

Testimony

of

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before the

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of the

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on

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Good morning Chairman Murkowski, Ranking Member Cantwell and members of the Committee. Thank you for the invitation to appear before you today as we consider S. 1236, the Hydropower Improvement Act of 2015, and the important opportunity to modernize and improve the hydropower licensing and relicensing processes.

My name is Randy Livingston, and I am here in my capacity as Vice President of Power Generation at Pacific Gas and Electric Company (PG&E).

PG&E is one of the largest combined natural gas and electric utilities in the United States. Based in San Francisco, with more than 22,000 team members, the company delivers some of the nation's cleanest energy to nearly 16 million people – or one in 20 Americans – throughout a 70,000-square-mile service area in Northern and Central California. In fact, more than 50 percent of the electricity we deliver to customers comes from greenhouse gas-free resources, a significant portion of which is attributed to hydroelectric generation.

PG&E owns and operates one of nation's largest investor-owned hydroelectric systems, which is built along 16 river basins and stretches more than 500 miles. PG&E's 67 powerhouses, including a pumped storage facility, have a total generating capacity of 3,888 megawatts (MW) – enough to meet the needs of nearly four million homes. The system relies on approximately 100 reservoirs located primarily in the higher elevations of California's Sierra Nevada and Southern Cascade mountain ranges.

PG&E's hydroelectric system consists of 26 federally licensed projects. Since 2000, PG&E has completed 10 hydropower relicensing proceedings representing 1,140 MW. PG&E has 7 "active" hydropower relicensing proceedings, which represent an additional 1,131 MW.

As required by federal and state regulatory agencies, PG&E evaluates and mitigates the projects' impacts on natural resources and the environment. We have made it a priority to work collaboratively with stakeholders, including federal and state agencies, local community members, environmental organizations, fishing interests and other recreationalists, and agricultural landholders, among others, during the relicensing process. Together, we work to assess the impacts of these projects, identify issues of importance, and develop plans to protect fish and wildlife habitat, enhance recreational uses, and improve water quality and flow management.

We believe this collaborative approach best serves the public interest, as we recognize that many entities and individuals rely on the watersheds in which our facilities are located. At the same time, we believe that the process currently in place could be substantially improved, allowing for the benefits of relicensing to the environment, the community and the consumer to be achieved significantly sooner than they are today.

Hydropower is an invaluable, renewable resource – and one that our country can and should do more to capitalize on. It is a greenhouse gas-free source of energy that provides important reliability benefits to the overall power system, particularly systems with significant amounts of intermittent renewable generation, such as solar and wind.

We appreciate all the efforts made to date by past Congresses to advance hydroelectric generation and we believe that, with the introduction of S. 1236, this committee is taking a very important step to continue this progress.

PG&E believes it is critical for hydroelectric power generators to be able to move through the relicensing process more efficiently and more affordably, so that we can implement environmental protections, community improvements and facility upgrades much more quickly than we do today. Essentially, delays in the relicensing process merely delay improvements and add costs, which are ultimately borne by the energy consumer.

We believe that S. 1236 includes common sense reforms, which would allow owners and operators of hydroelectric systems to function more efficiently, while providing – and accelerating – environmental protections and other benefits.

Hydropower: An Abundant Resource with Challenges

Hydropower is America's largest renewable energy resource. This safe, affordable and dependable natural resource is also by far the largest source of renewable electricity in the United States, at approximately 100 gigawatts of installed capacity.

In order to capitalize on hydropower's existing capacity and future potential, addressing key challenges within the existing hydropower licensing process is necessary. With respect to PG&E's system, the process to relicense existing hydroelectric projects requires extensive consultation with multiple state and federal agencies, consistently takes at least seven years, and frequently lasts more than ten years. For example, the relicensing of the Poe Project is now in year seventeen.

Meanwhile, the cost to PG&E customers to obtain a license renewal has routinely exceeded \$20 million per license, and some current proceedings will exceed \$50 million. When, and if, a license is approved and received, implementing the conditions of the license also routinely costs tens-of-millions of additional dollars.

To put this into greater perspective, the cost and duration of the process to relicense an existing hydroelectric project can be just as cumbersome and complex as seeking a license for a new, unbuilt hydroelectric project. In both cases, the cost and duration associated with licensing is typically far greater than any other established electric generation technology.

Congressional Action: Addressing Federal Regulatory Changes

PG&E applauds Congress for taking meaningful steps over the years to promote hydropower development, including taking swift action in 2013 to pass the "Hydropower Regulatory Efficiency Act of 2013" (now Public Law 113-23), and the "Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act" (now Public Law 113-24).

We also remain encouraged that the U.S. Senate and U.S. House of Representatives have expressed a desire – and are working now – to craft broad energy plans in the 114th Congress. PG&E fully supports the process and will remain an active voice in sharing our experiences during the development of potential legislation related to hydropower licensing, among other key issues.

Actions taken to provide a greater level of regulatory clarity and certainty for hydropower development and production, which are captured in S. 1236, serve as another example of the important work of the Committee on Energy and Natural Resources. Both the recognition of such licensing challenges in California – and across this country – as well as a bill providing solutions to these challenges, S. 1236 proposes, are very important to maximize hydropower's future potential.

Thus, there is no question that S. 1236 helps in many ways to improve the efficiency of the federal regulatory processes surrounding hydropower licensing. PG&E believes it responsibly reduces regulatory uncertainty across the nation, without sacrificing protections for the environment or jeopardizing the integrity of the licensing process.

Licensing Improvements for Hydropower

PG&E recognizes the right of and need for federal agencies to place license conditions upon the lands for which they have the responsibility to manage. Similarly, PG&E also understands that various federal agencies have different missions and different objectives, given their purview, and may therefore have different perspectives on the license conditions are needed. However, we believe that better coordination of these perspectives is necessary given how the process and agency interaction works today. In fact, today, if conflicting license conditions are placed on a project, they are left to the licensee to resolve. Instead, we believe the federal government should be in the position of resolving conflicting conditions from various agencies, not a licensee. While we recognize that the hydroelectric licensing provisions in the Energy Policy Act of 2005 tried to address this and similar issues, they unfortunately were not realized during implementation over the past decade.

The recommendations we advocate to modernize the process will: 1) help improve the timeliness and cost of renewing a license; 2) ensure all involved stakeholders use the same underlying data and studies, so that results can be compared, as well as follow the same schedule in exercising their authorities; 3) provide clarity of extent of authorities; and 4) provide a process for a single effective challenge opportunity before the Federal Energy Regulatory Commission (FERC) to resolve disputes regarding proposed license conditions.

Some specific actions Congress can take to overcome the existing challenges and maximize hydropower's potential, include addressing the following four areas:

- Improve coordination between federal and state environmental reviews;
- Better define the extent of authorities by federal agencies;
- Improve federal agency coordination and transparency; and
- Improve federal and state agency coordination and transparency.

To achieve these basic improvements, Congress should consider advancing legislation on the following four principles, which S. 1236 does in several cases:

 Establishing a defined process at FERC to resolve issues arising from overlapping or conflicting authorities, or overlapping and conflicting license conditions among federal agencies, as well as between federal and state agencies.

S. 1236 accomplishes this recommendation through: 1) new Federal Power Act (FPA) section 35 (a) which defines "Federal Authorization" to mean any authorization required under Federal law including any license, permit, special use authorization, certification, opinion, consultation, determination or other approval; 2) new FPA section 35 (b) which designates FERC as lead agency for the purposes of coordinating all applicable Federal authorizations; and 3) new FPA section 36 (n) which states the Commission has final authority to resolve any inconsistencies between requirements imposed pursuant to Federal authorization (as defined in section 35(a)).

 When a preliminary condition is proposed by an agency, the relicensing process currently allows a licensee to propose alternatives that would meet the resource objective, but be superior from a licensees' perspective; and it allows for trial type hearings on the preliminary condition. However, the process does not allow for any challenge of a final condition; further, it does not require that the final condition resemble the preliminary condition or the outcome of the hearing. To that end, we suggest this be addressed.

S. 1236 partially accomplishes this recommendation through new FPA sections 35 and 36 and revisions to Section 33. Proposed FPA Section 36 states any subsequent modified condition or prescription submitted by the Secretary in response to the trial-type hearing should reflect the findings of fact of the Administrative Law Judges (ALJ), and that the ALJ's findings shall be binding on all participants in the trial-type hearing. Alternatives may be submitted in response to a Secretary's submission of modified conditions or prescriptions. S. 1236 does not include a provision specifically allowing a party to request a trial type hearing on modified conditions or prescriptions, but there is no provision prohibiting it. Also, new Section 36 provides that after considering the modified condition/prescription and any alternative to the modified condition, the Commission shall include the modified condition, unless it determines that the alternative provides for the adequate protection and utilization of the reservation. • Requiring the use of the same studies and data for both federal and state environmental analyses, including defining a disciplined schedule for all agencies and stakeholders to adhere to and empowering FERC to consider late filed conditions FPA 10(a) recommendations.

S. 1236 accomplishes these recommendations by adding new FPA section 34 (a) (1), (2) and (3), which states FERC shall conduct an investigation into best practices, compile a comprehensive collection of studies and data accessible to the public and to the maximum extent practicable use existing studies and data to ensure such studies and data are not duplicated. Also, new FPA Sections 35 (c) (1) (2) and (3) establish timing for issuance of federal authorizations, that FERC shall issue a schedule for all such authorizations and that if a Federal authorization is not issued by the applicable deadline any subsequent submission shall be treated as a FPA 10(a) recommendation.

• Empowering FERC to be in a position of disallowing proposed license conditions if they do not have a clear nexus with the project being licensed or an effect on federal reserved land.

S. 1236 accomplishes this by amending FPA section 4e to state that the mandatory conditions must pertain to "reservation land on which project works are located, have a clear and direct nexus to the project being licensed, as determined by the Commission." Also, FPA section 18 is amended to state fishways must be "necessary to mitigate effects of the project on fish populations" and "have a clear and direct nexus to the presence or operations of the project being licensed."

PG&E believes these common sense and much-needed improvements to the hydropower licensing process can be accomplished in a responsible and balanced manner that protects and preserves our fisheries and other natural resources, as well as the collaborative process in place today.

At the same time, such enhancements would bring consistency, predictability, and lower costs for projects that support the safe and reliable delivery of domestic hydroelectric power – benefiting utility customers, the environment, American jobs, energy infrastructure, and the power grid. For example, a license renewal typically results in enhanced habitat and species protections, more access to recreational areas and updated water resources measures. These are improvements that all stakeholders want, but unfortunately they often take too long to put in place. We believe a more timely process will not jeopardize the implementation of these benefits, but instead ensure that they happen sooner and at lower cost to energy consumers.

PG&E looks forward to continuing our efforts – and working with Congress to further address these important issues – as we strive to operate the safest and most reliable hydroelectric system in the nation.

Again, PG&E appreciates the opportunity to participate in today's hearing. We applaud the introduction of S. 1236, an important measure to help further realize the growth potential of the U.S. hydropower industry and its related benefits on our communities, the environment and generation systems.

PG&E stands ready to work with the Committee on Energy and Natural Resources, and other members of the U.S. Senate and U.S. House Representatives on finding reasonable opportunities to advance hydropower development, including embracing realistic reforms – such as those included in S. 1236 – to reshape and modernize the licensing process.

Thank you for your time and attention.