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Testimony on "Mandatory Conditioning Requirements on Hydropower: How Federal Resource Agencies are Driving Up Electricity Costs and Decreasing the Original Green Energy"

Committee on Natural Resources The United States House of Representatives June 27, 2012

Mr. Chairman and Members of the Committee:

My name is J. Mark Robinson and I am the Principal with JMR Energy Infra, LLC. In this role I advise clients on the development of major energy infrastructure including liquefied natural gas (LNG) export facilities, natural gas pipelines, electric transmission lines, and, more germane to this hearing, hydropower projects regulated by the Federal Energy Regulatory Commission (FERC). Prior to my current activities I was with FERC for 31 years starting as an aquatic ecologist in the hydropower program and finishing as the Director of the Office of Energy Projects (OEP) from 2001 to 2009. During that later period OEP was responsible for the licensing, administration, and safety of approximately 1,600 non-federal hydropower projects.

I would like to thank you for the opportunity to speak today on mandatory conditioning requirements and their impact on hydropower development. The comprehensive nature of FERC's licensing program addresses all siting and operational issues with the full participation of federal and state agencies while attempting to ensure the timely and cost effective development of hydropower projects found to be in the public interest. Timeliness and cost effectiveness, however, are virtues that with some regularity go by the wayside as a result of a widely dispersed decision making process exemplified by the mandatory conditioning authority given to multiple agencies.

The remainder of my testimony will describe the efforts that have been made to efficiently integrate mandatory conditions into the licensing process, the issues that still detract from the ability to move on hydropower projects that are in the public interest, and a rational approach to the licensing of hydropower that would improve all agencies' ability to reach a decision jointly on needed projects while including mandatory conditions.

I. Licensing Hydropower Projects and Mandatory Conditions

Mandatory conditions take several forms in the licensing of hydropower projects but in essence they all share one attribute – the condition is provided by a separate federal or state agency and the FERC must include the condition in any license issued giving that condition the protective umbrella of the Federal Power Act (FPA) in terms of enforcement. There are three mandatory conditions that are common to the licensing process as described here.

FPA Section 4(e) – In cases where the proposed licensed project would be located on a federal reservation, the federal agency responsible for managing that land, typically the Department of Agriculture and the Department of the Interior, can file conditions to protect the reservation. These conditions are required to be included in any license issued. For example, the Secretary of the Interior prescribes mandatory conditions for projects on Indian reservations, and the Secretary of Agriculture does so for projects in national forests.

FPA Section 18 – The FPA of 1935 contained Section 18 that gave authority to the Secretary of Commerce to "prescribe" fishways. In 1970, Section 18 was amended to also give such authority to the Secretary of the Interior. The authority to prescribe fishways applies to new licenses as well as original licenses. Fishways can costs tens of millions of dollars and thus have a significant impact on the viability of not only new proposed projects but also existing projects up for relicensing. The fishways prescribed by the Secretaries of Commerce and of the Interior must be included in any license issued.

Clean Water Act (CWA) Section 401 – Under Section 401 of the CWA, a license applicant must obtain certification from the state or interstate pollution control agency verifying compliance with the CWA. Conditions included with the issuance of the 401 Certificate are considered conditions of any license issued by FERC. Although the CWA Section 401 conditions are frequently the most significant impediment to timely licensing of hydropower projects the focus of this testimony will be on FPA Section 4(e) and 18 mandatory conditions.

Although not a mandatory condition in the sense described above there are another set of conditions required by the FPA that should be noted here – Section 10(j) conditions. Section 10(j) of the FPA, requires fish and wildlife conditions included in licenses be based on conditions proposed by federal and state fish and wildlife agencies. If the FERC fails, in any respect, to adopt an agency's recommendation, it must explain not merely why it disagrees with the agency, but why the agency's recommendation is inconsistent with the FPA or other applicable law. This test of inconsistency with the law raises Section 10(j) conditions to near mandatory levels.

It should also be noted that in 2005 the Congress recognized a growing concern with the use of mandatory conditions and provided some relief. The Energy Policy Act of 2005 (EPAct) required the Departments of the Interior, Commerce, and Agriculture to provide for: 1) expedited trial-type hearings on contested mandatory conditions; and 2) alternatives to agency proposed mandatory conditions. Parties to a FERC license proceeding may request a trial-type hearing on mandatory conditions before an administrative law judge (ALJ). These hearings are limited to "sorting out the facts of a case" and are not used to decide whether a condition or prescription is appropriate for economic or policy reasons. The conditioning agency, however, must take into account the ALJ's opinion prior to issuing final conditions for inclusion in a FERC license. More significantly, the conditioning agency must accept proposed alternative mandatory conditions if they find: (1) that an alternative condition would adequately protect and use the reservation (federal lands) or that an alternative fishway would be as protective as a fishway initially prescribed, and (2) that an alternative condition would cost significantly less or would increase energy production. In making a decision, the conditioning agency must give equal consideration to the effects of the condition adopted and alternatives not accepted on certain energy and environmental criteria.

Under the FERC's Integrated Licensing Process, mandatory conditions are first provided to the parties after as much as three years of studies performed in cooperation with the conditioning agencies. Once the application for licensing is filed and found acceptable for processing the conditioning agencies file their "preliminary conditions" that are then available for review by the applicant and other parties. If a trial type hearing is requested pursuant to the Energy Policy Act of 2005 then that procedure is followed

- 4 -

while the FERC prepares a draft National Environmental Policy Act (NEPA) document, either an environmental assessment or and environmental impact statement. Regardless of whether a trial type hearing is requested the conditioning agencies may file modified conditions after the draft NEPA document so they may be included in the final NEPA analysis.

As the FERC found in its 2009 review of the use of the trial type hearing most of these proceeding end with a negotiated settlement (13 of the first 16 requests for trial type hearing were settled and withdrawn). This process of providing preliminary and modified conditions provides an opportunity for the conditioning agencies to lead with what some may consider unreasonable conditions as a tool for providing leverage in any settlement discussions that are ongoing. Knowing that the applicant must affirmatively pursue a trial type hearing and that the agencies have an opportunity to provide modified conditions later in the FERC process places the conditioning agencies in a superior position during any negotiations. The playing field is significantly tilted in favor of the conditioning agencies.

II. Challenges to the Hydropower Development

The FERC's role in licensing hydropower has been diminished over the last few decades. Prior to the FPA of 1935 the only significant role played by other agencies was outlined in Section 4(e). Originally the FERC reviewed Section 4(e)'s conditions as advisory. However, in 1984, the Supreme Court's Escondido decision found that 4(e) conditions were mandatory. This left the FERC with a choice of either finding that the 4(e) conditions were in the public interest and include them unaltered in any license issued or find that the conditions were inconsistent with the broad public interest standard

of FPA Section 10(a)(1) and decline to issue the license. Unlike the FERC and its requirements under Section 10(a)(1), agencies with 4(e) authority have no statutory obligation to adhere to the balanced development standard. The more narrow focus and interests of conditioning agencies with 4(e) authority results in conflicts with the license applicant caught in the middle.

The 1935 passage of the FPA included Section 18 authority for the Secretary of Commerce to "prescribe" fishways.

In American Rivers v. FERC (9th Cir. 1999) the Court ruled that FERC lacked authority to determine whether Section 18 conditions were in fact fishways. As a result of these judicial rulings the FERC's only discretion with respect to mandatory conditions it might otherwise conclude are not in the public interest is simply to deny the license application. The conflict between a broad public interest determination by FERC and the more narrow purpose of mandatory conditions continues.

In May 8, 2001, the FERC filed a report with Congress pursuant to Section 603 of the Energy Act of 2000. This report entitled, "Report on Hydroelectric Licensing Policies, Procedures, and Regulations - Comprehensive Review and Recommendations", was prepared after consultation with conditioning agencies to determine how to reduce the cost and time of obtaining a license under the FPA and to propose needed legislative changes. A review of this report and recommendations indicate that not much has changed in the last 11 years.

The finding of the 2001 report included that the time from the filing of a license application to an order issuing license was slightly more than three and a half years with many proceedings taking substantially longer. A review of all 16 hydropower licenses

- 6 -

issued in 2011 (the last full year available for comparison) by FERC shows that the average time from filing the application to licensing was 3.6 years with the longest being 8 years. The 2001 report also concluded that "...the underlying source of most delays was a statutory scheme that disperses decision-making among federal and state agencies acting independently of the FERC's proceedings." This dispersed decision-making remains the primary cause of not only delay but also additional costs associated with the preparation of the application and the cost of mandatory conditions.

The 2001 report captures the findings of the 100 pages of analyses with the following paragraph referring to dispersed decision making:

"The same statutory scheme also ensures that the Commission has scant control over the costs of preparing a license application or of the costs of environmental mitigation and enhancement. These expenditures are frequently mandated in state water quality certification or mandatory federal agency conditions required pursuant to FPA Sections 4(e) and 18, and override the Commission's balancing of all relevant factors affecting the public interest."

A related issue in timely licensing can be described as extended agency authority. This is where agencies will take the authority they have been granted covering an aspect of the project (e.g., prescribing fishways pursuant to Section 18 of the FPA) and utilize that singular authority to duplicate the action of the siting agency to make an overall public interest determination. This unnecessary and counterproductive duplication of the public interest determination can results in regulatory uncertainty when an applicant does not know which forum will ultimately decide if a project should be constructed. This is not to say that the agencies with conditioning authority need to agree with the FERC's decision, but rather that those agencies should focus on their aspect of the project and

condition accordingly while leaving the overall siting determination to the agency given that authority.

This dispersed decisional authority as represented by mandatory conditions does take its toll on hydropower development. A comparison among various electric power generation sources demonstrates the stagnation felt by the hydropower development community.

Between 2000 and 2010, according to the U.S. Energy Information Administration (EIA) Annual Generator Report, the net summer capacity for hydropower remained constant at 79 gigawatts (GW). No net increase in hydropower capacity for a decade. During this same period EIA reports that natural gas capacity increased by 187 GWs. In just two years between 2000 and 2002 more natural gas generation was added to the Nation's supply than all existing hydropower capacity today. It should be noted that according to EIA natural gas prices reached a high of \$6.82 during this two year period and reached a high of \$10.79 during the decade. Natural gas was not cheap but the market ignored hydropower and moved to natural gas.

Another comparison follows from the nuclear power industry. Utility executives are reasonably concerned with diversifying their generation sources. Georgia Power as an example is developing the Vogtle Nuclear Plant at an estimated cost of \$6,363 per installed kilowatt. Hydropower projects vary in terms of their construction costs but EIA puts the average cost of construction at approximately \$3,000 with no fuel costs. Utilities will pay twice the capital cost for generation and incur a fuel cost as well while available hydropower goes undeveloped.

- 8 -

The Department of Energy, in a report issued this year entitled, "An Assessment of Energy Potential at Non-Powered Dams in the United States," estimated that without building a single new dam there were 12 GWs of available hydropower ready for development. No new dams required, half the cost of constructing nuclear power, no cost fuel compared to the variable cost of natural gas and yet hydropower remains stagnant for at least the last decade. Certainly the issue of dispersed decision making, as represented by multiple agencies with mandatory conditioning authority and first identified by FERC in 2001, should be considered as a primary reason for the complete lack of progress in the development of this Nation's most significant, in terms of existing capacity, renewable resource.

III. A Rational Licensing Process with Mandatory Conditions

A rational process for the authorization of any energy infrastructure including hydropower development includes six basic principles:

- Exclusive Jurisdiction one lead agency that has been designated by congress as the only agency that has siting authority
- Pre-filing A system for quickly identifying issues and determining if there are any fatal flaws early in the process
- One Federal Record All agencies must work together to create one administrative record and all agencies are bound to that one record for judicial review
- Disciplined Schedule All agencies have to act within the time frame set by the lead agency with repercussions on authorities if an agency delays their decision

- 5. Expeditious Judicial Review Failure of an agency to follow the schedule set by the lead agency or to provide conditions narrowly focused to their authorities results in immediate referral to the federal court system
- 6. Eminent domain

Designating one agency as having exclusive siting authority would not usurp the decisional authority of the mandatory conditioning agencies. Rather it recognizes that one agency has been vested with the authority to determine whether the proposal is in the public interest while others have been vested with authorities that go only to some aspect of the project. This would specifically address the issue of extended agency authority where mandatory conditions are used to achieve larger agency goals like basin-wide restoration. The Alaska Gas Pipeline Act of 2004 specifically addressed this issue by distinguishing between the lead agency and other agencies that are handling aspects of the project.

The development of one federal record for all agencies that are acting under federal law is at its core just a matter of good government. Currently, at times agencies go to the effort of developing records covering the same issues under different time frames. Requiring all agencies to work together under the schedule of the lead agency would reduce waste, improve decision making, and reduce the potential for conflicting conclusions. Finally, to provide discipline to the process the agencies need to know that, should they not meet the schedule or extend their authorities beyond designated aspect of the project, their actions would be reviewed by the federal court.

With these six principles in place, energy infrastructure has the potential for development. As an example the natural gas pipeline industry has a legislative/regulatory

- 10 -

environment that encompasses all six principles. During the period from 2000 to 2010 more than 15,000 miles of new interstate pipeline were constructed. This included one 1,700 mile, 42 inch diameter pipeline across eight states that took only three and one half years to go from the application being filed at FERC to completing construction and natural gas flowing from the Rockies to the Pennsylvania border.

By comparison the hydropower industry only benefits from two of the six principles – pre-filing and eminent domain. As a consequence licensing can continue for excessive periods of time with associated costs. As an example the relicensing of the existing Orville hydropower project in California has been ongoing for nearly 10 years with many of those years directly related to the resolution of mandatory conditions. In practice there are no statutory curbs in the existing licensing process to the delays associated with resolving mandatory conditions and as a consequence no certainty in the regulatory process. Given these types of licensing uncertainties there is little incentive for the potential proponent for a new hydropower project to invest. The ability of a developer to see that the first dollar invested in pursuing a new hydropower project has a reasonable chance to result in a return is critical to infrastructure development. Hydropower suffers from lacking this legislative/regulatory environment that incorporates the six principles of energy infrastructure development.

IV. Conclusion

The FERC's licensing process is designed to ensure that all issues are carefully considered based on extensive input from all affected parties. Mandatory conditions can be integrated into this process without disruption or unnecessary costs. By developing a

- 11 -

statutory/regulatory process based on the six principles of energy infrastructure development that restrains the abuse of the mandatory conditioning authority, developmental interests will once again turn to our Nation's original green energy.