National Hydropower Association
25 Massachusetts Ave. NW, Ste. 450, Washington, D.C. 20001 • Tel 202-682-1700 • Fax 202-682-9478 • www.hydro.org

February 21, 2012

Mr. Elliot Mainzer
Bonneville Power Administration
P.O. Box 14428
Portland, OR 97293-4428

Dear Mr. Mainzer –

The National Hydropower Association (NHA) appreciates this opportunity to comment on Bonneville Power Administration's (BPA) Draft Oversupply Management Protocol released on February 7, 2012.

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 and others, with a significant representation from the Pacific Northwest.

Because of the diversity of interests and views within the Association's membership, NHA will leave specific comments on the details of the Protocol to our individual member companies and directs you to those filings. However, the Association is pleased to offer the following comments on the broader policy issues at play as BPA looks to address the issue of system reliability and integration of increasing amounts of variable energy generation into its balancing area.

To begin, NHA wants to commend BPA for the extensive outreach and engagement it has conducted on this issue – which included not only wind developers, but hydropower owners and operators as well, both federal and private. While further work remains to be done, NHA appreciates the months of stakeholder discussion undertaken to get to the issuance of the draft Protocol.

NHA recognizes that BPA is dealing with a complex set of issues in finding solutions when an oversupply of energy occurs as a result of high river flows and high wind generation, coupled with low energy demand periods - such as off peak hour or during mild temperatures. Not only are there concerns related to grid reliability with oversupply situations, but there are potential impacts to fish that must also be managed when a hydropower project owner or regional balancing authority needs to decide if they should bypass generation (i.e. spill) or curtail other generation sources.

Unfortunately, the complexities surrounding oversupply issues have often been downplayed and minimized in the debate of how to best manage high water and high wind events. Because

of the need for preserving grid reliability while promoting renewable energy sources, NHA endorses a holistic approach to the discussion that promotes and balances the goals of increased clean and renewable electricity generation, protection of natural resources, as well as providing secure, reliable energy.

As such, NHA wishes to re-emphasize several points made in our June 2011 "guideposts" statement.[1]

First, the Protocol addresses the immediate concern with how to move forward when an oversupply event occurs in the BPA system – instituting output reductions and establishing a compensation methodology – but it does not address how to prevent oversupply situations from occurring in the long term. As such, NHA again calls for continued dialogue on Northwest energy planning, transmission investments, and most importantly, a commitment to new energy storage in the region, particularly pumped storage.

On the BPA website, the Administration notes, "The risk of electricity oversupply depends on runoff conditions and BPA expects reductions in wind generation will be unnecessary in about one of every three years."[2] If out of two of every three years the BPA is faced with implementing the Protocol, it appears the Northwest region has not fully addressed the underlying issues affecting its regional power system – primarily the ability to effectively store the excess energy until supply no longer exceeds demand.

This leads to NHA's second main point. The real issue at the heart of the problem in the Northwest is storage of excess energy until the demand need is met. This is where pumped hydropower storage development could play a significant role in solving these problems.

Currently, there are proposals for dozens of pumped storage facilities across the west, with several located in the Northwest and within BPA's balancing area. As BPA itself has noted, modernizing the Keys Pump-Generator Plant at the Grand Coulee complex (Banks Lake) is an option that is under evaluation.

These pump storage projects provide regional and grid-scale energy storage and other ancillary services that are needed both for the integration of variable energy resources and for overall grid reliability purposes.

Pumped storage is a proven technology with a long track record of superior performance that provides the very services that are in demand in the Northwest now, and will certainly be needed in additional areas of the country in the near future. Experience in Europe has clearly shown that increasing variable energy generation requires access to energy storage. And that demand in Europe is being met with storage from both conventional hydropower as well as pumped storage projects.

---

[1] http://hydro.org/wp-content/uploads/2011/06/Press-Release-NHA-Releases-Guideposts-6-9-11.pdf
[2] http://www.bpa.gov/corporate/BPANews/ArticleTemplate.cfm?ArticleId=article-20120208-01

While the work on the Protocol will continue between BPA and the various stakeholders, NHA also calls on policymakers in the region and nationally to more actively engage in a dialogue on energy storage deployment here in the U.S., particularly in the Northwest, one that includes specific goals, recommendations and policies that are fundamentally based upon sound scientific principles.

NHA continues to believe that the strength of America's electric system is its diversity of generation resources, which is instrumental in providing customers with reliable, affordable and sustainable electricity.

For the Pacific Northwest, hydropower meets and will continue to meet the majority of its electricity needs. And as a result, the region now enjoys a lower emissions profile and some of the lowest electricity rates in the country.

Moving forward, generation from wind, and other renewable resources, will add to the base of clean energy hydropower currently provides. Hydropower and wind generation will each play an important role and are complementary resources that can work well together.

NHA looks forward to continued engagement with the BPA and stakeholders on the issue of oversupply specifically, and on others, in order to craft the right long-term policies to ensure access to reliable energy, while also protecting and enhancing natural resources and promoting increased generation from variable energy resources.

Sincerely,

Linda Church Ciocci
Executive Director