposals in utility planning, ratemaking (e.g., incentive compensation and tree trimming), PSCR, etc. The Commission finds that these issues should be specifically explored in the MI Power Grid initiative.

In response to the MEC Coalition's request that the company file a PBR proposal within six months in a separate contested case docket, the Commission finds the proposed timeframe to be too brief for DTE Electric to effectively investigate, develop, and finalize appropriate PBR metrics. Therefore, as part of its distribution investment and maintenance plan to be filed in 2021 in Case No. U-20147, the Commission directs DTE Electric to include proposed PBR elements with reasonable metrics tied to utility financial performance, improvement targets, and timelines for achievement. More specifically, the company should consider the following:

1. The utility's financial PBR system should include both incentives and disincentives based on performance; incentive structures should be holistically considered in terms of impacts on potential earnings;
2. The utility should consider the pros and cons of a comprehensive PBR system, which would avoid concurrent regular annual rate cases and separate PBR reconciliations;
3. Performance metrics should include outcome measures (e.g., customer average interruption duration index (CAIDI)) and not be limited to output metrics such as number of poles replaced;
4. Performance metrics should be linked to regional, national, and/or peer utility benchmarks, where possible;
5. Data and calculation methodologies should be well defined, transparent, and open for auditing/verification purposes;
6. Targets should be utility specific; and

7. Potential areas of performance focus are safety, customer service (end-use customers, builders, interconnecting generators, etc.), timeliness and quality, reliability and resiliency, long-term costs, and innovation.

A final PBR plan and metrics shall be included with the company's distribution investment and maintenance plan filed by June 30, 2021, in Case No. U-20147.

f. System Hardening and Conversion

Soulardarity claimed that, in Case No. U-20162, the Commission approved DTE Electric's plan to convert certain areas of its 4.8 kV system to 13.2 kV and to harden other areas to provide safer, more reliable conditions until a full conversion can be effectuated. Soulardarity expressed concern that the 4.8 kV system is less safe and reliable, that low-income communities may experience hardship during service interruptions, that DTE Electric has not been appropriately transparent about which systems it plans to convert or harden, and that, instead of safety and reliability, the company specifically favors reducing its future maintenance costs. Soulardarity's initial brief, p. 10. Soulardarity requested that:

- 1) The Commission should not approve DTE's proposed residential rate increase to fund hardening and conversion.
- 2) In the event that the Commission determines that a rate increase is necessary to fund the new and improved infrastructure, it should direct DTE to reconsider which rates would need to be increased, considering a reduction in residential costs and shifting the infrastructure cost burden to other rate classes.
- 3) The Commission should require that DTE provide public transparency on the basis for its decisions regarding which systems to improve (including hardening and conversion) and maintain.
- 4) The Commission should direct DTE to employ a cost measurement mechanism by substation that takes into account the value of the product it delivers to those ratepayers, reflecting the cost and benefit of safety and reliability upgrades.
- 5) The Commission should require as a policy and direct DTE to consider a service gap between low-income and higher-income ratepayers in plans for upgrades to the distribution and transmission systems, because Michigan law requires utilities to provide equitable service at equitable rates.

- 6) The Commission should require as a policy and direct DTE to use tools such as the EJScreen that would inform the Commission, DTE and other utilities, and the public when energy service must be analyzed in the context of other environmental and social indicators.

*Id.*, pp. 14-15 (footnote omitted).

DTE Electric disputed Soulardarity's claims, asserting that it is addressing sections of the 4.8 kV system based on priority, needs, and system characteristics, with safety as the most significant criteria. The company argued that the Commission acknowledged in Case No. U-20162 that a complete conversion of the 4.8 kV system to 13.2 kV is expensive and provides limited benefit, while hardening is more economically efficient. In addition, DTE Electric claimed that 4.8 kV hardening will provide safe and reliable service more quickly than 13.2 kV conversion. Finally, DTE Electric stated that "while approximately 14% of the Company's customers are located in the City of Detroit, the Company is investing more than 25% of its 2019 Strategic Capital in the City of Detroit to address aging infrastructure and improve safety and reliability, and these significant investments will continue in future years (4T 283-84)." DTE Electric's reply brief, p. 35.

The ALJ noted that because "the Commission addressed Soulardarity's concerns in substantial part in Case No. U-20162, and approved DTE's proposed hardening, there is no basis on this record to reconsider that decision. In its order, the Commission expressly found that DTE was considering both safety and economics in implementing that program." PFD, p. 193. However, she acknowledged Soulardarity's concerns about infrastructure not scheduled for hardening and conversion and noted that it has been challenging for the Commission to hold DTE Electric to its existing commitments that have been prefunded by ratepayers. Therefore, the ALJ recommended that the Commission reduce, but not completely eliminate, funding for DTE Electric's proposed

hardening and conversion programs. She also recommended that the Commission approve PBR and other measures to encourage the company to conduct system improvements. Furthermore, the ALJ asserted that “future rate cases would benefit from a greater upfront explanation by DTE of the factors and scoring process that goes into prioritizing the circuits to be hardened. DTE should also plan to address its prioritization in its next distribution system plan filing.” *Id.* In response to Soulardarity’s other requests, the ALJ stated that the Commission may not direct DTE Electric to use a specific screening tool or to set rates that disregard cost-of-service principles by shifting costs to other classes without technical justification.

Soulardarity excepts, stating that although DTE Electric forecasts safety risk during its prioritization process for hardening, the company failed to track or consider actual safety incidents. In addition, Soulardarity contends that the company is only considering safety or reliability when determining where to harden and is not providing the most significant service improvements through conversion to modern infrastructure. According to Soulardarity:

DTE’s failure to consider this information and these factors contributes to less infrastructure investment in low-income and people-of-color areas, where there is a higher prevalence of these problems. Residents and businesses served by antiquated parts of DTE’s system are receiving inferior and downright dangerous service as compared to individuals in the same rate classes who live in areas with hardened or converted infrastructure.

Soulardarity’s exceptions, pp. 4-5. Soulardarity also asserts that the ALJ misunderstood its argument and explains that its proposal does not violate cost-of-service principles. Finally, Soulardarity reiterates that the Commission should require DTE Electric “to use a tool like EJScreen to both improve the Company’s decisionmaking [sic] and enable more meaningful Commission oversight.” *Id.*, pp. 6-7.

In its replies to exceptions, DTE Electric disputes Soulardarity’s claim that it is not properly considering safety. The company “emphasizes that it appropriately makes its decisions about

safety and reliability investments based on the needs and characteristics of its system. In addition . . . the Company's prioritization framework provides the greatest weighting to safety improvements (4T 283; Exhibit A-23, Schedule M7)." DTE Electric's replies to exceptions, p. 22. DTE Electric also notes that Soulardarity's suggestion to shift costs to C&I customers reflects a fundamental misunderstanding of how costs are statutorily allocated to ratepayers.

The Staff disagrees with Soulardarity's claim that the ALJ misunderstood its argument and Soulardarity's assertion that, rather than customer rates and cost of service, the primary issue in this case is the inequality of service that DTE Electric is providing to low-income customers. Similarly, the Staff disputes Soulardarity's claim that, "[w]here the funding for this program comes from is separate from and secondary to ensuring comparable quality of service among ratepayers in the same class." Staff's replies to exceptions, pp. 28-29. The Staff asserts that the purpose of a general rate case is to set rates to recover revenue based on cost causation as described by the cost-of-service study. The Staff contends that DTE Electric's distribution planning process is the appropriate forum for Soulardarity to express these concerns.

In its replies to exceptions, ABATE argues that Soulardarity's proposal to increase rates for C&I customers, rather than residential ratepayers, violates cost-of-service principles pursuant to MCL 460.11(1). ABATE contends that, under DTE Electric's current cost-of-service model, C&I customers are properly allocated costs based on the customer's contribution to the costs; Soulardarity's proposal would be inconsistent with these statutory principles.

The Commission concurs with the ALJ that Soulardarity's concerns were substantially addressed in Case No. U-20162. However, the Commission also agrees with the ALJ that, in its next general rate case, DTE Electric shall provide a more detailed explanation of the factors and scoring process the company uses to prioritize the circuits to be hardened. In addition, DTE

Electric shall provide a plan and timeline for system hardening and conversion in its next distribution investment and maintenance plan to be filed by June 30, 2021.

g. Non-wires Alternatives

The ELPC Group contended that DTE Electric's projected distribution system spending does not conform to the requirements set forth in Case No. U-20147 and that it does not adequately incorporate non-wires alternatives (NWAs).

DTE Electric stated that, at this time, the company believes that NWAs "are best suited to addressing situations in which circuits or substation equipment is or might become overloaded, or to help delay or offset planned traditional upgrades (4T 206)." DTE Electric's initial brief, p. 55. In testimony, the company described its NWAs pilot project methodology and current pilot projects. 4 Tr 206-209. DTE Electric also noted that other technologies, such as battery storage, are now more affordable alternatives to traditional distribution investments, particularly when they are combined with DR and energy waste reduction (EWR) alternatives.

The ALJ stated that the ELPC Group's concerns regarding NWAs are most appropriately addressed in the distribution planning process. PFD, p. 195.

In its exceptions, the ELPC Group claims that DTE Electric has shortcomings in its five-year distribution plan and, specifically, its grid modernization plan. The ELPC Group also asserts "that the Company was considering NWA in an unreasonably narrow fashion." ELPC Group's exceptions, p. 5. The ELPC Group urges the Commission to address NWAs in this rate case proceeding rather than postponing consideration of the issue to DTE Electric's distribution plan. The ELPC Group contends that "that approach has not been sufficient to ensure that the Company follows through on its Strategic Capital spending commitments." *Id.*, pp. 7-8.

In its replies to exceptions, DTE Electric disputes the ELP Group's claim that its five-year distribution plan has shortcomings. Rather, the company asserts, the Commission found that DTE Electric's five-year distribution plan "complies with the Commission's prior orders and provides significant and useful information on future system needs." DTE Electric's replies to exceptions, p. 20, quoting the May 2 order, p. 20. DTE Electric also contends that its investment strategy and proposed expenditures in this case do not rely on its five-year distribution plan only; instead, they were developed from the plan and are supported in detail by expert testimony and exhibits.

The MEC Coalition states that, for the reasons set forth in the ELP Group's exceptions, it "supports the proposal that DTE provide a robust distribution plan as a supporting exhibit in its next rate case. Such a plan is a necessary but not sufficient measure by which to evaluate the reasonableness of DTE's proposed distribution system investments, the magnitude of which is significant and likely to continue in future rate cases." MEC Coalition's replies to exceptions, p. 57 (footnote omitted).

The Commission agrees with the ALJ that NWAs should be further explored in the distribution planning process. To that end, the Commission directs DTE Electric to provide, in its next distribution investment and maintenance plan, a robust suite of NWAs that may be evaluated for prudence as possible pilot programs. However, the Commission finds that the company continues to bear the burden of showing that its proposed expenditures are reasonable and prudent, and consideration of alternatives – including NWAs – are an important element in demonstrating why its proposed expenditures are preferable to other options. Such evaluations are inherently part of the rate case process.

h. Interoperability

The ELPC Group explained that interoperability is “the capability of two or more networks, systems, devices, applications or components to work together, and to exchange and readily use information—securely effectively, and with little or no inconvenience to the user.” ELPC Group’s initial brief, p. 18. The ELPC Group stated that, as DTE Electric modernizes its system by adding sensing, monitoring, communications, and automation technologies, the company should be required to ensure the interoperability of those technologies. Without interoperability, the ELPC Group contended that DTE Electric “may need to implement expensive integration layers between its different products or develop a proprietary solution, either of which would increase costs for customers.” *Id.* The ELPC Group alleged that DTE Electric failed to adequately consider interoperability testing.

DTE Electric disagreed with the ELPC Group that the definition of interoperability “is built upon open standards.” 4 Tr 278, quoting 9 Tr 2707. The company asserted that it follows the National Institute of Standards and Technology’s (NIST’s) definition of interoperability. In addition, DTE Electric disputes that independent third-party testing is necessary to “ensure that the technology adheres to the open standard, and minimize the effect of any vested utility or vendor interests that could otherwise be reflected in a testing regime.” DTE Electric’s reply brief, p. 37. DTE Electric stated that it employs testing that “confirms compliance, conformance, and integration of all systems. Third-party testing of the same system is unnecessary and would not provide additional value.” DTE Electric’s reply brief, p. 37.

The ALJ stated that the ELPC Group’s witness has extensive knowledge about interoperability testing and the experience of other utilities. And, she noted that DTE Electric is proposing to spend hundreds of millions of dollars on systems that will need to work together. Therefore, the ALJ recommended that the Commission “remind DTE that it puts its shareholders at risk of a

future disallowance if it seeks to prematurely replace or retire systems or purchase expensive retrofits to address interoperability concerns that could have been avoided had it been open to the reasonable suggestions of an expert in the field.” PFD, p. 196.

Although DTE Electric did not take specific exception to this issue, the company provided a general objection to several recommendations in the PFD that may “violate well-established law and regulatory policy because they would be based on hindsight review of how investments (combined with weather events, etc.) perform in the future.” DTE Electric’s exceptions, p. 55 and n. 52. According to the company, the ALJ should refrain from suggesting that the Commission consider certain issues in the future because it is neither a finding of fact nor a conclusion of law and, therefore, it is beyond the proper scope of a PFD. *Id.*

The Commission acknowledges ELP Group’s concern that interoperability is important because, in the future, the company will need to integrate “additional systems” into its ADMS. 9 Tr 2707. However, DTE Electric provided uncontroverted testimony that the “additional systems” cited by the ELP Group are already in the process of being fully integrated into the company’s system. 4 Tr 279. The company also stated that it is in alignment with the GridWise Architecture Council’s definition of organizational interoperability. *Id.*, p. 280. Furthermore, DTE Electric averred that it performs testing to confirm compliance, conformance, and integration of all systems, which demonstrates proper interoperability of all systems pursuant to the NIST definition. The company provided testimony that third party testing of the same system will not provide additional value. *Id.*, p. 279. Therefore, the Commission finds that, at this time, DTE Electric demonstrated that it has reasonably and prudently considered the interoperability of its organization and technologies and has performed the requisite testing. The Commission notes,

however, that interoperability issues should be considered as part of on-going IT planning and deployment.

##### 5. Demand-side Management/Demand Response (Schedule B5.6)

On September 15, 2017, in Case No. U-18369 (September 15 order), the Commission issued an order that provided a process for evaluating DR programs and reconciling DR expenses. In the September 15 order, the Commission explained the three-phase approach in which DR program costs and benefits are evaluated in a utility's IRP. First, after "DR plans are approved as part of the IRP, the DR programs costs are considered approved and are included in rates in a utility's next general rate case." September 15 order, p. 5. Second, between IRP proceedings, a utility may propose changes to DR programs or pilots. Those changes will be evaluated in a rate case and, if approved, included in the utility's next IRP. The Commission stated that, in the third phase, DR program costs and customer participation rates are reconciled against the levels approved in the IRP. *Id.*

DTE Electric filed its IRP in Case No. U-20471 on March 29, 2019, which was approximately three months before the immediate case was filed. In the February 20 order, the Commission recommended changes to DTE Electric's IRP and, on March 20, 2020, the company filed a revised IRP, incorporating the Commission's recommended changes. The Commission approved DTE Electric's revised IRP on April 15, 2020 in Case No. U-20471 (April 15 order).

In this case, DTE Electric proposed \$16.6 million in DR capital expenditures for the bridge period and \$8.5 million for the projected test year as set forth in Exhibit A-12, Schedule B5.6.

###### a. Association of Businesses Advocating Tariff Equity's Proposed Adjustments

ABATE asserted that the company's proposed spending in the immediate case is not consistent with the costs DTE Electric presented in its initial IRP filing. ABATE stated that,

compared to the company's initial IRP, DTE Electric included, in this case, an additional \$2 million for pilot program costs, an additional \$3 million for the Insight program, and zero funding for the Programmable Controlled Thermostat (PCT) program, although \$3 million for the PCT program was included in the initial IRP.

Regarding the Insight program, ABATE contended that DTE Electric failed to present and request approval of the program in its initial IRP, and as a result, ABATE recommended that the Commission reject the proposed \$3 million expense. ABATE also noted that:

in Case No. U-20521, DTE's pending application for reconciliation of its 2017-2018 DR program costs, DTE is requesting approval of a financial incentive mechanism ("FIM") that would provide DTE with an added incentive to invest in DR programs. DTE already receives an incentive to invest in DR programs through its ability to earn its full weighted-average cost of capital on its DR capital investments. The FIM would amount to a doubling of incentives on the same DR program costs, which is unreasonable.

7 Tr 1818. ABATE contended that the company's proposed DR spending in this case is misplaced and that it should be reviewed in the company's IRP proceeding.

DTE Electric objected to ABATE's claim that its projected spending does not match the costs included in the IRP; the company stated that, at the time this case was filed, the Commission had not yet issued an order approving the IRP. In addition, DTE Electric contended that:

the request for capital expenditures for the whole DR portfolio in the current rate case is consistent with the request proposed in the IRP in Case No. U-20471. The Company also assessed changes in circumstances and new pilot opportunities in between the filing of the IRP and of the current rate case to estimate the capital expenditure needs to effectively continue operating the DR portfolio in its entirety.

9 Tr 3543. Turning to the Insight program, DTE Electric stated that it has been investing in the program since 2014 and has recently enhanced the program. The company further explained that the Insight program is not appropriately considered in an IRP because the company does not plan to have the program qualified as a load modifying resource registered with MISO. Finally, DTE

Electric asserted that there is no risk of doubling DR incentives because no party in Case No. U-20521 has proposed an FIM. *Id.*, p. 3549.

The ALJ found that ABATE's proposed adjustments should be rejected because DTE Electric's proposals appear to be consistent with the three-phase framework set forth in Case No. U-18369. PFD, p. 199.

In exceptions, ABATE claims that the ALJ did not adequately address its concerns. ABATE asserts that, although the ALJ noted that “reviewing and approving DR programs in rate cases is appropriate under the Commission’s three-phase framework,’ the PFD did not take issue with the degree of the change in these programs within just a three-month period.” ABATE’s exceptions, p. 26, quoting PFD, p. 202. ABATE states that the disparities between DTE Electric’s initial IRP filing and the rate case warrant greater Commission review.

ABATE also argues that the company failed to demonstrate that its adjusted DR program expenditures are just and reasonable when compared with other alternatives by which DTE Electric could meet its peak demand requirements. ABATE recommends that the Commission approve DTE Electric’s DR program expenditures to the extent that they were approved in the company’s previous DR proceeding. Finally, ABATE reiterates that the Commission should disallow any double recovery on DR program costs that occurs through capitalization and a financial incentive.

On page 24 of its replies to exceptions, DTE Electric states that its “IRP case was pending when the Company filed its rate case, so there was no IRP-approved DR plan preceding this Case No. U-20561.” As a result, the company notes, the requests in this case would naturally differ from what was initially proposed in its IRP proceeding. In response to ABATE’s claim that DTE Electric may double recover the DR program costs through a financial incentive, the company

reiterates that “no party, including the Company, has filed a specific proposal for consideration of a financial incentive mechanism. ABATE’s proposed disallowance is based on a hypothetical and undefined financial incentive mechanism so that proposal should be rejected as speculative (9T 3549).” *Id.*, p. 25.

The Commission agrees with the ALJ and finds that, pursuant to the three-phase framework approved in the September 15 order, as of the date DTE Electric filed the instant case, it did not have an approved DR plan that was part of a Commission-approved IRP. In fact, the company’s DR plan and revised IRP were approved in the April 15 order. Therefore, it is irrelevant that the company’s proposed DR spending in this case is inconsistent with the costs DTE Electric initially presented in its IRP filing. The Commission finds that the company’s proposed capital expenditures for its DR portfolio must be evaluated on their own merits in this case.

b. The Commission Staff’s Proposed Adjustments

DTE Electric proposed expenditures for other programs and pilots, including: (1) Bring Your Own Device (BYOD) for customers who already have internet-ready smart thermostats; (2) a peak-time rebate program for residential customers; and (3) C&I battery storage pilots. The company asserted that “[t]he requested funding will be spent on the exploration and design stages of alternative pilot concepts during 2019 with a goal of launching additional pilots in 2020 and beyond.” 9 Tr 3531. According to DTE Electric, the projected spending for other programs for the bridge year is \$3.7 million and \$4.1 million for the test year. *See*, Exhibit A-12, Schedule B5.6, line 3.

DTE Electric contended that, if the Commission rejects the proposed funding for pilot programs because they are introductory and yet to be defined, it “may prevent the Company from conducting the necessary preliminary analyses before full implementation and project plans are

developed.” 9 Tr 3550. DTE Electric argued that pilot programs require sufficient capital so that the company may implement innovative DR technologies and rapidly change the course of a pilot if it is not performing as expected. The company also offered to meet with the Staff periodically to discuss the pilot programs’ progress, and, if the Staff were dissatisfied with company expenditures, DTE Electric asserted that the Staff could address them in the annual reconciliation phase.

The Staff did not object to the BYOD or the Electric Power Research Institute pilots but recommended that the Commission reject proposed expenses for DR pilots that are insufficiently defined, such as the peak-time rebate program and C&I battery storage. The Staff also contended that “[t]he three-phase DR framework give [sic] the Company ample opportunity to propose new DR capital spending on other pilots at a later time when it can be determined that those pilots actually have a defined purpose. Therefore, the Commission does not need to approve spending on vaguely-described pilots in the instant case, nor the IRP.” *Id.*, p. 3137. Finally, the Staff acknowledged DTE Electric’s offer to meet periodically to discuss the progress of pilot programs. However, the Staff asserted that the offer is not sufficient to provide the required support for undefined pilot programs in this case.

Although DTE Electric agreed that the three-phase framework set forth in the September 15 order provides the company an opportunity to present new DR capital spending on other pilots, the company contended that “the cadence of the regulatory three-phase process may introduce the risk of missed investment opportunities and delays if no clear guidelines exists [sic] regarding the funding of pilots at different developmental stages. By not approving the additional pilot spend in this case, the development and execution of future DR programs could be delayed by several years.” *Id.*, pp. 3552-3553. In addition, DTE Electric expressed disappointment that its offer to

meet was not sufficient to assuage the Staff's concerns; however, the company remained hopeful that it could design a solution that would address the Staff's concerns while allowing the company to move forward with other DR pilots.

The ALJ recommended that the Commission adopt DTE Electric's proposed DR capital expenditures except for the other pilot program expenses to which the Staff objected. She agreed with the "Staff that capital expense projections should not be used a [sic] placeholders for vague funding requests." PFD, p. 202. The ALJ noted that the Commission agreed with the Staff regarding a similar concern with pilot funding in the February 20 order. Additionally, the ALJ stated that DTE Electric's offer to meet with the Staff does not remedy the vagueness of its proposal. Finally, she found unpersuasive the company's claim that, if the expenditures are not approved in this case, it could be many years before the programs are developed and executed. The ALJ asserted that, "[w]ith DTE's present pace of filings, its next rate case order could be expected to be issued approximately May 2021, and if DTE had presented an approvable pilot program, it could be implemented approximately a year later, of [sic] May 2022. That would be a one-year delay, not a several-year delay." *Id.*

In exceptions, DTE Electric disagrees with the ALJ's claim that the pilot programs are placeholders for vague funding requests. The company asserts that pilot programs assist DTE Electric in identifying how customers will react to "specific marketing efforts, program design features, and other characteristics that are dependent on DTE Electric's unique combination of systems, equipment, tariffs, programs and processes (9T 3550-52)." DTE Electric's exceptions, p. 57. The company reiterates that its proposal to meet with the Staff is a practical and appropriate solution to alleviate the Staff's concerns with its pilot program initiatives and progress.

In its replies to exceptions, the Staff reiterates the arguments set forth in testimony and briefing, stating that the pilots for which the Staff recommends disallowance are vague and insufficiently defined, and that meetings with the company will not remedy these issues. The Staff asserts that DTE Electric “may engage in and spend on other DR pilots on its own time without preapproval of cost recovery by the Commission. The Company may then request recovery of prudently [sic] spending on pilots through the annual DR reconciliation or longer-term IRP processes.” Staff’s replies to exceptions, p. 3.

Although it supports a robust exploration of, and investment in, DTE Electric’s DR offerings, the MEC Coalition agrees with the Staff that the company’s other proposed pilot programs are too vague and undefined to be approved in this proceeding. In response to the company’s proposal to meet with the Staff to discuss the progress of the DR pilots, the MEC Coalition contends that “[n]ot only does this offer not overcome the vagueness of the proposal, as the ALJ concluded, but this offer is also insufficiently narrow in scope. Staff is not the only stakeholder with an interest in DTE’s DR pilots.” MEC Coalition’s replies to exceptions, p. 60. The MEC Coalition states that, if more communication about the DR pilot programs is required outside of a general rate case, it should be conducted through a stakeholder process or public forum.

ABATE states that, in the company’s exceptions, DTE Electric failed to “provide any clarifying substantive detail supporting its cost projections” to remedy the problem of vagueness associated with the other proposed pilot programs. ABATE’s replies to exceptions, p. 45. ABATE asserts that the company failed to provide detailed evidence demonstrating the reasonableness and prudence of the other pilot programs’ costs and, therefore, the expenses should be disallowed.

On page 23 of its replies to exceptions, DTE Electric states that it “supports full recovery of capital expenditures for the Company’s Demand Response (DR) portfolio (see generally, DTE Electric’s Initial Brief, pp 66-72; DTE Electric’s Exception IV. C.”

The Commission finds that the ALJ’s recommendation is reasonable and prudent and should be adopted. In testimony, DTE Electric asserted that, without the requested capital funding for the other pilot programs, it would “prevent the Company from conducting the necessary preliminary analyses before full implementation and project plans are developed.” 9 Tr 3550. Thus, DTE Electric acknowledges that it has not yet fully developed the project plans for the company’s other proposed pilot programs. Therefore, the Commission finds that DTE Electric’s proposed expenditures for the peak-time rebate program and C&I battery storage should be disallowed. As noted by the Staff, the company will have ample opportunity under the three-phase DR framework to propose new DR capital spending on other pilot programs when the company is able to provide sufficient detail and a defined purpose for the pilots.

#### 6. Information Technology Capital (Schedule B5.7)

In the July 31 order, the Commission directed each utility to provide specific information in its rate case filing to assist the Commission in examining and deciding the utility’s rate case application (Rate Case Filing Requirements). For IT capital expenditures, Part III of the Rate Case Filing Requirements, Attachment 11, item 6 states that the utility must:

Provide spreadsheet/exhibit that includes all of the following information for the highest cost top 25 IT and OT [operational technology] projects in the test year.

- a. Project description and functionality of the system with all acronyms defined.
- b. Project timelines and spending plans.
- c. Project benefits, both in dollars and intangible.
- d. Project timeline including expected implementation date.
- e. A description of alternatives considered, and rational behind decision.
- f. Cost benefit ratio (if applicable).

- g. Project business case showing date of Board Approval, and approved project amount for Each Individual Project.
- h. Percentage of total budget that the top 25 projects represents, and total number of projects that fall outside of the top 25.

Rate Case Filing Requirements, Case No. U-18238, filing #U-18238-0037. Additionally, in DTE Electric's last rate case, the Commission acknowledged the Staff's concerns and adopted additional IT reporting requirements. The Commission stated that:

IT programs have not fared well in this rate case. It behooves the utility to provide the level of information that can result in approval of IT capital expenditures. The Commission adopts the additional IT reporting requirements that were agreed upon by DTE Electric and the Staff. These requirements are as follows:

- A. Future IT project-level detail will include a breakdown of both the O&M and capital costs. O&M costs will be broken down into two or three sub-categories.
- B. For each IT project with a value threshold of \$500,000 or more the company will submit a project approval document after the project preliminary analysis phase that includes:

1. A brief synopsis describing the project.
2. The project approval date.
3. The incurred O&M expenditures to date.
4. The total project estimated O&M and capital cost through project implementation.
5. Any necessary approvals by the company's management with appropriate expenditure approval authorization (per documented company policy).
6. Any approved change management documentation if the total project estimate grows by greater than 10% or \$500,000 (whichever is greater).
7. For IT projects over \$500,000, the company will include as an exhibit a copy of the written, PowerPoint, or other media presentation that the company's technical staff used to present the project justification and alternatives considered by company senior management.
8. Analysis that shows the company considered cloud computing alternatives in IT project expense requests over \$100,000 excluding cyber security or transmission control IT projects.
9. The company will provide a breakdown of any IT programs that were approved in its previous rate case that were not completed or were 20% above or below the approved project amount with an explanation of why the project was not completed or why it was off budget, only for projects that meet the \$500,000 threshold and where additional recovery is being sought in the relevant rate case.

May 2 order, pp. 44-45.

In this case, DTE Electric stated that its IT capital expenditures for 2018 were \$79 million, its projected 16-month bridge-period capital expenditures are \$133 million, and its projected test year capital spending is \$137 million, which is an increase of approximately 75% over the 2018 historical amount. According to the company, the purpose of the capital projects and investments is to improve asset health, to create value, and to comply with non-discretionary regulatory, legal, and core values requirements. 8 Tr 2358-2360. DTE Electric provided Exhibit A-12, Schedules B5.7.1 through B5.7.8, which list approximately 140 projects with proposed costs exceeding \$250,000 and additional projects with costs less than \$250,000. Furthermore, to comply with the May 2 order, the company included the executive summary pages of its business case documents for all projects in Exhibit A-24, Schedules N1.1 through N1.183; Schedule N1 is an index.

The ALJ noted that, in the Rate Case Filing Requirements and the May 2 order, the Commission provided guidance to assist DTE Electric in effectively supporting its IT cost projections. She found that, in the immediate case, the company's workpapers associated with the top 25 IT projects were "ostensibly intended to meet the 'Part III' filing requirements quoted above, [however] *all* fail to quantify benefits, *all* report that no benefit-cost analysis was conducted, and *all* fail to identify any alternative considered to the project." PFD, p. 206 (emphasis in original). The ALJ stated that, even with the assistance of the index in Schedule N1, it was difficult to match projects with the business case executive summaries in Schedules N1.1 through N.183. She then addressed each project individually as they appeared on DTE Electric's schedules in Exhibit A-12.

a. Purchase to Pay (Corporate Application Projects, Schedule B5.7.1, line 11)

For Purchase to Pay (P2P), DTE Electric projected \$1.9 million in capital spending for the bridge period and \$3 million for the projected test year. According to the company, the

Commission approved \$1.9 million for this project for 2019 in the May 2 order, which was intended to improve DTE Electric's ability to obtain and manage inventory and monitor vendor contract performance.

The Attorney General proposed a \$5.1 million adjustment for P2P, which is set forth in Exhibit AG-1.14. She contended that the total cost of the project is \$6.7 million through 2021, but argued that the company failed to demonstrate quantifiable benefits or provide evidence "that there is a compelling need at this time to transform the P2P process, particularly when there are more pressing needs to upgrade electrical infrastructure that will more directly improve the customer experience . . ." 9 Tr 3005. In addition, the Attorney General disputed that, in the May 2 order, the Commission specifically approved \$1.9 million in capital expenditures for P2P. Finally, based upon the information provided in Exhibit AG-1.13, the Attorney General asserted that DTE Electric acknowledges that P2P will not be obsolete until 2025 and, therefore, she claimed that implementation of this system is four years premature.

DTE Electric disputed that it projected \$5.1 million for P2P in rate base; rather, the company argued that it is proposing to include only \$4.9 million. And, in response to the Attorney General's claim that the company failed to show quantifiable benefits and cost savings, DTE Electric stated that not every investment is driven by these considerations. The company asserted that, from time to time, it must "replace at-risk outdated and unsupported software with newer better software to ensure the security of its platforms and operability of its inventory, procurement and vendor services." *Id.*, p. 2465. DTE Electric explained that:

P2P is part of an integrated suite of systems that support the Enterprise Resource Planning (ERP) system. The Company will replace the ERP system with a cloud-based version of that platform, known as S/4, in 2025. Our ERP vendor partner is already in the process of transitioning to S/4. By 2025 the version of ERP that the company currently uses will no longer have vendor support.

8 Tr 2464. DTE Electric contended that the Attorney General's proposed benefit-cost analysis will not effectively measure the significance of the upgrade because there is value in continuing to be able to satisfactorily perform and manage the onboarding of vendors.

The ALJ found that DTE Electric failed to justify the reasonableness and prudence of its projected P2P expenditures. She stated that, according to the company:

this project began in 2018, but Schedule B5.7.1, line 11, does not report any spending in 2018, and neither the Part III documentation included in Exhibit AG-1.13, page 7, nor the business case executive summaries in Schedules N1.10 and N1.111 mention 2018 spending. More significantly, while Mr. Griffin's rebuttal testimony attempts to characterize the project as primarily a necessary "pre-step" required for a larger system replacement, Mr. Griffin did not make this claim in his direct testimony, Schedule B5.7.1 classified this project as "Value Creation" rather than "Asset Health," and neither the Part III documentation in Exhibit AG-1.13, page 7, nor the business case executive summaries in Schedules N1.10 and N1.111 describe this as a required step to implement the S/4 system.

PFD, pp. 210-211. In addition, the ALJ asserted that the total cost of the project set forth in the business case documents does not match the total cost set forth in Schedule N1.111 and DTE Electric made no effort to reconcile these differences. Therefore, the ALJ recommended that the Commission reject the company's proposed expenditures for the P2P project.

In exceptions, DTE Electric reiterates that P2P is an important part of the integrated suite of systems that support ERP, which will be replaced with a cloud-based version of that platform in 2025. DTE Electric states that this upgrade is necessary because the company's version of ERP will become obsolete: "the vendor has already stopped making any new improvements other than software security patches. So DTE Electric is already at the point of being unable to get any additional functionality out of the system." DTE Electric's exceptions, p. 65. The company asserts that it began work on this project in 2018, it is now midway through the upgrade, the Commission approved funding for the project in Case No. U-20162, and that cancelling the project at this phase would destroy the value of the investment and put customers at risk.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted. DTE Electric's description of the P2P project provided in testimony is inconsistent with the documentation the company provided in support. For example, DTE Electric's witness testified that the company began the project in 2018, however, as noted by the ALJ, none of the company's exhibits in this case, its Part III documentation, or its business case executive summaries mention 2018 spending. *See*, 8 Tr 2464; Exhibit A-12, Schedule B5.7.1, line 11; Exhibit AG-1.13, page 7; Exhibit A-24, Schedules N1.10 and N1.111. In addition, although DTE Electric asserted that the P2P upgrade is necessary to preserve asset health and prevent obsolescence, the Commission finds it compelling that, in Exhibit A-12, Schedule B5.7.1., line 11, the company labeled the expense category for P2P as "value creation." Finally, the company described P2P as a necessary pre-step before the transition to S/4. However, DTE Electric failed to provide a benefit-cost analysis to demonstrate that P2P and S/4 have quantifiable customer benefits, cost savings, or are the most reasonable and prudent solution to the problem of system obsolescence. Therefore, the Commission finds that the company's proposed capital expenditures for P2P should be disallowed.

b. SuccessFactors (Schedule B5.7.1, line 14)

According to DTE Electric, the Commission approved \$1.6 million in Case No. U-20162 for "SuccessFactors," the company's human resources system. In its direct testimony, DTE Electric projected bridge-period capital spending of \$3.7 million and test year expenditures of \$5 million, asserting that four new modules will be added to the base platform that will: (1) replace the time and attendance system, (2) focus on employee learning management and job qualifications, (3) manage payroll transactions, and (4) handle workforce planning to increase budget precision and reduce the amount of manual effort required for compensation management. *See*, 8 Tr 2370.

The Attorney General acknowledged that, in Case No. U-20162, DTE Electric may have included expenses for “SuccessFactors” in its projected capital spending and that there were no challenges to the expenditures. However, she asserted that the Commission did not specifically cite the “SuccessFactors” program when it approved IT expenditures in the May 2 order. The Attorney General also disputed DTE Electric’s claim that if the program is not fully funded, it will fall into unsupported obsolescence. She noted that:

From the [company’s] response, it is clear that unsupported obsolescence means that the vendor is no longer issuing new updates to the system, the reason for which is that the vendor wants to sell DTE its new system, Kronos. This appears to be a form of planned obsolescence by software vendors and does not necessarily indicate that DTE’s system is obsolete.

Attorney General’s initial brief, pp. 79-80. Therefore, she proposed a \$9.1 million reduction to DTE Electric’s proposed expenditures, as set forth in Exhibit AG-1.14, asserting that the company failed to provide economic justification for the approximate \$10 million increase.

DTE Electric responded that, after direct testimony was filed in this case, the company’s plan changed and it now intends to expand the scope of the project and extend the timeline. According to the company, in addition to the \$8.8 million it proposed for the four modules, DTE Electric plans to invest in an additional module, which “will bring the total investment for this Program, including years outside the current test period, to an expected \$15 million, with \$11 million by the end of the test period. The Company understands that the increase in capital investment will need to be represented for inclusion in the rate base in a future case.” 8 Tr 2468. DTE Electric asserted that the additional detail on the modules would be completed by 2022 and 2024.

In response to the Attorney General’s claim that the modules are unnecessary, the company stated that, “the supplier has already halted any ongoing updates or enhancements to this current offering in favor of investments in a new product called Kronos. This means that for the

remainder of its supported time period no new features or defect fixes will be available other than security patches. In very real sense that makes the current product end of life.” Exhibit AG-1.56. DTE Electric requested that the Commission reject the Attorney General’s proposed disallowance.

The ALJ found that DTE Electric failed to demonstrate the reasonableness and prudence of its proposed “SuccessFactors” expenditures. She states that:

First, DTE fails to acknowledge that its own Part III documentation, shown in Exhibit AG-1.13, page 4, reports total spending of \$11.7 million from 2019 through 2021 and only mentions the compensation model. Second, Mr. Griffin testified that the project plans, including both total spending and timeline, had changed, but in his Exhibit A-43, he only presented copies of the same business case documents for which the executive summaries were provided in Exhibit A-24, Schedules N1.13, N1.14, N1.15, N1.114, N1.115 and N1.116. He did not provide either corrected or updated Part III information following the format of Exhibit AG-1.13, page 4. As with the P2P line item, DTE provided no benefit-cost analysis, and showed no consideration of alternatives.

PFD, p. 216. The ALJ also reviewed Schedules HH3, HH4, HH5, HH6, HH7, and HH8 and found that, although the goals stated within the documents are reasonable, the information in the schedules is confusing, does not support total projected spending, and fails demonstrate the reasonableness and prudence of the spending. In addition, because DTE Electric acknowledges that the project scope and timeline have changed, the ALJ found that the company did not provide accurate information as required by Part III of the Rate Case Filing Requirements. Therefore, she recommended that the Commission disallow DTE Electric’s projected “SuccessFactors” expenditures.

Responding to the claim that the company failed to demonstrate the reasonableness and prudence of the spending, DTE Electric argues that “[t]he documentation provided in U-20561 is more robust than the documentation used for U-20162 and yet the Company notes that the Commission took no exception to this business case last year.” DTE Electric’s exceptions, p. 68. The company asserts that it complied with Part III of the Rate Case Filing Requirements and

provided accurate and complete descriptions and supporting data in the executive summaries for the three business cases for the program. DTE Electric requests that the Commission reject the Attorney General's proposed disallowance.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted. In its direct testimony, DTE Electric proposed spending \$8.8 million to update its human resources management system, explaining that the current software will soon be retired. 8 Tr 2467. Then, in rebuttal, the company admitted it had expanded the investment for the project, stating that it now proposes to spend a total of \$15 million, \$11 million of which would be spent during the test period. *Id.*, pp. 2467-2468. However, as noted by the ALJ, DTE Electric failed to update its Part III information of the Rate Case Filing Requirements or the executive summaries in the business case documents to reflect these changes. *See*, Exhibits A-43 and A-24, Schedules N1.13, N1.14, N1.15, N1.114, N1.115, and N1.116. The Commission finds that, because the company changed the scope, timeline, and expense for the project in the rebuttal phase of this case, the parties were not provided sufficient opportunity to thoroughly review and evaluate the updated project and expense.

As with the P2P project above, the company asserted that the proposed expenditures for "SuccessFactors" are necessary to preserve asset health and prevent obsolescence. 8 Tr 2370, 2467. Yet, in Exhibit A-12, Schedule B5.7.1., line 14, the company labeled the expense category as "value creation." In addition, the business cases set forth in Exhibit A-43, Schedules HH3 through HH8, page 2 classify the "SuccessFactors" project as "discretionary spending," and none of the business case documents mention Kronos or a transition to S/4. Finally, DTE Electric did not provide a benefit-cost analysis to demonstrate that the proposed updates to the "SuccessFactors" software have quantifiable customer benefits, cost savings, or are the most

reasonable and prudent solution to the problem of system obsolescence. Therefore, the Commission finds that DTE Electric's proposed capital expenditures for "SuccessFactors" should be disallowed.

c. Web Portal Rebuild and Transformation (Schedule B5.7.2, line 8)

In the executive summary of its business case, DTE Electric projected bridge-period capital expenditures of \$15.1 million and test year capital expenditures of \$8 million for web portal rebuild and transformation. *See*, Exhibit AG-1.13, p. 5. According to DTE Electric, the project is a complete redesign of the web portal to "improve ease of access, simplify navigation, and ensure that the interactions that the customer most often uses and finds value in are clearly front and center in the user experience." 8 Tr 2377. In addition, the company asserted that the project would upgrade the portal architecture to ensure that it meets current industry standards.

The Attorney General contended that DTE Electric failed to identify any financial benefits of the web portal rebuild and transformation project. She asserted that the Commission should disregard the savings figures provided by DTE Electric's witness because the figures were unsupported, presented for the first time during cross-examination, and the parties were unable to examine the company's internal savings forecasts. Moreover, the Attorney General claimed that DTE Electric is requesting approval of the expenditures under the guise that the project will assist in improving the company's safety record. However, she argued that the proposed webpage improvements are superfluous and do not promote safety:

If the Company wants to spend more than \$23 million on a system upgrade, it has an obligation to show how safety will be improved and safety incidents will be prevented, along with financial benefits that justify the capital expenditures. The Company has not presented any of that.

9 Tr 3002-3003. Therefore, the Attorney General requested that the Commission reject DTE Electric's web portal rebuild and transformation capital expenditures.

In its rebuttal testimony, DTE Electric cited Exhibit AG-1.13, page 5, and acknowledged that it had provided “an incorrect narrative in the Top 25 highest cost IT/OT project list.” 8 Tr 2475. The company stated that the correct program description and data is set forth in Exhibit A-24, Schedule N1.29, and the correct bridge-period capital expenditures of \$3.8 million and test year capital expenditures of \$13.4 million are set forth in Exhibit A-12, Schedule B.7.2, line 8. DTE Electric explained that its:

current website implementation is no longer robust enough to support the variety of features expected in a modern digital experience. The DTE website and the experience that it delivers is measured by our Customers based upon all of their many online interactions, not only those in the utilities market. We currently do not meet our Customers’ expectations using the tools available in the current site implementation. This results in the website having the lowest customer satisfaction rate of any of the Company’s digital channels at 72% and contributes to the nearly 5 million calls being driven to the contact center each year.

8 Tr 2476. The company asserted that the implementation of web-based self-service for customers may reduce the need for in-person agent phone calls.

The ALJ found that DTE Electric failed to support the reasonableness and prudence of its projected expenditures for its web portal rebuild and transformation. She stated that DTE Electric’s witness:

Mr. Griffin seemed insufficiently familiar with the contents of his own supporting documentation. . . . Even though Mr. Griffin identified that the “narrative” of the Part III documentation was incorrect, he did not attempt to reconcile the \$23.1 million project total presented in that document with the \$17 million in his testimony and in the “business outcome” box on Schedule N1.29, or with the \$32 million total presented in the cost detail in that schedule.

PFD, pp. 221-222. The ALJ also noted that, pursuant to the Rate Case Filing Requirements, DTE Electric was obligated to demonstrate the benefits of the project in dollars, provide a description of alternatives considered, and present a benefit-cost ratio. Although the company claimed that this

information was contained in Exhibit A-24, Schedule N1.29, the ALJ disagreed and found that the company did not comply with the filing requirements.

In exceptions, DTE Electric once again addresses the error in the narrative for the Top 25 highest cost IT/OT project list, arguing that:

The correct information, which is in the record, should not be ignored just because in a summary document the wrong item was referenced, when in the detail information also provided at the same time the correct information was provided. (See Exhibit A24, Schedule N1.29.) The Commission must review the whole record in rendering its determination of a matter.

DTE Electric's exceptions, p. 70. The company asserts that, if the Commission examines the record as a whole, it will show that DTE Electric provided reasonable and sufficient support for the proposed expenditures for the web portal rebuild and transformation project.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted. In rebuttal, DTE Electric cited its executive summary for web portal redesign and transformation, Exhibit A-24, Schedule N1.29, which provided the correct description of the project. The executive summary states that the "Business Outcome" of the project is:

to bring the standard DTE Electric web application architecture to current industry standard, as the cumulative technologies supporting the presentation of the Company's web-presence have aged and are increasingly limited in functionality. Not investing in this area would represent a serious risk to customer interaction with the Company on the web, which continues to be a preferred avenue of communication and service.

Exhibit A-24, Schedule N1.29. However, the Commission notes that the executive summary does not provide a description of alternatives, a cost-benefit ratio, or the financial benefits of the project, as required by Part III of the Rate Case Filing Requirements. Moreover, the Commission finds that DTE Electric failed to update its Part III information, set forth in Exhibit AG-1.13, page 5, with the required information. Additionally, DTE Electric did not explain why, in testimony, it stated that the total cost of the project is \$17 million but the executive summary states that the total

project cost is \$32 million. *See*, Exhibit A-24, Schedule N1.29. As a result, the Commission finds that the company did not provide quantifiable financial benefits, cost savings, or project alternatives and failed to demonstrate that the proposed expenditures are reasonable and prudent. The Commission adopts the ALJ's proposed disallowance of \$17.2 million.

d. Bill Redesign (Schedule B5.7.2, line 17)

DTE Electric proposed \$5.5 million to redesign its customer bills in a layout "that provides key information to the customers in an easy-to-read format as well as accommodate additional bill presentation requirements that are emerging for alternate rates and services." 8 Tr 2379. The company stated that, after implementation of the redesigned bill, it will be the basis for the bill metering pilot, which will experiment with rapid editing of content on the new standard-appearance bill. DTE Electric asserted that an additional driving factor of the project is to allow the display of all transactions and to avoid manual adjustment of 2,000 bills per week. 8 Tr 2471. The company indicated that the documentation required by Part III of the Rate Case Filing Requirements is set forth in Exhibit AG-1.13, page 6, and the executive summary of its business case is included in Exhibit A-24, Schedule N1.34.

In discovery, the Staff requested that DTE Electric provide the percentage of customers that expressed dissatisfaction with the current bill design and explain how the company will measure success of this program. According to the Staff, DTE Electric responded that, "[w]hile the total number of customers expressing dissatisfaction is not tracked in the requested manner, there have been 17 MPSC [Michigan Public Service Commission] complaints associated with bill presentation in 2019 and 45 complaints in 2018." Exhibit S-12.7, p. 2. Using DTE Electric's statistics, the Staff calculated that fewer than one-hundredth of 1% of customers complained in 2018 and 2019. Next, the Staff noted that, in response to the query about how to measure the

program's success, the company stated that “[t]he key metrics for this project will be to provide clear billing to DTE customers thus reducing MPSC billing complaints.” Exhibit S-12.7, p. 1.

The Staff asserted that the company claims that the expected impact of the program is not quantifiable until the solution is implemented. *Id.*, p. 2.

The Staff contended that, through testimony, exhibits, and discovery responses, DTE Electric was provided an opportunity to demonstrate that the projected expenditures for the bill redesign program are reasonable and prudent. However, the Staff argued that the company failed to provide sufficient support for the proposed expenditures and did not present “motivations and metrics of success.” Staff’s initial brief, p. 24. The Staff requested that, in this case, the Commission reject the company’s \$5.5 million expenditure and recommended that, in future cases, the Commission review for prudence any proposed bill redesign expenditures.

The Attorney General asserted that DTE Electric failed to identify any financial benefits or cost savings associated with the proposed bill-redesign-program expenditures of \$7 million through 2021. She questioned the value of the project, noting that, in 2017, the company implemented its Customer 360 system at a cost of \$200 million. According to the Attorney General, Customer 360 included a new billing system and improvements to customer billing and bill presentation. She stated:

It is difficult to understand why, two years later, the Company is seeking to redesign the customer bill at an additional cost of \$7.0 million when there are more pressing needs to rebuild electrical infrastructure. . . . No specific evidence has been presented by the company to show that there is broad-based dissatisfaction or confusion with the format of the bill to justify spending \$7 million over the next two years, particularly when there are far more pressing needs for capital.

9 Tr 3004. In response to the company’s claim that the current bill format is inadequate, the Attorney General suggested that DTE Electric could implement a programming fix that will allow

the company to provide the desired transaction details. Finally, she asserted that DTE Electric failed to provide any alternatives to the project.

The ALJ agreed with the Staff and the Attorney General, finding that DTE Electric “had the opportunity to provide additional metrics of success for the program and did not,” and “had the opportunity to provide a benefit cost analysis in support of its projected expenditures and did not.” PFD, p. 226. She cited Exhibit AG-1.13, page 6, noting that when the company was asked about the rationale behind the project and possible alternatives, DTE Electric responded that “[t]he rationale is that customers continually express dissatisfaction with the status quo. Doing nothing will exacerbate the situation.” The ALJ noted that when asked for a cost-benefit analysis, DTE Electric indicated “not applicable.” *Id.*, p. 227. Additionally, she stated that the company’s documentation was not reconciled to the projected expenses in Exhibit A-12, Schedule B5.7.2. Therefore, because DTE Electric failed to provide a quantification of benefits or a discussion of alternatives, the ALJ found that the company did not demonstrate the reasonableness or prudence of its proposed expenditures for the bill redesign program.

In exceptions, DTE Electric asserts that, although one of the metrics for the bill redesign program would be Commission complaints, the main purpose of the investment would be to create a new bill format that would allow all transactions to be displayed as new rates and products are added. Responding to the ALJ’s concern that the company’s exhibits show different expense amounts for the same program, DTE Electric states that “[t]he PFD seems to have confused the different time periods covered by different exhibits. The ALJ took the presentation of different numbers as evidence of unfamiliarity with the subject matter or conflicting numbers, but that conclusion is incorrect.” DTE Electric’s exceptions, p. 73. DTE Electric explains that, for completeness, it provided the total investments that would be required after the test year to

complete the project but asserts that it only is seeking recovery of the project expenditures included in the test year.

On page 16 of its replies to exceptions, the Staff states that “[t]he PFD is correct in supporting Staff’s and the Attorney General’s recommended disallowance of the Bill Redesign project. The burden of proof in the rate case lies with the Company and it did not provide adequate evidence to support the reasonableness and prudence of the Bill Redesign project.”

The Commission finds that the ALJ’s recommendation is reasonable and prudent and should be adopted. As noted by the Attorney General, in 2017, DTE Electric implemented the Customer 360 program at a cost of \$200 million, which included a new customer billing system and improvements to billing and billing presentation. 9 Tr 3004. Now, the company is proposing to spend an additional \$1.2 million during the bridge period and \$4.3 million during projected test year for bill redesign. *See*, Exhibit A-12, Schedule B5.7.2, line 17. DTE Electric claims that the key metric of this program is to improve bill formatting, which, the company contends, will reduce customer complaints. *See*, Exhibit S-12.7, p. 1. However, the Commission finds that, not only did DTE Electric fail to provide a cost-benefit ratio or additional metrics that would measure the success of the program, the company stated that the impact of the program is “not quantifiable until the solution is in place.” Exhibit AG-1.13, page 6; Exhibit S-7, p. 1. In addition, DTE Electric did not provide any financial benefits, project alternatives, or cost savings associated with the project. Therefore, the Commission finds that the company failed to demonstrate by a preponderance of evidence that its proposed bill redesign expenses are reasonable and prudent; DTE Electric’s projected \$5.5 million capital expenditures are disallowed.

e. Digital Engagement Group (Schedule B5.7.2, line 23)

To establish a digital engagement group (DEG) that will be “dedicated to improving the Company’s customer experience,” DTE Electric projected bridge-period capital spending of \$2.3 million and test year capital spending of \$6.9 million. 8 Tr 2382. The company explained that it will make capital investments in hardware and software that will make copies of current customer system production environments and will provide the company’s “DEG team with dedicated development and test systems.” *Id.* DTE Electric stated that the DEG team will then create designs for customer system enhancements that are specifically directed to improve the customer experience. Once those are completed and approved, the company’s IT Customer Service Team will implement them. Finally, DTE Electric contended that “[d]uring the period[,] the DEG Team will produce, at a minimum, the Designs for the Transformational Web, the replacement Mobile application, and a solution allowing customers to track all of their interactions with the Company.” *Id.*

The Staff noted that, according to the company’s discovery response, DTE Electric is still in the process of developing its business case for this project. The Staff contended that “[n]o prioritization scores are available for the business case. Therefore, the Company does not have enough information at this developmental stage to determine the benefits or complexity of the business case.” 9 Tr 3370 (footnote omitted); Exhibit S-12.9. As a result, the Staff recommended that the Commission disallow DTE Electric’s total DEG expenditures of \$9.2 million.

The Attorney General agreed, asserting that the company has not demonstrated how the DEG will improve the customer experience. She stated that, along with a failure to identify financial benefits, “[t]he Company has not adequately explained or justified what it means by customer experience, what it plans to accomplish specifically, why customers are interested in having a

better customer experience, how many customers would benefit from this initiative, and why this is a major priority to be completed in 2020.” 9 Tr 3000. Moreover, the Attorney General noted that DTE Electric’s witness, Mr. Griffin, acknowledged during cross-examination that “there may be additional projects that would stem from initial efforts that would incur costs beyond the test year.” Attorney General’s initial brief, pp. 83-84. She contended that the company was unable to identify how much additional spending would be incurred and over what timeframe.

In response, DTE Electric asserted that it clearly described the benefits of the DEG program. The company explained that the project provides optimal transactional flow that will eliminate one million calls to the customer call center; it offers accurate and timely data across all channels to keep customers safe and informed during outages; it improves customer interaction for payments, billing, and collections; and it provides an interactive voice response that will help customers navigate the site and connect customers with the correct contact agent. 8 Tr 2473-2474. Mr. Griffin also asserted in cross-examination that, with improvements to the company’s website and the implementation of the DEG, he estimated that there could be approximately \$2 million of savings each year. However, Mr. Griffin admitted that those savings were calculated for cross-examination purposes and were not included in the company’s direct case or rebuttal. 8 Tr 2510-2512.

The ALJ found that DTE Electric improperly presented its business case on rebuttal:

The Commission has previously made clear that the utility may not reserve line items of capital as a placeholder, only to explain its actual plans in the rebuttal phase. Not only did DTE decline to provide a benefit-cost analysis or a consideration of alternatives in its Part III documentation as shown in Exhibit AG-1.13, page 3--reciting merely “[t]he rationale for this initiative is to upgrade customer experience and document all processes,” and that a cost-benefit ratio is “not applicable”—but DTE also declined to provide Staff with even a prioritization score for this project as shown in Exhibit S-12.9, stating that the “business case is currently under development.”

PFD, pp. 231-232. In addition, she noted that a brief review of DTE Electric's documentation for this project reveals that line items for other projects, such as "transformational web," were included for the DEG program. *Id.*, p. 232. Therefore, the ALJ found that DTE Electric did not meet its burden of proving the reasonableness and prudence of the projected DEG expenditures.

In exceptions, DTE Electric disputes the ALJ's determination that it failed to properly present its business case. According to the company, it provided 106 pages of direct testimony to support the DEG expenditures. In response to the ALJ's claim that the benefits of the DEG project overlap with benefits of other projects, DTE Electric contends that the "DEG will be involved in the design of all projects that directly impact the Customer. As a result it is logical that many of the benefits that the DEG establishment highlights are shared with other projects." DTE Electric's exceptions, p. 77.

The Staff acknowledges that Mr. Griffin supplied lengthy direct testimony, however the Staff argues that it lacked evidence to support the DEG expenses. Furthermore, the Staff contends that "[t]he information provided in rebuttal and cross-examination still failed to clarify the benefits and costs associated with the Digital Engagement Group establishment project, as they focused on current digital interaction statistics . . ." Staff's replies to exceptions, p. 12. The Staff also notes that DTE Electric provided inconsistent information—some indicating that the DEG business case is currently under development, and other information stating that the group has already been established. In any event, the Staff asserts that DTE Electric failed to prove by a preponderance of the evidence that its DEG capital expenditures are reasonable and prudent.

The Commission notes that DTE Electric's Part III documentation for the Rate Case Filing Requirements briefly states that the rationale for the DEG project is "to upgrade customer experience" and that the benefits of the project are "improving the Company's customer

experience.” Exhibit AG-1.13, page 3. However, the Part III documentation does not include project alternatives or a cost-benefit ratio. The Part III documentation also states that “an in-progress draft of the Business Case can be found in Exhibit A-24, Schedule N1.37.” *Id.* The Commission has reviewed the business case and finds that it lacks cost detail, a quantification of financial benefits, project alternatives, and a cost-benefit ratio. Further, in the audit response in Exhibit S-12.9, DTE Electric provided no prioritization score for the DEG project and stated that the “business case is currently under development.”

Although DTE Electric claims in exceptions that it provided extensive direct testimony in support of the DEG expenditures, the company failed to provide a specific citation to assist the Commission in locating the referenced testimony. The Commission notes that Mr. Griffin gave a brief overview of the DEG in his direct testimony, however there was no discussion of the company’s business case. 8 Tr 2382. In rebuttal, Mr. Griffin provided a more detailed explanation of the purpose of the DEG and presented current statistics regarding customer use of the company’s digital channels. And, in cross-examination, he provided some estimated cost savings. 8 Tr 2473-2474, 2501-2512. However, as noted by the Staff, the rebuttal testimony provided by Mr. Griffin still failed to provide a fully developed business case and lacked a clear benefit-cost analysis. In any event, the Commission agrees with the ALJ that “DTE’s effort to present a new ‘business case’ to support the expenditures through Mr. Griffin’s rebuttal testimony is not proper.” PFD, p. 231. Therefore, the Commission finds DTE Electric failed to demonstrate by a preponderance of evidence that its proposed DEG capital expenditures are reasonable and prudent. The Commission adopts the ALJ’s recommendation to disallow the DEG expenses of \$9.2 million.

f. Fixed Bill Pilot (Schedule B5.7.2, line 34)

DTE Electric proposed IT capital expenditures of \$0.7 million for the bridge period and \$2.1 million for the test year. *See*, Exhibit A-12, Schedule B5.7.2, line 34. The ALJ noted that several parties objected to DTE Electric's proposed fixed bill pilot. She stated that “[f]or the reasons discussed below in the Rate Design section, of this PDF [sic], DTE has not established that its proposed fixed bill pilot is reasonable, and thus, the projected capital expenditures should be removed.” PFD, p. 233.

For the reasons set forth in the Rate Design section below, the Commission finds the ALJ's recommendation to be reasonable and prudent and, therefore, should be adopted.

g. 2019 Emergent Capital (Schedule B5.7.5, line 1)

For the Technology and Architecture category, DTE Electric projected \$5.1 million for the bridge period. The company stated that the 2019 Emergent project and the Applied Innovation project are the same. DTE Electric explained that the Emergent project expenditure was proposed in Case No. U-20162, however, in the May 2 order, the Commission disallowed the expense, finding “that it was based upon speculation and that there was no assurance that the investment would be made.” 8 Tr 2408. Although DTE Electric acknowledged that it did not have the historical data to support the Emergent project in Case No. U-20162, it argued that, as of November 2019, the company had sufficient data in this case to demonstrate that its projection method is thorough and that the expenditures are reasonable and prudent. DTE Electric presented its business case in Exhibit A-24, Schedule N1, page 158.

The Staff argued that the basis for this expense category is vague and not properly defined:

Given the business case objectives are to be determined as each initiative is approved, there is great uncertainty in these projects, not only in scope, benefits, and usefulness, but also project costs. Due to the guaranteed recovery of these cost

projections once approved, it is inappropriate for the Company to recover these costs in rates given this uncertainty.

9 Tr 3367. In the Staff's opinion, DTE Electric did not provide any data to measure the success of the projects that occurred under the 2018 or 2019 Emergent projects. Moreover, the Staff asserted that the company failed to provide support for "the goals and success metrics for the potential or active initiatives under either the 2019 Emergent or Applied Innovation programs." Staff's initial brief, p. 26. Finally, the Staff argued that DTE Electric did not design any guidelines or overall project goals that would assist the Staff in measuring the adequacy or effectiveness of the investments made in this project. Therefore, the Staff recommended that the Commission disallow \$3.1 million for 2019.

The ALJ agreed with the Staff and recommended that the Commission adopt the Staff's recommended disallowance for 2019 Emergent project capital spending. PFD, p. 236.

In exceptions, DTE Electric acknowledges that, in Case No. U-20162, the Commission found the 2018 Emergent project expenses to be speculative. However, the company asserts that "2018 was the first time the project was included in a rate case, so there was a lack of historical data to demonstrate that the investment would be carried out as described." DTE Electric's exceptions, p. 78. DTE Electric contends that, in Case No. U-20162, the Staff indicated that the investment should be included in a future case once the investment had been concluded. The company asserts that, pursuant to the Staff's recommendation, it included the 2019 Emergent project expenditures in this case, demonstrated that the method used to project future spending is sound, and provided sufficient detail to show that the Applied Innovation project is similarly non-speculative.

In its replies to exceptions, the Staff reiterates that DTE Electric failed to provide guidelines or overall project goals to assist the Commission in assessing the adequacy or effectiveness of the investments made under this program. The Staff asserts that "little weight should be given to

the Company's ability to spend down the allocated funds. The Company's ability to spend an arbitrary program budget is not proof of its ability to use funds prudently or reasonably . . .”

Staff's replies to exceptions, p. 14.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted. As noted by the Staff, the business case objectives of the 2019 Emergent project are vague and undefined; DTE Electric states that the key objectives are “to be determined by the company as each initiative is approved.” Exhibit A-24, Schedule N1.158, p. 156. The Commission also finds that the business case lacks project and cost detail, a quantification of benefits, project alternatives, and a benefit-cost analysis. Thus, because the project goals, scope, and key objectives have yet to be defined, the Commission agrees with the Staff that it is difficult to determine whether DTE Electric's projected capital expenses are reasonable and prudent. Therefore, the Commission approves the Staff's proposed \$3.13 million disallowance for 2019 Emergent project capital expenditures.

h. Applied Innovation (Schedule B5.7.5, line 2)

DTE Electric described the Applied Innovation project as “identical in concept to the 2019 Emergent project,” but the spending will apply to projects that will occur in 2020 through the end of the projected test year. 8 Tr 2408-2409. The company projected \$0.5 million for the bridge period and \$4 million for the test year. *See*, Exhibit A-12, Schedule B.7.5, line 2.

Citing Exhibit A-24, Schedule N1.69, the Staff asserted that DTE Electric's business case states that it supports “‘achieving improved performance . . . by delivering approved innovative business benefits in a rapid manner.’ Its key objectives are uncertain as their ‘[a]llignment [is] to be determined as each initiative is approved.’” 9 Tr 3367-3368 (footnote omitted). The Staff

contended that the business objectives are vague and uncertain and, therefore, recommended that the Commission disallow the company's projected expenditures.

The Attorney General agreed, stating that DTE Electric only provided one benefit of the project—the rapid delivery of approved innovative business benefits—and failed to identify any financial benefits. She stated that “it is not clear why the Company would need to spend \$8 million to develop a system to keep track of innovation items.” 9 Tr 2999. As a result, the Attorney General requested that the Commission approve a \$5.3 million reduction in capital spending for 2020 and 2021 in this category.

DTE Electric responded to the Attorney General’s proposed disallowance contending that she misunderstands the program. The company stated that it does not plan to spend \$8 million to develop or acquire a tracking system and, instead, is “broadening its focus on electric reliability through emergent and active initiatives in the innovation pipeline.” DTE Electric’s initial brief, p. 84. The company also objected to the Attorney General’s proposed \$5.3 million reduction, asserting that the projected expense is only \$4.48 million.

The ALJ found DTE Electric’s projected expenses for the Applied Innovation program to be speculative because the plans for the program have yet to be developed. She noted that, in the executive summary business case in Exhibit A-24, Schedule N1.69, “[t]he only ‘key objective’ stated is ‘Alignment to be determined as each initiative is approved.’ The supplemental information supplied by [the company] in rebuttal, while untimely and thus not able to be reviewed by the parties, also references other projects for which DTE has separately requested funding.” PFD, p. 237. Therefore, she recommended that the Commission disallow the company’s proposed expenditures for the Applied Innovation program.

DTE Electric excepts, reiterating the arguments set forth in its testimony and briefing, asserting that it does not plan to spend \$8 million on a tracking tool and, instead, will be focusing on a pipeline of small-scale tech pilots. DTE Electric's exceptions, pp. 78-79.

In reply, the Staff requests that the Commission adopt the ALJ's recommended disallowance for the reasons cited in the 2019 Emergent project section, above. Staff's replies to exceptions, pp. 13-14.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted. The Commission notes that, in the Part III documentation for the Rate Case Filing Requirements, DTE Electric asserted that the benefits and rationale of the Applied Innovation program are delivering "approved innovative business benefits in a rapid manner" to increase business value. Exhibit AG-1.13, p. 2. The company did not provide project alternatives or a cost-benefit ratio. DTE Electric also stated that an "in progress draft of the Business Case can be found in Exhibit A-24, Schedule N1.69." *Id.* The Commission has reviewed the company's business case and agrees with the ALJ and the Staff that the business outcome and key objectives were brief, uncertain, and vaguely defined. *See*, Exhibit A-24, Schedule N1.69.

Mr. Griffin gave a brief overview of the Applied Innovation program in his direct testimony, however there was no discussion of the company's business case. 8 Tr 2408. In rebuttal, Mr. Griffin provided a more detailed explanation of the Applied Innovation program, arguing that the expenses for the program are not speculative and stating that there are "39 potential and active initiatives." 8 Tr 2479. However, the Commission agrees with the ALJ that the supplemental explanation was provided on rebuttal and, thus, the parties were not provided an opportunity to review and evaluate the information. Furthermore, as noted by the Staff, DTE Electric failed to provide detailed plans for the projected expenditures and, instead, proposes to fully develop the

plans once the expenses are approved. Therefore, the Commission finds that DTE Electric failed to demonstrate by a preponderance of evidence that its proposed capital expenditures for the Applied Innovation program are reasonable and prudent. The Commission adopts the ALJ's recommendation to disallow capital expenses of \$0.5 million for the bridge period and \$4 million for the projected test year.

- i. Network-advanced Metering Infrastructure Enhanced Support (Schedule B5.7.7, line 8)

DTE Electric proposed \$4.7 million to enhance its private mesh network for AMI meter data collection and transportation. According to the company:

This network is a key capital asset for the Company as it is responsible for transporting the meter information needed to accurately bill our customers for service and to control/monitor the metered usage for our 2.6 million electric customers. The components of this network are on a 7-year asset-replacement schedule and the funding for this program covers the capital investment needed to replace these components as they age out. Kept up to date, these devices will perform more reliably, require less maintenance, and maximize availability, helping the Company to provide better service to our customers. Additionally, the Commission included this program in the rate base in Case No. U-20162 and the capital spend included in this case is incremental and builds upon work/spend included in U-20162.

8 Tr 2418. DTE Electric acknowledged that 100% of its proposed expenditures are related, either directly or indirectly, to the meter read rate, but asserted that the proposed spending is necessary to sustain its meter reading rates.

The Staff objected to the company's projected expenses, arguing that, although the purpose of the program is to improve the AMI mesh read rate, it is already 99.22%, which is well above the service quality standard of 85% set forth in Rule 24(d). *See*, Exhibit S-12.10, p. 183. The Staff contended that the company failed to explain why the replacement schedule is necessary, it did not provide details regarding the components needing replacement, and it failed to demonstrate how replacement affects AMI mesh network read rates. In addition, the Staff stated that DTE Electric

did not explain “the benefits from the incremental improvement of 0.3% in the AMI mesh read rate, or make a clear distinction between maintenance of the current read rate of 99.2% and the 0.3% incremental increase when discussing costs.” Staff’s initial brief, p. 29. Finally, the Staff noted that, in Case No. U-20162, it recommended that the Commission reject any additional expenses for this program. As a result, the Staff requested that the Commission disallow a portion of the historical expenditures, as well as all projected test year expenditures in this case. RCG agreed. *See*, RCG’s initial brief, pp. 34-35.

On page 240 of the PFD, the ALJ noted that “DTE’s own business case document supports [the Staff’s] conclusion that DTE’s project is designed to increase the mesh read rate.” She recommended that the Commission adopt the Staff’s proposed disallowance.

In exceptions, DTE Electric asserts that “[i]t is important to have a high read rate because customers want to be billed for their actual usage. Increasing the read rate would reduce estimated bills, and thereby result in fewer customer complaints.” DTE Electric’s exceptions, p. 50. In addition, the company argues that the ALJ misunderstood its position: the main purpose of enhancing the private mesh network for AMI is to maintain read rates, not improve them. Therefore, the company requests that the Commission reject the Staff’s proposed disallowance.

Although DTE Electric claimed that the purpose of its proposed capital expenditures is to sustain the mesh read rate, in its discovery response to the Staff, the company stated that the goal of the project is to increase the read rate to 99.5%. *See*, Exhibit A-43, Schedule HH1. As discussed above, the Commission agrees with the Staff that DTE Electric did not provide data and analyses demonstrating the benefits of increasing the read rate. The Commission finds that the ALJ’s recommended disallowance of \$4.7 million is reasonable and prudent and should be adopted.

j. Advanced Customer Pricing Pilot

The Staff initially objected to DTE Electric's proposed Advanced Customer Pricing Pilot and recommended a disallowance of \$5.9 million. However, as a result of the November 14, 2019 order in Case No. U-20602 approving the pilot, the Staff stated that it no longer disputes including the projected expenditures in rate base. Staff's initial brief, p. 15.

k. Future Recommendations

The Staff recommended that, for future business cases in which the "program objectives are not determined until each initiative is approved," DTE Electric should be required to "provide evidence of prudent and reasonable spending for historic [sic] and year-to-date spending when submitting the rate case." 9 Tr 3368. In addition, the Staff requested that the company provide a more detailed explanation of each initiative, along with a clear and concise description of the objectives and benefits, quantified in a way that allows the Staff to accurately assess the value. *Id.*

The ALJ stated that, "[b]ased on the foregoing analysis, this PFD finds more broadly that DTE did not make an organized or coherent presentation in support of its IT capital expenses, and did not fully comply with the Commission's filing requirements." PFD, p. 241. She recommended that the Commission adopt the Staff's proposal, direct DTE Electric to adhere to the Commission's existing requirements, and, once again, provide the company with guidance regarding its obligation to support the proposed capital spending in this area.

DTE Electric excepts, contending "that it made a good faith effort to fulfill the requirements. The record reflects that the Company has a robust IT capital planning process, which is known as the Annual Planning Cycle (APC), with output from that process included in this case." DTE Electric's exceptions, p. 59. The company explains that the APC is also known as the business case and DTE Electric uses and revises this document throughout the year, and in some cases, over

the course of multiple years. DTE Electric asserts that, contrary to the ALJ's determination that it failed to comply with the Rate Case Filing Requirements, it provided 169 business case documents and 300 pages of direct testimony and exhibits in support of its proposed IT capital expenditures. The company avers that the "documents were provided in a clear effort to interpret and meet the filing requirements, absent a clear definition of what each requirement means." *Id.* In addition, DTE Electric disputes the ALJ's finding that a benefit-cost analysis is required for every business case. Rather, the company asserts that Part III of the Rate Case Filing Requirements states that a utility is to provide a "cost benefit ratio (if applicable)." *Id.*, p. 60, quoting Rate Case Filing Requirements, Attachment 11, item 6. DTE Electric asserts that, if it had calculated a specific benefit-cost ratio for the project, it would have been provided. Finally, the company argues that it supplied a high-level review of all projects and initiatives, which is set forth in its testimony and Exhibit A-12, Schedules B5.7.1 through B5.7.8; and Exhibit A-24, Schedule N2.

In reply, the Staff states that, in the May 2 order, the Commission adopted additional IT reporting requirements, stating that "representative investments must be supported by a demonstration of the need for the investment (what is its priority and why) and the cost of the investment." Staff's replies to exceptions, p. 30, quoting May 2 order, p. 42. The Staff reiterates that, in this case, DTE Electric failed to clearly and concisely describe business case objectives and expected benefits. In response to the company's claim that it is not required to perform benefit-cost analyses/ratios for each item, the Staff asserts that, because DTE Electric already provides cost information, "it only needs to assess expected program benefits to conduct a cost benefit analysis." *Id.*, p. 31. The Staff recommends that the Commission adopt the ALJ's recommendation to approve the Staff's requested additional requirements set forth in its initial brief.

IT capital and O&M spending, including hardware and software to support customer billing and service, system operations, and AMI upgrades, has been challenging for the Commission to review for reasonableness and prudence. Detailed support for individual projects has been lacking despite guidance provided by the Commission. PFD, p. 241; May 2 order, pp. 44-45. In this order, the Commission agrees with the ALJ that DTE Electric failed to justify certain proposed IT capital and O&M investments, including the P2P, SuccessFactors, the web portal redesign, the bill redesign, the DEG project, 2019 emergent capital, the Applied Innovation project, and the Network-AMI Enhanced Support project, and affirms the PFD. In addition, the Commission has agreed with the ALJ's recommendation to disallow costs associated with the PQ meters and additional mesh relays, as is discussed above.

The Commission realizes technology is advancing at a rapid pace, and systems need to be modernized and supported to provide adequate service and modernize operations and customer interfaces. Project-level detail and support may be difficult to predict even two years into the future. IT projects—given their cost and operational impacts—present significant risk to the company and customers. The challenges with the Customer 360 (SAP) system illustrate this point. The replacement of legacy systems with Customer 360 was costly for the company and its ratepayers and created major disruption to customer billing. *See*, December 20, 2018 order in Case Nos. U-20084 *et al.* While the immediate problems appear to have been resolved, the system appears rather inflexible in terms of the ability to quickly and inexpensively add new rate offerings. *See*, May 2 order, pp. 152-165; September 26, 2019 and November 14, 2019 orders in Case No. U-20602. And although DTE Electric presents cost-benefit projections for AMI investments in every rate case at the direction of the Commission, the Staff continues to suggest that incremental upgrades are unwarranted or unjustified. Moreover, although DTE Electric

initially justified its AMI investment based on operational savings, it is difficult to track actual savings over time to ensure they are materialized and flow through to ratepayers. And the Commission believes there is more value beyond operational savings that can and should be pursued, such as power quality monitoring to inform system reliability planning and enhanced energy management offerings to monitor and save energy and manage reliability. We appear to be stuck in a vicious cycle on IT issues in rate cases.

The Commission sees two paths forward. In the first path, the company can go about investing in new technology to support its business operations. DTE Electric would take the risk associated with IT project selection and deployment and support its decisions after the fact in rate cases using actual historical costs. The Commission recognizes there is regulatory lag and uncertainty for the company associated with this approach. For example, decisions to invest in (and capitalize) in-house systems with the advent of (non-capitalized) cloud-based options or the utility's actions to deploy new systems would have to be justified after the fact with the potential for write-offs due to imprudence. A second option is modeled off of DTE Electric's distribution planning effort and involves working with the Commission, Staff, and stakeholders on an IT plan. The plan would strategically and holistically assess IT needs, solutions, risk management, security, and decision-making approaches to support the utility's customer, business, and operational functions going forward. Given the pace of change in technology, the time horizon may be shorter than the five years initially laid out for distribution plans and the Commission does not find it necessary to establish an arbitrary planning horizon in this rate case order.

The Commission envisions the plan would describe the IT system needs and strategic goals over a suitable timeframe that considers not only immediate needs to replace legacy systems but also longer term integration and compatibility between systems and support for the company's

strategic vision for the utility's business. The company can classify its projects into IT system areas as it sees fit. The Commission expects the plan would include but not be limited to: (1) a description of the types of projects that fall into each IT system area; (2) descriptions of current and expected needs or challenges supported by data; (3) strategic goals/plans; (4) how strategic goals/plans address the identified current and expected needs or challenges; (5) details of the expected company direction for solutions, such as cloud-based versus on-premise solutions; (6) plans on future proofing that address expected developments and anticipate customer needs with increased DERs, energy management, and innovative rate offerings, and that mitigate issues such as duplication and obsolescence of investments; (7) projected three-year capital and O&M spending along with identification of any areas of uncertainty in cost projections; (8) risk management and mitigation strategies, including financial, operational, and security risks; (9) decision-making criteria and controls for project identification, selection, and implementation; and (10) discussion of accounting treatment, metrics, and incentives to better align the utility's interests with maximizing customer benefit and successful implementation of the plan.

If DTE Electric seeks to pursue this planning effort, the Commission recommends the company meet with the Staff as a next step. This plan would not be expected to be concluded prior to future rate cases, nor would cost approvals be provided. Thus, the Commission envisions this to be a collaborative exercise that promotes information exchange, dialogue, and transparency. In the meantime, the Commission directs DTE Electric to follow the Commission's prior guidance along with the reporting recommended by the Staff in this proceeding to support IT expenditures.

#### B. Working Capital

DTE Electric projected a working capital balance of \$1.462 billion. The Staff recommended an approximate \$90.3 million reduction, as set forth on Exhibit S-2, Schedule B4. The Staff also

requested that the Commission disallow an additional \$4.2 million for the Charging Forward regulatory asset. The Attorney General recommended a \$74.3 million reduction, and ABATE proposed a \$794.3 million disallowance for DTE Electric's pre-paid pension asset.

#### 1. Intercompany Accounts Balances

The Staff recommended that the Commission exclude a balance of \$88.3 million for Other Accounts Receivable-Associated Companies. The Staff explained that \$68 million of this amount is related to the reduced emission fuel (REF) company contracts that were terminated in 2018. The remaining \$20.3 million adjustment, the Staff stated, "results from the timing lag for services billed for non-core utility services provided by DTE Electric to its affiliates or related parties."

9 Tr 3240.

The Attorney General proposed the same disallowance for accounts receivable related to the REF companies, citing the same reasons provided by the Staff. She also identified a \$2 million transposition error that DTE Electric acknowledged in discovery. *See, 9 Tr 3008.* Finally, she stated that:

the balances for Cash, as well as Materials & Supplies, included by the Company in its working capital estimate were based upon the historic [sic] year end level at December 31, 2018 and not the average historical period balances. It is more appropriate and common practice to use an average balance over the historical period and not a balance at a moment in time.

*Id.*, pp. 3008-3009. The Attorney General recommended a \$2.1 million reduction to cash and a \$2.2 million reduction to materials and supplies. *See, Exhibit AG-1.15, lines 4 and 5.*

DTE Electric acknowledged that accounts receivable for the REF companies should be excluded from working capital. The company also agreed with the \$20.3 million adjustment for Other Accounts Receivable-Associated Companies, "but only if the related financing source is

eliminated. The inter-company receivable is effectively financed by the inter-company accounts payable because affiliate balances are settled on a net basis.” 6 Tr 1567.

In response, the Staff revised its proposed \$20.3 million reduction to \$11.3 million, but disagreed that the accounts payable offset is appropriate:

Generally, the Company agrees that it would be inappropriate for its ratepayers to pay for, or finance, non-utility services through their rates. (Exhibit S-18, STDE-20.5.) Further, the \$76,797,000 Accounts Payable-Associated Companies working capital test year balance was confirmed by DTE to arise from affiliate services incurred by DTE Electric to help maintain or augment the core services it provides to its ratepayers. (Exhibit S-9.0, p. 2.) Thus, DTE’s qualified acceptance of Staff’s adjustment posits the \$20,271,408 Accounts Receivable Associated Companies amount (including \$11,271,408 of non-utility services) be financed by the \$76,797,000 Accounts Payable-Associated Companies balance (solely a utility item). Staff maintains its disagreement with the Company’s qualified acceptance as it would be inappropriate ratemaking to net utility and non-utility items to derive customer rates. (Exhibit S-18, STDE-20.6.)

Staff’s initial brief, pp. 8-9.

The ALJ found that the adjustment for accounts receivable related to the REF companies that was proposed by the Staff and the Attorney General, which was not disputed by DTE Electric, is reasonable and prudent and should be adopted. PFD, p. 244. In addition, she found that the Staff’s proposed \$11.3 million disallowance related to accounts receivable for services provided to other companies was reasonable and prudent and should be approved by the Commission. Finally, the ALJ found that DTE Electric did not respond to the Attorney General’s proposed reduction for cash, materials, and supplies “in its rebuttal testimony or briefs. This PFD recommends that the adjustment be adopted.” PFD, p. 245.

In exceptions, DTE Electric states that it does not disagree with the Staff’s proposals to increase Accounts Payable – Associated Companies by \$2 million and to eliminate \$68.0 million for the contracts related to the REF companies. And, the company continues to express agreement with the Staff’s proposed \$11.3 million reduction, “but only if the related financing source is also

eliminated from Accounts Payable, which would therefore result in no net change in Working Capital from this adjustment.” DTE Electric’s exceptions, p. 79. DTE Electric acknowledges that there are ratemaking reasons to exclude certain items from rates, however the company asserts that neither the Staff nor the ALJ provided an appropriate reason for such treatment.

The Staff provides two exceptions to the working capital projection in the PFD. First, the Staff states that:

Upon adding up all of the Administrative Law Judge’s (ALJ) working capital recommendations in the PFD, it is clear that the PFD’s projection for working capital in Appendix B is not inclusive of the ALJ’s adoption of the Attorney General’s (AG) \$4.1 million reduction to working capital to reflect average historical period balances rather than year-end actual balances for Cash and for Materials & Supplies.

Staff’s exceptions, p. 2. Second, the Staff notes that the Attorney General cited Exhibit AG-1.15 when calculating her proposed \$4.1 million reduction, which was adopted by the ALJ. The Staff contends that “Exhibit AG-1.15, however, clearly shows the calculation of an adjustment to Cash of \$2.1 million and the calculation of an adjustment to Materials & Supplies of \$2.2 million, for a total of \$4.3 million.” *Id.*, pp. 2-3. Therefore, the Staff requests that, if the Commission adopts the ALJ’s recommendation for this item, that it approve the correct amount of \$4.3 million for cash, materials, and supplies, which is set forth in Exhibit AG-1.15.

As an initial matter, the Commission notes that DTE Electric did not dispute the Staff’s proposals to increase Accounts Payable – Associated Companies by \$2 million or to eliminate \$68.0 million for the contracts related to the REF companies. In addition, as noted by the ALJ, DTE Electric did not object to the Attorney General’s proposed \$4.3 million reduction for cash, materials, and supplies. Therefore, the Commission finds that these adjustments should be approved.

Regarding the Staff's proposed \$11.3 million reduction related to accounts receivable for services provided to other companies, the Commission agrees with the ALJ that the Staff's proposed reduction should be approved. The Commission finds that, in ratemaking, non-utility items are regularly excluded from the calculation of customer rates; ratepayers should not pay for, or finance, non-utility services. Concomitantly, it is not proper for ratemaking purposes to net utility and nonutility items to derive customer rates.

## 2. Pension Asset

DTE Electric explained that a prepaid pension asset occurs when the company's annual contributions exceed its annual pension cost. In this case, the company argues that it is reasonable to include the prepaid pension asset in working capital, stating that it has developed a pension plan funding strategy that goes beyond the minimum requirements to achieve the advantage of compounded returns on investments.

This funding strategy reduces both current and long-term pension costs. Lower pension expense reduces rates for customers. In addition, the Company can deduct the contributions made to its pension trusts from its income taxes. These deductions increase the liability for deferred taxes. Increased deferred tax liabilities benefit customers because deferred taxes are a zero-cost component of the Company's weighted cost of capital. This reduces the overall rate of return used in setting customer rates. Also, when the expected return on pension assets is higher than the Company's cost of capital, customer rates are further reduced. The expected return is subject to change based on market conditions. Currently, the Company's authorized pre-tax rate of return is 6.81% compared to the expected return on pension assets of 7.3%. This provides a net reduction in rates for customers because pension expense reflected in rates includes the expected return.

6 Tr 1541-1542. The company also stated that any annual contributions to the pension trust that exceed the annual pension costs must be from investor capital. *Id.*, p. 1543. The company contended that the pension assets in this case are \$811.3 million less than the pension liability and, therefore, the pension trust is not overfunded. Finally, DTE Electric noted that the prepaid pension

asset grew from a \$37.6 million liability in 2002 to a \$757.7 million asset in 2018. *See*, Exhibit A-12, Schedule B4.4.

ABATE noted that, in the May 2 order, the Commission directed DTE Electric to provide, in its next rate case, evidence demonstrating that the prepaid pension asset should be included in working capital, including the source of the funding for the asset. According to ABATE, in this rate case, the company failed to show that the prepaid pension asset was fully funded by investor capital or that any additional shareholder contributions to the asset were reasonable and prudent. ABATE also claimed that “[t]he \$794.3 million prepaid pension asset represents over half of the total working capital amount” and if the prepaid pension asset is included in rate base, DTE Electric will be motivated to increase the value of the asset with greater discretionary funding amounts. 7 Tr 1803, 1806. Furthermore, ABATE contended that DTE Electric’s net pension liability has steadily increased at an average growth rate of 14% between 2003 and 2018, which is significantly larger than the 5.8% average annual growth rate in rate base. For these reasons, ABATE recommended that the Commission exclude from working capital the company’s prepaid pension funding.

DTE Electric responded, stating that, although customer rates include pension expense, “the prepaid asset is the contribution made above expense, [and therefore] customers have not paid for the pension asset.” 6 Tr 1568. The company acknowledged that there may be a variance between the amount approved in rates and booked expense because rates are not adjusted each year to correspond with the actual expense, thus resulting in a mismatch. And, DTE Electric contended, the current volatility in the financial markets contributes to the variance between projected and actual expense amounts. Therefore, DTE Electric recommended a pension expense tracker to

defer, as a regulatory asset or liability, any difference in the company's actual net pension expense in future years. ABATE objected to the pension tracker. *See*, ABATE's initial brief, p. 13.

The ALJ recommended that the Commission adopt ABATE's proposed prepaid pension asset reduction. She agreed with ABATE that the company failed to "demonstrate that the entirety of the prepaid pension asset was supplied by investors rather than ratepayer funding." PFD, p. 250. According to the ALJ, DTE Electric identified at least two line items of ratepayer funding for the pension plan: (1) pension expense in other O&M and (2) depreciation expense. In addition, the ALJ noted that, although the company adjusted its projected pension expense in O&M to show the amounts recovered through capitalization, it was not possible to determine, on this record, how much duplicative capitalization that may have occurred in the last few decades.

The ALJ also stated that DTE Electric's annual pension expense includes an amortization amount showing the difference between the company's actuarial predictions and actual experience. She asserted that because the company may amortize the difference over the expected service life of the plant participants, the amortization amount in the pension expense calculation is assigned to ratepayers. The ALJ found that DTE Electric did not provide any detail regarding the underlying actuarial errors and failed to state the full unamortized amount. Therefore, in her opinion, the company is requesting that customers "pay interest on the portion of the pension accounting that shows an 'asset,' while also asking ratepayers to pay the amortization amount of what is really an offsetting liability." PFD, p. 252. The ALJ recommended that the Commission remove the prepaid pension asset from working capital. For similar reasons, she also recommended that the Commission reject DTE Electric's proposed pension expense tracker. PFD, p. 252.

In exceptions, DTE Electric argues that "the Company has demonstrated (1) that the prepaid pension asset was investor funded, (2) that the investment was reasonable and prudent because it

benefit [sic] customers, (3) remove [sic] the prepaid funding requires raising the pension expense, and (4) the overall treatment of pensions is consistent with past cases.” DTE Electric’s exceptions, p. 80. The company reiterates the arguments set forth in its testimony, initial brief, and reply brief. *See*, 6 Tr 1541-1543, 1560, 1568-1569, 1572-1573; DTE Electric’s initial brief, pp. 15-18; DTE Electric’s reply brief, pp. 10-11; DTE Electric’s exceptions, pp. 81-85. The company also asserts that the ALJ’s recommendation was unsupported by record evidence or legal authority and, instead, was based upon the testimony of ABATE’s witness, who, in DTE Electric’s opinion, is less qualified and less experienced than the company’s witness.

Although DTE Electric concedes that its pension tracker was first proposed in rebuttal and that the parties had limited time to investigate and respond, the company contends that the proposal was made “to address ABATE’s indicated concern that the Company’s actual pension expense might vary from the pension included in the Company’s rates.” DTE Electric’s exceptions, p. 87. The company argues that, to ensure that the pension expense included in customer rates is consistent with DTE Electric’s actual recorded pension expense, a tracker is necessary.

ABATE replies that, in the May 2 order, DTE Electric was directed to provide additional evidence in its next rate case demonstrating that the prepaid pension asset should be included in working capital, including the source of the funding of the prepaid pension asset. However, ABATE contends that, in this case, “DTE gave only cursory attention to this matter until its rebuttal. (See 6 Tr 1541-1543, 1568-1573.)” ABATE’s replies to exceptions, p. 12. Moreover, ABATE asserts that the testimony provided by the company was limited, inadequate, and lacked sufficient detail for the Commission to determine whether cost recovery is reasonable and prudent. Similarly, ABATE states that the Commission cases cited by the company are irrelevant and do not support its prepaid pension asset. ABATE also contends that DTE Electric failed to provide

adequate evidence demonstrating that the prepaid pension asset is funded exclusively by investor capital; rather, ABATE argues, it is funded by various sources. ABATE concludes that “the evidence in the record demonstrates that the prepaid pension asset is funded at least partially by ratepayers” and, therefore, should be disallowed. *Id.*, pp. 18-20.

Regarding DTE Electric’s claim that the pension tracker was appropriately proposed in response to ABATE’s concerns, ABATE asserts that “[i]f the tracker was necessary, DTE would not have waited for another party’s prompting to propose it.” ABATE’s replies to exceptions, p. 25. ABATE avers that DTE Electric has not demonstrated that the proposed tracker is reasonable or prudent.

After reviewing the record and the parties’ arguments in this case, the Commission declines to adopt the ALJ’s recommendation to exclude the pension asset from working capital. As noted by DTE Electric, a prepaid pension asset or accrued pension liability results from the cumulative difference between accrued pension expense, which is funded by customers, and cash contributions to pension trusts, which is funded by investors. The company contends that the excess above the amount funded by customers is the amount that should be included in rate base. The Commission agrees, finding that this issue was addressed in the April 28, 2005 order in Case Nos. U-13898 and U-13899 (April 28 order), Michigan Consolidated Gas Company’s (Mich Con’s) rate case:

Present accounting procedures require Mich Con to evaluate the yearly costs of pensions that will be provided to its employees. The procedures are designed to produce an appropriate pension expense for an accounting period, but are greatly dependent upon the investment return from pension assets, actuarial projections, plan expenses, *etc.* Each of these may have a substantial effect on the yearly pension expense to be recorded by the company. For a number of years, this accounting calculation has actually resulted in a negative expense. The recording of the negative expense creates an asset that is the sum of the various negative amounts—future positive expense amounts would reduce that asset. Mich Con’s existing pre-paid pension expense asset has grown quite large—\$376.3 million, and

it forms part of the working capital calculation for the test year. The amount is a non-interest earning utility asset and is appropriately part of working capital.

April 28 order, p. 30. Furthermore, in the April 28 order, the Commission authorized the utility to record a regulatory liability in its financial statements for any negative pension costs as determined under generally accepted accounting principles. Therefore, any future growth in the prepaid pension asset would be offset by the regulatory liability, eliminating any further growth in the working capital requirement. April 28 order, p. 31. The Commission notes that this has been the approved and recognized accounting procedure for many years.

In this case, DTE Electric provided Exhibit A-12, Schedule B4.4, showing the growth of the prepaid pension asset between 2002 and 2018, and demonstrating that the prepaid pension asset is not overfunded. In addition, the company provided persuasive testimony stating that, because “the Company only recovers from customers through its rates the annual pension costs recognized pursuant to ASC [Accounting Standards Codification] 715-30 (f/k/a SFAS 87), any annual funding of the pension trust in excess of the annual pension costs must be from investor capital.” 6 Tr 1543.

ABATE argued that “[t]he full value of the [pension] asset has not been funded by investor capital, and therefore it is unreasonable to provide DTE a return on the full asset amount. The prepaid pension asset is also funded by ratepayers, from returns on the fund assets, and through delayed accounting (amortization) of losses on the fund balance.” 7 Tr 1806. However, the Commission finds that ABATE’s claim, on its own, is insufficient to refute the company’s contention that the prepaid pension asset was fully funded by investor capital. Moreover, the Commission finds that ABATE’s arguments are insufficient, at this time, to persuade the Commission to reverse the long-standing accounting policy approved in the April 28 order. Nevertheless, in DTE Electric’s next general electric rate case, the Commission expects the parties

to provide a robust and fully developed record that provides specific evidence of the funding source for the prepaid pension asset that may assist the Commission in evaluating the propriety of including the prepaid pension asset (or liability) in rate base.

Finally, the Commission finds that DTE Electric's proposed pension tracker should be rejected. As stated by the ALJ, the company "sought this relief late in the proceeding, giving rise to objections by both ABATE and Staff" that there was insufficient time to thoroughly review and evaluate the proposed tracker. PFD, p. 252.

### 3. Charging Forward

DTE Electric included Charging Forward program spending in regulatory asset and capital expenditure categories. DTE Electric proposed \$4,349,000 million as a regulatory asset for the Charging Forward program in its projected test year working capital. Exhibit A-12, Schedule B4.1, line 45. DTE Electric also proposed a \$858,000 as capital expenditures, related to an assumed 2019 spending level, for the Charging Forward program in its projected rate base. Exhibit A-12, Schedule B5.9.

The Staff noted that DTE Electric projected that it would spend \$2,019,000 in 2019 on its Charging Forward Program costs that qualified for regulatory asset treatment. However, the company spent \$220,000 through September 19, 2019. The Staff reviewed those expenses through September 19, 2019, and recommended that they be approved for regulatory asset treatment. DTE Electric further projected that it would spend \$3,367,000 in 2020 on its Charging Forward Program. The 2020 costs would also, if spent, qualify for regulatory asset treatment. However, the Staff argued that any costs incurred beyond September 19, 2020, should not be approved for regulatory asset treatment, as they had not "undergone a future reasonableness-and-prudence review in a rate case," as directed in the May 2 order, p. 115. As such, the Staff recommended that

a regulatory asset be approved for only the actual and reviewed expenses, and recommended reducing DTE Electric's proposed \$4,349,000 regulatory asset to \$139,000. Exhibit S-3, Schedule C5.3, line 12.

DTE Electric projected that it would spend \$858,000 in 2019 (\$618,003 of that amount through September 19, 2019), on its Charging Forward Program that qualified for capital expenditure treatment. However, the company spent \$0 through September 19, 2019. Because DTE Electric did not incur these costs, the Staff recommended that the revenue requirement not reflect the assumption that the company did. Exhibit S-3, Schedule C5.3, line 13.

DTE Electric responded that the Staff's approach will result in a permanent loss of a return on the unaudited amounts. The company acknowledges that:

amortization of the regulatory asset for rate-making purposes can include only those amounts audited by Staff per the Commission's Order in Case No. U-20162. However, depending on the timing of future rate cases and Staff's reviews, some costs will not be recovered at all because the Company is required to start amortization expense for accounting purposes the year after the costs are incurred. The unamortized balance should be included in working capital to slightly mitigate the loss from amortization expense that is above the amount in rates. While this would not provide full recovery *of* the deferred costs, it would at least provide a return *on* the unamortized balance.

6 Tr 1575 (emphasis in original). DTE Electric requested that the Commission reject the Staff's proposal.

The ALJ found that the Staff's proposed adjustment to the projected test year working capital regulatory asset for the Charging Forward program is reasonable and prudent, consistent with the May 2 order, and will avoid amortization of costs greater than the level included in rates. She stated that "neither the Staff nor the Commission set up the deferral and amortization accounting under the expectation that DTE would begin amortizing deferred amounts before they are

reviewed.” PFD, p. 255. Therefore, the ALJ recommended that the Commission adopt both of the Staff’s proposed adjustments. PFD, pp. 242, 255.

In exceptions, DTE Electric reiterates the arguments set forth in testimony and briefing, asserting that, pursuant to the Staff’s proposal, it will be permanently precluded from recovering a return on the unaudited amounts. The company requests that the Commission reject the Staff’s proposal and the ALJ’s recommendation and, instead, adopt DTE Electric’s projected average regulatory asset balance of \$4.3 million. DTE Electric states that “[t]his approach is reasonable because it allows a return on some of the deferred costs, while including only the audited costs to be recovered through amortization expense (6T 1560, 1575).” DTE Electric’s exceptions, p. 90.

The Commission finds that the ALJ’s recommendation is reasonable and prudent and should be adopted. The Commission addressed this issue in DTE Electric’s previous rate case, stating that:

The Commission finds that the creation of a regulatory asset for Charging Forward expenses is consistent with the Commission’s cost recovery approval in Case No. U-20134. Overall, the Commission finds that regulatory asset treatment, as proposed by the Staff, is the most reasonable and prudent recovery mechanism. Regulatory asset treatment balances the company’s interest with customer protection, by not requiring customers to pay for expenses that may not be incurred and by allowing the company to recover the actual costs incurred. As such, the Commission finds that DTE Electric is authorized to create a regulatory asset to recognize deferred EV [electric vehicle] program costs with the amortization of those costs over five years beginning the year after the costs are incurred. Further, the Commission authorizes the company to include recovery of the resulting amortization expense in rates and include the deferred net unamortized balance of EV program costs in rate base. *However, the program costs will not actually be recovered until they have undergone a future reasonableness-and-prudence review in a rate case.*

May 2 order, p. 115 (emphasis added). Consistent with the May 2 order, the Commission agrees with the ALJ that the regulatory asset and the capital expense should be approved for only the actual and reviewed expenses. Going forward, DTE Electric is authorized to begin the five-year

amortization concurrent with review and approval in a rate case in lieu of amortization over five years beginning the year after the costs are incurred. The Commission finds the Staff's proposed disallowance of the \$4.21 million regulatory asset and the Staff's proposed reduction to the Charging Forward capital expenses should be approved.

### C. Rate Base Summary

Based on the adjustments set forth in this order, DTE Electric's rate base is \$17,885,894,000 for the test year, on a total company basis. This is comprised of \$16,513,582,000 in net plant and an allowance for working capital of \$1,372,311,000.

## V. CAPITAL STRUCTURE AND RATE OF RETURN

### A. Capital Structure

DTE Electric proposed a capital structure of 50% equity and 50% long-term debt, and no party disputed the proposal. PFD, p. 257; 6 Tr 1452; 9 Tr 3318; 9 Tr 3009. The Commission adopts the proposed 50/50 capital structure.

#### 1. Short-Term Debt Balance

Based on evidence showing that DTE Electric has used progressively greater amounts of short-term debt over the last three years, the Attorney General argued that the company's short-term debt balance should be increased from (the proposed) \$219.9 million to \$337.2 million. 9 Tr 3010-3011; Exhibit AG-1.16. The ALJ disagreed, finding that DTE Electric showed that \$220 million provides ample liquidity for the company, and that the actual utilization of short-term debt should not be the sole determining criterion. PFD, p. 258.

In exceptions, the Attorney General argues that the ALJ's recommendation is unclear, but that she appears to have adopted the company's short-term debt amount of \$220 million without

providing a reasonable rationale. *See*, PFD, Appendix D. The Attorney General argues that the amount should be adjusted to the 2018 historical level, which would decrease the revenue requirement by \$7.0 million with an offsetting adjustment to common equity and long-term debt. Attorney General's exceptions, p. 9; Exhibit AG-1.16. The Attorney General argues that DTE Electric has been using increasing amounts of short-term debt over 2016-2018 as it grows its business, and thus the amount should not be set at only two-thirds of what it used last year.

Again, although the ALJ adopted the company's position, in its exceptions DTE Electric objects to the ALJ's reasoning, positing that the ALJ assumes that short-term debt is used to finance long-term capital expenditures.

In reply, DTE Electric again characterizes the decisions as *sua sponte* and "agrees only that the PFD is unclear." DTE Electric's replies to exceptions, p. 28.

In her reply, the Attorney General again notes that the company used increasing amounts of short-term debt in the 2016-2018 time period.

The Commission adopts the company's proposed short-term debt balance of \$219.9 million. DTE Electric provided testimony that this amount supplies the company with ample liquidity, and the Attorney General failed to provide convincing evidence that it would not, or that business growth would continue at the same rate. 6 Tr 1467. The Commission approves the short-term debt balance amount proposed by the company.

## 2. Accumulated Deferred Income Tax Balances

DTE Electric stated that it used the same methodology for amortizing its accumulated deferred income tax (ADIT) balances as was approved in the May 2 order. *See*, Exhibit A-12, Schedule B4.2; 9 Tr 3574-3575. In a revised form, ABATE made the same argument in the instant case that it made in the last rate case, namely, that the reduction of unprotected excess ADIT balances for

plant and non-plant should be accelerated as an offset to expenses. ABATE contended that the increased depreciation expense associated with the accelerated retirement of the Belle River units should be offset by an accelerated amortization of excess unprotected ADIT balances. ABATE noted that the Commission directed the parties to explore this issue further in the May 2 order and that DTE Electric failed to do so in its filing.

Noting that the Commission rejected ABATE's argument less than one year ago, the ALJ found that the record in the instant case still does not support an accelerated return of the excess unprotected ADIT balances. PFD, p. 262. The ALJ found that, in light of the complexity of the analysis, "ABATE has not established that ratepayers are better off under its proposal, and that uncertainty argues in favor of the status quo." *Id.*

In exceptions, ABATE contends that the record supports the proposed accelerated amortization because it will clearly mitigate the impact of the future cost increases associated with the early retirements by accelerating the return of these ADIT balances to the ratepayers most likely to have contributed to them. 7 Tr 1895. ABATE notes that DTE Electric estimates \$34.2 million in incremental depreciation expense in the test year due to the accelerated depreciation of Belle River, and contends this amount could be offset by shortening the 23-year amortization period for plant-related ADIT to 13 years, and the 14-year amortization period for non-plant-related ADIT to 9 years. ABATE calculates that this will reduce the revenue deficiency by \$34.8 million. *Id.* ABATE acknowledges that this could result in a \$2.4 million increase to the cost of capital, but argues that it is still beneficial to ratepayers and will mitigate the effects of intergenerational inequalities by allowing the benefit to flow sooner rather than later. 7 Tr 1894. ABATE contends that the study period of any NPV analysis should end in 2030 rather than 2042 (used by the utility), because the utility's proposal does not begin to produce a net benefit to

customers until 2038, whereas ABATE's proposal produces \$133.7 million in net benefits over the first 10 years. ABATE's exceptions, pp. 22-23. ABATE contends that DTE Electric's argument that its credit rating will be downgraded is speculative and unsupported.

In reply, DTE Electric argues that the proposal should be rejected because ABATE's NPV analysis is incorrect, the company's credit would be negatively impacted, and the accelerated ADIT would effectively replace deferred taxes. 9 Tr 3423-3424; 6 Tr 1467-1468. DTE Electric maintains that ABATE should have extended the NPV analysis to 2042, and that, by correcting the analysis in this way, there is a \$41 million advantage to customers in retaining the company's plan. 9 Tr 3423-3424.

In the May 2 order, the Commission found as follows:

The Commission declines to adopt ABATE's proposed regulatory plan because the excess unprotected ADIT cannot be used to directly offset increased depreciation rates or carrying costs associated with construction work in progress (CWIP). However, in light of future developments in pending Calculation C cases, possible early plant retirements, and other rate adjustments, the Commission finds that, in DTE Electric's next general rate case, the parties should evaluate the benefits and costs of an accelerated amortization of the excess unprotected ADIT.

May 2 order, p. 60. The Commission is again unpersuaded by ABATE's argument. The proposed accelerated ADIT balance return does not provide a direct offset to the increased depreciation or other costs associated with these early retirements, and ABATE failed to show that other considerations, such as the Tax Cuts and Jobs Act of 2017 (TCJA) Calculation C case, make a difference to the analysis. Moreover, DTE Electric showed that accelerating the return of the unprotected ADIT has the effect of replacing deferred taxes (which have a zero-funding cost) with debt and equity. 6 Tr 1468. The Commission finds DTE Electric's proposed depreciation periods to be reasonable and agrees with the ALJ that ABATE failed to show a decisive benefit to ratepayers from the proposal.

## B. Cost of Debt

In its filing, DTE Electric projected the cost of long-term debt to be 4.31% and short-term debt to be 3.25%. The Staff updated these numbers, and recommended that the Commission adopt debt costs of 4.22% for long-term debt and 2.73% for short-term debt. 9 Tr 3319; Exhibit S-4, Schedules D2 and D3. The company also supported an after-tax rate of return of 5.73%.

The ALJ recommended that the Commission adopt the Staff's more recent numbers for debt cost, noting that this is typical in rate cases and that DTE Electric's witness opined that interest rates would be decreasing. PFD, pp. 264, 303. The ALJ also recommended an after-tax rate of return of 5.42%. PFD, pp. 303, 440.

In exceptions, DTE Electric maintains that 4.31% is the appropriate long-term debt cost, stating that the difference between the company's and the Staff's numbers is due to the difference in the applied projected interest for bonds issued in 2020 and 2021. DTE Electric argues that interest rate forecasts change constantly. The company's rates were based on data from May 2019 and the Staff's rates were from September 2019. The company contends that the rates it provided remain a reasonable and prudent projection, and that forecasts cannot be adjusted based on every market fluctuation. DTE Electric makes the same argument with respect to the short-term debt rate, where it supports 3.25%. 6 Tr 1465-1466.

In reply, the Staff argues that the company presented no convincing reason to depart from the Commission's well-established practice of updating these interest rates.

In its reply, GLREA urges the Commission not to adopt the higher rates.

DTE Electric is correct that interest rate forecasts fluctuate constantly, and for this reason the Commission is not persuaded that it should reject a more recent rate in favor of an older one. The

Commission agrees with the ALJ and approves the Staff's proposed short-term and long-term debt cost rates of 2.73% and 4.22%, respectively, and an after-tax rate of return of 5.46%.

### C. Cost of Equity

The criteria for establishing a fair ROE for public utilities is rooted in the language of the landmark United States Supreme Court cases *Bluefield Waterworks & Improvement Co v Pub Serv Comm of West Virginia*, 262 US 679; 43 S Ct 675; 67 L Ed 1176 (1923) and *Fed Power Comm v Hope Natural Gas Co*, 320 US 591; 64 S Ct 281; 88 L Ed 333 (1944). The Supreme Court has made clear that, in establishing a fair ROE, consideration should be given to both investors and customers. The ROE should not be so high as to place an unnecessary burden on ratepayers, yet should be high enough to ensure investor confidence in the financial soundness of the enterprise. Nevertheless, the determination of what is fair or reasonable, "is not subject to mathematical computation with scientific exactitude but depends upon a comprehensive examination of all factors involved, having in mind the objective sought to be attained in its use." *Township of Meridian v City of East Lansing*, 342 Mich 734, 749; 71 NW2d 234 (1955). With these principles in mind, the Commission turns to the factors that form the basis for determining the ROE for DTE Electric.

DTE Electric (10.50%), the Staff (9.80%), the Attorney General (9.25%), and ABATE (9.20%) offered analyses of the appropriate ROE. The ALJ provided a detailed summary of the parties' cost of equity analyses and arguments in the PFD. PFD, pp. 264-302. DTE Electric proposed an ROE of 10.50% (from a recommended range of 9.75% to 10.75%) based on two proxy groups containing 26 electric utilities and 11 natural gas and water companies, to which it applied the Risk Premium (RP) analysis, the Discounted Cash Flow (DCF) approach, the Capital Asset Pricing Model (CAPM), and the empirical approximation to the CAPM (ECAPM), as well

as a discussion of financial leveraging and a formula for the after-tax weighted average cost of capital (ATWACC). *See*, 6 Tr 1242-1244. DTE Electric argued that interest rates are expected to rise, and that the TCJA has resulted in reduced cash flows. DTE Electric also argued that it carries a greater degree of business risk due to the lack of a revenue decoupling mechanism, the choice program, Fermi 2, environmental regulations, low demand growth, economic conditions in its service territory, and its need for capital to improve reliability.

The Staff recommended an ROE of 9.80%, which was towards the high end of its calculated range of 8.90% to 9.90%, based on a proxy group of 10 electric and combined electric and gas companies, to which it applied the DCF, CAPM, and RP approaches, in addition to reviewing other state commission ROE decisions. The Staff noted that ROEs approved by other state commissions averaged 9.73% in 2017, 9.62% in 2018, and 9.63% through the third quarter of 2019. 9 Tr 3312-3313A.

ABATE proposed an ROE of 9.20%, the midpoint of its recommended range of 8.70% to 9.70%. ABATE largely adopted DTE Electric's electric-only proxy group, and applied the same tests that were applied by the utility and the Staff.

The Attorney General recommended an ROE of 9.25% using a proxy group of 18 companies, to which she applied the DCF, CAPM, and RP analyses, while also considering the economic and interest rate environment for the company in recent years. The Attorney General argued that DTE Electric is in a better position with respect to sales, interest rates, and uncollectibles than it has been in recent years, and that ROEs have been steadily declining since 1990. The Attorney General provided evidence that the ROEs for the peer group companies averaged 9.58%, and that the true cost of equity is 8.19%.

Walmart and Soulardarity did not present evidence, but objected to DTE Electric's ROE proposal as too high. Walmart suggested including CWIP in rate base, which the Commission already allows.

The ALJ noted that several parties objected to DTE Electric's use of the gas/water proxy group, and referred to ABATE's finding that none of the results for DTE Electric's electric proxy group reached the level of 10.50%. 7 Tr 1874-1882; PFD, pp. 299-302. She also took note of testimony showing that interest rates are flat or declining, and of the criticisms of DTE Electric's analysis. The ALJ found that the company failed to justify its request for a higher ROE for the test year. She found that DTE Electric failed to prove any increased risk associated with the TCJA, noting the lack of an analysis of "its current or projected credit metrics." PFD, p. 299. She further noted that the income component of the company's revenue requirements calculation will increase as the equity percentage of the ratemaking capital structure increases with the declining ADIT balance. PFD, p. 300.

The ALJ found that DTE Electric had not demonstrated that market volatility presented an increased risk, and had not established the reasonableness of including the gas and water companies in its proxy analysis (noting the Commission's prior stated concern with including water utilities). *See*, September 13, 2018 order in Case No. U-18999, p. 53. She also questioned the inputs to the ECAPM, and noted that the Commission has already rejected the ATWACC method of adjusting proxy group results. The ALJ found that the collective results of the various models showed that a reduction to the ROE would be prudent. The ALJ recommended that the Commission adopt an ROE of 9.80%. PFD, p. 302.

In exceptions, ABATE argues that the 9.80% ROE is inflated as a result of flaws in the Staff's analysis and the correct ROE would be in the range of 8.70% to 9.70%. 7 Tr 1906-1918. ABATE

argues that the highest ROE supported by DTE Electric's own witness is 10.33%. 7 Tr 1875-1876. ABATE asserts that the ALJ framed the 9.80% ROE as a cap without establishing a floor, and that an ROE as low as 8.70% would still fairly compensate the utility for its current market cost of common equity while mitigating the revenue deficiency. 7 Tr 1826. In any case, ABATE asserts, the ROE should not be higher than 9.60%.

In her exceptions, the Attorney General argues that the ROE should be no higher than 9.25%. 9 Tr 3013-3015. The Attorney General points to the steady decline of ROEs around the nation over the past decade and the fact that the cost of equity is well below approved ROEs. The Attorney General argues that this trend has been slower to take effect in Michigan and that customers are paying inflated rates as a result.

In its exceptions, DTE Electric argues that 10.50% is the appropriate ROE, "based on changes in the capital markets, the challenging Michigan economic environment, the differences in financial risk for DTE Electric as compared to the sample companies, and the large-scale disruptive changes in the electric utility industry (6T 1207-1209, 1269-70, 1310-18, 1344, 1347-48)." DTE Electric's exceptions, p. 93. DTE Electric contends that the ALJ's decision would result in weakening the company's credit metrics due to the effects of the TCJA, by withdrawing the necessary degree of regulatory support. DTE Electric's exceptions, p. 94. The company argues that the ALJ failed to understand the risk in the electric utility industry, and that the ROE should not be set substantially lower than the return for natural gas and water utilities. DTE Electric contends that its modeling is superior to that offered by the other parties, and points to Commission orders which have recognized the importance of volatility as a factor in setting the ROE. The company asks the Commission to consider, in setting the ROE, the current realities of low electric demand growth; lack of a revenue decoupling mechanism; the Michigan economy's

dependence on the auto industry; the high unemployment and poverty rates in Detroit; the significant capital expenditures necessary to improve reliability and comply with environmental laws; and the risk presented by ownership of a nuclear plant.

In reply, the Staff argues that DTE Electric's position fails to balance ratepayer and company interests.

In its reply, DTE Electric contends that ABATE and the Attorney General have not added anything relevant to the discussion within their exceptions, and that the ALJ properly rejected the understated ROE recommendations made by these parties.

In her reply, the Attorney General argues that the company's exceptions do not add anything new or meaningful to this issue, noting that DTE Electric has used the same arguments many times before, and she continues to support an ROE of no more than 9.25%.

In its reply, RCG contends that 10.50% is excessive and conflicts with the downward trend in ROEs nationwide, and notes that even DTE Electric's testimony supported an ROE of 9.75%.

In its reply, Soulardarity supports the ROEs proposed by ABATE and the Attorney General. Soulardarity argues that, in light of the COVID-19 pandemic, DTE Electric is better situated to manage a short-term financial challenge than its customers are, because the utility will be able to seek recovery of costs attributable to the pandemic. Soulardarity's replies to exceptions, p. 7. Soulardarity refers to press reports regarding the unprecedented number of claims for unemployment insurance received in a recent week, and argues that Detroit's population is particularly vulnerable to an economic downturn.

In its reply, ABATE argues that a 9.80% ROE will not threaten DTE Electric's credit rating, and notes that the ALJ's recommendation is still above the national average for ROEs. 7 Tr 1825-1829. ABATE recommends a range of 8.70% to 9.70%. ABATE notes that markets

continue to embrace the regulated utility industry for safe investments, and argues that the natural gas and water utilities are not relevant as proxies since they are exposed to different risks.

ABATE characterizes DTE Electric's criticisms of its modeling as superficial and limited.

At this time, the Commission finds that an ROE of 9.90%, which is at the lower end of DTE Electric's proffered range of 9.75% to 10.75%, most appropriately compensates DTE Electric for the regional economic and company-specific aspects of risk, while maintaining its ability to attract capital, and ensuring the continued vitality of the company. It also strikes a balance between the company's interest in investment and the interests of DTE Electric's ratepayers in safe, reliable, and affordable energy. The Commission, in reaching its determination, has taken into consideration the company's unique circumstances and characteristics and the standards set forth in *Bluefield* and *Hope*. As Michigan courts have found, the establishment of a reasonable utility rate is not subject to precise computation; what is reasonable "depends upon a comprehensive examination of all factors involved, having in mind the objective sought to be attained in its use." *Township of Meridian v City of East Lansing*, 342 Mich 734, 749, 753; 71 NW2d 234 (1955); *In re Consumers Energy*, 322 Mich App 480, 487-488; 913 NW2d 406 (2017); *In re Application of Consumers Energy Co*, 316 Mich App 231; 891 NW2d 871 (2016). The Commission is confident that a 9.90% ROE satisfies the criteria in *Bluefield* and *Hope* in that it is not so high as to place an unnecessary burden on ratepayers, but high enough to ensure investor confidence in the financial soundness of the business.

An ROE of 9.90% provides an opportunity for the company to earn a fair return during current market conditions. As the Commission has stated previously, customers do not necessarily benefit from a lower ROE if it means the utility has difficulty accessing capital at attractive terms and in a timely manner. May 2 order, p. 67. DTE Electric failed to show that an ROE of 9.90% will

hinder the company's ability to attract capital. The Staff, the Attorney General, ABATE, and Walmart showed that ROEs—both nationwide and in the Midwest—are trending downward with averages below that in Michigan, without harming the ability of affected utilities to access capital and attract investors. 7 Tr 1827-1834; 9 Tr 3312-3313A; 9 Tr 2671-2674; 9 Tr 3034-3036. The Commission will continue to monitor a variety of market factors in future applications, including market reactions to recent events and measures of volatility and uncertainty, as well as measures of investor confidence, and the utility's risk profile.

#### D. Overall Rate of Return

The Commission adopts a 50/50 debt to equity capital structure, a long-term debt cost rate of 4.22%, an ROE of 9.90%, and an overall weighted cost of capital of 5.46%, as shown on the table below:

Description	Amount (\$000)	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	6,995,149	38.33%	4.22%	1.62%
Common Shareholders' Equity	6,993,099	38.32%	9.90%	3.79%
Short-Term Debt	219,881	1.20%	2.73%	0.03%
Investment Tax Credit (ITC) - Debt	24,309	0.13%	4.22%	0.01%
Investment Tax Credit (ITC) - Equity	24,309	0.13%	9.90%	0.01%
Deferred Income Taxes (Net)	<u>3,994,582</u>	<u>21.89%</u>	0.00%	<u>0.00%</u>
Total	<u>18,251,329</u>	<u>100.00%</u>		<u>5.46%</u>

## VI. ADJUSTED NET OPERATING INCOME

Net operating income (NOI) is calculated by subtracting the company's operating expenses, including depreciation, taxes, and allowance for funds used during construction (AFUDC), from the company's operating revenue. Adjusted NOI includes the ratemaking adjustments to the

recorded NOI test year for projections and disallowances. DTE Electric projected NOI of \$789.0 million. On pages 303-357 of her PFD, the ALJ provided a thorough analysis of the issues and arguments, recommending an adjusted NOI of approximately \$855 million. PFD, p. 357; Appendix C.

#### A. Revenue

##### 1. Residential and Commercial Sales

The Attorney General objected to the projected sales decline for residential and commercial customers in DTE Electric's projected test year sales forecast by rate class that underlies DTE Electric's revenue projections.

The ALJ acknowledged the Commission's preference for the use of regression analysis to project sales. While she noted that the Attorney General reasonably questioned DTE Electric's EWR and customer-owned generation assumptions, the ALJ found that the difference in revenue requirement is relatively minor. Therefore, she recommended adopting DTE Electric's forecast and further recommended instructing DTE Electric to provide a thorough analysis of the EWR and customer-owned generation assumptions in future cases. PFD, p. 307.

In exceptions, the Attorney General argues that the ALJ erred in describing the difference in revenue requirement as "relatively minor." Attorney General's exceptions, p. 12, quoting PFD, p. 307. She asserts that the \$12.2 million increase in test year revenues is significant and the perceived "smallness" of the amount is not a valid reason to reject her arguments. *Id.*, p. 13.

DTE Electric argues in replies to exceptions that the Attorney General's exception ignores the company's forecasting expertise and testimony and offers nothing new to support her simplistic and discredited alternative sales forecast methodology. Therefore, DTE Electric recommends adopting the ALJ's recommendations. DTE Electric's replies to exceptions, p. 35.

The Commission finds the ALJ's analysis reasonable and prudent and adopts her recommendation. The Commission directs DTE Electric to provide a thorough analysis of the EWR and customer-owned generation assumptions in future rate cases.

## 2. Energy Bridge Program Fees

The Staff initially recommended a \$1.622 million increase in test year revenue to reflect DTE Electric's charges for energy bridge devices to allow customers to access real-time usage data from the AMI meters. In rebuttal, DTE Electric identified an error in the Staff's calculation, which the Staff acknowledged in its brief. The Staff now recommends that test year miscellaneous revenue be increased by \$526,685 to incorporate the energy bridge fees. DTE Electric did not object. The ALJ found this issue to be resolved. PFD, p. 307.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

## 3. Low-income Assistance and Residential Income Assistance Customer Counts

For the test year, the company projected that 60,000 customers will receive the residential income assistance (RIA) credit and 50,000 customers will receive the low-income assistance (LIA) credit. The Staff argued that RIA enrollments have never reached the 60,000 level DTE Electric projected and noted a recent drop in enrollment. 9 Tr 3116-3118. Therefore, the Staff recommended reducing the RIA projection to 37,367 customers because “[i]f fewer customers receive a credit than projected, the excess is retained by the Company.” 9 Tr 3117. DTE Electric disagreed with the Staff's proposal and contended that the drop in RIA enrollments reflected problems with DTE Electric's billing system, and that enrollments are now at the level of 43,000 and can be expected to trend upward to the projected 60,000 level. 6 Tr 1153-1154.

The Staff further indicated that the LIA enrollment levels are near the program cap of 32,000 per month and recommended that the cap remain in place. 9 Tr 3118. Again, the company disagreed with the Staff's proposal and argued that if the cap for LIA enrollment "were raised from 32,000 to the 50,000 as requested, there would be no shortage of Non-LSP low income customers enrolled in receiving the credit." 6 Tr 1155.

The ALJ recommended using recent data showing an average of 43,000 customers per month for RIA enrollments, retaining the 32,000 LIA program customer cap, and adopting the Staff's revenue adjustment. PFD, p. 309.

In exceptions, DTE Electric notes that the ALJ did not address its proposal to make the RIA provision available to customers on other non-supplemental residential rate schedules. The company contends that its proposal should be adopted as there was no disagreement on the record. DTE Electric's exceptions, p. 139. The company also disagreed with the ALJ's reduction in its customer count projection and the adoption of the Staff's revenue adjustment. *Id.*, p. 140.

The Commission agrees that projecting these levels can be challenging, and wants to ensure ratepayers are protected and that all who want to utilize these programs are able. Therefore, the Commission adopts the ALJ's recommendations pertaining to reducing the projection to 43,000 RIA enrollments and retaining the 32,000 LIA program customer cap, thereby adopting the Staff's revenue adjustment. However, the Commission finds that these programs are valuable and encourages the company to continue the enrollment of interested customers. To encourage continued enrollment, the Commission authorizes DTE Electric to track enrollments up to the company's projections of 60,000 for RIA and 50,000 for LIA, to be booked as a regulatory asset. Thus, the Commission adopts the ALJ's recommendation pertaining to the 43,000 RIA enrollments, but authorizes the company to book any overages relating to serving customers above

this 43,000 level as a regulatory asset for a future determination by the Commission as to the reasonableness and prudence of the costs involved. The Commission also adopts the ALJ's recommendation to approve the Staff's revenue adjustments relating to the RIA and LIA customer counts. Additional LIA pilot program issues are discussed further below.

#### 4. Fuel and Purchased Power Revenue and Expense

DTE Electric proposed no change to the base PSCR factor set in Case No. U-15244 of 31.26 mills per kilowatt-hour (kWh), but did propose to change the line loss factor to 7.30%, which would result in an increase to the base PSCR factor at the sales level to 33.54 mills per kWh. 8 Tr 2252-2253.

The Staff proposed adjustments to both PSCR revenue and PSCR expense to reflect historical loss percentages. Staff's initial brief, pp. 65, 68. The Staff recommended 7.23% using a five-year average of historical sales and net system output to calculate a loss factor for PSCR revenue and expense. The Staff's recommendation results in a reduction in PSCR expense and offsetting revenues of \$789,774. 9 Tr 3348. The Staff also recommended that the Commission require DTE Electric to conduct a new line loss study before its next rate case. 9 Tr 3251, 3390-3391.

The MEC Coalition recommended that the Commission reject any increase in the PSCR loss factor, arguing the lack of a current line loss study renders the changes outdated and unreliable. 9 Tr 3803-3806. The MEC Coalition further recommended that the Commission require DTE Electric to prepare and file a new engineering line loss study. 9 Tr 3806-3807.

The ALJ recommended that the Commission adopt the MEC Coalition's recommendation and retain the current loss factor for PSCR purposes, resulting in no adjustment to current revenues; and that the company conduct a new loss study. PFD, p. 311, 365.

DTE Electric argues in exceptions that the ALJ confused the need for a line loss study with the adjustment proposed to the PSCR factor. DTE Electric asserts the two are not related and agrees with the Staff's proposed PSCR loss factor recommendations, however, with no further adjustment to present revenues. DTE Electric's exceptions, pp. 105-108.

In exceptions, the Staff continues to advocate for the adoption of a loss factor using historical sales and net system output, arguing that the ALJ failed to adjust current revenues when she relied on the previous line loss factor. The Staff asserts that if the Commission agrees with the PFD, then a further adjustment will be necessary to PSCR expense and revenue in the final approved rates. Staff's exceptions, p. 7.

In reply to DTE Electric's exceptions, the MEC Coalition again objects to DTE Electric's use of a different loss factor, at least until a proper line loss study has been performed. The MEC Coalition requests that the Commission adopt the ALJ's recommendation. MEC Coalition's replies to exceptions, pp. 61-70.

Replying to DTE Electric, the Staff opines that it is important to note that the Commission does not approve a revenue deficiency, but rather approves rates based on a revenue requirement. Therefore, the Staff recommends that the Commission incorporate into the final order any necessary adjustment to present revenue resulting from the decision on the PSCR loss factor. Staff's replies to exceptions, pp. 27-28.

DTE Electric, in replies to exceptions, reiterates its request to grant the company's PSCR base. DTE Electric's replies to exceptions, p. 59.

DTE Electric agreed to the Staff's PSCR loss factor. DTE Electric's exceptions, p. 107. The Commission agrees with DTE Electric and the Staff, and adopts the Staff's proposed PSCR loss factor of 7.23%. The Commission also adopts the Staff's adjustment to revenue. The Staff

showed that the adjustment to present revenue is necessary to offset the adjustment to base PSCR expense. 9 Tr 3120; Exhibit S-7.2. The line loss study is discussed below.

## B. Operations and Maintenance Expense

DTE Electric projected a total O&M expense of \$1,353,445,000 for the test year, but subsequently reduced its projection to \$1,352,930,000. DTE Electric's reply brief, p. 64. The Staff proposed an O&M expense of \$1,295,979,000 in its reply brief. Staff's reply brief, Appendix C. The ALJ addressed several contested issues.

### 1. Inflation

DTE Electric proposed using a blended rate of inflation, basing its projections on a 3% wage rate inflation factor for internal and contract labor and a CPI forecast for non-labor costs. DTE Electric's projected inflation rates are 2.8% for 2019, 2.9% for 2020, and 2.9% for 2021 (prorated to 0.97% for the first four months of the year.) 6 Tr 1507-1508.

The Staff recommended the following inflation factors: 2.19%, 2.477%, and 2.50% for 2019 through 2021, respectively. The Staff used an average of projected inflation rates from IHS Global Insight, the International Monetary Fund, and the Energy Information Administration as shown in Exhibit S-4, Schedule D-3a. 9 Tr 3321-3322. The Staff explained that it adjusted DTE Electric's projected O&M expenses for steam generation, fuel supply and fuel handling, nuclear, hydro, and other power generation, to reflect its inflation factors as shown in Exhibit S-7.3, but also recommended that its inflation factors be used to project distribution, customer service, regulated marketing, and corporate support. Staff's initial brief, pp. 68-70.

ABATE argued that the Commission should reduce DTE Electric's O&M inflationary expense projections by \$17.52 million. ABATE's initial brief, pp. 18-19. ABATE argued that DTE Electric's use of a 3% wage escalation factor as part of its composite inflation projection

reiterated the same arguments the Commission has rejected in prior cases. 7 Tr 1923. ABATE recommended that the projected CPI be used for inflationary projections, resulting in a \$17.52 million reduction to DTE Electric's projected O&M expenses, as shown in Exhibit AB-7. 7 Tr 1926. ABATE also noted that despite historical efforts to control its O&M costs, DTE Electric is not projecting any specific savings offsets in this case, although it acknowledges cost-control efforts and capital investments expected to produce O&M cost savings. 7 Tr 1926-1928. ABATE argued the Commission should limit inflationary projections to the CPI forecasts based on Blue Chip Economic Indicators: 1.8% for 2019, and 2.1% for 2020 and 2021. ABATE's initial brief, p. 19.

The Attorney General argued that the Commission should exclude all of DTE Electric's inflationary increases for O&M spending, or in the alternative, limit increases to the projected CPI-Urban increases. Attorney General's initial brief, pp. 35-39. She identified \$69.8 million attributable to DTE Electric's projected inflationary increases in O&M spending. The Attorney General noted that DTE Electric's use of a blended rate has been previously rejected by the Commission, and she expressed concern with the use of an inflation factor connected with certain DTE Electric capital expense projections. She further opined that O&M expenses for distribution operations and generation are currently below projected levels and below the proposed inflation adjustments. The Attorney General recommended that the Commission reject DTE Electric's proposed use of a separate wage inflation factor of 3%, and instead use the CPI-Urban index projections of 1.9%, 2.1%, and 1.8% for 2019 through 2021, as shown in Exhibit AG-1.30. In addition, she recommended disallowance of all projected inflationary increases, and reviewed the Commission's orders in Case Nos. U-18014, U-18255, and U-20162 to show that the alternative

CPI-Urban inflation estimates presented are more appropriate, if the Commission chooses to adopt an inflation estimate. 9 Tr 3044-3047.

Kroger recommended that inflation be removed from DTE Electric's projected test year non-labor O&M expenses. Kroger argued that inflation mechanisms make inflation a self-fulfilling prophecy and objected to creating a cost-cushion by inflating non-labor expenses. Additionally, Kroger argued that DTE Electric's protected test year O&M expenses include \$7.4 million for non-labor inflation, and \$25.5 million for outside services inflation which should be removed. Kroger's initial brief, pp. 4-6.

The ALJ recommended that the Commission adopt the lower inflation rates recommended by the Attorney General based on projected CPI-Urban values of 1.9%, 2.1%, and 1.8% for 2019 through 2021, respectively. The ALJ found that DTE Electric's proposed labor inflation factor should be rejected because DTE Electric has not presented any new information sufficient to reach a conclusion different from the one the Commission reached in prior rate cases. Additionally, the ALJ recommended that DTE Electric be directed to evaluate its own productivity gains in the last decade or propose the use of a productivity index. PFD, p. 317.

In exceptions, DTE Electric contends that, while the Commission previously declined to adopt the combined inflation rate due to a lack of justification, the record in this case supports adoption of the company's proposed inflation rates. The company reiterates its argument that collective bargaining agreements require the company to increase pay rates by 3.0% annually, which drive the increase in inflation costs. DTE Electric's exceptions, pp. 108-110.

In her replies to exceptions, the Attorney General reiterates that projected inflation is a self-fulfilling prophecy and recommends removing all O&M expense inflations. She argues that,

at a minimum, the Commission should follow her inflation factors as recommended by the ALJ. Attorney General's replies to exceptions, pp. 37-39.

The Commission agrees with the ALJ that DTE Electric has not provided sufficient evidence in this case to induce the Commission to depart from its decisions in previous rate cases rejecting the blended inflation rate. The Commission agrees with the Staff that, while DTE Electric will see some inflation, the company will also offset some of the inflation with productivity gains. Therefore, the Commission finds the Staff's proposed inflation rates to be the most reasonable and adopts the Staff's proposed inflation rates rather than the Attorney General's. Thus, the Commission adopts the following inflation factors: 2.19%, 2.477%, and 2.50% for 2019 through 2021, respectively.

## 2. Steam Power (Schedule C5, line 1; Schedule C5.1)

Regarding steam, hydraulic, and other power generation O&M, the Attorney General noted that DTE Electric proposed a total cost of \$304.8 million. However, she stated that, “[t]he Company's adjusted O&M expense for these operations in 2018 was \$298.1 million. To this cost level, the Company added \$20.2 million in projected inflation adjustments, and applied reductions of \$13.5 million due to certain generating plant retirements and operational modifications.” 9 Tr 3053. The Attorney General recommended that the Commission disallow the inflation O&M expense for steam, hydraulic, and other generation operations and all other inflation adjustments proposed by DTE Electric.

### a. St. Clair Unit 1

In addition to the inflation-related adjustment, the Attorney General also recommended a \$3.1 million reduction to the projected expenditures for the St. Clair plant due to the retirement of St. Clair Unit 1 in March of 2019. The Attorney General acknowledged DTE Electric's

\$1.4 million reduction to historical expenditures to address this retirement and contended that an additional adjustment was warranted. Attorney General's initial brief, pp. 43-45.

In rebuttal, DTE Electric argued that the Attorney General's analysis does not properly consider the offsetting impact of \$8 million in O&M insurance proceeds in 2018. DTE Electric's reply brief, p. 67.

The ALJ found DTE Electric's explanation of the data relied on by the Attorney General to be reasonable and recommended no reduction to the proposed O&M expenses for St. Clair Unit 1. PFD, p. 319.

In exceptions, the Attorney General argues the ALJ erred by failing to consider her analysis. The Attorney General continues to recommend a proposed reduction of \$4.5 million in forecasted O&M expense for the retirement of Unit 1 of the St. Clair generating plant. Attorney General's exceptions, pp. 13-15.

DTE Electric replies to the Attorney General, arguing that its expenses are correct and prudent and the Commission should adopt the recommendation of the ALJ. DTE Electric's replies to exceptions, pp. 35-37.

The Commission finds that the ALJ's recommendation is reasonable and prudent and that it should be adopted.

b. River Rouge Unit 3

The MEC Coalition recommended that the Commission exclude projected O&M expenses for River Rouge Unit 3 that are inconsistent with operating the unit after May 2020. MEC Coalition's initial brief, p. 11.

The ALJ concluded that DTE Electric has failed to establish that its plan to operate River Rouge Unit 3 beyond May 2020 is reasonable and prudent. Further, the ALJ recommended an O&M expense reduction of \$1.66 million. PFD, pp. 319-320.

DTE Electric argues in exceptions that the MEC Coalition's recommendation to disallow O&M expenses that are inconsistent with operating the unit after May 2020 should be rejected. The company contends that the recommendation is contrary to the Commission's previous decisions finding that while the unit is in use, the reasonable and prudent maintenance costs should be approved. DTE Electric's exceptions, pp. 21-22.

The MEC Coalition replies that if DTE Electric chooses to operate River Rouge Unit 3 after May 2020, it is free to do so, however, the customers should not be forced to pay costs associated with this uneconomic unit. MEC Coalition's replies to exceptions, pp. 8-9.

As stated in previous cases, “[t]he Commission sees no reason on this record to deviate from its prior determinations. The Commission continues to agree with DTE Electric that while the unit is in use, reasonable and prudent O&M costs should be approved to ensure safe operation and a smooth transition to retirement.” May 2 order, pp. 11-12. As such, the Commission finds that the O&M costs of \$1.66 million should be included. However, the Commission restates its concerns with the underlying assumptions included in the modeling, including the lack of a contract with U.S. Steel for industrial gases and the lack of analysis showing the cost impact of backfilling this fuel supply with natural gas. Therefore, the Commission will examine fuel supply costs through the PSCR process associated with continued operation of River Rouge Unit 3 beyond May 2020, including potential disallowance of any unreasonable fuel costs.

Further, the Commission notes that DTE Electric continues to raise concerns over the impact of closing the plant on the surrounding community. The Commission shares this concern but also

stresses that DTE Electric has had at least three years to prepare the River Rouge community for the plant's eventual retirement and transition. The planned retirement in 2020 was solidified publicly and attested to before the Commission in 2017.<sup>14</sup> Given that questions over the future of this particular unit go back at least to the December 11 order (2015), and that the plan was to close as soon as this month, DTE Electric could have—and indeed, should have—put in place plans for a smooth retirement and community transition, accounting for plant employees, the impact on local tax base, site remediation, and other factors. The best time for such a just transition plan to be in place was three years ago. The second-best time is now. As such, the Commission directs DTE Electric to file, as part of its next rate case application, a comprehensive community transition plan. The plan should address public input DTE Electric has received through public meetings in River Rouge or other outreach to communicate the utility's plans with the community and receive input from community members.

### 3. Nuclear Power (Schedule C5, line 3; Schedule C5.3)

DTE Electric projected \$1.6 million for a nuclear decommissioning cost study that the company stated will be completed by May 2020. 9 Tr 3459-3460.

ABATE acknowledged that DTE Electric was directed to provide an updated decommissioning study in its next rate case or in a standalone proceeding, however, ABATE objected to DTE Electric's proposal to recover an estimated \$1.6 million in nuclear decommissioning study expenses through a five-year amortization. ABATE recommended that funding be limited to payments to outside vendors. ABATE's initial brief, pp. 16-17.

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<sup>14</sup> See, 5 Tr 292 in Case No. U-18255 (filed April 19, 2017); and 6 Tr 1733 in Case No. U-18419 (filed July 31, 2017).

The ALJ found DTE Electric's projected study expenses to be reasonable because no party questioned the legitimacy of the undertaking, the time frame for completion of the study is realistic, and DTE Electric has shown a commitment to make the required filing. PFD, pp. 320-321.

ABATE argues in exceptions that the ALJ erred in allowing the cost for the decommissioning study because DTE Electric failed to adequately support the reasonableness of the expense. ABATE requests that the Commission reject the ALJ's recommendation and limit DTE Electric's recovery in accordance with ABATE's recommendation in the case. ABATE's exceptions, pp. 38-39.

In reply, DTE Electric argues that the decommissioning study was requested by ABATE and ordered by the Commission, and asserts that the scope, schedule, supplier sourcing strategy, and total forecasted expenditures of the study are reasonable and prudent. DTE Electric therefore requests that the Commission adopt the recommendation in the PFD. DTE Electric's replies to exceptions, pp. 37-39.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted.

#### 4. Distribution (Schedule C5, line 6; Schedule C5.6)

The Staff supported DTE Electric's requested distribution system O&M expense, subject to the Staff's use of revised inflation factors. Staff's initial brief, pp. 81-83.

The Attorney General recommended that the Commission exclude DTE Electric's projected inflationary increase for distribution O&M expenses, and exclude DTE Electric's requested \$2.8 million increase in tree trimming expenses. Attorney General's initial brief, p. 42.

The ALJ recommended a normalization adjustment for the same reasons discussed in connection with emergent capital costs above. Regarding the reduction in the tree trimming expenses, the ALJ disagreed with the Attorney General that the May 2 order set funding levels for the surge program based on a static level of O&M tree trimming expense. She found DTE Electric's proposed increase to be reasonable, and recommended allowing the \$2.8 million increase in tree trimming expenses. PFD, pp. 321-322.

DTE Electric argues in exceptions against the inflation impacts discussed above. Additionally, DTE Electric advocated for the tree trimming expense. DTE Electric's exceptions, pp. 110-113.

The Attorney General excepts, arguing that the ALJ erred in allowing inflation expenses in tree trimming. Attorney General's exceptions, pp. 15-16.

In its replies, DTE Electric requests that the Commission adopt the ALJ's recommendation because the Attorney General did not offer a basis to depart from the ALJ's recommendation. DTE Electric's replies to exceptions, pp. 39-40.

The Attorney General continues to recommend that the Commission disallow the proposed increase to tree trimming expenses until DTE Electric shows successful spending under the surge plan. Attorney General's replies to exceptions, pp. 40-41.

The Commission agrees with the ALJ's analysis that the tree trimming funding was not static in conjunction with the surge program funding, and agrees with the Staff that the distribution system O&M expenses are reasonable and prudent, therefore, the Commission adopts the findings and recommendations of the ALJ.

5. Customer Service (Schedule C5, line 7; Schedule C5.7)

a. Merchant Fees

In the May 2 order, the Commission approved DTE Electric's decision to eliminate the option for larger C&I customers to pay by credit card at no additional charge, while preserving the option for residential and smaller commercial customers. In the instant case, DTE Electric proposed to further revise its fee policy for credit card transactions to preclude C&I customers from using credit cards for bill payments if their total bill in the preceding calendar year was more than \$75,000. DTE Electric argued it is reasonable to expect these larger, more sophisticated customers to use more common business-to-business forms of payment, such as a check or electronic bank payment, that result in significantly lower costs to the company and correspondingly to its customers. 6 Tr 1008-1010.

The Attorney General did not object to the revised policy, and recommended that projected costs be reduced by the company's projected \$4.7 million savings associated with the change. 9 Tr 3057-3058.

The Staff recommended a further restriction on the availability of no-fee credit card payment options and requested that the Commission rely on historical costs for the projected test year. The Staff recommended that only residential customers be eligible for the free credit card payment option and that projected test year costs be limited to the historical amount of \$8,399,000. Staff's initial brief, pp. 72-73.

In rebuttal, DTE Electric objected to the Staff's and the Attorney General's recommendations. DTE Electric argued that the company has been accepting debit and credit card payments since 2010 and has recovered the costs through rates. DTE Electric disagreed with the Staff's recommendation to further limit the availability of free credit card payments, arguing the disallowance of smaller C&I customers would negatively impact customer satisfaction, would require customers to change a payment methodology, and may increase call center volume. DTE

Electric further argued that flexible payment methods assist customers and reduce service disconnections. 6 Tr 1048.

The ALJ found it reasonable to accept the Staff's recommendation and adjustment, with the caveat that DTE Electric should be able to accept credit card payments from C&I customers as it proposes, as long as it charges a fee for the service. PFD, p. 327.

In exceptions, DTE Electric argues that a reasonable and balanced approach to mitigate merchant fee costs and customer impacts would be to also allow debit or credit card use by smaller C&I customers whose aggregate bill is less than \$75,000 per year, and to expect larger, more sophisticated C&I customers to use more common business-to-business forms of payment, such as a check or electronic bank payment, with significantly lower costs to the company. DTE Electric requests that the commercial merchant fee O&M of \$10.7 million, adjusted for the \$75,000 annual cap savings of an additional \$2 million be adopted by the Commission. DTE Electric's exceptions, pp. 113-115.

In replies to exceptions, the Attorney General continues to argue that, if the C&I cap is implemented at \$75,000, the appropriate amount of merchant fees to remove from the test year is \$4.7 million. Attorney General's replies to exceptions, p. 41.

The Commission agrees with DTE Electric that merchant fees for residential and smaller commercial customers are a reasonable O&M expense. The Commission recognizes the increasing popularity of paying by credit card and the added convenience for the customer. Therefore, the Commission adopts DTE Electric's proposal for merchant fees. The Commission directs DTE Electric to work with the Staff on methodologies to better evaluate the impacts and attributions of this practice going forward and to provide information on this collaboration in its next rate case filing.

b. Information Technology Expenses

The Staff recommended that the Commission reject the projected O&M expenses for projects excluded from capital costs. Therefore, consistent with prior exclusion recommendations, the Staff reduced projected test year O&M expense by \$575,252 based on the reported O&M expenditures associated with the bill redesign project in DTE Electric's business case, and reduced projected test year O&M expense by \$600,000 based on the reported O&M expenditures associated with the Network-Advanced Metering Infrastructure Enhanced Support. Staff's initial brief, pp. 71-72.

DTE Electric asserted that these expenses were not included in DTE Electric's projected revenue deficiency calculations and therefore should not be disallowed. 6 Tr 1561-1562.

The ALJ found that the Staff's recommendation is reasonable and consistent with the capital expense adjustment and recommended the disallowance. PFD, pp. 327-328.

In exceptions, DTE Electric asserts that the ALJ erred in recommending the disallowance. DTE Electric argues the expenses were based on 2018 historical expenses and other adjustments, and were not tied to a specific capital project. DTE Electric's exceptions, p. 115.

The Commission agrees with the Staff and the ALJ regarding the disallowance to O&M for IT projects excluded from capital costs. Furthermore, the Commission sees a need for a more comprehensive IT plan, as discussed in section IV. A. 6. of this order.

6. Uncollectible Accounts Expense (Schedule C5, line 8; Schedule C5.8)

DTE Electric used a balance sheet method to determine the \$51.6 million uncollectible accounts expense projection. 6 Tr 1143.

The Attorney General recommended a \$2.1 million reduction to DTE Electric's projected uncollectible accounts expense, which represents the difference between the 2018 annualized

savings amount of \$4.6 million and the projected test year savings amount of \$6.7 million.

9 Tr 3058-3059.

The Staff adopted the revisions to the cash basis method in Schedule EE1 of Exhibit A-40 and revised its uncollectible expense projection to \$52.4 million. Staff's brief, pp. 73-74.

The ALJ found that neither the Staff nor DTE Electric properly implemented the cash basis method for estimating this expense item or showed that the problem with DTE Electric's three-year average method also affects the cash basis method. The ALJ recommended adopting the Attorney General's findings, including the \$2.1 million adjustment. PFD, pp. 328-334.

In exceptions, DTE Electric asserts that it has agreed to accept the cash basis method in this case to reduce the contested issues. The company requests that the Commission reject the ALJ's recommendation and adopt the Staff's adjustment of \$770,734 to the company's initially filed position, resulting in an uncollectible expense of \$52.4 million. DTE Electric's exceptions, pp. 116-119.

In replies to exceptions, the Attorney General urges the Commission to adopt the findings of the ALJ because the company and the Staff failed to properly implement the cash basis method and utilized outdated data. Attorney General's replies to exceptions, pp. 41-42.

The Commission declines to adopt the ALJ's recommendation and, instead, approves the Staff's proposal. The Commission, in Case No. U-20162, addressed the method used to project uncollectible accounts expense, rejecting DTE Electric's use of a three-year average of actual uncollectibles in favor of the Staff's use of the three-year average of the ratio of net charge-offs to revenue, referred to as the "cash basis" method. The Commission also approved this method in Case Nos. U-14347, U-16191, U-16794, U-17735, and U-17790. May 2 order, p. 87. Although the Commission would not typically exclude the most current year, a case was made to show

inclusion would lead to a perverse result and thus it is reasonable to remove it. The Commission finds the Staff's methods and calculations to be the most accurate and adopts the Staff's recommended adjustment.

7. Regulated Marketing (Schedule C5, line 9; Schedule C5.9)

a. Plug-in Vehicle Costs

DTE Electric projected test year amortization expense of \$1.2 million for plug-in vehicle costs under the authorization of the December 11 order, as shown in Schedule C5.9 of Exhibit A-13. The Staff recommends a reduction of \$347,000. Staff's initial brief, pp. 79-80.

DTE Electric stated it would complete the authorized amortization on January 20, 2021, prior to the conclusion of the test year. The company agreed it had overstated the amortization amount for the test year, but testified that the correct adjustment should be \$415,000, which was calculated using an end date of January 1, 2021, rather than the January 20 date underlying the Staff's calculation. 6 Tr 1574. The Staff adopted DTE Electric's revision to reduce disputed issues.

Staff's reply brief, pp. 6-7.

The ALJ found it is appropriate to give the ratepayers the benefit of any doubt, and recommended that DTE Electric's adjustment should be adopted. PFD, p. 335.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

b. Charging Forward Costs

DTE Electric filed an amortization expense of \$628,000 as shown in Schedules C5.9 and C5.9.1 of Exhibit A-13. The Staff recommended a reduction of \$360,000 in the test year amortization expense for the Charging Forward program. Staff's initial brief, pp. 80-81. The Staff explained that DTE Electric's amortization expense includes projected expenditures of \$2 million

in 2019 and \$3.4 million in 2020, however DTE Electric only spent \$220,000 through September 2019. The Staff recommended that only the \$220,000 in reviewed expenditures be amortized for recovery in the projected test year. 9 Tr 3339. DTE Electric agreed with the Staff that the amortization should be limited to actual, reviewed expenditures. 6 Tr 1575.

The ALJ recommended that the Staff's adjustment to the amortization expense be adopted. PFD, pp. 335-336.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

c. Fixed Bill Pilot

DTE Electric's projected O&M expense also includes \$900,000 for the fixed bill pilot. 6 Tr 1034-1035, 1037, 1040, 1067. As discussed in the Rate Design section, below, this pilot is rejected.

d. Low-income Renewable Energy Pilot

DTE Electric's projected O&M expense also includes \$800,000 for its low-income renewables pilot program. 6 Tr 1040. As discussed in the Rate Design section, below, this pilot is rejected.

8. Corporate Support (Schedule C5, line 10; Schedule C5.10)

a. Injuries and Damages

The Staff's recommended projection for injuries and damages expense of \$12.9 million was based on a five-year average with a normalization adjustment. The Staff has historically used a five-year average to project this category of expense, but recommended that a four-year average be used in this case, excluding DTE Electric's 2018 injuries and damages expense of \$19.3 million to smooth the volatility and difficulty of projecting this category. The Staff further recommended

that the 2018 experience be excluded from the averaging in future cases as well, unless DTE Electric establishes that its injuries and damages expense for that year were reasonably and prudently incurred. 9 Tr 3278-3279.

In rebuttal, DTE Electric objected to the Staff's adjustment, contending that the Staff excluded 2018 because it happens to be higher than typical years. DTE Electric contended the 2018 experience was not unusually high and the company objected to a change in the approved methodology. 6 Tr 1562-1563.

The Staff addressed DTE Electric's rebuttal, emphasizing that the Staff's adjustment is not based exclusively on the magnitude of the injuries and damages expense for 2018, but also on DTE Electric's confidentiality claim. Staff's initial brief, pp. 74-75.

The ALJ recommended that Staff's adjustment should be adopted, and the 2018 injuries and damages expense should not be used in setting rates unless and until DTE Electric establishes that it would be reasonable to expect ratepayers to pay for similar claims. PFD, pp. 337-338.

DTE Electric excepts, arguing that the injuries and damages expenses were calculated based on the acceptable method and should not be adjusted because 2018 was atypical. The company asserts that the Commission should continue its past practice. DTE Electric's exceptions, pp. 119-120.

The Commission agrees with the ALJ's recommendations and findings. The Commission agrees with the Staff that the 2018 injuries and damages expense needed to be identified, described, and explained to be included. Therefore, the Commission adopts the findings and recommendations of the ALJ.

b. Membership Dues

ABATE recommended that \$15.5 million in membership dues and fees be removed from projected test year O&M expenses. ABATE argued that DTE Electric failed to support the \$15.465 million expense, and also expressed a concern that groups such as the Edison Electric Institute (EEI) that receive a majority of their revenue from utility membership dues are highly political in nature and promote policies that are not always in the best interest of ratepayers. ABATE also recommended the Commission require DTE Electric to support its test year expense and indicate whether the industry association dues are used directly or indirectly to influence legislation. 7 Tr 1657-1658.

DTE Electric presented a list of corporate memberships included in the company's revenue requirement with a statement of the benefits those memberships provide. DTE Electric argued that memberships in organizations that provide key operational support are allowed for ratemaking purposes. 6 Tr 1565.

ABATE asserted that, in addition to removing political and lobbying expenses, DTE Electric must show that these costs are reasonable. ABATE argued that providing ratepayer funding for DTE Electric's dues and memberships is equivalent to compelled speech. ABATE's initial brief, pp. 59-62. The MEC Coalition supported ABATE's position. MEC Coalition's reply brief, p. 3.

The ALJ found that the record did not support excluding the membership fees for all associations as ABATE requested. The ALJ further noted that DTE Electric's membership in several of these organizations is required. The ALJ recommended that the Commission allow the industry association membership fees which are not otherwise excluded as required by accounting rules. PFD, pp. 338-342.

In exceptions, ABATE argues that even if the Commission routinely allowed membership costs, DTE Electric is required to present evidence in support of cost recovery. ABATE argues that DTE Electric failed to provide support for the significant increase in membership fees. ABATE requests that the Commission exclude the membership fees, and, in the alternative, remind DTE Electric of its obligation to identify, describe, and explain projected costs. ABATE's exceptions, pp. 32-38.

DTE Electric replies, contending that the PFD was well-reasoned and provided sufficient support for the ALJ's recommendation. The company further noted the arguments of both parties have been repeated over the last several rate cases and need no further repetition. DTE Electric's replies to exceptions, pp. 44-46.

The Commission adopts the findings and recommendations of the ALJ as to the inclusion of membership fees, finding the analysis and reasoning thorough and persuasive. However, the Commission also adopts ABATE's request as to the need to continually justify that such fees are truly required and/or are in the interests of ratepayers, and reminds the company of its continuing obligation to identify, describe, and explain projected costs associated with membership fees in future rate cases.

#### 9. Pension and Benefits (Schedule C5, line 11; Schedule C5.11)

The ALJ addressed the remaining two issues regarding DTE Electric's projected benefits expense. Below are discussions about DTE Electric's projected wellness expense and projected incentive compensation expense.

a. Wellness

The Attorney General objected to DTE Electric's doubling of the projected test year spending on its employee wellness program over historical levels, arguing the company provided no explanation for the increase in spending. 9 Tr 3063.

In rebuttal, DTE Electric argued that the enhanced wellness program will focus on obesity, hypertension, and high blood sugar levels. The additional program costs will relate to prediabetes and diabetes prevention and management programs and cardiovascular management programs. Further, the company stated that it will be expanding its employee training and awareness programs focused on injury prevention. 5 Tr 961.

Although the ALJ found the concept of wellness activities to be reasonable and desirable, she also determined that DTE Electric failed to demonstrate reliable plans to spend the projected amount or that its actual plans are reasonable and prudent. The ALJ recommended adoption of the Attorney General's \$2.3 million reduction with a \$483,000 cost savings offset, for a total reduction of \$1.8 million. PFD, pp. 342-344.

In exceptions, DTE Electric reiterates the three areas of wellness the additional funding will be applied to, and argues for the cost-effectiveness of wellness programs derived from the ability to reduce the rate of increase in healthcare costs. DTE Electric requests that the Commission reject the recommendations in the PFD and approve the wellness program. DTE Electric's exceptions, pp. 120-121.

In reply to DTE Electric's exceptions, the Attorney General argues that DTE failed to adequately support this tremendous increase in wellness spending along with all the other options the company already offers.

The Commission supports wellness programs and the cost-efficiencies derived from supporting healthy employees and work environments. DTE Electric provided convincing evidence of the cost savings associated with the enhanced Wellness Program (the annual healthcare cost escalation rate was reduced by 0.50% in 2020 and 1.00% in 2021). 5 Tr 905-906, 963; Exhibit A-13, Schedule C5.11.1. The Commission supports DTE Electric's choice to focus on diabetes, obesity, hypertension, and injury prevention. 5 Tr 908. DTE Electric demonstrated that the increased costs associated with the enhanced program may eventually be fully offset by the savings. *Id.* The Commission will continue to monitor this cost category, but finds DTE Electric's arguments persuasive and approves DTE Electric's full wellness program request.

b. Incentive Compensation

In the May 2 order and several prior orders, the Commission permitted DTE Electric to include incentive compensation expenses attributable to attaining the proposed non-financial operational measures, but declined to permit DTE Electric to recover projected expenses associated with attaining financial measures. In the May 2 order, the Commission directed DTE Electric to provide additional detail on compensation, performance targets, and achievement in this rate case, to allow the Commission to evaluate whether adjustments should be made for the non-financial incentive structure authorized for recovery in rates. May 2 order, pp. 93-94. DTE Electric requested to include projected incentive compensation expenses for both financial and non-financial measures totaling \$47.6 million in the test year revenue requirement. 5 Tr 917-947.

The Staff recommended that the Commission retain its past practice and permit recovery only of the incentive compensation associated with the non-financial operational measures. 9 Tr 3279-3280.

The Attorney General argued that the three DTE Electric plans are too heavily skewed toward measures that benefit shareholders rather than customers and recommended rejecting all associated costs. 9 Tr 3066.

The ALJ found that the Staff correctly analyzed the non-operational expenses, and that they should continue to be excluded from test year O&M. PFD, pp. 352-353.

In exceptions, DTE Electric continues to assert that all incentives should be recoverable in rates as part of total market-based compensation. DTE Electric argues that although the Commission has rejected some of the incentives in past cases, the company is not precluded from putting forth its case in future filings. DTE Electric asserts that it has filed and supported its arguments in this case that all incentives should be recoverable and requests that the Commission reject the ALJ's recommendations. DTE Electric's exceptions, pp. 121-131.

The Attorney General replies that the Commission should rely on its past decisions, the Staff, and the intervenor arguments in this case, and adopt the ALJ's decision to deny recovery of incentive compensation related to financial measures. Attorney General's replies to exceptions, pp. 43-47.

The Commission agrees with the ALJ that the Staff has correctly analyzed the expenses, and adopts her recommendation to exclude the non-operational based incentive compensation expenses from the test year O&M.

#### 10. Taft-Hartley Training Trust

The UWUA Local 223 requested that the Commission require DTE Electric to set aside training funds to deal with the workforce aging crisis. The UWUA Local 223 further argued that the Commission should require DTE Electric to partner with the UWUA Power for America Training Trust Fund (P4A) because there are not enough experienced employees to provide

training to new employees. 9 Tr 2744. The UWUA Local 223 argued that externally funded training programs like the P4A could help reduce some of this pressure by providing additional trainers and/or by taking responsibility for the classroom component of DTE Electric's apprenticeship and training programs. 9 Tr 2751-2752.

DTE Electric argued that the external funding of a Taft-Hartley training trust is strictly a question for collective bargaining and that the company's management will continue to work on solutions and partnerships. DTE Electric's reply brief, p. 70. DTE Electric also argued that it is currently providing adequate reporting on this issue. DTE Electric's reply brief, pp. 70-71.

The ALJ found that DTE Electric's current reporting is a reasonable approach. Additionally, the ALJ recommended that DTE Electric identify any workforce and training issues that would interfere with its ability to complete its strategic capital investments as well. PFD, p.355.

In their exceptions, UWUA Local 223 argue that the ALJ did not adequately explain why the utility should not fund training through the UWUA Local 223. UWUA Local 223 further excepted to the ALJ's failure to recommend DTE Electric provide a report addressing the aging workforce. UWUA Local 223's exceptions, pp. 2-8.

DTE Electric argues in its replies to exceptions that this matter settled as a matter of collective bargaining and is not relevant to this case. The company requests that the Commission adopt the recommendation of the ALJ. DTE Electric's replies to exceptions, pp. 41-43.

The Commission shares UWUA Local 223's concern with the aging workforce and encourages DTE Electric to prioritize workforce attraction and training and to explore new training approaches in collaboration with unions and other partners. The Commission agrees with DTE Electric and the ALJ that decisions for specific training programs are within the company's purview and DTE Electric's current approach and reporting are reasonable and can be modified,

through discussions with the Staff, to ensure the ability to complete strategic capital investments and ensure safe, reliable operations. The Commission adopts the findings and recommendations of the ALJ.

#### 11. Case No. U-20084 Expenses

RCG asked the Commission to ensure that DTE Electric is not seeking to recover expenses to comply with the Commission's order in Case No. U-20084. RCG's initial brief, pp. 20-27. RCG did not identify any specific costs associated with DTE Electric's compliance with that order that are included in this case in contravention of that order.

The ALJ did not recommend any specific adjustment. PFD, p. 355.

In exceptions, RCG asserts that the ALJ erroneously placed the burden of proof upon RCG to reveal, calculate, and determine the costs that DTE Electric incurred as a result of the Commission's orders in Case No. U-20084. RCG argues that DTE Electric is the only party privy to those expenses, and the Commission should make an estimation of the costs and adopt a downward rate adjustment in this case to reflect said costs. RCG argues, in the alternative, that the Commission should initiate a docket to obtain all such cost information and provide an immediate deduction or address it in DTE Electric's next rate case. RCG's exceptions, pp. 22-30.

In reply, DTE Electric reiterates that any costs associated with the Commission's order in Case No. U-20084 have already been removed or were excluded from the historical test period, therefore, there is no expense to adjust. DTE Electric's replies to exceptions, p. 46.

The Commission finds that the ALJ's recommendation is reasonable and prudent and should be adopted.

## 12. Tax Cuts and Jobs Act-related Potential Cost Savings

RCG argued that DTE Electric should be seeking cost reductions from suppliers and contractors, based on cost reductions resulting from the TCJA. RCG did not request specific adjustments. RCG's brief, pp. 27-28.

The ALJ did not recommend any adjustments as no specific adjustments were requested. PFD, p. 356.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

### C. Other Expenses

Tax expense, depreciation and amortization expense, and AFUDC were either undisputed or drew no exceptions, and the Commission adopts the findings and recommendations of the ALJ on each of them. PFD, p. 357.

### D. Adjusted Net Operating Income Summary

In summary, the Commission finds that DTE Electric's jurisdictional projected NOI for the 2020-2021 test year is \$840,421,000.

## VII. REVENUE DEFICIENCY

In accordance with the decisions in this order, the Commission finds that DTE Electric's jurisdictional revenue deficiency for the test year is \$188,285,000, computed as follows:

Rate Base	\$17,885,894,000
Adjusted Net Operating Income	\$839,191,000
Overall Rate of Return	4.69%

Required Rate of Return	5.46%
Income Requirements	\$977,140,000
Income Deficiency (Sufficiency)	\$137,949,000
Revenue Conversion Factor	<u>1.3496</u>
Revenue Deficiency	\$186,181,000
Rev. Def. – Tree Trim Surge	<u>\$2,104,000</u>
Revenue Deficiency – Total	<u>\$188,285,000</u>

### **VIII. OTHER REVENUE-RELATED ITEMS**

#### A. Surge Funding Extension and Reporting

In Case No. U-20162, the Commission approved DTE Electric's request for surge program funding for three years, through 2021. DTE Electric proposed an additional funding approval of \$58.2 million through 2022 to provide financial security in order to negotiate labor contracts through January 2023. 9 Tr 3051-3052.

The Attorney General contended that insufficient time had passed to allow for an assessment of the merits of the program. 9 Tr 3052. In response, DTE Electric argued that, if the company cannot provide work volume guarantees for the 2022 surge work, then the contractors may elect to move trimmers and equipment to other areas of the country where they have guaranteed work volumes and create a shortage for DTE Electric. 9 Tr 3631-3633.

The ALJ recommended that the Commission wait until DTE Electric's next rate case to consider the additional surge funding, citing that DTE Electric's March 2020 report will be available then and DTE Electric will have the opportunity to demonstrate one full year of successful spending under the program. PFD, pp. 360-361. Additionally, the ALJ noted that the Staff requested additional reporting regarding the surge program that DTE Electric agreed to, and

the ALJ also recommended that DTE Electric include other distribution system workers in its reporting. PFD, pp. 361.

In exceptions, DTE Electric reiterates that the additional funding would allow for continuity planning and securing labor for scheduling work into the future to achieve the goals approved by the Commission in the May 2 order. DTE Electric acknowledges that the company agreed to the Staff's additional reporting requirement requests, and urges the Commission to grant the 2022 surge funding. DTE Electric's exceptions, pp. 111-112.

The Attorney General replies to DTE Electric's exception and argues that the three years previously approved have not run their course. She requests that the Commission wait until the next rate case, as the ALJ recommended. Attorney General's replies to exceptions, pp. 40-41.

The Commission reiterates its desire for a safe and reliable electric system, and it appreciates DTE Electric's aggressive surge proposal. The record shows that DTE Electric has continued to bring tree trimming spending into line with the approved amounts, as it has significantly scaled up tree trimming activity, and the Commission agrees that falling behind in this area will cost more in the future. The Commission is also cognizant of the costs and workforce constraints. Thus, the Commission agrees in part with the ALJ and the Staff regarding additional reporting. In addition, the company shall also provide, in its next tree trim annual report: (1) the SAIDI reduction calculations; (2) a description of spot-trimming work done on the 10 worst performing circuits; and (3) for each service center, the following metrics: miles trimmed under the Enhanced Tree Trimming Program (ETTP), miles of backlog yet to be trimmed under the ETTP, average tree density, percentage of work that is backlog, and percentage of work that involves climbing. *See*, May 2 order, pp. 74-81. The Commission directs DTE Electric to consult with the Staff to refine

further reporting expectations. The Commission also agrees in part with DTE Electric and approves the \$58.2 million requested surge funding for 2022.

#### B. DTE Electric Company's Accounting Requests

DTE Electric sought three accounting approvals: (1) an increase in the Program Evaluation and Review Committee base to \$15 million; (2) continued deferral of net Other Post-Employment Benefits expenses; and (3) approval to comply with Accounting Standards Update 2018-15 by recording certain deferred costs associated with cloud computer services as other assets in Plant, Property, and Equipment.

Finding DTE Electric's proposed accounting requests to be undisputed in this case, the ALJ recommended that they be approved. PFD, pp. 361-362.

DTE Electric's request to authorize the creation of a regulatory asset for pension expenses is addressed above.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

#### C. Tax Cuts and Jobs Act Accounting and Reporting Requirements

The Staff and the Attorney General also recommend the Commission require DTE Electric to report on its amortization of excess deferred tax balances resulting from the TCJA; recommending that DTE Electric be required to file a letter each March 31 in this docket detailing the annual activity related to the excess deferred federal income taxes, including the following information, separately stated for protected and unprotected balances: (1) the beginning refundable balance; (2) the yearly amount included in rates; (3) the over/under regulatory asset/liability the company has recorded, which shall be calculated as the difference between the actual amount of excess

deferred taxes in a given year and the estimated amount included in rates; and (4) the ending refundable balance. 9 Tr 3332. DTE Electric did not object.

The ALJ found that these recommendations were reasonable and should be adopted. PFD, pp. 362-363.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

#### D. Analytic and Other Reporting Issues

This section addresses requests for further analyses and reporting not already addressed above.

##### 1. Line Loss Study

As discussed above, the Staff recommended that DTE Electric conduct a line loss study before its next rate case. Staff's initial brief, p. 101.

In its reply brief, DTE Electric agreed to conduct a loss study, but argued against a marginal line loss study because of the expense and difficulty in evaluating non-engineering losses on an hourly basis. DTE Electric's reply brief, p. 107.

In its reply brief, the MEC Coalition argued DTE Electric should evaluate engineering losses on an hourly or marginal basis and should not be excused from conducting an engineering loss study on both an average and marginal basis due to challenges associated with non-engineering losses. MEC Coalition's reply brief, p. 35.

The ALJ recommended that the Commission require DTE Electric to conduct a line loss study before its next rate case, and, because DTE Electric did not object to either the time required or the cost of the analysis, the ALJ recommended that the marginal loss study should be completed as described by the MEC Coalition or the company should provide a detailed explanation of what appropriate limitations it imposed on its analysis. PFD, pp. 365-366.

In exceptions, DTE Electric maintains its position, and is agreeable to conducting a line loss study consistent with the Staff's approach, and reiterates that the company is not in favor of doing a marginal line loss study as recommended by the MEC Coalition due to the complexity, uncertainty, and expense. DTE Electric's exceptions, p. 108.

In replies to exceptions, the MEC Coalition again recommends that the loss study should provide estimates of marginal losses for changes in load, by time and by rate class and interconnection voltage. The MEC Coalition also disagrees with both the Staff and DTE Electric, stating that neither cited evidence that it may be difficult to assign non-engineering losses on an hourly basis, and therefore, the marginal losses should be included in the study. MEC Coalition's replies to exceptions, pp. 62-66.

The Commission supports the need for an accurate and timely line loss study and adopts the recommendation of the ALJ that DTE Electric shall conduct a line loss study before its next rate case, and should endeavor to complete a marginal loss study as recommended by the MEC Coalition "or provide a detailed explanation of what appropriate limitations it imposed on its analysis." PFD, p. 365. As the ALJ noted, "the company's distribution system is a focus of substantial investment for the utility, and additional insight into the operation of that system would seem to be valuable." *Id.*, pp. 365-366.

## 2. Reporting of Advanced Metering Infrastructure Benefits

Once again, the parties disputed whether DTE Electric should continue to report on AMI benefits as required by prior orders. Additionally, DTE Electric disagreed with the Staff's recommendation that the report be revised to include actual yearly realized benefits of AMI and the forecasted benefits from past years. 9 Tr 2629.

The ALJ found the Staff's arguments reasonable and recommended that DTE Electric should continue to comply with the AMI reporting requirements the Commission has already established. The ALJ recommended that DTE Electric work with the Staff to make sure that it is not misunderstanding the work involved. PFD, p. 329.

In exceptions, DTE Electric maintains that further reporting is unnecessary and agrees that the Staff's additional reporting requirements should be rejected. However, the company is agreeable to working with the Staff regarding the existing reporting requirements as indicated in the PFD. DTE Electric's exceptions, p. 52.

In replies to exceptions, the Staff asserts that the ALJ did not dismiss the additional reporting requirements but, instead, made it clear DTE Electric was to work with the Staff to comply with the Commission's reporting requirements. The Staff recommends that the Commission adopt its recommendation and clearly determine that actual realized historical AMI benefit information is required to comply with the Commission's established requirements. Staff's replies to exceptions, pp. 33-34.

The Commission agrees with the recommendations of the ALJ and directs DTE Electric to provide the Staff with the actual yearly realized benefits of AMI along with the forecasted benefits for past years in the reporting.

### 3. The Commission Staff's Requests for Reporting on the Charging Forward Pilot

The ALJ recommended that the Commission adopt the Staff's recommendation that DTE Electric provide clear and explicit quarterly reports containing all assumptions regarding EV adoption and charging in the EV grid impact study. PFD, p. 369.

No exceptions were filed. The Commission adopts the findings and recommendations of the ALJ.

## **IX. COST OF SERVICE**

### A. Production Cost Allocation

In DTE Electric's last rate case, the Commission found that the production cost allocation should be revisited in the company's next rate case. Specifically, the Commission stated “[g]iven the allocation of costs trend since Case No. U-17689 . . . the Commission finds it reasonable to revisit this issue to ensure that rates are cost-based, as required by MCL 460.11(1).” May 2 order, p. 129. The Commission cited the January 31 order to remind parties of the following standard:

that any party proposing to revise the production cost allocation method in a future case include in its evidentiary presentation an analysis using the equivalent peaker method or an approximation for comparison purposes. On pages 52-53 of the NARUC [National Association of Regulatory Utility Commissioners] Manual, it states that “[e]quivalent peaker methods are based on generation expansion planning practices, which consider peak demand loads and energy loads separately in determining the need for additional generating capacity and the most cost-effective type of capacity to be added.”

January 31 order, p. 100 (alteration in original).

The MEC Coalition relied upon this language to contend that the Commission made the determination that a four coincident peak (4CP) 75-0-25 allocation does not reflect cost-of-service based rates. 9 Tr 3825-3828; *see also*, MEC Coalition's initial brief, pp. 80-81. The Staff disagreed, stating that a desire to revisit an issue does not imply that the company's current cost allocation method is not equal to the cost of service required by law. *See*, Staff's reply brief, p. 27.

The ALJ agreed with the Staff, finding that the Commission only indicated that parties raised concerns and that the allocator should be reexamined in this proceeding. She concluded “that had the Commission found that 75-0-25 does not reflect cost-causation, the Commission could have modified the allocator in DTE's last rate case.” PFD, p. 372.

The Commission finds that the ALJ's analysis is appropriate. In the May 2 order, the Commission did not determine that 4CP 75-0-25 did not ensure cost-based rates. Rather, as the

ALJ indicated, the Commission found that the issue should be revisited in the company's next rate case.

Given the Commission's directive to revisit the issue in this proceeding, several witnesses addressed DTE Electric's proposed production cost allocation. The ALJ provided a thorough overview of the various methods proposed by the parties on pages 373 to 395 of the PFD. As noted by the ALJ, DTE Electric, the Staff, ABATE, Kroger, and Walmart each recommend the continuation of the 4CP 75-0-25 method for allocating fixed production costs, while the Attorney General advocated a 50-0-50 allocation, and the MEC Coalition recommended adoption of either its 4CP Equivalent Peaker (EP4CP) method or the Attorney General's proposal.

The ALJ found that the Attorney General's claim that a 50-0-50 allocation is typical was not well supported. Nevertheless, she concluded that the Attorney General's load factor analysis, as refined by Kroger and testimony in Case No. U-17689, provided "sufficient support to demonstrate that 75-0-25 should be modified to slightly increase the energy weighting to 30% and decrease the demand weighting to 70%." PFD, pp. 395-396. In addition, the ALJ recommended that the Commission require DTE Electric to provide revenue requirements by plant in its next general rate case. *Id.*, p. 395.

DTE Electric takes exception to the ALJ's determination, arguing that her reliance upon testimony in Case No. U-17689 is misplaced. The company contends that the Commission was aware of the testimony and other evidence in that case yet still chose to adopt the 4CP 75-0-25 allocation method and has consistently applied that methodology in subsequent cases. Further, DTE Electric reiterates that recent legislation "codifies the 75-0-25 method, [which] sets forth a standard for change that cannot be met by revisiting the record in a prior case and suggesting a

different result than the Commission already reached.” DTE Electric’s exceptions, p. 133 (footnote omitted).

The company also contends that the ALJ erred in referencing Kroger’s testimony as support for her determination because she neglects the context in which the testimony was proffered. According to DTE Electric, Kroger’s testimony posited that the Attorney General’s methodology, even as corrected, should not be used because it disadvantages higher-load factor customers, given its structural bias which double-weights energy usage. As such, the company argues that relying on this testimony is inappropriate and does not meet the burden under MCL 460.11(1) to change the existing methodology. In addition, DTE Electric references various parties’ support and contends that “maintaining the 4CP 75-0-25 production plant cost allocation is the most reasonable and prudent course of action.” DTE Electric’s exceptions, p. 134.

Regarding the ALJ’s recommendation to require the company to provide revenue requirements by plant in its next rate case, the company contends that the ALJ mischaracterized its willingness to provide data. Specifically, DTE Electric states that it “had clearly provided the Company’s available accounting data for gross plant by generating plant, and accumulated depreciation and net book value by generation category.” DTE Electric’s exceptions, p. 132 (internal citation omitted). The company contends that it does not maintain accumulated depreciation records at the generating plant level and that the MEC Coalition’s methodology had numerous other flaws “that cannot be cured by the provision of additional data.” *Id.*

The Attorney General also takes exception to the ALJ’s recommendation to utilize a 4CP 70-0-30 method noting that it is a step in the right direction but “that a 50-0-50 method is a more reasonable approximation of the true cost of service and represents a more proper allocation of costs among rate classes.” Attorney General’s exceptions, p. 17. The Attorney General contends

that the ALJ did not provide discussion as to why she concluded that there was not sufficient support to find that a 50-0-50 allocation is typical and cites to pages 121-135 of the Attorney General's initial brief for support. In the alternative, the Attorney General "recommends that the Commission adopt the ALJ's 70-0-30 allocation as it does provide a step toward recognizing the true cost of service balancing." Attorney General's exceptions, p. 18.

ABATE also takes exception, arguing that the ALJ erred in recommending a 70-0-30 allocation because it was not offered or recommended by any party to the proceeding. Thus, ABATE contends the ALJ's determination is not supported by competent, material, and substantial evidence and is "unreasonable, arbitrary, and capricious." ABATE's exceptions, p. 3. ABATE argues that the ALJ's recommendation is based on a witness's aside which she mischaracterizes as a refinement of the Attorney General's load factor analysis. Rather, ABATE states that the testimony relied upon by the ALJ recommends the adoption of the 75-0-25 allocation and does not provide support for the ALJ's proposed allocation. ABATE also contends that the ALJ's conclusion discounts the evidentiary record establishing that the Attorney General's method disadvantages high-load factor customers as it double-weights the annual energy usage. ABATE's exceptions, pp. 6-8. ABATE argues that the Commission has previously rejected the proposed methodology and that the record does not demonstrate "that a production cost allocation with high energy weighting would align costs with their causation or achieve cost of service rates to a greater or more accurate degree than the existing 4-CP 75-0-25 production cost allocation." ABATE's exceptions, p. 8.

In its exceptions, Kroger disputes that its testimony refined the Attorney General's load factor analysis. Kroger states that its witness simply used the Attorney General's "analysis in a hypothetical example to demonstrate that even if [the Attorney General's] load factor analysis was

accurate, that [her] recommended 12CP 50-0-50 was not appropriate.” Kroger’s exceptions, p. 2. Kroger states that the mischaracterization also ignores the second part of its analysis, namely that the methodology has “a structural bias that double weights energy and unreasonably shifts costs” and the adoption of a version of the Attorney General’s methodology “would benefit lower load factor classes to the detriment of higher load factor classes without a legitimate cost of service justification.” *Id.* Kroger concludes that it continues to support the 4CP 75-0-25 method as it more appropriately reflects the cost of service than the ALJ’s proposal and it is a reasonable balance between high-load and low-load factor customers.

Kroger also excepts to the ALJ’s summary of its testimony regarding the MEC Coalition’s EP4CP proposal. Specifically, Kroger states that the record is clear that it disagrees with the statement that the “use of average revenue requirements by category skewed the analysis toward a higher amount of cost being allocated to demand” and further explains that “the results are also skewed because of the use of overall revenue requirement which includes variable costs, such as fuel, that vary substantially depending on the dispatch of a unit.” Kroger’s exceptions, p. 3.

In reply, DTE Electric contends that the Attorney General did not provide anything to rebut the ALJ’s finding that her proposal was not well supported, and that the record reflects that her “recommendation lacks a sound foundation because it is based primarily on system load factors, and it is simply an attempt to reverse what our Legislature requires . . .” DTE Electric’s replies to exceptions, p. 47. The company further reiterates that the Attorney General’s Exhibit AG-2.5 is not a close facsimile to the equivalent peaker method as suggested by the Attorney General. DTE Electric states that maintaining the 4CP 75-0-25 production plant cost allocation is appropriate based on the shortcomings of the Attorney General’s and the MEC Coalition’s proposals, the other parties’ positions, “and the substantial effort and progress made toward achieving rates better

aligned with the Company’s cost of service over the last decade.” DTE Electric’s replies to exceptions, p. 48.

The Attorney General also replies, arguing that “there are important considerations with this issue, as the proportion of costs borne by residential ratepayers has continued to grow, while the proportion borne by other classes has shrunk.” Attorney General’s replies to exceptions, p. 49. The Attorney General contends that DTE Electric ignored the Commission’s language in Case No. U-20162 wherein the Commission explicitly stated that this issue should be revisited in this case and that “simply because the Commission has arrived at a result in a previous case does not automatically make it reasonable in the current case.” *Id.* The Attorney General reiterates that she continues to recommend that the Commission adopt a 50-0-50 production plant cost allocation method but, alternatively that the ALJ’s 70-0-30 production plant cost allocation would be a step in the right direction to more appropriately reflect the actual cost of service.

ABATE replies that, contrary to the Attorney General’s assertions, the ALJ specifically discussed the many flaws and shortcomings of her proposal. *See*, ABATE’s replies to exceptions, pp. 2-3 (citing PFD, pp. 377-378, 390-394). ABATE notes that the NARUC Cost Manual does not indicate a preference for the Attorney General’s proposed methodology and does not demonstrate that the methodology is widely used or is typical. Rather, ABATE argues that the method is not widely used and has been previously rejected by the Commission. In addition, ABATE states that the NARUC Cost Manual approach the Attorney General relies upon “would actually produce an allocation that is more closely aligned with the current 75-0-25 approach than the Attorney General’s proposal.” ABATE’s replies to exceptions, p. 5. ABATE also reiterates its position that the Attorney General’s proposal contains biases that over-allocate production cost to

larger load customers, the methodology preordains a result, and that the Attorney General failed to demonstrate how the 50-0-50 allocation would more closely align costs with causation.

The MEC Coalition also replies, stating that the company, ABATE, and Kroger take exception to the ALJ's recommendation "but offer no alternatives other than continuing the status quo." MEC Coalition's replies to exceptions, p. 72. Disputing DTE Electric's claims, the MEC Coalition states that the question presented before the Commission is whether the energy weighting is too low, and that the alleged errors in its proposed production cost allocation are mostly just differences of opinion. The MEC Coalition reiterates its argument that the Commission has already made the determination that the 75-0-25 method is not equal to the cost of service based upon its decision in the May 2 order. Further, the MEC Coalition contends that the ALJ did not specifically adopt Kroger's calculations utilizing the Peak and Average method but instead properly utilized the calculations "to adjust the energy weighting in the existing production cost allocation method" which was reasonable. MEC Coalition's replies to exceptions, p. 79.

The MEC Coalition argues that, contrary to ABATE's contention, the ALJ was within her authority to utilize the available calculations on record to set the allocation method at 70-0-30 even though that specific allocation was not advanced by any party. Further, the MEC Coalition states that the testimony relied upon by the ALJ from Case No. U-17689 stated that 25% was the minimum energy weighting and that an energy allocation higher than 25% would be reasonable.

The MEC Coalition also responds to Kroger's exception seeking clarification of its testimony on page 384 of the PFD. The MEC Coalition states that the record supports the ALJ's statement and that "this particular bone of contention is moot, since the ALJ did not recommend adoption of the Equivalent Peaker method." MEC Coalition's replies to exceptions, p. 84.

In addition, the MEC Coalition replies to DTE Electric's objection to the ALJ's recommendation that the Commission require DTE Electric to provide revenue requirements by plant in the next general rate case. Specifically, the MEC Coalition states that the company failed to provide production costs for each plant and that the Commission should direct DTE Electric to maintain this information by plant as recommended by the ALJ which "would ensure that the necessary data for the Equivalent Peaker method is available in the next case." MEC Coalition's replies to exceptions, p. 75.

The Commission appreciates the effort put forth by the parties in presenting various methodologies, in light of the Commission's willingness to revisit this issue as expressed in the May 2 order. As indicated above, the Commission did not determine that the 4CP 75-0-25 production cost allocation method was not cost-based in Case No. U-20162, and again reiterates the statutory requirements set forth in MCL 460.11(1) which states, in pertinent part:

The commission shall ensure that the cost of providing service to each customer class is based on the allocation of production-related costs based on using the 75-0-25 method of cost allocation and transmission costs based on using the 100% demand method of cost allocation. The commission may modify this method if it determines that this method of cost allocation does not ensure that rates are equal to the cost of service.

While numerous methodologies were presented, the Commission finds that the record evidence is insufficient to overcome this statutory allocation, as no party adequately demonstrated that a different methodology more appropriately reflected the actual cost of service. Notwithstanding this decision, the Commission realizes that cost and usage trends and corresponding analysis may change over time and that the cost allocation methodology may warrant further adjustment, and remains open to reviewing alternative methodologies in future rate cases.

In light of the foregoing, the Commission agrees with the ALJ's determination that the company should be required to provide revenue requirements by plant/unit in its next general rate

case. If some or all necessary data is unavailable by plant/unit, DTE Electric should, in consultation with the Staff, determine a reasonable method for allocating the available data to plants/units, and provide explanations and evidentiary support in its next rate case filing. *See*, PFD, p. 395. The company's objection is noted as well as its claim that it does not presently maintain accumulated depreciation records at the generating plant level. *See*, DTE Electric's exceptions, p. 132. Nevertheless, the Commission finds that the company is in the best position to provide this information to enable the development of the EP4CP methodology (or another appropriate methodology) in a future case.

The ALJ relied upon Kroger's testimony as a "refinement" of the Attorney General's load factor analysis. However, as set forth by DTE Electric, ABATE, and Kroger in exceptions, the testimony relied upon by the ALJ was not intended as a refinement of the Attorney General's methodology. After careful review of the record, the Commission is not convinced that the current 4CP 75-0-25 allocation is not cost-based, as no party demonstrated that an alternative proposal more appropriately reflects the cost of service. *See*, 7 Tr 1680-1682, 1688; 8 Tr 2177-2182. Given the record evidence, the Commission declines to adopt the ALJ's recommendation of a 70-0-30 production cost allocation method. The Commission finds that it is reasonable and prudent to continue application of the current 4CP 75-0-25 methodology.<sup>15</sup>

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<sup>15</sup> The Commission notes that Kroger requested that the record be clarified regarding its testimony about the EP4CP methodology proposed by the MEC Coalition. The MEC Coalition maintains that the ALJ's statement on page 384 of the PFD is supported. As noted by both parties, the EP4CP methodology was not adopted by the ALJ and the correction of the same does not affect the outcome of this issue. The Commission finds that the record speaks for itself and declines to either clarify or affirm the ALJ's characterization of Kroger's testimony. *See*, 8 Tr 2216-2217; *see also*, Kroger's reply brief, pp. 2-5.

## B. Subtransmission

The Attorney General recommended a 12CP 100-0-0 cost allocation methodology for subtransmission plant facilities which “would make the allocation of sub-transmission consistent with the current allocation of transmission plant, reflecting the quasi-transmission role sub-transmission plays in the delivery of electric power.” 9 Tr 2861. DTE Electric disagreed with the Attorney General’s proposal, stating that it confuses “the allocation for transmission plant with the allocation for transmission O&M” and that the proposal is contrary to prior Commission determinations. 7 Tr 2036.

The ALJ found that DTE Electric’s classification of subtransmission as distribution has been settled since at least 1998 and the record did not support the Attorney General’s proposed change to the classification of the subtransmission system. PFD, p. 397. The ALJ also noted that the Attorney General introduced a new justification for her recommendation in her reply brief, leaving the parties with no opportunity to respond.

The Attorney General takes exception, arguing that the ALJ improperly based her recommendation on the fact that the classification of subtransmission has been consistent for years. She states that “simply because certain classifications have been adhered to over numerous years and numerous rate cases does not automatically make them reasonable and prudent.” Attorney General’s exceptions, p. 19. The Attorney General also takes exception to the ALJ’s finding that she presented a new justification in her reply brief. She contends that she did not present a new argument but merely a direct response to DTE Electric’s initial brief.

DTE Electric replies, stating that the record fully supports the ALJ’s determination. The company cites to its testimony and Kroger’s initial brief to reiterate that the Attorney General’s proposal contains errors and is improperly based on only a small percentage of lines. DTE

Electric's replies to exceptions, p. 49. DTE Electric contends that the ALJ properly rejected as untimely the Attorney General's new argument contained in her reply brief given it was not raised previously and no party could respond.

ABATE also replies that "the Attorney General's proposal was based on an incorrect assumption regarding the nature of subtransmission and transmission facilities and should be rejected." ABATE's replies to exceptions, p. 10. ABATE also states that if the Attorney General's new argument was "primary evidence" and no party was given the opportunity to respond, it should be rejected. Alternatively, if the Attorney General's new argument is not rejected, ABATE asserts that the Attorney General's new analysis failed to support its proposal. ABATE concludes that the Attorney General's proposal should be rejected for all the reasons set forth in the PFD and because the Attorney General "improperly assumed DTE's subtransmission and transmission facilities are effectively identical." *Id.*, p. 12.

The Commission agrees with the ALJ's analysis. The Attorney General introduced a new justification for her recommendation in her reply brief, which was properly rejected by the ALJ as untimely. The Commission adopts the findings and recommendations of the ALJ.

### C. Secondary Voltage Demand-related Costs

DTE Electric utilized "an allocation methodology based on the summation of individual customer's peak demand requirements to allocate costs associated with secondary-voltage distribution plant facilities." 8 Tr 2332. The Attorney General disagreed with this methodology and recommended that the Commission allocate the costs associated with demand-related secondary voltage distribution systems based on class non-coincident peak demands. She contended that DTE Electric's "proposed allocation places too much emphasis on individual

customer peak loads failing to recognize that not all customers present on the system peak at the same time.” 9 Tr 2865.

The ALJ concluded that the record did not contain sufficient evidence to support the Attorney General’s proposed change in the method for allocating secondary voltage distribution plant. She agreed with the company that the 18 cases presented by the Attorney General make “a very small sample that may have been biased toward a particular outcome,” but that “the Attorney General may raise this issue in a future rate case, albeit with more evidentiary support for her position.” PFD, p. 399.

The Attorney General excepts, stating that the simple fact that certain classifications have been followed for numerous years does not mean they are reasonable and prudent. The Attorney General contends that she presented a new analysis “which more properly examines the issues and assigns certain costs.” Attorney General’s exceptions, p. 19.

In reply, DTE Electric states that the Attorney General’s exceptions heading suggests that she disagrees with the ALJ’s findings and recommendations regarding the secondary voltage demand-related cost but that she “does not provide any discussion on this topic.” DTE Electric’s replies to exceptions, p. 50. Overall, the company contends that the Attorney General “did not present meaningful evidence that could support deviating from the current, well-established practice.” *Id.*, p. 51.

The Commission agrees with the ALJ’s determination that the Attorney General’s recommendation was based upon a small sample and was insufficient to demonstrate that the secondary voltage demand-related cost allocation should be modified. The Attorney General has not presented a rationale to dispute the findings and recommendations in the PFD. Therefore, the

Commission finds that the ALJ’s recommendation, including that the Attorney General is able to raise this issue again in the next rate case with additional evidence, should be adopted.

#### D. Distributed Generation

The MEC Coalition raised concerns regarding the treatment of distributed generation (DG) outflows in its cost-of-service study (COSS), contending that the company “allocates costs of customer classes based solely on inflows but does not fully account for outflows.” MEC Coalition’s initial brief, pp. 99-100. However, the MEC Coalition admitted that the scale of total outflows is small and does not impact rates in this case. *See, id; see also*, 9 Tr 3821-3825. The Staff disagreed with the MEC Coalition’s proposal stating that “until the problem is actually shown to exist, no solution is necessary.” 9 Tr 3399.

The ALJ found that the MEC Coalition’s concerns regarding “the allocation of DG outflows are premature and should be addressed in the future when DG outflow amounts are sufficient to affect the cost allocation.” PFD, p. 401.

No exceptions were filed, and the Commission adopts the findings and recommendations of the ALJ, while noting that this issue may warrant further investigation in future rate cases.

#### E. Capacity Charge Revenue Requirement

The ALJ noted that there was no dispute regarding the calculation of the capacity charge revenue requirement and no exceptions were filed on this issue. The Commission adopts the findings and recommendations of the ALJ.

## X. RATE DESIGN AND TARIFFS

### A. Residential Rate Design

Soulardarity argued that DTE Electric's proposed rate increase disproportionately impacts residential ratepayers and low-income ratepayers. Specifically, the proposed increase for residential ratepayers requested by the company is 9.1%, which Soulardarity claimed is significantly higher than the proposed increases for primary and secondary ratepayers. 6 Tr 1407. Soulardarity recommended that the Commission ensure that DTE Electric is not allowed "to raise its rates at a higher proportion on residential customers." *Id.*, p. 1440. The Attorney General, as an alternative to her recommendations in cost of service methodology, recommended that residential rate changes be limited to "1.5 times the overall system average increase." 9 Tr 2871.

The ALJ rejected a broad residential rate freeze, noting that she rejected some of DTE Electric's requested increases which lowered the overall increase. Similarly, the ALJ declined to adopt the Attorney General's residential rate increase cap because "the Commission's choice of cost of service allocations generally determines the revenues to be collected from each class, rather than using rate design to indirectly address cost of service allocations." PFD, p. 402.

No exceptions were filed related to freezing or capping residential rates, and the Commission adopts the findings and recommendations of the ALJ.

### B. Commercial and Industrial Rates

The Staff argued that the company improperly stated that it was utilizing the Staff's methodology for calculating customer charges as approved in Case No. U-20162. Specifically, the Staff averred that DTE Electric's calculation of property taxes assigned to meters and services in this case was different from the method previously approved by the Commission. *See,* 9 Tr 3249-3250. The company agreed with the Staff's contentions, and adopted the Staff's

proposed changes. The company also agreed with the Staff “that the currently approved customer charges for sub-transmission and transmission customers should be retained, and that the primary customer charge should be increased to \$70.” 7 Tr 2048.

The ALJ noted that Energy Michigan argued that the company’s “proposed service charge increases were unjustifiably high for subtransmission and transmission voltage customers.” PFD, p. 402. She concluded that, based upon the Staff’s reply brief at page 28, the dispute appeared to be resolved. PFD, p. 403.

Energy Michigan takes exception, first noting that it broadly agrees with the PFD and does “not seek to overturn what the ALJ has recommended.” Energy Michigan’s exceptions, pp. 3-4. Energy Michigan argues that the positions advanced were generally tracked by the ALJ but that the ALJ failed to “explicitly recognize the potential complexity in correcting the error identified.” *Id.*, p. 5. Energy Michigan further states that the Commission should ensure that DTE Electric is required to set forth the proper customer charges, paying attention to the R1.1 and R1.2 rate classes, because it is concerned the company may overlook these classes.

In reply, DTE Electric states that it is unclear what Energy Michigan is asking for in its exceptions as the “suggested issue appears to be resolved.” DTE Electric’s replies to exceptions, p. 54. In addition, DTE Electric claims that Energy Michigan’s exceptions contain vague implications that the company may not implement the proper customer charges.

The Commission finds that Energy Michigan does not object to the ALJ’s findings and recommendations. The ALJ properly sets forth the agreement regarding customer charges and the Commission concludes that her findings and recommendations are reasonable and prudent. As indicated by DTE Electric, it is unclear what Energy Michigan is seeking in its exceptions. Nevertheless, the Commission directs the company to implement the customer charges for each

rate class as necessary to facilitate the agreement set forth by the Staff and DTE Electric. *See*, 9 Tr 3429-3250; 7 Tr 2048. Finally, the Commission notes that the PFD did not address voltage level discounts for primary rates. The Staff proposed to calculate voltage level discounts for primary rates based on the loss factors approved in the company's most recent rate case. 9 Tr 3122. No party filed exceptions or replies to exceptions addressing this issue. Based on the lack of an updated line loss study, as discussed above, the Commission agrees with the Staff and finds that the use of the previously-approved loss factors for calculating voltage level discounts for primary rates is reasonable and prudent.

#### C. Streetlighting

Soulardarity contended that DTE Electric proposed disproportionate increases in rates for streetlights with above-ground wiring as compared to the increase in rates for streetlights with below-ground wiring. Soulardarity averred that this disproportionately affects lower-income communities who have more urgent needs. 6 Tr 1415-1416. The Staff countered, stating that “the proposed rate increases . . . are not proportional because the changes in the cost to serve these different rates are likewise not proportional.” 9 Tr 3142.

The ALJ concluded that the charges for each of the lighting rates were designed to collect revenue requirements based on the actual cost. She recommended, however, that the Commission require DTE Electric to “provide an explanation of efforts it has taken to control the costs of maintaining aboveground streetlighting as well as any efficiencies gained through the use of technology.” PFD, p. 404.

No exceptions were filed on this issue and the Commission adopts the findings and recommendations of the ALJ.

#### D. Distributed Generation Tariff (Rider 18)

The company proposed to continue utilizing the same outflow credit methodology for Rider 18 that was approved in Case No. U-20162, which was set at power supply less transmission. 7 Tr 2126. GLREA argued that DTE Electric should collect inflow/outflow data and provide it to the parties so that the impact on utility revenue and customer costs may be determined. In addition, GLREA recommended that “a comprehensive cost of service study [should] be done using real DG customer data (not averaged data) to apply to different time periods for netting and to determine the results.” 9 Tr 2784. GLREA advanced numerous concerns regarding DG implementation, and proposed that the Commission require the company to implement net metering until the “data can be provided to determine the impact on rate recovery and the customer’s rate as well as the cross subsidy that the DG customers provide to all other customers.” *Id.* Both DTE Electric and the Staff disagreed with GLREA’s concerns, arguing that they lacked merit and that the current methodologies were approved in the May 2 order. *See,* Staff’s initial brief, pp. 88-91; DTE Electric’s initial brief, pp. 180-182.

The ALJ found that “[w]hile some of GLREA’s concerns are well-taken, Rider 18 has been in effect for less than one year, and most, if not all, of the arguments GLREA raises here were considered in the Commission’s evaluation of the DG tariff as part of the company’s last rate case.” PFD, p. 406. As such, the ALJ recommended that the Commission reject GLREA’s request to modify Rider 18 at this time.

In exceptions, GLREA contends that the ALJ erred in finding that its concerns were addressed in Case No. U-20162, claiming that the “Staff almost completely ignored any of the intervener’s arguments in its desire to focus upon the inflow/outflow methodology” which GLREA contends resulted in a deficient Rider 18. GLREA’s exceptions, p. 5. GLREA argues that the Commission

could, at minimum, indicate that the issues raised will be addressed in the company's next rate case or a special contested case.

DTE Electric replies that GLREA's proposal to return to net metering should be rejected again, as it was by the Commission in the May 2 order. The company contends that the record reflects that GLREA's claims are unfounded and the Staff also recommended that GLREA's proposed changes be rejected. DTE Electric's replies to exceptions, pp. 55-56.

The Commission finds that the ALJ properly held that it is premature to revisit and modify Rider 18 given that it has been in effect for less than one year. Further, the Commission agrees that the majority of GLREA's concerns were addressed by the Commission in Case No. U-20162. Therefore, the Commission adopts the findings and recommendations of the ALJ. However, the Commission also notes that in its April 18, 2018 order in Case No. U-18383 (April 18 order) finding that the inflow/outflow tariff framework met the statutory requirements of Section 6a(14) of PA 341 of 2016, MCL 460.6a(14), the Commission stated that “[a]s the DG program evolves and more data becomes available, the Commission will better be able to assess the cost and benefit impacts and conduct rate design consistent with COS [cost of service] principles.” April 18 order, p. 17. As such, the Commission will continue to review inflow/outflow data to determine the impact on utility revenue and customer costs and whether the model as implemented fully reflects COS principles.

In addition, the Staff and GLREA requested that the company voluntarily lift the cap on DG. 9 Tr 3265-3269; GLREA's initial brief, pp. 1-2. DTE Electric responded that the 1% cap is set by statute and that there are several inequities remaining which prevent the voluntary lifting of the statutory cap. 4 Tr 495.

The ALJ quoted MCL 460.1173(3) and concluded that “the Commission cannot order DTE to allow more participants in the program once the 1% amount is reached. Nevertheless, DTE should be mindful of the interplay between the company’s self-imposed 1% limit on the DG program and the Commission’s determination in Case No. U-20471.” PFD, pp. 407-408.

GLREA takes exceptions to the ALJ’s reliance upon the statute, claiming that she “ignores the reality that the Commission may exercise its ratemaking powers to encourage the utility to undertake certain actions, or to provide incentives or disincentives to the implementation of utility policies or actions.” GLREA’s exceptions, p. 2. GLREA further suggests that the Commission could lower the company’s common equity return if the company decides to rigidly adhere to the 1% soft cap imposed on DG resources.

The company again responds to GLREA’s exceptions stating that the ALJ properly resolved the issue regarding the DG cap set forth in MCL 460.1173(3) and that “GLREA’s invitation for the Commission to instead violate that law should be rejected.” DTE Electric’s replies to exceptions, p. 56.

The MEC Coalition replies and reiterates its support for the company to voluntarily lift the 1% cap on participation. The MEC Coalition also states that the ALJ “correctly noted that the statute does not impose a cap; instead, it imposes a lower limit on participation.” MEC Coalition’s replies to exceptions, p. 100. The MEC Coalition further notes its agreement with providing incentives to encourage DTE Electric to increase DG participation above the self-imposed 1% cap.

The Commission agrees with the PFD that the statute “only sets a lower limit, leaving the upper boundary to the utility’s discretion,” and that “the characterization of this portion of the statute as a cap, soft or not, is misplaced.” PFD, p. 407. The Commission further notes that the company may voluntarily increase its self-imposed cap on DG participation as suggested by the

Staff. *See*, 9 Tr 3265-3269. However, the Commission declines to incentivize such an increase at this time, and will continue to monitor state legislation addressing the cap while reaffirming its determination, as described by the ALJ, “that Rider 18, without a system access charge, is cost-based, contrary to the company’s claims.” PFD, p. 407. The Commission further finds that the ALJ’s rationale is reasonable and prudent and her findings and recommendations are adopted.

#### E. Pilot Programs

##### 1. Fixed Bill Pilot

DTE Electric proposed a Fixed Bill pilot which the company described as “an elective offering that allows up to 5,000 residential customers to pay a pre-specified fixed monthly amount for a period of one year that is not subject to any adjustments for actual usage or price.” 6 Tr 1010. The company indicated that the program would “be available to customers who take service on residential rate D1” and “who have been in their current residence over the previous 12 months and are currently in good financial standing with the Company.” 6 Tr 1011, 1029.

After summarizing the company’s proposal, the ALJ noted that the PFD in Case No. U-20162 rejected a similar pilot because it was likely that the effects of the program would run contrary to DTE Electric’s energy efficiency efforts and the State of Michigan’s conservation policy goals. PFD, p. 410; *see also*, PFD in Case No. U-20162, p. 246. The ALJ further indicated that the Commission agreed with the PFD’s recommendation in the May 2 order and rejected DTE Electric’s previous fixed bill pilot proposal. The ALJ thoroughly reviewed the parties’ criticisms and the company’s response before concluding that “the fixed bill pilot should be rejected by the Commission for the same reasons the Commission rejected the program in Case No. U-20162.” PFD, pp. 411-418. She found that the pilot is substantially similar to the proposal in Case No. U-20162, and that the program does not send proper price signals to customers. Overall, she

concluded that the program is “contrary to the interest of ratepayers as a whole” and that it contradicts energy conservation policies. PFD, p. 419.

DTE Electric takes exception to the ALJ’s finding that the Fixed Bill pilot should be rejected for the same reasons set forth in the May 2 order. Specifically, the company contends that it “provided a list of major changes in response to criticisms that the presently-proposed pilot is no different than the pilot that the Company proposed in Case No. U-20162.” DTE Electric’s exceptions, p. 135. DTE Electric reiterates that the pilot is “supported by strong customer desire” and that the pilot “would allow for reasonable experimentation and oversight to appropriately respond to customer preferences and improve customer satisfaction.” *Id.* The company claims that price signals would be made clear to customers through usage alerts and estimated renewal offers, with the incentive to use less power given that the subsequent year’s renewal offer would be lower. DTE Electric concludes that “it would be premature to draw conclusions before conducting a pilot to gather the actual data necessary to assess usage behavior, customer satisfaction, the impact on peak demand, and other factors.” DTE Electric’s exceptions, p. 137.

The Staff filed replies to the company’s exceptions arguing that customer demand for a program does not provide sufficient support for approving a pilot program. The Staff reiterates its argument that the inclusion of the “assumption that customers will increase their consumption, despite the Company’s forecast for class-wide consumption decrease” is “absurd.” Staff’s replies to exceptions, p. 10. Further, the Staff contends that the monthly estimated renewal offer is not based on real time insight given it “represents a potential *future* bill based on usage from the *past*” and that the company already offers a DTE Energy Insight program which gives customers real time information. *Id.* (emphasis in original). The Staff also argues that its objections are not superficial and that “[a] pilot will not address the fundamental flaw that the pilot’s base

assumptions are contrary not only to energy waste reduction efforts . . . but also contrary to the base assumptions for the Company’s rate case.” *Id.*, p. 11.

In reply, the Attorney General states that each of the company’s claims “have already been rejected by the Commission and multiple ALJs, and that they are unpersuasive.” Attorney General’s replies to exceptions, p. 52. She contends that DTE Electric has not demonstrated any benefits of the pilot besides customer convenience and that the company already has the BudgetWise program, which meets the needs of customers seeking an alternative billing option.

The MEC Coalition also replies and contends that the data submitted by the company demonstrates that energy usage increased under fixed billing programs and that the ALJ properly found that DTE Electric’s program would not advance efficiency goals set forth by the State of Michigan. The MEC Coalition states that the survey contained an over-representation of BudgetWise customers, which improperly inflated the results showing a “strong demand.” The MEC Coalition contends that “[t]he program undermines substantial progress in energy waste reduction, as well as contravenes the move towards time-based rates” and that “[t]here is no sound reason to further explore a concept that is fundamentally at odds with the Commission’s goals, efforts, and policies.” MEC Coalition’s replies to exceptions, pp. 88-89.

Soulardarity replies, stating that the Fixed Bill pilot should be rejected “because it excludes low-income customers who receive service under residential rate tariff D1.6.” Soulardarity’s replies to exceptions, p. 6. Soulardarity contends that the company cannot gather meaningful data and cannot demonstrate benefits to low-income customers while excluding the majority of low-income customers from the pilot.

The Commission finds that the ALJ’s determination is well-reasoned and supported on the record. Although the company contends numerous changes have been made to the pilot, the

Commission concludes that it does not send proper price signals and is contrary to energy efficiency goals. Moreover, customer interest is insufficient to support adoption of the Fixed Bill pilot program, and the BudgetWise program already offers customers an alternative billing solution. Therefore, the Commission adopts the findings and recommendations of the ALJ and declines to approve the Fixed Budget pilot program.

## 2. Low-income Renewables Pilot

DTE Electric also presented the Low-Income Renewables pilot (LIRP) program which it proposed will “provide increased renewable energy access to qualifying low income residential customers . . . at no additional cost through the MIGP [MIGreenPower] program.” 6 Tr 1037. As designed, the program would allow up to 2,500 customers who are “at or below 200% of the federal poverty level, who are not enrolled in Low Income Self Sufficiency Program (LSP), Shutoff Protection Program (SPP), or any other low-income credit program and are less than \$100 in arrears.” 6 Tr 1037-1038. The company projected the total cost of the program at \$800,000. Parties objected to this program as presented on grounds that it does not lower low-income customers’ bills or rates, the program excludes many low-income customers, and may be primarily for marketing purposes. *See*, 9 Tr 3193, 2734-2737; 6 Tr 1432-1436.

The ALJ found that DTE Electric’s proposed LIRP should be rejected because the company did not show that the pilot would benefit low-income customers. She reasoned that the LIRP does not include new renewable generation resources, excludes a majority of low-income customers, does not assist low-income customers in lowering their bills, and includes disproportionate costs for marketing expenses. Therefore, the ALJ recommended “that DTE accept Staff’s offer to work with Staff’s Renewable Energy and EWR sections, and also work with stakeholders, to redesign a

low-income renewables pilot that offers more tangible benefits to low-income customers.” PFD, p. 423.

In exceptions, DTE Electric states that the LIRP is appropriately designed and will benefit low-income customers. The company contends that “[t]he pilot would allow participants to increase their purchase of renewable energy by 35% at no additional cost” and directly benefits the “customers wishing to lower their carbon footprint.” DTE Electric’s exceptions, p. 137. The company argues that the costs are relatively small. DTE Electric states that it “welcomes the opportunity to work with Staff . . . but would still like to offer the proposed pilot to gather data” because a pilot in the company’s “service territory is the only way to gather data on how customers *actually do act.*” *Id.*, pp. 138-139 (emphasis in original).

In reply, the Attorney General states that DTE Electric “has failed to support the reasonableness of this program in this case.” Attorney General’s replies to exceptions, p. 54. Therefore, she recommends that the Commission adopt the ALJ’s proposal and direct the company to work with the Staff and stakeholders to design a more inclusive pilot program.

The MEC Coalition also replies that the ALJ’s recommendation should be adopted because “[r]olling out a poorly designed pilot . . . would waste resources, may lead to customer confusion, and would render the data of marginal value.” MEC Coalition’s replies to exceptions, p. 89. In the alternative, the MEC Coalition contends that, if the Commission approves the program, its suggested improvements should be implemented before deployment of the LIRP. Further, the MEC Coalition suggests that the company be directed to work not only with the Staff but also with stakeholders to “ensure a well-designed program to meet the mutual interests and needs of the utility and also its intended customers.” *Id.*, p. 91.

Soulardarity filed replies arguing that the LIRP “has disproportionate marketing and administrative costs, does not collect information from low-income consumers, and does not deliver incremental renewable energy or renewable energy in the format that low-income customers have indicated that they want.” Soulardarity’s replies to exceptions, pp. 8-9. Therefore, Soulardarity contends that the ALJ’s determination should be adopted.

In its reply, the ELP Group contends that DTE Electric merely reiterated the same arguments in its briefing. The ELP Group states that the LIRP does not provide benefits to low-income customers and actually “provides a disincentive to participate because low-income customers are forced to choose between the LIRP and other low-income programs that actually reduce their bills.” ELP Group’s replies to exceptions, p. 5. As such, the ELP Group recommends that the pilot be rejected and that the company be directed to work with parties to develop a program consistent with the principles set forth in its briefing.

The Commission echoes the concerns of the ALJ regarding the LIRP. By its own terms, the pilot excludes customers enrolled in other low-income programs, thereby excluding many low-income customers and hindering the collection of data representative of all low-income customers. While the company asserts that the overall costs of the program are “relatively low” the Commission agrees with the ALJ that the projected costs are disproportionately marketing costs. Therefore, the Commission rejects the LIRP and adopts the findings and recommendations of the ALJ. Should the company wish to revisit this issue in future cases, the Commission supports the recommendation made by the ELP Group and Soulardarity that DTE Electric work with other parties to develop a program that better reflects the renewable energy goals of low-income customers.

### 3. Low-income Assistance Pilot/Low-income Energy Assistance Initiative

The company proposed an increase from \$15.4 million to \$24 million in projected credits for the LIA pilot “to accommodate a projected increase of customers enrolled in the 2020 LSP.” 6 Tr 1142. DTE Electric argued that the LIA credit works best when paired with LSP. The company proposed that the cap should be raised from 32,000 to 50,000, contending that “there would be no shortage of Non-LSP low income customers enrolled in receiving the credit.” 6 Tr 1155. The Attorney General and the MEC Coalition proposed numerous changes to the LIA program. The Staff objected to both the company’s proposal and the Attorney General and MEC Coalition’s combined proposal stating that “as this program is still a pilot and the Company is unable to show how successful this program is relative to the RIA, the cap should remain as it is.” 9 Tr 3118.

The ALJ thoroughly reviewed the parties’ proposals, objections, and replies on pages 421-436 of the PFD before recommending that “the current rate case funding for the LIA pilot remain in place with the expectation that DTE will present a revised two-year pilot in its next rate case along the lines indicated in its reply brief as quoted above.” PFD, p. 436.

In exceptions, DTE Electric indicates its willingness to propose a new low-income pilot in its next rate case. However, the company disagrees with the ALJ’s “reliance on a potential future pilot as a basis to recommend that ‘the current rate case funding for the LIA pilot remain in place.’” DTE Electric’s exceptions, p. 142. DTE Electric contends that the credit amounts should be increased based upon the increased customer count and should not be affected by a potential pilot to be proposed in the future.

The Attorney General replies, noting her agreement with the ALJ’s recommendations. She reiterates the arguments in her brief, which she recommends that the Commission use to guide its decision. Attorney General’s replies to exceptions, p. 55.

The MEC Coalition also replies reiterating its proposed modifications to the LIA pilot. *See*, MEC Coalition’s replies to exceptions, pp. 93-97. The MEC Coalition states that it “supports the company’s exception” to the ALJ’s rejection of the increase in customer cap and funding as requested. *Id.*, p. 97. The MEC Coalition further contends that the low-income proposals can only serve about 20% of the company’s customers who are at or below the poverty line and that these figures do not take into consideration the current events which will exacerbate the problem. Therefore, the MEC Coalition requests that the Commission approve the increase as requested by DTE Electric.

The Commission finds that the ALJ’s determination is reasonable and prudent. As noted above, the Commission adopts the ALJ’s findings related to retaining the cap on enrollment but authorizes regulatory accounting treatment for the enrollment of additional customers. The Commission takes note of all suggested modifications but agrees with the Staff that the current pilot should remain in effect. As the ALJ recommended, the Commission finds that the company should work with the Staff and stakeholders to develop a low-income pilot structured around the Attorney General’s and MEC Coalition’s combined analysis. The Commission looks forward to seeing the results from the collaborative process and believes engaging all interested parties in the process will result in a well thought out proposal.

#### 4. Other Pilots

DTE Electric, the Staff, and the MEC Coalition agreed that the time-of-use pilot for residential customers should move forward, and it was recommended for approval by the ALJ. PFD, p. 436. The Staff excepts only with respect to its summer on-peak rate, which is discussed

below. Otherwise, no exceptions were filed regarding the Advanced Customer Pricing pilot, and the Commission adopts the findings and recommendations of the ALJ.<sup>16</sup>

Similarly, the ALJ found that there was no dispute regarding DTE Electric’s DR pilots (excluding the “other pilots” that the Staff considered undefined) and she recommended that they be approved. No exceptions were filed on this issue and the findings and recommendations of the ALJ are adopted.

#### F. Advanced Metering Infrastructure Opt-out Program

DTE Electric noted that the number of customers who have elected to opt-out of AMI metering is substantially lower than expected. The company stated that it “agreed to replace the meters of existing AMI opt-out customers and any customers who had not yet had an AMI meter installed, with digital meters without radios” as part of the settlement agreement in Case No. U-20084. 9 Tr 2625. RCG proposed that the Commission require the company to eliminate all surcharges for opt-out customers along with other modifications to the AMI opt-out program. 9 Tr 2819-2820. DTE Electric responded that it is not yet required to review the opt-out program. *See*, 9 Tr 2634-2635.

The ALJ recognized the merit in the company’s “proposal to make its opt out filing in a separate docket in the third quarter of 2020” and declined to adopt RCG’s proposals. PFD, p. 437.

RCG takes exception to the ALJ’s “failure to adopt RCG’s position that DTE’s surcharges to opt-out customers should be eliminated or substantially reduced.” RCG’s exceptions, p. 30. RCG

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<sup>16</sup> While adopting the recommendations based on the record in this case, the Commission also notes that the impacts of the current COVID-19 situation may make implementation of the planned on-peak pricing pilot impracticable, and encourages the parties to continue discussion on plans to implement an on-peak pricing pilot for residential customers, based on the findings in this case and in Case No. U-20602.

contends that DTE Electric has failed to present any evidence that its opt-out charges are cost-based, and the Commission should eliminate the charges. RCG also argues that DTE Electric's reliance on only 200-600 meters yet to be installed as justification for its delay in conducting a COSS to support the opt-out charges is not justified.

The Commission declines to modify the AMI opt-out charges in this proceeding. DTE Electric's proposal to file a separate proceeding regarding AMI opt-out charges in the third quarter of 2020 is both reasonable and prudent. *See*, 9 Tr 2635. RCG has not presented sufficient information to warrant a revision of the previously approved AMI opt-out charges. Therefore, the Commission adopts the findings and recommendations of the ALJ and will review AMI opt-out charges in a separate docket to be filed by the company in the third quarter of 2020.

#### G. Interruptible Rate D8 Tariff

DTE Electric proposed changes to the tariff language for its interruptible tariff, Rate D8. *See*, DTE Electric's initial brief, pp. 176-177; *see also*, Exhibit A-16, Schedule F8, Sheet D 40:00. Energy Michigan recommended that the capacity deficiency provision in the Rate D8 tariff be deleted, leaving only the system integrity rules, procedures, and penalty because they "provide a clear and sufficient interruption process for both DTE Electric and the customer." 9 Tr 2770.

The ALJ found that "the tariff language is insufficiently clear regarding a declaration of a capacity deficiency" and that the tariff language includes more than a "mere pricing provision" as the company contends. PFD, p. 439. The ALJ, therefore, recommended that the Commission require DTE Electric to work with stakeholders to improve the clarity of the Rate D8 tariff language in its next rate case.

Energy Michigan takes exception claiming that it does not see why any "revisions to the D8 tariff should be delayed until the *next* rate case." Energy Michigan's exceptions, p. 7 (emphasis in

original). Energy Michigan requests that the Commission require the company to file revised tariff language to clarify Rate D8, “making it consistent with the company’s testimony and clearly separating the two types of interruptions so that customers will have clear notice when an interruption is optional for pricing purposes and when it is ordered for system integrity purposes.” Energy Michigan’s exceptions, p. 7.

DTE Electric replies and claims that the tariff language Energy Michigan wishes to modify has been in effect, as written, since 1994. The company contends that it is unclear how Energy Michigan wishes to change the long-standing language “and how that might be implemented while maintaining the Company’s interests.” DTE Electric’s replies to exceptions, p. 54.

The Staff also replies stating that the Commission may modify the tariff language outside of a general rate case on an *ex parte* basis because such a change would not result in a change to the cost of service for any customer. “Staff is currently engaging with customers, utilities, and other stakeholders to review interruptible tariffs, including Rate D8, as part of the Commission’s MI Power Grid initiative.” Staff’s replies to exceptions, p. 28.

Rather than ordering the company to provide clarified language in this proceeding, as requested by Energy Michigan, the Commission finds it is more appropriate to require cooperation as part of workgroups with interested parties. Therefore, the Commission finds that it is reasonable and prudent to require DTE Electric to continue its work with the Staff, customers, and other stakeholders to review and revise the Rate D8 tariff language, and to reflect any changes through an *ex parte* filing, as part of a future rate case, and/or as part of the MI Power Grid initiative.

#### H. Rate Effective Date

The Staff proposed that the effective date of the rates should be set seven calendar days from the date the order is issued in order to provide time for DTE Electric's billing system to be populated with the new rates. 9 Tr 3127. In the alternative, the Staff proposed that the Commission issue draft rates with its final decision and provide 21 days for the parties to comment and verify the calculations and tariff sheets. If no errors are identified in the comment period, the rates and tariffs would take effect automatically; otherwise, the rates and tariffs would be corrected and approved by the Commission in a subsequent order. *Id.*, pp. 3127-3128. DTE Electric stated that it would comply with a rate effective date seven calendar days after the issuance of the order but disagreed with the Staff's alternative proposal for a 21-day comment period, arguing that the alternative proposal would effectively transform a 10-month rate case into an 11-month rate case. 4 Tr 493-494.

The ALJ found that "the question of the effective dates of rates set in the Commission's final order in this case is a matter for the Commission's discretion." PFD, p. 440. She also noted that she is unaware of any tariff issues that would require additional time beyond the suggested seven-day period which the parties identified as being standard.

In exceptions, DTE Electric states its agreement with the ALJ that "there is nothing about this case that would require more than seven days" and adds that "the Staff's uncontested first proposal should be adopted, rather than any problematic alternative." DTE Electric's exceptions, p. 142.

The Staff also excepts, reiterating its position that the date rates become effective is at the discretion of the Commission. The Staff further contends that its alternative proposal should be considered by the Commission as it "will reduce the potential for erroneous rates to affect customers." Staff's exceptions, p. 8.

In reply, DTE Electric states that the Staff's alternative proposal is unnecessary and, if implemented, would cause the company to suffer financial harm by not receiving rate relief at the start of the projected test year. *See*, DTE Electric's replies to exceptions, p. 57.

The Commission has considered the Staff's proposals and finds that the most reasonable and prudent proposal is to implement the new rates seven days from the issuance of this order. The seven-day period should allow for most errors to be corrected prior to implementation and, as DTE Electric notes, “[a]ny errors found, but not corrected in that time, would be corrected as soon as possible.” 4 Tr 494. Therefore, the Commission finds that the rates shall be effective seven days after the issuance of this order.

## I. Other Rate Design Issues

The Staff takes exception to the PFD, claiming that it “proposed several important alterations of the company’s rate design that require a finding by the Commission.” Staff’s exceptions, p. 5. The Staff notes proposals it contends were not addressed by the ALJ, each of which are addressed below.

### 1. Relative Differences

The Staff contends that the ALJ did not address its proposal to retain relative differences of same-rate charges rather than absolute differences. Specifically, the Staff contends that:

Rates D1.8 and D4 include charges that are calculated using formulae based on other charges. (Staff Initial Brief, p 98.) The Company’s rate design relied on the absolute difference between those calculated charges, so the difference remained constant over time even if the underlying charge increased. In past rate designs, this method was used by the Company and Staff. In the instant case, Staff proposed to instead increase both charges proportional to their present revenue. *Id.* This method maintains the *relative* (i.e. percent) difference between the charges, rather than the absolute (i.e. cents per kWh) difference. It is not inconsequential even though the rate design still recovers the exact same total revenue required from its customers. The specificity of a rate’s charges should not be arbitrary, because their purpose is likewise specific and should correspond in relevant proportion. (9 TR 3121.)

Staff's exceptions, p. 5 (emphasis in original). The Staff also notes that no party opposed this proposal.

The Commission has reviewed the Staff's proposal to utilize relative differences of same-rate charges and finds that it is reasonable and prudent and should be adopted.

## 2. Summer On-peak Rate

The Staff also argues in exceptions that the Commission should approve its summer on-peak rate, including the effective date of May 2022. The Staff states:

Staff maintained the position that a rate should be approved by the Commission and entered into the Company's rate book before the implementation of the rate's eventual full roll-out. *Id.* This would avoid the need to approve a rate change for nearly 2 million customers through an *ex parte* case before the Commission. GLREA agreed with this position. (GLREA's Initial Brief, p 3.) The Commission approved Consumers Energy's summer on-peak rate well before its implementation, which will occur in the summer of 2020. (Staff Initial Brief, p 109.)

Staff's exceptions, p. 6. The Staff also contends that the Commission should approve the proposed summer on-peak rate in this case "even if it will not be in effect for at least 2 years." *Id.*, p. 7.

DTE Electric replies stating that it "continues to disagree with Staff's overall position as unnecessary and inappropriate." DTE Electric's replies to exceptions, p. 52. The company states that there is no basis to approve the proposed summer on-peak rate in this case in light of the fact that the pilots that the Commission authorized in Case No. U-20602 were approved to test the rate structure, and that approval of the Staff's proposal would defeat the purpose of the ongoing pilots. DTE Electric contends that the Commission should not adopt the Staff's "unnecessary and inappropriate proposal." DTE Electric's replies to exceptions, p. 53.

The MEC Coalition replies that adopting the Staff's rate design in this case, subject to modification in a future case, "would ensure both that the new rate design will be approved in a

contested case and also that DTE will have an approved rate to implement in May 2022.” MEC Coalition’s replies to exceptions, p. 92. The MEC Coalition also notes that it supports the “Staff’s approach because it is reasonable and complements the stakeholder engagement opportunity that DTE has consented to facilitate.” *Id.* The MEC Coalition asserts that, contrary to DTE Electric’s exceptions, the Commission should not wait until after the company conducts the pilot to make a decision about the new rate.

In the April 18, 2018 order in Case No. U-18255, pp. 81-82, the Commission directed DTE Electric to, in light of the full implementation of AMI, include in its next rate case filing a summer on-peak rate for non-capacity charges for Rate Schedule D1 (residential customers). In the May 2 order, pp. 162-165, the Commission adopted an implementation plan for this transition, and directed DTE Electric to test capacity and non-capacity rates through pilots. In the September 26, 2019 order in Case No. U-20602 (September 26 order), the Commission approved two time-of-use energy pilots (with modifications and an opt-out option), but rejected four demand pricing pilots, in order to allow additional discussions to take place. As was stated there:

The Commission believes there is value to be gained by the utility, the Commission, and ratepayers from these pilot programs, including learning about customers’ reaction to the rate offerings and different outreach and communication methods. The Commission stresses the importance of customer education for the successful implementation of summer peak pricing rates.

September 26 order, p. 3.

In this case, the Staff seeks Commission approval of its summer-on peak rate, to be effective in May of 2022. The Commission finds that approval of the Staff’s rate design would be premature in this case. As the parties acknowledge, there will be another contested case on this issue prior to the implementation of the Staff’s proposal. Additionally, the pilot programs are designed to gather information and data to guide the implementation of these new rates. The

Commission believes that this must be a deliberate, step-by-step process, which may require the implementation of additional pilots prior to the adoption of a rate design. The Commission finds the MEC Coalition's proposal for informal engagement with stakeholders outside of a rate case to be reasonable (and notes that the company indicated its willingness to accept stakeholder input), but declines to set a schedule for such an undertaking at this time, until these first two pilots have yielded some initial results. *See*, 4 Tr 531.

### 3. Nuclear Surcharge

The Commission notes that DTE Electric proposed to increase the Site Security and Radiation Protection portion of the nuclear surcharge only with respect to inflation, and the remainder of the surcharge is unchanged. 6 Tr 2288; 9 Tr 3461-3462; Exhibit A-16, Schedule F6. The ALJ did not address this issue. The parties did not dispute the proposal, and no exceptions or replies to exceptions addressing the proposal were filed. The Commission finds that the proposal should be approved.

THEREFORE, IT IS ORDERED that:

A. Based on this order's findings adopting a May 1, 2020 through April 30, 2021 test year, a jurisdictional rate base of \$17,885,894,000, an authorized rate of return on common equity of 9.90%, an authorized overall rate of return of 5.46%, and a jurisdictional revenue deficiency of \$188,285,000, DTE Electric Company is authorized to implement rates that increase its annual electric revenues by \$188,285,000, on a jurisdictional basis, over the rates approved in the May 2, 2019 order in Case No. U-20162.

B. DTE Electric Company is authorized to implement rates consistent with the revenue deficiency approved by this order on a service rendered basis for service provided on and after May 15, 2020, as reflected in Attachment A (a summary of revenue by rate class), Attachment B

(tariff sheets), and Attachment C (calculation of the capacity charge as updated by this order) to this order. Within 30 days of the date of this order, DTE Electric Company shall file tariff sheets substantially similar to Attachment B. When filing the tariffs consistent with those ordered, DTE Electric Company shall also update the Standard Allowance amounts on Tariff Sheet C-30.00, Section C6.2(4)(a), to be consistent with the rates approved in this order. DTE Electric Company shall implement a state reliability mechanism capacity charge of \$120,527 per megawatt-year, or \$330.21 per megawatt-day, for customers taking capacity service, as shown on Attachment C to this order. Attachment B contains the associated capacity rates.

C. In its next general rate case, DTE Electric Company shall provide a full accounting of current and future coal combustion residual costs, clearly identifying funds collected to date, funds for the proposed test year, and funds projected for the future.

D. In its next general rate case, DTE Electric Company shall file a revised net present value revenue requirement analysis for its Belle River power plant using alternative retirement dates, as described in this order.

E. In its next general rate case, DTE Electric Company shall provide specific evidentiary support for the current contributions-in-aid-of-construction model as described in this order.

F. In its next general rate case, DTE Electric Company shall provide a detailed explanation of the factors and scoring process the company uses to prioritize the circuits to be hardened.

G. DTE Electric Company shall report on its amortization of excess deferred tax balances resulting from the Tax Cuts and Jobs Act of 2017 on March 31, 2021, and annually thereafter, by filing a letter in this docket detailing the annual activity related to the excess deferred federal income taxes, as described in this order.

H. In its next distribution investment and maintenance plan to be filed by June 30, 2021, in Case No. U-20147, DTE Electric Company shall provide a plan and timeline for system hardening and conversion, and shall include proposed performance based regulation elements with reasonable metrics tied to utility financial performance, improvement targets, and timelines for achievement.

I. In its next general rate case, DTE Electric Company shall file a comprehensive community transition plan relating to the retirement of River Rouge Unit 3, accounting for plant employees, the impact on local tax base, site remediation, and other factors. The plan shall also describe and address public input DTE Electric Company has received through public meetings in River Rouge or through other outreach.

J. DTE Electric Company shall work with the Commission Staff and stakeholders to develop a low-income pilot, as described in this order.

K. In its next general rate case, DTE Electric Company shall provide a new line loss study, as described in this order.

L. In its next general rate case, DTE Electric Company shall provide revenue requirement information by plant/unit, working with the Commission Staff on a suitable timeframe for this information, as described in this order.

M. DTE Electric Company's accounting requests are approved as set forth in this order.

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after issuance and notice of this order, under MCL 462.26. To comply with the Michigan Rules of Court's requirement to notify the Commission of an appeal, appellants shall send required notices to both the Commission's Executive Secretary and to the Commission's Legal Counsel. Electronic notifications should be sent to the Executive Secretary at [mpscedockets@michigan.gov](mailto:mpscedockets@michigan.gov) and to the Michigan Department of the Attorney General – Public Service Division at [pungp1@michigan.gov](mailto:pungp1@michigan.gov). In lieu of electronic submissions, paper copies of such notifications may be sent to the Executive Secretary and the Attorney General – Public Service Division at 7109 W. Saginaw Hwy., Lansing, MI 48917.

MICHIGAN PUBLIC SERVICE COMMISSION

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Sally A. Talberg, Chairman

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Daniel C. Scripps, Commissioner

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Tremaine L. Phillips, Commissioner

By its action of May 8, 2020.

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Lisa Felice, Executive Secretary

**Michigan Public Service Commission**  
**DTE Electric Company**  
**Present and Proposed Revenue**  
**by Rate Schedule**  
FOR ORDER

MPSC Case No.: U-20561  
ATTACHMENT A  
Page: 1 of 3

**Total Revenues**

Line No.	<b>Residential</b>	(a)	(b)	(c)	(d)	(e)
		Total Present Revenue (\$000's)	Total Proposed Revenue (\$000's)	Total Net Increase/ (Decrease) (\$000's)	Total Net Increase/ (Decrease) (%)	
1	D1/D1.6 Residential	\$2,295,673	\$2,419,288	\$123,615	5.4%	
2	D1.1 Int. Air	\$49,635	\$52,461	\$2,826	5.7%	
3	D1.2 TOD	\$23,172	\$23,367	\$195	0.8%	
4	D1.7 TOD	\$13,800	\$15,238	\$1,438	10.4%	
5	D1.8 Dynamic	\$11,948	\$12,597	\$648	5.4%	
6	D1.9 Elec. Vehicle	\$548	\$578	\$30	5.5%	
7	D2 Elec. Space Heat	\$43,209	\$45,545	\$2,335	5.4%	
8	D5 Res. Water Ht.	\$14,653	\$15,502	\$849	5.8%	
9	Total Residential	\$2,452,638	\$2,584,574	\$131,936	5.4%	
10						
11	<b>Secondary</b>					
12	D1.1 Int. Air	\$707	\$724	\$17	2.4%	
13	D1.7 TOD	\$918	\$1,004	\$86	9.4%	
14	D1.8 Dynamic	\$35	\$35	\$1	2.6%	
15	D 1.9 Elec Vehicle	\$1	\$1	\$0	4.9%	
16	D3 Gen. Serv.	\$911,490	\$933,504	\$22,013	2.4%	
17	D3.1 Unmetered	\$9,083	\$9,313	\$230	2.5%	
18	D3.2 Sec. Educ.	\$35,172	\$39,748	\$4,576	13.0%	
19	D3.3 Interruptible	\$11,103	\$11,370	\$266	2.4%	
20	D4 Lg. Gen. Serv.	\$248,144	\$273,092	\$24,948	10.1%	
21	D5 Com. Wat. Ht.	\$449	\$491	\$41	9.2%	
22	E1.1 Eng. St. Ltg.	\$741	\$757	\$16	2.2%	
23	R7 Greenhs. Ltg.	\$244	\$266	\$21	8.7%	
24	R8 Space Cond.	\$9,265	\$9,483	\$218	2.4%	
25	Total Secondary	\$1,227,353	\$1,279,787	\$52,434	4.3%	
26						
27	<b>Primary</b>					
28	D11 Prim. Supply	\$979,837	\$978,772	(\$1,065)	(0.1%)	
29	D6.2 Pri. Educ.	\$41,168	\$42,097	\$928	2.3%	
30	D8 Int. Primary	\$49,637	\$50,195	\$558	1.1%	
31	D10 El.Schools	\$2,625	\$2,595	(\$30)	(1.1%)	
32	R1.1 Alt. Mtl. Melt.	\$3,474	\$3,574	\$100	2.9%	
33	R1.2 El. Pr. Htg.	\$35,542	\$35,856	\$314	0.9%	
34	R3 Standby	\$6,464	\$6,959	\$495	7.7%	
35	R10 Int. Supply	\$97,099	\$97,790	\$691	0.7%	
36	Total Primary	\$1,215,847	\$1,217,838	\$1,992	0.2%	
37						
38	<b>Other</b>					
39	D9 Protective Ltg.	\$8,030	\$8,403	\$374	4.7%	
40	E1 Muni Street Ltg	\$51,569	\$53,057	\$1,488	2.9%	
41	E2 Traffic Lights	\$4,602	\$4,673	\$71	1.5%	
42	Total Other	\$64,201	\$66,133	\$1,932	3.0%	
43						
44	<b>Total All Classes</b>	<b>\$4,960,039</b>	<b>\$5,148,333</b>	<b>\$188,294</b>	<b>3.8%</b>	

**Michigan Public Service Commission**  
**DTE Electric Company**  
**Present and Proposed Revenue**  
**by Rate Schedule**  
FOR ORDER

MPSC Case No.: U-20561  
ATTACHMENT A  
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**Power Supply Revenues**

Line No.	(a) <b>Residential</b>	(b) <b>Power Supply Sales (MWH)</b>	(c) <b>Present Revenue (\$000's)</b>	(d) <b>Increase/ (Decrease) (\$000's)</b>	(e) <b>Proposed Revenue (\$000's)</b>	(f) <b>Capacity Revenue (\$000's)</b>	(g) <b>Non-Capacity Revenue (\$000's)</b>
1	D1/D1.6 Residential	13,604,972	\$1,218,050	\$55,311	\$1,273,361	\$705,239	\$568,122
2	D1.1 Int. Air	343,556	\$24,246	\$1,101	\$25,347	\$14,038	\$11,309
3	D1.2 TOD	154,945	\$11,988	(\$583)	\$11,405	\$4,803	\$6,602
4	D1.7 TOD	119,404	\$6,225	\$283	\$6,508	\$3,604	\$2,903
5	D1.8 Dynamic	76,446	\$5,860	\$265	\$6,125	\$3,393	\$2,733
6	D1.9 Elec. Vehicle	3,710	\$258	\$12	\$270	\$150	\$121
7	D2 Elec. Space Heat	296,173	\$20,487	\$848	\$21,335	\$8,385	\$12,951
8	<u>D5 Res. Water Ht.</u>	118,145	\$5,643	\$256	\$5,899	\$3,267	\$2,632
9	Total Residential	14,717,352	\$1,292,759	\$57,492	\$1,350,251	\$742,880	\$607,373
10							
11	<b>Secondary</b>						
12	D1.1 Int. Air	6,245	\$428	\$17	\$444	\$210	\$234
13	D1.7 TOD	12,312	\$559	\$22	\$581	\$275	\$306
14	D1.8 Dynamic	287	\$23	\$1	\$24	\$11	\$13
15	D1.9 Elec. Vehicle	5	\$0	\$0	\$0	\$0	\$0
16	D3 Gen. Serv.	7,052,356	\$559,603	\$21,876	\$581,479	\$275,035	\$306,443
17	D3.1 Unmetered	82,087	\$5,586	\$218	\$5,805	\$2,746	\$3,059
18	D3.2 Sec. Educ.	248,176	\$17,087	\$1,173	\$18,260	\$7,450	\$10,810
19	D3.3 Interruptible	101,904	\$6,755	\$264	\$7,019	\$3,320	\$3,699
20	D4 Lg. Gen. Serv.	2,167,294	\$158,584	\$8,103	\$166,687	\$72,174	\$94,513
21	D5 Com. Wat. Ht.	5,277	\$246	\$10	\$256	\$121	\$135
22	E1.1 Eng. St. Ltg.	7,410	\$407	\$16	\$423	\$200	\$223
23	R7 Greenhs. Ltg.	3,047	\$138	\$5	\$144	\$68	\$76
24	R8 Space Cond.	81,415	\$5,539	\$217	\$5,756	\$2,722	\$3,033
25	Total Secondary	9,767,816	\$754,956	\$31,921	\$786,877	\$364,332	\$422,545
26							
27	<b>Primary</b>						
28	D11 Prim. Supply	13,021,293	\$853,340	(\$6,257)	\$847,083	\$323,157	\$523,925.79
29	D6.2 Pri. Educ.	380,422	\$29,889	\$481	\$30,370	\$14,862	\$15,508
30	D8 Int. Primary	712,566	\$40,989	\$233	\$41,222	\$10,521	\$30,701
31	D10 El.Schools	23,740	\$1,958	(\$13)	\$1,944	\$741	\$1,204
32	R1.1 Alt. Mtl. Melt.	54,502	\$3,072	(\$6)	\$3,066	\$672	\$2,395
33	R1.2 El. Pr. Htg.	506,331	\$28,001	(\$107)	\$27,894	\$5,646	\$22,249
34	R3 Standby	77,540	\$4,474	\$372	\$4,846	\$1,374	\$3,473
35	R10 Int. Supply	1,811,677	\$90,397	\$266	\$90,663	\$0	\$90,663.21
36	Total Primary	16,588,072	\$1,052,121	(\$5,032)	\$1,047,089	\$356,972	\$690,118
37							
38	<b>Other</b>						
39	D9 Protective Ltg.	30,790	\$1,398	(\$21)	\$1,377	\$0	\$1,377
40	E1 Muni Street Ltg	147,520	\$6,697	(\$100)	\$6,597	\$0	\$6,597
41	E2 Traffic Lights	56,005	\$3,489	\$146	\$3,636	\$1,187	\$2,448
42	Total Other	234,315	\$11,584	\$25	\$11,609	\$1,187	\$10,422
43							
44	<b>Total All Classes</b>	<u>41,307,555</u>	<u>\$3,111,420</u>	<u>\$84,405</u>	<u>\$3,195,826</u>	<u>\$1,465,371</u>	<u>\$1,730,457</u>

**Michigan Public Service Commission**  
**DTE Electric Company**  
**Present and Proposed Revenue**  
**by Rate Schedule**  
FOR ORDER

MPSC Case No.: U-20561  
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### **Distribution Revenues**

Line No.	(a) <u>Residential</u>	(b) <u>Distribution Sales (MWH)</u>	(c) <u>Present Revenue (\$000's)</u>	(d) <u>Increase/ (Decrease) (\$000's)</u>	(e) <u>Proposed Revenue (\$000's)</u>
1	D1/D1.6 Residential	13,604,972	\$1,077,622	\$68,304	\$1,145,926
2	D1.1 Int. Air	343,556	\$25,389	\$1,725	\$27,114
3	D1.2 TOD	154,945	\$11,184	\$778	\$11,962
4	D1.7 TOD	119,404	\$7,575	\$1,155	\$8,730
5	D1.8 Dynamic	76,446	\$6,088	\$384	\$6,472
6	D1.9 Elec. Vehicle	3,710	\$289	\$19	\$308
7	D2 Elec. Space Heat	296,173	\$22,722	\$1,487	\$24,209
8	D5 Res. Water Ht.	118,145	\$9,010	\$593	\$9,603
9	Total Residential	<u>14,717,352</u>	<u>\$1,159,880</u>	<u>\$74,444</u>	<u>\$1,234,324</u>
10					
11	<b><u>Secondary</u></b>				
12	D1.1 Int. Air	6,245	\$279	\$0	\$279
13	D1.7 TOD	12,481	\$359	\$64	\$423
14	D1.8 Dynamic	287	\$12	\$0	\$12
15	D1.9 Elec Vehicle	5	\$0	\$0	\$0
16	D3 Gen. Serv.	7,340,759	\$351,887	\$138	\$352,025
17	D3.1 Unmetered	82,087	\$3,497	\$11	\$3,508
18	D3.2 Sec. Educ.	547,475	\$18,085	\$3,403	\$21,488
19	D3.3 Interruptible	109,020	\$4,348	\$2	\$4,350
20	D4 Lg. Gen. Serv.	2,480,581	\$89,560	\$16,845	\$106,406
21	D5 Com. Wat. Ht.	5,283	\$203	\$32	\$234
22	E1.1 Eng. St. Ltg.	7,410	\$334	\$0	\$335
23	R7 Greenhs. Ltg.	3,047	\$106	\$16	\$122
24	R8 Space Cond.	83,136	\$3,726	\$2	\$3,727
25	Total Secondary	<u>10,677,816</u>	<u>\$472,397</u>	<u>\$20,513</u>	<u>\$492,910</u>
26					
27	<b><u>Primary</u></b>				
28	D11 Prim. Supply	16,293,389	\$126,497	\$5,192	\$131,689
29	D6.2 Pri. Educ.	739,808	\$11,279	\$448	\$11,727
30	D8 Int. Primary	851,505	\$8,648	\$325	\$8,973
31	D10 El.Schools	34,229	\$668	(\$17)	\$651
32	R1.1 Alt. Mtl. Melt.	54,502	\$402	\$106	\$508
33	R1.2 El. Pr. Htg.	515,422	\$7,540	\$421	\$7,962
34	R3 Standby	70,450	\$1,990	\$123	\$2,113
35	R10 Int. Supply	1,811,677	\$6,702	\$425	\$7,127
36	Total Primary	<u>20,370,982</u>	<u>\$163,726</u>	<u>\$7,024</u>	<u>\$170,749</u>
37					
38	<b><u>Other</u></b>				
39	D9 Protective Ltg.	30,790	\$6,632	\$395	\$7,027
40	E1 Muni Street Ltg	147,520	\$44,872	\$1,588	\$46,460
41	E2 Traffic Lights	56,005	\$1,113	(\$76)	\$1,037
42	Total Other	<u>234,315</u>	<u>\$52,617</u>	<u>\$1,907</u>	<u>\$54,524</u>
43					
44	<b>Total All Classes</b>	<b><u>46,000,465</u></b>	<b><u>\$1,848,619</u></b>	<b><u>\$103,886</u></b>	<b><u>\$1,952,506</u></b>

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**SECTION C - PART I**  
**COMPANY RULES AND REGULATIONS**

**C1 CHARACTERISTICS OF SERVICE**

**C1.1 Character of Service**

The Company furnishes alternating current service at a nominal frequency of 60 hertz, and at 120/240 volts which is suitable for lighting and small single-phase power uses. In certain city districts, alternating current is supplied from a Y connected secondary network at 208Y/120 volts.

For three-phase General Service installations, the Company will provide 208Y/120 volt, three-phase four-wire service. The Company may at its option provide 240/120 volt, three-phase four-wire Delta connected service or 480Y/277 volt, three-phase four-wire Y connected service for the customer's entire requirements. Where service is supplied at 480Y/277 volts, the customer must furnish any transformation for the supply of his 120/240 volt requirements.

For primary (high voltage) service, the Company offers alternating current service at nominal 4,800, 13,200, 24,000, 41,570 or 120,000 volts, as available, at the option of the Company. Customers must provide their own switchgear and necessary transformation equipment and the installation must be compatible with the Company's system. The operation and maintenance of this switchgear and equipment shall be the responsibility of the customer.

Before purchasing equipment or installing wiring, the customer should secure from the Company the characteristics of electric service available.

**C1.2 Continuity of Service**

The Company agrees to furnish continuous and adequate service subject to interruption by agreement, or upon advance notice or by accident or other causes not under the reasonable control of the Company, and except where limitations or hours for controlled service are shown in the Schedule of Rates. The Company will not be liable for damages caused by an interruption of service, voltage or frequency variations, single-phase supply to three-phase lines, reversal of phase rotation, or carrier-current frequencies imposed by the Company for system operations or equipment control except such as result from the failure of the Company to exercise reasonable care and skill in furnishing the service. Therefore, the customer should install suitable protective equipment if such occurrences might damage his apparatus.

**NOTWITHSTANDING ANY OTHER PROVISION OF THESE RULES, THE COMPANY MAY INTERRUPT, CURTAIL, OR SUSPEND ELECTRIC SERVICE TO ALL OR SOME OF ITS CUSTOMERS BY STATUTE OR IN ACCORDANCE WITH THE PROVISIONS OF THE ORDER APPROVED BY THE MICHIGAN PUBLIC SERVICE COMMISSION ON MAY 23, 1975, AND AS AMENDED ON DECEMBER 11, 1979, IN CASE NO. U-4128, OR SUBSEQUENT ORDERS, AND THE COMPANY SHALL BE UNDER NO LIABILITY WITH RESPECT TO ANY SUCH INTERRUPTION, CURTAILMENT, OR SUSPENSION.**

(Continued on Sheet No. C-2.00)

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D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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(Continued from Sheet No. C-1.00)

**C1 CHARACTERISTICS OF SERVICE (Contd.)**

**C1.3 Franchise Provisions**

The Company is furnishing electric service under franchises granted to it or its predecessors or assignors by various municipalities and townships in which it is doing business. These franchises provide that the rates and charges for electric service shall not exceed its rates and charges for like service elsewhere in its service area, evidenced by its uniform rate schedules at the time on file with and approved by the Commission.

The Company is also exercising all such rights, privileges and franchises as it and its predecessors and assignors have or are entitled to under the statutes of the State of Michigan.

**C2 CONTROLLED SERVICE (See Section C3)**

**C3 EMERGENCY ELECTRICAL PROCEDURES**

**C3.1 General**

*Emergency Electrical Procedures may be necessary if there is a near-term shortage in the electrical energy supply to meet the demands of customers. For the purpose of this procedure, an Emergency Electrical Event may be i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of any electric system or the safety of persons or property; ii) a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or iii) a condition that requires implementation of Emergency Electrical Procedures as defined in this tariff. Conditions during an emergency event may escalate such that procedural steps are not followed in orderly succession. DTE Electric is a member of a Regional Transmission Organization (RTO) which therefore dictates that during any Emergency Electrical Event, DTE Electric will coordinate procedural steps with the RTO and with the applicable transmission operator. For longer-term forecasts of resource adequacy, the RTO works with DTE Electric to ensure an effective and efficient resource adequacy construct with appropriate consideration of all eligible internal and external resources and resource types and recognition of legal/regulatory authorities and responsibilities. The Company shall promptly advise the Commission of the nature, time and duration of implemented emergency procedures which could result in widespread disruption of service to customers. The Commission may order the implementation of additional procedures or the termination of the procedures previously employed when circumstances so require.*

The following health and safety customers given special consideration in these procedures shall be subject to curtailments of up to a maximum of 15%, unless it can be demonstrated by the customer to the serving utility that such a curtailment would result in a discontinuation of essential services:

- (1) Uses essential for the operation of any facility known to be necessary for the support of life, such as hospitals, kidney machines, iron lungs, and other life-support systems.
- (2) Uses required for fire, police, prison, and custodial, and essential street and highway lighting services.
- (3) Refrigeration for the storage and preservation of perishable food or medicine, when that is substantially all the customer's load.

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**C3 EMERGENCY ELECTRICAL PROCEDURES (Contd.)**  
**C3.1 General (Contd.)**

- (4) Operation, guidance control, and navigation services for public transportation and shipping, including rail, mass transit, licensed commercial air transportation, and other forms of transportation.
- (5) Communication services, including telephone and telegraph systems, television and radio stations, newspapers and traffic control and signal systems.
- (6) Water supply and sanitation services, including waterworks, pumping and sewage disposal activities which cannot be reduced without seriously affecting public health.
- (7) Federal activities essential for national defense and state and local activities essential for providing emergency services.
- (8) Uses necessary for the manufacture, directly or as a by-product, the transmission or the distribution of natural or manufactured gas or fuel.
- (9) Uses necessary for the mining and transportation of coal.
- (10) Uses necessary for the production, refining, transmission or distribution of oil and gas for fuel.
- (11) Essential construction, operation, and maintenance activities for energy production and supply.

Although these types of customers will be given special consideration from the curtailment provisions of this plan, they should install emergency generation equipment if continuity of service is essential. All customers who, in their opinion, have critical equipment should install emergency battery or portable generating equipment.

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### C3.2 Short -Term Capacity Shortages

A Sudden or Unanticipated ***Frequency Event***

In the event of a major power system disturbance which results in an area being seriously deficient in generation, this procedure sheds load to restore a load-generation balance.

In the event of a sudden decline of the frequency on the system or a sudden breakup which isolates all or parts of the Company's ***electric system*** from other electric systems with which it is interconnected and which results in the area so isolated being deficient in electric generation, with consequent rapid decline in frequency, automatic load shedding will take place *per North American Electric Reliability (NERC) Reliability Standards. Five percent (5%) of the system load will be shed automatically at each frequency step of 59.5, 59.3, 59.1, 58.9 and 58.7 Hertz. Service interrupted shall be to certain substations and lines serving customers throughout the Company's service area. Such interruptions shall be, where practicable, for short periods of time. DTE Electric will comply with Reliability Directives from the applicable transmission operator and Balancing Authority, as defined in the NERC glossary of terms, to restore the system as frequency is recovered.*

In the event of a sudden generation deficiency in an area which causes the interconnection loadings to exceed their emergency ratings, manual actions must be instituted immediately to achieve an acceptable load-generation balance.

(a) The following steps will be taken in the order appropriate to the situation:

- (i) Service will be interrupted to controlled service loads and to loads served under interruptible tariffs and emergency load management tariff provisions.

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- (ii) Voltage will be reduced not more than six percent.
- (iii) As a measure of last resort, manual load shedding of firm customer loads will be instituted as necessary to maintain the integrity of the system.

***B. Actual or Forecast Generation Capacity Shortages***

*In the event the RTO determines that near-term conditions are such that maximum generation capacity is within 1% of forecasted peak load, as published daily by the RTO, plus operating reserves, as defined in the NERC glossary of terms, an Emergency Alert Level is declared. For all emergency levels, the Company will advise the MPSC staff by telephone. The Alert Level steps are:*

- (1) *Generation assets will cancel maintenance that could jeopardize capability and expedite returning equipment to service if it increases capability.*
- (2) *Internal load reduction will be implemented.*
- (3) *Operators will dispatch to sites that will need operator assistance to make equipment available.*
- (4) *Expedite the return to service of equipment in planned outage or maintenance if possible.*
- (5) *Set probability of interruption to medium for Tariff Interruptible loads.*
- (6) *Determine if any capacity is available that is currently limited or may become limited by future emergency operation.*

*In the event the RTO determined that forecasted energy reserves are less than required, actual operating reserves are less than required, or transmission constraints may be projected to limit energy transfer, the RTO will declare an Emergency Warning Level. For all declared emergency levels, the Company will advise the MPSC staff by telephone. The Warning Level steps are:*

- (1) *The Company will ensure all steps of the Alert Level have been performed.*
- (2) *Internal load reduction will be implemented.*
- (3) *The Company will schedule any external to the RTO resources into the RTO area.*
- (4) *Non-firm energy sales will be curtailed.*
- (5) *Set probability of interruption to high for Tariff Interruptible loads*

*In the event that the RTO determines that real-time energy demand and operating reserve requirements cannot be met, an Event Level emergency is declared. For all declared emergency levels, the Company will advise the MPSC staff by telephone. The Event Level steps are:*

- (1) *Ensure all steps of the Alert and Warning Level have been performed.*
- (2) *Start additional resources as directed by MISO.*
- (3) *Direct that public appeal for load reduction be issued.*
- (4) *Implement Load Modifying Resources (LMR) such as tariff interruptible loads.*
- (5) *Poll industrial customers for voluntary load reduction and instruct those volunteers to implement load reduction.*
- (6) *Request that government environmental restrictions are lifted on generation suffering such reductions.*
- (7) *Direct shedding of firm load as directed by the RTO.*

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***Emergency Event Termination is determined by the RTO. Upon termination, the Company will work backward through the implemented steps and ensure all notifications to generation sites, facilities, industrial customers, tariff interruptible customers, and the MPSC have been made.***

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M.P.S.C. No. 1 - Electric  
 DTE Electric Company  
 (Final Order Case No. U-20561)

### C3.3 Long-Term Capacity or Fuel Shortages

#### A. Fuel Shortages

*The Company shall notify the MPSC staff of the fuel supply shortage if such shortfall is expected to impact customer service. In the event of a fuel shortage at a generation facility, the Company shall take one or more of the following actions:*

- (1) *Attempt to find alternative supplies or transportation of fuel.*
- (2) *Optimize deliveries of fuel to all generation facilities to free up supply.*
- (3) *Reduce dispatch of the affected generator(s).*
- (4) *Purchase capacity or energy to replace the facility.*
- (5) *Enter into load management agreements with large industrial customers.*
- (6) *Optimize all other generating facilities to free up supply.*

#### B. Long Term Capacity Shortages

If an emergency situation of long-term duration arises out of a long-term capacity shortage which cannot be relieved by sources of generation within or outside of the Company's service area, the following actions shall be taken as necessary:

- (1) Curtail use of energy during hours of capacity deficiency on premises controlled by the Company.
- (2) Curtail all non-firm outside sales of electricity by the Company during the hours of capacity deficiency.
- (3) Initiate voluntary energy curtailment during hours of capacity deficiency of all customers by:
  - (a) Direct contact of customers with an electric demand of 500 kW (this will be reduced to 200 kW for utilities with less than \$10,000,000 annual revenue who are firm customers of the Company) or higher requesting them to implement their voluntary long-term electric load management plan.
  - (b) Requesting, through mass communication media, voluntary curtailment by all other customers.
- (4) Implement available load management options to controlled service loads and to loads rendered service under interruptible rates in accordance with approved tariffs.

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- (5) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric demand of residential, commercial and industrial customers on an equitable basis during the period of capacity deficiency to achieve a 15% reduction in system demand.
  - (6) Implement procedures for mandatory curtailment of the electric demand of all non-residential customers who have a monthly energy use in excess of 75,000 kilowatthours, (this will be reduced to 30,000 kWh for utilities with less than \$10,000,000 annual revenue who are firm customers of the Company) to levels and at times specified by the Company, such curtailment to be not more than 15% of the customer's "monthly base period demand." Monthly base period demand is defined as the customer's billing demand created during the corresponding monthly billing cycle of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case, adjusted to reflect any changes in operating rate as computed in the formula in Appendix A hereto. The "monthly base period demand" will be updated every three (3) years. Upon application by the customer and agreement by the serving utility, a one-time adjustment of the monthly billing demand of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case or an adjustment to the average demand of the prior three months (PQkW) will be made to correct any abnormalities of demand resulting from such things as strikes and breakdown of major equipment that may have occurred during the period in question. For customers connected or qualifying after December 31 of the calendar year immediately preceding the year defined as the base period, the base period demand will be negotiated between the customer and the serving utility, until such time as one calendar year of billing data at normal operation is available, at which time this will become the base period to be adjusted in accordance with the formula in Appendix A.

Upon prior arrangement and mutual agreement with the serving utility, customers may affect their electric demand reduction on a corporate basis within an individual utility's service area.

In the event the foregoing steps are insufficient, the following steps will be taken:

- (7) The Governor will be requested to exercise any authority at his/her disposal to alleviate the emergency situation.
- (8) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric demand of residential, commercial and industrial customers on an equitable basis during the period of capacity deficiency to achieve a 30% reduction in system demand.
- (9) Implement procedures for mandatory curtailment of demand for customers covered in Section 3.3 **B(6)** to levels and at times specified by the Company, such curtailment to be not more than 30% of such customer's respective monthly base period demand.
- (10) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric demand of residential, commercial and industrial customers on an equitable basis during the period of capacity deficiency to achieve a 50% reduction in system demand.

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- (11) Implement procedures for mandatory curtailment of demand for customers covered in Section 3.3 **B(6)** to levels and at times specified by the Company, such curtailment to be not more than 50% of such customer's respective monthly base period demand.
  - (12) As a measure of last resort, manual load shedding of firm customer loads will be initiated as necessary to maintain the integrity of the system.

Voltage may be reduced up to six percent if at any time it is deemed appropriate by the Company to maintain the integrity of the system.

**C** Long-Term Fuel Shortages (Other Than Coal):

In the event of an anticipated long-term fuel shortage, the utility shall estimate each day anticipated kilowatthour requirements for the subsequent 45 and 30 day periods. Fuel supplies to meet these requirements will be calculated in accordance with the formula in Appendix B. In addition to the following procedures, at an appropriate time prior to implementation of mandatory curtailment procedures and with the concurrence of the MPSC, the Company shall initiate a conservation dispatch in order to conserve fuel at critical plants to the degree deemed necessary:

- (1) If the fuel supplies to meet the expected electric load for the subsequent 45-day period are not available and the transmission service provider is unable to commit adequate resources, the following actions shall be taken:
  - (a) The utility shall notify the Commission of fuel supply shortage.
  - (b) Use of energy on premises controlled by the Company shall be curtailed.
  - (c) Request voluntary curtailment of all customers by:
    - (i) Direct contact of large industrial and commercial customers with an electric demand of 500 kW (this will be reduced to 200 kW for utilities with less than \$10,000,000 annual revenue who are firm customers of the Company) or higher, and request them to implement their voluntary long-term electric load management plan.
    - (ii) Request, by mass communication media, voluntary curtailment by all other customers.
  - (d) Curtail non-firm outside sales of electricity by DTE Electric during the period of fuel shortage, except those non-firm sales which do not affect fuel usage at critical plants.
- (2) If the fuel supply situation continues to deteriorate and the fuel and energy supplies to meet the expected electric load for the subsequent 30-day period are not available, the following additional actions shall be taken in the order noted to maintain as nearly as possible a 30-day supply:

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- (a) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers on an equitable basis to achieve a 15% reduction in energy consumption.
- (b) Implement procedures for mandatory curtailment of electric service to all non-residential customers, who have monthly energy uses in excess of 75,000 kilowatthours (this will be reduced to 30,000 kWh for utilities with less than \$10,000,000 annual revenue who are firm customers of the Company), to levels specified by the Company, such curtailments to be not more than 15% of the customer's "monthly base period use."

"Monthly base period use" is defined as the customer's usage during the corresponding monthly billing cycle of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case, adjusted to reflect any increases or decreases of load in the most recent three-month period due to the installation or removal of equipment or a change in operating rate as computed in the formula in Appendix A hereto. The "monthly base period use" will be updated every three (3) years.

Upon application by the customers and agreement by the serving utility, a one-time adjustment of the monthly energy use of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case or an adjustment of the prior three-month usage (PQkWh) will be made to correct any abnormalities of energy use resulting from such things as strikes and breakdown of major equipment that may have occurred during the period in question. For customers connected or qualifying after December 31 of the calendar year immediately preceding the year defined as the base period, the base period consumption will be negotiated between the customer and the serving utility until such time as one full calendar year of billing data at normal operation is available, at which time this will become the base period to be adjusted in accordance with the formula in Appendix A.

Upon prior arrangement and mutual agreement with the serving utility, customers may affect their electric usage reduction on a corporate basis within an individual utility's service area.

- (c) The Governor will be requested to exercise any authority at his/her disposal to alleviate the emergency situation.
- (d) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers on an equitable basis to achieve a 30% reduction in energy consumption.
- (e) Implement procedures for mandatory curtailment of service to customers covered in Section 3.3 C(2)(b) to levels specified by the Company, such curtailment to be not more than 30% of such customer's respective monthly base period use.

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- (f) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers on an equitable basis to achieve a 50% reduction in energy consumption.
- (g) Implement procedures for mandatory curtailment of service to customers covered in Section 3.3 **C**(2)(b) to levels specified by the Company, such curtailment to be not more than 50% of such customer's respective monthly base period use.
- (h) As a measure of last resort, manual load shedding of firm customer loads will be initiated as necessary to maintain the integrity of the system.

Voltage may be reduced up to six percent if at any time it is deemed appropriate by the Company to maintain the integrity of the system.

**D** Long-Term Fuel Shortages Due to Coal

In the event of an emergency fuel shortage, such as that which could result from a general coal or transportation strike, the utility shall estimate each day the anticipated kilowatthour requirements for the subsequent 60-day period. Fuel supplies to meet these requirements will be calculated in accordance with the formula in Appendix B.

- (1) If the fuel supplies necessary to meet the expected electric load for the subsequent 60-day period are not available, the following actions shall be taken:
  - (a) The utility shall notify the Commission of the fuel supply shortage.
  - (b) Use of energy on premises controlled by the Company shall be curtailed.
  - (c) Request voluntary energy curtailment of all customers by:
    - (i) Direct contact of customers with an electric demand of 500 kW (this will be reduced to 200 kW utilities with less than \$10,000,000 annual revenue who are firm customers of the Company) or higher, requesting them to implement their voluntary long-term electric load management plan.
    - (ii) Request, by mass communication media, voluntary curtailment by all other customers.
  - (d) Curtail non-firm outside sales of electricity by the Company during the period of fuel shortage, except those non-firm sales which do not affect fuel usage at critical plants.

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- (e) Seek authorization from the proper regulatory agencies to curtail the use of air pollution control facilities and to burn the available coal in a manner which will maximize use of the remaining stockpiles.
  - (f) Request industry to utilize industrial-owned generation equipment to supplement utility generation to maximum extent possible.
  - (g) At an appropriate time prior to implementation of mandatory curtailment procedures, and with the concurrence of the MPSC, the Company shall initiate a conservation dispatch in order to conserve fuel at critical plants to the degree necessary.
- (2) If the fuel supply situation continues to deteriorate and the supplies necessary to meet the expected electric load for the subsequent 40-day period are not available, the following actions shall be taken:
- (a) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers on an equitable basis to achieve a 15% reduction in energy consumption.
  - (b) Implement procedures for mandatory curtailment of electric service to all non-residential customers, who have monthly energy uses in excess of 75,000 kilowatthours (this will be reduced to 30,000 kWh for utilities with less than \$10,000,000 annual revenue who are firm customers of the Company), to levels specified by the Company, such curtailments to be not more than 15% of the customer's "monthly base period use."

"Monthly base period use" is defined as the customer's usage during the corresponding monthly billing cycle of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case, adjusted to reflect any increases or decreases of load in the most recent three-month period due to the installation or removal of equipment or a change in operating rate as computed in the formula in Appendix A hereto. The "monthly base period use" will be updated every three (3) years.

Upon application by the customers and agreement by the serving utility, a one-time adjustment of the monthly energy use of the twelve monthly billing periods immediately prior to December 31 of the calendar year immediately preceding the issuance of the order in this case or an adjustment of the prior three-month usage (PQkWh) will be made to correct any abnormalities of energy use resulting from such things as strikes and breakdown of major equipment that may have occurred during the period in question. For customers connected or qualifying after December 31 of the calendar year immediately preceding the year defined as the base period, the base period consumption will be negotiated between the customer and the serving utility until such time as one full calendar year of billing data at normal operation is available at which time this will become the base period to be adjusted in accordance with the formula in Appendix A.

Upon prior agreement and mutual agreement with the serving utility, customers may affect their electric usage reduction on a corporate basis within an individual utility's service area.

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- (3) In the event the foregoing steps are insufficient, the following steps will be taken when the fuel supplies necessary to meet the expected electric load for the subsequent 25-day period are not available:
- (a) The Governor will be requested to exercise any authority at his/her disposal to alleviate the emergency situations.
  - (b) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers up to 30% on an equitable basis.
  - (c) Implement procedures for mandatory curtailment of service to customers covered in Section 3.3 D(2)(b) to levels specified by DTE Electric, such curtailment to be not more than 30% of such customer's respective monthly base period use.
- (4) When the fuel supplies necessary to meet the expected load for the subsequent 15-day period are not available, the following actions shall be taken:
- (a) Implement a comprehensive voluntary program with procedures designed to take specific measures at specific times in specific areas to curtail the electric consumption of residential, commercial and industrial customers on an equitable basis to achieve a 50% reduction in energy consumption.
  - (b) Implement procedures for mandatory curtailment of service to customers covered in Section 3.3 **D**(2)(b) to levels specified by the Company, such curtailment to be not more than 50% of such customer's respective monthly base period use.

As a measure of last resort, manual load shedding of firm customer loads will be initiated as necessary to preserve the integrity of the system. Voltage may be reduced up to six percent if at any time it is deemed appropriate by the Company to maintain the integrity of the system.

#### C3.4 Penalties

Demand use in excess of that permitted under a curtailment instituted pursuant to Sections 3.3 A(6), A(9) or A(11) shall be subject to an excess demand charge per kW of up to 15 times the average cost per kW of the capacity or demand-related charges for the billing month in question. The first 15% of excess demand shall be penalized at a rate of 5 times the average cost per kW of capacity or demand-related charges for the billing month in question, the next 15% of excess demand shall be penalized at a rate of 10 times the average cost per kW of the capacity or demand-related charges for the billing month in question, and all additional excess demand shall be penalized at a rate of 15 times the average cost per kW of the capacity or demand-related charges for the billing month in question.

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Energy use in excess of that permitted under a curtailment instituted pursuant to Sections 3.3 **C**(2)(b), **C**(2)(e), **C**(2)(g), **D**(2)(b), **D**(3)(c) and **D**(4)(b) shall be subject to an excess charge per kWh of up to 15 times the average cost per kWh of the energy-related charges for the billing month in question. The first 15% of excess energy use shall be penalized at a rate of 5 times the average cost per kWh for the billing month in question, the next 15% of excess energy use shall be penalized at a rate of 10 times the average cost per kWh for the billing month in question, and all additional excess energy use shall be penalized at a rate of 15 times the average cost per kWh for the billing month in question.

Such charges shall be in addition to the regular rates under which service is supplied. Customers failing to comply with the specified reductions for more than a 60-day period will be subject to disconnection upon 24 hours' written notice for the duration of the emergency.

The "ratchet" clause of the on-peak minimum billing demand provision for rates D4 and D11 will be waived during periods when the long-term portion of these procedures are in effect for those customers who are affected by the clause due to their efforts to conserve energy or reduce demand.

### **C3.5 Short-Term Capacity Shortages *Outside of the Company's Service Areas***

Firm service to customers in the Company's service area may be interrupted at the direction of the **RTO** in order to provide service to suppliers of electric energy outside of the Company's service area.

(Continued from Sheet No. C-13.00)

### **C3.6 Appendix A - Formula for Base Period Adjustment**

$$\text{AMBP} = (\text{CM-BP}) \cdot \frac{(\text{PQ})}{(\text{BPPQ})}$$

AMBP = Adjusted Monthly Base Period (kW or kWh).

(CM-BP) = Corresponding Month During Base Period.

PQ = Average use (kW or kWh) for the second, third and fourth monthly billing periods immediately prior to the month of the curtailment. Should a curtailment be extended so that one of the three monthly billing periods reflects usage under a curtailment period--voluntary or mandatory--the actual billing for that month is replaced with the AMBP previously calculated for that month.

(BPPQ) = Average of corresponding three monthly billings prior to (CM-BP).

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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in Case No. U-20561

M.P.S.C. No. 1 - Electric  
DTE Electric Company  
(Final Order Case No. U-20561)

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BASE PERIOD = The twelve monthly billing period immediately prior to December 31 of the calendar year immediately preceding the issuance of this order.

(Continued on Sheet No. C-15.00)

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DTE Electric Company  
(Final Order Case No. U-20561)

Forty-Second Revised Sheet No. C-62.00  
Cancels Forty First Revised Sheet No. C-62.00

(Continued from Sheet No. C-61.00)

## C8 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE

### C8.1 Power Supply Cost Recovery (PSCR) Clause

- A This Power Supply Cost Recovery Clause permits the monthly adjustment of rates for power supply to allow recovery of the booked costs of fuel and purchased and net interchanged power transactions incurred under reasonable and prudent policies and practices in accordance with 1982 PA 304. All rates for electric service, unless otherwise provided in the applicable rate schedule, shall include a Power Supply Cost Recovery factor.
- B The Power Supply Cost Recovery factor is that element of the rates to be charged for electric service to reflect power supply costs incurred by the company and made pursuant to the Power Supply Cost Recovery Clause.
- C Effective **, 2020** the Power Supply Cost Recovery Factor shall consist of an increase or decrease of **.010723** mills per kWh for each full .01 mill increase or decrease in the projected average booked cost of fuel burned for electric generation and purchased and net interchange power incurred above or below a base of 31.26 mills per kWh. Average booked cost of fuel burned and purchased and net interchange power shall be equal to the booked costs in that period divided by that period's net system kWh requirements. Net system kWh requirements shall be the sum of the net kWh generation and net kWh purchased and interchange power.

The following factor(s) were applied to bills rendered during the billing months as indicated below for the calendar years 2018 and 2019.

<u><b>Billing Month</b></u>	<u><b>2018</b></u>		<u><b>2019</b></u>	
	<u><b>Maximum Authorized Factor</b></u> <u><b>€/kWh</b></u>	<u><b>Actual Factor Billed</b></u> <u><b>€/kWh</b></u>	<u><b>Maximum Authorized Factor</b></u> <u><b>€/kWh</b></u>	<u><b>Actual Factor Billed</b></u> <u><b>€/kWh</b></u>
January	(0.087)	(0.087)	0.181	0.181
February	(0.087)	(0.087)	0.181	0.181
March	(0.087)	(0.087)	0.181	0.181
April	(0.087)	(0.087)	0.181	0.181
May	(0.087)	(0.087)	0.181	0.181
June	(0.087)	(0.087)	0.181	0.181
July	(0.087)	(0.087)	0.410	0.410
August	(0.087)	(0.087)	0.410	0.410
September	(0.087)	(0.087)	0.410	0.410
October	(0.087)	(0.087)		
November	(0.087)	(0.087)		
December	(0.087)	(0.087)		

The Company will file a revised Sheet No. C-62.00 monthly, or as necessary, to reflect the factor to be billed the following month.

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D. M. Stanczak

Vice President

Regulatory Affairs

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M.P.S.C. No. 1 - Electric  
DTE Electric Company  
(Final Order Case No. U-20561)

MPSC Case No.: U-20561  
ATTACHMENT B  
Page 17 of 95

Forty-Second Revised Sheet No. C-62.00  
Cancels Forty First Revised Sheet No. C-62.00

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(Continued on Sheet No. C-63.00)

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 DTE Electric Company  
 (Final Order Case No. U-20561)

Seventh Revised Sheet No. C-66.00  
 Cancels Sixth Revised Sheet No. C-66.00

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(Continued from Sheet No. C-65.00)

## **C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE**

### **C9.1 Nuclear Surcharge (NS)**

On January 1987 MPSC Order authorized the establishment of an external trust fund to finance the decommissioning of Fermi 2 Power Plant when its operating license expires. The Order approves a decommissioning surcharge on customer bills under which the funds are collected. Pursuant to Commission Order U-10102 dated January 21, 1994, a revised surcharge became effective with service rendered on and after January 22, 1994. In the same order, the Commission authorized the establishment of an external fund to finance the disposal of low-level radioactive waste during the operating life of Fermi 2 Power Plant. Pursuant to an order in Case No. U-14399, costs associated with site security and radiation protection services were removed from base rates and transferred to the Nuclear Surcharge. Pursuant to Commission Order U-16472 dated October 20, 2011, a revised surcharge became effective with service rendered on and after October 29, 2011 Pursuant to Commission Order in Case No. U-17767 a revised surcharge became effective with service rendered on and after December 17, 2015. Pursuant to Commission Order in Case No. U-18255 a revised surcharge became effective with service rendered on and after April 18, 2018. Pursuant to Commission Order in Case No. U-20162 a revised surcharge became effective with service rendered on and after May 9, 2019. **Pursuant to Commission Order in Case No. U-20561 a revised surcharge became effective with service rendered on and after \_\_\_\_\_, 2020.**

### **C9.2 HOLD FOR FUTURE USE**

### **C9.3 HOLD FOR FUTURE USE**

### **C9.4 HOLD FOR FUTURE USE**

Continued on Sheet No. C-67.00)

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 Regulatory Affairs

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 DTE Electric Company  
 (Final Order Case U-20561)

Forty-Eighth Revised Sheet No. C-70.00  
 Cancels Forty-Seventh Revised Sheet No. C-70.00

(Continued from Sheet No. C-69.00)

**C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)**

**C9.8 Summary of Surcharges and Credits:** Summary of surcharges and credits, pursuant to sub-rules C9.1, C9.2, C9.6, C9.7.9, C9.7.10, C9.7.11, C9.7.12 and C9.7.13. Cents per kilowatthour or percent of base bill, unless otherwise noted.

	<u>NS</u> ¢/kWh	<u>EWRS</u> ¢/kWh	<u>Total Delivery Surcharges</u> ¢/kWh	<u>LIEAF Factor</u> \$/Billing Meter
<b>Residential</b>				
D1 Residential	<b>0.0842</b>	0.4487	<b>0.5329</b>	\$0.93
D1.1 Int. Space Conditioning	<b>0.0842</b>	0.4487	<b>0.5329</b>	N/A
D1.2 Time of Day	<b>0.0842</b>	0.4487	<b>0.5329</b>	\$0.93
D1.6 Special Low Income Pilot	<b>0.0842</b>	0.4487	<b>0.5329</b>	\$0.93
D1.7 Geothermal Time-of-Day	<b>0.0842</b>	0.4487	<b>0.5329</b>	N/A
D1.8 Dynamic Peak Pricing	<b>0.0842</b>	0.4487	<b>0.5329</b>	\$0.93
D1.9 Electric Vehicle	<b>0.0842</b>	0.4487	<b>0.5329</b>	N/A
D2 Space Heating	<b>0.0842</b>	0.4487	<b>0.5329</b>	\$0.93
D5 Wtr Htg	<b>0.0842</b>	0.4487	<b>0.5329</b>	N/A
D9 Outdoor Lighting	<b>0.0842</b>	0.4487	<b>0.5329</b>	N/A
<b>Commercial</b>				
D1.1 Int. Space Conditioning	<b>0.0842</b>	See C9.6		\$0.93
D1.7 Geothermal Time -of- day	<b>0.0842</b>	See C9.6		\$0.93
D1.8 Dynamic Peak Pricing	<b>0.0842</b>	See C9.6		\$0.93
D1.9 Electric Vehicle	<b>0.0842</b>	See C9.6		\$0.93
D3 General Service	<b>0.0842</b>	See C9.6		\$0.93
D3.1 Unmetered	<b>0.0842</b>	See C9.6		N/A
D3.2 Educ. Inst.	<b>0.0842</b>	See C9.6		\$0.93
D3.3 Interruptible	<b>0.0842</b>	See C9.6		\$0.93
D4 Large General Service	<b>0.0842</b>	See C9.6		\$0.93
D5 Wtr Htg	<b>0.0842</b>	See C9.6		\$0.93
D9 Outdoor Lighting	<b>0.0842</b>	See C9.6		N/A
R3 Standby Secondary	<b>0.0842</b>	See C9.6		\$0.93
R7 Greenhouse Lighting	<b>0.0842</b>	See C9.6		\$0.93
R8 Space Conditioning	<b>0.0842</b>	See C9.6		\$0.93
<b>Industrial</b>				
D6.2 Educ. Inst.	<b>0.0842</b>	See C9.6		\$0.93
D8 Interruptible Primary	<b>0.0842</b>	See C9.6		\$0.93
D10 Schools	<b>0.0842</b>	See C9.6		\$0.93
D11 Primary Supply	<b>0.0842</b>	See C9.6		\$0.93
R1.1 Metal Melting	<b>0.0842</b>	See C9.6		\$0.93
R1.2 Electric Process Heating	<b>0.0842</b>	See C9.6		\$0.93
R3 Standby Primary	<b>0.0842</b>	See C9.6		\$0.93
R10 Interruptible Supply	<b>0.0842</b>	See C9.6		\$0.93

(Continued on Sheet No. C-71.00)

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Vice President

Regulatory Affairs

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DTE Electric Company  
(Final Order Case U-20561)

Forty-Eighth Revised Sheet No. C-71.00  
Cancels Forty-Seventh Revised Sheet No. C-71.00

(Continued from Sheet No. C-70.00)

**C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)**

**C9.8 Summary of Surcharges and Credits (Contd.):**

	<u>NS</u> ¢/kWh	<u>EWRS</u> ¢/kWh	<u>LIEAF Factor</u> \$/Billing Meter
<b>Governmental</b>			
E1 Streetlighting Option I	<b>0.0842</b>	See C9.6	N/A
E1 Streetlighting Option II	<b>0.0842</b>	See C9.6	N/A
E1.1 Energy Only	<b>0.0842</b>	See C9.6	\$0.93
E2 Traffic Lights	<b>0.0842</b>	See C9.6	N/A
<b>Electric Choice</b>			
EC2 Secondary			
EC2 D1.1 Int. Space Conditioning	<b>0.0842</b>	See C9.6	\$0.93
EC2 D1.7 Geothermal Time of Day	<b>0.0842</b>	See C9.6	\$0.93
EC2 D1.9 Electric Vehicle	<b>0.0842</b>	See C9.6	\$0.93
EC2 D3 General Service	<b>0.0842</b>	See C9.6	\$0.93
EC2 D3.2 Educ. Inst.	<b>0.0842</b>	See C9.6	\$0.93
EC2 D3.3 Interruptible	<b>0.0842</b>	See C9.6	\$0.93
EC2 D4 Large General Service	<b>0.0842</b>	See C9.6	\$0.93
EC2 D5 Wtr Htg	<b>0.0842</b>	See C9.6	\$0.93
EC2 R7 Greenhouse Ltg	<b>0.0842</b>	See C9.6	\$0.93
EC2 Space Conditioning	<b>0.0842</b>	See C9.6	\$0.93
EC2 Primary			
EC2 D6.2 Educ. Inst.	<b>0.0842</b>	See C9.6	\$0.93
EC2 D8 Interruptible Primary	<b>0.0842</b>	See C9.6	\$0.93
EC2 D10 Schools	<b>0.0842</b>	See C9.6	\$0.93
EC2 D11 Primary Supply	<b>0.0842</b>	See C9.6	\$0.93
EC2 R1.1 Metal Melting	<b>0.0842</b>	See C9.6	\$0.93
EC2 R1.2 Electric Process Htg	<b>0.0842</b>	See C9.6	\$0.93
EC2 R10 Interruptible Supply	<b>0.0842</b>	See C9.6	\$0.93
EC2 Residential	<b>0.0427</b>	0.4487	\$0.93

(Continued on Sheet No. C-72.00)

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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the Michigan Public Service Commission  
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in Case No. U-20561

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**RATE SCHEDULE NO. D1****RESIDENTIAL SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available to customers desiring service for all residential purposes through one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected on a permanent basis. Service to appurtenant buildings may be taken on the same meter.

This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

**RATE PER DAY:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity Energy Charges:      **4.500¢** per kWh for the first 17 kWh per day  
   **6.484¢** per kWh for excess over 17 kWh per day

Non-Capacity Energy Charge: **4.176¢** per kWh for all kWh

**Delivery Charges:**

Service Charge:                \$7.50 per month  
Distribution Charge:           **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Customers taking Utility Capacity service for DTE:

Capacity Energy Charges:      **4.500¢** per kWh for the first 17 kWh per day  
   **6.484¢** per kWh for excess over 17 kWh

**Delivery Charges:**

Service Charge:                \$7.50 per month  
Distribution Charge:           **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Sections C8.5.

(Continued on Sheet No. D-2.00)

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(Continued from Sheet No. D-1.00)

**RATE SCHEDULE NO. D1 (Contd.)**

**RESIDENTIAL SERVICE RATE**

**BILLING FREQUENCY:** Based on a nominal 30-day month. See Section C4.5.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**CONTRACT TERM:** Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

**LATE PAYMENT CHARGE:** See Section C4.8.

**INTERRUPTIBLE SPACE-CONDITIONING PROVISION:** Rate D1.1 is available on an optional basis.

**WATER HEATING SERVICE:** Water heating service is available on an optional basis. See Schedule Designation No. D5.

**INCOME ASSISTANCE SERVICE PROVISION (RIA):** When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

**Delivery Charges:** These charges are applicable to Full Service and Retail Open Access customers.

**Income Assistance Credit:** \$(7.50) per customer per month

(Continued on Sheet No. D-2.01)

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Vice President

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 DTE Electric Company  
 (Final Order Case No. U-20561)

Third Revised Sheet No. D-2.01  
 Cancels Second Revised Sheet No. D-2.01

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(Continued from Sheet No. D-2.00)

**RATE SCHEDULE NO. D1 (Contd.)**

**RESIDENTIAL SERVICE RATE**

**RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION:** When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.  
 Senior Citizen Credit: \$(3.75) per customer per month

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA).

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**HOLD FOR FUTURE USE**

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Issued February 6, 2013

N. A. Khouri  
Vice President  
Regulatory Affairs

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and October 9, 2007 in Case No. U-15152

**RATE SCHEDULE NO. D1.1**

**INTERRUPTIBLE SPACE-CONDITIONING SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available on an optional basis to Residential and Commercial customers desiring separately metered interruptible service for central air conditioning and/or central heat pump use. Customers who have more than one heat pump and/or air-conditioning unit which serves their business or home, will not be permitted to have only a portion of their load on the rate, all units will be interrupted upon the signal from the Company. Installations must conform with the Company's specifications. This rate is not available to commercial customers being billed on a demand rate.

**HOURS OF SERVICE:** 24 hours.

**HOURS OF INTERRUPTION:** Central air-conditioning and/or heat pump units only will be turned off by the Company by remote control on selected days for intervals of no longer than thirty minutes in any hour for no more than eight hours in any one day. Company interruptions may include interruptions for, but not limited to maintaining system integrity, making an emergency purchase, economic reasons, or when available system generation is insufficient to meet anticipated system load.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

**RATE PER MONTH:** For separately metered space-conditioning service.

**Full Service Customers:**

**Residential Power Supply Charges:**

Capacity Energy Charge (June through October):	<b>4.304¢</b> per kWh for all kWh
Capacity Energy Charge (November through May):	<b>1.067¢</b> per kWh for all kWh

Non-Capacity Energy Charge:	<b>3.292¢</b> per kWh for all kWh
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**Residential Delivery Charges:**

Service Charge (June through October):	\$1.95 per month
Distribution Charge (Year-round):	<b>6.611¢</b> per kWh for all kWh

**Commercial Power Supply Charges:**

Capacity Energy Charge (June through October):	<b>4.347¢</b> per kWh for all kWh
Capacity Energy Charge (November through May):	<b>1.044¢</b> per kWh for all kWh
Non-Capacity Energy Charge:	<b>3.749¢</b> per kWh for all kWh

**Commercial Delivery Charges:**

Service Charge (June through October):	\$1.95 per month
Distribution Charge (Year-round):	<b>3.868¢</b> per kWh for all kWh

(Continued on Sheet No. D-5.00)

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DTE Electric Company  
(Final Order Case No. U-20561)

Seventh Revised Sheet No. D-5.00  
Cancels Sixth Revised Sheet No. D-5.00

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(Continued from Sheet No. D-4.00)

**RATE SCHEDULE NO. D1.1 (Contd.)      INTERRUPTIBLE SPACE-CONDITIONING SERVICE RATE**

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

**Retail Access Service Customers:**

Residential Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:  
Capacity Energy Charge (June through October):      **4.304¢** per kWh for all kWh  
Capacity Energy Charge (November through May):      **1.067¢** per kWh for all kWh

**Residential Delivery Charges:**

Capacity Service Charge June through October):	\$1.95 per month
Capacity Distribution Charge (Year-round):	<b>6.611¢</b> per kWh for all kWh

Commerical Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through October):	<b>4.347¢</b> per kWh for all kWh
Capacity Energy Charge (November through May):	<b>1.044¢</b> per kWh for all kWh

**Commercial Delivery Charges:**

Service Charge June through October):	\$1.95 per month
Distribution Charge (Year-round):	<b>3.868¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**CONTRACT TERM:** Open order, terminable on three days' written notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

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Vice President  
Regulatory Affairs

Detroit, Michigan

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## RATE SCHEDULE NO. D1.2

## RESIDENTIAL TIME-OF-DAY SERVICE RATE

**AVAILABILITY OF SERVICE:** Available on an optional basis to customers who desire time of day service for their residential dwelling. Customers who select this rate must qualify for the Residential Service Rate D1.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire.

### RATE PER MONTH:

#### Full Service Customers:

##### Power Supply Charges:

Capacity Energy Charge (June through October):

**11.841¢** per kWh for all On-peak kWh  
**1.160¢** per kWh for all Off-peak kWh

Capacity Energy Charge (November through May):

**9.341¢** per kWh for all On-peak kWh  
**0.948¢** per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.  
Off-Peak Hours: All other kWh used.

Non-Capacity Energy Charge: **4.261¢** per kWh for all kWh

##### Delivery Charges:

Service Charge: \$7.50 per month  
Distribution Charge: **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

#### Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through October):

**11.841¢** per kWh for all On-peak kWh  
**1.160¢** per kWh for all Off-peak kWh

Capacity Energy Charge (November through May):

**9.341¢** per kWh for all On-peak kWh  
**0.948¢** per kWh for all Off-peak kWh

On-Peak Hours: all kWh used between 1100 and 1900 hours Monday through Friday.

Off-Peak Hours: all other kWh used.

(Continued on Sheet No. D-7.00)

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(Continued from Sheet No. D-6.00)

**RATE SCHEDULE NO. D1.2 (Contd.)**

**RESIDENTIAL TIME-OF-DAY SERVICE RATE**

**Delivery Charges:**

Service Charge: \$7.50 per month  
Distribution Charge: **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C5.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**CONTRACT TERM:** Commencing upon installation of the Time-of-Day meter, service will be provided for twelve continuous months thereafter, with termination upon mutual consent of the Company and the customer.

**WATER HEATING SERVICE:** Water heating service is available on an optional basis.

**INTERRUPTIBLE SPACE CONDITIONING PROVISION:** Rate D1.1 is available on an optional basis.

**INCOME ASSISTANCE SERVICE PROVISION (RIA):** *When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.*

*The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:*

**Delivery Charges:** These charges are applicable to Full Service and Retail Open Access customers.

**Income Assistance Credit:** \$(7.50) per customer per month

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**RATE SCHEDULE NO. D1.6**

**RESIDENTIAL SERVICE SPECIAL LOW INCOME PILOT RATE**

**AVAILABILITY OF SERVICE:** Customers who select this pilot rate must qualify for the Residential Service rate D1. To qualify for this pilot rate a customer must also provide annual evidence of receiving a Home Heating Credit (HHC) energy draft or warrant, or must provide confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid. Service under this rate shall be limited to an annual average of 32,000 customers.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

**RATE PER DAY:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity Energy Charges:	<b>4.500¢</b> per kWh for the first 17 kWh per day
	<b>6.484¢</b> per kWh for excess over 17 kWh per day

Non-Capacity Energy Charge: **4.176¢** per kWh for all kWh per day

**Delivery Charges:**

Service Charge:	\$7.50 per month
Distribution Charge:	<b>6.611¢</b> per kWh for all kWh
Special Low Income Discount:	(\$40.00) per month

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

**Retail Access Service Customers:**

Residential Power Supply Charges for Retail access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charges:	<b>4.500¢</b> per kWh for first 17 kWh per day
	<b>6.484¢</b> per kWh for excess over 17 kWh per day

(Continued on Sheet No. D-12.02)

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 DTE Electric Company  
 (Final Order Case No. U-20561)

Third Revised Sheet No. D-12.02  
 Cancels Second Revised Sheet No. D-12.02

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(Continued from Sheet No. D-12.01)

**RATE SCHEDULE NO. D1.6 (Contd.) RESIDENTIAL SERVICE SPECIAL LOW INCOME PILOT RATE**

**Delivery Charges:**

Service Charge:	\$7.50 per month
Distribution Charge:	<b>6.611¢</b> per kWh for all kWh
Special Low Income Discount:	(\$40.00) per month

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**BILLING FREQUENCY:** Based on a nominal 30-day month. See Section C4.5.

**CONTRACT TERM:** Open order, terminable on three days' notice by either party. If a customer fails to make the required payment on time for three consecutive billing periods that customer shall automatically be removed from this rate. Where special services are required, the term will be as specified in the applicable contract rider.

**LATE PAYMENT CHARGE:** See Section C4.8.

**INTERRUPTIBLE SPACE-CONDITIONING PROVISION:** Rate D1.1 is available on an optional basis.

**WATER HEATING SERVICE:** Water heating service is available on an optional basis. See Schedule Designation No. D5.

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**RATE SCHEDULE NO. D1.7**

**GEOTHERMAL TIME-OF-DAY RATE**

**AVAILABILITY OF SERVICE:** Available on an optional basis to residential customers desiring separately metered service for approved geothermal space conditioning and/or water heating. To qualify for the rate the water heater must be for sanitary purposes with the tank size, design and method of installation approved by the company. The space conditioning equipment must be permanently installed.

**HOURS OF SERVICE:** 24 Hours

**CURRENT, PHASE AND VOLTAGE:** Same as D1 and D3 Rates

**CONTRACT TERM:** The customer shall contract to remain on this rate for at least 12 months terminable on three days notice after the initial 12 months by either party. Where special services are required, the term will be specified on the applicable contract rider.

**INSULATION STANDARDS FOR ELECTRIC HEATING:** See Section C4.9.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**LATE PAYMENT CHARGE:** See Section C4.8.

**RATE PER DAY:**

**Full Service Customers:**

**Residential Power Supply Charges:**

Capacity Energy Charge (June through September):

**11.59¢** per kWh for all On-peak kWh

**2.214¢** per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):

**3.629¢** per kWh for all On-peak kWh

**2.330¢** per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.

Off-Peak Hours: All other kWh used.

Non-Capacity Energy Charge: **2.432¢** per kWh for all kWh

**Residential Delivery Charges:**

Service Charge: **6.70¢** per day

Distribution Charge: **6.611¢** per kWh for all kWh

(Continued on Sheet No. D-13.01)

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Second Revised Sheet No. D-13.01  
Cancels First Revised Sheet No. D-13.01

(Continued from Sheet No. D-13.00)

**RATE SCHEDULE NO. D1.7 (Contd.)**

**GEOTHERMAL TIME-OF-DAY RATE**

**Commercial Power Supply Charges:**

Capacity Energy Charge (June through September):

**3.447¢** per kWh for all On-peak kWh

**1.792¢** per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):

**2.206¢** per kWh for all On-peak kWh

**2.206¢** per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.

Off-Peak Hours: All other kWh used.

Non-Capacity energy Charge:

**2.486¢** per kWh for all kWh

**Commercial Delivery Charges:**

Service Charge: **6.70¢** per day

Distribution Charge: **3.078¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Residential Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through September):

**11.595¢** per kWh for all On-peak kWh

**2.214¢** per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):

**3.629¢** per kWh for all On-peak kWh

**2.330¢** per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.

Off-Peak Hours: All other kWh used.

**Residential Delivery Charges:**

Service Charge: **6.70¢** per day

Distribution Charge: **6.611¢** per kWh for all kWh

Commerical Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through September):

**3.447¢** per kWh for all On-peak kWh

**1.792¢** per kWh for all Off-peak kWh

(Continued on Sheet No. D-13.02)

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(Continued from Sheet No. D-13.01)

**RATE SCHEDULE NO. D1.7 (Contd.)**

**GEOTHERMAL TIME-OF-DAY RATE**

Capacity Energy Charge (October through May):

**2.206¢** per kWh for all On-peak kWh

**2.206¢** per kWh for all Off-peak kWh

**Commercial Delivery Charges:**

Service Charge:           **6.70¢** per day

Distribution Charge:     **3.078¢** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the commission. See Section C5.8.

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(Continued from Sheet No. D-14.01)

**RATE SCHEDULE NO. D1.8 (Contd.)**

**DYNAMIC PEAK PRICING RATE**

**CHARGES:**

**Full Service Residential Customers:**

**Power Supply Charges:**

Capacity Energy Charges:      **13.025¢** per kWh for all On-Peak kWh  
                                     **5.645¢** per kWh for all Mid-Peak kWh  
                                     **1.218¢** per kWh for all Off-Peak kWh  
                                     **\$0.91424** per kWh for all kWh during Critical Peak Hours

Non-Capacity Energy Charge: **3.576¢** per kWh for all kWh

**Delivery Charges:**

Service Charge:                \$7.50 per month  
Distribution Charge:           **6.611¢** per kWh for all kWh

**Full Service Secondary Commercial and Industrial Customers:**

**Power Supply Charges:**

Capacity Energy Charges:      **11.005¢** per kWh for all On-Peak kWh  
                                     **4.492¢** per kWh for all Mid-Peak kWh  
                                     **0.694¢** per kWh for all Off-Peak kWh  
                                     **\$0.93013** per kWh for all kWh during Critical Peak Hours

Non-Capacity Energy Charge:        **4.374¢** per kWh for all kWh

**Delivery Charges:**

Service Charge:                \$11.25 per month  
Distribution Charge:           **3.868¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**SCHEDULE OF HOLIDAYS:** See Section C11

**CONTRACT TERM:** The customer shall contract to remain on this rate for at least 12 months terminable on three days' notice after the initial 12 months by either party.

**LATE PAYMENT CHARGE:** See Section C4.8.

**INCOME ASSISTANCE SERVICE PROVISION (RIA):** *When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's*

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DTE Electric Company

(Final Order Case No. U-20561)

Fourth Revised Sheet No. D-14.01

Cancels Third Revised Sheet No. D-14.01

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*total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.*

***The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:***

***Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.***

***Income Assistance Credit: \$7.50 per customer per month***

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**RATE SCHEDULE NO. D1.9**

**ELECTRIC VEHICLE RATE**

**AVAILABILITY OF SERVICE:** Available on an optional basis to residential and commercial customers desiring separately metered service for the sole purpose of charging licensed electric vehicles. Installations must conform to the Company's specifications. Service under this tariff is limited to 5,000 customers. Service on this rate is limited to electric vehicles that are SAE J1772 compliant, and all vehicles shall be registered and operable on public highways in the State of Michigan to qualify for this rate. Low-speed electric vehicles including golf carts are not eligible to take service under this rate even if licensed to operate on public streets. The customer may be required to provide proof of registration of the electric vehicle to qualify for the program.

**HOURS OF SERVICE:** 24 Hours

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three wire. In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken

**CONTRACT TERM:** Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified on the applicable contract rider.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**LATE PAYMENT CHARGE:** See Section C4.8.

**OPTION 1: TIME OF DAY PRICING**

**Full Service Customers:**

**Power Supply Charges:**

Capacity Energy Charge:

**9.791¢** per kWh for all On-peak kWh  
**2.448¢** per kWh for all Off-peak kWh

Non-Capacity Energy Charge:

**7.889¢** per kWh for all On-peak kWh  
**1.972¢** per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 9 am and 11 pm Monday through Friday.

Off-Peak Hours: All other kWh used.

**Delivery Charges:**

Service Charge:	\$1.95 per month
Distribution Charge:	<b>6.611¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge:

**9.791¢** per kWh for all On-peak kWh  
**2.448¢** per kWh for all Off-peak kWh

(Continued on Sheet No. D-14.04)

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(Continued from Sheet No. D-14.03)

**RATE SCHEDULE NO. D1.9 (Contd.)**

**EXPERIMENTAL ELECTRIC VEHICLE RATE**

**Retail Access Service Customer (Contd.):**

On-Peak Hours: All kWh used between 9 am and 11 pm Monday through Friday.  
Off-Peak Hours: All other kWh used.

**Delivery Charges:**

Service Charge: \$1.95 per month  
Distribution Charge: **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See C8.5.

**OPTION 2: MONTHLY FLAT FEE (Residential only):**

Closed to new customers as of May 31, 2019. Existing customers will be moved to a new rate by December 31, 2019.

**Monthly Fee:** \$48.34 per month per vehicle.

**Surcharges and Credits:** Included in monthly flat fee.

The monthly flat-fee option shall be limited to 250 customers.

**SPECIAL TERMS AND CONDITIONS:**

Service under this rate must be supplied through a separately metered circuit and approved electric vehicle charging equipment. Installations must conform with the Company's specifications.

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## RATE SCHEDULE NO. D2

## RESIDENTIAL SPACE HEATING RATE

**AVAILABILITY OF SERVICE:** Available on an optional basis to customers desiring service for all residential purposes to a single or double occupancy dwelling unit including farm dwellings. All of the space heating must be total electric installed on a permanent basis and served through one meter. This rate also available to customers with add-on heat pumps and fossil fuel furnaces served on this rate prior to July 16, 1985. The design and method of installation and control of equipment as adopted to this service are subject to approval by the Company. This rate is also available to customers with electric heat assisted with a renewable heat source.

This rate is available only to dwellings being served on this rate prior to December 17, 2015.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally. In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volt three-wire service may be taken.

### RATE PER DAY:

#### Full Service Customers:

##### Power Supply Charges:

Capacity Energy Charges: (June through October): **4.624¢** per kWh for the first 17 kWh per day  
**6.613¢** per kWh for over 17 kWh per day

Capacity Energy Charges: (November through May): **2.728¢** per kWh for the first 20 kWh per day  
**1.065¢** per kWh for over 20 kWh per day

Non-Capacity energy Charge: **4.373¢** per kWh for all kWh

##### Delivery Charges:

Service Charge \$7.50 per month

Distribution Charge: (June through October): **6.611¢** per kWh for all kWh

Distribution Charge: (November through May): **6.611¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge

#### Retail Access Service customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charges: (June through October): **4.624¢** per kWh for the first 17 kWh per day  
**6.613¢** per kWh for over 17 kWh per day

Capacity Energy Charges: (November through May): **2.728¢** per kWh for the first 20 kWh per day  
**1.065¢** per kWh for over 20 kWh per day

(Continued on Sheet No. D-16.00)

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**RATE SCHEDULE NO. D2 (Contd.)**

**RESIDENTIAL SPACE HEATING RATE**

**Delivery Charges:**

Service Charge	\$7.50 per month
Distribution Charge: (June through October):	<b>6.611¢</b> per kWh for all kWh
Distribution Charge: (November through May):	<b>6.611¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**BILLING FREQUENCY:** Based on a nominal 30-day month. See Section C4.5.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**CONTRACT TERM:** Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

**WATER HEATING SERVICE:** Water heating service is available on an optional basis. See Schedule Designation No. D5.

**LATE PAYMENT CHARGE:** See Section C4.8.

**INTERRUPTIBLE SPACE-CONDITIONING PROVISION:** Rate D1.1 is available on an optional basis.

**INSULATION STANDARDS FOR ELECTRIC HEATING:** See Section C4.9.

**INCOME ASSISTANCE SERVICE PROVISION (RIA):** *When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.*

*The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:*

**Delivery Charges:** These charges are applicable to Full Service and Retail Open Access customers.

**Income Assistance Credit:** **\$7.50 per customer per month**

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## RATE SCHEDULE NO. D3

## GENERAL SERVICE RATE

**AVAILABILITY OF SERVICE:** Available to customers desiring service for any purpose, except that this rate is not available for service in conjunction with the Large General Service Rate. At the Company's option, service may be available to loads in excess of 1000 kW for situations where significant modifications to service facilities are not required to serve the excess load. The 1000 kW discretionary demand restriction does not apply to service provided to Electric Vehicle Fast-Chargin Stations until June 1, 2024. Effective May 27, 1981, this rate is not available to customers desiring service through one meter for residential purposes to a single or double occupancy dwelling unit.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity Energy Charge:	<b>3.900¢</b> per kWh for all kWh
Non-Capacity Energy Charge:	<b>4.345¢</b> per kWh for all kWh

**Delivery Charges:**

Service Charge:	\$11.25 per month
Distribution Charge:	<b>3.868¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:  
Capacity Energy Charge: **3.900¢** per kWh for all kWh

**Delivery Charges:**

Service Charge:	\$11.25 per month
Distribution Charge:	<b>3.868¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

(Continued on Sheet No. D-19.00)

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Seventh Revised Sheet No. D-20.00  
Cancels Sixth Revised Sheet No. D-20.00

**RATE SCHEDULE NO. D3.1****UNMETERED GENERAL SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available at the option of the Company to customers for loads that can be readily calculated and are impractical to meter.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

**SERVICE CONNECTIONS:** The customer is to furnish and maintain all necessary wiring and equipment, or reimburse the Company therefore. Connections are to be brought to the Company's underground or overhead lines by the customer as directed by the Company, and the final connections to the Company's line are to be made by the Company.

Conversion and/or relocation of existing facilities must be paid for by the customer, except when initiated by the Company. The detailed provisions and schedule of such charges will be quoted upon request.

**RATE:** Capacity charge of **3.345¢** and non-capacity charge of **7.594¢** both applied per month per kilowatthour of the total connected load in service for each customer. Loads operated cyclically will be prorated. This rate is based on 350 hours per month. Proration of cyclical loads will not apply when hours of operation are within 10% of base. Proration may either increase or decrease connected load.

The Company may, at its option, install meters and apply a standard metered rate schedule applicable to the service.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** \$3.00 per month.

**CONTRACT TERM:** Open order on a month-to-month basis.

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Cancels Sixth Revised Sheet No. D-20.01

**RATE SCHEDULE NO. D3.2****SECONDARY EDUCATIONAL INSTITUTION RATE**

**AVAILABILITY OF SERVICE:** Available to Educational Institution (school, college, university) customer locations desiring service at secondary voltage. School shall mean buildings, facilities, playing fields, or property directly or indirectly used for school purposes for children in grades kindergarten through twelve, when provided by a public or nonpublic school. School does not include instruction provided in a private residence or proprietary trade, vocational training, or occupational school. "College" or "University" shall mean buildings owned by the same customer which are located on the same campus and which constitute an integral part of such college or university facilities.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

**RATE PER MONTH:****Full Service Customers:****Power Supply Charges:**

Capacity Energy Charge:	3.002¢ per kWh for all kWh
Non-Capacity Energy Charge:	4.356¢ per kWh for all kWh

**Delivery Charges:**

Service Charge:	\$11.25 per month
Distribution Charge:	3.730¢ per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge:	3.002¢ per kWh for all kWh
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**Delivery Charges:**

Service Charge:	\$11.25 per month
Distribution Charge:	3.730¢ per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the approved commission. See section C8.5.

**LATE PAYMENT CHARGE:** See Section C4.9.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

(Continued on Sheet No. D-20.02)

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Seventh Revised Sheet No. D-21.00  
Cancels Sixth Revised Sheet No. D-21.00

**RATE SCHEDULE NO. D3.3****INTERRUPTIBLE GENERAL SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available to no more than 300 customers desiring interruptible service in conjunction with service taken under the general service rate. Service to interruptible load *may* be taken through separately metered circuits and permanently wired. The design and method of installation for application of this rate shall be subject to the approval of the Company. Service to interruptible load may not be transferred to firm service circuits to avoid interruption. At the Company's option, in lieu of the requirement for separately metered circuits and associated *interruption* equipment the customer may elect to *contract for a minimum firm load demand to protect product or process loads in accordance with the product protection provision of this tariff.* *Under this option,* interval demand metering *will be* installed in order to monitor compliance when called to interrupt load. This rate is not available for loads that are primarily off-peak, such as outdoor lighting.

**HOURS OF SERVICE:** 24 hours except as described below.

**HOURS OF INTERRUPTION:** All *interruptible load served* hereunder shall be subject to interruption by the Company and may include interruptions for, but not limited to, maintaining system integrity, making an emergency purchase, economic reasons, or when available system generation is insufficient to meet anticipated system load. *A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3.*

**NOTICE OF INTERRUPTION:** *The customer shall be provided, whenever possible, notice in advance (generally 1 hour) of probable interruption, the time in which customer must fully reduce its interruptible load, and the estimated duration of the interruption.*

**NON-INTERRUPTION PENALTY:** A customer who does not *fully comply with the timing and load reduction prescribed in the Notice of Interruption* shall be billed at the rate of \$50 per kW *applied to* the highest 60-minute *integrated interruptible demand* (kW) created during the interruption period, in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not *fully comply with an interruption order* *may* be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

**RATE PER MONTH:****Full Service Customers:****Power Supply Charges:**

Capacity Energy Charge:	3.258¢ per kWh for all kWh
Non-Capacity Energy Charge:	3.630¢ per kWh for all kWh

**Delivery Charges:**

Service Charge:	\$11.25 per month
Distribution Charge:	3.868¢ per kWh for all kWh

(Continued on Sheet No. D-22.00)

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Sixth Revised Sheet No. D-22.00  
Cancels Fifth Revised Sheet No. D-22.00

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(Continued from Sheet No. D-21.00)

**RATE SCHEDULE NO. D3.3 (Contd.)****INTERRUPTIBLE GENERAL SERVICE RATE**

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge: **3.258¢** per kWh for all kWh

**Delivery Charges:**

Service Charge: \$11.25 per month

Distribution Charge: **3.868¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the commission. See Section C8.5.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**PRODUCT PROTECTION PROVISION (Full Service Customers Only):** *A customer on rate D3.3 may elect to contract for a minimum load during the period of interruption to protect his product or process. This minimum load called "product protection load" shall not exceed 50% of the total contracted interruptible load and shall be charged rates equal to the General Service Rate (D3) power supply charge.*

**CONTRACT TERM:** *The contract term is one year, extending thereafter from month-to-month until terminated by mutual consent or on twelve months written notice by either party, which may be given at any time after the end of the first year.* However, where special services are required or where the investment to serve is out of proportion to the revenue derived there from, the contract term will be as specified in the applicable contract rider or Extension of Service Agreement.

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**RATE SCHEDULE NO. D4**

**LARGE GENERAL SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available to customers desiring service for any purpose, except that this rate is not available for service in conjunction with the General Service Rate.

Effective May 27, 1981, this rate is not available to customers desiring service through one meter for residential purposes to a single or double occupancy dwelling unit.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity Demand Charge:	\$14.07 per kW applied to the Monthly Billing Demand
Non-Capacity Demand Charges:	\$2.92 per kW applied to the Monthly Billing Demand
Non-Capacity Energy Charges:	4.171¢ per kWh for the first 200 kWh per kW of billing demand 3.219¢ per kWh for the excess

**Delivery Charges:**

Service Charge:	\$13.67 per month
Distribution Demand Charge:	\$17.10 per kW applied to the Monthly Billing Demand

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:  
Capacity Demand Charge: \$14.07 per kW applied to the Monthly Billing Demand

**Delivery Charges:**

Service Charge:	\$13.67 per month
Distribution Demand Charge:	\$17.10 per kW applied to the Monthly Billing Demand

(Continued on Sheet No. D-25.00)

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**RATE SCHEDULE NO. D5**

**WATER HEATING SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available to customers using hot water for sanitary purposes (other uses subject to the approval of the Company) and taking service under Residential and General Service Rate Schedules. This rate is also available to customers with solar assisted hot water heaters. Company approved waste heat reclamation systems and heat pump water heaters when used in conjunction with an approved electric water heater are also acceptable for use.

Available to customers who desire controlled water heating service to all of the heating elements of electric water heaters, the design and method of installation of which are approved by the Company as adapted to this service, taken through a separately metered circuit to which no other load except water heating may be connected.

**HOURS OF SERVICE:** The daily use of all controlled water heating service will be controlled by a timer or other monitoring device. Control of service shall not exceed 4 hours per day, said hours to be established from time to time by the Company.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, nominally at 240 volts, three-wire, except that, in certain city districts, alternating current service at 208 volts, nominal, three-wire, or three-phase at the option of the Company.

**RATE PER MONTH:**

**Full Service Customers:**

Residential Power Supply Charges:

Capacity Energy Charge:	<b>2.765¢</b> per kWh for all kWh
Non-Capacity Energy Charge:	<b>2.228¢</b> per kWh for all kWh

Residential Delivery Charges:

Service Charge:	\$1.95 per month
Distribution Charge:	<b>6.611¢</b> per kWh for all kWh

Commercial Power Supply Charges:

Capacity Energy Charge:	<b>2.296¢</b> per kWh for all kWh
Non-Capacity Energy Charge:	<b>2.558¢</b> per kWh for all kWh

Commercial Delivery Charges:

Service Charge:	\$1.95 per month
Distribution Charge:	<b>3.589¢</b> per kWh for all kWh

**Retail Access Service Customers:**

Residential Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge: **2.765¢** per kWh for all kWh

(Continued on Sheet No. D-27.00)

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(Continued from Sheet No. D-26.00)

**RATE SCHEDULE NO. D5 (Contd.)**

**WATER HEATING SERVICE RATE**

**Retail Access Service Customers (contd):**

Residential Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE (contd):

Residential Delivery Charges:

Service Charge: \$1.95 per month  
Distribution Charge: **6.611¢** per kWh for all kWh

Commerical Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge: **2.296¢** per kWh for all kWh

Commercial Delivery Charges:

Service Charge: \$1.95 per month  
Distribution Charge: **3.589¢** per kWh for all kWh

**SURCHARGES AND CREDITS:** As approved by the Commission. Power Supply Charges are subject to Section C8.5. Delivery Charges are subject to Section C9.8. Capacity related surcharges and credits applicable topower supply, excluding PSCR, as approved by the Commission. see Section C8.5.

**CONTRACT TERM:** Open order, terminable or three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**WATER HEATER REQUIREMENTS FOR WATER HEATER RATE APPLICATION:**

<u>Rate Option</u>	<u>Minimum Tank Capacity*</u>	<u>Maximum Total Connected Load**</u>
<b>Residential</b>	30 gallons	5.5 kW
<u>Rate Option</u>	<u>Minimum Tank Capacity*</u>	<u>Maximum Total Connected Load**</u>
<b>Commercial</b>	2 gallons per kW of total connected load 40 gallon minimum	Controlled by minimum tank capacity requirements

\*No limitation to number of tanks

\*\*Single or multi-element

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Seventh Revised Sheet No. D-36.01  
Cancels Sixth Revised Sheet No. D-36.01

**RATE SCHEDULE NO. D6.2****PRIMARY EDUCATIONAL INSTITUTION RATE**

**AVAILABILITY OF SERVICE:** Available to Educational Institution (school, college, university) customer locations desiring service at primary, sub-transmission, or transmission voltage who contract for a specified capacity of not less than 50 kilowatts at a single location. School shall mean buildings, facilities, playing fields, or property directly or indirectly used for school purposes for children in grades kindergarten through twelve, when provided by a public or nonpublic school. School does not include instruction provided in a private residence or proprietary trade, vocational training, or occupational school. "College" or "University" shall mean buildings owned by the same customer which are located on the same campus and which constitute an integral part of such college or university facilities.

**HOURS OF SERVICE:** 24 hours, subject to interruption by agreement, or by advance notice.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

**CONTRACT CAPACITY:** Customers shall contract for a specified capacity in kilowatts sufficient to meet normal maximum requirements but not less than 50 kilowatts. The Company undertakes to provide the necessary facilities for a supply of electric power from its primary distribution system at the contract capacity. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for customers served at more than one voltage level shall be the sum of the contract capacities established for each voltage level.

**RATE PER MONTH:****Full Service Customers:****Power Supply Charges:****Capacity**

Demand Charge: **\$14.81** per kW of on-peak billing demand

**Voltage Level Discount:**

**\$0.90 per kW at transmission level**

**\$0.60 per kW at subtransmission level**

**Non-Capacity**

Energy Charges: **4.307¢** per kWh for all on-peak kWh

**4.007¢** per kWh for all off-peak kWh

**Voltage Level Discount:**

**0.223¢ per kWh at transmission level**

**0.131¢ per kWh at subtransmission level**

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

**Distribution Charges:**

For primary service (less than 24 kV) **\$4.21** per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

(Continued on Sheet No. D-36.02)

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(Continued from Sheet No. D-36.01)

**RATE SCHEDULE NO. D6.2 (Contd.)**

**PRIMARY EDUCATIONAL INSTITUTION RATE**

**Full Service Customers (Contd.):**

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

Capacity (Only applicable to Retail Access Service Customers receiving utility Capacity Service from DTE Electric)

Demand Charge: **\$14.81** per kW of on-peak billing demand

**Voltage Level Discount:**

**\$0.90 per kW of on-peak billing demand at transmission level**  
**\$0.60 per kW of on-peak billing demand at subtransmission level**

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**Retail Access Service Customers:**

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

Distribution Charges:

For primary service (less than 24 kV) **\$4.21** per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**LATE PAYMENT CHARGE:** See Section C4.8.

**DEFINITION OF CUSTOMER VOLTAGE LEVEL:** See Section C13.

**MONTHLY ON-PEAK BILLING DEMAND:** The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. The monthly on-peak billing demand will not be less than 65% of the highest monthly on-peak metered billing demand during the billing months of June, July, August, September, and October of the preceding eleven billing months, nor less than 50 kilowatts.

(Continued on Sheet No. D-36.03)

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**RATE SCHEDULE NO. D8****INTERRUPTIBLE SUPPLY RATE**

**AVAILABILITY OF SERVICE:** Available to customers desiring separately metered service at primary voltage who contract for a specified quantity of demonstrated interruptible load of not less than 50 kilowatts at a single location. Contracted interruptible capacity on this rate is limited to 300 megawatts.

**HOURS OF INTERRUPTION:** All *interruptible load served* hereunder shall be subject to curtailment on order of the Company. Customers may be ordered to interrupt only when the Company finds it necessary to do so either to maintain system integrity or when the existence of such loads shall lead to a capacity deficiency by the utility. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3. A Capacity Deficiency Interruption Order may be given by the Company when *the Company's* available generation *assets are* insufficient to meet *the Company's* anticipated *full service* load.

**NOTICE OF CAPACITY DEFICIENCY INTERRUPTION:** The customer shall be provided, whenever possible, notice in advance of probable interruption and the estimated duration of the interruption.

**NON-INTERRUPTION FEE:** Customers who do not interrupt within one hour following notice of a capacity deficiency interruption order shall be billed at the cost of replacement energy plus 0.576¢ per kWh during the time of interruption plus the applicable voltage level charge, but not less than the normal D8 rate. Voltage level charges for service other than transmission voltage are:

0.191¢ per kWh at the distribution level.

0.079¢ per kWh at the subtransmission level.

**HOURS OF INTERRUPTION:** *All interruptible load served hereunder shall be subject to interruption by the Company in order to maintain system integrity. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3.*

**NOTICE OF SYSTEM INTEGRITY INTERRUPTION:** *The customer shall be provided, whenever possible, notice in advance (generally 1 hour) of probable interruption, the time in which customer must fully reduce load, and the estimated duration of the interruption.*

**NON-INTERRUPTION PENALTY:** *A customer who does not fully comply with the timing and load reduction prescribed in the Notice of System Integrity Interruption shall be billed at the rate of \$50 per kW applied to the highest 60-minute integrated interruptible demand (kW) created during the interruption period, in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not fully comply with a System Integrity interruption order may be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.*

**CURRENT, PHASE AND VOLTAGE:** Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

**CONTRACT CAPACITY:** Customers shall contract for a specified capacity in kilowatts sufficient to meet maximum interruptible requirements, but not less than 50 kilowatts. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The interruptible contract capacity shall not include any firm power capacity, except under Product Protection Provision.

(Continued on Sheet No. D-41.00)

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(Continued from Sheet No. D-40.00)

**RATE SCHEDULE NO. D8 (Contd.)**

**INTERRUPTIBLE SUPPLY RATE**

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:  
Capacity**

Demand Charge: **\$5.94** per kW of on-peak billing demand

Voltage Level Discount:

**\$0.36** per kW of on-peak billing demand at transmission level

**\$0.24** per kW of on-peak billing demand at subtransmission level

**Non-Capacity**

Demand Charge: **\$4.00** per kW of on-peak billing demand

Voltage Level Discount:

**\$0.22** per kW of on-peak billing demand at transmission level

**\$0.13** per kW of on-peak billing demand at subtransmission level

**Energy Charge:**

**4.261¢** per kWh for all on-peak kWh

**3.261¢** per kWh for all off-peak kWh

**Voltage Level Discount:**

**0.191¢** per kWh at transmission level

**0.113¢** per kWh at subtransmission level

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

**Distribution Charges:**

For primary service (less than 24 kV) **\$4.21** per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

(Continued on Sheet No. D-42.00)

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D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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(Continued from Sheet No. D-41.00)

**RATE SCHEDULE NO. D8 (Contd.)**

**INTERRUPTIBLE SUPPLY RATE**

**Retail Access Service customers:**

Capacity (only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Demand Charge: \$5.94 per kW of on-peak billing demand

Voltage Level Discount: \$0.36 per kW of on-peak billing demand at transmission level  
\$0.24 per kW of on-peak billing demand at subtransmission level

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**Delivery Charges:**

Primary Service Charge: \$70 per month

Subtransmission and Transmission Service Charge: \$375 per month

Distribution Charges:

For primary service (less than 24 kV) \$4.21 per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) \$1.65 per kW of maximum demand.

For service at transmission voltage (120 kV and above) \$0.70 per kW of maximum demand.

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**DEFINITION OF CUSTOMER VOLTAGE LEVEL:** See Section C13.

**MONTHLY ON-PEAK BILLING DEMAND:** The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. In no event will the monthly on-peak billing demand be less than 65% of the highest monthly on-peak metered billing demand during the billing months of June, July, August, September, and October of the preceding eleven billing months, nor less than 50 kilowatts.

**MAXIMUM DEMAND:** The maximum demand shall be the highest 30-minute demand created during the previous 12 billing months, including the current month but not less than 50% of contract capacity. This clause is applicable to each voltage level served.

**MINIMUM CHARGE:** All applicable demand charges plus the service charge and any applicable per meter per month surcharges.

**ON-PEAK HOURS:** See Section C11.

(Continued on Sheet No. D-43.00)

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M.P.S.C. No. 1 - Electric  
DTE Electric Company  
(Final Order Case No. U-20561)

Seventh Revised Sheet No. D-45.00  
Cancels Sixth Revised Sheet No. D-45.00

(Continued from Sheet No. D-44.00)

**RATE SCHEDULE NO. D9 (Contd.)****OUTDOOR PROTECTIVE LIGHTING**

- (1) Special purpose facilities are considered to be line or cable extensions, transformers, and any additional poles without lights, excluding facilities provided under stated charges on Sheet No. D-45.00. Where special purpose facilities are required, a service charge of 18% per year on the investment in such facilities will be billed in installments as an addition to the regular rate for each light. In the event the customer discontinues service before the end of the contract term, the established rate as well as the service charge on special purpose facilities for the remaining portion of the contract term shall immediately become due and payable. This provision was closed to new installations as of January 22, 1994.
- (2) For new installations after January 22, 1994, which require investment in excess of three times the annual revenue, this rate is available only to customers who make a contribution in aid of construction equal to the amount by which the investment exceeds three times the annual revenue at the prevailing rate at the time of installation.
- (3) For new underground-fed installations of 5 lights or more after May 1, 2019, which require investment in excess of three times the annual revenue, the customer may elect to pay a post charge for each increment of \$1,000 investment required above three times the annual revenue.

**MONTHLY RATES:** Overhead Outdoor Protective Lighting with Existing Pole and Existing Secondary Facilities  
(All-night service).

## Power Supply Charges:

Capacity Energy Charge:	0.00¢ per kWh for all kWh
Non-Capacity Energy Charge:	4.47¢ per kWh for all kWh

## Luminaire Charges:

(a)  Nominal Lamp Size	(b)  Type of Service	(c)  Distribution Charge per Lamp per Month	(d)  System Wattage	(e)  Average Monthly Hours (4200/12)	(f)  Energy Charge	(g)  Average Energy Cost per Month (d*e*f/1000)	(h)  Average Monthly Cost
100 W	Mercury Vapor	\$13.16	120	350	\$0.0447	\$1.88	\$15.04
175 W	Mercury Vapor	\$16.22	210	350	\$0.0447	\$3.29	\$19.50
250 W	Mercury Vapor	\$19.27	300	350	\$0.0447	\$4.70	\$23.97
400 W	Mercury Vapor	\$25.25	450	350	\$0.0447	\$7.04	\$32.29
1,000 W	Mercury Vapor	\$52.08	1060	350	\$0.0447	\$16.59	\$68.67
100 W	High Pressure Sodium	\$12.20	135	350	\$0.0447	\$2.11	\$14.32
150 W	High Pressure Sodium	\$14.48	200	350	\$0.0447	\$3.13	\$17.61
250 W	High Pressure Sodium	\$18.51	305	350	\$0.0447	\$4.77	\$23.29
400 W	High Pressure Sodium	\$22.56	465	350	\$0.0447	\$7.28	\$29.84
1,000 W	High Pressure Sodium	\$45.08	1100	350	\$0.0447	\$17.22	\$62.30
100 W	Metal Halide	\$11.68	120	350	\$0.0447	\$1.88	\$13.56
150 W	Metal Halide	\$14.13	180	350	\$0.0447	\$2.82	\$16.95
175 W	Metal Halide	\$15.35	210	350	\$0.0447	\$3.29	\$18.64
250 W	Metal Halide	\$19.03	300	350	\$0.0447	\$4.70	\$23.72
320 W	Metal Halide	\$22.46	365	350	\$0.0447	\$5.71	\$28.17
400 W	Metal Halide	\$26.37	460	350	\$0.0447	\$7.20	\$33.57
1,000 W	Metal Halide	\$55.76	1050	350	\$0.0447	\$16.43	\$72.19
20 - 29 W	LED	\$11.09	25	350	\$0.0447	\$0.39	\$11.49
30 - 39 W	LED	\$11.18	35	350	\$0.0447	\$0.55	\$11.73
40 - 49 W	LED	\$11.27	45	350	\$0.0447	\$0.70	\$11.97
50 - 59 W	LED	\$11.35	55	350	\$0.0447	\$0.86	\$12.21
60 - 69 W	LED	\$11.77	65	350	\$0.0447	\$1.02	\$12.79
70 - 79 W	LED	\$12.33	75	350	\$0.0447	\$1.17	\$13.50

(Continued on Sheet No. D-45.01)

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Third Revised Sheet No. D-45.01  
Cancels Second Revised Sheet No. D-45.01

(Continued from Sheet No. D-45.00)

**RATE SCHEDULE NO. D9 (Contd.)**

**OUTDOOR PROTECTIVE LIGHTING**

(a)  Nominal Lamp Size	(b)  Type of Service	(c)  Distribution Charge per Lamp per Month	(d)  System Wattage	(e)  Average Monthly Hours (4200/12)	(f)  Energy Charge	(g)  Average Energy Cost per Month (d*e*f/1000)	(h)  Average Monthly Cost
80 - 89 W	LED	\$12.89	85	350	\$0.0447	\$1.33	\$14.22
90 - 99 W	LED	\$13.45	95	350	\$0.0447	\$1.49	\$14.93
100 - 109 W	LED	\$14.00	105	350	\$0.0447	\$1.64	\$15.65
110 - 119 W	LED	\$14.56	115	350	\$0.0447	\$1.80	\$16.36
120 - 129 W	LED	\$15.12	125	350	\$0.0447	\$1.96	\$17.08
130 - 139 W	LED	\$15.68	135	350	\$0.0447	\$2.11	\$17.79
140 - 149 W	LED	\$16.24	145	350	\$0.0447	\$2.27	\$18.51
150 - 159 W	LED	\$16.79	155	350	\$0.0447	\$2.43	\$19.22
160 - 169 W	LED	\$17.35	165	350	\$0.0447	\$2.58	\$19.93
170 - 179 W	LED	\$17.91	175	350	\$0.0447	\$2.74	\$20.65
180 - 189 W	LED	\$18.47	185	350	\$0.0447	\$2.90	\$21.36
190 - 199 W	LED	\$19.02	195	350	\$0.0447	\$3.05	\$22.08
200 - 209 W	LED	\$19.58	205	350	\$0.0447	\$3.21	\$22.79
210 - 219 W	LED	\$20.16	215	350	\$0.0447	\$3.37	\$23.53
220 - 229 W	LED	\$20.75	225	350	\$0.0447	\$3.52	\$24.27
230 - 239 W	LED	\$21.33	235	350	\$0.0447	\$3.68	\$25.01
240 - 249 W	LED	\$21.91	245	350	\$0.0447	\$3.83	\$25.74
250 - 259 W	LED	\$22.49	255	350	\$0.0447	\$3.99	\$26.48
260 - 269 W	LED	\$23.07	265	350	\$0.0447	\$4.15	\$27.22
270 - 279 W	LED	\$23.66	275	350	\$0.0447	\$4.30	\$27.96
280 - 289 W	LED	\$24.20	285	350	\$0.0447	\$4.46	\$28.66
290 - 299 W	LED	\$24.73	295	350	\$0.0447	\$4.62	\$29.35
300 - 309 W	LED	\$25.27	305	350	\$0.0447	\$4.77	\$30.05
310 - 319 W	LED	\$25.81	315	350	\$0.0447	\$4.93	\$30.74
320 - 329 W	LED	\$26.35	325	350	\$0.0447	\$5.09	\$31.44
330 - 339 W	LED	\$26.89	335	350	\$0.0447	\$5.24	\$32.13
340 - 349 W	LED	\$27.43	345	350	\$0.0447	\$5.40	\$32.83
350 - 359 W	LED	\$27.97	355	350	\$0.0447	\$5.56	\$33.53
360 - 369 W	LED	\$28.51	365	350	\$0.0447	\$5.71	\$34.22
370 - 379 W	LED	\$29.05	375	350	\$0.0447	\$5.87	\$34.92
380 - 389 W	LED	\$29.59	385	350	\$0.0447	\$6.03	\$35.61
390 - 399 W	LED	\$30.12	395	350	\$0.0447	\$6.18	\$36.31

For installations prior to January 22, 1994. New Pole and Single Span of Secondary Facilities. The above rate plus \$24.48 per pole per year.

Effective January 22, 1994 installation requiring additional facilities shall pay a contribution in aid of construction in lieu of the service charge. Contribution is described in paragraph (2) above.

Multiple Lamps on a Single Pole. For each additional luminaire added to the same pole the charge will be at the existing pole rate.

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those fixtures fail. At that time, the luminaire will be converted to LED.

(Continued on Sheet No. D-46.00)

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Eighth Revised Sheet No. D-46.00  
Cancels Seventh Revised Sheet No. D-46.00

(Continued from Sheet No. D-45.01)

### RATE SCHEDULE NO. D9 (Contd.)

### OUTDOOR PROTECTIVE LIGHTING

**MONTHLY RATES:** Underground Outdoor Protective Lighting with Lamp Spacing up to 120 Feet of Trench (All-night service).

#### Power Supply Charges:

Capacity Energy Charge: 0.00¢ per kWh for all kWh

Non-Capacity Energy Charge: 4.47¢ per kWh for all kWh

#### Luminaire Charges:

(a)  Nominal Lamp Size	(b)  Type of Service	(c)  Distribution Charge per Lamp per Month	(d)  System Wattage	(e)  Average Monthly Hours (4200/12)	(f)  Energy Charge	(g)  Average Energy Cost per Month (d*e*f/1000)	(h)  Average Monthly Cost
100 W	Mercury Vapor	\$29.29	120	350	\$0.0447	\$1.88	\$31.17
175 W	Mercury Vapor	\$31.49	210	350	\$0.0447	\$3.29	\$34.77
250 W	Mercury Vapor	\$34.54	300	350	\$0.0447	\$4.70	\$39.23
400 W	Mercury Vapor	\$39.74	450	350	\$0.0447	\$7.04	\$46.78
1,000 W	Mercury Vapor	\$64.34	1060	350	\$0.0447	\$16.59	\$80.94
70 W	High Pressure Sodium	\$26.31	95	350	\$0.0447	\$1.49	\$27.79
100 W	High Pressure Sodium	\$27.17	135	350	\$0.0447	\$2.11	\$29.28
150 W	High Pressure Sodium	\$28.61	200	350	\$0.0447	\$3.13	\$31.74
250 W	High Pressure Sodium	\$31.49	305	350	\$0.0447	\$4.77	\$36.26
400 W	High Pressure Sodium	\$35.80	465	350	\$0.0447	\$7.28	\$43.08
1,000 W	High Pressure Sodium	\$53.07	1100	350	\$0.0447	\$17.22	\$70.29
100 W	Metal Halide	\$27.17	120	350	\$0.0447	\$1.88	\$29.05
150 W	Metal Halide	\$30.05	180	350	\$0.0447	\$2.82	\$32.87
175 W	Metal Halide	\$31.49	210	350	\$0.0447	\$3.29	\$34.77
250 W	Metal Halide	\$35.80	300	350	\$0.0447	\$4.70	\$40.50
400 W	Metal Halide	\$44.44	460	350	\$0.0447	\$7.20	\$51.64
1,000 W	Metal Halide	\$78.97	1050	350	\$0.0447	\$16.43	\$95.40
20 - 29 W	LED	\$26.90	25	350	\$0.0447	\$0.39	\$27.29
30 - 39 W	LED	\$27.38	35	350	\$0.0447	\$0.55	\$27.93
40 - 49 W	LED	\$27.86	45	350	\$0.0447	\$0.70	\$28.57
50 - 59 W	LED	\$28.34	55	350	\$0.0447	\$0.86	\$29.20
60 - 69 W	LED	\$28.82	65	350	\$0.0447	\$1.02	\$29.84
70 - 79 W	LED	\$29.28	75	350	\$0.0447	\$1.17	\$30.45
80 - 89 W	LED	\$29.73	85	350	\$0.0447	\$1.33	\$31.06
90 - 99 W	LED	\$30.18	95	350	\$0.0447	\$1.49	\$31.67
100 - 109 W	LED	\$30.64	105	350	\$0.0447	\$1.64	\$32.28
110 - 119 W	LED	\$31.09	115	350	\$0.0447	\$1.80	\$32.89
120 - 129 W	LED	\$31.54	125	350	\$0.0447	\$1.96	\$33.50
130 - 139 W	LED	\$31.95	135	350	\$0.0447	\$2.11	\$34.07
140 - 149 W	LED	\$32.37	145	350	\$0.0447	\$2.27	\$34.64
150 - 159 W	LED	\$32.78	155	350	\$0.0447	\$2.43	\$35.21
160 - 169 W	LED	\$33.19	165	350	\$0.0447	\$2.58	\$35.78
170 - 179 W	LED	\$33.61	175	350	\$0.0447	\$2.74	\$36.35
180 - 189 W	LED	\$34.02	185	350	\$0.0447	\$2.90	\$36.92

(Continued on Sheet No. D-46.01)

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Vice President

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Third Revised Sheet No. D-46.01  
Cancels Second Revised Sheet No. D-46.01

(Continued from Sheet No. D-46.00)

**RATE SCHEDULE NO. D9 (Contd.)****OUTDOOR PROTECTIVE LIGHTING****Luminaire Charges(Contd):**

(a)  Nominal Lamp Size	(b)  Type of Service	(c)  Distribution Charge per Lamp per Month	(d)  System Wattage	(e)  Average Monthly Hours (4200/12)	(f)  Energy Charge	(g)  Average Energy Cost per Month (d*e*f/1000)	(h)  Average Monthly Cost
190 - 199 W	LED	\$34.44	195	350	\$0.0447	\$3.05	\$37.49
200 - 209 W	LED	\$34.85	205	350	\$0.0447	\$3.21	\$38.06
210 - 219 W	LED	\$35.26	215	350	\$0.0447	\$3.37	\$38.63
220 - 229 W	LED	\$35.68	225	350	\$0.0447	\$3.52	\$39.20
230 - 239 W	LED	\$36.09	235	350	\$0.0447	\$3.68	\$39.77
240 - 249 W	LED	\$36.50	245	350	\$0.0447	\$3.83	\$40.34
250 - 259 W	LED	\$36.92	255	350	\$0.0447	\$3.99	\$40.91
260 - 269 W	LED	\$37.33	265	350	\$0.0447	\$4.15	\$41.48
270 - 279 W	LED	\$37.75	275	350	\$0.0447	\$4.30	\$42.05
280 - 289 W	LED	\$38.16	285	350	\$0.0447	\$4.46	\$42.62
290 - 299 W	LED	\$38.57	295	350	\$0.0447	\$4.62	\$43.19
300 - 309 W	LED	\$38.99	305	350	\$0.0447	\$4.77	\$43.76
310 - 319 W	LED	\$39.40	315	350	\$0.0447	\$4.93	\$44.33
320 - 329 W	LED	\$39.81	325	350	\$0.0447	\$5.09	\$44.90
330 - 339 W	LED	\$40.23	335	350	\$0.0447	\$5.24	\$45.47
340 - 349 W	LED	\$40.64	345	350	\$0.0447	\$5.40	\$46.04
350 - 359 W	LED	\$41.05	355	350	\$0.0447	\$5.56	\$46.61
360 - 369 W	LED	\$41.47	365	350	\$0.0447	\$5.71	\$47.18
370 - 379 W	LED	\$41.88	375	350	\$0.0447	\$5.87	\$47.75
380 - 389 W	LED	\$42.30	385	350	\$0.0447	\$6.03	\$48.32
390 - 399 W	LED	\$42.71	395	350	\$0.0447	\$6.18	\$48.89

Effective January 22, 1994 installation requiring additional facilities shall pay a contribution in aid of construction in lieu of the service charge. Contribution is described in paragraph (2) above.

Effective May 1, 2019, installations requiring additional facilities shall pay a post charge of **\$8.96** per increment of \$1,000 of expense in lieu of contribution in aid of construction. Contribution is described in paragraph (3) above.

Multiple Lamps on a Single Pole. For each additional luminaire added to the same pole reduce rate per lamp per year on the added luminaire by \$97.92.

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, the luminaire will be converted to LED.

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**RATE SCHEDULE NO. D10**

**ALL-ELECTRIC SCHOOL BUILDING SERVICE RATE**

**AVAILABILITY OF SERVICE:** Available to customers desiring service in school buildings served at primary voltage who contract for a specified installed capacity of not less than 50 kilowatts at a single location provided the space heating and water heating for all or a substantial portion of the premises is supplied by electric service and is installed on a permanent basis.

**HOURS OF SERVICE:** 24 hours, subject to interruption by agreement, or by advance notice.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, three-phase, nominally at 4,800 or 13,200 volts at the option of the Company.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity

Energy Charge (June through October): **4.455¢** per kWh for all kWh  
Energy Charge (November through May): **2.442¢** per kWh for all kWh

Non-Capacity

Energy Charge (June through October): **5.070¢** per kWh for all kWh  
Energy Charge (November through May): **5.070¢** per kWh for all kWh

**Delivery Charges:**

Service Charge: **\$70.00** per month  
Distribution Charge: **1.419¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charge (June through October): **4.455¢** per kWh for all kWh  
Energy Charge (November through May): **2.442¢** per kWh for all kWh

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**Delivery Charges:**

Service Charge: **\$70.00** per month  
Distribution Charge: **1.419¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-48.00)

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Sixth Revised Sheet No. D-48.01  
Cancels Fifth Revised Sheet No. D-48.01

**RATE SCHEDULE NO. D11****PRIMARY SUPPLY RATE**

**AVAILABILITY OF SERVICE:** Available to customers desiring service at primary, sub-transmission, or transmission voltage who contract for a specified capacity of not less than 50 kilowatts at a single location.

**HOURS OF SERVICE:** 24 hours, subject to interruption by agreement, or by advance notice.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

**CONTRACT CAPACITY:** Customers shall contract for a specified capacity in kilowatts sufficient to meet normal maximum requirements but not less than 50 kilowatts. The Company undertakes to provide the necessary facilities for a supply of electric power from its primary distribution system at the contract capacity. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for customers served at more than one voltage level shall be the sum of the contract capacities established for each voltage level.

**RATE PER MONTH:****Full Service Customers:****Power Supply Charges:**

## Capacity

Demand Charge: **\$13.82** per kW of on-peak billing demand

## Voltage Level Discount:

**\$0.84** per kW of on-peak billing demand at transmission level

**\$0.56** per kW of on-peak billing demand at subtransmission level

## Non-Capacity

Demand Charge: **\$3.30** per kW of on-peak billing demand

## Voltage Level Discount:

**\$0.18** per kW of on-peak billing demand at transmission level

**\$0.11** per kW of on-peak billing demand at subtransmission level

Energy Charge: **4.261¢** per kWh for all on-peak kWh

**3.261¢** per kWh for all off-peak kWh

**Voltage Level Discount:**

**0.191¢** per kWh at transmission level

**0.113¢** per kWh at subtransmission level

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

**Distribution Charges:**

For primary service (less than 24 kV) **\$4.21** per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

Continued on Sheet No. D-48.02)

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Vice President

Regulatory Affairs

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(Continued from Sheet No. D-48.01)

**RATE SCHEDULE NO. D11 (Contd.)**

**PRIMARY SUPPLY RATE**

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Demand Charge: **\$13.82** per kW of on-peak billing demand

Voltage Level Discount:

**\$0.84** per kW of on-peak billing demand at transmission level

**\$0.56** per kW of on-peak billing demand at subtransmission level

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C5.8.

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

**Distribution Charges:**

For primary service (less than 24 kV) **\$4.21** per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

**Substation Credit:** Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**DEFINITION OF CUSTOMER VOLTAGE LEVEL:** See Section C13.

**MONTHLY ON-PEAK BILLING DEMAND:** The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. The monthly on-peak billing demand will not be less than 65% of the highest monthly on-peak metered billing demand during

(Continued on Sheet No. D-48.03)

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(Continued from Sheet No. D-49.00)

**RATE SCHEDULE NO. E1 (Contd.)**

**MUNICIPAL STREET LIGHTING RATE**

**CONTRACT TERM:** Minimum 5 year term. Upon expiration of the initial term shall continue on a month-to-month basis until terminated by mutual written consent of the parties or by either party with thirty (30) days prior written notice to the other party. Any conversion, relocation and/or removal of existing street lighting facilities at the customer's request, including those removals necessitated by termination of service, must be paid for by the customer. The detailed provisions and schedule of charges, which may include the remaining value of the existing facilities, will be quoted upon request. The Company shall not withdraw service, and the municipality shall not substitute another source of service in whole or in part, without twelve months' written notice to the other party.

**Option I: Company Owned Street Lighting System**

Where new installations require an investment in excess of an investment allowance, Option I is available only to customers who make a contribution in aid of construction equal to the amount by which the investment exceeds three times the annual revenue at the prevailing rate at the time of installation. (Effective January 1, 1991, the investment amount will be limited to direct cost. Effective January 1, 1992, the investment amount will include full cost.)

As an alternative, where the required contribution exceeds \$10,000, upon agreement of the customer and the Company, the customer will pay an additional annual charge of the Company's weighted average cost of capital (**6.79%**) times the contribution amount in lieu of the cash contribution.

For new underground-fed installations of 5 lights or more after May 1, 2019, which require investment in excess of three times the annual revenue at the prevailing rate at the time of installation, the customer may elect to pay a post chrg for each increment of \$1,000 investment required above three times the annual revenue.

**DE-ENERGIZED LIGHTS:** Customers may elect to have any or all luminaires served under this rate disconnected. The charge per luminaire per year, payable in equal monthly installments, shall be 60% of the regular yearly rates. A \$35.00 charge per luminaire will be made at the time of de-energization and at the time of re-energization.

**DUSK TO MIDNIGHT SERVICE:** For service to parking lots from dusk to approximately twelve o'clock midnight E.S.T., a discount of 1.060¢ per nominal lamp size wattage per month will be applied. One control per circuit will be provided.

**EXPERIMENTAL PROGRAMMABLE PHOTOCCELL SERVICE:** Customers may elect to place luminaires on photocells that are programmable to turn off lights at pre-determined times during the night. A discount of 1.060¢ per nominal lamp size wattage per month will be applied.

**MONTHLY RATES OPTION I: Overhead Municipal Street Lighting (All-night service).**

Power Supply Charges:

Capacity Energy Charge: 0.00¢ per kWh for all kWh

Non-Capacity Energy Charge: **4.47¢** per kWh for all kWh

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Third Revised Sheet No. D-50.02  
Cancels Second Revised Sheet No. D-50.02

(Continued from Sheet No. D-50.00)

## RATE SCHEDULE NO. E1 (Contd.)

## MUNICIPAL STREET LIGHTING RATE

## Luminaire Charges:

( a )	( b )	( c )	( d )	( e )	( f )	( g )	( h )
<i>Nominal Lamp Size</i>	<i>Type of Service</i>	<i>Distribution Charge per Lamp per Month</i>	<i>System Wattage</i>	<i>Average Monthly Hours (4200/12)</i>	<i>Energy Charge</i>	<i>Average Energy Cost per Month</i>	<i>Average Monthly Cost</i>
100 W	Mercury Vapor	\$18.35	120 W	350	\$0.0447	\$1.88	\$20.23
175 W	Mercury Vapor	\$22.48	210 W	350	\$0.0447	\$3.29	\$25.77
250 W	Mercury Vapor	\$26.73	300 W	350	\$0.0447	\$4.70	\$31.42
400 W	Mercury Vapor	\$35.11	450 W	350	\$0.0447	\$7.04	\$42.16
1,000 W	Mercury Vapor	\$69.20	1,060 W	350	\$0.0447	\$16.59	\$85.79
70 W	High Pressure Sodium	\$13.63	95 W	350	\$0.0447	\$1.49	\$15.12
100 W	High Pressure Sodium	\$15.47	135 W	350	\$0.0447	\$2.11	\$17.58
150 W	High Pressure Sodium	\$18.45	200 W	350	\$0.0447	\$3.13	\$21.58
250 W	High Pressure Sodium	\$23.81	305 W	350	\$0.0447	\$4.77	\$28.59
310 W	High Pressure Sodium	\$26.97	380 W	350	\$0.0447	\$5.95	\$32.92
360 W	High Pressure Sodium	\$29.61	418 W	350	\$0.0447	\$6.54	\$36.15
400 W	High Pressure Sodium	\$31.76	465 W	350	\$0.0447	\$7.28	\$39.04
1,000 W	High Pressure Sodium	\$62.73	1,100 W	350	\$0.0447	\$17.22	\$79.95
70 W	Metal Halide	\$17.84	85 W	350	\$0.0447	\$1.33	\$19.17
100 W	Metal Halide	\$19.45	120 W	350	\$0.0447	\$1.88	\$21.33
150 W	Metal Halide	\$22.20	180 W	350	\$0.0447	\$2.82	\$25.02
175 W	Metal Halide	\$23.58	210 W	350	\$0.0447	\$3.29	\$26.86
250 W	Metal Halide	\$29.19	300 W	350	\$0.0447	\$4.70	\$33.89
320 W	Metal Halide	\$34.00	365 W	350	\$0.0447	\$5.71	\$39.71
400 W	Metal Halide	\$39.50	460 W	350	\$0.0447	\$7.20	\$46.70
1,000 W	Metal Halide	\$81.18	1,050 W	350	\$0.0447	\$16.43	\$97.61
20 - 29 W	LED	\$11.04	25 W	350	\$0.0447	\$0.39	\$11.44
30 - 39 W	LED	\$11.82	35 W	350	\$0.0447	\$0.55	\$12.37
40 - 49 W	LED	\$12.60	45 W	350	\$0.0447	\$0.70	\$13.30
50 - 59 W	LED	\$13.38	55 W	350	\$0.0447	\$0.86	\$14.24
60 - 69 W	LED	\$14.17	65 W	350	\$0.0447	\$1.02	\$15.19
70 - 79 W	LED	\$14.99	75 W	350	\$0.0447	\$1.17	\$16.16
80 - 89 W	LED	\$15.84	85 W	350	\$0.0447	\$1.33	\$17.17
90 - 99 W	LED	\$16.73	95 W	350	\$0.0447	\$1.49	\$18.22

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Third Revised Sheet No. D-50.02  
Cancels Second Revised Sheet No. D-50.02

<i>100 - 109 W</i>	<i>LED</i>	<i>\$17.67</i>	<i>105 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$1.64</i>	<i>\$19.32</i>
<i>110 - 119 W</i>	<i>LED</i>	<i>\$18.62</i>	<i>115 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$1.80</i>	<i>\$20.42</i>
<i>120 - 129 W</i>	<i>LED</i>	<i>\$19.63</i>	<i>125 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$1.96</i>	<i>\$21.59</i>
<i>130 - 139 W</i>	<i>LED</i>	<i>\$20.30</i>	<i>135 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.11</i>	<i>\$22.41</i>
<i>140 - 149 W</i>	<i>LED</i>	<i>\$20.83</i>	<i>145 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.27</i>	<i>\$23.10</i>
<i>150 - 159 W</i>	<i>LED</i>	<i>\$21.30</i>	<i>155 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.43</i>	<i>\$23.72</i>
<i>160 - 169 W</i>	<i>LED</i>	<i>\$21.77</i>	<i>165 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.58</i>	<i>\$24.35</i>
<i>170 - 179 W</i>	<i>LED</i>	<i>\$22.25</i>	<i>175 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.74</i>	<i>\$24.98</i>
<i>180 - 189 W</i>	<i>LED</i>	<i>\$22.72</i>	<i>185 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$2.90</i>	<i>\$25.61</i>
<i>190 - 199 W</i>	<i>LED</i>	<i>\$23.19</i>	<i>195 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.05</i>	<i>\$26.24</i>
<i>200 - 209 W</i>	<i>LED</i>	<i>\$23.70</i>	<i>205 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.21</i>	<i>\$26.91</i>
<i>210 - 219 W</i>	<i>LED</i>	<i>\$24.22</i>	<i>215 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.37</i>	<i>\$27.58</i>
<i>220 - 229 W</i>	<i>LED</i>	<i>\$24.73</i>	<i>225 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.52</i>	<i>\$28.25</i>
<i>230 - 239 W</i>	<i>LED</i>	<i>\$25.24</i>	<i>235 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.68</i>	<i>\$28.92</i>
<i>240 - 249 W</i>	<i>LED</i>	<i>\$25.75</i>	<i>245 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.83</i>	<i>\$29.59</i>
<i>250 - 259 W</i>	<i>LED</i>	<i>\$26.27</i>	<i>255 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$3.99</i>	<i>\$30.26</i>
<i>260 - 269 W</i>	<i>LED</i>	<i>\$26.78</i>	<i>265 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.15</i>	<i>\$30.93</i>
<i>270 - 279 W</i>	<i>LED</i>	<i>\$27.29</i>	<i>275 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.30</i>	<i>\$31.59</i>
<i>280 - 289 W</i>	<i>LED</i>	<i>\$27.84</i>	<i>285 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.46</i>	<i>\$32.31</i>
<i>290 - 299 W</i>	<i>LED</i>	<i>\$28.40</i>	<i>295 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.62</i>	<i>\$33.02</i>
<i>300 - 309 W</i>	<i>LED</i>	<i>\$28.97</i>	<i>305 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.77</i>	<i>\$33.75</i>
<i>310 - 319 W</i>	<i>LED</i>	<i>\$29.55</i>	<i>315 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$4.93</i>	<i>\$34.48</i>
<i>320 - 329 W</i>	<i>LED</i>	<i>\$30.12</i>	<i>325 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.09</i>	<i>\$35.21</i>
<i>330 - 339 W</i>	<i>LED</i>	<i>\$30.69</i>	<i>335 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.24</i>	<i>\$35.94</i>
<i>340 - 349 W</i>	<i>LED</i>	<i>\$31.27</i>	<i>345 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.40</i>	<i>\$36.67</i>
<i>350 - 359 W</i>	<i>LED</i>	<i>\$31.84</i>	<i>355 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.56</i>	<i>\$37.40</i>
<i>360 - 369 W</i>	<i>LED</i>	<i>\$32.41</i>	<i>365 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.71</i>	<i>\$38.13</i>
<i>370 - 379 W</i>	<i>LED</i>	<i>\$32.99</i>	<i>375 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.87</i>	<i>\$38.86</i>
<i>380 - 389 W</i>	<i>LED</i>	<i>\$33.56</i>	<i>385 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$6.03</i>	<i>\$39.59</i>
<i>390 - 399 W</i>	<i>LED</i>	<i>\$34.14</i>	<i>395 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$6.18</i>	<i>\$40.32</i>

#### Multiple Lamps on a Single Pole

- For each additional luminaire added to the same pole, reduce rate per lamp per year on the added luminaire \$12.24.

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available.

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Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, the luminaire will be converted to LED..

Continued on Sheet No. D-51.00)

(Continued from Sheet No. D-50.02)

**RATE SCHEDULE NO. E1 (Contd.)**

**MUNICIPAL STREET LIGHTING RATE**

**Option I:** Company Owned Street Lighting System (Contd.)

**MONTHLY RATES OPTION I:** Ornamental Underground Municipal Street Lighting for Lamp Spacing up to 120 Feet of Street (All-night service).

**Power Supply Charges:**

Capacity Energy Charge: 0.00¢ per kWh for all kWh

Non-Capacity Energy Charge: 4.47¢ per kWh for all kWh

**Luminaire Charges:**

(a) Nominal Lamp Size	(b) Type of Service	(c) Distribution Charge per Lamp per Month	(d) System Wattage	(e) Average Monthly Hours (4200/12)	(f) Energy Charge	(g) Average Energy Cost per Month	(h) Average Monthly Cost
100 W	Mercury Vapor	\$26.17	120 W	350	\$0.0447	\$1.88	\$28.05
175 W	Mercury Vapor	\$29.30	210 W	350	\$0.0447	\$3.29	\$32.58
250 W	Mercury Vapor	\$34.03	300 W	350	\$0.0447	\$4.70	\$38.73
400 W	Mercury Vapor	\$42.21	450 W	350	\$0.0447	\$7.04	\$49.26
1,000 W	Mercury Vapor	\$77.77	1,060 W	350	\$0.0447	\$16.59	\$94.36
70 W	High Pressure Sodium	\$22.17	95 W	350	\$0.0447	\$1.49	\$23.66
100 W	High Pressure Sodium	\$23.71	135 W	350	\$0.0447	\$2.11	\$25.82
150 W	High Pressure Sodium	\$26.02	200 W	350	\$0.0447	\$3.13	\$29.15
250 W	High Pressure Sodium	\$29.96	305 W	350	\$0.0447	\$4.77	\$34.73
310 W	High Pressure Sodium	\$32.48	380 W	350	\$0.0447	\$5.95	\$38.43
360 W	High Pressure Sodium	\$34.59	418 W	350	\$0.0447	\$6.54	\$41.13
400 W	High Pressure Sodium	\$36.22	465 W	350	\$0.0447	\$7.28	\$43.50
1,000 W	High Pressure Sodium	\$64.90	1,100 W	350	\$0.0447	\$17.22	\$82.12
70 W	Metal Halide	\$25.74	85 W	350	\$0.0447	\$1.33	\$27.07
100 W	Metal Halide	\$26.95	120 W	350	\$0.0447	\$1.88	\$28.83
150 W	Metal Halide	\$29.04	180 W	350	\$0.0447	\$2.82	\$31.86
175 W	Metal Halide	\$30.08	210 W	350	\$0.0447	\$3.29	\$33.37
250 W	Metal Halide	\$34.72	300 W	350	\$0.0447	\$4.70	\$39.42

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Third Revised Sheet No. D-51.01  
Cancels Second Revised Sheet No. D-51.01

<i>320 W</i>	<i>Metal Halide</i>	\$38.72	<i>365 W</i>	<i>350</i>	\$0.0447	\$5.71	\$44.43
<i>400 W</i>	<i>Metal Halide</i>	\$43.28	<i>460 W</i>	<i>350</i>	\$0.0447	\$7.20	\$50.48
<i>1,000 W</i>	<i>Metal Halide</i>	\$77.51	<i>1,050 W</i>	<i>350</i>	\$0.0447	\$16.43	\$93.95
<i>20 - 29 W</i>	<i>LED</i>	\$19.73	<i>25 W</i>	<i>350</i>	\$0.0447	\$0.39	\$20.12
<i>30 - 39 W</i>	<i>LED</i>	\$20.25	<i>35 W</i>	<i>350</i>	\$0.0447	\$0.55	\$20.80
<i>40 - 49 W</i>	<i>LED</i>	\$20.78	<i>45 W</i>	<i>350</i>	\$0.0447	\$0.70	\$21.48
<i>50 - 59 W</i>	<i>LED</i>	\$21.30	<i>55 W</i>	<i>350</i>	\$0.0447	\$0.86	\$22.16
<i>60 - 69 W</i>	<i>LED</i>	\$21.83	<i>65 W</i>	<i>350</i>	\$0.0447	\$1.02	\$22.85
<i>70 - 79 W</i>	<i>LED</i>	\$22.35	<i>75 W</i>	<i>350</i>	\$0.0447	\$1.17	\$23.53
<i>80 - 89 W</i>	<i>LED</i>	\$22.88	<i>85 W</i>	<i>350</i>	\$0.0447	\$1.33	\$24.21
<i>90 - 99 W</i>	<i>LED</i>	\$23.41	<i>95 W</i>	<i>350</i>	\$0.0447	\$1.49	\$24.90
<i>100 - 109 W</i>	<i>LED</i>	\$23.94	<i>105 W</i>	<i>350</i>	\$0.0447	\$1.64	\$25.58
<i>110 - 119 W</i>	<i>LED</i>	\$24.46	<i>115 W</i>	<i>350</i>	\$0.0447	\$1.80	\$26.26
<i>120 - 129 W</i>	<i>LED</i>	\$24.99	<i>125 W</i>	<i>350</i>	\$0.0447	\$1.96	\$26.95
<i>130 - 139 W</i>	<i>LED</i>	\$25.43	<i>135 W</i>	<i>350</i>	\$0.0447	\$2.11	\$27.54
<i>140 - 149 W</i>	<i>LED</i>	\$25.86	<i>145 W</i>	<i>350</i>	\$0.0447	\$2.27	\$28.13
<i>150 - 159 W</i>	<i>LED</i>	\$26.30	<i>155 W</i>	<i>350</i>	\$0.0447	\$2.43	\$28.73
<i>160 - 169 W</i>	<i>LED</i>	\$26.74	<i>165 W</i>	<i>350</i>	\$0.0447	\$2.58	\$29.32
<i>170 - 179 W</i>	<i>LED</i>	\$27.17	<i>175 W</i>	<i>350</i>	\$0.0447	\$2.74	\$29.91
<i>180 - 189 W</i>	<i>LED</i>	\$27.61	<i>185 W</i>	<i>350</i>	\$0.0447	\$2.90	\$30.50
<i>190 - 199 W</i>	<i>LED</i>	\$28.04	<i>195 W</i>	<i>350</i>	\$0.0447	\$3.05	\$31.10
<i>200 - 209 W</i>	<i>LED</i>	\$28.48	<i>205 W</i>	<i>350</i>	\$0.0447	\$3.21	\$31.69
<i>210 - 219 W</i>	<i>LED</i>	\$29.01	<i>215 W</i>	<i>350</i>	\$0.0447	\$3.37	\$32.38
<i>220 - 229 W</i>	<i>LED</i>	\$29.54	<i>225 W</i>	<i>350</i>	\$0.0447	\$3.52	\$33.06
<i>230 - 239 W</i>	<i>LED</i>	\$30.10	<i>235 W</i>	<i>350</i>	\$0.0447	\$3.68	\$33.77
<i>240 - 249 W</i>	<i>LED</i>	\$30.65	<i>245 W</i>	<i>350</i>	\$0.0447	\$3.83	\$34.49
<i>250 - 259 W</i>	<i>LED</i>	\$31.21	<i>255 W</i>	<i>350</i>	\$0.0447	\$3.99	\$35.20
<i>260 - 269 W</i>	<i>LED</i>	\$31.80	<i>265 W</i>	<i>350</i>	\$0.0447	\$4.15	\$35.95
<i>270 - 279 W</i>	<i>LED</i>	\$32.39	<i>275 W</i>	<i>350</i>	\$0.0447	\$4.30	\$36.69
<i>280 - 289 W</i>	<i>LED</i>	\$32.99	<i>285 W</i>	<i>350</i>	\$0.0447	\$4.46	\$37.45
<i>290 - 299 W</i>	<i>LED</i>	\$33.60	<i>295 W</i>	<i>350</i>	\$0.0447	\$4.62	\$38.22
<i>300 - 309 W</i>	<i>LED</i>	\$34.21	<i>305 W</i>	<i>350</i>	\$0.0447	\$4.77	\$38.98
<i>310 - 319 W</i>	<i>LED</i>	\$34.81	<i>315 W</i>	<i>350</i>	\$0.0447	\$4.93	\$39.74
<i>320 - 329 W</i>	<i>LED</i>	\$35.42	<i>325 W</i>	<i>350</i>	\$0.0447	\$5.09	\$40.51
<i>330 - 339 W</i>	<i>LED</i>	\$36.03	<i>335 W</i>	<i>350</i>	\$0.0447	\$5.24	\$41.27
<i>340 - 349 W</i>	<i>LED</i>	\$36.63	<i>345 W</i>	<i>350</i>	\$0.0447	\$5.40	\$42.03

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Vice President  
Regulatory Affairs

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M.P.S.C. No. 1 - Electric  
DTE Electric Company  
(Final Order Case No. U-20561)

Third Revised Sheet No. D-51.01  
Cancels Second Revised Sheet No. D-51.01

<i>350 - 359 W</i>	<i>LED</i>	<i>\$37.24</i>	<i>355 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.56</i>	<i>\$42.80</i>
<i>360 - 369 W</i>	<i>LED</i>	<i>\$37.85</i>	<i>365 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.71</i>	<i>\$43.56</i>
<i>370 - 379 W</i>	<i>LED</i>	<i>\$38.45</i>	<i>375 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$5.87</i>	<i>\$44.32</i>
<i>380 - 389 W</i>	<i>LED</i>	<i>\$39.06</i>	<i>385 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$6.03</i>	<i>\$45.09</i>
<i>390 - 399 W</i>	<i>LED</i>	<i>\$39.67</i>	<i>395 W</i>	<i>350</i>	<i>\$0.0447</i>	<i>\$6.18</i>	<i>\$45.85</i>

**Long Span**

- For lamp spacing over 120 feet up to 325 feet on the same side of street, add to rate per lamp per year.....\$24.48

**Semi-Ornamental**

- For Semi-Ornamental Systems which employ Ornamental Post Units served from overhead conductors, where such construction is practical, reduce rate per luminaire per year ..... \$21.48

**Post Charge**

- For each increment of \$1,000 of investment which exceeds three times the annual revenue at the prevailing rate at the time of installation, add to rate per year.....\$83.16

**Multiple Luminaires on a Single Pole**

- For additional luminaires added to the same pole, *a reduced* rate per luminaire per year on the added luminaire.
- |   |          |
|---|----------|
| Ornamental.....                             | \$97.92  |
| Ornamental-Lamp spacing over 120 feet ..... | \$122.40 |
| Semi-Ornamental .....                       | \$76.56  |

(Continued on Sheet No. D-52.00)

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Seventh Revised Sheet No. D-52.00  
Cancels Sixth Revised Sheet No. D-52.00

(Continued from Sheet No. D-51.00)

**RATE SCHEDULE NO. E1 (Contd.)**

**MUNICIPAL STREET LIGHTING RATE**

**OPTION II: Street Equipment Owned by Municipality**

**MONTHLY RATES OPTION II: Overhead and Underground Ornamental Municipality Owned Street Lighting (All-night service).**

Power Supply Charges:

Capacity Energy Charge: 0.00¢ per kWh for all kWh

Non-Capacity Energy Charge: 4.47¢ per kWh for all kWh

(a)  Nominal Lamp Size	(b)  Type of Service	(c)  Distribution Charge per Lamp per Month	(d)  System Wattage	(e)  Average Monthly Hours (4200/12)	(f)  Energy Charge	(g)  Average Energy Cost per Month (d*e*f/1000)	(h)  Average Mothly Cost
<b>175 W</b>	<b>Mercury Vapor</b>	<b>\$6.86</b>	<b>210 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$3.29</b>	<b>\$10.15</b>
<b>250 W</b>	<b>Mercury Vapor</b>	<b>\$9.00</b>	<b>300 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$4.70</b>	<b>\$13.70</b>
<b>400 W</b>	<b>Mercury Vapor</b>	<b>\$13.28</b>	<b>450 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$7.04</b>	<b>\$20.33</b>
<b>1,000 W</b>	<b>Mercury Vapor</b>	<b>\$30.42</b>	<b>1,060 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$16.59</b>	<b>\$47.01</b>
<b>70 W</b>	<b>High Pressure Sodium</b>	<b>\$3.94</b>	<b>95 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$1.49</b>	<b>\$5.43</b>
<b>100 W</b>	<b>High Pressure Sodium</b>	<b>\$4.85</b>	<b>135 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$2.11</b>	<b>\$6.96</b>
<b>250 W</b>	<b>High Pressure Sodium</b>	<b>\$9.40</b>	<b>305 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$4.77</b>	<b>\$14.18</b>
<b>360 W</b>	<b>High Pressure Sodium</b>	<b>\$12.54</b>	<b>418 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$6.54</b>	<b>\$19.09</b>
<b>400 W</b>	<b>High Pressure Sodium</b>	<b>\$13.69</b>	<b>465 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$7.28</b>	<b>\$20.96</b>
<b>1,000 W</b>	<b>High Pressure Sodium</b>	<b>\$30.82</b>	<b>1,100 W</b>	<b>350</b>	<b>\$0.0447</b>	<b>\$17.22</b>	<b>\$48.04</b>

- The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, customers will be given the option of switching to High Pressure Sodium, Metal Halide, LED or retiring the Luminaire.
- DE-ENERGIZED LIGHTS:** Customers may elect to have any or all luminaires served under this rate disconnected. The charge per luminaire per year, payable in equal monthly installments, shall be 10% of the above yearly rates. A \$35.00 charge per luminaire will be made at the time of de-energization and at the time of re-energization.
- DUSK TO MIDNIGHT SERVICE:** For service to parking lots from dusk to approximately twelve o'clock midnight E.S.T., a discount of 1.060¢ per nominal watt per month will be applied. One control per circuit will be provided.

(Continued on Sheet No. D-53.00)

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Seventh Revised Sheet No. D-53.00  
 Cancels Sixth Revised Sheet No. D-53.00

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(Continued from Sheet No. D-52.00)

**RATE SCHEDULE NO. E1 (Contd.)**

**MUNICIPAL STREET LIGHTING RATE**

**OPTION III:** Municipally Owned and Maintained Street Lighting System (Unmetered)

**HOURS OF SERVICE:** For circuits controlled by automatic timing devices, one-half hour after sunset until one-half hour before sunrise. For circuits controlled by photo-sensitive devices, dusk to dawn for approximately 4,200 hours per year.

**RATES:** Where the municipality owns, operates, cleans and renews the lamps, and the Company's service is confined solely to the supply of electricity from dusk to dawn, the monthly charge of said service shall be a power supply capacity energy charge of 0.00¢ per kilowatthour, a power supply non-capacity charge of **4.47¢** per kilowatthour and a distribution charge of **8.45¢** per kilowatthour. If it is necessary for the Company to install facilities to provide service for the lamps, the customer will reimburse the Company for these costs. Contract Rider No. 2 charges will also apply.

**OPTION III:** Municipally Owned and Maintained Street Lighting System (Controlled/Metered)

**AVAILABILITY OF SERVICE:** Available to governmental agencies desiring controlled nighttime service for primary or secondary voltage energy-only street lighting service where the Company has existing distribution lines available for supplying energy for such service. Luminaires served under any of the Company's other street lighting rates shall not be intermixed with luminaires serviced under this street lighting rate. This rate is not available for resale purposes. Service is governed by the Company's Standard Rules and Regulations.

**KIND OF SERVICE:**

**Secondary Voltage Service:** Alternating current, 60 hertz, single-phase 120/240 nominal volt service for a minimum of ten luminaires located within a clearly defined area. Except for control equipment, the customer will furnish, install, own and maintain all equipment comprising the street lighting system up to the point of attachment with the Company's distribution system. The Company will connect the customer's equipment to the Company's lines and supply the energy for operation. All of the customer's equipment will be subject to the Company's review.

**Primary Voltage Service:** Alternating current, 60 hertz, single-phase or three-phase, primary voltage service for actual demands of not less than 100 kW at each point of delivery. The particular nature of the voltage shall be determined by the Company. The customer will furnish, install, own and maintain all equipment comprising the street lighting system, including control equipment, up to the point of attachment with the Company's distribution system. The Company will supply the energy for operation of the customer's street lighting system.

(Continued on Sheet No. D-54.00)

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(Continued from Sheet No. D-53.00)

**RATE SCHEDULE NO. E1 (Contd.)**

**MUNICIPAL STREET LIGHTING RATE**

**Primary and Secondary Energy**

**Full Service Customers:**

**Power Supply Charge:**

Capacity Energy Charge: **2.659¢** per kWh for all kWh  
Non-Capacity Energy Charge: **3.007¢** per kWh for all kWh

**Delivery System Charge:**

**3.868¢** per kWh based on the capacity requirements in kilowatts of the equipment assuming 4,200 burning hours per year, adjusted by the ratio of the monthly kWh consumption to the total annual kWh consumption.

**Retail Access Service Customers:**

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge: **2.659¢** per kWh for all kWh

**Delivery System Charge:**

**3.868¢** per kWh based on the capacity requirements in kilowatts of the equipment assuming 4,200 burning hours per year, adjusted by the ratio of the monthly kWh consumption and the total annual kWh consumption.

At the Company's option, service may be metered and the metered kWh will be the basis for billing. Capacity requirements of lighting equipment shall be determined by the Company from manufacturer specifications, but the Company maintains the right to test such capacity requirements from time to time. In the event that Company tests show capacity requirements other than those indicated in manufacturer specifications, the capacity requirements indicated by Company tests will be used. The customer shall not change the capacity requirements of its equipment without first notifying the Company in writing.

**BILLING:** Billing will be on a monthly basis.

**SURCHARGES AND CREDITS:** As approved by the Commission. Power Supply Charges are subject to Section C8.5. Delivery Charges are subject to Section C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The contract minimum.

**CONTRACT TERM:** Contracts will be taken for a minimum of two years, extending thereafter from year to year until terminated by mutual consent or upon 12 months' written notice by either party.

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## RATE SCHEDULE NO. E2

## TRAFFIC AND SIGNAL LIGHTS

**AVAILABILITY OF SERVICE:** Available to municipalities or other public authorities, hereinafter referred to as customer, operating lights for traffic regulation or signal lights on streets, highways, airports or water routes, as distinguished from street lighting. Customers desiring service under Rate Schedule No. E2 are free to determine the appropriate light source for their application including incumbent and emerging technologies (including LEDs). Customers must supply adequate documentation of the wattage of the light source that will be subject to the approval of the Company.

**HOURS OF SERVICE:** 24 hours.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, single-phase, at 120 volts two-wire.

**SERVICE CONNECTIONS:** The customer is to furnish and maintain all necessary wiring and equipment, including lamps and lamp replacements, or reimburse the Company therefore, except that the Company will furnish, install and maintain such span poles and messenger cable as may be needed to support the traffic or signal lights of the overhead type. Connections are to be brought to the Company's underground and overhead lighting mains by the customer as directed by the Company, and the final connection to the Company's main is to be made by the Company.

Conversion and/or relocation of existing facilities must be paid for by the customer, except when initiated by the Company. The detailed provisions and schedule of such charges will be quoted upon request.

**RATES:** Distribution charge of **1.72¢**, capacity energy charge of **2.12¢** and non-capacity energy charge of **4.37¢** per month per kilowatthour of the total connected traffic light or signal light load in service for each customer.

Total connected wattage will be reckoned as of the fifteenth of the month. Lamps removed from service before the fifteenth or placed in service on or after the fifteenth will be omitted from the reckoning; conversely, lamps placed in service on or before the fifteenth of the month or removed from service after the fifteenth of the month will be reckoned for a full month. Lamps operated cyclically, on and off, will be reckoned at one-half wattage and billed for a full month. No such reduction of reckoned wattage will be allowed for lamps in service but turned off during certain hours of the day.

The Company may, at its option, install meters and apply a standard metered rate schedule applicable to the service.

**SURCHARGES AND CREDITS:** As approved by the Commission. See Sections C8.5 and C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** \$3.00 per customer per month.

**CONTRACT TERM:** Open order on a month-to-month basis. However, the Company shall not withdraw service, and the customer shall not substitute another source of service in whole or in part, without twelve months' written notice to the other party.

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**STANDARD CONTRACT RIDER NO. 1.1**

**ALTERNATIVE ELECTRIC METAL MELTING**

<b>APPLICABLE TO:</b>	General Service Rate	Schedule Designation D3
	Large General Service Rate	Schedule Designation D4
	Interruptible Supply Rate	Schedule Designation D8
	Primary Supply Rate	Schedule Designation D11

Customers operating electric furnaces for metal melting or for the reduction of metallic ores and/or electric use consumed in holding operations and taking their supply at any of the above rates and who provide special circuits so that the Company may install necessary meters, may take service under this ***interruptible service*** Rider subject to Section C4.4 - Choice of Rates..

***HOURS OF INTERRUPTION:*** *All interruptible load served hereunder shall be subject to interruption by the Company in order to maintain system integrity. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3.*

***NOTICE OF INTERRUPTION:*** *The customer shall be provided, whenever possible, notice in advance (generally 1 hour) of probable interruption, the time in which customer must fully reduce load, and the estimated duration of the interruption.*

***NON-INTERRUPTION PENALTY:*** *A customer who does not fully comply with the timing and load reduction prescribed in the Notice of Interruption shall be billed at the rate of \$50 per kW applied to the highest 60-minute integrated interruptible demand (kW) created during the interruption period, in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not fully comply with an interruption order may be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.*

Electric energy from any facilities, other than the Company's, except for on-site generation installed prior to January 1, 1986, will be used to first reduce the sales on this rider. Standby service will not be billed at this rider, but must be taken under Riders No. 3, No. 5 or No. 6.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

**Capacity**

**Energy Charges:**

For service at secondary voltage level (less than 4.8 kV)

**2.738¢** per kWh for the first 100 hours use of maximum demand

**1.034¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)

**2.035¢** per kWh for the first 100 hours use of maximum demand

**0.743¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)

**1.987¢** per kWh for the first 100 hours use of maximum demand

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Seventh Revised Sheet No. D-57.00  
Cancels Sixth Revised Sheet No. D-57.00

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**0.691¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)

**1.685¢** per kWh for the first 100 hours use of maximum demand

**0.558¢** per kWh for the excess

**Non-Capacity**

Energy Charge: **4.394¢** per kWh for all kWh

(Continued on Sheet No. D-58.00)

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(Continued from Sheet No. D-57.00)

**STANDARD CONTRACT RIDER NO. 1.1 (Contd.)**

**ALTERNATIVE ELECTRIC METAL MELTING**

**Delivery Charges:**

Distribution Charges:

For service at secondary voltage level (less than 4.8 kV)  
**3.223¢** per kWh for the first 100 hours use of maximum demand  
**3.223¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)  
**1.231¢** per kWh for the first 100 hours use of maximum demand  
**1.231¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**0.541¢** per kWh for the first 100 hours use of maximum demand  
**0.541¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**0.140¢** per kWh for the first 100 hours use of maximum demand  
**0.140¢** per kWh for the excess

**Substation Credit:** Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8

**Retail Access Service Customers:**

Capacity (Only applicable to Retail access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)  
**2.738¢** per kWh for the first 100 hours use of maximum demand  
**1.034¢** per kWh for the excess

(Continued on Sheet No. D-59.00)

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(Continued from Sheet No. D-58.00)

**STANDARD CONTRACT RIDER NO. 1.1 (Contd.)**

**ALTERNATIVE ELECTRIC METAL MELTING**

**Retail Access Service Customers:**

For service a primary voltage level (4.8 kV to 13.2 kV)  
**2.035¢** per kWh for the first 100 hours use of maximum demand  
**0.743¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**1.987¢** per kWh for the first 100 hours use of maximum demand  
**0.691¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**1.685¢** per kWh for the first 100 hours use of maximum demand  
**0.558¢** per kWh for the excess

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**Delivery Charges:**

**Distribution Charges:**

For service at secondary voltage level (less than 4.8 kV)  
**3.223¢** per kWh for the first 100 hours use of maximum demand  
**3.223¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)  
**1.231¢** per kWh for the first 100 hours use of maximum demand  
**1.231¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**0.541¢** per kWh for the first 100 hours use of maximum demand  
**0.541¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**0.140¢** per kWh for the first 100 hours use of maximum demand  
**0.140¢** per kWh for the excess

**Substation Credit:** Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

(Continued from Sheet No. D-60.00)

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**STANDARD CONTRACT RIDER NO. 1.2**

**ELECTRIC PROCESS HEAT**

<b>APPLICABLE TO:</b>	General Service Rate	Schedule Designation D3
	Large General Service Rate	Schedule Designation D4
	Interruptible Supply Rate	Schedule Designation D8
	Primary Supply Rate	Schedule Designation D11

Customers using electric heat as an integral part of a manufacturing process, or electricity as an integral part of an anodizing, plating or coating process, and taking their supply at any of the above rates and who provide special circuits to accommodate separate metering may take service under this **interruptible service** Rider subject to Section C4.4- Choice of Rates.

This Rider is available only to customers who add new load on or after May 1, 1986 to engage in the above described processes and to customers served on R1.1 prior to May 1, 1986 and engaged in the above described processes.

**HOURS OF INTERRUPTION:** *All interruptible load served hereunder shall be subject to interruption by the Company in order to maintain system integrity. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3.*

**NOTICE OF INTERRUPTION:** *The customer shall be provided, whenever possible, notice in advance (generally 1 hour) of probable interruption, the time in which customer must fully reduce load, and the estimated duration of the interruption.*

**NON-INTERRUPTION PENALTY:** *A customer who does not fully comply with the timing and load reduction prescribed in the Notice of Interruption shall be billed at the rate of \$50 per kW applied to the highest 60-minute integrated interruptible demand (kW) created during the interruption period, in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not fully comply with an interruption order may be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.*

Electric energy from any facilities, other than the Company's, except for on-site generation installed prior to January 1, 1986, will be used to first reduce the sales on this rider. Standby service will not be billed at this rider, but must be taken under Riders No. 3, No. 5 or No. 6.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

Capacity

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)

**2.738¢** per kWh for the first 100 hours use of maximum demand

**1.034¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)

**2.035¢** per kWh for the first 100 hours use of maximum demand

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D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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DTE Electric Company

(Final Order Case No. U-20561)

Seventh Revised Sheet No. D-61.00

Cancels Sixth Revised Sheet No. D-61.00

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**0.743¢** per kWh for the excess

For service at primary voltage level (24 kV to 41.6 kV)

**1.987¢** per kWh for the first 100 hours use of maximum demand

**0.691¢** per kWh for the excess

(Continued on Sheet No. D-62.00)

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**STANDARD CONTRACT RIDER NO. 1.2 (Contd.)**

**ELECTRIC PROCESS HEAT**

For service at transmission voltage level (120 kV and above)  
**1.685¢** per kWh for the first 100 hours use of maximum demand  
**0.558¢** per kWh for the excess

Non-Capacity  
Energy Charge: **4.394¢** per kWh for all kWh

**Delivery Charges:**

Distribution Charges:

For service at secondary voltage level (less than 4.8 kV)  
**3.223¢** per kWh for the first 100 hours use of maximum demand  
**3.223¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)  
**1.231¢** per kWh for the first 100 hours use of maximum demand  
**1.231¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**0.541¢** per kWh for the first 100 hours use of maximum demand  
**0.541¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**0.140¢** per kWh for the first 100 hours use of maximum demand  
**0.140¢** per kWh for the excess

**Substation Credit:** Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)  
**2.738¢** per kWh for the first 100 hours use of maximum demand  
**1.034¢** per kWh for the excess

(Continued on Sheet No. D-63.00)

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(Continued from Sheet No. D-62.00)

**STANDARD CONTRACT RIDER NO. 1.2 (Contd.)**

**ELECTRIC PROCESS HEAT**

**Retail Access Service Customers:**

For service at primary voltage level (4.8 kV to 13.2 kV)  
**2.035¢** per kWh for the first 100 hours use of maximum demand  
**0.743¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**1.987¢** per kWh for the first 100 hours use of maximum demand  
**0.691¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**1.685¢** per kWh for the first 100 hours use of maximum demand  
**0.558¢** per kWh for the excess

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

**Delivery Charges:**

**Distribution Charges:**

For service at secondary voltage level (less than 4.8 kV)  
**3.223¢** per kWh for the first 100 hours use of maximum demand  
**3.223¢** per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)  
**1.231¢** per kWh for the first 100 hours use of maximum demand  
**1.231¢** per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)  
**0.541¢** per kWh for the first 100 hours use of maximum demand  
**0.541¢** per kWh for the excess

For service at transmission voltage level (120 kV and above)  
**0.140¢** per kWh for the first 100 hours use of maximum demand  
**0.140¢** per kWh for the excess

**Substation Credit:** Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-64.00)

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**STANDARD CONTRACT RIDER NO. 3 (Contd.) PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE DEFINITIONS (contd):**

**MAINTENANCE PERIODS (contd):**

- (e) If there is a substantial change in circumstances which make the agreed upon schedule impractical for either party, the other party upon request shall make reasonable efforts to adjust the schedule in a manner that is mutually agreeable.

**WAIVERS AND LIMITS FOR GENERATION RESERVATION FEE AND DAILY DEMAND CHARGES:**

For customers taking supplemental service on rate schedules D4, D11, D6.2 or D8, the following waivers apply:

If the total of daily demand charges for the month is less than the monthly generation reservation fee, then the daily demand charges will be waived for that month.

If the total of daily demand charges for the month is greater than the monthly generation reservation fee, then the generation reservation fee will be waived for that month.

**Waivers and limits for energy-only rates:**

For customers taking supplemental service on energy-only rates for the entire billing cycle, schedules D3, or D3.3, the following applies.

If the total of daily demand charges for the month is less than the monthly generation reservation fee, then the daily demand charges will be waived for that month.

If the total of daily demand charges for the month is greater than the monthly generation reservation fee, then the daily demand charges will be waived for that month provided that the supplemental rate continues as an energy-only rate. If not, then the total of daily demand charges for the month will be charged and the generation reservation fee for the month will be waived..

**RATES:**

**Power Supply Charges:**

Capacity

Monthly Generation Reservation Fee:

\$0.50 times the standby contract capacity in kW, per month.

The daily on-peak backup demand charge is \$1.38 per kW per day during periods other than maintenance periods as defined below.

The daily on-peak backup demand charge is \$0.69 per kW per day during maintenance periods as defined below.

(Continued from Sheet No. D-72.00)

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Ninth Revised Sheet No. D-72.00  
Cancels Eighth Revised Sheet No. D-72.00

(Continued from Sheet No. D-72.00)

**STANDARD CONTRACT RIDER NO. 3 (Contd.) PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

**RATES (contd):**

**Energy Charge:**

For customers served on supplemental rate schedules D3, D3.2 and D3.3, the energy charge will be the applicable power supply energy charge specified in the customer's supplemental rate.

The energy as stated herein, is also subject to provisions of the PSCR clause and other Surcharges and Credits Applicable to Power Supply as approved by the Commission. See Section C8.5.

Non-Capacity

**Monthly Generation Reservation Fee:**

\$0.12 times the standby contract capacity in kW, per month.

The daily on-peak backup demand charge is \$0.33 per kW per day during periods other than maintenance periods as defined below.

The daily on-peak backup demand charge is \$0.17 per kW per day during maintenance periods as defined below.

**Energy Charge:**

An energy charge for back-up and maintenance power will be charged based on standby contract capacity less the output toward internal load of the customer's generator, but not less than zero. For customers served on supplemental rate schedules D4, D11, D6.2 and D8, the energy charge will be 4.863¢ per kWh, plus appropriate power supply credits, including but not limited to an off-peak credit of 1.00¢ per kWh, and voltage level credits of 0.113¢ per kWh for subtransmission and 0.191¢ per kWh for transmission. For customers served on supplemental rate schedules D3, D3.2 and D3.3, the energy charge will be the applicable power supply energy charge specified in the customer's supplemental rate.

The energy as stated herein, is also subject to provisions of the PSCR clause and other Surcharges and Credits Applicable to Power Supply as approved by the Commission. See Section C8.5.

**Delivery Charges:**

**Service Charge:**

\$70.00 per customer per month for customers served at primary voltage.

\$375 per customer per month for customers served above primary voltage.

\$95 per customer per month for customers served at secondary voltages.

**Distribution Charge:**

Distribution charges will be as follows:

\$4.21 per kW at primary voltage applied to the standby contract capacity

\$1.65 per kW at subtransmission voltage applied to the standby contract capacity

\$0.70 per kW at transmission voltage applied to the standby contract capacity

(Continued on Sheet No. D-73.00)

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(Continued from Sheet No. D-72.00)

**STANDARD CONTRACT RIDER NO. 3 (Contd.) PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

**RATES (contd):**

**Distribution Charge:**

For service provided in conjunction with a secondary voltage base rate the Delivery Charge will be the greater of \$9.67 per kW applied to standby contract capacity or 3.868¢/kWh applied to all standby energy delivered.

**Substation Credit:** Available to customers served at subtransmission voltage level (24 to 41.6 kW) or higher who provide the on-site substation including all necessary transforming, controlling, and protective equipment. A credit of \$.30 per kW shall be applied to the distribution demand charge per kW of standby capacity. An additional credit of 0.040¢ per kWh of standby delivered will be given where the service is metered on the high voltage side of the transformer.

**Surcharges and Credits Applicable to Delivery Service:** As approved by the Commission. See Section C9.8.

**ADJUSTMENT OF PRIOR RATCHETS:** When a customer takes standby service under Rider No. 3, the setting or the increasing or decreasing of standby contract capacity will affect the existing ratchet levels on the supplemental rate as follows:

- (a) An amount in kW equal to the initial standby contract capacity (or to the increase or decrease) will be subtracted from (or subtracted from or added to) the existing ratcheted maximum demand level for customers on supplemental rates D6.2 and D8 and D11.
- (b) An amount in kW equal to 65% of the initial standby contract capacity (or of the increase or decrease) will be subtracted from (or subtracted from or added to) the existing ratcheted on-peak billing demand level for customers on supplemental rates D4, D6.2 and D8 and D11.

**LATE PAYMENT CHARGE:** See Section C4.8.

**SCHEDULE OF ON-PEAK HOURS:** See Section C11.

**POWER FACTOR CLAUSE:** The rates and charges under this tariff are based on the customer maintaining a power factor of not less than 85% lagging. Customers are responsible for correcting power factors less than 70% at their own expense. The size, type and location of any power factor correction equipment must be approved by the Company. Such approval will not be unreasonably withheld. A penalty will be applied to the total amount of the monthly billing for supplemental and standby service for power factor below 85% lagging in accordance with the table in Power Factor Determination, Section C12. The penalty will not be applied to the on-peak billing demand ratchet nor to the minimum contract demand of the supplemental rate, but will be applied to metered quantities.

(Continued on Sheet No. D-73.01)

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(Continued from Sheet No. D-73.01)

**STANDARD CONTRACT RIDER NO. 3 (Contd.) PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

**STATION POWER STANDBY SERVICE**

**SERVICE UNDER THIS PROVISION BECOMES EFFECTIVE APRIL 1, 2014**

**STATION POWER STANDBY SERVICE:** Available to customers with generation facilities that are located within the Company's retail service territory and that are interconnected to ITC Transmission. The power supply requirements necessary to maintain and operate the generating facility that are normally served by the facility's on-site generation but which instead are provided by the facility's taking power through its transmission interconnection must be provided under the station Power Standby Service provisions of this rider.

**APPLICABLE TO:** General Service Rate Schedule Designation D3

**HOURS OF SERVICE:** 24 hours, subject to interruption by agreement, or by advance notice.

**CONTRACT CAPACITY:** Customers shall initially contract for a specified capacity in kilowatts sufficient to meet expected maximum requirements. Any single reading of the demand meter or aggregation of demand meters recording inflow to the facility in any month that exceeds the contract capacity then in effect shall become the new contract capacity.

**METERING REQUIREMENTS:** All customers taking service under this rider must install the necessary equipment to permit metering. The Company will supply the metering equipment. Service to the customer under this Rider will be metered with demand-recording equipment. Any equipment installed by the customer necessary to accommodate the Company's metering equipment must be approved by the Company and must be compatible with the Company's Meter Data Acquisition System.

**RATES:**

**Power Supply:**

**Non-Capacity**

Station Power Energy Service will be priced on the basis of the real time MISO locational hourly marginal energy price for the Company-appropriate load node. In addition to the MISO locational hourly marginal energy price the following charges will also apply:

0.740¢/kWh for MISO network transmission costs and MISO energy market costs plus,  
An administrative charge of 1.676¢/kWh plus,  
Surcharges and Credits Applicable to Power Supply, excluding PSCR, as approved by the Commission. See Section C8.5

**Service Charge:**

Primary Service Charge:	\$70.00 per month
Subtransmission and Transmission Service Charge:	\$375 per month

(Continued on Sheet No. D-73.03)

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DTE Electric Company  
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Seventh Revised Sheet No. D-84.00  
Cancels Sixth Revised Sheet No. D-84.00

**STANDARD CONTRACT RIDER NO. 7****GREENHOUSE LIGHTING SERVICE**

**APPLICABLE TO:** General Service Rate  
Large General Service Rate

Schedule Designation D3  
Schedule Designation D4

Available on an optional basis to customers desiring high intensity discharge lighting service for greenhouses or other environmentally controlled growing facilities as a daylight supplement. All lighting on this rider shall be separately metered. The customer will furnish, install, own, and maintain all equipment comprising the lighting system. No other device may be connected to this circuit except for controls, lighting and associated equipment.

**HOURS OF SERVICE:** Dusk to dawn service for circuits controlled by photo-sensitive or clock timing devices.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, 60 hertz, single phase, nominally at 120/240 volts, three-wire; or three-phase, four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase, four-wire, Y connected at 480Y/277 volts.

**RATE PER MONTH:****Full Service Customers:****Power Supply Charge:**

Capacity Energy Charge:	<b>2.228¢</b> per kWh for all kWh
Non-Capacity Energy Charge:	<b>2.482¢</b> per kWh for all kWh

**Delivery Charges:**

Service Charge:	\$1.95 per month
Distribution Charge:	<b>3.868¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charge for Retail Access Service Customers taking Utility Capacity Service for DTE:

Capacity Energy Charge:	<b>2.228¢</b> per kWh for all kWh
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**Delivery Charges:**

Service Charge:	\$1.95 per month
Distribution Charge:	<b>3.868¢</b> per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-85.00)

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**STANDARD CONTRACT RIDER NO. 8**

**COMMERCIAL SPACE HEATING**

<b>APPLICABLE TO:</b>	General Service Rate	Schedule Designation D3
	Large General Service Rate	Schedule Designation D4

Available on an optional basis to customers desiring service for commercial space conditioning furnished through separately metered circuits to which no other device except electric space heating, water heating, air conditioning, or humidity control equipment may be connected and provided that all of the space heating must be either total electric or an electric heat pump supplemented by a fossil fuel furnace installed on a permanent basis. The customer must provide special circuits, the design and method of installation of which are approved by the Company as adapted to this service.

Electric space heating under the terms of this rider will be considered to include heating by light systems, provided the primary means of space heating at the time of maximum requirements will be furnished by the lighting system, with the balance furnished by supplementary electric heating equipment. After June 15, 1970, under the authority of the Commission in Case U-3189, service to facilities which heat by lighting is not available for premises not previously qualified for service hereunder.

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charge:**

Capacity Energy Charge: **6.040¢** per kWh for all kWh, except that during the billing months of November through May, usage in excess of 1,000 kWh per month shall be billed at **2.003¢** per kWh.

*Non-Capacity* Energy Charge: **3.726¢** per kWh

**Delivery Charges:**

Service Charge: \$11.25 per month  
Distribution Charge: **3.868¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8.

**Retail Access Service Customers:**

Power Supply Charge for Retail Access Service Customers taking Utility Capacity service from DTE:

Capacity Energy Charge: **6.040¢** per kWh for all kWh, except that during the billing months of November through May, usage in excess of 1,000 kWh per month shall be billed at **2.003¢** per kWh.

**Delivery Charges:**

Service Charge: \$11.25 per month  
Distribution Charge: **3.868¢** per kWh for all kWh

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-87.00)

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(Continued from Sheet No. D-86.00)

**STANDARD CONTRACT RIDER NO. 8 (Contd.)**

**COMMERCIAL SPACE HEATING**

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus any applicable per meter per month surcharges.

**CONTRACT TERM:** This rate is made effective by a rider modifying the contract form prescribed for one of the applicable filed rates listed above. The contract term is co-extensive with the contract term of the applicable filed rate under which service is being taken.

**INSULATION STANDARDS FOR ELECTRIC HEATING:** See Section C4.9.

**OPTIONAL PROVISION FOR CERTAIN COMMON AREA ACCOUNTS:** Electric heating and common area usage of apartment or condominium accounts supplied through a single meter and billed under the terms of the Domestic Space Heating Rate D2 prior to September 28, 1978 may be billed under this provision without the necessity of separate metering if an initial block of kilowatthours is billed at the current General Service Rate D3. This initial block of kilowatthours will be calculated each November by averaging the usage during the previous billing months of June through October.

**Full Service Customers:**

Usage in excess of the initial block of kilowatthours per month shall be billed at a power supply capacity charge of **6.040¢** and a non-capacity charge of **3.726¢** per kilowatthour during the billing months of June through October, and a capacity charge of **2.003¢** and a non-capacity charge **3.726¢** per kilowatthour during the billing months of November through May. A Distribution charge of **3.868¢** per kWh for all kWh shall also be applied. The only service charge to be billed to a customer utilizing this provision will be the D3 service charge.

**Retail Access Service Customers:**

Power Supply Charge for Retail Access Service Customers taking Utility Capacity Service from DTE:

For Retail Access customers taking capacity service from DTE, usage in excess of the initial block of kilowatthours per month shall be billed at a power supply capacity charge of **6.040¢** per kilowatthour during the billing months of June through October, and a power supply capacity charge of **2.003¢** per kilowatthour during the billing months of November through May.

For all retail access customers, usage in excess of the initial block of kilowatthours per month shall be billed a distribution charge of **3.868¢** per kWh for all kWh.

**SUPPLEMENTAL SPACE HEATING PROVISION:** This provision is available to customers taking service under the General Service Rate D3 or the Large General Service Rate D4 who purchase energy for a minimum of 10 kW of supplemental, permanently installed, electric space heating equipment. To qualify for this provision, a customer must certify in writing the amount of permanently installed space heating equipment, subject to inspection at the option of the Company, and have the said equipment on separately metered circuits to which no other device is connected. Section C4.9, Insulation Standards for Electric Heating, will not apply to this provision.

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Cancels First Revised Sheet No. D-90.00

**STANDARD CONTRACT RIDER NO. 10****INTERRUPTIBLE SUPPLY RIDER**

**AVAILABILITY OF SERVICE:** Available to Primary Supply Rate (D11) customers desiring interruptible service for a total of not less than 50,000 kilowatts of contracted interruptible service at a single location. The total contracted interruptible capacity on this tariff is limited to 400,000 kilowatts. This rider is effective for service rendered on and after January 1, 1993.

The contracted interruptible capacity limit on this tariff shall be increased to 525,000 kilowatts in 1994 and 650,000 kilowatts in 1995. The increase shall apply to customers desiring interruptible service for a total of not less than 5,000 kilowatts of contracted interruptible service at a single location.

In the event the total contracted interruptible capacity is less than the approved limit specified above, the Company may offer the remaining capacity, to otherwise eligible customers willing to contract for less than the minimum contract capacity amounts specified above.

**CURRENT, PHASE AND VOLTAGE:** Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company. For definition of customer voltage level, see Section C13.

**HOURS OF INTERRUPTION:** *All interruptible load served hereunder shall be subject to interruption by the Company in order to maintain system integrity. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3.*

**NOTICE OF INTERRUPTION:** *The customer shall be provided, whenever possible, notice in advance (generally 1 hour) of probable interruption, the time in which customer must fully reduce load, and the estimated duration of the interruption.*

**NON-INTERRUPTION PENALTY:** *A customer who does not fully comply with the timing and load reduction prescribed in the Notice of Interruption shall be billed at the rate of \$50 per kW applied to the highest 60-minute integrated interruptible demand (kW) created during the interruption period, in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not fully comply with an interruption order may be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.*

If the customer fails to curtail load as requested, the Company reserves the right to interrupt the customer's total separately metered load on this rider, or total plant if not separately metered, and the customer will be billed at the rate of \$50 per kW per instance applied to contract capacity.

**CONTRACT CAPACITY:** Customers shall contract for a specified capacity in kilowatts sufficient to meet the customers' maximum interruptible requirements, but not less than the minimum contract capacity amounts, specified above. Demand/Energy in excess of the contracted load level will be billed under the applicable Primary Supply Rate. The contract capacity shall not be decreased during the term of the contract and subsequent renewal periods as long as service is required unless there is a specific reduction in connected load. Capacity disconnected from service under this rider shall not be subsequently served under any other tariff during the term of this contract and subsequent renewal periods.

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in Case No. U-20561

(Continued from Sheet No. D-90.00)

**STANDARD CONTRACT RIDER NO. 10 (Contd.)**

**INTERRUPTIBLE SUPPLY RIDER**

**RATE PER MONTH:**

**Full Service Customers:**

**Power Supply Charges:**

**Non-Capacity:**

The Energy charge will be the real time MISO locational hourly marginal energy price for the DTE Electric-appropriate load node. In addition to the MISO locational hourly marginal energy price the following charges will also apply:

0.740 ¢/kWh for MISO network transmission costs and MISO energy market costs plus,  
An administrative charge of 1.676¢/kWh plus,  
A voltage level service adder of 1% for transmission, 2% for subtransmission and 7% for primary.

**Delivery Charges:**

Primary Service Charge: **\$70.00 per month**

Subtransmission and Transmission Service Charge: \$375 per month

Distribution Charges:

.....For primary service (less than 24kV) **\$ 4.21**

per kW of maximum demand.

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand.

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand

**Substation Credit:** Available to customers where service at subtransmission voltage level or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Sections C8.5 and C9.8

(Continued on Sheet No. D-92.00)

Issued \_\_\_\_\_, 2020

D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

Effective for service rendered on  
and after \_\_\_\_\_, 2020

Issued under authority of the  
Michigan Public Service Commission  
dated \_\_\_\_\_, 2020  
in Case No. U-20561

(Continued from Sheet No. D-91.00)

**STANDARD CONTRACT RIDER NO. 10 (Contd.)**

**INTERRUPTIBLE SUPPLY RIDER**

**Retail Access Service Customers:**

**Delivery Charges:**

Primary Service Charge: **\$70.00** per month

Subtransmission and Transmission Service Charge: **\$375** per month

**Distribution Charges:**

For primary service (less than 24kV) **\$4.21** per kW of maximum demand

For service at subtransmission voltage (24 to 41.6 kV) **\$1.65** per kW of maximum demand

For service at transmission voltage (120 kV and above) **\$0.70** per kW of maximum demand.

**Substation Credit:** Available to customers where service at subtransmission voltage level or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of \$.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

**Surcharges and Credits:** As approved by the Commission. See Section C9.8.

**LATE PAYMENT CHARGE:** See Section C4.8.

**MINIMUM CHARGE:** The Service Charge plus the Maximum Demand Charge, plus all applicable energy charges plus any applicable per meter per month surcharge.

**MAXIMUM DEMAND:** The maximum demand shall be the highest 30-minute demand created during the previous 12 billing months, including the current month but not less than 50% of the contract capacity. This clause is applicable to each voltage level served.

**POWER FACTOR CLAUSE:** Shall be the Power Factor Clause as defined in the Primary Supply Rate (D11).

**SPECIAL TERMS AND CONDITIONS:** Customer-owned equipment must be operated so the voltage fluctuations on the primary distribution system of the Company shall not exceed permissible limits.

The customer will own and maintain the necessary equipment to separate the interruptible load from the firm power load. This equipment must meet the Company standards. The customer must also provide space for the separate metering of the interruptible load.

The interruptible load shall not be served from firm power circuits at any time. Violations of this provision will result in a charge of \$50 per kilowatt per month applied to the interruptible load determined to have been served from firm power circuits.

(Continued on Sheet No. D-93.00)

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Vice President

Regulatory Affairs

Detroit, Michigan

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in Case No. U-20561

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**STANDARD CONTRACT RIDER NO. 18**

**DISTRIBUTED GENERATION PROGRAM**

**AVAILABILITY:**

*This Rider can be attached to any metered tariff, excluding riders, unless otherwise noted on the applicable metered tariff. The Distributed Generation Program is offered as authorized by 2008 PA 295, as amended by 2016 PA 342, 1939 PA 3, as amended by 2016 PA 341, Section (6) (a) (14), and the Commission in Case No. U-20162.*

*The Distributed Generation Program is available for eligible Distributed Generation customers on and after May 9, 2019.*

*A customer participating in a net metering program approved by the Commission before May 9, 2019 shall have the option to take service under this tariff at the time service under the terms and conditions of the previous net metering program terminates in accordance with MCL 463.0183(1).*

*The Distributed Generation Program is voluntary and available on a first come, first served basis for new customer participants or existing customer participants increasing their aggregate generation. The combined net metering (Rider 16) and Distributed Generation Program size is equal to 1.0% of the Company's average instate peak load for Full-Service customers during the previous 5 calendar years. Within the Program capacity, 0.5% is reserved for Category 1 Distributed Generation customers, 0.25% is reserved for Category 2 Distributed Generation customers and 0.25% is reserved for Category 3 Distributed Generation customers. The Company shall notify the Commission upon the Program reaching capacity in any Category.*

*If an existing customer who participates on Rider 16 increases their aggregate generation following the effective date of this rider, then all generation on site will be subject to the terms and conditions of this tariff.*

**CHARACTER OF SERVICE:**

*As specified under the applicable Base Rate. The term Base Rate refers to the Rate Schedule under which the Customer takes service and that this Rider is associated with.*

**DISTRIBUTED GENERATION DEFINITIONS**

- (1) *A Category 1 distributed generation customer has one or more Eligible Electric Generators with an aggregate nameplate capacity of 20 kW or less that use equipment certified by a nationally recognized testing laboratory to IEEE 1547-2018 testing standards and is in compliance with UL 1741-SA and located on the customer's premises and metered at a single point of contact.*
- (2) *A Category 2 distributed generation customer has one or more Eligible Electric Generators with an aggregate nameplate capacity greater than 20 kW but not more than 150 kW that use equipment certified by a nationally recognized testing laboratory to IEEE 1547-2018 testing standards and is in compliance with UL 1741-SA and located on the customer's premises and metered at a single point of contact.*

*(Continued on Sheet No. D-113.00)*

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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Michigan Public Service Commission  
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(Continued from Sheet D-112.00)

**STANDARD CONTRACT RIDER NO. 18 (contd.)**      **DISTRIBUTED GENERATION PROGRAM**

- (3) *A Category 3 distributed generation customer has one or more methane digesters with an aggregate nameplate capacity greater than 150 kW but not more than 550 kW that use equipment certified by a nationally recognized testing laboratory to IEEE 1547-2018 testing standards and is in compliance with UL 1741-SA and located on the customer's premises and metered at a single point of contact.*
- (4) *Eligible Electric Generator – a renewable energy system or a methane digester with a generation capacity limited to no more than 100% of the customer's electricity consumption for the previous 12 months and does not exceed the following:*
- a. *For a renewable energy system, 150 kW of aggregate generation at a single site*
  - b. *For a methane digester, 550 kW of aggregate generation at a single site*
- (5) *Inflow – the metered inflow delivered by the Company to the customer during the billing month or time-based pricing period.*
- (6) *Outflow – the metered quantity of the customer's generation not used on site and exported to the utility during the billing month or time-based pricing period.*
- (7) *Renewable Energy Resource – a resource that naturally replenishes over a human, not a geological, timeframe and that is ultimately derived from solar power, water power or wind power. Renewable energy resource does not include petroleum, nuclear, natural gas, or coal. A renewable energy resource comes from the sun or from thermal inertia of the earth and minimizes the output of toxic material in the conversion of the energy and includes, but is not limited to, all of the following:*
- (i) *Biomass*
  - (ii) *Solar and solar thermal energy*
  - (iii) *Wind energy*
  - (iv) *Kinetic energy of moving water, including the following:*
    - (a) *waves, tides or currents*
    - (b) *water released through a dam*
  - (v) *Geothermal energy*
  - (vi) *Thermal energy produced from a geothermal heatpump*
  - (vii) *Any of the following cleaner energy resources:*
    - (a) *Municipal solid waste, including the biogenic and anthropogenic fractions*
    - (b) *Landfill gas produced by municipal solid waste*
    - (c) *Fuel that has been manufactured in whole or significant part from waste, including, but not limited to, municipal solid waste. Fuel that meets the requirements of this subparagraph includes, but is not limited to, material that is listed under 40 CFR 241.3(b) or 241.4(a) or for which a nonwaste determination is made by the United States Environmental Protection Agency pursuant to 40 CFR 241.3(c). Pet coke, hazardous waste, coal waste, or scrap tires are not fuel that meets the requirements of this subparagraph.*

*(Continued on Sheet No. D-114.00)*

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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Michigan Public Service Commission  
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(Continued from Sheet D-113.00)

**STANDARD CONTRACT RIDER NO. 18 (contd.)**

**DISTRIBUTED GENERATION PROGRAM**

**CUSTOMER ELIGIBILITY**

*In order to be eligible to participate in the Distributed Generation Program, customers must generate a portion or all of their own retail electricity requirements with an Eligible Electric Generator which utilizes a Renewable Energy Resource, as defined above.*

*A customer's eligibility to participate in the Distributed Generation Program is conditioned on the full satisfaction of any payment term or condition imposed on the customer by pre-existing contracts or tariffs with the Company, including those imposed by participation in the Distributed Generation Program, or those required by the interconnection of the customer's Eligible Electric Generator to the Company's distribution system.*

**CUSTOMER BILLING – CATEGORY 1, 2 AND 3 CUSTOMERS**

**Inflow**

**(a) Full Service Customers**

*The customer will be billed according to their retail rate schedule, plus surcharges, and Power Supply Cost Recovery (PSCR) Factor on metered Inflow for the billing period or time-based pricing period.*

**(b) Retail Open Access Customers**

*The customer will be billed as stated on the customer's Retail Open Access Rate Schedule on metered Inflow for the billing period or time based pricing period.*

**Outflow**

*The customer will be credited on Outflow for the billing period or time-based pricing period. The credit shall be applied to the current billing month and shall be used to offset power supply and PSCR charges on that bill. The credit shall not offset any delivery charges or other surcharges. Any excess credit not used will be carried forward to subsequent billing periods. Unused Outflow Credit from previous months will be applied to the current billing month, if applicable, to offset the power supply component and PSCR components on the customer's bill. Outflow Credit is nontransferrable.*

**(1) Full Service Customers**

**Power Supply Credit for Outflow:**

*Customers will be credited for each kWh of Outflow according to the non-transmission power supply rates shown below, plus the PSCR factor.*

*(Continued on Sheet No. D-115.00)*

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D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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Michigan Public Service Commission  
dated \_\_\_\_\_, 2020  
in Case No. U-20561

M.P.S.C. No. 1 - Electric

DTE Electric Company

(Final Order Case U-20561)

(Continued from Sheet D-114.00)

**STANDARD CONTRACT RIDER NO. 18 (contd.)****DISTRIBUTED GENERATION PROGRAM**

<i>Rate Schedule</i>	<i>Outflow Credit \$ per kWh</i>			
<i>Residential</i>				
<i>D1/D1.6 Residential</i>	<i>First 17 kWh per Day: \$0.07746</i>	<i>Excess: \$0.09730</i>		
<i>D1.1 Int. Air</i>	<i>Summer: \$0.06666</i>	<i>Winter: \$0.03429</i>		
<i>D1.2 Time-of-Day</i>	<i>Summer On-Peak: \$0.15329</i>	<i>Summer Off-Peak: \$0.04648</i>	<i>Winter On-Peak: \$0.12830</i>	<i>Winter Off-Peak: \$0.04436</i>
<i>D1.7 Time-of-Day</i>	<i>Summer On-Peak: \$0.13096</i>	<i>Summer Off-Peak: \$0.03715</i>	<i>Winter On-Peak: \$0.05130</i>	<i>Winter Off-Peak: \$0.03831</i>
<i>D1.9 Elec. Vehicle</i>	<i>On-Peak: \$0.16751</i>	<i>Off-Peak: \$0.03490</i>		
<i>D2 Elec Space Heat</i>	<i>Summer First 17 kWh per Day: \$0.08210</i>	<i>Summer Excess: \$0.10199</i>	<i>Winter First 20 kWh per Day: \$0.06314</i>	<i>Winter Excess: \$0.04651</i>
<i>D5 Water Heat</i>	<i>All kWh: \$0.04063</i>			
<i>Secondary</i>				
<i>D1.1 Int. Air</i>	<i>Summer: \$0.07288</i>	<i>Winter: \$0.03985</i>		
<i>D1.7 Time-of-Day</i>	<i>Summer On-Peak: \$0.05124</i>	<i>Summer Off-Peak: \$0.03470</i>	<i>Winter On-Peak: \$0.03883</i>	<i>Winter Off-Peak: \$0.03883</i>
<i>D1.9 Elec. Vehicle</i>	<i>On-Peak: \$0.16873</i>	<i>Off-Peak: \$0.03612</i>		
<i>D3 General Service</i>	<i>All kWh: \$0.07437</i>			
<i>D3.2 Secondary Education</i>	<i>All kWh: \$0.06685</i>			
<i>D3.3 Interruptible General Service</i>	<i>All kWh: \$0.06080</i>			
<i>D4 Large General Service</i>	<i>Demand: \$13.86</i>	<i>First 200 kWh per kW: \$0.04171</i>	<i>Excess: \$0.03219</i>	
<i>D5 Water Heat</i>	<i>All kWh: \$0.04045</i>			
<i>E1.1 Eng. St. Ltg.</i>	<i>All kWh: \$0.04857</i>			

*(Continued on Sheet No. D-116.00)*

Issued \_\_\_\_\_, 2020

D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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dated \_\_\_\_\_, 2020  
in Case No. U-20561

M.P.S.C. No. 1 - Electric

DTE Electric Company

(Final Order Case U-20561)

(Continued from Sheet D-115.00)

**STANDARD CONTRACT RIDER NO. 18 (contd.)****DISTRIBUTED GENERATION PROGRAM**

<i>Rate Schedule</i>	<i>Outflow Credit \$ per kWh</i>		
<i>Primary</i>			
<i>D11 Primary Supply</i>	<i>Demand:</i>	<i>On-Peak:</i>	<i>Off-Peak:</i>
<i>Primary</i>	<b>\$13.78 per kW</b>	<b>\$0.04261</b>	<b>\$0.03261</b>
<i>Subtransmission</i>	<b>\$13.21 per kW</b>	<b>\$0.04149</b>	<b>\$0.03149</b>
<i>Transmission</i>	<b>\$12.93 per kW</b>	<b>\$0.04070</b>	<b>\$0.03070</b>
<i>D6.2 Primary Educational Institution</i>	<i>Demand:</i>	<i>On-Peak:</i>	<i>Off-Peak:</i>
<i>Primary</i>	<b>\$14.81 per kW</b>	<b>\$0.03532</b>	<b>\$0.03232</b>
<i>Subtransmission</i>	<b>\$14.21 per kW</b>	<b>\$0.03425</b>	<b>\$0.03125</b>
<i>Transmission</i>	<b>\$13.91 per kW</b>	<b>\$0.03351</b>	<b>\$0.03051</b>
<i>D8 Interruptible Supply</i>	<i>Demand:</i>	<i>On-Peak</i>	<i>Off-Peak</i>
<i>Primary</i>	<b>\$6.38</b>	<b>\$0.04261</b>	<b>\$0.03261</b>
<i>Subtransmission</i>	<b>\$6.12</b>	<b>\$0.04149</b>	<b>\$0.03149</b>
<i>Transmission</i>	<b>\$5.99</b>	<b>\$0.04070</b>	<b>\$0.03070</b>
<i>D10 All Electric School</i>	<i>Summer:</i> <b>\$0.08768</b>	<i>Winter:</i> <b>\$0.06754</b>	

## (1) Retail Open Access Customers

The Outflow Credit will be determined by the Retail Service Supplier. For customers taking capacity service from the Company, the capacity outflow credit shall be the appropriate capacity rate(s) from the customer's rate schedule.

**APPLICATION FOR SERVICE**

In order to participate in the Distributed Generation Program, a customer shall submit completed Interconnection and Distributed Generation Program Applications, including the application fee of \$50 to the Company.

The Distributed Generation Program application fee is waived if the customer is transitioning from the Net Metering Program.

If a customer does not act or correspond on an application for over 6 months, when some action is required by the customer, the application may be voided by the Company.

*(Continued on Sheet No. D-116.01)*

Issued \_\_\_\_\_, 2020

D. M. Stanczak

Vice President

Regulatory Affairs

Detroit, Michigan

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dated \_\_\_\_\_, 2020  
in Case No. U-20561

M.P.S.C. No. 1 - Electric  
DTE Electric Company  
(Final Order Case U-20162)

(Continued from Sheet D-116.00)

**STANDARD CONTRACT RIDER NO. 18 (contd.)****DISTRIBUTED GENERATION PROGRAM*****GENERATOR REQUIREMENTS***

*The Eligible Electric Generator(s) must be located on the customer's premises, serving only the customer's premises and must be intended primarily to offset a portion or all of the customer's requirement for electricity.*

*Systems will be limited in size, not to exceed the Customer's self-service needs of the Rate Schedule to which this Rider is attached. The customer's requirement for electricity shall be determined by one of the following methods:*

- (1) *The customer's annual energy usage, measured in kWh, during the previous 12-month period*
- (2) *In instances where complete and correct data is not available or where the customer is making changes on-site that will affect total usage, the Company and the customer shall mutually agree on a method to determine the customer's annual electric requirement*

*The customer is required to provide the Company with a capacity rating in kW of the generating unit and a projected monthly and annual Kilowatt-hour output of the generating unit, along with a one-line of system and site plan when completing the Company's Distributed Generation Program Application.*

*The customer need not be the owner or operator of the eligible generation equipment, but is ultimately responsible for ensuring compliance with all technical, engineering and operational requirements suitable for the Company's distribution system.*

***GENERATOR INTERCONNECTION REQUIREMENTS***

*The requirements for interconnecting a generator with the Company's facilities are contained in Rule B8., Electric Interconnection and Distributed Generation Standards, the Michigan Electric Utility Generator Interconnection Requirements and the Company's Generator Interconnection Supplement to Michigan Electric Utility Generator Interconnection Requirements. All such interconnection requirements must be met prior to the effective date of a customer's participation in the Distributed Generation Program. The customer must sign an Interconnection and Operating Agreement with the Company and fulfill all requirements as specified in the Agreement. The customer shall pay actual interconnection costs associated with participating in the Distributed Generation Program, subject to limits established by the Michigan Public Service Commission.*

*The Company must approve in writing any subsequent changes in the interconnection configuration before such changes are allowed. Operating in parallel with the Company's system without the Company's written approval of the interconnection and written approval of any subsequent changes to the interconnection will subject the Customer's equipment to disconnection.*

(Continued on Sheet No. D-116.02)

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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Michigan Public Service Commission  
dated \_\_\_\_\_, 2020  
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(Continued from Sheet D-116.01)

**STANDARD CONTRACT RIDER NO. 18 (contd.)**

**DISTRIBUTED GENERATION PROGRAM**

**METERING REQUIREMENTS**

*Metering requirements shall be specified by the Company, as detailed below. All metering must be capable of recording inflow and outflow and all parameters metered on the customer's otherwise applicable retail rate schedule, for both Full Service and Retail Open Access customers.*

**DISTRIBUTION LINE EXTENSION AND/OR EXTRAORDINARY FACILITIES**

*The Company reserves the right to make special contractual arrangements with Distributed Generation Program customers whose utility service requires investment in electric facilities, as authorized by the Company's Standard Contract Rider No. 2, Special Purpose Facilities, Rule C1, Character of Service, and Rule C6., Distribution Systems, Line Extensions and Service Connections, as set out in the Company's Electric Rate Book. The Company further reserves the right to condition a customer's participation in the Distributed Generation Program on a satisfactory completion of any such contractual requirements.*

**CUSTOMER TERMINATION FROM THE DISTRIBUTED GENERATION PROGRAM**

*A participating customer may terminate participation in the Company's Distributed Generation Program at any time for any reason on sixty days' notice. In the event that a customer who terminates participation in the Distributed Generation Program wishes to re-enroll, that customer must reapply as a new program participant, subject to program size limitations, application queue and application fees.*

*The Company may terminate a customer from the Distributed Generation Program if the customer fails to maintain the eligibility requirements, fails to comply with the terms of the interconnection and parallel operating agreement, or if the customer's facilities are determined not to be in compliance with technical, engineering, or operational requirements suitable for the Company's distribution system. The Company will provide sixty days' notice to the customer prior to termination from the Distributed Generation Program, except in situations the Company deems dangerous or hazardous. Such notice will include the reason(s) for termination.*

*Upon customer termination from the Distributed Generation Program, any existing Outflow credit on the customer's account will be applied to the power supply component and PSCR components of the customer's future bills for customers who remain in the residence. Outflow credit will be refunded to customers who do not remain in the residence. Distributed Generation Program credit is non-transferrable.*

**COMPANY TERMINATION OF THE DISTRIBUTED GENERATION PROGRAM**

*Company termination of the Distributed Generation Program may occur upon receipt of Commission approval.*

*Upon customer termination from the Distributed Generation Program, any existing Outflow credit on the customer's account will be applied to the power supply component and PSCR components of the customer's future bills for customers who remain in the residence. Outflow credit will be refunded to customers who do not remain in the residence. Distributed Generation Program credit is non-transferrable.*

*(Continued on Sheet No. D-116.03)*

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D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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(Continued from Sheet D-116.02)

**STANDARD CONTRACT RIDER NO. 18 (contd.)                   DISTRIBUTED GENERATION PROGRAM**

**DISTRIBUTED GENERATION PROGRAM STATUS AND EVALUATION REPORTS**

*The Company will submit an annual status report to the Commission Staff by March 31 of each year including Distributed Generation Program data for the previous 12 months, ending December 31. The Company's status report shall maintain customer confidentiality.*

**RENEWABLE ENERGY CREDITS**

*Renewable Energy Credits (RECs) are owned by the customer. The Company may purchase Renewable Energy Credits from participating Distributed Generation Program customers who are willing to sell RECs generated if the customer has a generator meter in place to accurately measure and verify generator output. REC certification costs are the responsibility of the customer.*

*The Company will enter into a separate agreement with the customer for the purchase of any RECs.*

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Issued \_\_\_\_\_, 2020

D. M. Stanczak  
Vice President  
Regulatory Affairs

Detroit, Michigan

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Issued under authority of the  
Michigan Public Service Commission  
dated \_\_\_\_\_, 2020  
in Case No. U-20561

**Michigan Public Service Commission**  
DTE Electric Company  
Capacity Charge Calculation  
FOR ORDER

MPSC Case No.: U-20561  
ATTACHMENT C

	Total Electric
<b>CAPACITY COSTS DETERMINATION</b>	
Net Production Costs Rev. Req.	\$ 3,195,818
Proj '19 Enrgy Sales Rev Net of Fuel & '18 Recon	\$ (443,352)
Less Fuel	\$ (1,068,812)
Less MISO Energy in PP	\$ (47,080)
Less Other Energy in PP	\$ (159,173)
Less Variable O&M	\$ (12,038)
<b>Capacity Revenue Requirement</b>	<b>\$ 1,465,364</b>
U-18248 Capacity Charge Demand	12,158 MW
Capacity Charge /MW-Year	\$ 120,527
Capacity Charge /MW-Day	\$ 330.21

# PROOF OF SERVICE

STATE OF MICHIGAN )

Case No. U-20561

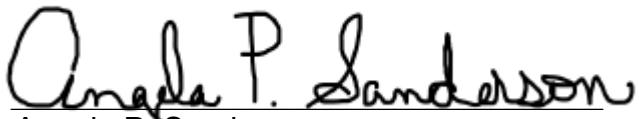
County of Ingham )

Brianna Brown being duly sworn, deposes and says that on May 8, 2020 A.D. she electronically notified the attached list of this **Commission Order via e-mail transmission**, to the persons as shown on the attached service list (Listserv Distribution List).



Brianna J. Brown  
Brianna Brown

Subscribed and sworn to before me  
this 8<sup>th</sup> day of May 2020.



Angela P. Sanderson

Angela P. Sanderson  
Notary Public, Shiawassee County, Michigan  
As acting in Eaton County  
My Commission Expires: May 21, 2024

**Service List for Case: U-20561**

---

Name	Email Address
Benjamin L. King	bking@michworkerlaw.com
Brian W. Coyer	bwcoyer@publiclawresourcecenter.com
Bryan A. Brandenburg	bbrandenburg@clarkhill.com
Christopher M. Bzdok	chris@envlaw.com
Constance D. Groh	cdgroh@liskeyllc.com
Daniel E. Sonneveldt	sonneveldtd@michigan.gov
David S. Maquera	maquerad@dteenergy.com
Don L. Keskey	donkeskey@publiclawresourcecenter.com
DTE Energy Company	mpscfilings@dteenergy.com
Heather M.S. Durian	durianh@michigan.gov
Jody Kyler Cohn	jkylercohn@bkllawfirm.com
Joel B. King	kingj38@michigan.gov
John R. Canzano	jcanzano@michworkerlaw.com
John R. Liskey	john@liskeyllc.com
Jon P. Christinidis	jon.christinidis@dteenergy.com
Justin K. Ooms	jkooms@varnumlaw.com
Kurt J. Boehm	kboehm@bkllawfirm.com
Laura A. Chappelle	lachappelle@varnumlaw.com
Lauren D. Donofrio	lauren.donofrio@dteenergy.com
Margrethe Kearney	mkearney@elpc.org
Mark N. Templeton	templeton@uchicago.edu
Megan E. Irving	megan.irving@dteenergy.com
Melissa M. Horne	mhorne@hcc-law.com
Michael C. Soules	msoules@earthjustice.org
Michael J. Orris	orrism@michigan.gov
Michael J. Pattwell	mpattwell@clarkhill.com
Michael S. Ashton	mashton@fraserlawfirm.com
Monica M. Stephens	stephensm11@michigan.gov
Nicholas Leonard	nicholas.leonard@glelc.org
Nikhil Vijaykar	nvijaykar@elpc.org
Patrick B. Carey	patrick.carey@dteenergy.com
Rebecca J. Boyd	rebecca.j.boyd@gmail.com
Robert A. Weinstock	rweinstock@uchicago.edu
Robert A.W. Strong	rstrong@clarkhill.com
Sean P. Gallagher	sean@legalspg.com
Shaina Reed	sreed@fraserlawfirm.com
Sharon Feldman	feldmans@michigan.gov
Stephen A. Campbell	scampbell@clarkhill.com
Timothy J. Lundgren	tjlundgren@varnumlaw.com
Tracy Jane Andrews	tjandrews@envlaw.com