

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Preliminary Permits for Wave, Current, and
Instream New Technology Hydropower Projects**

Docket No. RM07-8-000

**COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY
ON NOTICE OF INQUIRY AND INTERIM STATEMENT OF POLICY
REGARDING PRELIMINARY PERMITS FOR WAVE, CURRENT, AND
INSTREAM NEW TECHNOLOGY HYDROPOWER PROJECTS**

INTRODUCTION

In a Notice of Inquiry (“NOI”) and Interim Statement of Policy issued in this docket on February 15, 2007,¹ the Federal Energy Regulatory Commission (“Commission”) solicited comments on two basic issues with respect to applications for preliminary permits to study proposals to use wave, current, tide, and instream new technology methods (“new technologies”) to develop hydroelectric power. The questions it posed are:

1. How to treat such permit applications; and
2. How to oversee such permits during their terms.

Pacific Gas and Electric Company (“PG&E”) recently filed two preliminary permit applications to study the feasibility of wave energy conversion devices off the California coast,²

¹ FERC Stats. & Regs. ¶ 35,555, 72 Fed. Reg. 9281 (March 1, 2007).

² On February 27, 2007, PG&E filed two preliminary permit applications to study the feasibility of wave energy conversion devices that would float on the surface of the open ocean in water depths somewhere between 60 and 600 feet. The proposed 40-megawatt PG&E Humboldt WaveConnect Project No. 12779 would be located off the coast of the City of Eureka and the Samoa Peninsula in Humboldt County, California, between 2 and 10 miles from shore. The proposed 40-megawatt PG&E Mendocino WaveConnect Project No. 12781 would be located off the coast of Mendocino County, California, between 0.5 and 4.5 miles from shore. The permit applications define a study area of roughly 8 miles by 17 miles (136 square miles) and 4 miles by 17 miles (68 square miles), respectively, but the final projects will have much smaller footprints.

so it especially appreciates this opportunity to submit its comments on these timely and important questions.

BACKGROUND

A. Statutory Provisions

Section 4(f) of the Federal Power Act³ (“FPA”) authorizes the Commission to issue preliminary permits to prospective applicants for a hydropower license for the purpose of preserving the permittee’s priority of application for a license for up to three years while the permittee investigates the feasibility of the proposed project and prepares a license application. Section 5 of the FPA provides that a permit is not transferable, and it can be cancelled for the permittee’s failure to comply with the permit’s conditions, or for other good cause shown.⁴

B. The Commission’s Traditional Preliminary Permit Policy

In part because a preliminary permit does not authorize any construction or access to study sites, the Commission has granted permits for conventional and pumped storage hydroelectric projects without requiring the applicant to make a detailed showing of its technical or financial resources to construct the proposed project.⁵ The heavy attrition between permits and license applications, and the consequent reluctance to expend staff resources on monitoring

³ 16 USC § 797(f) (2000).

⁴ 16 USC § 798 (2000). Section 5 states:

Each preliminary permit issued under this part shall be for the sole purpose of maintaining for such period or periods, not exceeding a total of three years, as in the discretion of the Commission may be necessary for making examinations and surveys, for preparing maps, plans, specifications, and estimates, and for making financial arrangements. Each permit shall set forth the conditions under which priority shall be maintained. Such permits shall not be transferable, and may be canceled by order of the Commission upon failure of permittees to comply with the conditions thereof or for other good cause shown after notice and opportunity for hearing.

⁵ PG&E’s comments in this filing are not directed at the issuance or monitoring of permit applications for conventional and pumped storage hydroelectric projects.

compliance with permit conditions, caused the Commission to strip down the conditions. Also, the Commission's licensing regulations increasingly defined the pre-filing requirements for potential license applicants focusing less attention on permits.

C. New Hydropower Technologies Require a New Preliminary Permit Policy

When the Commission began receiving permit applications for proposed new technology projects, it recognized the potential of the new technologies to make a significant contribution to the generation of clean, renewable, and domestic energy. It also understood the risk that the development of this nascent energy source from experimental to commercial status could easily stall in a business-as-usual regulatory climate. The Commission has made clear that it "wants to reduce regulatory barriers to the development of new technologies, where possible," and has exhibited "the maximum flexibility permitted by law in regulating these projects."⁶

A key demonstration of the Commission's flexibility is its holding in *Verdant Power, LLC*⁷ that under specified circumstances the short-term testing of new hydropower technology would not require a Commission license. This ruling helps bridge the problem that many of the studies needed to obtain operational performance data and evaluate the potential impacts of the technology on offshore environmental and commercial uses require that test units be installed and operated.⁸

At the Commission's December 6, 2006 Hydroelectric Infrastructure Technical Conference, potential developers and other interested parties described regulatory elements they

⁶ (NOI at P 3; footnote omitted).

⁷ 111 FERC ¶ 61,024, reh'g, 112 FERC ¶ 61,143 (2005).

⁸ Unlike the Commission's current licensing processes, which were designed for conventional hydroelectric projects and draw on considerable existing operational data and a fairly standard menu of study topics involving largely familiar terrestrial and aquatic environmental resources, the new offshore technologies pose operational and environmental questions for which relatively few answers have been obtained.

see as stumbling-blocks to the advancement of the new technologies industry. Among the concerns expressed were that the Commission's preliminary permit policies, which evolved in the context of conventional hydroelectric development, do not adequately distinguish between qualified, serious applicants and applicants that lack the requisite resources to undertake the necessary studies and put together an acceptable license application; or that allegedly merely seek to profit from holding permits covering large swaths of ocean with potential generation value ("site-banking"). The Commission's NOI seeks further comments on these and other preliminary permit issues.

DISCUSSION

The Commission asks for comments on three approaches it describes with respect to preliminary permit applications for new-technology projects: (1) continue its current "standard" approach as described above; (2) seek to reduce the size of expansive proposed study areas; or (3) decline to issue permits to study new technologies. Our comments begin with the third approach.

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A. The Commission Should Continue to Issue Permits for New Technologies

A preliminary permit serves the important function of protecting the substantial investment of time and money a prospective license applicant must commit to study the technical and economic feasibility of a proposed project, together with its potential impacts on an array of environmental, cultural, tribal, recreational and other resources. During the permit term, only the permittee can file a license application for a project on the permit site. Moreover, if the permittee files an acceptable license application during the permit term, FPA Section 7(a)⁹ confers on that application a tie-breaker preference as against any competing license

⁹ 16 U.S.C. § 800(a).

applications. The Commission's regulations increase this competitive advantage by giving the permittee an opportunity to revise its application to match any competing application the Commission determines to be substantively superior.¹⁰ The municipal preference also applies in the case of competing permit applications. A private permit applicant that loses to a municipal competitor can cut its losses at this early stage. However, if the Commission decides not to issue any permits for new-technology projects, the private entity would face having to spend a significant amount of time and money preparing a license application without knowing whether its application will be met with a competing municipal application. Moreover, the private entity's license application could be preceded by another private application, which, in the absence of any competing municipal applicant, would enjoy first-to-file tie-breaker preference. These are risks many potential private applicants may decline to take, with the result that significant sources of funding and technical expertise could become unavailable to the new technologies at the time they are most needed.

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For all these reasons, PG&E urges the Commission to continue to issue preliminary permits for the new technologies project proposals.

B. The Commission Should Apply Stricter Scrutiny to Permit Applications for the New Technologies Projects

1. Stricter Scrutiny of Applicants

PG&E supports the Commission's proposal to apply stricter scrutiny to the qualifications of permit applicants for the new technologies projects in order to weed out applicants that lack the intent or requisite resources to undertake the consultation and studies that will be required of

¹⁰ 18 C.F.R. § 4.37(c)(2). In the absence of any license applicant with permittee priority, Section 7(a) of the FPA, 16 U.S.C. § 800(a) (2000), grants a State or municipal applicant a tie-breaker preference over competing license applications filed by non-municipalities, as well as an opportunity to revise its application to match any competing application the Commission determines to be substantively superior.

them. The Commission should optimize the chances that new technologies will actually be developed by asking under-documented non-traditional or unfamiliar permit applicants to provide additional information about their technical expertise, financial resources, and developer credentials/capacities. Where the responses of such an applicant put in reasonable doubt its ability to undertake the necessary procedures and studies, much less actually develop a project, the Commission should dismiss the application without prejudice to the entity's filing of a new application that provides the requisite demonstration of technical and financial capability.¹¹

2. Stricter Scrutiny of Proposed Technology

At this early stage in the development of the new-technology industry, there has not been a shake-out of the commercially viable designs among the various prototype facilities. However, a permit applicant should be required to identify the technology it intends to deploy in sufficient detail to allow the Commission, the resource agencies, and tribes to develop relevant study requests at an early stage. If the applicant is not prepared to provide enough specific information to allow consultations and studies to go forward on a timely basis, its application should be dismissed, without prejudice, allowing the applicant to file a new application that provides the requisite specific information. However, a deficient application should not block an application by a better-prepared applicant.

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¹¹ See, e.g., Commission staff's February 1, 2007 letter to Natural Currents Energy Services, LLC, Project No. 12718, *et al.*, asking for the company's articles of incorporation, any business or other relationships with other organizations, and how the company proposes to raise the money to fund the studies and any eventual licensed project; and staff's February 1, 2007 letter to Lincoln County, Oregon, Project No. 12727, asking for a more specific description of the technology and equipment proposed to be used.

3. Stricter Scrutiny of Permit Boundary

PG&E supports the option set forth in the NOI, and adopted by the Commission as its interim policy, of requiring greater specificity in new-technology permit applications with regard to the proposed location of the project.

It is recognized that the features of any permit proposal tend to be general and fluid, since the purpose of the permit is to protect the permittee's investment in studies that will examine the feasibility of various project designs and derive a much more specific proposal for a license application. With respect to permit proposals for new technologies to be deployed offshore, there is the additional complication that at the current state of the science, applicants cannot identify with much accuracy where their projects will be placed. However, excessively expansive permit boundaries can tie up large areas of ocean for as long as three years (the maximum term of a permit), with no guarantee that the permittee will file a license application. PG&E supports the Commission's efforts to balance these considerations by seeking to have permit applicants reduce expansive boundaries or explain to the Commission why their chosen boundary is appropriate.

C. The Commission Should Impose Additional Requirements on Permits for New Technologies and Apply Stricter Scrutiny to Compliance

PG&E supports the option set forth in the NOI, and adopted by the Commission as its interim policy, of imposing additional requirements on preliminary permits issued for new technology proposals, in order that the Commission can identify and, if appropriate, terminate the permits of permittees who are unwilling or unable to commit the necessary resources and actions required to follow through with a license application.

As noted above, in recent years permits have contained few requirements beyond directing the permittee to file progress reports with the Commission at six-month intervals. The

Commission's interim policy for new hydropower technologies includes the addition of permit Article 4,¹² which requires the permittee to file, within forty-five days of the effective date of the permit, a schedule plan that includes a commitment to submit a notice of intent to file a license application ("NOI") and a pre-application document ("PAD"),¹³ together with any request to use a licensing process other than the default Integrated Licensing Process ("ILP"):¹⁴ *i.e.*, the Traditional Licensing Process ("TLP"), Alternative Licensing Process ("ALP"), or a Hybrid Integrated Traditional Process ("HIT").

New permit Article 4 should go a long way toward winnowing out permittees (and permit applicants) that are unwilling or unable to invest the resources required to promptly launch the license application pre-filing effort. However, for permit applicants such as PG&E that filed before or shortly after the first use of Article 4, forty-five days may not be enough time to develop a schedule plan and obtain the requisite approval, such as from state public utility commissions, to commit the funds needed to prepare a NOI/PAD and conduct other required actions.¹⁵ Further, Article 4 should be amended to delete the one-size-fits-all timeline for new technology project permit compliance. Instead, the permittee's schedule plan should commit to a date, that need not be "within one year of the effective date of [the] permit," by which it intends to submit its NOI/PAD.

¹² See, e.g., the February 16, 2007 order issuing a preliminary permit to Reedsport OPT Wave Park, LLC 118 FERC ¶ 61,118 (2007) (Project No. 12713).

¹³ See 18 C.F.R. §§ 5.5, 5.6 (2006).

¹⁴ 18 C.F.R. § 5.3.

¹⁵ PG&E notes that permit orders are made effective as of the first day of the month in which they are issued. This practice can reduce the actual time by which a particular permittee must file its schedule plan to as few as fifteen days. PG&E suggests that the Commission change the schedule plan filing date to 60 or 75 days after the date the permit is issued.

The standard ILP takes more time than the three years of a permit term. If the permittee needs a second, “sequential,” permit in order to complete the prerequisites to filing a license application, it must apply for the sequential permit, at which point it will face the risk of losing to a competitor that files the first permit application or is a State or municipality. In light of these realities, most new technology permittees can be expected to try to finish the pre-filing process before the first permit expires by requesting leave to use the TLP, ALP or a HIT. It is vital for the encouragement of serious investment in the new technologies that the Commission declares its intent to grant such requests.

In addition, because of the chicken-and-egg problem of field-testing new types generating units for which no baseline data are available, it has become apparent that even at the pre-filing stage, developers and regulators need to employ principles of adaptive management with respect to the design and execution of studies. Therefore, it is also important that the Commission express its readiness to grant all reasonable requests for waiver of pre-filing requirements that are ~~not in step with the special circumstances of still-experimental technologies~~. For example, the Commission could waive, at least for offshore project proposals, the requirement for a Pre-Application Document (“PAD”) (18 C.F.R. § 5.6 (2006)), which was clearly designed for conventional projects on inland waterways.

D. The Next Goal: An Expedited Licensing Process for New Technologies

PG&E appreciates that both developers and regulators are on a learning curve with respect to the types and extent of the various new technologies' potential environmental impacts. However, PG&E believes it is in the public interest for the Commission to examine all opportunities to shorten – programmatically, case-by-case, or both – the time it takes to act on accepted license applications for these projects. As with the pre-filing process, we encourage the

Commission to grant process waivers where possible and, once the Commission has sufficient information to satisfy the substantial evidence standard, to issue public notice under 18 C.F.R. § 4.34(b) calling for the filing of all comments, recommendations, and (if applicable) mandatory conditions, even if some studies are not yet completed. We also urge the Commission defer any additional study requests until after licensing. The license's inclusion of a strong adaptive management approach can serve to protect the public interest from any unanticipated adverse effects that post-license studies may reveal.

CONCLUSION

A. Preliminary Permits

PG&E thanks the Commission for the opportunity to offer comments regarding the permit policy best suited to encourage investment in the timely development of new technologies. PG&E urges the Commission to:

- Continue to issue preliminary permits for new-technology project proposals;
- Require permit applicants to make a threshold showing of their technical and financial resources and their developer credentials/capacities;
- Require permit applicants to identify the technology they propose to use;
- Require permit applicants reduce expansive boundaries or explain why their boundary is appropriate; and
- Keep new permit Article 4, revised to require the permittee to file, within sixty or seventy-five days of the effective date of the permit, a schedule plan that includes a commitment to submit, during the permit term, a notice of intent to file a license application and a pre-application document, together with any request to use a licensing process other than the default Integrated Licensing Process.

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B. Licensing Process

PG&E recognizes the Commission intends to solicit comments specific to new technologies licensing issues and looks forward to providing more in-depth comments on how that process might be reshaped to expedite licensing while complying with statutory and regulatory requirements. PG&E strongly supports reforms that will further the significant public interest in the timely testing, and commercial deployment, of these clean renewable and domestic energy sources.

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Respectfully submitted,

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