For the Energy and Technology Committee
Testimony of Alicea Charamut, Executive Director
March 6, 2025

Rivers Alliance was formed to fight for sound water policies at the state and federal levels, to provide education on water resources, and to advocate for any person or group striving to protect water. If you want clean, free-flowing and healthy rivers, and high-quality drinking water, Rivers Alliance is here to help.

Thank you for the opportunity to provide testimony on the following raised bill before you today.

SB 647 – AN ACT CONCERNING PROTECTIONS FOR CONSUMER ACCESS TO AFFORDABLE ELECTRICITY- ***STRONGLY OPPOSES***

Rivers Alliance opposes several aspects of this bill, particularly **Section 6**, which is most relevant to our work. We offer the following perspectives on this section.

Section 6 of this bill would eliminate <u>all</u> criteria from the definition of hydropower projects eligible for designation as a Class I renewable energy source under the Connecticut Renewable Portfolio Standards, **allowing <u>any</u> hydropower project to qualify as a Class I source**.

Eliminating this criteria will:

- Remove much needed environmental and safety standards to help protect our rivers and communities from the harmful impacts of hydropower.
- Decrease the value of Renewable Energy Credits (REC) by flooding the REC market with hydropower projects.

The environmental and safety criteria for hydropower in the RPS are essential and necessary

Connecticut's goal of achieving zero-carbon energy generation by 2040 necessitates an expansion of renewable energy sources, including hydropower. However, while hydropower offers low-carbon and flexible energy, it **often imposes greater negative ecological impacts per**

megawatt than other renewable sources[1]. Therefore, we must proceed with caution as Connecticut looks to hydropower and ensure that all state programs and procurements source from projects that are least damaging and dangerous – including the RPS.

Dams can significantly disrupt local river ecosystem by:

- **Blocking the migration** of fish and other aquatic species (such as eels and mussels).
- **Interrupting natural water flows** and **sediment transport**.
- **Accumulating pollutants** in impounded sediments.
- **Degrading water quality** and **altering water quantity**.
- **Disrupting natural temperature regimes** and submerging critical habitats.

These concerns were explicitly recognized by the **Hydropower Task Force** that was formed at the direction of this committee. In its report submitted in April of last year, the task force recommended policies that support hydropower only if they:

1. **Meets all state and federal requirements**, including standards for safety, water quality, flow, and fish passage.
2. **Is limited to existing dams** without encouraging new dam construction.
3. **Excludes dams identified for removal** due to ecological or safety concerns.

For those who do not prioritize environmental health, removing dam safety requirements from the criteria could **encourage the repowering of failing dams, posing risks to life and property**[2].

For all of these reasons, the current criteria in the definitions exist to ensure that projects that could harm our rivers or pose safety risks to our communities are not incentivized through the RPS. Criteria must remain or be enhanced.

These changes may increase costs to customers and the state in the future

One of the purposes of this bill is to reduce energy costs. Hydropower is not a cheap energy source - dams generally have high capital, operation, maintenance, and external costs. Rehabilitating aging dams to support hydropower can be particularly expensive. There is also

[1] Popescu et al. (2020). Quantifying biodiversity trade-offs in the face of widespread renewable and unconventional energy development; McManamay et al. (2021). Global biodiversity implications of alternative electrification strategies under the Shared Socioeconomic Pathways.

[2] Friedman (2024). The dilemma of dams in the face of climate change; Perera et al. (2021). Ageing water storage infrastructure: An emerging global risk.

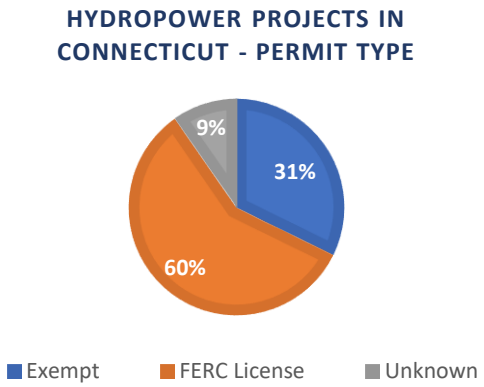
the potential for significant financial liabilities associated with failing dams that remain in place due to poorly considered hydropower expansion that lacks the necessary guardrails.

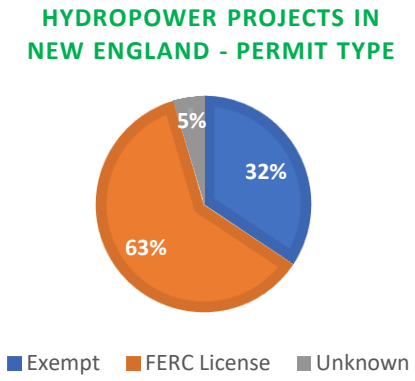
Realities of Regulation

Furthermore, it is a misconception that all hydropower projects are regulated by FERC and that FERC licensing and state regulation of dams guarantees regulatory consistency and oversight of hydropower facilities and protection of our rivers. This had been offered as justification for removing criteria from the Class I definition of hydropower in the past.

Only a little more than half of hydropower projects in Connecticut have a full license from FERC. Thirty one percent are granted an exemption from a full FERC license. Nine percent of projects in Connecticut do not fall under FERC jurisdiction.

Looking at hydropower projects in New England which is a much larger dataset, 60% are licensed by FERC, 31% are exempt from licensing, and 9% do not fall under FERC jurisdiction.[3]





FERC projects with exempt status are particularly problematic from the standpoint of river health. New hydropower projects up to 10 MW that may be built at an existing dam are eligible for an exemption from FERC licensing. Projects granted an exemption are exempt from the requirements of Part I of the Federal Power Act. Exemptions have no expiration date, and yet these exempt dams have all of the same environmental and social impacts of the fully licensed dams.

[3] M.M. Johnson, S.-C. Kao, N.M. Samu, and R. Uria-Martinez, Existing Hydropower Assets, 2021. HydroSource. Oak Ridge National Laboratory, Oak Ridge, TN.

Since an exemption does not expire, there is little opportunity or teeth for stakeholders to engage with FERC and a dam owner in order to negotiate a potential change in operations to address documented harm to the environment and recreation. Keven Zak, founder of the Naugatuck River Revival Group, spent decades documenting serious environmental issues below Kinneytown Dam, which holds an active FERC exemption. Despite well-documented environmental impacts, it took the threat of a lawsuit by Save the Sound and the Naugatuck Valley Council of Governments to even get the dam operator's attention.

Moreover, **FERC jurisdiction does not guarantee that environmental mitigation measures are in place to minimize the impact on rivers**. They are not automatically incorporated in the FERC licensing and relicensing process. Organizations like the Connecticut River Conservancy, Save the Sound, The Nature Conservancy, and Trout Unlimited have put significant resources into intervening in the FERC process. Engaging in the process is not trivial. Without legal and expert representation, it is almost impossible for the average person to take part on behalf of their rivers and/or public health. Even federal and state water quality certificates do not guarantee effective environmental protections for downstream flow and aquatic habitat.

Maintain the Integrity of Renewable Energy Credits (RECs)

RECs are tradable commodities that allow the environmental attribute of the renewable energy to be bought and sold separately from the energy commodity itself. Flooding the market with hydropower projects with environmental impacts to our rivers that offset carbon reduction benefits will decrease the amount of REC revenue that developers of new renewable and less environmentally harmful projects will expect to receive during the life of their projects. **Depressing the REC price decreases the incentive to build renewable energy with fewer environmental impacts and will make it harder for the Connecticut to meet its policy goals**.

We strongly urge the committee not to pass this bill.