



Institute Certifies Natel Energy's Monroe Drop Site as 200th Low Impact Hydropower Project

June 8, 2023 (Arlington, MA and Alameda, CA) - The Low Impact Hydropower Institute (LIHI) announced today that it has issued its 200th Low Impact certificate in the United States. The Monroe Drop hydropower project, located in Oregon and owned by Natel Energy, has the distinction of receiving this milestone certificate.

LIHI has been the only national, independent program reviewing and certifying hydropower projects based on their environmental, recreational, and cultural impacts for nearly 25 years. It was established in 1999 during the period when electricity market deregulation was just beginning to drive increased demand for "green power." While the definitions of "green" or "renewable" varied, it was generally recognized that consumers were seeking power that presented few significant adverse impacts. Despite hydropower's utilization of a renewable resource – water – concerns remained about hydropower's detrimental impact on aquatic ecosystems. LIHI grew out of a collaborative effort by conservation, marketing, and green power organizations to create a voluntary standard that would recognize and provide economic reinforcement to hydropower owners who develop, operate and/or improve their facilities consistent with established environmental criteria.

Today, 23 years after issuing its first Low Impact certification, LIHI certified the Monroe Drop hydropower project as its 200th LIHI Certified® project. Situated on an irrigation canal in Oregon's Deschutes River Basin, the Monroe Drop project operates during the irrigation season in passive run-of-canal mode with no storage, posing little-to-no ecological impact.

"What is unique about LIHI is that our criteria can fit a wide range of hydropower projects. Each of the projects we have certified finds location-appropriate ways to prioritize the environment. The Monroe Drop project is a great example of how innovative owners can operate a project that is consistent with power, environmental and community needs," said **Shannon Ames, Executive Director of LIHI**. "Not only does the project have minimal impact and utilize existing infrastructure, but it also is being used by Natel Energy as a full-scale test site to advance fish-safe turbine technology as part of their efforts to develop hydropower solutions that support efficient energy production and fish safety."

"To limit global warming to less than 2°C we need to keep existing hydropower assets online and build new ones — all while maintaining and improving the health of our rivers. Natel chose to pursue LIHI certification for the Monroe Drop Project to highlight the importance of setting and meeting sustainability standards that support ecosystem function alongside energy production. We are thrilled to celebrate Monroe as LIHI's 200th certified project, and we encourage other project owners to work with LIHI to evaluate their assets' ecological footprints so that as an industry we can deliver truly sustainable renewable energy," said **Gia Schneider**, **co-founder and CEO**, **Natel Energy**.





LIHI and Natel Energy share a commitment to advancing low impact hydropower. As the climate continues to change, our understanding and relationship to the water cycle must also evolve. Adapting to shifting water patterns and preserving biodiversity will require new ways of building and upgrading hydropower assets. When ecological health functions as a design and operational constraint, hydropower can advance the energy transition while also promoting biodiversity and contributing to river conservation and restoration.

Low Impact certification establishes a framework that enables hydro asset owners to benchmark the environmental impact of their projects and sets targets that help guide future operations to restore or maintain ecological function, while generating reliable, renewable power.

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More about the Monroe Drop hydropower project:

Situated on an irrigation canal in Oregon's Deschutes River Basin, the Monroe Drop project has been a cornerstone of Natel Energy's research and development process, facilitating the validation of Natel's fish-safe turbine design. In 2020 the Monroe Drop became the site of the first utility-scale installation of Natel's flagship fish-safe Restoration Hydro Turbine (RHT) and has served as a test site for multiple through-turbine fish passage studies with Pacific Northwest National Laboratory. The studies, conducted in 2020 and 2022 (and now pending peer-reviewed publication) passed trout up to 500 mm (19.7 inches) in length through the RHT with 100% immediate survival and no detectable injuries — indicating that the RHT allows safe passage of some of the largest fish ever successfully passed through a compact hydro turbine.

Monroe Drop represents a massive opportunity for clean energy development in the United States. With increasing demand for clean, baseload energy supply, conduit projects in irrigation canals, water supply lines, and other human-made structures could bring gigawatts of potential low impact hydropower generation online across the nation. The project demonstrates the feasibility of developing low impact hydropower on already existing structures while providing reliable power to its surrounding municipalities with minimal impact to the socio-environmental communities relying on our natural water systems.

Learn more from the Monroe Drop Project Completed LIHI Application.

More about the Low Impact Hydropower Institute





The Low Impact Hydropower Institute (LIHI) is a non-profit 501(c)(3) organization dedicated to reducing the impacts of hydropower generation through the development of comprehensive low impact criteria and the certification of hydropower projects that meet them.

LIHI envisions a world where hydropower puts people and the environment first. With a mission to recognize and support hydropower that priorities environmental, recreational, historical, and cultural resource protection by (1) defining and certifying Low Impact Hydropower using rigorous science-based criteria and public input; (2) providing education and outreach; and (3) structuring our organization to integrate and evolve with community, conservation, and hydropower interests.

To date, LIHI has issued 200 Low Impact Hydropower certificates in 24 states. Eleven percent of all Federal Energy Regulatory Commission (FERC)-licensed and FERC-exempt facilities are now LIHI Certified®. Most certified facilities have undergone at least one recertification. LIHI Certified® facilities provide over 4,500 MW of capacity and generate over 16,900 GW hours of electricity annually – enough to supply 1.8 million average US households and avoiding nearly 12 million metric tons of carbon dioxide emissions. LIHI Certified® facilities have stewardship of over 1,000 river miles and associated aquatic and terrestrial habitats. They collectively provide over 160 fish passage structures, protect dozens of different threatened and endangered species, and provide over 1,000 recreation facilities and services.

Learn more at LIHI's website (<u>www.lowimpacthydro.org</u>) which includes a library of resources featuring a <u>20-Year Review of LIHI Certification Program</u> and the just issued, <u>Hydropower and Environmental Justice – A LIHI Case Study.</u>

More about Natel Energy

<u>Natel Energy, Inc.</u> is working to support healthy rivers, promote biodiversity and decarbonize the grid through fish-safe hydropower. Natel delivers high-performance fish-safe turbine and plant designs and engineering services informed by industry-leading CFD modeling and analysis and an in-house hydraulic test lab. In partnership with turbine manufacturers, Natel designs solutions to upgrade existing hydropower plants and develop new, sustainable projects worldwide, mitigating climate change and curbing biodiversity loss. Founded in 2009, Natel is a privately held company located in Alameda, California in the United States. Visit <u>www.natelenergy.com</u> for more information.