

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

**Washington Tidal Energy Company )      Project No. 12663-000**

**MOTION TO INTERVENE AND PROTEST  
OF VERDANT POWER, LLC.**

Pursuant to Rules 210, 211, 212 and 214 of the Rules of Practice and Procedure, Verdant Power, LLC (“Verdant”) hereby submits this Motion to Intervene and Protest in the above-captioned proceeding. As will appear below, Verdant has good cause to intervene, and Verdant requests that the Commission grant its motion with all rights attendant thereto.

**NOTICES AND COMMUNICATIONS**

All correspondence, pleadings, and other communications regarding this motion should be sent to:

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**I. VERDANT AND ITS INTEREST IN THIS PROCEEDING**

Verdant, a limited liability company organized under the laws of the Commonwealth of Virginia, is a developer and systems integrator of kinetic hydropower projects. On December 13, 2005 the Commission issued a preliminary permit to Verdant for Project No. 12611-000 related to the Roosevelt Island Tidal

Energy Project (“RITE Project”). Verdant’s application for the permit for this project demonstrated that Verdant is a serious developer with the knowledge and capability to develop Kinetic Hydropower (“KH”) projects. As such, Verdant has a strong interest in Commission actions that may have the effect of supporting an unqualified company in its quest, against Commission policy, to bank prime potential KH sites.

Thus, Verdant has unique and substantial interests that may be affected by Project 12663; interests that will need to be addressed at the appropriate time. Verdant’s interests would not and cannot be adequately represented by any other party in this proceeding. Consequently, it is in the public interest that Verdant be permitted to intervene in this proceeding and to participate fully as a party therein.

## **II. PROTEST**

### **A. Background**

In the past eight months, one company, Oceana and/or the Tidal Energy Company (hereinafter TEC) and its various affiliates have filed, collectively, at least ten applications for preliminary permits for tidal energy development at sites across the country.<sup>1</sup> It may be coincidental but for the most part the filings seek to develop

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<sup>1</sup> The permit applications are as follows: Golden Gate Energy Company and Gulf Stream Energy, P-12585 (San Francisco Bay, permit granted); New York Tidal Energy, P-12665 (application filed March 27, 2006); Tacoma Project, P-12612 (Tacoma Washington, application filed November 11, 2005; permit issued February 22, 2006); Maine Tidal Energy Company, Project Nos. 12666, 12668 (applications filed 4/3/2006); New Hampshire Tidal Energy Company Project No. 12644 (application filed March 26, 2006); Massachusetts Tidal Energy Company, Project No. 12670 (application filed 4/17/2006); Washington Tidal Energy Company, Project No. 12663 (application filed March 31, 2006). The contact information for every one of these application is Charles Cooper of TRC Consulting and Joseph Cannon, Esq. of the Washington D.C. law firm, Pillsbury, Winthrop, Shaw Pittman. Information available at FERC Website; *see also Power Research Institute Challenges Practicality of Tidal Energy Project*, James Kinsella, Martha's Vineyard Gazette

sites identified as high potential resources in a recent study lead by Roger Bedard of the Electric Power Research Institute (EPRI) which assessed various tidal resources throughout the United States and Canada.<sup>2</sup> Unfortunately, despite seeking to lock up enormous expanses of water, not a single one of the TEC applications identifies a specific technology that it will employ to develop tidal power, nor describes efforts being made to evaluate and license existing technologies or to develop proprietary technologies. Instead, TEC states that it will use TISEC devices, a term of art that was coined as part of the EPRI study to describe tidal energy conversion turbines.<sup>3</sup> Based on the targeting of prime sites identified in the EPRI report, its failure to propose any specific technology, its general lack of any reputation in the still relatively close knit ocean energy community, and its manifest lack of understanding of the capabilities of KH technology,<sup>4</sup> Verdant believes that TEC intends to bank the sites and auction them off for its own private gain when tidal technology matures. In this respect, an analogy must be drawn between the company and to those dot.com

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(June 13, 2006) (reporting that companies are subsidiaries of Oceana, a Delaware corporation).

<sup>2</sup> See *Power Research Institute Challenges Practicality of Tidal Energy* (quoting Roger Bedard as saying that Oceana members "obviously read the [EPRI] report); see also *EPRI Tidal Energy Report*, online at <http://www.epri.com/oceanenergy/streamenergy.html>.

<sup>3</sup> *Id.*

<sup>4</sup> The 80% Capacity Factor ("CF") identified in the Astoria Project's application is impossible with a tidal site, with the peak turbine capacity based on peak water flow. In order to get a CF of 80%, they would have to arbitrarily make a turbine with a power rating *far less* than 140kw, perhaps 1/3 of 140kW, or less than 50kW, and throw away any power over that level. That would artificially improve the CF at the cost of generating far less power, and guaranteeing that the system would not be cost-effective.

exploiters who seized domain names and held them for ransom. The Commission previously has confirmed its opposition to site banking as contrary to the public interest and to the purposes of the Federal Power Act. *See Electric Plant Board of the City of Augusta, Kentucky*, 115 FERC ¶ 61,198 (2006); *Idaho Power Company*, 14 FPC 55, 68, *aff'd, Idaho Power Co. v. FPC*, 237 F.2d 777 (D.C. Cir. 1956), *cert. denied*, 353 U.S. 924 (1956). *See also Idaho Power Co. v. FERC*, 767 F.2d 1359, 1363 (9<sup>th</sup> Cir. 1985).

Verdant believes that since competitive advantages are conferred by a preliminary permit, applicants should be required to meet certain minimum requirements.

#### **B. Preliminary Permit Competitive Advantages**

Issuance of a preliminary permit provides the holder three years to study a project site. In addition, during the three year term of the permit, *only* the permit holder has the right to file an application for a license to construct and operate the project. Other entities are precluded from filing for a license on a site that is the subject of an existing permit. The permit holder's exclusive right to file for a license during the term of the permit guarantees it "first to file" status for its license application over any other competitor.

At the licensing stage, FERC is required to choose between competing license proposals by selecting the "better adapted plan" for development of the waterway. But where FERC finds both proposals equal, it applies a "first to file" preference as a tie breaker and chooses the application filed first. In all but one or two competing

license proceedings over the past twenty five years, FERC has found competing license proposals equal and applied the first to file rule.

Because of the way FERC's permit/license system operates, issuance of a preliminary permit to a company with questionable motivation deters bonafide developers from pursuing a project at the site. As Barbara Schneider, a FERC expert commented:

It is doubtful that anyone will proceed with preparation of a license application when another entity who holds the permit is actively engaged in preparation of a "preferred license application."<sup>5</sup>

Issuance of a preliminary permit dictates the subsequent award of a license. *A developer that cannot secure a permit will not take the risk of investing money in preparing a license application that will lose out to the first filed license application filed by the permit holder.* If the Commission grants a preliminary permit to the Astoria Project, Verdant and subsequent developers with real development goals will be at a competitive disadvantage.

### **C. Impact on Bonafide Developers**

At present, permitting an ocean or tidal project that has already developed and tested its technology before filing an application can take three to five years. For example, Verdant, which had already designed and tested small scale prototypes of its in stream tidal generators *before* filing a preliminary permit application in 2002, has still not completed a license application because of multiple study demands by various resource agencies. FERC Project No. 12178. Likewise, Aqua Energy's

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<sup>5</sup> B. Schneider, *FERC's First in Time Rule: An Impediment to Hydropower Development*, 5 Energy L.J. 97, 105 (1984).

AquaBuoy devices have been deployed for short test periods since 2003 in connection with its Makah Bay Project (after having spent over a year prior to that in consultation with agencies) but the company has yet to file a license application for its wave energy project. FERC Project No. DI02-3.

A company like TEC that does not have its own tidal technology or an agreement to license technology will need far more than three years to prepare a license application. Experience in the industry indicates that two to three years of testing, accompanied by an additional three or more years to conduct studies and raise necessary capital is a realistic time frame before a license application can be considered. On top of the requisite studies, consultation and site assessments, TEC will need to start from scratch and either test and develop its own proprietary technology or negotiate a licensing agreement with an existing technology holder. As a practical matter, at the end of its permit term, a company like TEC that will never be able to file a license application will have one of two options: surrender the permit (and open the site up for competition) or file for a successive permit and tie up the site for *another* three years.

At a minimum, awarding permits to companies like TEC that realistically stand no chance of filing for a license within the period of any preliminary permit issued to them delays development of permit sites by bonafide developers for at least three years. That delay is particularly prejudicial to the industry now, at a time when large institutional companies are beginning to invest in wave and tidal companies.<sup>6</sup>

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<sup>6</sup> See, e.g., GE investment in Ocean Power Delivery, Online at: <http://news.moneycentral.msn.com/tickler/sigdev.asp?Symbol=GE>; Finavera

These investors most likely will pull their money, with a possible death spiral effect on this fledgling industry, once they discover that the tested technologies that they have financed are barred from development because companies like TEC with no technology have prime sites tied up.

#### **D. Recommended Minimum Requirements**

Verdant believes that the Commission should summarily reject applications filed by companies that have not demonstrated any assets or technology.

##### **1. Check Credentials**

Verdant believes that the Commission should more closely check the corporate credentials of the applicant. Applications filed on behalf of a developer by lawyers or other consultants should clearly identify the developer, the developer's qualifications and its experience. At the same time, the Commission should inquire about financial status and plans for financing at the permit stage, although these factors should carry only minimal weight. Most wave and tidal energy companies are small, with most self-financed by company principals. Applying too strenuous a financial fitness test at the permit stage would probably eliminate most of today's wave and tidal industry leaders and allow large companies with money, but not technology, to grab sites.<sup>7</sup> Nevertheless, the Commission should reconsider its position on this issue and summarily reject applications filed by companies with apparently no assets or background. The locking up sites for up to three years or

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acquisition of AquaEnergy, Online at:  
<http://www.rte.ie/business/2005/0404/finavera.html>.

<sup>7</sup> Under FERC's present permit policy, financial fitness is not a relevant factor at the permit stage. *Chain Dam Corp*, 22 FERC ¶ 61183, at p. 61317 (1983).

more by companies with no demonstrated resources ultimately will damage prospects for development of this important resource.

## **2. Identifying technology**

At a minimum, a permit application should specify the technology that will be utilized at the site. TEC's applications, which describe that TEC will use TISEC devices ranging from .5 to 2 MW (a huge range with today's technology), are analogous to a conventional hydroelectric application that states that a project will use a dam, reservoir, powerhouse and turbines. In other words, the TEC applications are entirely generic. They manifest no familiarity with KH technology other than that a grade school aged child could ascertain from the internet. A more rigorous standard should be applied.

There are enough tidal technologies that, at a minimum, a company should be required to describe at least in theory, what types of devices will be used, what types of arrays will be tested and how much power the project is expected to generate. The types of devices described either should be proven in the market, or, as described in Verdant's original application, been the subject of thorough testing. The TEC applications do not pass this test. Their various assertions demonstrate familiarity with neither the technology nor its capabilities. Of course, at the permit stage, a company will not know all of the details and in many cases, the permit stage is where a developer may change the layout or design of the project to minimize environmental impacts. Still, it would be reasonable for FERC to require project developers to identify real, not generic technologies, for use at a site.

**CONCLUSION**

WHEREFORE, Verdant, in view of the foregoing, respectfully requests that it be permitted to intervene in this proceeding with all the rights that pertain to such status.

Respectfully submitted,



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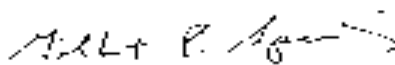
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Dated: July 3, 2006

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served by regular mail the foregoing document upon each person designated on the official service list in this proceeding in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Rockville, MD this 3rd day of July 2006.



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