



March 27, 2012

The Honorable Jeff Bingaman
Chair
Subcommittee on Energy, Natural Resources,
and Infrastructure
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable John Cornyn
Ranking Member
Subcommittee on Energy, Natural Resources,
and Infrastructure
Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

Re: Statement for the Record of the National Hydropower Association on the March 27, 2012 Hearing on Renewable Energy Tax Incentives: How have the recent and pending expirations of key incentives affected the renewable energy industry in the United States?

Dear Chairman Bingaman and Ranking Member Cornyn:

The National Hydropower Association¹ (NHA) appreciates this opportunity to comment on the need for continued federal tax policy support of renewable energy technologies – particularly hydropower and marine and hydrokinetic (MHK) – and the negative impacts developers are experiencing, and will be further exacerbated, due to lack of certainty with regard to the future availability of the credit.

NHA reiterates its strong support for federal policy that provides a predictable market signal in support of renewable energy project deployment, which in turn leverages significant private investment, stimulates job creation, and provides local economic benefits across the country.

We continue to urge Congress to approve, without delay, long-term extension of renewable energy incentives, such as the production tax credit (PTC) and other policies, which provide the hydropower industry the certainty needed to compete for investment, complete project construction and begin operation over the next several years.²

As demonstrated by the recent introduction of PTC extension bills in both the Senate and the House, support for renewable energy incentives crosses party lines and regions of the country.

The American Energy and Job Promotion Act, S. 2201, sponsored by Senator Chuck Grassley (R-IA), has seven co-sponsors, both Democrats and Republicans, representing constituencies from Oregon to Colorado, from Nevada to Massachusetts. In the House, the American Renewable Energy Production

¹ NHA is the non-profit national association dedicated exclusively to advancing the interests of the U.S. hydropower industry, including conventional, pumped storage and marine and hydrokinetic technologies. NHA's 180 members includes public utilities, investor owned utilities, independent power producers, project developers, equipment manufacturers, environmental and engineering consultants and attorneys.

² Other incentives for the hydropower industry include the investment tax credit, Section 1603 grants in lieu of tax credits, clean renewable energy bonds (CREBs), as well as the renewable energy equipment manufacturer ITC.

Tax Credit Extension Act of 2011, H.R. 3307, sponsored by Representatives Dave Reichert (R-WA) and Earl Blumenauer (D-OR), has 85 cosponsors – again with supporters from both sides of the aisle and representing 30 states across the country.³

Extension of the renewable energy incentives has broad bipartisan support in Congress, assists the industries seeking to increase the nation's renewable energy production, and provides the necessary certainty to finance projects – particularly large, capital-intensive hydropower projects that must navigate long licensing processes.

Of the renewable technologies, hydropower has one of the longest development timeframes due, in part, to the extensive multi-year federal and state licensing process.⁴ In addition, these projects incur significant up-front costs.

Without the long-term certainty and predictability provided by consistent federal support policies, developers will be unable to attract the financing needed to support this considerable investment and utilities will be driven by default to other resources with shorter development timelines, such as wind and natural gas, resulting in a less diverse electricity generation mix.

As demonstrated below, failure to extend the tax incentives will effectively bring these projects to a halt and undermine the progress the hydropower industry has made in recent years.

The Impact of Tax Incentives on Hydropower Industry-wide Growth

Throughout the 1990s and 2000s, the hydropower industry experienced a period of minimal growth. This changed dramatically with the inclusion of hydropower technologies under the production tax credit (PTC) and clean renewable energy bonds program (CREBs) in 2005, and other incentives, such as the investment tax credit (ITC) and Section 1603 program, in 2009.

From the enactment of the Energy Policy Act of 2005 through December 2011, FERC has certified 85 hydropower projects in 22 states for the PTC.⁵ These projects, involving capacity additions and technology or efficiency improvements at existing hydropower facilities, have resulted in an average

³ The 30 states include: Alabama, Alaska, Arkansas, California, Connecticut, Colorado, Hawaii, Illinois, Iowa, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Virginia, Washington, Wisconsin, and Vermont.

⁴ The integrated licensing process (ILP), the default federal process for hydropower development takes 5-5.5 years. While FERC is the lead agency, the process can also involve federal hydropower project owners, such as the Bureau of Reclamation and the Army Corps of Engineers, federal resource agencies, state resource agencies, tribes, and interested stakeholders and the public. This complex, comprehensive process is intensive, multi-layered and can take up to 26 steps as outlined at: <http://ferc.gov/industries/hydropower/gen-info/licensing/ilp/flowchart.pdf>.

⁵ The 22 states in which hydropower projects have received PTC certification are: Arkansas, California, Georgia, Idaho, Indiana, Kansas, Maine, Maryland, Massachusetts, Michigan, Montana, New Hampshire, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Vermont, Virginia, Washington, West Virginia and Wisconsin.

increase in generation of close to 11 percent for a total generation increase of 971,798 megawatt hours. This is enough energy to power 84,533 homes.⁶

Hydropower Project-specific Examples of the Need for Extension

One NHA member company that has a portfolio of 450 MW of proposed projects (all new facilities on existing dams) reports that the PTC and the ITC have brought much more capital investment into the hydropower market than in the past. Their projects are projected to receive FERC licenses between 2013 and 2015. Once the license is issued, they will then proceed to construction financing. The incentives help make the hydropower projects economically competitive to other renewable energy facilities.

For this company, election of the PTC or the ITC provides important value. However, for their portfolio, an ITC extension provides the greatest value. The company reports that an extension of the ITC would allow them to move forward on 83 percent of the MWs in their portfolio. With no ITC extension, they estimate only 23 percent will be built.

If the PTC is extended, but no parity given (hydropower currently receives only one-half PTC credit), they estimate 26 percent of their projects will move forward. If PTC is extended with parity given, the number increases to 45-50 percent. They also said that the 30 percent ITC is a value of about 26 percent of total project costs, while the PTC provides a value of only 7.5 percent (15 percent with parity).

Another member company has a proposed portfolio that includes a total of 10 projects totaling 250 MW that either have FERC licenses and/or are pending FERC issuance of a license. The company reports 2 of these will get built on the basis of qualification for the Section 1603 cash grant; however, it is unlikely that most of the other projects will get built unless the placed-in-service dates for the incentives are extended.

The multi-year licensing timeline, followed by an additional 1-2 years to get Corp of Engineers or Bureau of Reclamation sign-off and approval (the projects will be situated on existing federal infrastructure) is representative of the additional risks that new hydro projects on existing non-powered dams face from a financing perspective.

Additionally, while the projects are granted up to a 50-year license and have 80-100-year lifetimes, they must be financed and the debt amortized over a 20-year period, if developed by a private company. Once the projects are online they become the least costly source of energy over the life of the project. This is because once the debt and the initial costs are amortized; the projects will continue generating for another 30-60+ years and with much lower O&M costs.

Lastly, another NHA member company is currently developing 33 projects in 15 states, with 12 projects presently in the FERC hydropower licensing process. Nearly all of the projects are located at existing Army Corps of Engineers' dams. The company holds preliminary permits for the development of 400 MW of new hydropower capacity, equivalent to the energy production from approximately 1400 MW of solar power or 930 MW of wind power. The current projects will provide enough annual power for approximately 200,000 homes and annually avoid 2.7 billion pounds of carbon emission. The company expects to create 140 jobs per project during development.

⁶ See <http://www.eia.gov/tools/faqs/faq.cfm?id=97&t=3> for EIA data on average residential annual electricity consumption for 2010 (updated December 2011).

They also report that they have received preliminary FERC permits for 11 new sites totaling 140 MW. The company states that they will not begin to develop these sites until the PTC is extended and are now only moving forward on licensing 1 of the 12 previously mentioned projects until there is resolution to the PTC issue.

They report that the PTC is valuable and will help ensure new development because it closes the gap between the price of a new hydro plant at an existing dam and the price to build new gas fired plants, which is the de facto baseline for utilities in PPA negotiations.

The company states that a PTC extension (at the full credit rate) would undoubtedly unlock new hydro growth and they would move forward very aggressively on virtually all of their proposed projects. Extension of the current PTC for hydropower (at half credit) also helps, though not as much as a full credit extension.

Conclusion

Hydropower is the country's largest renewable electricity provider, generating approximately 8 percent of total electricity in the United States in 2011.⁷ This represents almost two-thirds of U.S. renewable electricity generation.

NHA believes tremendous opportunities exist to further increase deployment of hydropower resources to realize our national clean energy, job creation, and environmental goals.

However, the looming expiration of incentives is already leading to a decline in the commitment to new projects and construction. As the company examples cited above illustrate, the full scope of this potential will only be realized if there is continued stable policy support for project deployment, such as extension of existing renewable energy incentives.

Again, NHA would like to thank you for the opportunity to comment on the need for continued federal tax policy support of renewable energy technologies - particularly hydropower and marine and hydrokinetic (MHK) - and we look forward to serving as a resource for the Committee.

Sincerely,



Linda Church Ciocci
Executive Director

⁷ http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_1_1