

UNITED STATES OF AMERICA
Before The
FEDERAL ENERGY REGULATORY COMMISSION

Preliminary Permits for Wave, Current, and)
Instream New Technology) Docket No. RM07-8-000
Hydropower Projects)

**TACOMA POWER’S COMMENTS ON
NOTICE OF INQUIRY AND INTERIM STATEMENT OF POLICY**

I. Background

On February 15, 2007, the Federal Energy Regulatory Commission (“FERC” or “Commission”) issued a Notice of Inquiry and Interim Statement of Policy (“NOI”) regarding preliminary permits for wave, current, and in-stream new technology hydropower projects. The NOI solicited comments on, in particular, the Commission’s treatment of applications for preliminary permits for hydropower projects that would utilize wave, current and in-stream new technologies and the Commission’s oversight of permits issued for new technology hydropower projects. The City of Tacoma, Washington, dba Tacoma Power (“Tacoma Power”) respectfully submits these comments for the Commission’s consideration.

Tacoma Power is one of the largest publicly-owned utilities in the state of Washington in terms of both customers served and energy sold. In 2005, Tacoma Power served an average of 158,182 customers with a total demand of approximately 550 aMW. Tacoma Power is also subject to the renewable portfolio standards (RPS) recently enacted with the passage of Washington State Initiative 937 in November of 2006. As a result, Tacoma Power will need to purchase and/or develop sources of renewable energy to meet its RPS requirements.

In 2005, prior to the passage of Washington’s RPS law, Tacoma Power began investigating the possibility of generating power using the tidal currents in the Tacoma Narrows; a channel in the Puget Sound lying between Tacoma and Gig Harbor. As part of that investigation, Tacoma Power applied for and received the first preliminary permit from the Federal Energy Regulatory Commission (FERC) to study the feasibility of in-stream tidal energy conversion in Puget Sound. Since receiving its preliminary permit, Tacoma Power has completed the first phase of its feasibility study and has filed two semi-annual reports describing its progress in detail. Tacoma Power believes that in-stream tidal energy could be a reliable renewable energy source and a viable component of the mix used to meet the requirement to obtain 15% of its energy from renewable sources by 2020. Tacoma Power is therefore actively studying the feasibility of tidal energy conversion.

As a holder of the first preliminary permit (P-12612) in Puget Sound and because it is actively studying tidal power, Tacoma Power will be directly affected by the outcome of this proceeding.¹ Tacoma Power therefore greatly appreciates this opportunity to submit comments on the NOI and looks forward to a continuing dialogue with the Commission as it develops policies appropriate for these emerging renewable technologies.

Tacoma Power generally supports FERC's initiative to apply strict scrutiny to new applications for preliminary permits and compliance with the terms of those permits. In particular, Tacoma Power concurs with the Commission's goals to "limit[] the boundaries of the permits, to prevent site-banking and to promote competition." NOI at P14. The NOI indicates that the strict scrutiny approach is intended to be flexible, *i.e.* the elements of strict scrutiny are not carved in stone.² Consistent with this approach, Tacoma Power submits that the requirements of strict scrutiny should be applied on a case-by-case basis according to the nature of the proposed site and technology. Tacoma Power's comments reflect this approach and offer suggestions and refinements on the application of a strict scrutiny policy to preliminary permit applications and compliance.

II Recommendations for Modifications to the Preliminary Permit Application

Tacoma Power would suggest the following changes to the required content of a preliminary permit application, as outlined in Title 18 Chapter I Sec. 4.81, for proposed in-stream and ocean energy projects. The suggestions are intended to modify or augment the contents of a preliminary permit application to more accurately define and describe the proposed project area and environment for wave, current and in-stream technologies.

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Ocean energy projects often do not lend themselves to being defined in topographical terms, therefore Tacoma Power suggests additional methods of identifying a proposed project area (other than by USGS maps defining section, township and range as currently required), which may be more accurate. Several of these methods are listed below.

1. Aerial/Satellite photographs
2. Coast Guard approved navigational charts
3. GPS coordinates
4. Longitude and latitude or universal transverse Mercator (UTM)

¹ *Tacoma Power*, 114 FERC ¶ 62,174 (Feb. 22, 2006). Tacoma Power understands that its current preliminary permit is not subject to the Interim Statement of Policy; however, to the extent Tacoma files an application for preliminary permit in the future, Tacoma understands that such an application and permit would be subject to then-current regulatory requirements, including any such requirements or policies resulting from this proceeding.

² For example, the NOI does not definitively list the requirements of strict scrutiny, stating that "[s]tricter scrutiny could entail requirements such as...." NOI at P 14.

USGS and state topographic maps do not provide adequate information to evaluate offshore sties. This is particularly important for sites located within navigable waters. For proposed projects located within river systems or in channels located between two land masses, USGS topographic maps may still be adequate to identify the project area.

Tacoma Power supports the efforts of FERC to prevent “site banking” and suggests that applicants be required to submit documentation demonstrating their financial and operational ability to develop a commercial power generation facility. Tacoma Power also supports FERC’s attempts to prevent “site banking” by requiring applicants to define extremely tight project and study boundaries. Because of the infancy of the wave, current and in-stream technology in this country, and the absence of comprehensive and detailed tidal and current mapping for most waters, some flexibility in the size and area of a study site will be required to ensure that flow patterns are accurately mapped and that the most feasible site in terms of power generation, environmental effect and economic benefit is selected. However, we must work together to strike the proper balance between defining a large enough boundary for study purposes and overextending the boundaries to the point of “site banking.”

For in-stream and tidal projects, Tacoma Power also suggests that FERC require applicants to notify all existing and/or proposed “down stream” project developers when filing a preliminary permit. Because upstream projects will remove energy from the water, it is likely the amount of energy available at downstream sites will be reduced by an amount proportional to the size of all upstream projects.

It would also be appropriate for preliminary permit applicants for wave, current, or in-stream projects to provide a description of all known hazards to navigation within their project area. This information will be required by the Coast Guard prior to any and all construction.

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III Preliminary Permit Compliance Requirements

The current “strict scrutiny” approach being applied by FERC when issuing preliminary permits to study the feasibility of in-stream tidal and wave energy projects is unduly burdensome for the permittee. In the NOI, FERC proposes to impose “deadlines for filing a notice of intent to file a license application and a preliminary application document.” NOI at P 14. In recent orders issuing preliminary permits, FERC has required these documents, which signal commencement of the licensing process, to be filed within one year of permit issuance.³ While Tacoma Power understands that the purpose of this approach is to prevent “site banking,” the infancy of the technology makes the timeframe required by the current “strict scrutiny” preliminary permit and the schedule-driven ILP impractical. For this reason, Tacoma Power recommends FERC adopt a modified approach to permitting these new technologies that would allow permittees to conduct the necessary studies and fully investigate the efficacy and environmental impacts of the technology under consideration.

³ See, e.g., *ORPC Alaska, LLC*, 119 FERC ¶ 62,045 (2007); *Public Utility District No. 1 of Snohomish County, Washington*, 118 FERC ¶ 62,188 (2007).

As a holder of the first preliminary permit to study tidal power in Puget Sound, Tacoma Power is further into the process of its feasibility studies than other permit holders and has a unique perspective on the development of this new technology. Tacoma Power therefore makes the following recommendations:

- Issue an initial preliminary permit in which the applicant would dedicate the resources necessary to; 1) collect information on the tidal currents, 2) collect bathymetric data, 3) select the equipment to be tested based on the results of the current flow studies and seabed composition and 4) consult with the agencies and stakeholders about permits required to install a test unit and what studies to conduct while the pilot unit is operating. The collection of this data should be collected based upon a timeline included and required as part of the preliminary permit application.
- Grant a second preliminary permit to the original permittee if the permittee has shown due diligence in meeting the timeline of the initial preliminary permit.
- Require the second preliminary permit to contain a second timeline that would detail the process of designing and installing a pilot unit and conducting the required functional and environmental studies. It is from this information that the permittee in consultation with the various agencies and stakeholders could identify the conditions under which a license for a commercial array should be issued.
- Continue to require semi-annual progress reports to ensure that real progress is being made in the investigation of project feasibility. If FERC determines at the end of the first preliminary permit that insufficient progress toward testing a unit and conducting studies has been made, the second preliminary permit can be denied.
- At the conclusion of the second preliminary permit period, the permittee would be expected to submit a license application if it wishes to move forward with the project. If the permittee is still interested in pursuing the project but does not yet have the information available to submit a license application, then a request for a subsequent preliminary permit could be submitted. However, other interested parties may also submit preliminary permit applications for consideration in developing the same location.

Tacoma Power feels these changes are necessary to allow these new and relatively untested technologies to be thoroughly investigated. Here in Puget Sound, a number of endangered and protected species are known to live and migrate through the waters being studied by Tacoma Power. Because of this, Tacoma Power recognizes that additional steps need to be taken to ensure that these new technologies will not pose a danger to the Puget Sound ecosystem and that future developers of in-stream tidal, wave and current generation sites will have to do the same.

In addition to these changes, Tacoma Power also strongly supports the concept of a federally funded programmatic EIS to evaluate the potential impacts of wave and tidal site selection on fish and wildlife and related habitat; and potential cumulative impacts as described in the proposed "Marine and Hydrokinetic Renewable Energy Promotion Act". This concept will help advance these new technologies and speed up their inclusion into the nation's supply of green power resources.

IV Limited Licensing Requirements for Pilot Installations

Because wave, current and in-stream technologies are relatively new, Tacoma Power requests FERC use its flexibility to create short licensing processes and waiver rights to process limited licenses for pilot projects installed during the second preliminary permit. This flexibility allows utilities and developers to gather the information necessary to thoroughly understand the impacts of these new technologies. Pilot installations would be small and are unlikely to cause major environmental impacts and the information gained will provide invaluable data that can be used to quickly license future projects in a more expedient manner and bring a significant amount of green energy to the market.

V Conclusions

The Electric Power Research Institute estimates that the total amount of electricity that could be harnessed from wave and in-stream tidal currents alone could meet over 6.5% of the United States' energy needs. If river in-stream energy conversion is considered, that number approaches 10% of the total energy needs of the United States. For this reason, it is important that wave, current and in-stream sites be studied and developed. The best way to responsibly develop these sites is to ensure that preliminary permits are issued to the entities that have the means and commitment to conduct the extensive studies required and the means to move this potentially large quantity of green power onto the grid. Tacoma Power commends the recent efforts by FERC to prevent site banking of these potential sources of green power, a circumstance which could prevent their timely development.

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Internal Statement of Policy for Preliminary Permits for Wave, Current, and Instream New Technology Hydropower Projects.” We feel there is great potential in these new sources of electricity and appreciate FERC's efforts to facilitate the development of these resources. Tacoma Power believes the actions FERC is taking now, coupled with the recommendations we have provided above, will allow for a more informed and faster development of these potential green energy sources and provide the United States with another means to reduce its dependence on fossil fuels.

Respectfully submitted,



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