Insight

The Energy Policy Modernization Act: Successes and Missed Opportunities

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Summary

- The Energy Policy and Modernization Act of 2015 (EPMA) is a broad bipartisan energy bill, the first one since 2007, that covers a wide range of policy issues both good and bad, and seeks to modernize American energy policy that is currently mired by outdated energy objectives.
- The EPMA brings a welcome focus to easing liquefied natural gas (LNG) export applications, streamlining hydropower dam licensing, expanding public-private partnerships from the National Labs, defining the role of coal, and updating an archaic grid.
- Despite its size, the EPMA does not address a number of key energy problems such as the future of LNG export restrictions, Master Limited Partnership (MLP) parity, or the future of the Renewable Fuel Standard (RFS), and also questionably would subsidize the training of workers to bring buildings up to code while simultaneously supporting efficiency focused regulation.

Introduction

Congress is currently contemplating the EMPMA, the first major energy policy bill since 2007. Although the bill has been caught in some political crossfires and had been put on the proverbial “back burner” it remains very much alive.

In the wake of an energy revolution that has brought booming oil, natural gas, and renewable energy to America, priorities and interests have shifted dramatically. An outdated energy policy is acting more as a hindrance than a help, and the energy sector is rudderless as it faces the unknowns of future regulation, taxes, and restrictions.

In the absence of a clear energy policy, investors must take on more risk to compensate for marketplace uncertainty. Like any bill, the EPMA is not perfect in its entirety, but America cannot afford continued apathy on energy policy. With that in mind, here is a sample of five successful policies within the EPMA, and five missed opportunities.

Five Policies the EPMA Gets Right:

1. **Natural Gas – Accelerating the LNG Export Application Process:** The Energy Information Administration (

EIA) expects the U.S. to become a net exporter of LNG thanks to its booming production. Currently, all applications for the export of LNG must be approved by the Federal Energy Regulatory Commission (FERC). The EPMA will be a boon to LNG exporters by putting a time limit of 45 days on the decision process for FERC.

Japan, the world's largest importer of LNG, has already secured purchases of 1,000 Bcf/y (billion cubic feet per year) of future LNG production via long term contracts. These contracts typically last about 20 years, and at current export prices (accessed on 4/5/2016) these contracts will bring $215 billion in revenue to America. A drawn out application process should not stand in the way of these sales.

2. **Hydroelectricity – Accelerating the Licensing Process:** America has 2,300 powered dams with a capacity of 79 GW and providing about 6 percent of America's electricity. A study from Oak Ridge National Labs determined that America has 84.7 GW of undeveloped hydroelectric capacity from new dams, and an additional 12.1 GW of potential capacity from powering existing non-powered dams.

   Realizing this energy potential from one of America's most affordable, cleanest, and renewable sources of energy will require improvements to licensing procedures. Licensing and relicensing a hydroelectric dam is a highly individualized process in terms of both cost and time, but in testimony to Congress a representative of Pacific Gas & Electric disclosed that relicensing a dam routinely exceeds $20 million in cost, and sometimes even $50 million. The EPMA aims to reduce these costs by extending the duration of preliminary permits to a maximum of 8 years (up from 5), and allowing applicants to use existing studies and open source information to fulfill requirements that may require expensive and duplicative research.

3. **Advanced Nuclear and America COMPETES Technology Transfer:** Publically funded research centers known as National Labs have been spearheading energy research in America for decades. They are not beholden to the conventional market constraints or timelines, and have access to sensitive government research and equipment. The National Labs are a proven source of technological innovation, and would benefit from more policies that help their research become commercialized.

   The EPMA will authorize an expansion of technology transfers (T2) from the labs to the private sector of early stage technologies, improve small business access to T2s, and assess the potential for National Labs to host privately funded advanced nuclear energy research. From 2009-2013 the National Labs sold 28,000 technology licenses, generating $209 million in sales revenue, and $138 million in royalties. Expanding on a program which generates income, creates new opportunities for the private sector, and would allow private investment in energy technologies that could overcome the nation's growing nuclear waste problem is simply good policy.

4. **Clarifying the Role of Coal in the U.S. Energy Future:** The coal industry, which provides about 33 percent of America's electricity, has been the target of regulation and policies by the administration over the past seven years. The American Action Forum (AAF) estimates that 180,000 coal miners have lost their jobs, and $650 billion in economic value is threatened. The Clean Power Plan—regulation primarily targeting coal—is estimated by AAF to impose $8.4 billion annually in regulatory burdens, and has been stayed by the Supreme Court due to questions of its legality.

The EPMA seeks to define the continued role of coal in America's future energy mix, and promote technological advancements to improve its efficiency and "environmental performance." American energy policy must clearly define the role and burdens of energy sources in order to provide market clarity to reduce investment risk, and the EPMA takes a welcome step towards this goal.

5. **A Focus on Improving the Grid:** America is in the midst of an energy revolution as renewable sources are dropping in cost and booming in capacity, but its grid is ill equipped to incorporate intermittent sources of power. America's grid is simultaneously an engineering marvel and an archaic mess, as producers must meet a precarious balance between supply and demand which fluctuates (on both sides) throughout the day. An improved grid could help America to better utilize intermittent energy sources (wind and solar), increase information available to producers and consumers that would improve efficiency, and level out daily electricity demand by utilizing energy storage. The EPMA has a focus on exploiting the potential in this lesser explored component of the energy equation, with plans to implement energy storage, improve grid resilience, and expand voluntary "smart grid" technologies.

EPMA's Missed Opportunities:

1. **Unrestricted LNG Exports Are Missing:** The U.S. does not allow for unrestricted LNG exports, based on speculation that forcing LNG suppliers to sell domestically will reduce prices. In reality, producers opt either not to produce, or must match international prices anyway as they compete with imports. The EIA estimates that by 2040 the U.S. will be a net exporter of LNG anywhere between 3,000 Bcf/y and 13,100 Bcf/y. At current prices, this would be $32.2 billion to $140.7 billion in revenue annually. Restrictions that make little sense and reflect an energy outlook that is no longer true should not stand in the way of America becoming a major source of global energy, and the EPMA could have opened the door to a much needed discussion on the topic.

2. **MLP Parity is Not Included:** A MLP is a tax status that essentially allows a company the liquidity and financing benefits of a corporation. By definition, only companies that receive 90 percent or more of their income from natural resources qualify for MLP status, meaning only energy companies relying on fossil fuels qualify. MLP status for renewable energy sources (hydro, wind, solar, geothermal, etc.) could significantly reduce financing costs, which make up the greatest proportion of levelized electricity costs for these sources. The American Action Forum pointed out that a 17 percent reduction in wind prices would be 58 percent of the cost difference between wind and coal, with a potential cost difference of $18.7 billion per year. Despite bipartisan support, legislation focused on remedying this tax preference has been slow moving, and the EPMA missed an opportunity to finally advance this policy.

3. **No Mention of Fixing the Broken Renewable Fuel Standard:** The RFS, a regulation enforced by the Environmental Protection Agency (EPA) to blend ethanol and other renewable fuels with gasoline, has repeatedly failed to meet legislated targets from the Energy Policy Act. American Action Forum research found that the RFS will cost gasoline consumers around $10 billion in 2016, and research from Resources for the Future (a resource focused think tank) estimates that the combined U.S. and EU RFS regulations will cause global food prices to rise 32 percent. The EPA has been tight lipped on the future of this regulation, which is now eligible to have its blend targets reset. In light of the EPA's failed management of the RFS, the EPMA should have addressed the future of this costly regulation that is leaving market participants in the dark.

4. **Career Skills Training Being Funded by the Federal Government:** The EPMA will authorize $10

million in grant money to help train and certify workers to install “energy efficient buildings technologies” described in the Energy Conservation and Production Act (a law from 1976). Essentially the government would not only impose new regulations on building codes, but then force taxpayers to subsidize the training that would certify workers to bring buildings into compliance. If workers are in demand, then private companies will train and hire them. It is not the role of the government to subsidize this training, which would not even be necessary if not for the regulations in the first place. This is just all around bad policy, and the U.S. should avoid it whenever possible.

5. **Energy Efficiency Standards:** Efficiency standards are a major component of the EPMA. Some of the focus is on making regulators more accountable and requiring more justification before implementation, and some are focused on codifying and entrenching regulatory regimes. The decision as to what level of energy efficiency is appropriate though should be left to the consumers, not to regulators. Last year, American Action Forum research found that regulation of energy efficiency on furnaces will have a total cost of $12.3 billion, and America risks going down a similar road with efficiency standards on other appliances.

Although there are missed opportunities, this bill has the potential to serve as a roadmap for future energy policy at a time it is critically needed. The EPMA manages to garner broad bipartisan support for a comprehensive energy bill, something which is sorely needed as America tackles questions of future regulations, energy sources, and redefined balances of global energy production.