2005 Energy Act: The Impacts on Renewable Energy

As one in a series, this brief issue paper summarizes the key provisions, impacts, and implications that ICF International sees in the Energy Policy Act of 2005 for renewable energy.

Key Provisions

The Energy Policy Act of 2005 signed by President Bush has a number of provisions that apply to renewable energy. These include:

- A two-year extension of the 10-year production tax credit (PTC) of US$19 per MWh, indexed to inflation, for selected renewable resources on-line by December 31, 2007.
- Expansion of the 10-year PTC to include technologies previously assigned only a partial PTC—geothermal, open-loop biomass, and landfill gas. These technologies join wind, closed-loop biomass, solar, and others that were already assigned the full 10-year credit.
- Extension of the PTC to resources not previously covered, including incremental hydroelectric power at existing dams and wave, current, tidal, and ocean thermal energy.
- Research, development, demonstration, and commercial implementation support (R&D) for renewable energy in the amount of US$2.2 billion through 2009, escalating from US$632 million in 2007 to US$743 million in 2008 and US$852 million in 2009.
- Set-asides of US$590 million from the research and development (R&D) amount for biomass in particular.
- The Federal government has a "soft" requirement to implement renewables (up to 7.5 percent of energy consumed after 2013), but this is subject to the requirement that it be economically and technically feasible.

Significantly, what the Act does not include is a national renewable portfolio standard (RPS) of any amount. The Senate version had proposed a 10 percent incremental RPS by 2020, which is comparable to what a number of the 20 states with RPSs have implemented. This provision became controversial when it was suggested that nuclear energy might qualify under a "clean energy" standard.

The 2005 Energy Act does not provide for a National RPS—which would have had significant impacts on the development of new wind projects

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Anticipated Impacts

- The patchwork quilt of state RPS programs and funding for renewables will continue. The state RPS programs have different goals, qualifying technologies, deliverability requirements, and consequences for non-compliance.
- ICF projects that these RPS programs will lead to the incremental installation of approximately 25 GW of wind energy capacity by 2010, and 60-65 GW by 2025.
- The extension of the PTC will—for another two years—avoid the "see-saw" effect experienced several years ago when the PTC was not renewed, and will provide real incentives to selected renewables opportunities.
- Taxpayers will absorb the PTC payments, so customers would not need to pay directly for that share of the incremental cost of renewables.
- In states where renewables are voluntary (no RPS), the PTC will be insufficient to support renewables whose costs are still well above conventional alternatives (though the high cost of gas, if sustained, makes more alternatives viable).
- If the national RPS had been passed, ICF estimates that the impact could have been triple the amount of renewable energy installed nationwide by 2025.

Industry Implications

- The Finance Committee calculates that the extension of the production credits by two years will cost the Treasury a total of US$2.75 billion.
- Companies with projects that can be on line by the end of December 2007 should aggressively pursue such opportunities.
- Alternatively, developers of more marginal projects should realistically assess whether they are likely to be able to take advantage of the PTC.
- The financial analysis and strategic approach for utilities and project developers needs to reflect the difference between RPS states and voluntary states.
- It will be easier for states with existing RPS programs, and new states considering such programs to mandate higher levels of RPS, since the federal government will absorb a share of the incremental cost.
- It will be easier for states and utilities with voluntary renewable programs to promote and gain participation in such programs for the same reason.
- There is a risk that the PTC will not be renewed again, which could lead once again to a "cliff" in renewable projects, especially in states without RPSs.

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