



Finavera Renewables, Inc. (Finavera) is a Vancouver, BC based renewable energy company that develops wind energy projects and wave energy technologies and projects<sup>1</sup> around the world. Finavera is developing substantial wind resources in Canada and Europe and is developing wave energy projects in North America, Europe and South Africa. The company's wholly owned subsidiary Finavera Renewables Ocean Energy Ltd., formerly AquaEnergy Group Ltd., has filed a commercial license application with the Commission for its Makah Bay project in Washington State (FERC Docket No. P-12751), was recently issued a preliminary permit for the Coos County Offshore Wave Energy Power Plant in Oregon (FERC Docket No. P-12752) and has applied for another such permit in Humboldt County in Northern California (FERC Docket No. P-12753). Finavera is also a contributing board member of the Ocean Renewable Energy Coalition (OREC), which has also submitted comments on the NOI.

Finavera compliments the Commission for its recent focus on wave, tidal and instream technologies and commends the Commission for its flexibility in handling these issues to date. The raft of recent preliminary permit applications for these technologies demonstrates the growing enthusiasm for their prospects and the important role we believe they can and will play in the nation's energy portfolio. The Commission is clearly aware of the influence its regulatory responsibilities have on technology development and commercialization. For this reason in particular, Finavera applauds the Commission's initiative to take a careful look at how it might "reduce regulatory barriers to the development of new technologies".

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<sup>1</sup> In June of 2006, Finavera purchased AquaEnergy Group, Ltd. and its patented AquaBuOY wave energy conversion device.

The current permit and license process is well suited for the conventional hydro technologies it was originally designed to address, but it is an inelegant fit for the development of new, and very different technologies. Traditional hydroelectric facilities (dams) are not built or installed one megawatt at a time; typically they are built with their full capacity coming online at once. Conventional hydropower development is an irrevocable exercise that results in dramatic and permanent changes to immediate riverine environments. For this type of development, the permit and license process is appropriately front loaded with study, design and analysis based on accessible and established data. These steps are necessary to protect the environment and indeed the national interest from development missteps that may be large in scale, irrevocable and essentially occurs at once.

In contrast, requiring similar permitting standards and processes for ocean energy create obstacles to development that may be unreasonable without providing benefit to the end users, the environment, or the national interest. This is because ocean energy projects rely on the installation of multiple devices to establish a facility of significant size, and can therefore be developed iteratively. Unwieldy, poorly matched permitting requirements create increased uncertainty and risk by asking questions with the answers to which will only be available after initial development is allowed.

Finavera believes that wave, tidal and current technologies should be held to highest environmental standards at that the United States government should adopt affirmative policies that promote development of ocean renewable energy.

## II. Finavera's Comments Related to the Three Alternatives

The Commission outlined three alternatives – a “Maintain Standard Preliminary Permit Approach”, a “Stricter Scrutiny Approach”, and a “Decline to Issue Preliminary Permits for New Technology Projects” approach – and encouraged comments on each of these. Finavera generally supports the Commission’s proposed stricter scrutiny approach, which strikes a fair balance between affording developers adequate security, through priority of application, to risk investment in preparation of a license application and maximizing competition for, and innovation at, wave, current and tidal sites (OREC). Finavera fundamentally believes that open and fair competition will lead to the most optimal results, and that the relative business success of different ocean energy technologies should be decided by their merits, not arbitrary allowances or exclusions established through a permitting process totally removed from technologies or development plans.

Eliminating preliminary permits entirely would negatively effect the wave and tidal energy industry. Finavera concurs with OREC’s comments on this NOI related to this issue. OREC states: “Virtually all wave and tidal developers rely on the “first to file” priority afforded by the preliminary permit to attract private investment to finance initial study and site evaluation. Depriving developers of the preliminary permit will deter private investment in wave and tidal technologies”.

Making no changes to the process would not sufficiently recognize the poor fit of the existing process, originally developed for very different technologies and conditions, as described above. The “square peg, round hole” issues prevalent throughout the

preliminary permit process create uncertainties and inefficiencies that could be eliminated. In addition, the current process does indeed allow for the prospect of site banking.

The following comments are intended to provide guidance to the Commission as it refines its stricter scrutiny provisions.

**1) The preliminary permit process should be designed to eliminate or reduce site banking.** Finavera supports fair competition for sites as a key ingredient in developing a healthy, open market for commercialization of new ocean energy technology. Finavera also supports measures to reduce or eliminate site banking, which is counterproductive to ensuring timely access to resource areas when new technology is ready for deployment. A process that allows holders of permits to reserve prospective sites without significant investment and effort in the timely development of the technology is a clear invitation to site banking, a form of resource speculation that will increase the risks and barriers to market.

As the Commission moves forward, it will be helpful for the Commission to provide clearer guidance on its definition of site banking.

**2) Finavera agrees with the Commission's suggestion to require indicators of progress in development plans.** In general, on this subject Finavera concurs with the comments on this NOI of the Hydropower Reform Coalition, who argue: "Rather than developing a different set of conditions for each permit issued, we recommend that FERC issue policy guidance which lays out, as specifically as possible, the Commission's information requirements under the strict scrutiny standard, giving permit applicants a clear understanding of what field investigations, meetings with investors and regulatory agencies, filings with commissions, etc. will be required of them *before* they file a permit

application.” This concept responsibly accelerates the licensing process in two fashions. It provides developers with a road map to follow once a permit has been issued, possibly removing unnecessary actions and ensuring that important ones are not overlooked. It also provides guidance to the Commission and its staff as it considers whether a developer’s study/outreach/development plan will be sufficient for the project proposed.

In the absence of the above recommendation, applicants should be asked to provide a more robust description of their proposed schedule of events before a permit is issued in order to ensure adequate familiarity with responsible development practice. The Commission has directed developers to file, within 45 days of issuance of the permit, a schedule of activities to be carried out under the permit and target dates for implementation. Within a year, a developer must file a Preliminary Application Document (PAD) and a Notice of Intent to file a license application. Finavera agrees with the concept of holding developers to a timeline; it creates discipline in the approach and weeds out developers that do not have serious intent. However, we would prefer a 60 day deadline in order to allow greater interplay between developers and resource agencies and to create a buffer for unexpected, unavoidable delays. In any event, events out of control of the developer should result in additional grace periods.

**3) Applicants should provide a rationale for the size of the project they propose.** The Commission should not predetermine what is and is not an appropriate size but should evaluate each proposal individually. While limiting the geographic scope of projects may be one way to reduce (a form of) site banking, it may also force developers, no matter their competence and qualifications, to pursue projects in locations suboptimal for their technologies or that mismatch the specific preferences of local communities. The

granting of a larger project size may be appropriate to subsequently allow a developer to narrow or ‘micro-site’ their project to the least sensitive areas (ecologically, socially, commercially) of a given location. Arbitrarily limited boundaries may cause developers to file applications in locations that represent their best guess for responsible energy development, rather than an informed decision, protected by the benefit of a secure study period in which to determine optimal or mutually agreed upon boundaries.

In its comments to the Commission on this same docket, the Hydropower Reform Coalition is also insightful on this point, noting that “The Commission could help solve this dilemma within the “strict scrutiny” standard by placing more weight on a potential applicant’s actual performance under a preliminary permit than on the size of the area being studied. Alternately, the Commission could grant permits with a requirement that the applicant narrow the geographic scope of the permit as site selection fieldwork continues”.

**4) Applicants should provide a description of the technologies they intend to use in their project.** While technology choice may change upon detailed review of a proposed site, developers should demonstrate the ability to make informed decisions about that technology choice.

**5) Applicants should provide to the Commission assurances that they have the resources to pursue a license.** Serious developers will demonstrate their ability to marshal the resources to perform the work required within the term of the license.

**6) The Commission should be willing to cancel or deny preliminary permit applications.** The current preliminary permit process has the potential for sites to be locked up by unqualified or unmotivated developers, preventing qualified developers from

developing potentially productive sites. If it becomes obvious that a permit holder is unwilling or unable to develop a site within the term of the permit the Commission should be willing to cancel the preliminary permit. Likewise, if it is clear to the Commission that development plans for a particular site are poorly or inadequately defined, the Commission should maintain its willingness to deny issuance of permits.

### **III. Additional Suggestions from Finavera**

The Commission encouraged suggestions for methods that commenters believe would be fruitful in encouraging and appropriately regulating the initial exploration of new technology projects. The following comments are intended to stimulate discourse that will result in accelerated development of ocean technologies and projects.

**1) Demonstration Projects.** Finavera notes that there is significant action related to wave, tidal and instream technologies on the Hill at this time, with new legislation directly related to these new technologies and their deployment having been introduced or considered. With much of the emphasis of this legislation focused on research and development, the Commission may want to especially consider ways to address these areas of interest.

Finavera encourages the Commission to allow for demonstration projects to occur under the preliminary permit regime. These demonstrations would provide several explicit advantages and would evolve under the Commission's oversight:

- It would eliminate the gridlock predicament of requiring a potential license applicant to develop the information required for that application, while at the same time denying the applicant the ability to perform the tests or demonstrations in-water that would allow for the acquisition of the information.

- Allowing demonstration projects under a preliminary permit would reduce the likelihood that developers would be required to develop extraordinary and unnecessary modifications to their projects once they have been built to full scale. Through a demonstration program better questions get asked earlier in the process, which leads to a more orderly and predictable development schedule.
- In the early stage of the technology, when the project developers have limited resources, allowing demonstration projects would protect developers from unduly expensive requirements related to developments of greater size. Similarly, a demonstration program would protect the environment from unforeseen incidents that may occur with larger installations.
- These demonstration projects could be closely monitored and reported. Adaptive management schemes could be developed and adopted for the build-out to commercial scale installations. If active monitoring of the project determined effects that were sufficiently adverse, the complete removal of the demonstration projects could be required.

While demonstration projects are not by their nature fully commercial, the Commission should allow for the recoup of costs and the return of investments related to these demonstration projects through sales to willing buyers, regardless of the fact that they would not possess a license. Some of the study work necessary for a more robust understanding of these technologies and their potential effects relate to the transmission of

generated energy to shore. It would be unreasonable to not allow the project developers to be rewarded for their risk, innovation and production.

These demonstration projects should be of limited size (energy production: 3 MW might be appropriate), geographic scope (dependent on technology type/morphology) and duration, but should be great enough to allow for the acquisition of information that would be helpful to the subsequent licensing process (identifying alternatives, adaptive management, etc.). Allowing demonstration projects to occur under a preliminary permit would clearly demonstrate the Commission's desire to be a positive authority promoting the development of new technologies for the nation's energy future.

**2) Preliminary Permit Review.** To further deter site banking, the Commission might wish to adopt procedures that would specifically allow an interested party to request that Commission staff convene a technical conference on particular sites covered by a preliminary permit. Such an inquiry would have to be convened with protections for proprietary information and with appropriate requirements so as to not unduly burden developers, but could provide additional assurances that good-faith efforts towards project development are being made.

**3) Incorporating a Planning Element.** Some coastal states are working to incorporate a planning element into the siting of ocean energy facilities. It is Finavera's understanding that they do this with the intent of protecting existing uses of the marine resource. While the Commission has not been, and should not be, a planning agency, it is appropriate for the Commission to defer to siting and development plans that have local planning concurrence. The Commission may wish to request that additional information related to local planning be included in the preliminary permit application.

**4) Is Preliminary Permit the Right Name?** Finavera believes the Commission should consider changing the name of the preliminary permit from its current title to to something that more accurately reflects the project stage of development reflected by issuance of the permit. The public and media often misunderstand the meaning of the preliminary permit, and have, on numerous occasions, believed that its issuance meant that development had been approved. Calling this permit a “Preliminary Study Permit” or something similar may reduce the confusion among local stakeholders as development plans are studied, formed and implemented.

#### **IV. Conclusion**

Finavera believes that new energy technology development should be held to the highest of environmental standards. And while redundant or unnecessary regulatory burdens should be removed, a more robust preliminary permit application process that eliminates or reduces site banking and provides greater guidance is appropriate to ensure the responsible, competitive development of new ocean wave, tidal and instream current technologies that have the promise to do so much for the nation’s energy portfolio. Finavera thanks the Commission for its inquiry into this issue and appreciates the opportunity to provide comments.

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Respectfully Submitted,

Alla Weinstein  
Director and General Manager  
Finavera Renewables Ocean Energy

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