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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

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INTRODUCTION:

Chairman Hastings and Ranking Member Markey; My name is Einar Maisch; I am the Director of Strategic Affairs for the Placer County Water Agency (PCWA) located in Auburn, California. Thank you for the opportunity to address the Natural Resources Committee today on the important topic of Mandatory Conditioning Requirements on Hydropower.

PCWA is a public agency established by an Act of the California Legislature in 1957 to provide water and energy services within Placer County. PCWA is governed by a five-member elected Board of Directors.

PCWA is the owner and licensee of the Middle Fork American River Project (MFP), Federal Energy Regulatory Commission (FERC) Project No. 2079. The MFP is located in northern California, west of Lake Tahoe, on the west slope of the Sierra Nevada Mountains. The MFP serves as a multi-purpose water supply and hydroelectric project. The Project was licensed in 1963 and began operations in 1967. It has a generating capacity of approximately 224 megawatts (MW) and produces an average of 1,000,000 megawatt-hours (MWh) per year of clean, carbon-free energy. The MFP is also used to divert and store water to meet municipal, industrial, and agricultural demands in western Placer County.

PCWA's 50-year FERC license expires on February 28, 2013. In my capacity as Director of Strategic Affairs, in cooperation with the County of Placer, I have overseen the relicensing of the MFP. In addition, I have directed PCWA's active participation as a stakeholder in the relicensing of two FERC hydroelectric projects in the Yuba River Watershed, the next watershed north of the American River. These projects include Nevada Irrigation District's (NID) Yuba-Bear Hydroelectric Project, FERC Project No. 2266 and Pacific Gas and Electric's (PG&E) Drum-Spaulding Project, FERC Project No. 2310. In these proceedings, PCWA's primary interest is to protect both current and future consumptive water deliveries for the residents of Placer County, from the Yuba-Bear/Drum-Spaulding projects.

PCWA has intimate knowledge of the FERC's Integrated Licensing Process (ILP) and the mandatory conditioning authority that certain resource agencies have under the Federal Power Act (FPA).

#### ROLE OF HYDRO IN THE NATION'S ENERGY PORTFOLIO:

Hydropower represents a source of clean, renewable energy, providing approximately 10% of the country's electric generating capacity. The energy produced from hydro-generation is not only emission-free, which facilitates the country's overall objective of reducing greenhouse gases, but is also one of the least-costly forms of energy available to consumers. Furthermore, due to its ability to be dispatched quickly, hydropower provides valuable ancillary services to support the overall quality and reliability of the electric grid.

Only recently, from the experiences in the Bonneville Power Administration's territory and others, have many come to understand that hydropower's grid regulation capability is critical to incorporating more non-dispatchable renewable energy sources (i.e., wind and solar) into the nation's energy portfolio.

#### RELICENSING PROCESS OVERVIEW:

The relicensing process is a long and expensive process with decision-making authority spread across a range of federal and state agencies pursuing different statutory missions. The relicensing of hydroelectric projects is resulting in an average loss of approximately 8-10% of the nation's hydropower. In addition, implementation of new license conditions has dramatically increased capital and operating costs. In some cases, the loss of generation revenue combined with increased costs has resulted in hydroelectric projects being deemed uneconomical, resulting in decommission.

#### **The Integrated Licensing Process**

As of July 23, 2005, the ILP is the default FERC process for the licensing of hydroelectric projects. The ILP offered several advantages over the previous licensing processes, most importantly defined deadlines for participation through the process associated with:

- Study plan determination;
- Requests for additional information; and
- Filing of terms and conditions by resource agencies.

Unfortunately, however, if the licensee strictly adheres to the ILP schedule, there may be insufficient time to complete the required studies and have sufficient information available to resolve conflicts with relicensing participants on potential new license conditions, prior to submittal of the License Application. While the ILP timeline may appear to confine the study

activities and costs, it often results in FERC prolonging the licensing proceeding until studies are completed or encourages the resource agencies to mandate very conservative license conditions based on either a lack of information or insufficient time for the parties to jointly understand the implications of the study results. The resource agencies often also request license reopeners or impose conditions that require extensive studies after the license is issued and adaptive management that allows the agencies to modify their mandatory conditions over the term of the license, once study results become available.

Under these scenarios the licensee is left with uncertain costs and conditions for years into the new license, which makes efficient budgeting and planning exceedingly difficult.

### **PCWA's Relicensing Experience**

For the relicensing of the MFP, PCWA made the strategic decision to invest in the development of the study plans and implementation of scientific studies early in the process. In fact, PCWA began relicensing activities five years prior to filing of the Notice of Intent (NOI) and Pre-Application Document (PAD). PCWA was the first license applicant to submit stakeholder-approved study plans in its PAD. PCWA also obtained FERC approval to expedite the study plan process. Early implementation of the study plans allowed PCWA to complete the studies in sufficient time for the results to be used by relicensing participants to collaborate on new license conditions. PCWA submitted a Final License Application (FLA) which included detailed management and monitoring plans. The resource agencies filed preliminary terms and conditions on August 2011 which were generally consistent with the FLA and subsequent negotiations between the parties. FERC's draft National Environmental Policy Act (NEPA) document should be distributed for public review in mid-July 2012.

PCWA has worked collaboratively with resource agencies, non-governmental organizations (NGO), and other stakeholders for seven years on this project. Overall, we feel that the stakeholders in our relicensing have appreciated PCWA's approach, and they have been reasonable in setting conditions. We believe that this success was directly related to PCWA's early engagement in the process and active collaboration with relicensing participants.

PCWA has spent about \$37 million on the relicensing of the MFP to date. Under the preliminary terms and conditions filed by the mandatory conditioning agencies, PCWA expects to lose about 5% of annual energy generation as a result of increased instream flows requirements. We expect to spend approximately \$20 million on capital improvements; our annual operation and maintenance (O&M) costs will increase approximately \$2.4 million per year and direct cash payments to resource agencies will amount to another \$1 million per year. Believe me, under the current regulatory framework, this is what success looks like.

## **The PG&E and NID Relicensing Experience**

In the northern adjacent watershed, the story is different. PG&E is relicensing its Drum-Spaulding Project (FERC Project No. 2310) collaboratively with NID's Yuba-Bear Hydroelectric Project, (FERC Project No. 2266). The Drum-Spaulding/Yuba-Bear projects are highly integrated, operating as a single system with over 50 individual diversions. It is one of the most complex hydropower systems in California, if not the nation. Many of its facilities date back to the California Gold Rush era and are used to support both power generation and delivery of consumptive water. However, complexity does not translate into high revenues from power generation.

PG&E and NID made the strategic decision to be less aggressive in the development of study plans and implementation of environmental studies compared to PCWA; however, they did comply with every ILP regulatory deadline. This approach was likely due to the overall complexity of the system, an order of magnitude more complex than PCWA's MFP, and the inability of the project revenues to support the scope of studies expected by resource agencies.

With less timely information available in the Yuba-Bear/Drum-Spaulding relicensing, resource agencies have been more aggressive, and their current proposal will result in a loss of approximately 10% of average annual generation, in addition to significant capital improvements, and increased operating costs. As a consequence, PG&E recently asked FERC to divide the Drum-Spaulding Project into more than one licensed project, because electric generation revenues may not be sufficient to support continued hydropower operations of the entire system.

The residents of Placer County are dependent upon operations of the Drum-Spaulding Project and its water conveyance facilities to deliver consumptive water. These conveyance facilities have provided water to the people of Placer County since the late-1800's. The new license conditions and the uncertainty about the fate of the project, now licensed to PG&E, are obviously of great concern to PCWA and its water customers.

### **RESOURCE BALANCING:**

The FPA gives FERC legal authority to issue licenses for non-federal hydroelectric projects. During the relicensing process, FERC must give "equal consideration" to developmental and non-developmental values including:

- Utilization of the site's hydroelectric potential;
- Potential benefits to interstate or foreign commerce;
- Adequate protection, mitigation, and enhancement of fish and wildlife (including their spawning grounds and habitat); and

- Other beneficial public uses, including energy conservation, irrigation, flood control, water supply, recreational opportunities, and other aspects of environmental quality.

It is important to note that under FERC jurisdiction the baseline for the relicensing of a hydroelectric project is the existing environmental conditions associated with the current project facilities and on-going O&M.

### **Mandatory Conditioning**

Under Section 4(e) of the FPA, resource agencies may establish mandatory conditions for lands within their federal reservation. Under Section 18, certain resource agencies can prescribe mandatory fishways prescriptions. However, the mandatory conditioning agencies are not required to give equal consideration to developmental and non-developmental values. The only requirement for mandatory conditions under Section 4(e) is that they do not interfere with the purpose for which the federal reservation was created or acquired, and that they are deemed necessary for the “adequate protection and utilization” of such reservation.

These resource agencies can impose mandatory conditions that result in substantial loss of hydropower generation, require costly infrastructure modifications, and increase O&M costs without considering the overall effects of the conditions on project economics, energy supply, water supply, and any other public benefits. The resource agencies are simply following their statutory mission. Although we can all cite examples where resources agencies have been overzealous in prescribing mandatory conditions, the problem lies in the guidance provided under current law. The resource agencies do not have to establish mandatory conditions with an eye toward balancing environmental and societal values.

Since the FPA does not allow FERC to modify or reject mandatory conditions filed by resource agencies, there is no mechanism to establish final license conditions that are balanced and provide for equal consideration of other developmental and non-developmental values. This directly conflicts with FERC’s authority under the FPA.

In addition, the resource agencies do not consider filing of mandatory conditions to be a federal action requiring analysis under NEPA. We strongly disagree with this interpretation. Because these conditions are mandatory and must be accepted by FERC, the act of submitting the conditions should be considered a federal action, and therefore the resource agencies should be required to complete an independent review under NEPA that includes a detailed analysis of direct, indirect or cumulative effects of the federal action. The NEPA analysis conducted by FERC for issuance of the new license is completed after resource agencies have issued their mandatory conditions, and it therefore cannot satisfy NEPA for issuance of the mandatory conditions.

## Challenging Mandatory Conditions

Under current regulations, the licensee and other parties have three options to respond to preliminary mandatory conditions including submitting: 1) comments; 2) alternative conditions; and/or, 3) requests for a trial-type hearing.

Experience shows that comments filed on mandatory conditions are routinely ignored and at best become a footnote in the administrative record.

Filing of alternative conditions is a more extensive process that requires the licensee to meet specific criteria. The alternative conditions must be submitted within 30 days following filing of the preliminary terms and conditions, including mandatory conditions, with FERC.

The filing of alternative conditions must include:

- A description of the alternative;
- An explanation of how the alternative will provide the adequate protection and utilization of the reservation;
- An explanation of how the alternative, as compared to the preliminary conditions, will
  - Cost significantly less to implement or
  - Result in improved operation of the project works for electricity production;
- An explanation how the alternative will affect (1) energy supply, distribution, cost, and use; (2) flood control; (3) navigation; (4) water supply; (5) air quality; (6) other aspects of environmental quality; and
- Specific citations to any scientific studies, literature, etc relied on to support proposal.

The party proposing an alternative condition must provide extensive evidence comparing its alternative to the resource agency's preliminary mandatory conditions across a range of different factors, both environmental and economic. In contrast, the mandatory conditioning agency itself, in developing and filing its preliminary mandatory conditions, is not required to consider or present evidence on any of those factors, or on the effects of the conditions it has mandated. Furthermore, alternative conditions are evaluated by the mandatory conditioning agency within the confines of "adequate protection and utilization of the reservation." This approach does not provide for equal consideration of other environmental and societal values. In other words, there is no balancing.

So what happens once resource agencies receive alternative conditions? Under the current regulations, the resource agencies are not obligated to respond in a timely manner or consult on the alternative conditions. The resource agencies are only obligated to provide an explanation of the rationale for rejecting the alternative conditions concurrent with the filing of

their modified terms and conditions. At this point in the process, the licensee has no ability under the alternative condition process regulations to challenge the mandatory conditions.

The request for trial-type hearing on a mandatory condition is an even more arduous and expensive process. This request must also be made within 30 days following the filing of preliminary terms and conditions by the resource agencies. The request for hearing must be solely based on a “disputed issue of material fact.” What constitutes an issue of material fact is ill-defined. The hearing process is focused on whether the mandatory conditions are supported by the record, in the context of the resource agencies’ narrow objective--protection and utilization of the federal reservation. The hearing process does not evaluate the mandatory conditions in a broader perspective of balancing other environmental and societal values.

To further compound the problem, the resource agencies can issue modified mandatory conditions later, which can be substantially different from the preliminary conditions, with no clear process for requesting a trial-type hearing on the modified mandatory conditions.

#### RECOMMENDED PROCESS IMPROVEMENTS:

We urge Congress to revise the licensing regulations to incorporate greater balance in the development of license conditions for hydroelectric projects. Specifically, we present two options to revise the mandatory conditioning process.

Option 1 includes:

- Require resource agencies to broaden the scope of their analysis when developing mandatory conditions, beyond just the narrow mission of their respective agency and adhere to the broader requirement of balancing between developmental and non-developmental values that is currently required of FERC.
- Establish that agencies filing mandatory conditions with FERC are engaging in a “federal action” and require independent environmental review under NEPA; including a comprehensive analysis of the direct, indirect, and cumulative impacts of their action under the same public review process required for every other federal action.
- Require resource agencies to clearly define the objective of each mandatory condition with an accompanying rationale and disclosure of impacts in an open and transparent manner, thereby, adhering to the same standard of disclosure and explanation required of the licensee and other parties submitting Alternative Conditions.
- Require agencies to promptly consult and respond to Alternative Conditions prior to FERC’s Draft NEPA document, rather than allowing the agencies to ignore the requests for months and only address them during the filing of modified terms and conditions, after the Draft NEPA document has been issued.

- Modify the hearing process regarding the basis for challenging mandatory conditions such that concerns over balancing between developmental and non-developmental values can be addressed, rather than restricting the hearing process to only “issues of material fact.” Further, there should be a clear process for requesting a trial-type hearing on modified terms and conditions.

Option 2 includes:

- A more direct and cost-effective approach for revising the relicensing process -- simply eliminate mandatory conditioning authority and have resource agencies use their authority to file recommendations under Section 10(a) and 10(j) of the FPA. This would allow FERC to fully evaluate and balance these recommendations in a broader context.

I would like to thank Chairman Hastings and Ranking Member Markey for allowing me to share my thoughts on this important topic with the Natural Resources Committee. Revising the mandatory conditioning process is paramount for the Nation’s hydroelectric generation resources.