VOITH

Written Testimony of:

Bob Gallo, President/CEO

Voith Hydro, Inc.

Before the

House Committee on Natural Resources

Subcommittee on Water, Power and Oceans

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Chairman Lamborn, Ranking Member Huffman and the rest of the Subcommittee on Water, Power and Oceans - thank you for allowing me to testify before you today. My name is Bob Gallo and I am President and CEO of Voith Hydro, Inc. based in York, Pennsylvania. We are very appreciative to the Subcommittee for holding this hearing today on a topic of great interest to Voith and the nearly 150,000 people working in the United States' hydropower industry.[1] How we keep hydropower affordable and how we develop new hydropower resources is vital to America's energy and economic future.

For background, Voith Hydro is a worldwide leader in hydropower equipment and services, with offices, factories and/or projects across six continents, employing nearly 5,000 people in total. As a company, we are celebrating our 150th anniversary this year. The fact that we are discussing the world's original renewable energy 150 years after our company was founded is a testament to hydropower's importance to the development of the modern world.

Perhaps it's fitting that I begin my testimony in the context of those early dams that contributed to the expansion, industrialization, and economic growth of the United States. I'm sure most view hydropower through the lens of the Hoover or Grand Coulee Dams, or even Niagara Falls – which, incidentally, used Voith turbines when its first powerhouses were built at the turn of the 20th Century.

And indeed, those dams are still a vital source of power for millions of Americans. In fact, Grand Coulee is by far the largest power plant in the country, outpacing the second largest power plant by nearly 3,000 megawatts (MW).[2]

In many ways, hydropower's future in the United States lies in foundations that were laid in the past. According to the Department of Energy's (DOE) 2016 Hydropower Vision Report, upgrades at existing facilities and retrofitting unpowered dams are a key component in what the DOE estimates is 50 gigawatts of untapped hydropower potential – or a 50% increase in our current installed capacity.[3]

Many are shocked to learn that there are approximately 80,000 dams in the country that do not produce electricity. That's right - only 3% of U.S. dams actually generate power.[4]

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[1] "Hydropower Vision," U.S. Department of Energy, https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-Executive-Summary-10212016.pdf (July 2016)
[2] "The Country's Largest Power Plants," Power Engineering Magazine, http://www.power-eng.com/articles/slideshow/2016/02/the-country-s-largest-power-plants.html (Accessed May 2017)
[3] "Hydropower Vision," U.S. Department of Energy, https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-Executive-Summary-10212016.pdf (July 2016)
[4] Converting Non-Powered Dams," National Hydropower Association, http://www.hydro.org/policy/waterpower/powering-existing-dams/

Untapped potential exists across the country, and at all types of facilities. These include private dams and developers, as well as federally-owned ones at the Tennessee Valley Authority, Army Corps of Engineers, and the U.S. Bureau of Reclamation, which falls under this Committee's jurisdiction.

In many cases, these dams can be powered through what amounts to public-private partnerships. For instance, Missouri River Energy Services (MRES), which is a municipal power provider operating in the upper Midwest, is developing a hydropower facility at Red Rock Lake near Pella, Iowa. Red Rock Dam is owned and operated by the U.S. Army Corps of Engineers. Though initially built for flood control and recreation, nearly 50 years later, Red Rock will also provide clean and affordable power to approximately 18,000 homes.[5]

A similar story can be found on the Ohio River, where American Municipal Power (AMP) undertook the largest new domestic hydro development in decades through its Ohio River projects. These four run-of-the-river facilities on existing Army Corps locks and dams will provide over 300 MW of additional power to AMP's customers.[6]

It should come as no surprise that funding remains a challenge for government-owned facilities. In some ways, these challenges are part and parcel to the broader conversation about improving our country's aging infrastructure. Hydropower is often a victim of its own success; our equipment can last with minimal maintenance for 50 years or longer.[7] But 50 years means that the turbines, generators, and automation technology are falling behind modern efficiency and environmental performance standards.

There are a number of other ways, however, in which the federal government can help spur hydropower development.

For years, the industry has called for hydropower licensing reform, and for good reason. Many are shocked to learn that it can take 10 years or more to license or re-license a hydropower facility – longer than even a nuclear power reactor.[8] Redundant local, state, and federal studies and requirements needlessly slow down what should be an efficient and collaborative process.

The lack of a standard timeframe and a lead agency to keep all on task cause indefinite delays. This is of course true for new development, but also an immediate concern for existing projects. Approximately 15% of America's installed hydroelectric capacity will be up for relicensing over the next decade.[9] There has already been at least one instance of a plant operator calling it quits because the relicensing process was simply too long and expensive; our nation can't afford for other developers to draw the same conclusion.

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[5] "Project Overview," Red Rock Hydroelectric Project, http://redrockhydroproject.com/project-overview/
[6] "Hydroelectric Power," American Municipal Power, https://www.amppartners.org/generation/hydro
[7] "Age of electric power generators varies widely," U.S. Energy Information Administration, https://www.eia.gov/todayinenergy/detail.php?id=1830
[8] "Separating Myth from Fact," Unlock Hydro, http://www.unlockhydro.org/myth-vs-fact/
[9] "Licensing Challenges Limit Hydropower's Potential," Bipartisan Policy Center, https://bipartisanpolicy.org/blog/licensing-challenges-limit-hydropowers-potential/

Congress made piecemeal progress on the regulatory front in years past, including the Hydropower Regulatory Efficiency Act that was signed into law in 2013.[10] That legislation took aim at improving and streamlining the licensing process for smaller hydropower projects, and contained a pilot two-year licensing process through the Federal Energy Regulatory Commission (FERC).

Last year's Energy Policy Modernization Act went even further to streamline the process for hydropower, most notably designating FERC as the lead agency in charge of the permitting process, something long sought by the industry.[11] Our goal is not to bypass or ignore any necessary environmental safeguards. After all, we take pride in hydropower's unsurpassed environmental performance. We simply want to remove the redundancy and provide some certainty to the process.

I don't need to rehash the fate of the energy bill to members of the Committee. Unfortunately, the Energy Policy Modernization Act fell victim to the Congressional calendar and was not passed in the 114th Congress. I do hope the legislation, and in particular its hydropower provisions, are a starting position for energy regulatory reform in this Congress.

This Committee deserves credit for its recent attention to hydropower development, including last week's passage of the Bureau of Reclamation Pumped Storage Hydropower Development Act.[12] This legislation could pave the way for non-federal pumped storage hydropower development on Bureau of Reclamation properties. Pumped storage hydropower is the only proven source of large scale energy storage, and offers tremendous benefits to grid stability, as well as the development of other renewable – but intermittent – sources of energy.

In addition, in 2013 the Committee passed the Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act, which was ultimately signed into law.[13] The legislation authorized hydropower development, streamlined the regulatory process, and reduced administrative costs for small canal and pipeline hydropower development projects on Bureau-owned conveyances.

Development on low-head streams is promising. Though relatively small in individual power output, taken together these facilities make a significant contribution in powering America's future. To that end are very excited about one of our newest technologies – the Voith StreamDiver, which is a standardized, oil-free turbine/generator unit that can be installed into existing civil works. It can fit into these canals, or even small streams. In fact, the University of Notre Dame will be installing a system of StreamDivers in the St. Joseph River at South Bend, Indiana over the next year or so.

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[10] "H.R. 267 – Hydropower Regulatory Efficiency Act of 2013," Congress.gov, https://www.congress.gov/bill/113th-congress/house-bill/267

[11] "Sens. Murkowski, Cantwell Lead Senate Approval of Broad, Bipartisan Energy Bill," U.S. Senate Committee on Energy and Natural Resources, https://www.energy.senate.gov/public/index.cfm/2016/4/sens-murkowski-cantwell-lead-senate-approval-of-broad-bipartisan-energy-bill (April 2016)

[12] "Committee Advances Slate of Bills to Boost Water and Power Infrastructure," House Committee on Natural Resources, http://naturalresources.house.gov/newsroom/documentsingle.aspx?DocumentID=401876 (April 2017)

[13] "Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act (H.R. 678)," House Committee on Natural Resources, http://naturalresources.house.gov/legislation/?legislationid=326939

We hope the Committee will continue its strong work to streamline the licensing process, and look for ways to boost production on federally-owned dams. Expanding hydropower helps companies like Voith Hydro and those in the 2,500-company strong national hydropower supply chain[14] that accounts for $17 billion in economic output.[15] More importantly, it also helps the American worker.

Voith Hydro is a perfect example. Though our workforce in the U.S. is already over 600 strong, our plant in York could accommodate a significant increase in work volume. And the good-paying jobs that would be created are highly-skilled engineering and union manufacturing jobs that are the backbone of America.

I want to leave you with a closing thought. Though I am aware this Committee will likely not be front and center in the infrastructure debate, hydropower should absolutely be included in any infrastructure package considered by this body. Streamlining a cumbersome licensing process is vital, but we must make sure there are plenty of projects in the pipeline – for both new development and modernization of existing capacity.

As President Trump recently remarked to industry leaders, "You know, hydropower is a great, great form of power. But we don't even talk about it anymore because the permits are virtually impossible. [Hydropower] is one of the best things you can do, but we don't even talk about it anymore."[16]

The President is right in his assessment of our industry. I hope this Committee and the rest of your colleagues work with him and his Administration to make hydropower great again.

Thank your again for your time and the opportunity to discuss hydropower and its potential.

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[14] "U.S. Hydropower Industry Snapshot," National Hydropower Association, http://www.hydro.org/why-hydro/available/industrysnapshot/

[15] "Hydropower Vision," Department of Energy, https://energy.gov/sites/prod/files/2016/10/f33/Hydropower-Vision-Chapter-2-10212016.pdf (July 2016)

[16] "Trump: Hydro a 'great, great form of power'" Hydroworld.com, http://www.hydroworld.com/articles/2017/04/trump-hydro-a-great-great-form-of-power.html