



FOR THE ENERGY AND TECHNOLOGY COMMITTEE
TESTIMONY OF RIVERS ALLIANCE OF CONNECTICUT ON
Bill No. 1183, AAC Connecticut's Clean Energy Goals

Date: March 19, 2013

To the Chairmen, Sen. Bob Duff and Rep. Lonnie Reed, and to Members of the Committee:

Rivers Alliance of Connecticut is the statewide, non-profit coalition of river organizations, individuals, and businesses formed to protect and enhance Connecticut's waters by promoting sound water policies, uniting and strengthening the state's many river groups, and educating the public about the importance of water stewardship. Our 450 members include almost all of the state's river and watershed conservation groups, representing many thousand Connecticut residents

This energy bill relies heavily on hydropower to provide cheap, low-emission electricity. But hydropower is a river killer. The essential nature of a river is continuity. Life in and along a river depends on a flowing interchange of physical and biological elements. Reliable river flows and seasonal flooding have benefitted human communities since the most ancient times.

The original Connecticut Class I renewable energy generation did not include any hydropower. By some measures hydropower is too destructive to be considered green. The altered flows and turbine action destroy habitat and kill fish and other river life. Migrating species cannot pass safely up or down stream; rising temperatures in the impoundments are unsuitable for the natural flora and fauna of the river; artificial high and low flows erode the banks and river bed; sediment instead of flowing naturally to a downstream delta builds up behind the dams. A dam is like a tourniquet. It renders the river in part moribund.

River advocates recognize that hydropower should have a place in the state's portfolio of energy sources. But its role should be limited to facilities with the lowest possible impact. The present Class I criteria try to do that with the inclusion of the requirement for "run-of-river" (the flow into the area behind the dam equals the flow out instantaneously -- more or less). This design combined with measures for fish passage is an acceptable compromise between the need for electricity and the need for real rivers.

Rivers Alliance has always objected to the criterion in Class I that the hydro facility should be "new" (later than 2003). We do not want to see new dams (there are already 5,000 in the

state); and we would prefer increases in efficiency at existing facilities rather than the creation of new ones. We do not advocate for or against “small” hydropower (under 5mw). There can be a small facility that seriously disrupts a large river. A well-designed large facility should be able to provide more power with less damage to the aquatic environment.

For these reasons, our most urgent request to the Committee is that you not delete or alter the requirement for run-of-river in Class I.

We understand that the state needs to do more to respond to periods of peak electricity demand, and that hydro “peaking” plants might seem to be one answer. But peaking (also called store and release) is exceptionally disruptive. Until recently, river advocates counted on the Low-Impact Hydropower Institute (LIHI) to rule out low-impact certification for peaking plants in New England. LIHI certification is necessary in Connecticut for eligibility for state support and for use of state dams by a private operator. Unfortunately, LIHI is in the midst of a change of administration and a re-examination of its standards and has (I hope temporarily) lost credibility a guarantor of low impact. It serves for redundant protection but not for sufficient protection.

There is limited potential for additional peaking hydro in Connecticut. But there is a plant on the Deerfield River in Massachusetts that provides what LIHI in a very controversial decision called “modified” peaking operation, producing more than 5mw. Presumably this and perhaps other sources would qualify for Connecticut Class I, but only if the state abandons its prudent commitment to run of river.

The proposal in this bill to make HydroQuebec and other cross-border hydro utilities partially eligible as Class I is a bad approach on principle. HydroQuebec is one of the most notoriously destructive hydro operations in the world. Tempting as it is to benefit from their desecration of their own resources, it’s a bad precedent to award them Class I status. **Worse, with respect to broad energy policy, it threatens to undermine both the purpose of the state’s RPS (encourage new, truly green energy generation) and the market demand that would reward innovators.**

The problem of dealing with peak-demand periods challenges water suppliers as well as electric companies. The state is overbuilding and overspending in order to cope with a couple of weeks each year of super-high demand. **We ask the Committee and the DEEP to consider far-reaching and stringent efforts to reduce electricity use on predictably high-demand days. This should be doable. The sacrifice is only temporary. And it would provide important cost reductions.**

I see solar installations around the state, on all sorts of properties. More solar, please.

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