

# We can double U.S. hydropower resources

By Andrew Munro

All of us in the hydropower industry are experts at turning the potential energy of water into a limitless resource of possibility. From electrifying the South and West almost a century ago to feeding an international network of computer data centers that propel us into the future, hydropower has led the way with renewable, clean, affordable and reliable electricity.

Now we need to turn this extraordinary capability to power – and empower – our country, and our own industry.

U.S. hydropower represents an enormous store of “potential renewable energy,” with untapped resources that can offer new sources of renewable generation, environmental benefits, and green jobs in communities across the country. It’s our challenge to turn this potential into real benefits that serve our country’s energy, environmental, and economic priorities.

As I take on the duties of president of your National Hydropower Association, I plan to make the industry’s challenge my challenge. We’re standing at a critical juncture, at a time when the benefits of the hydro industry truly align with our country’s most pressing needs. We must take bold action and act now while our industry’s interests are the public’s interest.

During my term as NHA president, I’d like us to focus on these goals:



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- 1) Double the total megawatts of new hydropower projects pending at the Federal Energy Regulatory Commission by 2012.
- 2) Double the number of jobs created by the hydropower industry by 2012.
- 3) Double U.S. hydropower capacity by 2025.

Sound ambitious? Yes, it is. But, we’re part of an industry that meets challenges. After all, how many other industries can say that during the Great Depression, they created jobs, improved the quality of life, and established renewable resources that still serve our country today?

I would argue that the hydropower industry enjoys more opportunity today than we have since that time.

We’re starting to see Congress and the Administration recognize hydropower’s untapped potential through more investment incentives and R&D support. New and ongoing collaborations with environmental organizations recognize the renewable energy benefits of hydropower, and, we’re playing a significant role in energy, climate, and economic policy debates at all levels.

The view of hydropower and our very message has changed.

Previously, our message was... “Don’t forget hydro.”

Today, our message is “Hydropower has a lot to offer” and “Hydropower can help!”

Indeed, hydropower can help our nation

## Existing dams offer potential power

Did you know that of the nearly 80,000 dams in the United States, only 2,436 – just 3 percent – are used to generate electricity? We can add new hydropower capacity simply by capturing the untapped renewable energy potential at existing dams.

Adding hydropower capability to these existing facilities, improving efficiencies at generating dams and pursuing new hydrokinetic such as wave energy can help our country expand its renewable generation portfolio, create long-term, family-sustaining green jobs in every region of the country, and help integrate variable renewable energy, including wind and solar, into the electric grid.

We are fortunate and proud to have one of our state’s exemplary PUD employees serving in a key national leadership role on hydropower.

Andrew Munro, director of external affairs at Grant PUD, was recently elected president of the National Hydropower Association. His extensive knowledge and insights into the workings of Congress will serve the hydropower industry well during these exciting times in the world of energy.

Already, he has established a new long-term strategic goal for NHA and the industry to double U.S. hydropower capacity, which is currently at 96,000 megawatts. Andrew talks about his vision in the following speech delivered in May 2009 at the NHA Annual Conference in Washington, DC.

—Tom Flint, President, Washington PUD Association

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achieve its renewable energy goals, and hydropower can help integrate wind and other intermittent technologies into the grid. Let's leverage this momentum to reach our goals.

Think about how we can double the number of megawatts pending at FERC by 2012, for example. We have the tools to do this.

Consider how production tax credits prompted a 20 percent to 50 percent increase in hydropower development work in just their first year alone. Consider also that only three percent of our nation's dams generate electricity.

With the federal Production Tax Credit now in place through 2013, (bolstered by options for investment tax credits, federal investment grants, clean renewable energy bonds, and other tax incentives) doubling the megawatts of new hydropower projects pending at FERC by 2012 is within our reach.

The growth of jobs in the industry is poised to become the same way.

Think about NHA member Hydro Green Energy, a small entrepreneurial company that just a few years ago began to commercialize hydrokinetic technology.

Today, HGE holds the first commercial hydrokinetic license and its work spurred the creation of nearly 100 jobs around the country. Leaders like HGE make doubling the number of new jobs created by the hydropower industry in three years possible.

With new applications in the pipeline and a growing industry, doubling U.S. hydropower capacity by 2025 is within our sights, too.

We already have a good head-start: Right now, FERC is considering more than 30,000 megawatts of new projects, which represent a 32 percent increase in hydropower capacity. As new incentives prompt additional development, I see this number growing.

We'll also be feeling a strong push from other industries to expand our resources.

According to the "20% Wind Energy by 2030 report," in order to meet a national goal of securing over 20 percent of our electricity from renewable sources by 2025 (not including the 7 percent we already get from hydro) our country will need to integrate approximately 300,000 megawatts of wind energy.

The Department of Energy estimates that

it will take 50,000 megawatts of peaking generation or storage to firm or integrate this large, intermittent resource. That means hydropower – America's largest renewable energy resource – and pumped storage will be at the forefront, integrating wind and other variable technologies into the grid.

All these factors make me optimistic about hydropower's future.

I believe the goal of doubling U.S. hydropower capacity and industry jobs is reachable, and will play a key

role in serving our country's energy, environmental and economic priorities. I urge all of you to join me in working with your National Hydropower Association, Congress, and the Administration. Together, we can make it happen. ☐

*Andrew Munro is Director of External Affairs at Grant County Public Utility District. Previously, he held a similar position at the Chelan County PUD. Munro also served as Acting Regional Director for the Small Business Administration in Region 10 and was on the staff of Rep. Norm Dicks (D-WA). He is currently president of the National Hydropower Association. The remarks above were delivered at the NHA's annual meeting in May.*

**With new applications in the pipeline and a growing industry, doubling U.S. hydropower capacity by 2025 is within our sights, too.**

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