Dear Ms. O’Neil,

On December 23, 2011, the Oregon Department of Energy (“Department”) issued a comment opportunity on Considerations for an Oregon Hydropower Development Assistance Program (“DAP”). The Department seeks comments on whether Oregon stakeholders would benefit from an assistance program similar to a Colorado state pilot program.

The National Hydropower Association (“NHA”) applauds the Department’s initiative to investigate the “next generation” assistance program for small hydropower developers in Oregon and urges the Department to institute such a program. We agree that hydropower development can be approached and conducted in a way that realizes the climate benefits of this clean, renewable generation, while also preserving and protecting Oregon’s natural resources.

The majority of Oregon’s electricity needs are met with hydropower. As a result, the state, like the Northwest region as a whole, has a lower emissions profile and enjoys some of the lowest electricity rates in the country. All too often, the misconception that exists about hydropower (in Oregon and across the country) is that the sector is “all tapped out.” However, that is not the case and Oregon developers are proving it.

Today, there are nearly two dozen proposed hydroelectric projects in Oregon at various stages of the licensing process before the Federal Energy Regulatory Commission (“Commission”). These projects range from conventional small-hydro, marine hydrokinetic and closed loop pumped storage. The majority of these projects would qualify under the DAP, and NHA believes these and other potential projects would realize a significant economic and local job creation benefit to the state along with their energy and environmental benefits.

NHA leaves specific detailed comments on the Colorado program and its potential application in Oregon to those industry and NHA members who deal most directly with the licensing and development issues. However, we do believe the DAP (with technical support for developers and assistance with

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1 NHA is a national non-profit association dedicated exclusively to advancing the interests of the U.S. hydropower industry, including conventional, pumped storage, and new marine and hydrokinetic technologies. NHA’s membership consists of more than 180 organizations, including consumer-owned utilities, investor owned utilities, independent power producers, project developers, equipment manufacturers, environmental and engineering consultants, and attorneys from across the country, including Oregon.
prescreening and public outreach) can simplify the process and address some of the economic challenges of small projects, which do not share the economies of scale achieved by their larger counterparts. This is evidenced by Colorado’s first approved project, the Meeker Wenschhof hydroelectric project, in which the Commission approval was completed in only two months, a remarkable result and success story for the Commission and Colorado.

Oregon, like Colorado, has a tremendous opportunity to provide leadership on hydropower policy and set a precedent for other states to follow. The result is a positive outcome for developers, for customers, and for the environment. The efficiencies gained through these types of assistance programs will not only help small hydro development, but can be built upon as we look to assist development in other sectors of the hydropower industry through improved intergovernmental cooperation between federal and state regulators.

Thank you for this opportunity to comment on the Department’s proposal. We look forward to further dialogue with the Department as you move forward with DAP activities.

Respectfully submitted,

Linda Church Ciocci
Executive Director
National Hydropower Association
25 Massachusetts Avenue, N.W.
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202.682.1700
February 3, 2012

By Electronic Transmission -- rebecca.oneil@state.or.us

Re: Comments of Hydropower Reform Coalition Members American Rivers, American Whitewater, Cascade Wild, Gifford Pinchot Task Force, and Trout Unlimited on Opportunity Considerations for an Oregon Hydropower Development Assistance Program.

Dear Ms. O’Neil,

On December 23, 2011, the Oregon Department of Energy issued a Comment Opportunity: Considerations for an Oregon Hydropower Development Assistance Program, requesting comments on whether the assistance provided to hydropower developers through a Colorado state program (“Colorado pilot”) would work well for Oregon’s stakeholders, governments, and resources. The Hydropower Reform Coalition offers the following comments.

The Colorado Pilot Program
The 2010 program developed in Colorado was designed to “identify and test opportunities to simplify and streamline procedures and regulations for authorizing small scale hydropower projects in an environmentally responsible manner.”1 The MOU was specifically targeted at streamlining the pre-consultation process for eligible “in-conduit” or “under 5MW” exempt projects.2 In an effort to expedite processing for these projects, the Colorado MOU established a pilot program through which the State would pre-screen projects to ensure that the projects qualify for and comply with the Commission’s regulations for either the “in-conduit” or “under 5MW” exemptions and to ensure more complete hydropower applications, which in turn would facilitate expedited processing by the Commission. As a part of the pre-screening process, Colorado agreed to provide technical support to applicants by having a consultant guide and educate potential project applicants and review the applications for completeness and compliance with the Commission’s exemption requirements and agreed to provide assistance in obtaining agency review for project proposals. In exchange for this pre-screening, FERC agreed to waive certain pre-filing consultation requirements for projects so long as the state and federal resource agencies and any affected Indian tribe agreed, in writing.

1 Memorandum of Understanding Between the Federal Energy Regulatory Commission and the State of Colorado Through the Governor’s Energy Office to Streamline and Simplify the Authorization of Small Scale Hydropower Projects.
2 The Federal Power Act, 16 U.S.C. §791a et. seq. includes two exemptions from the licensing provisions of Part I of the Act – one for small conduit hydroelectric facilities (“conduit exemptions”) and another for small hydroelectric projects (“under 5MW exemption”). Applicants must apply to FERC for review and approval of exemptions; FERC maintains responsibility and authority under relevant environmental protection statutes, including but not limited to the National Environmental Policy Act and Endangered Species Act.
The Colorado pilot-program is still underway, so it is premature to draw conclusions about the relative success or failure of the program. However, the concept of the pilot-program – a clearly defined process aimed at identifying minimal-impact projects and helping developers navigate those projects more expeditiously through the FERC regulatory process without sacrificing public participation or agency review - would be worth further exploration for Oregon. Done correctly, such a program could promote responsible renewable energy development by allowing non-controversial projects without major ecological issues to move forward more efficiently. To the extent the Department is considering establishing such a program, we offer the following additional feedback to the questions posed below.

Oregon Department of Energy Inquiry

1. **What are the most productive elements of the Colorado pilot? What are the challenges with that approach?**

Productive Elements of the Colorado Program:

- **Strong Pre-Screening Criteria:** The Colorado pilot-program provides clear criterion for project eligibility. Colorado’s primary criterion is that the proposed hydropower development be added to existing infrastructure. To meet this criterion, Colorado outlines several specific eligibility criteria. These requirements are critically important to ensure that the program is narrowly tailored to assist projects with minimal social, cultural and ecological impacts. For example, in addition to requiring that all projects meet the FERC exemption criteria, the program also specifically limits eligibility to projects that do not increase stream diversions, modify natural systems, or adversely affect water quality, fish passage, threatened or endangered species, or cultural and recreational resources. While prescreening alone won’t protect natural resources, we believe that strong eligibility guidelines will generally help to distinguish projects with minimal ecological impacts from those projects with more significant ecological effects or public controversy, which are more appropriately left to the traditional FERC process. Strong pre-screening criteria will focus limited resources on the projects most likely to meet with final approval.

If the Department determines that a similar program would be beneficial for Oregon, we believe that strong pre-screening criteria should be established. While the Colorado program included several strong criteria and provides a good template upon which to build, we believe that the Colorado standards should be further strengthened for Oregon given our state’s important fisheries (including many anadromous and migratory fish) and existing regulatory system.

- **Relationship with existing FERC regulations:** The Colorado MOU created a program that complements existing FERC regulations and provides a platform (MOU) through which FERC officially recognizes the program and agrees to waive certain pre-consultation requirements completed at the state level. This provides a benefit to developers to participate, and guarantees good site selection criteria.

Challenges with the Colorado Program:

- **Cost of Program Implementation:** Oregon should determine expected cost estimates of such a program (staff, maintenance, monitoring) and identify appropriate funding sources. The Colorado pilot used federal stimulus funds to hire technical expertise to establish the program and start-up costs were not in-expensive. At present these federal funds are running out in Colorado and may not be available for Oregon. The Coalition suggests the Department evaluate creative funding mechanisms, including inclusion of a fee-structure for project developers to contribute to program costs. Colorado is currently evaluating a fee-structure for project developers to help support and maintain the program.
Opportunity for Public Involvement: The Colorado pilot, in its early planning, did not provide for early stakeholder and NGO participation in the planning process. It is our understanding that this was greatly improved as the final pilot developed. Providing a forum and process for public participation (including early and strong participation by stakeholders and other public interests) will be critical in any Oregon program to ensure legitimate environmental and recreation issues associated with new hydropower development are adequately addressed.

Additional Restrictions Required for Protected Areas: The Colorado pilot does not specifically address concerns with siting projects at environmentally sensitive sites. We recommend that Oregon address siting concerns by limiting project eligibility to projects that are not proposed to be sited in sensitive areas, including but not limited to Wild &Scenic designated rivers or rivers that have been deemed eligible for W&S designation, state scenic waterways, or rivers on the Northwest Power and Conservation Council protected areas list.

2. There are many reasons that hydropower proposals succeed or fail in Oregon. Please comment broadly on the most significant factors for success and whether the Colorado pilot would address these reasons in the public interest.

A successful hydropower project balances energy production with resource protection. With this view of success in mind, significant factors for success include project siting, project economics, and ecological impacts related to project construction and operation.

Projects that are limited in generation potential, are poorly sited in sensitive and/or controversial areas, are lacking modern fish screening or passage facilities and/or that have high environmental impacts that are fairly expensive to mitigate relative to the power they are able to generate, are not likely to result in projects that successfully balance energy production and resource protection. The Colorado pilot aims to address these factors by including detailed pre-screening requirements that focus on ensuring developments chosen for the program will have minimal impacts. By disqualify certain types of development, including new dam construction, and focusing instead on projects located within existing conduit and irrigation projects, and adding generation at existing non-power dams, the Colorado program aims to add hydropower capacity that relies on existing infrastructure and does not require additional water diversions, and not by promoting new generation projects that would additionally stress Oregon’s river systems.

While some developers express concern that the existing regulatory process is so cumbersome as to act as a significant barrier for development, it seems likely that the factors discussed above are the more significant hurdles. Strategic technical support for development proposals aimed at helping developers to prepare the necessary documents and filings - along with a pre-screening process aimed at identifying the most promising, lowest impact and least controversial projects - would likely help eligible projects more effectively and efficiently navigate the regulatory landscape. By eliminating controversy and focusing on projects that enjoy broad acceptance, many expensive, time-consuming and controversial projects can be avoided, providing benefits for the state, for potential developers, and other stakeholders.

3. Could the Oregon Hydroelectric Application Review Team (HART) process, which currently applies to reauthorization, sufficiently perform the function of development assistance?

Two conditions would greatly improve the HART process in terms of its ability to perform the added responsibilities of development assistance. First, Applicants should be required to demonstrate that they have done due diligence to the pre-screening process before submitting a project for review. Second, the existing process would need to be adjusted to include a front-end review process that assures that the Water Resources Department, Department of Environmental Quality and the Department of Fish

http://www.oregonlaws.orge/ors/543A.400
and Wildlife can provide early review of projects to vet generation and environmental issues. Currently, HART is not convened until a reauthorization application for the use of water for hydroelectric purposes is received.

4. If Oregon pursued a development assistance program –

- **What should the goals of the program be?**
  - Increase hydropower generation and improve environmental protection, equally.
  - An open, transparent process with meaningful opportunities for public comment.
  - Help program participants more effectively navigate through, not around, existing regulations.
  - Help minimize process delays and expense for qualifying projects based on specific, stringent, pre-screening criteria.

- **Is there an opportunity to provide additional public benefits through the program?**
  - Providing open access to online tracking and documentation would benefit both the public and potential developers by providing transparency, tracking, and a clearinghouse for public, agency and developer comments.
  - Colorado pilot staff conducts proposed project site visits early in the review process. This provides an opportunity for early participation by all parties, as well as a method to visually identify potential problems and adherence to program guidelines. This is a benefit to both the state and to public participation.

- **How will the State measure the program’s effectiveness?**
  - Number of projects that pass through the program and are approved by FERC with the support of a broad range of constituencies.
  - Program should operate on a pilot-basis, similar to Colorado. The Department should solicit feedback from industry and the public on how the program is working and consider that feedback prior to formalizing any permanent or long-term program.
  - Increase in renewable energy generation with minimal ecological impact.
  - Number of involved stakeholders.
  - Ability to maintain program over time.

- **How will Oregon’s natural resources be better protected through this program? For example, should low impact proposals receive immediate highest priority?**
  - First, the process must define “low impact” proposals by establishing clear pre-screening guidelines and criteria to ensure harmful and controversial projects are excluded. The regulatory process is designed to determine and address impacts and these must be identified and agreed upon before any project is selected.
  - With pre-screening criteria designed to focus the program only on non-controversial, low impact proposals, “priority” would not be an issue; projects not meeting these baseline criteria would not be included in the pilot.

- **Should State assistance focus mostly on: technical support; process support; or pre-filing outreach?**
  - Coalition members recommend that Oregon clearly define a set of best environmental practices and offer “technical support” in how a developer could design a project around them.
  - Technical and process support should be the primary focus, and the scope and purpose of support should clearly identify Oregon’s dual role in assisting the development of minimal-impact projects and ensuring environmental safeguards and strong natural resource protections. Scope and purpose should likewise identify Oregon’s limits regarding available time, staffing and other resources. Pre-filing outreach could be completed through a simple online list serve type system, similar to the system that ODOE currently operates for RPS information.

- **What projects should be eligible for the program? Please comment on both the general character of the project, any geographic focus, and pre-screening criteria that should be applied.**
  - At a minimum, program eligibility should be limited to projects meeting the following, basic criteria:
- Existing infrastructure projects only (conduits, irrigation canals, and adding generation to existing, less than 5MW hydropower exemption projects).
- Projects not sited in sensitive, critical or protected areas.
- Projects that meet modern fish screening or passage requirements
- Projects that do not create other environmental problems.
  - If the Department elects to pursue a development assistance program, additional opportunity for comment should be provided related to eligibility guidelines and restrictions.
  - *Is there a nexus to the Deschutes Basin Preliminary Hydropower Opportunity Assessment, currently underway?*
    - It is our understanding that The Basin-Scale Assessment is aimed at identifying opportunities to simultaneously expand hydropower generation and promote environmental benefits at the system scale. To the extent that this assessment work may identify priority projects within the basin that meet these goals, it may be beneficial to have a development assistance program in place to help efficiently move these projects through the regulatory process. However, the Basin-Scale Assessment program is still under development and at this time, it is too soon to determine what the results of that program may be.
  - *What should be the responsibility of the project developer for due diligence regarding a potential project’s costs, benefits, and the likelihood of success prior to requesting assistance?*
    - An up-front understanding by developers of the environmental requirements needed, and the costs associated with these requirements. This information would help to quickly eliminate uneconomic projects or those that led to high environmental impacts.
    - Guaranteed funding or bonding requirements so that developers don’t abandon projects after a license is issued and leaving the public to pay for clean-up.
    - The Department should provide increased scrutiny, process and requirements if a project has potential or unknown impacts on critical resources. The Department should reserve the right to push projects to FERC that need a full review (the proposed Two Girls Hydro Project is an example of a project with potential high resource impacts, and where FERC scrutiny has identified deficiencies and is now reviewing termination of the Integrated Licensing Process).
  - *Should Oregon seek an MOU with FERC? The Department notes that a state does not need special approval from FERC to assist a developer with pre-filing requirements.*
    - To the extent that the program will seek to waive certain FERC requirements for eligible projects, then yes, an agreement with FERC is required. If the program is simply to aid developers with the process, then a formal agreement with FERC may not be necessary.

The Coalition is made up of more than 150 outdoor recreation and conservation organizations nationwide that advocate for river protection and restoration by improving the environmental performance of individual hydropower dams regulated by the Federal Energy Regulatory Commission (FERC). The Coalition enjoys an especially strong membership in Oregon due to the value placed on the State’s diverse, and wild and beautiful river resources.

Thank you for the opportunity to submit comments on Oregon’s proposed Hydropower Development Assistance Program, we look forward to further involvement as updates or additional opportunities for feedback develop. Please contact me with any questions about these comments or the Coalition.

Respectfully,

Richard J. Bowers
Northwest Coordinator
Hydropower Reform Coalition
February 3, 2012

Attention: Rebecca Sherman-O’Neil
Oregon Department of Energy

RE: Considerations for an Oregon Hydropower Development Assistance Program

The Northwest Hydroelectric Association represents a broad spectrum of members, including utilities, irrigation districts, other developers, consultants, contractors and equipment manufacturers. These comments reflect the concerns of our small hydro development members.

Types of Small Hydro Generation Projects
The majority of small hydroelectric projects that will be developed in the near future in Oregon are projects that are “exempt” from Federal Energy Regulatory Commission (FERC) licensing. There are primarily two types of these small generation projects:

1) projects at existing dams of 5 Megawatts or less in capacity, “exempt” from licensing; and
2) projects within water delivery systems of irrigation districts, municipalities, or other existing water systems that are up to 40 Megawatts in capacity and classified as “conduit exemptions”.

The projects that are within a water delivery system use existing conduits or pipelines and a generation facility (turbine/generator) is constructed at the end of the conduit. There are small hydro projects within irrigation systems that can generate in the neighborhood of ½ MW to a little over 5 MWs. Within those same systems there can be many very small hydro turbines placed in open canals that are also “conduit exemptions” for the purpose of FERC classification (as small as a couple kilowatts in capacity). There are a significant number of these sites available as well within existing pipelines of drinking water systems and wastewater systems operated by municipal and private corporations.

Oregon’s Beneficial Programs
In 2007, Oregon was very progressive in setting up an opportunity for an existing water right to be reused for hydropower generation so long as the water right was used in the same amount, same season, and same priority as the existing right and the project was “exempt” from FERC licensing. This statute was envisioned to be a substantial tool in allowing exempt projects to move forward when located at existing diversions using existing water supplies.

Oregon’s Business Energy Tax Credit was a major benefit to small developers because the process has substantial “upfront” investments in permitting, studies and construction prior
to the project ever coming on line and producing power. Most of those benefits unfortunately no longer exist.

The Small Scale Energy Loan Program (SELP) has become difficult to traverse for developers as it no longer allows for any pre-construction costs to be provided and the process is pretty extensive for a small developer to incorporate into a project. The ideal program would coordinate U.S. Department of Energy funds with Oregon Department of Energy funds to make the funds more flexible and provide stability resources to the department.

One-Stop Center in ODOE as a Goal
At one time, back in the early 1980s, the Oregon Department of Energy was envisioned to develop a one-stop center for hydropower development, to assist with technical support, agency review, consistent agreements for development and other features. But that program was never implemented. Such a program could provide substantial benefits if enacted.

The Governor’s Oregon Energy Plan for the next 10 years could include a center with skill resources and technical assistance. It would be a welcome opportunity to provide support for renewable projects.

A memorandum of understanding, such as the one with the state of Colorado, would not necessarily be needed to develop the center or to provide the service provided in that state. Oregon already has a multi-agency process for review under the water right provisions of the state. The major benefit of the Colorado MOU was the technical assistance the state committed to providing to developers.

Institutional Constraints to Hydropower Development

Protected Areas
The Northwest Power Planning and Conservation Council’s Fish and Wildlife Program requires that projects within the expansive boundaries of its “protected areas” program site hydropower generation only at existing diversions. However, most of the projects that could move forward in a short-term process will be those small hydro projects at existing diversions either as exemptions at small dams or conduit exemption projects on existing water systems.

Fish Passage
While one would think that the opportunities to therefore go forward with these exempt projects would result in new renewable generation in Oregon, only two projects have been developed in the past 20 or more years. A significant reason that projects are not now moving forward is that the Oregon Department of Fish and Wildlife (ODFW) interprets the fish passage statute as requiring fish passage to be developed at any existing dam that diverts water into a water delivery system, even though the generation project itself is located several miles away in an irrigation canal already screened to keep fish from entering canals. FERC considers the project boundary as the generation site at the end of a conduit exemption. ODFW considers the dam for the entire project diversion to be part of the project, a dam already constructed with ODFW prior approval when developed.

While this provision remains in place, all conduit exemptions will remain in limbo. Adding fish passage to a dam that is not part of the project could require millions in rehabilitation
work on dam facilities. These small projects cannot move forward with that cost added to them. The fish passage statute was intended, by the advisory group reports published in 1999 and 2001, to only require implementation when there was a hydropower “license”, a new water right permit requiring additional water supply, or when a major rehabilitation to a dam was to occur. In addition ODFW was to prioritize where fish passage was needed. That prioritization has still not been accomplished since 2001. As a result all projects are being treated as though passage is a priority whenever an exemption process occurs.

Fish passage at existing dams where a project is added to the dam itself were anticipated to be included under the fish passage requirements as that is a major construction rehabilitation project. However these small conduit exemption projects without a new water right should be treated differently. Our association promotes protection of fish through appropriately placed screens and when dams are effectively rehabilitated with a fish passage method that provides benefits and in keeping with project development costs. These small projects need to be approached differently.

Two conduit exemption projects within irrigation district supply systems were developed in 2009 and 2010. When the districts applied with FERC for a conduit exemption, ODFW, the federal fishery agencies, the Confederated Tribes of the Warm Springs, DEQ and all the other agencies and local governments indicated that there were no environmental or other issues that warranted attention. ODFW, US Fish and Wildlife and NOAA provided letters stating that result on each of the projects. When these project were at the end of the FERC conduit exemption process, and in fact the last month before they were approved, ODFW then stepped in and asserted that the applicants would have to put fish passage in at an existing dam several miles from the in-conduit projects, outside FERC project boundaries. Due to a deadline in the power sales contract agreements, both projects were forced to sign an agreement with ODFW to create fish passage in the future or they would miss their power sales agreement deadlines.

This statutory interpretation by the department not only stops small hydro conduit projects that would provide jobs and renewable energy, but it does nothing to promote fish passage as the projects cannot support that cost merely for the sake of implementing a small in-conduit project. As a result, the state loses the opportunity for renewable energy and the ability to systematically fund fish passage in priority areas. While we applaud the Governor’s office stepping in to hold some advisory meetings with limited participants, no results have occurred in the last 8 months of discussion and nothing is on the table to address the issue.

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Specific Questions

To answer your specific questions,

1) The most productive element of the Colorado project as compared to Oregon process was the provision of technical assistance, not currently available in Oregon except through private consultants and in some limited cases, through the OSU extension program. Colorado set up a process for one stop/multi-agency review; Oregon already has the HART process and the coordinated review process within the water right approval of the Oregon Water Resources Department.
2) There are several reasons that projects in Oregon are not moving forward as quickly as they may.

   a) I have cited the fish passage issue above that should not be applicable to a project that is within a conduit exemption. Fish passage requirements would apply to existing dam projects, those added to the dam facility itself.
   b) Power sales agreement prices fluctuate within short periods of time so that it is difficult to assure a positive cash flow for a project even under PURPA requirements.
   c) Interconnection agreements are expensive and process timing is significant because small hydro projects go through the same process as larger FERC licensed projects. The PUC could set a different standard of process for the small projects.
   d) The BETC program for small projects was a most valuable tool. Providing some set aside funds from BETC for small projects would be an asset.

3) The Oregon Hydroelectric Application Review Team (HART) requires cost reimbursement for reviews and technical assistance. As a result, that would be no different than using a private consultant from the perspective of cost. That would also lengthen the process that conduit exemptions have in place with the expedited water right process if the same process used for licensed projects would apply. The expedited water right process, through the Oregon Water Resources Department provides an opportunity for all agencies to participate in the process already. But that process has failed to some degree as we have not been able to effectively work with the fish passage issue.

4) The state could measure the program's effectiveness by identifying the results of the many small hydro facilities that could move forward while still being “green” renewable projects. The state could measure the effect of jobs on the economy as well.

5) State assistance should focus on technical support to small producers. This would envision that the fish passage issue gets resolved so that projects could actually move forward.

6) The small projects that would be most beneficial to the state would be those at existing diversions, with existing water rights, that are exempt from FERC licensing. Those that are within local government water delivery systems will be the easiest to move forward with the financial capabilities of the applicants. However, there are many small projects on farms and in other systems that would benefit from assistance and demonstration projects should go forward to develop successful processes and practices. That would then enable the state to determine what due diligence and applicant performance for non-government entities will work.

We look forward to working with you, Rebecca, to continue to find resolutions to provide Oregon with a process that will promote clean, renewable energy and provide jobs for Oregonians.

Jan Lee, Executive Director
February 3, 2012

VIA ELECTRONIC MAIL (rebecca.sherman@state.or.us)

Ms. Rebecca Sherman O'Neil
Oregon Department of Energy
625 Marion St. NE
Salem, OR 97301-3737

Re: Comment Opportunity – Considerations for an Oregon Hydropower Development Assistance Program

Dear Ms. O'Neil:

We are providing comments on behalf of the Oregon Water Resources Congress (“OWRC”) and its Hydro Caucus. OWRC is made up of and represents local governments in Oregon that provide primarily irrigation water to water users throughout the state. The water storage and delivery operations overseen by OWRC’s members present numerous opportunities for new hydroelectric projects. Despite this potential, several of our members have struggled with the various processes required to permit, construct, and ultimately operate hydroelectric projects. OWRC appreciates this opportunity to provide input on ways in which the State of Oregon could simplify processes, making permitting and development more cost-effective and less burdensome for small-scale hydroelectric projects.

The following comments respond to the Comment Opportunity – Considerations for an Oregon Hydropower Development Assistance Program, per the Oregon Department of Energy’s solicitation dated December 23, 2011.

What are the most productive elements of the Colorado pilot? What are the challenges with that approach?

The most productive elements of the Colorado pilot include the exemptions for 5MW projects and the joint coordination of state agencies for environmental review and comments. The need for state agency input is usually very minimal with regard to 5MW projects, particularly when such projects are within an existing water delivery system. We believe it would be very valuable for Oregon state agencies to quickly coordinate their reviews and comments for such projects into a single process, and have comments produced in a timely manner. Such comments could also be coordinated with the U.S. Bureau of Reclamation’s process for determining under what circumstances and conditions it will enter into a lease of the power privilege (“LOPP”) for Reclamation-owned facilities.

As for challenges, it is our member districts’ experience that Oregon state agencies do not have staff with the necessary experience to quickly and efficiently evaluate and comment on small hydro projects. However, this may be changing with some of the more recent in-conduit hydro projects.

The mission of the Oregon Water Resources Congress is to promote the protection and use of water rights and the wise stewardship of water resources.
There are many reasons that hydropower proposals succeed or fail in Oregon. Please comment broadly on the most significant factors for success and whether the Colorado pilot would address these reasons in the public interest.

In our experience, after general project economics, the most significant factors impacting potential projects are the conditions and mitigation requirements requested by state agencies. These conditions and requirements are often undefined, open-ended, and overly general, which challenge the developers to consider the risks and costs to the project going forward. To the extent the state agencies can standardize and be more exact with respect to conditions and mitigation requirements, such an approach will make it much easier for developers to anticipate and predict project costs and implications for project schedules.

We view the biggest challenge to the overall success of hydro projects in Oregon being the inconsistent approaches and interpretations by state agencies from one project to the next. For instance, there continue to be competing approaches and interpretations by the Oregon Department of Fish and Wildlife (“ODFW”) as to what protections of what natural resources are necessary before a project can move forward. There is often inconsistency in the very definition of “necessary mitigation measures” amongst ODFW staff members and a lack of clarity as to who actually decides within ODFW the definitive agency position. Stated another way, we have seen state agencies view small hydroelectric projects as an opportunity to gain environmental enhancements when the projects are not cause of any of the impacts associated with the enhancements. The Colorado process could benefit Oregon if it brings with it a very clear definition and structure as to what environmental protections and enhancements are necessary for a project to move forward.

Could the Oregon Hydroelectric Application Review Team (HART) process, which currently applies to reauthorization, sufficiently perform the function of development assistance?

No experience to comment.

If Oregon pursued a development assistance program –

What should the goals of the program be? Is there an opportunity to provide additional public benefits through the program?

The goals should be to provide a clear road map of the process for potential projects to follow. Included in this process should be basic parameters for projects – such as where hydroelectric projects are already prohibited from being sited (e.g., within Wild and Scenic River boundaries, etc.) and guidance regarding whether a project can be considered for a FERC exemption (conduit or 5MW), and then what the corresponding state agency processes are for such projects, including who to contact at each state agency on discovering whether there may be mitigation issues. Of course, with a consolidated agency approach, there could be a single contact agency or person that would oversee all potential mitigation requirements. In addition, it would be helpful to have a cumulative and master list of potential state project funding sources and contacts for those sources.
How will the State measure the program’s effectiveness?

The state can measure effectiveness by the number and generating capacities of projects that participate in the program and then which ultimately receive orders and permits.

How will Oregon’s natural resources be better protected through this program? For example, should low impact proposals receive immediate highest priority?

We are concerned with how these questions are framed. For instance, who decides what a low impact proposal is? Who decides what natural resources need to be protected in the first place? OWRC does not believe the State has clearly set forth the premises for these questions in any statute, rule, or policy document, and until a particular project application is submitted, no one really knows the answers to these questions. As a result, it seems that the state agencies “invent the wheel” each time a new project is proposed, which then leads to varying and inconsistent conditions and mitigation requirements.

The potential benefit to better protecting the state’s natural resources comes with the state defining what needs to be protected in the first place, in a systematic and prioritized manner or hierarchy.

Should State assistance focus mostly on:
- technical support; - process support; or - pre-filing outreach?

All of the above. Assistance from ODOE really needs to be value added. For example, an ODOE technical support person could be the interface or “partner” for the hydroelectric project developer with other state and federal agencies. For OWRC members, the local hydroelectric project developer is a local government entity. We feel it is critically important for ODOE to assist all developers, and not purely private developers. Local governments, whether they be irrigation districts, drainage districts, municipal water providers, etc., that take on a hydro project must be able to address the financial issues, engineering issues, contracting issues, local government requirements, state agency requirements, federal agency requirements (such as those included with Reclamation’s lease of power privilege), power purchase requirements, and the FERC process almost all at the same time. This is nearly an impossible task for a small local government agency with limited resources. If ODOE could in fact provide technical help in any or all of these areas, it would truly provide a meaningful service to the small local agency attempting to convert what is otherwise simply a good hydro opportunity into an actual project.

What projects should be eligible for the program? Please comment on both the general character of the project, any geographic focus, and pre-screening criteria that should be applied.

Eligibility should be for those projects that would potentially qualify for FERC exemptions, including conduit and 5MW projects, and especially the 5MW projects. These projects have the potential to go to construction on a quicker timeframe and could result in more immediate generation of renewable energy than projects that do not qualify for exemptions.
Is there a nexus to the Deschutes Basin Preliminary Hydropower Opportunity Assessment, currently underway?

*There is a limited nexus to the Deschutes Basin Preliminary Hydropower Opportunity Assessment to the extent that the Assessment is identifying potential projects and creating a general understanding of environmental impacts. The Assessment may result in a set of possible tools for addressing environmental impacts.*

What should be the responsibility of the project developer for due diligence regarding a potential project’s costs, benefits, and the likelihood of success prior to requesting assistance?

*The project developer should demonstrate it has the agreement or consensus of the land owner, right-of-way holder, or water right holder (or all three in some cases) involved in the project location before being able to request assistance. In addition, when the project developer intends to make use of a local government’s water storage and delivery infrastructure, the project developer should show it has the agreement or consensus of the local government before being able to request assistance. Many OWRC members have had to expend time, energy, and resources defending potential sites from private developers who file on sites purely out of speculation and without conducting even a hint of due diligence.*

Should Oregon seek an MOU with FERC? The Department notes that a state does not need special approval from FERC to assist a developer with pre-filing requirements.

*Oregon should seek an MOU with FERC only after the issues discussed above have been addressed. Otherwise, there is no benefit to pursuing an MOU with FERC.*

OWRC is supportive of the Oregon Department of Energy’s initiative of finding ways to provide development assistance and streamlining burdensome processes that could materially benefit the development of small hydroelectric facilities in the State of Oregon.

If you need any additional information, please contact April Snell, Interim Executive Director (april@owrc.org).

Thank you for the opportunity to share our comments and concerns.

Sincerely,

April Snell
Interim Executive Director

Mike Britton, OWRC Hydro Caucus Chair
North Unit Irrigation District
February 7, 2012

Rebecca Sherman O’Neil  
Oregon Department of Energy  
625 Marion St. NE  
Salem, OR 97301

Dear Rebecca:

Energy Trust of Oregon values the Department’s interest in exploring and considering new ways of supporting Oregon’s hydropower sector. We also appreciate your willingness to accept our comments after the deadline.

Energy Trust believes there is significant potential for new low-, zero-, or positive-impact hydropower projects in Oregon. Energy Trust has focused its efforts on supporting projects which harness water flows in existing man-made conveyances to generate energy (so called ‘Conduit Projects’). Our research suggests there could be over 30 megawatts of developable capacity in projects located on irrigation canals or otherwise utilizing irrigation water.

Energy Trust comments on the questions in the RFI:

1) **What are the most productive elements of the Colorado pilot? What are the challenges?**

   The Colorado pilot tried to address the complexities of the federal hydropower licensing/exemption process, which can be daunting for new project developers. In Energy Trust’s experience, municipalities and first-time individual developers (such as farmers or ranchers with the potential for a net-metered project) are most at risk of delay due to inexperience with the FERC process. Other developers (irrigation districts, private enterprises, etc.) generally hire specialized consultants for guidance through the FERC process.

   In Energy Trust’s opinion, the biggest challenge with the FERC process is that the cost to hire consultants can impair the financial viability of very small projects (less than 50-100 kilowatts) or those with low capacity factors. Energy Trust provides development assistance funds to eligible projects to help address this barrier. The Department might be able to address this as well, as detailed below.

2) **There are many reasons that hydropower proposals succeed or fail in Oregon. Please comment broadly on the most significant factors for success and whether the Colorado pilot would address these reasons in the public interest.**
In Energy Trust’s experience, the reasons for failure and the factors for success in hydro projects are related and usually inversely proportional. To be successful in Oregon, a project with a feasible resource and design needs to work through three critical areas:

- **Federal and State Permitting:** At present fish passage issues are a substantial challenge in the state permitting process. Only hydro projects where the source water diversion(s) allows for fish screening, bypass, and passage can be successful, even if a project would not change the operation of an existing diversion(s). This has occasionally resulted in lose-lose scenarios where fish barriers remain in place and the hydro does not go forward because it cannot afford to pay for an acceptable solution.

- **Interconnection:** High interconnection costs present a barrier for many projects. In some cases, project owners have found success by hiring consultants who can review utility-drafted requirements and suggest lower-cost solutions.

- **Power Purchase / Offtake:** Currently, the only available pathway to the wholesale power market for most small hydro projects in Oregon is as a Qualifying Facility (QF). QF’s are offered published avoided cost rates. In Oregon these rates are quite low and projects have to be very cost-competitive in order to be financially successful.

The Colorado pilot does not address these issues. The Department could, if it so chooses.

3) **What should the goals of the program be? Is there an opportunity to provide additional public benefits through the program?**

There are a number of opportunities with potential public benefit.

- **A Colorado Pilot style federal permitting assistance program:** This would be the most focused approach. It could provide some benefit if targeted at the smallest projects where permitting becomes a high percentage of total cost.

- **An Expanded permitting assistance program:** Consider expanding on the Colorado model through the HART process. There is substantial overlap between the consultation requirements for Oregon’s Minor and Major Hydroelectric Water Right processes and FERC’s Exemption processes. Consider whether project applications for state water rights could be transformed by the Hydroelectric Application Review Team (HART) into applications for a FERC Exemption. Could the HART manage one consultation process for both applications? This could provide substantial benefit and time savings for a developer and, potentially, for agencies who have to file separate responses to each application.

- **A One-Stop Shopping approach:** The HART is unusually qualified to evaluate potential hydro sites for issues that may impede project permitting. It could be very useful for projects to have access to this knowledge earlier in the development process. For example, a developer could submit details about a proposed site early in the exploratory phase. The HART agencies could review the known information and respond with issues that could arise in the project. This exchange of information should also be useful to the HART agencies to inform them about potential
projects and establish early communication. The Department could also expand the reach of this option to address interconnection challenges, project finance, or other issues within its purview.

4) **What should be the responsibility of the project developer for due diligence regarding a potential project’s costs, benefits, and the likelihood of success prior to requesting assistance?**

In Energy Trust’s experience, project developers need to have a significant financial stake in proposed projects in order to be successful. Depending on the nature of the Department’s assistance, you could consider the following steps/actions as preconditions for assistance:

- An independent, third-party study documenting the feasibility of the proposed project.
- Documentation from Fish and Wildlife that fish screening/bypass/passage issues will not preclude the project. (This could also include other agencies than might have issues given a specific project site.)
- Documentation of continuing progress on a proposed project’s design (details of which will be necessary in permitting and interconnection processes).

In addition, if the Department offers services to a developer, it seems reasonable for the developer to share in the cost of the service.

5) **Should Oregon seek an MOU with FERC? The Department notes that a state does not need special approval from FERC to assist a developer with pre-filing requirements.**

Energy Trust does not see substantial benefit in seeking an MOU with FERC. The main advantage in the Colorado MOU seems to be a slight decrease in the time required for FERC to process and notice applications. This could be valuable in some cases but for most successful projects, FERC’s timeline does not appear to be a significant limiting factor. Further, in Energy Trust’s experience, projects that complete FERC Exemption applications with the same level of rigor as those created by the Colorado pilot appear to be processed quickly by FERC. For a good application, an MOU may bring little advantage.

Energy Trust again thanks the Department for the opportunity to respond to this RFI and we are happy to respond to any questions you may have.

Sincerely,

Jed Jorgensen
Sr. Energy Project Manager