Peabody's Energy Fantasy: America's Nightmare

A Reader's Guide to the National Coal Council Report

March 28, 2006

On March 22, 2006 members of the National Coal Council rubberstamped a report called "Coal: America's Energy Future." This is a future that only the coal industry would choose. Not coincidentally, executives from Peabody Energy, the country's largest coal producer, chaired the study and the work group that wrote the report. The document even contains a variation of the Peabody ad slogan, "Yeah, Coal can do that," in its Executive Summary.

The report calls for more than doubling U.S. coal consumption by 2025, with a total of 1.3 billion tons of additional coal used to produce 4 trillion cubic feet of gas, 2.6 million barrels per day of liquid fuels, 100 gigawatts of electric power, and 3.6 trillion cubic feet of hydrogen. While making unsupportable claims about the economic benefits of this coal industry fantasy it ignores the nightmarish damages that would be caused to our air, water and climate. There is a way for coal to be a component of a responsible energy portfolio that makes America more secure and reduces the dangers of global warming, but this most definitely is not it.

Global Warming Pollution

The National Coal Council (NCC) report is a recipe for accelerating global warming. Although the report implies in various places that synthetic fuels from coal could substitute for conventional energy supplies, the economic claims in the report are based on assuming that the energy produced from consuming an extra 1.3 billion tons of coal is all an addition to EIA's reference forecast for 2025. The reference case projects emissions of 2.9 billion tons of CO_2 in 2025 from burning 1.6 billion tons of coal, so the extra coal consumption called for by the NCC report would increase CO_2 emissions by 2.6 billion tons. At a time when the dangers of coastal inundation, drought, disease, and habitat destruction due to global warming are becoming more apparent nearly every day it would be reckless to commit America to an energy path premised on such an increase in heat-trapping pollution.

The report discusses injecting 30% of this incremental CO_2 for enhanced oil recovery, resulting in incremental production of 2.9 million barrels of oil per day. Again the NCC report assumes that this oil would all be consumed in addition to the reference case forecast, which would release an additional 360 million tons of CO_2. Hence, even assuming that all of the injected CO_2 stays underground, the net incremental CO_2 emissions from the NCC scenario would still be over 2 billion tons (0.7 x 2360 + 360).

Scars on the Land

Ignoring the directive in the letter from Energy Secretary Bodman that requested the study, the report completely fails to discuss the need to employ low impact mining techniques to reduce the devastation caused by the mining practices currently used to produce 1.1 billion tons of coal annually. No effort is made to assess the impact of the additional mountain top removal mining, aquifer destruction, acid mine drainage and land subsidence that would result from an effort to more than double this production over the next 20 years as called for in the report.

Peabody's Zero Cost Energy Fantasy

The NCC report calls for burning an additional 1.3 billion tons of coal in 2025 on top of the 1.6 billion tons of coal in the business as usual forecast of the Energy Information Administration's (EIA's) 2006 Annual Energy Outlook. This coal would be used to produce 12.7 quadrillion BTUs (quads) of liquid and gaseous fuels and electricity in addition to the 127 quads of energy use forecast in EIA's reference case.

The economic "analysis" offered to promote this scenario amounts to assuming that the extra 12.7 quads of energy in 2025 is produced essentially for free. The claimed GDP and employment benefits are unsupportable, having been calculated by simply ignoring energy production costs and using patently false economic assumptions. It would be as if you could balance a bank account by accounting only for deposits while ignoring all withdrawals!

The calculations are the sum of three components:

- The $500 billion in capital costs to build the coal "conversion" facilities is not treated as a *cost* to the economy, but only as an economic *stimulus* with an economic multiplier of 2.6[1] and an employment multiplier of 3.23.
- The incremental 12.7 quads of energy production is valued based on simply multiplying by projected energy prices (with the same economic multipliers as the capital expenditures), completely ignoring the economic (let alone the environmental) costs incurred to produce this energy.
- The largest and most absurd economic benefit claim comes from assuming that the extra 12.7 quads of free energy reduces energy prices by 33% because this is the price reduction needed to stimulate the demand for this extra energy. This price reduction is assumed to have no impact on energy supplies, as if U.S. energy companies meet Soviet-style production quotas regardless of demand. The assumed price reduction is then used to calculate an increase in GDP of 1.6 percent ($322 billion) based on historic relationships between energy prices and economic output. By this logic the government could stimulate the economy at any time by buying additional oil from Saudi Arabia and dumping it on the market for free, regardless of how much it paid.

These absurd assumptions are justified with the mild-mannered caveat that "Representation of how equilibrium energy prices and quantities adjust in each of these markets and their interactions in response to coal-based energy manufacturing is impossible given the resources and timeframe for this project."[2] An additional, equally understated, caveat notes in part that "In addition, such large scale coal utilization could increase equilibrium prices for basic materials and

[1] Vol. 2, p. 69.
[2] Vol. 2, p. 61.

services used to produce BTUs from coal. To estimate these impacts, a general equilibrium model of energy markets and the economy is needed."[3] No such modeling is attempted. Nor is basic input-output modeling used to account for even the partial-equilibrium costs of producing BTUs from coal. Instead of real analysis, then, the report merely offers another version of Peabody's ad slogan, "Yeah, Coal can do that."

An Energy Future for the Rest of Us

Peabody's energy fantasy would be a nightmare for the country. It would require massive subsidies to build synfuels plants, it would wreak environmental havoc, and it would not produce the claimed economic benefits. In contrast, real world experience shows that smart investments in energy efficiency can reduce demand at a fraction of the cost, while reducing, rather than increasing, global warming pollution and other environmental harms. For example, considering only the electricity sector, we know that it is possible to stabilize per capita electricity consumption through robust cost-effective energy efficiency programs because California has achieved this in practice. Doing so nationwide would reduce electricity consumption in 2025 by 10 percent and reduce CO_2 emissions by at least 310 million tons.[4] Considering all sectors of the economy, general equilibrium modeling has shown that investing in advanced energy efficiency and clean energy technologies can boost economic output while cutting global warming pollution in half by mid-century.[5] Peabody Energy's vision for coal can't do that.

[3] Vol. 2, p. 70

[4] This assumes that electricity generation is reduced proportionately for all fuel sources; if all of the electricity savings were used to reduce coal-fired generation the emission reduction would be 475 million tons.

[5] Laitner, Hanson, Mintzer and Leonard, "Adapting for Uncertainty: A Scenario Analysis of U.S. Technology Energy Futures", Energy Studies Review, Vol. 14, No. 1, 2005, pp. 120-135.