

The Honorable Kathleen H. Burgess, Secretary  
New York State Public Service Commission  
Empire State Plaza, Agency Bldg. 3  
Albany, NY 12223-1350



Re: Case #15-E-0302: Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.

Offered at Public Hearing on May 26, 2016 at the City of Kingston City Hall and submitted electronically on May 27 at: <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-e-0302>

### **Nuclear Power is NOT Clean Energy and should not be included in New York's Clean Energy Standard**

The NYS Public Service Commission has proposed a set of Clean Energy Standards as part of its Reforming the Energy Vision (REV) proceedings. Hudson River Sloop Clearwater strongly applauds Tier 1 and Tier 2 of the proposed Clean Energy Standard, which will ensure that utilities and other energy companies purchase new and existing renewable energy resources. These are entirely consistent with the Reforming the Energy Vision (REV) goal to have New York transition to Distributed Energy Resources (DER) and to promote local self-reliance through Community Choice Aggregation (CCA), local generation and microgrids. However, we strongly oppose the inclusion of subsidies for aging nuclear reactors as proposed in Tier 3 of the Clean Energy Standard. The PSC's rationale for including the Tier 3 nuclear subsidies is the unsupported assumption that New York cannot meet its 2030 greenhouse-gas reduction goals if the financially-unsustainable upstate nuclear plants are allowed to close. This contradicts many analyses done by scientists showing that we can meet aggressive greenhouse gas reduction targets while closing nuclear reactors at the same time. It also promotes our ongoing dependence on large, centralized sources of generation that must be transmitted across an inefficient and sometimes congested grid. Rather than making ratepayers bail out these dangerous and unprofitable facilities, which owners Entergy and Exelon want to close, the estimated \$3.5 billion in subsidies should be invested in truly clean energy infrastructure: wind, including off-shore wind, hydroelectric, tidal, community- and utility-scale solar, pump and other forms of storage, and energy efficiency.

**Nuclear energy is NOT clean or carbon-free.** While it is true that nuclear reactors do not emit carbon dioxide at the point of power generation, the nuclear fuel chain is responsible for carbon emissions during mining, milling, enriching, construction, transportation, and decommissioning. From cradle to grave, nuclear reactors pollute the environment and threaten human health and safety. After mining, milling generates vast amounts of radioactive and toxic tailings that are deposited on the ground or in open ponds. Approximately 25,000 pounds of mining waste (rock, mill tailings, and depleted uranium) are generated for each pound of nuclear fuel delivered to New York's reactors. The nuclear fuel is then enriched in an energy-intensive process. The nuclear life cycle is extremely dangerous to human health. Uranium fuel is mined in or near indigenous communities and communities of color, which is clearly an Environmental Justice concern. During power generation, nuclear plants routinely and accidentally release radioactive isotopes to air and water, including newly-generated radioactive carbon, C-14, which results from nuclear fission, and vast amounts of thermal pollution, which kill billions of fish, eggs and larvae each year. The so-called "spent" nuclear fuel rods, which leave the reactor, are approximately one million times more radioactive than when they entered, and must be stored on-site indefinitely, with inadequate decommissioning plans or funds to ensure that this is done safely. The Nuclear Regulatory Commission's legal limit for radiation exposure to the public from the routine operation of a reactor is 100 millirems per year – a dose rate which the agency itself believes will result in one additional cancer fatality per 286 people exposed. There is no safe level of radiation exposure. Subsidizing nuclear power will increase the amount of highly radioactive fuel rods that each host community will have to store over time and that ratepayers will pay to maintain, if the plants owner's decommissioning funds are insufficient, which is commonly the case. These additional costs have not been considered in the Clean Energy Standard cost analysis.

**Bailing out nuclear reactors is a form of corporate welfare subsidized by ratepayers:** Under Tier 3 of the proposed Clean Energy Standard, by 2020, nuclear power would become the most heavily subsidized energy source in New York – a cost that would have to be paid by ratepayers. The Nuclear Information and Resource Service projects that these subsidies will cost approximately \$3.5 billion (based on losses reported at some of the reactors). The Department of Public Service has released lower estimates, but refuses to provide their methodology publicly. These subsidies

would benefit the Exelon Corporation, which owns Ginna and Nine Mile Point, and the Entergy Corporation, which has already announced plans to retire its FitzPatrick reactor. These companies would merely have to show the Public Service Commission how much money they need in order to continue operating, and the cost of the subsidies would automatically be set to that amount. No other criteria would be used for setting the price of the subsidies, there is no cost-cap proposed, nor can any other resources compete for this support. It is essential a blank check – a nuclear tax, which will be borne by local and county governments, colleges and universities, hospitals and health care facilities, large and small businesses and residential customers, including low- and moderate-income families. This contradicts a major REV goal – to allow the marketplace to work with as little regulation as possible. The PSC is either committed to free-enterprise or it's not – you cannot have it both ways. Subsidizing the urgently needed transition to a fossil fuel and nuclear free energy future is a wise investment of public resources; forcing us to bail out failing nuclear plants, on top of paying the Hudson Valley Capacity zone surcharge and assume Price-Anderson and other existing subsidies, is definitely not. We especially object to the requirement that utilities and Energy Services Companies (ESCOs) purchase a percentage of their energy from nuclear sources.

**The jobs argument is equally faulty.** At least half of the workers at these facilities will need to be retained during closure and decommissioning. Those who are downsized should be retrained for jobs in the emerging green energy economy through a planned and just transition.

**Indian Point:** We note that Tier 3 does not currently apply directly to Indian Point, since – until recently – it has been fiscally profitable; Tier 3 only applies to the reactors in the western part of the State, which need a subsidy to operate profitably. Needless to say, Entergy is appealing the exclusion of Indian Point from Tier-3 payments and has said that it fully expects to be subsidized through the Clean Energy Standard. This means that ratepayers could be forced to pay for any major costs required to keep nuclear plants afloat. In the case of Indian Point that might well entail a major overhaul of the reactors, which the recent discovery of large numbers of missing, broken and degraded bolts in the reactor is symptomatic of, or the construction of closed-cycle cooling, or to pay for losses that occur during mandatory outages that may be required to protect Hudson River fish.

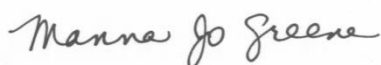
**Support for off-shore wind.** NY's enormous offshore wind potential has great promise to help New York meet its goal of 50 percent renewable energy generation by 2030 and to power the greater NYC metropolitan area. NYSERDA has already completed a well-researched environmental impact study of the potential impacts of off-shore wind on the marine ecology and has given this technology a clear green light. The cancellation of the proposed liquid natural gas export facility at Port Ambrose removed an important obstacle. The Clean Energy Standard Tier 3 should be dedicated to accelerating the development of off-shore wind, not to subsidizing nuclear power.

**Set aggressive energy efficiency goals.** The Clean Energy Standard proposal assumes a very modest decrease in electricity demand due to energy efficiency, but does not mandate that utilities invest in energy efficiency retrofits. Energy efficiency is a key component of a low-carbon energy future. It is the most affordable way to reduce greenhouse gas emissions and displace fossil fuel and nuclear generators.

**RECs not ZECs:** In summary, Clearwater supports Tier 1 and Tier 2 Renewable Energy Credits and strongly opposes Tier 3 subsidies, the so-called Zero Emission Credits for nuclear power, which is not emission-free, cost-effective or safe for human health and the environment. In fact, we oppose subsidizing nuclear power in NY through any mechanism.

Thank you for considering these comments.

Sincerely,



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