

Institute for
Policy Integrity
NEW YORK UNIVERSITY SCHOOL OF LAW

October 31, 2016

Hon. Kathleen H. Burgess, Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

VIA ELECTRONIC SUBMISSION

Attn: Case No. 15-E-0302, Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.
Subject: Party Comments on New York State Department of Public Service, Petitions for Rehearing on Clean Energy Standard

The Institute for Policy Integrity at New York University School of Law¹ (“Policy Integrity”) respectfully submits the following comments as a response to petitions for rehearing on Clean Energy Standard. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity has extensive experience advising stakeholders and government decisionmakers on the rational, balanced use of benefit-cost analysis, both in federal practice and in New York.

In January 2016, the Public Service Commission (“Commission”) instructed the Department of Public Service Staff (“Staff”) to develop a Clean Energy Standard (“CES”) that would help New York State meet its 2015 State Energy Plan goals.² As a result, Staff prepared its White Paper on the Clean Energy Standard, and submitted it for public comment.³ Policy Integrity has submitted comments outlining recommendations to help ensure that the CES is not excessively costly, and is effective in achieving all of its policy goals.⁴ Notably, these comments included suggestions to base the Tier 3 alternative compliance payment on the true value of the environmental attributes of energy resources rather than relying on the market revenues and operating expenses of the nuclear plants.⁵ In July 2016, Staff issued

¹ No part of this document purports to present New York University School of Law’s views, if any.

² In the Matter of the Implementation of a Large Scale Renewable Program, Order Expanding Scope of Proceeding and Seeking Comments, PSC Case No. 15-E-0302 (Jan. 21, 2016).

³ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Staff White Paper on Clean Energy Standard, PSC Case No. 15-E-0302 (Jan. 25, 2016).

⁴ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302, Filing No. 141, Institute for Policy Integrity Comments on Staff White Paper on Clean Energy Standard 15-17 (Apr. 22, 2016).

⁵ *Id.* at 15.

its Responsive Proposal for Preserving Zero-Emissions Attributes that outlined a proposal that bases the Zero-Emission Credits on the Social Cost of Carbon (“SCC”). Policy Integrity submitted further comments on this proposal, reiterating that the use of the SCC is the economically correct approach to valuing the clean energy attributes of these energy resources.⁶

The Commission’s Order Adopting a Clean Energy Standard (“Order”) took these comments into consideration, and adopted a Zero-Emissions Credit (“ZEC”) valuation methodology for nuclear generation that was in line with Policy Integrity’s suggested approach.⁷

Since the Order, various parties submitted petitions for rehearing or clarification. These parties have criticized the Order on a variety of grounds. Among other criticisms, challengers argue that it was inappropriate for the Commission to use the SCC to value the zero-emission attributes of nuclear energy resources alone, and that other types of low-emitting resources (e.g., small hydro) should receive commensurate payments for their zero-emission characteristics.⁸

As one of the Commission’s goals is to strive for economic efficiency in its decisionmaking,⁹ the Commission should take the following two actions in response to the filed petitions:

⁶ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302 Filing No. 342, Institute for Policy Integrity Party Comments on Staff White Paper on Staff’s Responsive Proposal for Preserving Zero-Emissions Attributes (July 22, 2016).

⁷ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case 15-E-0302, Order Establishing a Clean Energy Standard, (Aug. 1, 2016).

⁸ See Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302 Filing No. 356, Ampersand Hydro Petition for Rehearing 8 (Aug. 23, 2016) (“Ampersand proposes that the CES Order be modified to address the errors of law identified above by treating small hydro generation facilities as qualifying for ZECs due to their unchallenged environmental characteristics as clean, renewable and zero-emission sources of electricity.”); Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302, Filing No. 360, H.Q. Energy Services Inc. Petition for Rehearing 15 (Aug. 23, 2016) (“Unless the CES Order is revised on rehearing to compensate existing hydroelectric resources reflected in the baseline, including large scale hydroelectric generation with impoundment, for the environmental value of those resources, the Commission risks losing much of that baseline to other, more competitive states.”); Proceeding on the Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302, Filing No. 362, Energy Ottawa Petition for Rehearing 7 (Aug. 23, 2016) (“One option for achieving this fair and non-discriminatory outcome is for the Commission to extend eligibility for the ZEC program to all existing generators of zero-emissions energy within the State.”).

⁹ In its Track One Order in the Reforming the Energy Vision (“REV”) Proceeding, the Commission designated “system-wide efficiency” as one of the main goals of REV and described “regulatory models and economic efficiency” as one of the “trends driving [the Commission’s] regulatory reforms.” Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, PSC Case No. 14-M-0101, Order Adopting Regulatory Policy Framework and Implementation Plan 4, 14

(1) The Commission should continue using the SCC to value the zero-emission attributes of nuclear plants.

As our prior comments outline, the correct value of the zero-emissions attribute is the monetized value of the external benefit that a nuclear plant provides by avoiding the carbon emissions that would have been emitted if the power it provides was generated by another generator. And, the SCC is the best available estimate of the monetary value of the marginal external damage of carbon emissions. Therefore using the SCC to value the zero-emission attributes of energy resources is the economically correct approach.

(2) The Commission should strive to promote consistency in the way it values the clean energy attributes of all other energy resources.

While the Commission should continue to use the SCC to value the clean energy attributes of nuclear energy, it should take additional steps promote consistency in the way it values these attributes in other clean energy resources. As Policy Integrity noted in earlier comments,¹⁰ the first-best public policy tool to promote clean energy resources and achieve greenhouse gas reductions is to use a carbon price that would lead all power generators that use dirtier energy resources to fully internalize the externalities caused by greenhouse gas emissions. When such a carbon price is not available as a policy tool, or when the existing carbon price, like that provided by the Regional Greenhouse Gas Initiative auctions, is not sufficiently high to fully internalize the externality, additional subsidies for non-emitting resources are required to achieve economic efficiency. Ideally, such subsidies should *uniformly* apply to *all resources*. This approach would ensure that the same zero-emissions attribute provided by different resources is valued commensurately, that the relative values of different resources are not distorted by artificial differences in subsidies for the same attribute, and that the economically efficient market outcome can be achieved without artificially picking winners in advance.

Several power companies and trade associations have filed suit in the U.S. District Court for the Southern District of New York, claiming that the ZEC program is preempted by the Federal Power Act and invalid under the dormant commerce clause.¹¹ One of plaintiffs' allegations is that

[t]he price-suppressive effects of the ZECs on the FERC-regulated wholesale markets also impermissibly discriminate against other non-carbon emitting technologies. Under the ZEC

(Feb. 26, 2015). Economic efficiency means maximizing net social welfare, including the consideration of externalities like environmental damage. N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 850 (5th ed., 2008).

¹⁰ Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Case 14-M-0101 Filing No. 447, Institute for Policy Integrity Comments on the Staff White Paper on Benefit Cost Analysis 17 (Aug. 21, 2015).

¹¹ See *Coalition for Competitive Electricity v. Zibelman*, Case No. 16-cv-8164, Doc. 1, Complaint ¶¶ 76-101 (Oct. 19, 2016).

program, a small hydroelectric dam producing zero-emission energy would receive the FERC-determined energy price, but would not qualify for ZECs.¹²

Modifying the Order to consistently value the clean energy attributes of all clean energy resources would both strengthen the economic foundation of the CES and eliminate the basis for this allegation by plaintiffs. At minimum, the Commission should indicate in its response to the petitions for reconsideration that it intends to evaluate the potential extension of the zero-emission compensation structure to other resources.

Policy Integrity elaborated on these points in more detail in its July 22nd comments and a blog post by its staff, both of which we incorporate by reference and attach here as Appendix A.

Respectfully submitted,



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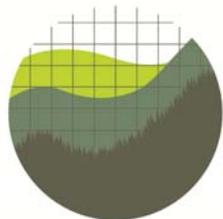
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¹² *Id.* at ¶ 66.

APPENDIX A



Institute for
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July 22, 2016

Hon. Kathleen H. Burgess, Secretary
 New York State Public Service Commission
 Three Empire State Plaza
 Albany, New York 12223-1350

VIA ELECTRONIC SUBMISSION

Attn: Case No. 15-E-0302, Proceeding on Motion of the Commission to Implement
 a Large-Scale Renewable Program and a Clean Energy Standard
 Subject: Party Comments on Staff's Responsive Proposal for Preserving Zero-
 Emissions Attributes, Docket No. 299 (July 8, 2016)

Dear Secretary Burgess:

The Institute for Policy Integrity at New York University School of Law¹ ("Policy Integrity") respectfully submits the following comments on the New York State Department of Public Service Staff's Responsive Proposal for Preserving Zero-Emissions Attributes. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. Policy Integrity has extensive experience advising stakeholders and government decisionmakers on the rational, balanced use of benefit-cost analysis, both in federal practice and in New York.

We are grateful for the Commission's consideration of these comments.

Sincerely,

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¹ No part of this document purports to present New York University School of Law's views, if any.

POLICY INTEGRITY COMMENTS ON STAFF'S RESPONSIVE PROPOSAL FOR PRESERVING ZERO-EMISSIONS ATTRIBUTES

The 2015 New York State Energy Plan set an ambitious clean energy target for the state: 50 percent of all electricity used in the state by 2030 should be generated by renewable energy sources.² At the Commission's request, the Department of Public Service Staff ("Staff") prepared its White Paper on Clean Energy Standard ("White Paper"), with recommendations on how to achieve this target, and submitted it for public comments on January 25, 2016.³ In response to the public and party comments submitted during the comment period, Staff revised its approach to value and compensate for the zero-emissions attributes of nuclear plants and submitted its Responsive Proposal for Preserving Zero-Emissions Attributes ("Responsive Proposal") for comment on July 8, 2016.⁴

Initially, in the White Paper, Staff had proposed that the price of zero emission credits ("ZECs") be administratively set at the difference between the anticipated operating costs of each nuclear facility and the forecasted wholesale energy price.⁵ In the Responsive Proposal, Staff has moved away from this approach and instead suggested a new formula that is based on the portion of the Social Cost of Carbon ("SCC") that is uninternalized in the energy markets. This is a step in the right direction, but the Commission should move toward consistency in the way it values all types of clean energy resources, in order to avoid distorting the market incentives for developing low-emitting generation.

Using the Social Cost of Carbon to value the zero-emission attributes of energy resources is the economically correct approach, but the Commission should endeavor to promote consistency in the way it values these attributes in both nuclear and other clean energy resources, in order to avoid artificially distorting the relative value of different clean energy resources.

As Policy Integrity noted in prior comments,⁶ the goal of compensating a nuclear plant for its zero-emission attribute can be best achieved by calculating the actual monetary value of this attribute. By definition, the cost of an externality such as carbon emissions is not borne by an acting party in the market, and hence valuations of clean energy attributes of energy

² NEW YORK STATE ENERGY PLANNING BOARD, 1 NEW YORK STATE ENERGY PLAN STATE ENERGY PLAN 112 (2015).

³ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302 (Jan. 25, 2016) [hereinafter "White Paper"].

⁴ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302 Filing No. 229, Staff's Responsive Proposal for Preserving Zero-Emissions Attributes (July 8, 2016).

⁵ White Paper, at 30-31.

⁶ Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Case No. 15-E-0302 Filing No. 141, Institute for Policy Integrity Comments on Staff White Paper on Clean Energy Standard 15 -17 (Apr. 22, 2016).

resources cannot depend on the values created by the market transactions of private actors in the energy markets. The correct value of the zero-emissions attribute is the monetized value of the external benefit that a nuclear plant provides by avoiding the carbon emissions that would have been emitted if the power it provides was generated by another generator.

Staff's decision to move away from an approach that relied on the difference between a plant's revenue and its operating cost and instead to use a compensation formula based on the SCC, which is the best available estimate of the marginal external damage caused by carbon dioxide emissions, is a step in the right direction. However, the Commission should take additional steps to ensure that the Responsive Proposal does not create an unfair advantage for nuclear energy by valuing the zero-emissions attribute of nuclear energy differently than the zero-emissions attributes of other clean energy resources.

As Policy Integrity noted in earlier comments,⁷ the first-best public policy tool to promote clean energy resources and achieve greenhouse gas reductions is to use a carbon price that would lead *all* power generators that use dirtier energy resources to fully internalize the externalities caused by greenhouse gas emissions. A carbon price that is applied uniformly to all emitting resources would ensure that the economically efficient market outcome can be achieved without distorting relative values of resources, picking winning technologies *ex ante*, and unnecessarily rewarding uneconomic technologies. When such a carbon price is not available as a policy tool, or when the existing carbon price, like that provided by the Regional Greenhouse Gas Initiative auctions, is not sufficiently high to fully internalize the externality, additional subsidies for non-emitting resources are required to achieve economic efficiency. Ideally, such subsidies should *uniformly* apply to all resources to ensure that the same zero-emissions attribute provided by different resources is valued commensurately, and that the relative values of different resources are not distorted by artificial differences in subsidies for the same attribute.

The Responsive Proposal administratively sets the ZEC price using a formula based on the uninternalized portion of the SCC, but it does not suggest any changes in the initially proposed tradeable Renewable Energy Credits ("RECs") for renewable energy resources. The fundamental difference in the mechanics of these two approaches creates a dissonance between the compensation that renewable energy resources receive and the compensation that nuclear plants receive for the same zero-emission benefit. As REC prices will be determined by the market and will vary depending on demand and supply conditions, it is possible that they will fall below the administratively set ZEC at times, creating an unfair advantage for nuclear plants over renewable energy resources. If the emission-free energy generated by renewables is compensated at an artificially lower value because of the differences in policy tools, it would distort relative price signals, hurt economic efficiency,

⁷ *Id.* at 3.

and hinder important policy goals of the Clean Energy Standard, such as fostering new renewable generation in state.



OPINION

New York's Clean Energy Standard is a key step toward pricing carbon pollution fairly

The CES lays out one of the country's first clean energy plans that relies on sound economic valuation of generators' clean energy attributes

By Denise Grab and Burcin Unel • Aug. 18, 2016

Editor's note: The following is a guest post from Denise Grab a senior attorney and Dr. Burcin Unel, a senior economist at the Institute for Policy Integrity at New York University School of Law, which filed party comments in the New York Public Service Commission's Clean Energy Standard proceeding. If you or one of your colleagues is interested in submitting a viewpoint article, please review these guidelines

New York State's new Clean Energy Standard (CES) has drawn plenty of attention for trying to prop up otherwise-faltering nuclear plants. But what it's actually doing is far more significant.

The CES, recently approved by the New York Public Service Commission, aims to help meet the state's goals of using renewable energy sources for half its electricity by 2030 and reducing greenhouse gas emissions by 80 percent by 2050. To help get there, the CES lays out one of the country's first clean energy plans that relies on sound economic valuation of generators' clean energy attributes. This isn't a nuclear plant bailout; it's an embrace of economic principles.

The part of the order that breaks the most new ground is the Zero-Emissions Credit (ZEC) program for nuclear energy resources. The ZEC

instructs utilities and other load-serving entities to compensate nuclear plants based directly on the value of the carbon-free attributes of their generation.

In designing plans to meet the state's clean energy target, the Commission determined that nuclear plants would need to play a key role. Initially, Commission Staff had proposed welfare-style payments to nuclear plants, based upon how much money each plant needed to stay afloat. The final ZEC pricing approach instead takes a major step toward valuing the carbon-free attributes of a generation source based upon the benefits it actually provides.

In particular, the ZEC payments will be calculated based upon the Social Cost of Carbon. As the Commission recognizes, the Social Cost of Carbon is the best available estimate of the marginal external damage of carbon emissions. So by basing the ZEC formula on the Social Cost of Carbon, the payments reflect the benefits that nuclear plants provide by avoiding carbon emissions that would have come from a dirtier generator. The Commission's decision to price ZECs using the Social Cost of Carbon draws on comments that we submitted, which were later echoed by nuclear advocates and other groups.

Economics tells us that in order to maximize social welfare, regulators must make sure that the market properly accounts for all externalities, like pollution, that might otherwise escape valuation in a transaction. Failing to fully value all attributes of energy resources, including externalities, puts a thumb on the scales in favor of an otherwise undesirable technology, which reduces net benefits to society. By failing to account fully for carbon pollution, for example, many regulators tip the scales in favor of dirtier energy sources, letting polluters pass the costs of their carbon emissions onto the public.

Ideally, an economy-wide carbon price would require dirty generators to pay for the full cost of each ton of carbon they emit. However, no economy-wide carbon price exists, and even states that have carbon pricing do not account for the full cost of carbon effects. The federal government's Social Cost of Carbon estimate is currently \$36 per ton of carbon emitted. But the most recent Regional Greenhouse Gas Initiative (RGGI) auction priced carbon allowances at \$4.53 per ton. This means that in RGGI-member states like New York, polluting generators are paying only a small fraction of the actual cost of their carbon emissions and are, therefore, able to compete on unequal footing with cleaner generators.

When existing policies do not fully account for the cost of carbon pollution, additional subsidies for non-emitting resources, such as ZECs, can help to balance the scales. The new ZEC system is designed to make up the difference between the RGGI price and the Social Cost of Carbon, so that zero-emitting and carbon-releasing resources will compete on a level playing field.

Because carbon emissions are currently priced far too low under RGGI, the ZEC pricing approach will result in significant payments to New York's nuclear generators, \$965 million during the first two years of the program. But these payments will reflect the value these generators provide to the public through avoided carbon emissions, rather than just serving as life support to a struggling industry.

Not only is this ZEC approach economically preferable to the initial proposal, it also offers potential legal benefits. Under the Supreme Court's recent decision in *Hughes v. Talen Energy Marketing LLC*, state energy policy may be preempted by the Federal Power Act if it interferes with the Federal Energy Regulatory Commission's authority over the wholesale rate. *Hughes* suggests a safe harbor for state policy that encourages "production of new or clean generation through measures untethered to a generator's wholesale market participation." Because the ZEC system directly values the carbon attributes of the generators in question and operates independently of the wholesale markets, the final decision is on sturdier legal ground than the initial proposal.

New York has made a key move toward properly using economic valuation to guide energy decision making. However, there is still a long road ahead. CES distinguishes between nuclear generators and other types of carbon-free generators and—so far—only uses the Social Cost of Carbon approach to value the clean energy attributes of nuclear resources. Ideally, the state will choose to value the clean energy attributes of *all* resources based on the Social Cost of Carbon. Hopefully more progress is on the way.