NEW YORK STATE
PUBLIC SERVICE COMMISSION

CASE No.15-E-0302. Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard

PETITION FOR REHEARING OF COUNCIL ON INTELLIGENT ENERGY & CONSERVATION POLICY; PROMOTING HEALTH AND SUSTAINABLE ENERGY; PHYSICIANS FOR SOCIAL RESPONSIBILITY, NEW YORK; SIERRA CLUB – LOWER HUDSON VALLEY GROUP; ROCKLAND SIERRA CLUB; INDIAN POINT SAFE ENERGY COALITION; GOSHEN GREEN FARMS, LLC, ELLEN JAFFE, NEW YORK STATE ASSEMBYMENBER DISTRICT 97; AND ANDREW STEWART, ORANGETOWN SUPERVISOR

August 31, 2016

INTRODUCTION

On August 1, 2016, the Public Service Commission (Commission or PSC) issued an Order Adopting a Clean Energy Standard (CES) and a Zero-Emissions Credit (ZEC) requirement in the referenced case (the Order). Council on Intelligent Energy & Conservation Policy (CIECP); Promoting Health and Sustainable Energy (PHASE); Physicians for Social Responsibility, New York; Sierra Club - Lower Hudson Valley Group; Rockland Sierra Club; Indian Point Safe Energy Coalition (IPSEC); Goshen Green Farms, LLC; Ellen Jaffee, New York State Assemblymember District 97; and Andrew Stewart, Orangetown Supervisor, hereby petition the Commission for rehearing regarding certain elements of the Order, pursuant to Section 3.7 of the New York State Public Service Commission's Rules and Regulations.

We applaud the Commission's stated goal to establish a renewable energy standard that comports with the State Energy Plan goal of 50% renewable energy and fully support the CES.

However, the Tier 3 nuclear subsidy program that was approved as the ZEC mandate of the Order is based on multiple errors of fact and law and contradicts the adopted State Energy Plan's stated goals. For this reason, we respectfully request a rehearing of the decision to approve ratepayer subsidies for nuclear facilities. The sections of the Order related to the nuclear subsidies contain numerous assumptions and statements not supported by any technical basis, reasonable policy, or fact. Errors of fact, procedural defects, and the rushed approval of the nuclear program violate the State Administrative Procedures Act, are inconsistent with previous Commission Orders and the State Energy Plan, and represent substantial overreach, violate state and federal regulations promoting a fair and competitive energy system, and represent an abrogation of the Commission's duty as an independent regulatory agency.

We note that the PSC has long been viewed by consumers and the public as standing up for the public interest and not capitulating to undue influence. We urge you here to continue your service as true public servants.

ARGUMENT

1. The Order violates the State Administrative Procedures Act (SAPA) §202-a(1).

The Order violates SAPA §202-a(1) which requires agencies establish rules that are consistent with the objectives of applicable statutes and consider using approaches which are designed to avoid undue deleterious economic impacts or overly burdensome impacts.

Though the CES purports to support renewable and clean energy, a component of the newly adopted policy will direct billions of dollars of ratepayer money toward dirty and dangerous nuclear energy. This Order to subsidize nuclear power through the CES via the Tier 3 so-called "Zero-Emissions Credit" (ZEC) contravenes decades of Commission and State policy, including the previously enacted Renewable Portfolio Standard (RPS), the 2015 State Energy Plan, and the deregulation of New York's wholesale energy markets.

No clear factual basis or policy rationale was provided in this case to support the nuclear subsidies as a way to meet the Reforming Energy Vision (REV) initiative in the State Energy Plan.

We agree with the PSC's estimation that advancement of renewables may enable the CES goal to be surpassed. We aver that substantial evidence supports the desirability and capability of New York State to promote a goal of well *over* 50 percent renewable by 2030 and this would be most beneficially achieved by stronger State support for an expanded ambit of renewables (both in type and degree) and better incorporation of efficiency and transmission upgrades into the regulatory scheme. Much of this may be done at no cost to taxpayers/ratepayers simply via clarification and streamlining of access routes to use of renewable and efficiency. As the Order notes, the public is highly supportive of renewable and desirous of better access to same.

The ZEC – in stark contrast to the tiers supportive of renewable – simply diverts resources away from service of the objective of energy system transformation. As has been set forth at length in prior submissions in this proceeding, averting the worst effects of climate change mandate *rapid* scale-up of renewables and efficiency. Prolonging dependence on large baseload polluters (and the market mechanisms which keep them entrenched) is counterproductive; simply promotion of business as usual.

A vast array of studies were provided to the New York Department of Public Service (DPS) and PSC in this proceeding by Alliance for a Green Energy Economy (AGREE), Hudson River Sloop Clearwater, CIECP, PHASE, IPSEC, and many other groups and citizens providing ample evidence that nuclear power contributes to and exacerbates

climate change. Abundant literature shows that replacement of nuclear energy in New York State with renewable energy and energy efficiency is feasible, available and cost effective. Moreover, smart energy market design can ensure adequacy and reliability of electric power without increased greenhouse gas emissions from fossil fuel sources. Any serious effort to move away from dirty fuels to a clean energy model would treat generation, efficiency (including demand-side management) and transmission in an integrated way.[1]

The Tier 3 component of the Order is based on an unverified and speculative assertion that closure of nuclear plants would result in a default on the state's 2030 energy goals. Lacking a rationale based in the State Energy Plan goals to justify the nuclear subsidies,

[1] Indeed, even 10 years ago, before solar and wind costs plummeted and prior to many of the recent advancements made in of solar and wind technology, the National Research Council (focusing on Indian Point, but with observations relevant to other reactors) noted the substantial reliability benefits solar and wind could provide. The National Research Council noted that transmission upgrades would add capacity and serve as a suitable alternative to generation. Improved transmission capacity would further provide system reliability benefits and lower total system production costs within New York State. The Council observed that the modeling framework employed by the New York Control Area discounts the value of transmission system upgrades for improved supply reliability. The Council also discussed the benefits of replacing particulate and heavy greenhouse gas producing fossil fuel heating and electrical systems with more modern and efficient systems. Papay LT, Arvizu DE, Beyea J, Bradford P, Brown MA, Farrell AE, Fleming SM, Hidy GM, Katzer JR, Mathusa PD, Mount T, Murray FJ, Jr, Peoples DL, Quinn WF, Reicher DW, Thorp JS, and Tillinghast JA, Alternatives to the Indian Point Energy Center for Meeting New York Electric Power Needs, Report of the National Research Council's Committee on Alternatives to Indian Point for Meeting Energy Needs, National Academies Press (2006). http://www.nap.edu/download/11666.
More recent government reports only confirm the strong potential of solar and wind. Wiser R, Mai T, Millstein D, Macknick J, Carpenter A, Cohen S, Cole W, Frew B, and Heath G, On the Path to SunShot: The Environmental and Public Health Benefits of Achieving High Penetrations of Solar Energy in the United States, U.S. Department of Energy SunShot Project, Berkeley National Laboratory, and U.S. National Renewable Energy Laboratory Report, NREL/TP-6A20-65628; LBN-1004373. May 2016. http://www.nrel.gov/docs/fy16osti/65628.pdf.
Offshore Wind Energy, U.S. Bureau of Ocean Management web page, accessed Aug 29, 2016. http://www.boem.gov/Offshore-Wind-Energy/.
Wiser RH, Bolinger M, Barbose GL, Darghouth NR, Hoen B, Mills AD, Rand J, Millstein D, Proter K, Widiss R, Oteri F, Tegen S, and Tian T, 2015 Wind Technologies Market Report, U.S. Department of Energy report, Aug 2016. https://emp.lbl.gov/sites/all/files/2015-windtechreport.final_.pdf. See also, Cicala, Steve, Subsidizing Nuclear Will Only Make Our Grid Problems Worse, Forbes Op-Ed, Aug 11, 2016. http://www.forbes.com/sites/ucenergy/2016/08/11/subsidizing-nuclear-will-only-make-our-grid-problems-worse/#965e5675eb81.

the Commission instead irrationally relied on the vague specter of "backsliding" on greenhouse gas emissions reduction if nuclear plants were to close. The Commission made no serious attempt to examine alternative opportunities to prevent "backsliding," and only substantial subsidies to nuclear power plants was even considered. Further, New York does not currently have any clear definition of "backsliding" or policy proposal on "backsliding".

Justification for subsidizing nuclear energy under the claim of promoting "fuel diversity" is misleading and inaccurate. There exists no guideline to identify what percentage of the state's resource mix can be provided by any one fuel source. The Order's dramatic change in policy and the significantly increased expenses to ratepayer expenses that would result cannot be justified based on the claimed "fuel diversity" benefit, since no objective standard to evaluate nuclear policy as compared to alternatives exists.

Likewise, the justification for subsidizing nuclear under the claim that failure to do so would lead to the rise of emissions due to fossil fuel use is a wholly unsubstantiated red herring.

Crucially, the forced purchase of nuclear power by all consumers runs counter to the Order's repeated professed support of "consumer choice," violates free-market principles and actually impedes rapid scale up of renewable and efficiency technology.

Frankly, the assertion that New York needs to expend billions subsidizing nuclear power operators in order to indirectly promote renewables, rather than simply spending those billions directly to promote renewables is ludicrous.

2. The Order violates New York State Public Service Law §5.2.

New York State Public Service Law §5.2 provides that: "The commission shall encourage all persons and corporations, subject to its jurisdiction to formulate and carry out long-range programs, individually or cooperatively, for the performance of their public service responsibilities with economy, efficiency, and care for the public safety, the preservation of environmental values, and the conservation of natural resources." In fact, this Order is uneconomical and highly inefficient; increases radioactive waste, environmental contamination, and risks to public safety. The Tier 3 component of the Order proposes a most sizable waste of public resources while placing the State's precious natural resources at risk.

The PSC has failed to demonstrate that imposing exorbitant surcharges which inure solely to the benefit of nuclear operator(s) is in the public interest and consistent with existing statute and policy. Therefore, the Order is irrational, unreasonable, arbitrary, and capricious, while imposing an enormous burden on all New Yorkers.

This Order is inconsistent with the Reforming Energy Vision (REV) initiative, which is critical to PSC's effort to improve system efficiency, empower customer choice, and

encourage greater penetration of clean generation and energy efficiency technologies and practices. New York's REV was promoted as a plan to make the state a leader in the transition to a clean energy economy. It articulates a vision of groundbreaking regulatory reform:

- "We are changing New York's energy policy to put customers first and make sure energy efficiency, increased use of renewable, and reliance on more resilient distributed energy resources like microgrids are at the core of our energy system."

REV promises a commitment to grow the clean energy economy:

- "Our Clean Energy Fund will mobilize private capital, jumpstart innovation and eliminate market barriers to make clean energy affordable and scalable for all New Yorkers."

REV so rightly points to the need to promote investment in energy efficiency:

- "New York State government is leading by example, actively investing in reducing its energy costs and saving taxpayers money through energy efficiency projects across public buildings and facilities. Local municipalities are also joining to demonstrate the benefits of clean energy."

The ZEC provision of the Order represents a dramatic departure from the REV's articulated vision. Indeed, the word "departure" is grossly insufficient. The ZEC, as designed, is utterly antithetical to the goals set forth in the REV.

The Order is also discordant with statements made on the record by New York energy officials. For example, the Order completely contradicts the representation made by Richard Kauffman, Chairman of Energy and Finance for New York, that "New York is moving to a more market-based, decentralized approach with how it shapes energy policy. This new approach will help protect the environment, lower energy costs and create opportunities for economic growth. By developing innovative market solutions, Governor Cuomo is changing the energy industry into a clean, cost-effective and dynamic system that is more resilient to the impacts of climate change."

Committing New York energy consumers to provide subsidies totaling $7.6 billion to $10 billion dollars (depending upon degree of reactor inclusion) to one sector of the energy industry, potentially one multi-billion dollar corporation, is in diametric opposition to a "market-based" decentralized approach.[2]

The Order, irrationally and without reasonable basis, enables the single largest transfer of wealth from the government to a single corporate entity in New York history.

[2] Prior submissions in this proceeding by AGREE, NIRS, CIECP, PHASE and IPSEC delve into why protection of nuclear power does not promote growth.

It has been widely publicized that the PSC would actively manage and coordinate a wide range of distributed resources, and promote generation of electricity from many small clean energy sources. Nuclear energy is not small distributed energy, but rather outdated, toxic waste producing, unsustainable, large, centralized energy which is financially and structurally unsustainable.

In fact, a recent study of energy policy outcomes related to nuclear power, renewable energy, and greenhouse gas emissions suggests that the policy adopted in the Order runs counter to New York's policy goals. Researchers at the University of Sussex and the Vienna School of International Studies studied the progress European countries made toward achieving the European Union's (EU) 2020 Strategy, proposed in 2010, to reduce greenhouse gas emissions by least 20 percent compared to 1990 levels and increase renewable energy share in final energy consumption to 20 percent.

The researchers found that "progress in both carbon emissions reduction and in adoption of renewables appears to be inversely related to the strength of continuing nuclear commitments." The study found that countries which have maintained current nuclear units had their emissions on average go up 3 percent, and they had the smallest increase in renewable shares—16 percent. In contrast, countries planning to phase out nuclear power have performed better on both measures: achieving the greatest greenhouse gas reductions (11 percent, on average) and increasing renewable energy by 19 percent, on average.[3]

LACK OF PROCEDURE

3. The Commission considered no alternatives to nuclear subsidies, in violation of the State Environmental Quality Review Act (SEQRA).

Title 16, Chapter I, CRR-NY §7.3. SEQRA requires an evaluation of "all reasonable alternatives" when an agency action is being considered. Contrary to this law, the Generic Environmental Impact Statement (GEIS) provided in this case considered only two scenarios:

- The "no action" scenario, which would involve allowing nuclear reactors to close as owners deemed them too unprofitable. Under this scenario, the market would determine what resources replaced the power generated by nuclear facilities.

- The subsidizing of nuclear plants as proposed by the Department of Public Service Staff, through which nuclear plants would receive significant subsidies designed to prevent nuclear closures.

[3] Lawrence A, Sovacool B, and Stirling A, Nuclear energy and path dependence in Europe's 'Energy union': coherence or continued divergence? Climate Policy (2016); 16 (5). http://www.tandfonline.com/doi/full/10.1080/14693062.2016.1179616.

The most obvious means of replacing closing nuclear reactors with energy efficiency or increased renewable energy was not considered, yet the DPS Cost Study indicates such alternatives would be cost effective and viable. The direct costs of the responsive proposal for tier 3 ($7.6 billion through March 31, 2029) are estimated to be more than triple the total direct costs of tier 1 ($2.44 billion through 2030), though the total annual generation to be provided by tier 1 new renewables in 2030 (~34 TWh per year) is more than 25% greater than the amount of nuclear to be subsidized through March 2029 (~27 TWh per year). This suggests that incentives spent on new renewable generation sources would be nearly 4 times as effective in providing zero-carbon generation than subsidies to nuclear generation.

However, when considering that two of the four reactors the Commission declared "publicly necessary" and eligible for tier 3 subsidies will have to cease operations in 2029 at the latest, regardless of the subsidies provided, the relative cost-effectiveness of renewable energy incentives is even greater. Nine Mile Point 1 and Ginna together generate 9-10 TWh per year, and their closure in 2029 (at the latest) would leave only 17 TWh of nuclear generation potentially available in 2030. Thus, based on data available to the Commission on the record through DPS's proposals and supporting analysis, the nuclear program will deliver approximately 50% less generation than new renewables in 2030, at more than 3 times the cost, suggesting that new renewables are up to 6 times more cost-effective than the nuclear tier in meeting the state's emissions goal.
The Commission's failure to consider alternatives to nuclear subsidies when sufficient information was available on the record is arbitrary and capricious, and would have substantial economic and environmental impacts.

4. Approval of the nuclear tier violated the State Administrative Procedures Act.

The State Administrative Procedures Act (SAPA) §202(1)(a) requires agencies to publish proposed rules in the State Register and to provide the public with at least 45 days to comment.

On July 8, 2016, the Department of Public Service issued a new proposal for nuclear subsidies. The proposal is a substantial revision as defined by SAPA §102(9) and represented a significant departure from the previous proposal that had been put forth for public comment. Not only did the new proposal include an entirely new formula for calculating the cost of the nuclear subsidies (which raised the projected price exponentially), but also included entirely new policy concepts, such as the designation of "public necessity" for certain nuclear units.

Additionally, in this new proposal, staff advanced a totally new policy and process at the same time as they pronounced what the outcome of said process should be, as the new proposal includes a determination by the Commission to subsidize some reactors upon inception of the program for a 12-year period. Thus, the only opportunity afforded parties and the public to challenge the brand new "public necessity" policy proposal, as well as the "public necessity" determination for any particular generator, was during a truncated public comment period.

The public was initially provided a comment period of ten (10) calendar days on this new proposal. After almost fifty (50) organizations complained, the comment period was extended by another 4 days, for a total of fourteen (14) calendar days, or ten (10) business days. During that time, hundreds of public and party comments were submitted.

Fourteen (14) days is a wholly inadequate period of time for parties and the public to analyze the implications of the complex proposal and to provide meaningful and detailed comment. The comment period violated the SAPA §202(1)(a), which required, at the least, that the new public necessity designation policy be subject for a 45-day comment period.

To make matters even more difficult and unfair, the Staff provided a vague and random list of criteria that the Commission could use to make a determination of "public necessity", and offered absolutely no detailed information for why Staff was proposing that all of the four upstate nuclear reactors meet all of the criteria and would qualify for this designation.

The new proposal also included an unusually lengthy term of twelve (12) years for the nuclear subsidies with no possibility for interim review, in violation of SAPA §207(4).

And out of the blue, the new proposal threw out new eligibility criteria, which would allow the Indian Point nuclear reactors to become potentially eligible for subsidies in the future, so long as the plant becomes less economic to operate. (The convoluted reasoning here stands out. The more safety problems the long problem-plagued site has, the more costly it is to run. Ergo, the less safe Indian Point becomes, the more likely it will be to be propped up by public subsidies.) These subsidies for Indian Point had never before been proposed or considered, and, in fact, are bizarrely contrary to the decade long efforts of New York State in numerous proceedings, inconsistent with statements made by the Governor, and a sharp departure from the State Energy Plan which contemplates the facility's closure.

The significant changes to the original proposal -- including the new cost benefit calculations, the new formula for determining the costs of the subsidies, and the new eligibility criteria -- should have been subject, at the very least, to the required notice of revised rulemaking and a minimum 30-day public comment period pursuant to SAPA §202(4-a)(a).

None of these material changes were entered into the State Register as required under SAPA.

Thereafter, the PSC took only a mere five (5) business day after the public comment period closed to approve the Order which locks in billions of dollars of taxpayer subsidies for the nuclear generators over a 12-year period.

5. The Cost Study that accompanied the Clean Energy Standard proposal was misleading and inadequate regarding implications of the nuclear tier.

Prior to the new proposal being announced, on April 8, 2016, Department of Public Service Staff filed a Clean Energy Standard White Paper - Cost Study (Cost Study), providing estimates of the net costs and benefits of the Clean Energy Standard ("CES") proposal. In the 297-page document, only 5 pages contained any information with respect to the benefits or costs of the nuclear tier:

- Pages 84-85 provided some general notes on the cost analysis methodology, a total net cost range for the nuclear program through 2023, an explanation for the lack of any detail comparable to that provided for other parts of the CES, and two bullet points providing general notes on how the sensitivity analysis for Tier 3 costs was conducted.

- Page 103 uncritically accepted and incorporated by reference estimates of the net economic impact of some New York nuclear reactors contained in a nuclear industry-funded report produced by two individuals affiliated with the Brattle Group. The Cost Study nowhere indicates DPS performed an independent review of the report.

- Page 275 discussed in very general terms the factors considered in the Tier 3 analysis, and reiterated the explanation for not providing comparable level of detail; and,

- Page 283 provided an estimated cost of the program through 2030.

Not only was the negligible information offered utterly conclusory, but the cost ranges for the nuclear tier were inconsistent, confusing and lacked transparency.

Given the reported information about how much money certain nuclear reactors were losing the in the market, these cost estimates are extremely low. For instance, Ginna has been known to be losing approximately $80 million and FitzPatrick has been reported to be losing approximately $65 million per year.

At a technical conference regarding the Cost Study, when Jessica Azulay, representing Alliance for a Green Economy requested more information about how the nuclear costs in the Cost Study were calculated and she was rebuffed. Jeff Hogan of the DPS staff said: "we didn't feel that releasing the detail was -- would be productive." Subsequently, Alliance for a Green Economy and Nuclear Information and Resource Service submitted a request for information, again asked for more detailed information about the methodology behind the cost estimates for the nuclear tier in order to adequately comment on this section of the study. This request went unacknowledged for an extended period of time and was never fully answered.

In short, the public was led to believe that the costs of the nuclear tier would be far less than those set forth in the Order. The Staff relied upon Cost Study estimates during their informational sessions at public hearings on the Clean Energy Standard. Thus, the public had no reason to suspect these exorbitant subsidizes were even on the table. The direct costs of the nuclear tier promulgated under the Commission's Order are more than an order of magnitude greater than those contemplated in the Cost Study.

Another serious deficiency of process and analysis was the utter disregard of the massive, well-documented cost impacts of nuclear power in the cost-benefit analysis. These include costs associated with state regulation and emergency preparedness, environmental impacts, health, safety and security risks. All these costs and risks will increase with the elevated build up of nuclear waste if, as the Order effectively mandates, New York's nuclear reactors continue to operate for more than another decade.

The need to evaluate these costs was identified in comments submitted to the Commission by AGREE, NIRS, CIECP, PHASE, Hudson River Sloop Clearwater, and others, prior to DPS/PSC issuance of the responsive proposal.

LACKING FACTUAL BASIS OR ANALYSIS

6. The Order is factually incorrect, scientifically inaccurate and misleading.

a. The Order results in a waste of public funds without rational reason and without factual basis, in violation of the Administrative Procedures Act.

In its evident rush to approve the Order, the PSC did not consider any alternatives. Nor did the PSC consider which system would be most beneficial for the public good and be most effective and efficient to meet the state's greenhouse gas reduction goal as contemplated by the REV. The PSC did not weigh new sustainable renewable energy and efficiency technologies and systems (solar, wind, off-shore wind, tidal, geothermal efficiencies, retrofits, transmission improvements, and storage, etc.) against outdated, costly, polluting unsustainable nuclear power generation.

b. Increased production of Nuclear Waste: No analysis whatsoever was provided evaluating the increased cost to New York State of continuing production and storage of nuclear waste in the state. Given the recent August 8, 2016 decision of the United States Court of Appeal for District of Columbia, Circuit D.C. Cir. No. 14-1210 *State of New York, et al., v. United States Nuclear Regulatory* Commission, et al., the state must assume that every new pound of high level radioactive toxic waste produced at any reactor will increase costs and risks to environment since there are no current plans to remove waste from reactor sites. The Nuclear Regulatory Commission (NRC) "Continued Storage Rule" now establishes, as part of the licensing basis for facilities under NRC's jurisdiction, that nuclear waste may be stored indefinitely at the reactor sites at which it is generated. Thus, New York State is likely to bear the burden and risk of nuclear waste storage long into the future. This burden will increase with growing inventories of nuclear waste that would result from the tier 3 subsidy program. [4]

[4] This risk is obviously associated with catastrophic events like a spent fuel pool fire, a risk elucidated in a sobering National Academies of Science report issued this year. Lessons Learned From The Fukushima Nuclear Accident For Improving Safety And Security Of U.S. Nuclear Plants – Phase 2, Report of the Committee on Lessons Learned from the Fukushima Nuclear Accident for Improving Safety and

c. Increased Health Costs: The National Academy of Sciences has concluded that there is no level of radiation that may be considered harmless.[5] Moreover, women, children, infants, babies in utero and environmental justice populations are especially vulnerable to radiation.[6] No analysis was provided by the PSC regarding potential increased health costs caused by continued reactor operation and deferral of the decommissioning and environmental remediation of reactor sites.[7] It should be noted that such costs would ensue from continued low level radioactive emissions from operating reactors as part of normal operation, would rise with rising risk of accidental releases as these plants continue to age and are subjected to weather and other externalities. Ironically, almost immediately after the Order was issued, the NRC issued a report noting that FitzPatrick had a leak that had been going on for 4 years. Manifestly, a large accident would impose a greater cost. And all these health-related costs, regardless of cause or degree, will be imposed upon many generations due to the longevity of some of the most toxic radionuclides.

d. Increased Risk of Operating Aging Reactors without adequate Insurance to protect the public: The PSC did not consider whether continuing operations of uninsured nuclear power reactors was in the best interest of the public.

Security of U.S. Nuclear Plants, Nuclear and Radiation Studies Board, Division on Earth and Life Studies of the National Academies of Sciences, Engineering and Medicine, Washington, DC: The National Academies Press. Doi: 10.17226/21874, May 2016. Link at: Lessons Learned From the Fukushima Nuclear Accident for Improving Safety and Security of U.S. Nuclear Plants: Phase 2 (NAS Lessons Learned Report). However the risk is also attendant to spent fuel pool leaks, a problem which continues to plague Indian Point and is increasingly likely to occur at New York's other spent fuel pool structures as they continue to age and are subject to weather events and other external stressors. It is rather astonishing that the PSC has chosen to disregard these risks and the broad panoply of their associated costs. (See Flint, Michigan.)

[5] NATIONAL ACADEMY OF SCIENCES; BEIR VII REPORT: Health Risks From Exposure to Low Levels of Ionizing Radiation, BEIR VII – Phase 2, Report of the Committee to Assess Health Risks from Exposure to Low Levels of Ionizing Radiation to the National Research Council of the National Academies, Washington, D.C. National Academies Press (2005) http://books.nap.edu/catalog.php?record_id=11340.

[6] Prior CIECP-PHASE filings in this proceeding detail and provide authoritative evidence of elevated risks.

[7] Notably under the current regulatory scheme the wide range of public health impacts is not even considered. In fact, there has not been a single U.S. government-funded population health study investigating the full health impacts in reactor communities or in populations exposed to the toxic emissions released at the front end (mining, milling, enrichment) or back end (waste holding) steps of the nuclear fuel cycle. In keeping with the governmental head-in-the-sand approach, the NRC recently cancelled a study which was supposed to be conducted by the National Academy of Sciences on cancer incidence in reactor communities.

The Price Anderson Act of 1957, et seq, overwhelming places the financial risk of a nuclear power accident upon the public. When this act was first promulgated, it was supposed to be a temporary measure. Industry lobbying efforts has kept the cap on nuclear industry liability intact now for over half a century. (The insufficiency of coverage is demonstrated by the fact that the value of property alone in the 50 mile zone around Indian Point is in excess of $8.5 trillion dollars, but Price-Anderson caps insurance coverage at $12.2 billion. The costs of the Fukushima accident have been estimated at $500 billion or more.) Meanwhile, the federal Waste Policy Act places the long-term nuclear waste disposal, storage, and safeguarding costs squarely upon the public. There exists no fund for cleanup of toxic emissions off reactor site, thus reactor communities are continually at risk of a Flint River type of scenario. The Commission did not compare the increased risk and costs of continued operations and creation of additional waste of aging nuclear reactors. This omission is incomprehensible.

OVERREACH OF AUTHORITY AND IMPROPER, UNTRANSPARENT ACTION

7. The exorbitant subsidies represent a de facto overhaul of deregulation and appear to be the product of other activities outside the purview of this proceeding.

Upon information and belief this Order was, in part, designed to offer billions of dollars to Exelon in order to entice it to buy the FitzPatrick reactor, and the Commission's approval of said subsidies is apparently based upon the involved nuclear operators' profit interests.

Deregulation in the 1990s enabled transfer of substantial assets held by public utilities to private corporations. These corporations enjoyed high profits for many years. And the nuclear industry as a whole has been vastly subsidized in innumerable ways since its very inception.[8] Now, faced with market competition, these multi-billion dollar out-of-state

[8] Economic analysis shows U.S. government subsidies to the nuclear power industry over the past 50 years have been so large in proportion to the value of the energy produced that in some cases it would have cost taxpayers less to simply buy kilowatts on the open market and give them away. Subsidies to the nuclear industry come from a wide range of sources including federal loan guarantees; production tax credits; public-provided insurance (Price Anderson Act); subsidized borrowing costs; depletion allowances for uranium mining; under-priced water for cooling; property tax abatements; accelerated depreciation. Thus the direct electricity production costs of nuclear-generated electricity to the taxpayer are substantial. When the massive additional costs of security, risk, waste and decommissioning management are added in, the expense to the public of nuclear power is amplified considerably. UNION OF CONCERNED SCIENTISTS (UCS): Koplow D, Nuclear Power: Still Not Viable without Subsidies, report of Doug Koplow of Earth Track, Inc. For Union of Concerned Scientists, Feb 2011. http://www.ucsusa.org/sites/default/files/legacy/assets/documents/nuclear_power/nuclear_subsidies_report.pdf. The PSC Order threatens to perpetuate this uneven playing field.

corporations are demanding the public guarantee their continued profits. This is understandable from the perspective of corporations seeking maximization of profits. However propping up corporate profits is not the legitimate role of the PSC.

Aside from the lack of any demonstrated legitimate policy rationale or technical imperative, the integrity of this process has been compromised by a lack of transparency.

Upon information and belief, there have been constant ongoing closed door negotiations with Entergy and Exelon nuclear reactor owners, discussing ways to protect and subsidize New York State's nuclear industry. Upon information and belief these meetings were not reported in the Project Sunlight database.

Eventually, some sort of deal for Exelon to purchase the FitzPatrick reactor from Entergy was worked out. Upon information and belief the deal was predicated on the Commission approving the ratepayer subsidies in this Order to bolster FitzPatrick and the other financially failing nuclear plants in upstate New York.

Upon information and belief, prior to or since the approval of the Order, negotiations regarding transference of hundreds of millions of dollars of decommissioning funds for FitzPatrick and Indian Point 3 held by the New York Power Authority to an Entergy subsidiary has also taken place behind closed doors.

8. Inappropriate use of the Social Cost of Carbon

The Order determines the price of ZECs through a formula based on the U.S. Environmental Protection Agency's (EPA) Social Cost of Carbon (SC-CO2). This is a gross misapplication of the SC-CO2, and one which will impose an unnecessarily high cost on New York consumers without demonstrated furtherance of emissions reduction. The SC-CO2 is a metric developed by the EPA, in conjunction with other federal agencies, to estimate the impact of regulatory decisions as they affect incremental carbon dioxide (CO2) emissions. The SC-CO2 represents the present-value of the consequences of CO2 emissions, not the cost of emissions abatement.

The DPS Cost Study itself and substantial other evidence submitted in the course of the proceeding have shown there are substantially lower cost and far more effective means of reducing emissions available. What is more, the SC-CO2 increases dramatically over time, resulting in rising costs for the nuclear tier as the program nears its expiration and reactors get closer to their retirement dates. In contrast, efficiency is acknowledged to be the cheapest and fastest means of carbon reduction, and renewable energy resources are projected to decrease in cost and to require lower levels of public support over time.

In addition, the Commission's order adopts DPS's entirely inconsistent applications of the SC-CO2. Throughout the Cost Study, DPS relied upon the SC-CO2 to quantify the "carbon benefits" of the CES, applying it equally to both renewables and nuclear to determine the net costs as adopted by the White Paper. In the responsive proposal, however, the staff shifted the SC-CO2 to the other side of the ledger to determine the subsidies to be paid to one energy source--nuclear--and incorporated an unexplained but far larger estimate of the benefits of nuclear. DPS neither adjusted the pricing of subsidies for renewables using the SC-CO2, nor changed its estimate of the carbon benefits of renewables to be consistent with the new methodology for the nuclear tier.

By setting the cost of greenhouse gas emissions reductions (abatement) at the same price as the cost of emissions releases, the Commission has, in effect, promulgated a policy in which the direct cost of reducing emissions must be equivalent to the environmental harms from increasing emissions. The Commission's action is arbitrary and capricious in its misapplication of the SC-CO2 metric; its inconsistent application of the metric with respect to nuclear but not renewable energy or efficiency resources; and its failure to evaluate the availability of lower cost means of emissions abatement.

Furthermore, the purported amount of carbon saved by continuing nuclear operations was promoted by the industry and manifestly adopted without verification – or even scrutiny – by the DPS and PSC.

9. An underlying basis of Order is factually incorrect, scientifically inaccurate and misleading.

Nuclear power is not "zero emissions" and does not have "zero emission attributes" Nuclear power is not "clean". Designations using these false industry-promoted PR terms, are utterly illegitimate as a matter of science not just semantics.

Whatever policy might end up being promulgated in furtherance of immediate electrical grid reliability needs, or even political expedience, it is imperative that the State not mischaracterize the science.[9]

The PSC may not properly use words in defiance of their commonly understood meaning. Therefore the Order must remove all reference to nuclear being "clean," "emissions free", "carbon free", "zero emissions" or nuclear having "zero emission attributes". Such nomenclature is misleading and rises to the level of misrepresentation.

Transparency and candor require any subsidies ultimately provided by the state to nuclear operators be clearly defined as nuclear power subsides. That's what they are. The ZEC in Tier 3, if it remains embedded in New York policy, must be changed to the accurate and

[9] Prior filings of CIECP-PHASE in this proceeding detail and provide extensive authoritative evidence of nuclear emissions and negative environmental impacts.

honest terminology of "Nuclear Plant Subsidies." Transparency also requires that the total amount of potential subsidies be clearly stated.[10]

10. Tier 3's Arbitrary & Capricious policies.

Tier 3 has no rational or reasonable policy basis, it represents a dramatic departure from the prior proposal, is internally inconsistent. The rush to approve this Order also appears have been solely for the purpose of enabling Exelon to buy FitzPatrick.

The end result is a policy which is highly non-competitive, violates free market principles and gives unlawful preference to a polluting industry (perhaps one corporation), and is detrimental in the extreme to ratepayers and citizens of New York State.

The among the most flagrant flaws are:

- The Order's 12-year contract mandate unnecessarily constricts future energy system and market options. [11] The predication of the 12-year ZEC commitment on the completion of the FitzPatrick sale is anomalous and inconsistent with the stated goal of the program -- i.e., to hedge against emissions increases. Moreover the PSC effectively acknowledges that nuclear is not a "necessity" by making the entire ZEC program contingent on the sale of FitzPatrick from Entergy to Exelon.

    - The PSC has offered no viable explanation for why this 12 year contract term is being foisted upon New York ratepayers.

- The 12 year term unreasonably slows New York's transition to a modern, clean, low-emissions energy system, and thwarts emissions reduction plans necessary to achieve New York's articulated policy 2030 goal.[12]

- The tier 3 sends the absolute worst signal to the energy market, reducing the incentive to invest in truly sustainable energy and efficiency.

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[10] The $7.6 billion to $10 billion total noted in this Petition is the product of number crunching by our fellow environmental advocates.

[11] More flexibly designed and limited support of nuclear for a few years to ensure electrical system reliability during the initial phase of the CES might have been a colorable – if unwise – policy. The duration of the mandate, the exorbitant cost, and the inflexibility are irrational and unjustifiable.

[12] See Footnote 3, above.

- The plan shackles New York to nuclear and provides no escape route, no matter how counterproductive nuclear becomes to achievement of REV goals, no matter how risky continued operations of nuclear reactors is to the state.

  - The Order denies freedom of choice to consumers. This creates a captured market and runs diametrically counter to the repeatedly stated goal of the Order to increase consumer choice.

  - The Order disregards low income and fixed income ratepayers entirely. Not only does it force them to subsidize multi-billion dollar companies, but it restricts their ability to participate in clean energy opportunities, and limits expansion of clean energy resources in their communities.

  - The Order disregards the environmental justice considerations and populations entirely.

  - Tier 3 is effectively a corporate welfare mechanism, as it places no restrictions on how the funds are used, whether it be used for executive salaries, shareholder distributions advertising, public relations, support of front groups, accountant fees, legal services, or other activities which provide no benefit to New York and which may, in fact, promote undue influence over public debate and policy.[13]

  - Corporate welfare appears to be subject to even further expansion in view of new information that decommissioning funds for Fitzpatrick and Indian Point 3 may be transferred from the New York State Power Authority to a subsidiary of Entergy.[14]

  - Shockingly this ill-considered scheme actually financially incentivizes nuclear operators to engage in reckless activities. The Order does this by pushing nuclear generators to maximize power generation using historic output as a metric. Nuclear operators already have substantial financial incentive to run reactors. When reactors have unplanned shutdowns it is nearly always because of safety or security issues. Indeed, New York State, noted these concerns in many documents on record. The Order thus places the State in the absurd position of penalizing operators for caution and effectively endangering public safety. Protect of public safety and health are the

[13] In fact the Order would allow the nuclear beneficiaries to use New York money to litigate against New York or to litigate against and advertise against renewable energy providers. As enumerated in a prior CIECP-PHASE, et al filing, the nuclear industry has actively fought against expansion of renewable.

[14] Entergy Operations, Inc, Indian Point Nuclear Generating Unit No. 3, LLC, Entergy Nuclear FitzPatrick, LLC, and Entergy Nuclear Operations, Inc, Application for order to Transfer Master Decommissioning Trust From PASNY to ENO, Consenting to Amendments to Trust Agreement, and Approving Proposed License Amendments to Modify and Delete Decommissioning Trust License Conditions Upon the Transfer of Trust Funds, Aug 16, 2016.

highest obligations of the PSC. Thus the Order represents an abdication of the PSC's most basic and primary duty to promote public safety.

- The Order, without legislative or executive authority creates the single largest transfer of wealth from the government to a single corporate entity in New York history.

CONCLUSION

For the reasons stated above, we respectfully request rehearing of Tier 3, elimination of the nuclear subsidies program, and excision of the misleading characterization of nuclear as "zero emissions" in the Order.

The PSC has exceeded its authority under New York Public Service Law, which requires the PSC to carry out programs which promote public interest, preserve environmental values, and protect the public health.

Therefore, Petitioners are requesting that, within thirty (30) days of the receipt of this petition, the PSC either rescind all portions of the Order promoting nuclear energy or commence rehearing on the issues set forth above immediately and prior to any license or decommissioning fund transfers.

Respectfully submitted by

Michel Lee, Esq.
on behalf of:
Council on Intelligent Energy & Conservation Policy
Promoting Health and Sustainable Energy
Physicians for Social Responsibility, New York
Sierra Club, Lower Hudson Valley Group
Rockland Sierra Club
Indian Point Safe Energy Coalition
Goshen Green Farms, LLC
Ellen Jaffee, New York State Assemblymember, District 97
Andrew Stewart, Orangetown Supervisor