



STREAMLINING HYDRO DEVELOPMENT

MARCH 2012

OVERVIEW

- Hydroelectric generation is the nation’s largest source of clean, renewable electricity, accounting for approximately 67% of domestic renewable generation, but just 7% of the nation’s total electricity generation. Hydropower provides a reliable source of baseload capacity, unlike other renewables such as wind or solar.
- In certain regions and using certain technologies, considerable potential clean energy gains can be found in undeveloped hydroelectric capacity.
- In 2009, the National Hydropower Association (NHA) commissioned a thorough study of the potential for hydro capacity additions and job impacts relative to hydroelectric development in the United States. Navigant Consulting, Inc. found that accelerated development of hydro could provide up to 60,000 MW of new capacity and up to 1.4 million new jobs by 2025. Navigant’s full report can be found at <http://hydro.org/why-hydro/job-creation/navigant-study/>.
- AMP is in the midst of what is currently the largest development of new hydroelectric generation in the United States. Four new run-of-the-river hydroelectric facilities are under construction at

ACTION REQUESTED

AMP / OMEA urge their U.S. Representatives and Senators to keep the following key points of consideration in mind as efforts to examine and streamline the development of hydropower resources continue:

- Ongoing federal efforts to examine and improve the licensing and permitting process, operation, and energy production of hydroelectric facilities should be encouraged. Improved agency coordination alone can greatly reduce timely and costly delays in the development of needed clean energy capacity.
- USCOE should exercise its existing operational authority to improve river flows at certain run-of-the-river hydro facilities to maximize generation.
- In any CES proposal, hydroelectric generation – both existing and new – should be given full recognition for its clean energy contributions to the nation’s power supply needs and should not be discounted in favor of other renewable, nuclear, or similar “clean” energy technologies.

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existing locks and dams on the Ohio River, and two other projects are in the licensing and permitting stage of development. Those projects include:

o	Cannelton (Kentucky)	84 MW	under construction
o	Meldahl (Kentucky)	105 MW	under construction
o	Smithland (Kentucky)	72 MW	under construction
o	Willow Island (West Virginia)	35 MW	under construction
o	RC Byrd (Ohio)	~50 MW	licensing
o	Pike Island (Ohio)	~50 MW	licensing

■ AMP’s hydro projects currently under construction represent over \$1.6 billion in capital investment in the Ohio River valley and up to 1600 construction jobs at peak.

■ Once completed, the combined generation of these new clean energy facilities is expected to add over 1.076 GWh annually to AMP’s power supply portfolio.

■ AMP member communities subscribed to these clean energy projects under construction based on their power supply needs.

■ Despite AMP’s success with its hydroelectric development, significant regulatory hurdles exist, which can create unnecessary lengthy and costly delays.

■ Two federal entities play critical roles in the licensing and permitting process for new hydroelectric facilities. The Federal Energy Regulatory Commission (FERC) is the principal federal agency responsible for licensing hydropower projects under the Federal Power Act (FPA). FERC issues a license for the construction, operation, and maintenance of hydroelectric facilities, and also has authority under the FPA to “relicense” these facilities and oversee related environmental matters, dam safety issues, etc. The U.S. Army Corps of Engineers (USCOE) operates the navigational locks and dams on the Ohio River associated with AMP’s run-of-the-river hydro projects. USCOE also is responsible for issuing permits under Sections 404 and 408 of the Clean Water Act. These processes also involve state resource agency approvals.

■ Unfortunately, these processes can be duplicative, and the agencies do not have a strong track record of coordinating the decision-making process. Improvements in this area could significantly improve the efficiency of the licensing and permitting process so that needed hydroelectric capacity can be developed in a timely and more cost-effective manner.

■ The U.S. Department of Energy (DOE) recently sought input from the public on its Hydropower Advancement Project (HAP). In its comments, AMP observed that the addition of an additional one (1) foot of headwater in the upstream pool of certain projects on the Ohio River could provide an additional 50,000 MWh annually for hydro facilities that are currently operating, with that figure potentially growing to over 81,000 MWh by 2015, when most of AMP’s units currently under construction will be operational. This is an operational issue that the USCOE should be able to implement immediately, with no known opposition. A copy of AMP’s responses to the Request for Information (RFI) is available at http://amppartners.org/pdf/regulatory-comments/DOE-FOA-0000629-AMP_comments-Feb-21-2012.pdf.

- Congressional consideration of hydropower issues in the 112th Congress has included:
 - o Legislation to promote a more efficient permitting and licensing process for hydro projects by requiring studies and reports by DOE, FERC, USCOE, and others on both technologies and regulatory process improvements;
 - o Legislation to provide grants to support efficiency improvements or capacity additions at existing hydro facilities;
 - o Legislation to remove some existing impediments to the development of small (<5 MW) hydro projects and projects involving non-traditional technologies; and
 - o Legislative discussions pertaining to the treatment of hydropower (existing and new) under any proposed Clean Energy Standard (CES), such as Sen. Jeff Bingaman's (D-NM) current proposal or that outlined by the Obama administration in 2011.

American Municipal Power, Inc. (AMP) is a public power leader in providing energy supply and services for member municipal electric systems. AMP has 129 member systems in seven states - Ohio (82), Pennsylvania (30), Michigan (6), Virginia (5), Kentucky (3) and West Virginia (2), and the Delaware Municipal Electric Corporation. These systems serve more than 600,000 customers. The Ohio Municipal Electric Association (OMEA) is the legislative liaison to AMP and 81 Ohio municipal electric communities, which serve approximately 370,000 customers. For more information on AMP or OMEA, please contact: Jolene Thompson, AMP senior vice president and OMEA executive director, at either 614.540.1111 or jthompson@amppartners.org. More information about AMP and OMEA can be found at www.amppartners.org.