NWHA

NORTHWEST
HYDROELECTRIC
ASSOCIATION

April 3, 2013

Chairman Dingfelder and Committee Members

RE: SB 360/SB 837 Fish Passage/Conduit Exemptions

The Northwest Hydroelectric Association represents the states of Alaska, Oregon, Idaho, Montana, Washington and No. California. Our members are the utilities in these states, hydropower developers, irrigation districts, consultants, manufacturers of equipment and others.

Conduit Exemptions

Conduit exemptions are the simplest form of hydroelectric generation as they use existing infrastructure and do not require a new diversion or extensive construction. Conduit exemptions are approved generally by the Federal Energy Commission using a short form process, but when the conduit project is on a Bureau of Reclamation facility such as a canal, then Reclamation has approval authority using an almost identical process as FERC does.

FERC considers the official boundary of a conduit exemption as the generation equipment at the end of the conduit. Look at page 4 of the testimony and you will see an example where the diversion is 10 miles away, but a pipeline moves water from there to the end of the pipe and the generation facility is then placed at the end of the pipe. The boundary does not include diversion, transmission lines and other facilities. Generally these projects are approved by FERC in less than 6 months' time.

A conduit may be a canal, a ditch or a pipeline or other conveyance structure that is "not part of an integral dam" (quote from FERC rules). These projects are exempt from regular licensing procedures as they take advantage of existing infrastructure and do not create a new diversion.

Applicants must consult with relevant agencies and the public in at least two different stages of consultation, particularly, in Oregon, with the Oregon Department of Fish and Wildlife and the Oregon Water Resources Department.

There are projects like the one you see on page 4 that take advantage of water delivery pipelines. Another type of project is a generator within a pipeline (page 2). The City of Portland is under development now with the City of Portland Water Bureau to install this kind of project in its existing infrastructure by removing a portion of the old pipe and installing these new sections with turbines.

JAN LEE
Executive Director

PO Box 2517
Clackamas, OR 97015

(503) 545-9420
(503) 631-7299 Fax

www.nwhydro.org
jan@nwhydro.org

For a list of Directors, please visit our website.

The newest technology is shown on page 3. This technology drops into an open conveyance structure such as a canal and requires no pipeline. This particular unit is installed in Roza Irrigation District in Washington.

Problem

What has been problematic is the interpretation of the state's fish passage statute as requiring the owner or developer of the conduit project to add fish passage at a diversion dam which may be miles away from the project. ODFW has always had the authority to request fish passage, but in the past did not do so and as a result many of our dams in Oregon do not have passage.

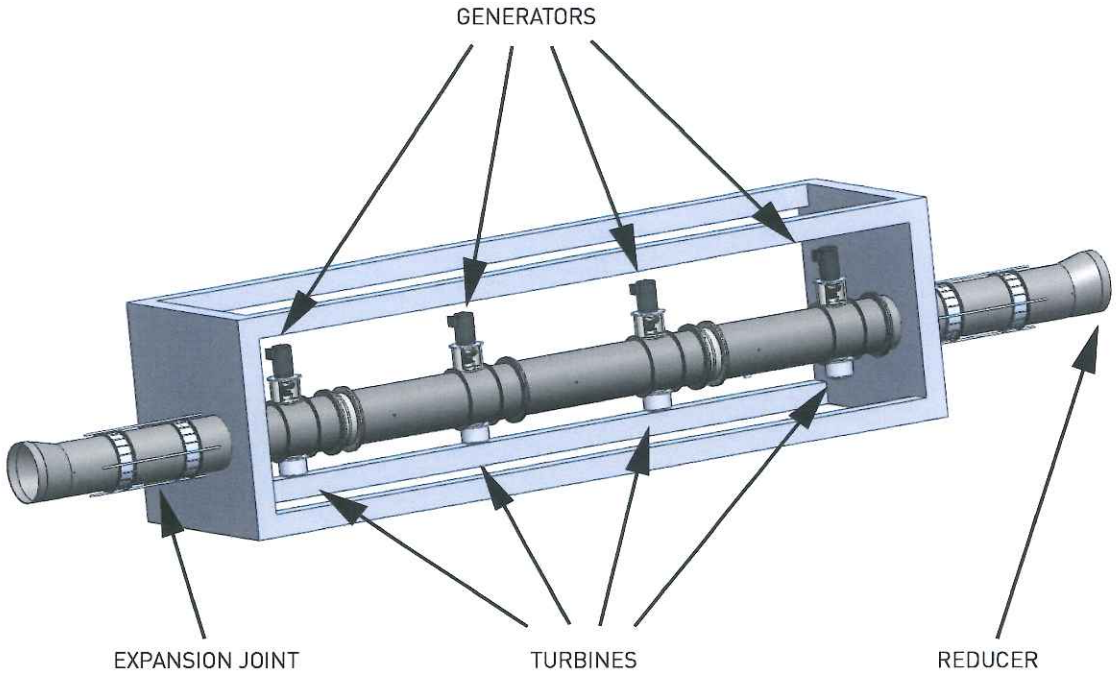
Fish passage is very expensive. Passage on a small dam, under 50', may cost millions. The requirement to put in passage before doing a conduit project has stopped most small projects on conduits from moving forward for several years, both at irrigation district sites and within municipal infrastructure.

The concept in the bill is to allow a payment into the fish passage subaccount until passage is built so that projects can move forward. In the consultation process with FERC fishery agencies can request any conditions and a project cannot move forward in the exemption process if it cannot meet the requirement. The subaccount can also accept grants or federal appropriations specifically for projects and we, along with others in the group, intended to help build the account by identifying and securing those resources.

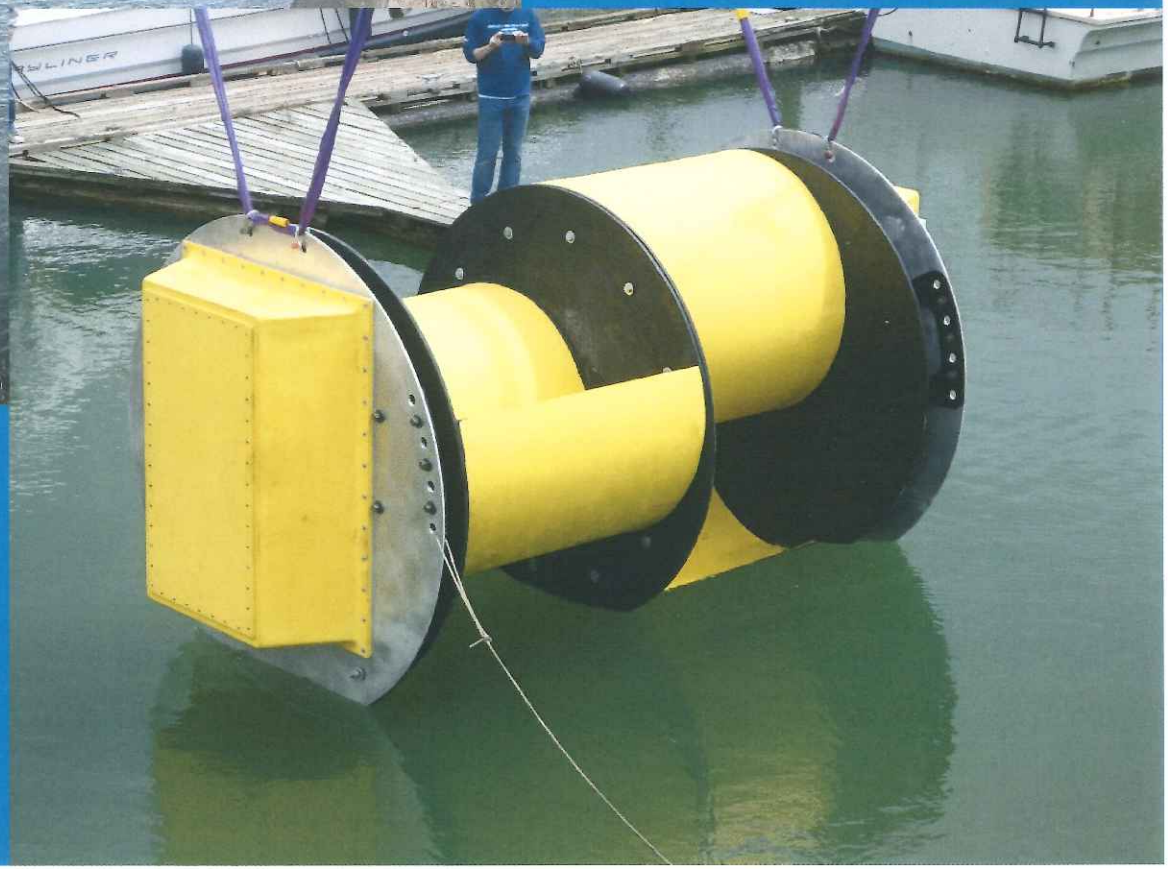
Thank you for your consideration and for your support in securing more renewable resources for Oregon through the use of existing infrastructure as an alternative to other resources with emissions.

Jan Lee
Executive Director
Northwest Hydroelectric Association

Vault and Turbine System



- Four 42" Turbines installed in series.
- Each section of pipe contains an internal generation unit.
- Pipe/Turbines/Generators will be located in an underground vault
- The largest unit is 50 kW in capacity, and the other three units are smaller as energy dissipates through the pipeline sections



Hydrovolts

CONDIUT EXEMPTPION

- 10 MILES FROM DIVERSION TO PROJECT