



Michael Elias Baroody
Executive Vice President

April 27, 2001

The Honorable Spencer Abraham
Department of Energy
950 Pennsylvania Avenue, NW
Washington, DC 20530

Dear Mr. Secretary:

On behalf of the National Association of Manufacturers (NAM) and the 18 million people who make things in America, I am inviting you to address the manufacturing community's leading representatives at the NAM's Issue Briefing Breakfast on either May 16th or May 22nd.

The NAM's Issue Briefing Breakfast series has become a dynamic gathering for public and government affairs executives and Washington representatives from major corporations and trade associations to discuss the major legislative issues of the day. We were pleased to begin this year's Issue Briefing Breakfast series with Vice President Richard Cheney on Wednesday, February 28, 2001. Our format customarily calls for 15-20 minutes of remarks, followed by questions and comments from the audience. We would anticipate substantial media interest and attendance exceeding 125.

We welcome any comments and insight you can provide on the legislative priorities, program changes and other issues for the Department of Energy, especially your remarks regarding President Bush's energy plan. The NAM's Issue Briefing Breakfast series is a long-standing program in which we have secured high level members of the Senate and House of Representatives as well as cabinet members, to discuss important legislative topics with the manufacturing community.

We hope you will be able to join us at this event. The breakfast will be at the Grand Hyatt Hotel located at 1000 H Street, NW. We will begin at 8:30 a.m. and will conclude no later than 10:00 a.m. and we are more than willing to adjust the time to accommodate his schedule. As we wish to firm up our program as soon as possible, quick consideration would be greatly appreciated. If you have any questions or concerns, please contact George Southworth, the NAM's associate director of public affairs at (202) 637-3122.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike", is written below the typed name.

Manufacturing Makes America Strong

1331 Pennsylvania Avenue, NW • Washington, DC 20004-1790 • (202) 637-3120 • Fax (202) 637-3182 • mbaroody@nam.org • www.nam.org

28030



WESTERN GOVERNORS' ASSOCIATION

Dirk Kempthorne
Governor of Idaho
Chairman

Jane Dee Hull
Governor of Arizona
Vice Chairman

James M. Souby
Executive Director

Headquarters:
1515 Cleveland Place
Suite 200
Denver, Colorado 80202-5114

303-623-9378
Fax 303-534-7909

Washington, D.C. Office:
400 N. Capitol Street, N.W.
Suite 388
Washington, D.C. 20001

202-624-5402
Fax 202-624-7707

www.westgov.org

April 27, 2001

The Honorable Richard B. Cheney
Vice President of the United States
The White House
1600 Pennsylvania Ave. N.W.
Washington, DC 20501

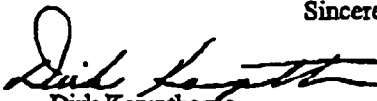

Dear Mr. Vice President:

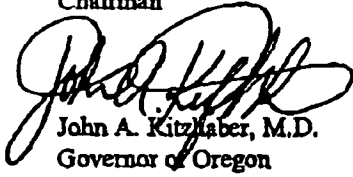
On March 9, the Western Governors' Association transmitted a draft Memorandum of Understanding and joint implementation plan to you. The agreement would help align and coordinate our efforts to address the energy crisis now confronting the Western United States. The document was based on our very productive meeting with you on February 27. We also initiated a review among our states and public utility commissions to make sure the proposal was as complete as possible. That process has been completed with only minor, constructive changes, and we are pleased to transmit our final proposal to you for your consideration.

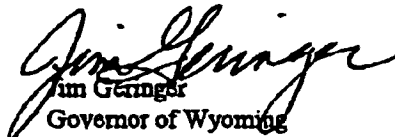
This agreement, along with the underlying support of participating agencies, should provide the necessary resources to enable a powerful state-federal partnership. Such a partnership will be essential to address both the short- and longer-term issues facing the region. Our work together will also provide a model for addressing the unique needs of the nation's other regions.

We thank you for your keen interest in resolving the Western energy crisis and look forward to working with the Administration as we move forward together to solve these problems. Please contact any one of us or our executive director, Jim Souby, if you have any questions.

Sincerely,

 
Dirk Kempthorne
Governor of Idaho
Chairman
Jane Dee Hull
Governor of Arizona
Vice Chair


John A. Kitzhaber, M.D.
Governor of Oregon
Co-Lead Governor for Energy


Jim Granger
Governor of Wyoming
Co-Lead Governor Energy

cc: Western Governors

Enclosures

F:\Energy\mou\mit.wpd

28031

**MEMORANDUM OF UNDERSTANDING
AMONG THE
PRESIDENT'S NATIONAL ENERGY POLICY DEVELOPMENT GROUP
AND ITS MEMBER OFFICES AND AGENCIES
AND THE
WESTERN GOVERNORS' ASSOCIATION
AND ITS MEMBER STATES
REGARDING ENERGY DEVELOPMENT AND CONSERVATION
IN THE WESTERN UNITED STATES**

I. Purpose

The purpose of this Memorandum of Understanding (MOU) is to establish a framework for cooperation between Western States and the Federal government to rapidly resolve immediate energy shortages and longer-term energy problems facing the West. This effort will involve the States and the Federal government. Other stakeholders may be called upon from time to time to provide advice. The regional approach will serve as a demonstration of principles and practices, which may be adopted nationally or in other regions.

II. Objective

To encourage cooperation among the President's National Energy Policy Development Group (NEPDG), its member offices and agencies, the Western Governors' Association (WGA) and its members states for the following purposes:

- (1) Improving intergovernmental systems that authorize and enable planning, financing, permitting and siting of energy facilities;
- (2) Increasing energy supplies;
- (3) Building needed energy infrastructure; and
- (4) Increasing the efficiency of energy use.

III. Background

Energy prices and supplies in the Western United States have become uncertain and highly volatile over the past year. Electricity and natural gas transmission systems may no longer be adequate to provide reliable, secure energy to citizens, businesses and governmental and national defense facilities. Due to unique Western land ownership patterns, widely dispersed population centers and government facilities, and the isolated nature of the Western Interconnection for electricity transmission, this situation poses

28032

unique policy, management, and investment problems that must be addressed to ensure protection of public health, welfare, the environment and national security.

The Nation's energy policy must be broad-based and flexible so that each state and region in the nation can maximize its contributions to the economy and well-being of its citizens. The signatories to this agreement and the offices, agencies and states they represent are committed to carrying out both short and long-term, cost-effective efforts to resolve the energy crisis in the Western States. This may involve: obtaining and sharing necessary public information relating to energy markets and emerging energy technologies; identifying and implementing cooperative strategies for research, development, demonstration and adoption of policies, procedures and programs that will ensure delivery of new energy supplies, greater efficiency, more sustainable conservation practices and new or improved energy technologies; and assessing the effectiveness of implementation policies and practices.

The signatories are committed to market-based approaches so that the selection and financing of energy facilities and strategies, including those for research and development, will be based on wide competition, broad participation and market discipline.

The signatories seek a regional, integrated, cooperative approach to identifying solutions to problems. The proposed approach for this MOU will bring together the signatories or their designated representatives to share information and collaborate to the extent permitted by law.

IV. Authorities

Nothing in this MOU alters the responsibilities or statutory authorities of NEPDG and its member offices and agencies, or the WGA, and its member States and insular areas. This MOU does not supersede existing agreements among any of the signatories.

V. Responsibilities

The signatories agree to prepare a workplan and provide an annual report to identify and list by priority energy needs and requirements. The workplan and report will identify and assess governmental approaches, including regulatory practices that affect the development of energy supply, conservation and efficiency in the West. The report will consider current funding levels and allocations for governmental energy activities, the most pressing energy production, transmission and efficiency problems, and identify for demonstration and/or implementation the most promising new solutions.

The report will be completed and submitted to the signatories no later than February of each year for use as a resource in the formulation and review of the states' and nation's energy policies.

28033

The signatories agree that this MOU may serve as a prelude to other regional or National programs for identifying and implementing needed new, cost-effective energy strategies for development and deployment.

VI. Authentication

This MOU becomes effective upon its signature by all parties. The MOU will continue in effect for three (3) years or until modified by mutual consent. Participation by any signatory member may be terminated at the request of any signatory with ninety (90) days prior notice.

FOR THE NATIONAL ENERGY POLICY DEVELOPMENT GROUP AND ITS MEMBER OFFICES AND AGENCIES

Vice President of the United States

Date

FOR THE WESTERN GOVERNORS' ASSOCIATION AND ITS MEMBER STATES

Chairman of the
Western Governors' Association

Date

Vice Chair of the
Western Governors' Association

Date

Lead Governor of the
Western Governors' Association

Date

Lead Governor of the
Western Governors' Association

Date

F:\Energy\3-9 MOU-energy.doc

28034

JOINT IMPLEMENTATION PLAN FOR MEETING ENERGY NEEDS IN WESTERN STATES

May 2001

Introduction:

This addendum to the Memorandum of Understanding (MOU) of May __, 2001 regarding energy development and conservation in the western states established a plan for initial implementation of the MOU.

This plan is intended to create the mechanisms necessary to implement the MOU and provide a legal and accepted basis to pursue regional cooperative efforts.

Proposed Approach:

First working independently, and then jointly, the Federal agencies and WGA will accomplish tasks in four areas in FY 2001-2004:

Task 1: Improve intergovernmental systems

- Establish policies that upon request extend NEPA "cooperating agency" status to states for energy project reviews as a matter of routine practice and provide funding to states to participate.
- Develop information to enable the timely development of alternatives for evaluation in EISs.
- Establish integrated state-federal processes for the shared development of energy plans, programs, policies and projects.
- Develop processes for the effective participation by key stakeholders in the consideration of energy issues.
- Investigate the application of information technologies to siting and permitting functions for energy facilities.
- Develop a budget and plan for accomplishing Tasks 1, 2, 3 and 4.
- Establish mechanisms for key stakeholder participation in the execution of Tasks 2, 3 and 4.

Task 2: Increase energy supplies

- Enable the operation of existing generation through expedited local, state and federal permit decisions affecting the operation of existing and retired generation while protecting the public health and environment.
- Enable the deployment of distributed generation through the identification of practices in the western power system that create barriers to distributed generation and the adoption of practices to overcome such barriers, such as standardized interconnection practices and information necessary for local zoning decisions.

28035

- Streamline local, state and federal permitting of new renewable and fossil energy generation and associated electric transmission and natural gas pipelines.
- Speed the local, state and federal permitting of new, cleaner and more efficient technologies including the development of information necessary for agency reviews of the performance of new technologies and the sharing of such information among state and federal permitting agencies.
- Expand the efficient production and use of natural gas, oil, and coal through the development of new technologies and the timely permitting and leasing of resources.

Task 3: Build needed energy infrastructure

- Identify and evaluate the bottlenecks in western energy system (e.g., electric transmission, natural gas and petroleum pipelines).
- Determine financial impediments to investment in necessary infrastructure to eliminate bottlenecks in the western energy system.
- Seek opportunities to deploy new technologies to relieve bottlenecks.

Task 4: Improve the efficiency of energy use

- Coordinate federal agency efficiency efforts with state energy efficiency initiatives.
- Collaborate in evaluations of the effectiveness of energy efficiency initiatives in the West.
- Seek opportunities to identify and conduct pilot projects to test the implementation of new programs and technologies to increase energy efficiency.
- Conduct public outreach to encourage conservation and efficiency.
- Expand State and Federal energy efficiency programs and initiatives.

F:\Energy\4-16\implementation plan.doc

28036

012056



Timothy J. Hogan
Vice President
External Affairs

May 2, 2001

The Honorable Spencer Abraham
Secretary
United States Department of Energy
1000 Independence Avenue, NW
Washington, DC 20585

2001-012056 5/11 P 3:49

Dear Secretary Abraham:

On behalf of Puget Sound Energy and its customers, I want to thank you and President Bush for leading the national discussion regarding the need for a federal energy policy. Attached you will find a short position paper entitled "The Benefits of Demand-Side Management and Dynamic Pricing Programs." This paper was prepared by McKinsey & Company and explains how demand-side management and time-of-day energy pricing can assist in reducing price peaks and lowering energy costs for consumers all across the nation. We believe this paper is an excellent outline of the benefits of time-of-day electricity pricing and believe the inclusion of such programs would be an excellent fit with President Bush's energy policy.

In short, the federal government can lead an effort to achieve tremendous savings in national energy costs by encouraging wide-scale deployment of real-time or time-of-day energy pricing. McKinsey & Company believes that a national implementation of real-time pricing would result in \$10 billion to \$15 billion in annual electricity cost savings. This is because time-of-day pricing enables individuals to see the true cost of the energy they use when they use it. Information on the real cost of energy will empower customers to take control of their energy usage – and many small decisions can have huge benefits. *If just half of the 818,000 households that Puget Sound Energy serves with electricity use their dishwasher during off-peak hours rather than during high-demand peak times, it would free up enough power-generation capacity in the Puget Sound region to serve about 100,000 households.* Furthermore, this shift in energy usage will ensure that we are all using our resources most efficiently.

The benefits from widespread time-of-day pricing programs are already being demonstrated. On April 25, 2001, state regulators approved time-of-day rates for 300,000 Puget Sound Energy (PSE) residential electric customers. The rates will take effect beginning May 1, 2001 and run through September 30, 2001 for a trial period; if successful, the program will be continued. Since December, these customers have been receiving detailed information in their monthly bills and on PSE's web site showing daily information on when they use electricity, and how the price varies between peak and off-peak times.

The beauty of time-of-day pricing is that it is a market-based solution that puts consumers in charge of their energy use decisions and it should be included in a national energy policy. If encouraged for nation-wide implementation, time-of-day pricing programs would enable millions of energy consumers around nation to take greater control of their energy bills. With that control, customers can work collectively to shave the highest portion of peak energy loads. Reduced peak demand leads to reduced peak prices.

Thank you again for your work on a federal energy policy. If you have any questions after reading this paper or would like to learn more about PSE's time-of-day pricing program, please do not hesitate to give me a call at (425) 462-3464.

Sincerely,

Timothy J. Hogan

WHITE PAPER

*The Benefits of Demand-Side Management and
Dynamic Pricing Programs*

McKinsey & Company
May 1, 2001

28038

"Without the ability of end-use electricity consumers to respond to prices, there is virtually no limit on the price that suppliers can fetch in shortage conditions."—William Massey, FERC Commissioner, August 2000

"The demand side of the market is not functioning well because customers are not seeing real-time price signals . . . With real-time pricing options and their supporting technologies in play, we would get the full benefits of deregulation."—Ahmad Faruqui, Electric Power Research Institute

EXECUTIVE SUMMARY

The wide-scale deployment of dynamic pricing¹ has the potential to promote long-term efficiencies in electric power markets. Current rate structures provide consumers with little understanding of the underlying cost of the electricity they consume. As a result, they are unable to react to daily or hourly fluctuations in wholesale market prices by changing their consumption behavior. The variability of demand is one of the primary causes of wholesale price-spikes and, in the case of markets with tight supply constraints such as California, contribute to rolling blackouts. By more closely linking retail prices to wholesale prices, end users would have greater incentive to reduce their consumption on peak, which would in turn lead to lower overall energy costs for all.

Our conservative estimate is that the wide-scale (i.e., national) implementation of dynamic pricing would result in annual electricity cost savings on the order of \$10 billion to \$15 billion. Approximately 20 percent of total financial savings comes from individuals reducing their consumption during peaks; the remaining 80 percent is generated by the lower wholesale peak prices that result from reducing peak load and accrues to all consumers. In addition, there could be significant societal benefits associated with implementing dynamic pricing.

With falling technology and digital communications costs, the infrastructure needed for dynamic pricing can now be brought to the mass market, albeit with relatively long payback periods (5 to 6 years). However, since so much of the benefit of dynamic pricing is the result of collective and not individual usage, a free-rider problem threatens to prevent this deployment. By our estimates, dynamic pricing would have to be extended to one-half or more of mass market customers in order to deliver positive economics. Such a wide-scale deployment will require an institutional solution.

This whitepaper summarizes our belief that dynamic pricing solutions and demand-side management programs can be powerful complements to the supply-side initiatives required to create an enduring energy policy.

¹ Dynamic pricing refers to any pricing option in which prices change in response to changes in costs. This can include time-of-use (TOU) rates, which are set based on expected wholesale prices or real-time pricing (RTP) in which actual market prices are transmitted to customers.

DEREGULATION: THE INCOMPLETE EXPERIMENT

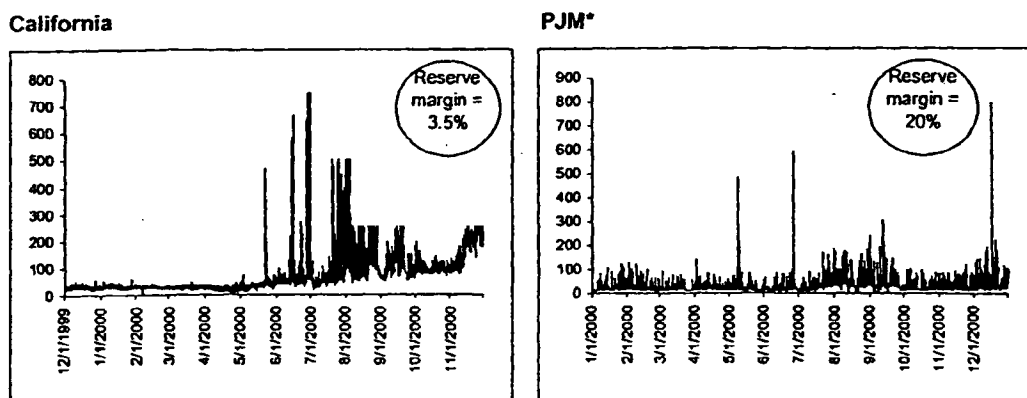
Given recent turmoil in restructured electricity markets, many observers have begun to question whether deregulation is delivering the anticipated benefits to consumers. The problems in these newly deregulated markets, however, should not be interpreted as evidence that electricity restructuring has been a failure. Rather, restructuring is not yet complete—and it will not be complete until retail and wholesale markets are more effectively linked.

Many of the recent, headline-grabbing problems in electricity markets can be attributed to a short-term imbalance of supply and demand. Over time, as new generating resources and additional infrastructure are brought on line, the high prices witnessed in the Western United States should fall. However, the lack of connection between wholesale and retail markets will continue to present longer-term problems in all markets. The reason is that wholesale prices for energy are highly volatile, and under current regulatory structures, there is no way to tie consumer demand to actual market prices for power. In other words, there is no market mechanism at present for managing the demand side of the equation.

Evidence shows that this price volatility exists in all energy markets. As shown in Exhibit 1, wholesale prices in the California Power Exchange averaged \$81/MWh, with a range from \$6/MWh to \$750. The high average price is reflective of tight supply conditions. California's reserve margin for Summer 2000 was only 3.5 percent compared to standard utility practice of carrying a 15 percent cushion. But even in markets with excess capacity, wholesale electricity prices exhibit significant volatility. For example, in the Pennsylvania, New Jersey, Maryland power pool (or PJM), the average price was \$34/MWh, but ranged from a low of \$10/MWh to a high of \$800/MWh, despite a reserve margin of nearly 20 percent.

EXHIBIT 1 — PRICE VOLATILITY IN WHOLESALE POWER MARKETS – 2000

The causes of the fundamental volatility of electric commodity prices are varied. Unlike



* Pennsylvania, New Jersey, Maryland power pool
Source: California Power Exchange; PJM ISO; McKinsey analysis

other commodities, electricity cannot be stored in large quantities; consequently, as

demand increases over the course of a day or a season, more expensive (peaking) capacity must be dispatched to serve additional load. Since natural gas is the fuel of choice for these peaking plants, their marginal costs are, in turn, affected by volatility in gas markets. Beyond “peaker” plants, the cost of generators varies significantly, which contributes to market variability. Additionally, consumer loads themselves change significantly over the course of a day, which increases the volatility of prices.

This market volatility combined with consumption inefficiencies imposes significant costs on society: the most obvious of which are the interruptions, rolling blackouts, and financial distress that currently plague the Western United States. But there are other economic and social costs as well, including the need to build capacity and related infrastructure and consume natural resources in the provision of electricity that could be avoided altogether.

ONE SOLUTION: DYNAMIC PRICING

If deregulation is ever to be complete, utilities and policy makers must find a way to better link retail demand to wholesale market forces, especially at the level of residential and small commercial end users. Many large commercial and industrial customers already have time-of-use programs in place. By exposing smaller customers to dynamic (or time-varying) prices, end-users would have the incentive to curtail demand at peak times and to shift their demand from high- to low-priced periods—resulting in significant savings.

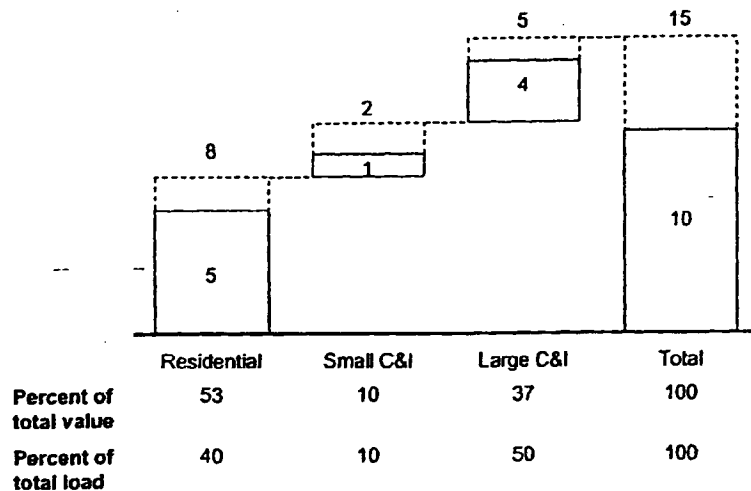
A conservative estimate indicates that the economic benefit gained from shifting even small amounts of demand away from peak price periods could range from \$10 billion to \$15 billion annually. (See Exhibit 2.) This analysis assumes that all users would shift approximately 5 to 8 percent of their load consumption from peak periods (roughly 3 hours a day) to off-peak hours and would curtail usage of another 4 to 7 percent altogether during peaks.² These assumptions have been substantiated by actual experiments with real-time pricing, such as one in Texas where some consumers shifted and curtailed as much as 36 percent of their demand during price peaks.³

² Based on PJM hourly loads and prices for the Year 2000, extrapolating to a national set.

³ According to a study by consultants Eric Hirst and Brendan Kirby. Over a 5-hour period, participants in the study reduced an average of 15 percent of their demand.

EXHIBIT 2 — ECONOMIC BENEFITS FROM DYNAMIC PRICING ESTIMATE

\$ Billions



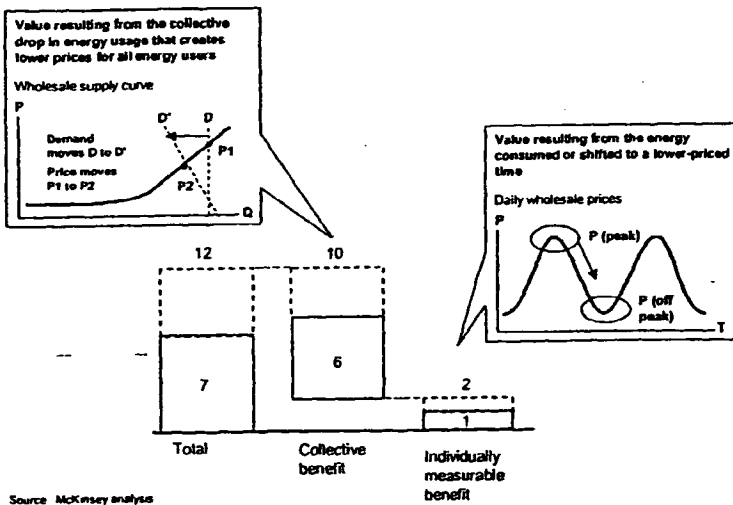
Note: Assumes customers shift 5 to 8% of peak load to off-peak hours and curtail an additional 4 to 7% of resulting peak load; savings based on actual prices and load for PJM power pool in Year 2000 extrapolated to national load; peak hours defined as highest 10% of daily and annual prices
 Source: PJM ISO; McKinsey analysis

Changing consumption patterns during peak periods reduces energy cost savings in two ways. As shown in Exhibit 3, about 20 percent of the value created by dynamic pricing comes from individuals responding to high prices and curtailing electricity consumption—e.g., turning off lights or increasing their thermostat by several degrees in the summer—or shifting consumption to non-peak periods—e.g., by running a dishwasher or water heater at night. However, there is a second-order effect of this reduction in peak demand that results in even greater savings—nearly 80 percent of the total value created. As more customers respond to wholesale market conditions, demand for peak energy drops, resulting in a lower market-clearing price for all energy consumed at that time.

EXHIBIT 3 — ECONOMIC BENEFITS FROM DYNAMIC PRICING IN MASS MARKET

\$ Billions

ESTIMATE



Source: McKinsey analysis

Shifting and curtailing demand would also lead to benefits beyond the obvious economic gains. With universal application, peak energy demand could be lowered by at least 30,000 MW nationally, translating to perhaps as many as 250 peaking plants that would not need to be built. Society could avoid the burning of 680 bcf of gas per year and the resulting 31,000 tons of NO_x emissions. Water quality would be improved, and stresses on land use would be relieved. Additionally, by deploying dynamic pricing programs, utilities could optimize other parts of their value chain that are driven by peak demand—gas storage as well as electric transmission and distribution capacity. They would also achieve some reduction in metering costs by installing automated meter reading systems that would be required to support real-time or time-of-use pricing. Exhibit 4 summarizes these additional benefits.

EXHIBIT 4 — INDIRECT BENEFITS OF BROADLY DEPLOYED DYNAMIC PRICING SOLUTION

ESTIMATE



- ~250 "peaker" plants not built
- Power infrastructure for peaks reduced by 31,000 MW, saving \$16 billion in capital costs (one-time)



- 31,000 tons of NO_x not emitted (per annum)



- Reduction in water used for hydro electric generation
- Gas demand reduced by 680 bcf/year
- Gas transmission reduced by 2 bcf/day



- Other environmental benefits, e.g.
 - Cleaner water
 - Thermal pollution
 - Hydro power impact on ecosystems



- Enough saved electricity to supply 7 million new homes annually
- Significant benefits for avoiding blackouts (lost productivity)



- Other system benefits
 - Avoided transmission and distribution investment
 - Reduced meter reading costs

Notes: Assumes 125 MW peaking plant, \$500/MW capital cost, 25% load factor, 10,000 heatrate, 0.9 lb NO_x/MWh
 Source: Department of Energy, EIA Power Annual Volume II; BAEF Report, EIA RECS 1997; McKinsey analysis

Implementing dynamic pricing programs need not be complex. A basic solution—requiring only real-time or time-of-day metering and billing—could achieve significant results. Consumers would manually set their appliances and home systems to run in off-peak periods, or they would use less energy during peak times of the day. Financial incentives would be communicated through bills that reflected actual costs. Over time, as network technology and standards evolve—and costs drop—the emergence of smart appliances and home networks could support automated real-time response to energy price signals.

THE CHALLENGES OF DYNAMIC PRICING FOR SMALL USERS

So if implementing dynamic pricing for residential and small commercial users is so beneficial, why have so few companies pursued it?⁴ Despite the significant value at stake, several barriers prevent the wide-scale deployment of more dynamic pricing in retail electricity markets: current rate structures, inadequate infrastructure, and the necessity of wide-scale deployment to achieve significant benefits.

First, most customers are currently charged for usage under a regulated rate structure. These rates are typically uniform across a customer class and across time (both hours of day and days of the year). Moreover, typical retail rates do not change in response to an individual customer's actions. Consequently, individuals' prices do not reflect their

⁴ On April 25, 2001, the Washington Utilities and Transportation Committee approved a trial time-of-use rate for more than 300,000 of Puget Sound Energy's customers.

incremental impact on system costs, nor do they give customers the proper incentives to consume energy more efficiently. Reforming rate structures at the state level and allowing prices that reflect actual costs at the time of consumption would provide real financial incentives for end users to curb usage during peak periods. Such a structure would also reduce the amount of cross-subsidization across ratepayers within a customer class.

Second, the industry today does not yet have the adequate metering and billing infrastructure in place to implement dynamic pricing. Currently, nearly all mass-market residential and commercial customers have meters that record consumption on a monthly basis. Since neither the distribution utility nor the retail provider can observe the customer's actual consumption patterns during the day, it is impossible to link customer actions to wholesale market prices. Thus, necessity forces utilities to assign customers a statistical load profile that may accurately reflect the *average* consumption of similar homes or businesses, but that does not reflect the customer's *actual* usage. Without such specific usage information, the customer cannot benefit from shifting or curtailing load in response to higher prices.

To obtain the amount and quality of data necessary for efficient consumption decisions, the utility must upgrade its metering and billing infrastructure. At a minimum, any dynamic pricing program requires that data be collected on a more frequent (e.g., hourly) basis. Luckily, a number of recent advances in automated meter reading technology, the expansion of Internet access, and the declining cost of digital communications has made real-time pricing systems more practical for smaller commercial and residential customers. But despite this fact, many utilities are still concerned about the longer-term cost recovery associated with advanced metering investments—a fact that could prohibit widespread deployment. Several proceedings currently underway call into question the role of utilities in meter reading and billing; as a result, management teams are still reluctant to invest in what may become the next major “stranded asset.”

One final complication exists in the deployment of effective dynamic pricing programs—a classic free-rider problem. As discussed above, approximately 20 percent of total savings comes from individuals either shifting or curtailing their consumption during peak price periods. The remaining 80 percent is generated by the lower wholesale peak prices that result from reducing overall demand during peaks. As more customers respond to wholesale market conditions, demand for peak energy drops, resulting in a lower market-clearing price for all energy consumed at that time.

In aggregate, relatively small individual reductions in demand can potentially create significant savings. For example, our analysis shows that a 10 percent reduction in peak could result in a 20 to 30 percent reduction in peak price on average.⁵ Another report by The Brattle Group found that a 10 percent reduction in demand could lead to a 50 percent reduction in peak price.⁶ Moreover, this collective benefit accrues to all customers,

⁵ Calculated by determining the average price reduction for a corresponding drop in peak demand.

⁶ A report by Peter Fox-Penner and Dean Murphy of The Brattle Group. They found that as little as a 10 percent reduction in price spikes (fly-ups) could result in as much as a 73 percent reduction in peak price.

regardless of whether they participate in dynamic pricing or have made investments in improving the utility metering and communications infrastructure.

Since so much of the value comes from collective actions, there is a risk that consumers or their utilities, especially in the mass-market residential or commercial sectors, will not invest in real-time metering of their own accord. However, unless significant customers are offered this opportunity, the economics will not be positive. By our estimates, at least half of mass market customers would need dynamic pricing capabilities in order to justify the infrastructure expense. Such a wide-scale deployment will require an institutional solution.

THE NEED FOR AN INSTITUTIONAL SOLUTION

In spite of the clear and measurable benefits, these obstacles are preventing the deployment of dynamic pricing solutions. We believe an institutional solution is called for to encourage and support the deployment of the systems and technologies which will enable dynamic pricing. Without such a solution, peak energy consumption will continue to be unnecessarily high, prices will be more volatile than necessary, and more energy infrastructure than necessary will be required. A more efficient solution exists, one that combines effective demand-side and supply-side actions.

011606

CARE

Paul C. Oakley
Executive Director

2001-011606 5/4 P 4:09

May 2, 2001

The Honorable Spencer Abraham
Secretary of Energy
Department of Energy - 7A-257
1000 Independence Avenue, SW
Washington, DC 20585

Dear Secretary Abraham:

Over the past several months, our nation's energy problems have gained increasing attention, whether it is the rolling electricity blackouts in California, increasing natural gas bills or rising gasoline prices.

A number of opinion articles have been published in various newspapers across the country that underscore the importance of affordable and reliable energy to America. Copies of these articles are enclosed.

These articles demonstrate the need for America to have a comprehensive and balanced national energy policy that recognizes the key role of our abundant domestic energy resources, including electricity from coal. We thought you might find them informative as the Bush administration develops its energy policy recommendations.

The Coalition for Affordable and Reliable Energy (CARE) is a broad alliance of more than 45 organizations representing numerous businesses, organized labor, consumer groups and thousands of concerned individuals from across America. CARE has been working for the past year to promote the need for a national energy policy that enables us to meet our future energy needs while striking a sensible balance among social, economic, national security, environmental and energy goals.

If you have any questions or seek further information, please visit our web site, www.careenergy.com, or contact me directly at (202) 639-2805.

Sincerely,



Paul C. Oakley
Executive Director

Coalition for Affordable and Reliable Energy
50 F Street, N.W., Suite 5300, Washington, DC 20001
PHONE (202) 639-2802 FAX (202) 639-2803 EMAIL poakley@careenergy.com

28047