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Policy Integrity

NEW YORK UNIVERSITY SCHOOL OF LAW

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Hon. Kathleen H. Burgess, Secretary
Three Empire Plaza
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Subject: Party Comments on New York State Public Service Commission’s Notice Soliciting Comments in the Matter of Offshore Wind Energy, Matter No. 18-E-0071

The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law¹ respectfully submits the following comments on the Public Service Commission’s Notice Soliciting Comments.²

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.

We write to make the following comments:

I. The Social Cost of Carbon Is the Best Available Estimate for the Value the Avoided Greenhouse-Gas Emissions of the Offshore Wind Policy

In the Options Paper, NYSERDA used the Social Cost of Carbon as published by the Environmental Protection Agency (“EPA”) in 2015 (“SCC”) to assess the benefits of avoiding greenhouse-gas emissions in the state’s Offshore Wind Policy.³ The SCC is the best available estimate of the external cost of greenhouse-gas emissions. The SCC was prepared as part of a multi-year federal interagency process designed to provide an estimate of “the monetized damages associated with an incremental increase in carbon emissions in a given year”

¹ This document does not purport to present New York University School of Law’s views, if any.

² Notice Soliciting Comments, *In the Matter of Offshore Wind Energy, Case 18-E-0071* at 4, (N.Y. Pub. Serv. Comm’n Apr. 11, 2018), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={B8BC4F71-090D-4622-B8D6-3955383ACC2A}> (“Notice”).

³ NYSERDA, OFFSHORE WIND POLICY OPTIONS PAPER at 19 & n.23, 96 (Jan. 29, 2018), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={5A506C07-8ECD-422B-8024-41788C9A08F0}> (“Options Paper”).

based on “a defensible set of input assumptions grounded in the existing scientific and economic literatures.”⁴

To conduct the calculations, an Interagency Working Group (“IWG”) used the three most cited, peer-reviewed models that have been built to connect global and local harms of climate change (including extreme weather, increased disease, decreased fresh water availability, lost agricultural productivity, lost property value, and many others) to carbon emissions.⁵

The models that were used by the IWG incorporate estimates of the global and local harms of climate change because that is the most reliable and accurate way to understand the true cost of those emissions. Carbon emitted anywhere can have effects related to storms and extreme weather that happen close to home⁶ as well as spillovers from other countries through “such pathways as global migration, economic destabilization, and political destabilization.”⁷ Because of those interactions, “[a]ccurately estimating the damage” of carbon to the United States requires an examination of damages that occur inside and outside of the United States.⁸

Once the IWG had an estimate of the damages caused by climate change, the IWG ran the models to calculate how much an incremental increase in carbon emissions would cause those damages to increase. To do that, the IWG ran the models to obtain a baseline scenario, which reflects a business-as-usual world.⁹ The IWG then added a single additional ton of carbon emissions to the models and reran the calculation.¹⁰ The increase in monetary damages after adding that single additional unit of emissions is the SCC.¹¹

The IWG’s methodology has received substantial vetting over several years and the SCC remains the best available independent estimate for calculating the external cost of greenhouse-gas emissions. In 2014, the U.S. Government Accountability Office reviewed the

⁴ INTERAGENCY WORKING GROUP ON SOCIAL COST OF CARBON, TECHNICAL SUPPORT DOCUMENT: SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12866, at 1-2 (2010), <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf> (“2010 Technical Support Document”).

⁵ *See id.* at 1, 5.

⁶ *See* Order Adopting a Clean Energy Standard, *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*, Cases 15-E-0302 & 16-E-0270, at 4-5 (N.Y. Pub. Serv. Comm’n Aug. 1, 2016), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B44C5D5B8-14C3-4F32-8399-F5487D6D8FE8%7D> (“CES”).

⁷ NAT’L ACAD. SCI., ENG’G & MED., VALUING CLIMATE DAMAGES: UPDATING ESTIMATION OF THE SOCIAL COST OF CARBON DIOXIDE 9 (2017), <https://www.nap.edu/read/24651/chapter/1>.

⁸ *Id.*; *see also* *Zero Zone*, 832 F.3d at 679 (holding that the agency reasonably relied on the IWG’s assessment of local and global damages of climate change due to the unique characteristics of carbon emissions).

⁹ 2010 Technical Support Document at 24.

¹⁰ *Id.*

¹¹ *See id.* at 24-25.

IWG's methodology and concluded that the IWG followed a "consensus-based" approach, relied on peer-reviewed academic literature, disclosed relevant limitations, and adequately planned to incorporate new information through public comments and updated research.¹² The estimate has been endorsed in federal court as a reasonable estimate for the costs imposed by carbon emissions.¹³ In 2016 and 2017, the National Academies of Sciences issued two reports that supported the continued use of the estimates, while recommending further improvements to the methodology.¹⁴ And though the President Trump Administration has disbanded the Interagency Working Group, 82 Fed. Reg. 16,093 (Mar. 28, 2017), experts have continued to recommend that agencies rely on those estimates as the best available estimate of the external cost of greenhouse gases.¹⁵

In line with those recommendations, some federal agencies have continued to use the SCC, as determined by the IWG, to calculate the damages associated with additional greenhouse-gas emissions.¹⁶ In addition, several other states, including New York, have continued to use the SCC to calculate the benefits of avoiding greenhouse-gas emissions.

For example, New York used the SCC to value the benefits of avoiding carbon dioxide emissions in the Benefit Cost Analysis Framework in the Reforming the Energy Vision proceeding.¹⁷ New York used the SCC in the Value of Distributed Energy Resources context.¹⁸ And New York used the SCC as the basis for compensating nuclear generators for the value of avoiding carbon emissions.¹⁹

¹² GOV'T ACCOUNTABILITY OFFICE, GAO-14-663, REGULATORY IMPACT ANALYSIS: DEVELOPMENT OF SOCIAL COST OF CARBON ESTIMATES 12-20 (2014), <http://www.gao.gov/assets/670/665016.pdf>.

¹³ *Zero Zone, Inc.*, 832 F.3d at 677-79.

¹⁴ NAT'L ACAD. SCI., ENG'G & MED., VALUING CLIMATE DAMAGES: UPDATING ESTIMATION OF THE SOCIAL COST OF CARBON DIOXIDE 3 (2017), <https://www.nap.edu/read/24651/chapter/1>; NAT'L ACAD. SCI., ENG'G & MED., ASSESSMENT OF APPROACHES TO UPDATING THE SOCIAL COST OF CARBON: PHASE 1 REPORT ON A NEAR-TERM UPDATE 1-2 (2016), <https://www.nap.edu/download/21898>.

¹⁵ See Richard L. Revesz et al., *Best Cost Estimate of Greenhouse Gases*, 357 SCIENCE 655 (2017).

¹⁶ See, e.g., U.S. Dep't of the Interior, Bureau of Ocean Energy Mgmt., Draft Envtl. Impact Statement: Liberty Development Project at 3-129, 4-246 to 4-247 (Aug. 2017) (using the SCC to assess the consequences of offshore oil and gas drilling); U.S. Dep't of Energy, Energy Conservation Standards for Walk-In Cooler and Freezer Refrigeration Systems, 82 Fed. Reg. 31,808, 31,811, 31,856-57 (July 10, 2017) (using the SCC to assess an energy efficiency regulation).

¹⁷ Order Establishing the Benefit Cost Analysis Framework, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Case 14-M-0101*, App. C., Att. B at 1 (N.Y. Pub. Serv. Comm'n Jan. 21, 2016), <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={F8C835E1-EDB5-47FF-BD78-73EB5B3B177A}>.

¹⁸ See generally Docket, *In the Matter of the Value of Distributed Energy Resources, No. 15-E-0751*, (N.Y. Pub. Serv. Comm'n Mar. 9, 2017) <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/8A5F3592472A270C8525808800517BDD?OpenDocument>.

¹⁹ See CES at 131.

Similarly, several other states have relied on the SCC to select resources in utility resource planning and to pay for different resources' environmental attributes. For example:

- California has used the SCC to calculate the value of avoided economic damages associated with a “suite of policies developed to reduce” greenhouse-gas emissions in the state.²⁰ And a California Administrative Law Judge recently recommended that the California Public Utilities Commission use the SCC as part of its decision tool for determining when utilities must integrate distributed energy resources.²¹
- The Colorado Public Utilities Commission uses the SCC to monetize the value of reduced emissions when assessing utility investments in new electricity resources.²²
- Illinois uses the SCC in its program compensating nuclear generators for the avoided carbon emissions of nuclear generation.²³
- Maine’s Public Utility Commission uses the SCC to determine the value of reduced emissions associated with distributed solar energy generation.²⁴
- The Minnesota Department of Commerce adopted the SCC to set the price paid to distributed solar energy generation for the value of carbon emissions they avoid.²⁵
- Washington State has adopted the SCC for use by all state agencies when assessing the cost of carbon emissions associated with public decisions.²⁶

²⁰ CALIFORNIA AIR RESOURCES BOARD, THE 2017 CLIMATE CHANGE SCOPING PLAN UPDATE; THE PROPOSED STRATEGY FOR ACHIEVING CALIFORNIA’S 2030 GREENHOUSE GAS TARGET 60-61 (2017), https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

²¹ Administrative Law Judge’s Ruling Seeking Responses To Questions And Comment On Staff Amended Proposal On Societal Cost Test, *Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning and Evaluation of Integrated Distributed Energy Resources*, Rulemaking No. 14-10-003 at 3, att. 1 at 8 (Cal. PUC Mar. 14, 2018), <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M212/K023/212023660.PDF>.

²² Phase I Decision Granting, With Modifications, Application For Approval Of 2016 Electric Resource Plan, *In the Matter of the Application of Public Service Company of Colorado for Approval of its 2016 Electric Resource Plan*, No. 16A-0396E, at 29-30 (Colo. PUC Apr. 28, 2017), http://coseia.org/wp2016/wp-content/uploads/2017/05/ERP-Decision-C17-0316_16A-0396E-1.pdf.

²³ Illinois Power Act, 20 ILCS 3855/1-75(d-5)(1)(B)(i).

²⁴ MAINE PUBLIC UTILITIES COMMISSION, VALUE OF SOLAR STUDY at 35 & n.26 (2015), http://www.maine.gov/mpuc/electricity/elect_generation/valueofsolar.shtml.

²⁵ MINN. DEP’T OF COM., MINNESOTA VALUE OF SOLAR: METHODOLOGY 40 (2014), <http://mn.gov/commerce-stat/pdfs/vos-methodology.pdf>.

²⁶ WASH. DEP’T OF COM., THE SOCIAL COST OF CARBON: WASHINGTON STATE ENERGY OFFICE RECOMMENDATION FOR STANDARDIZING THE SOCIAL COST OF CARBON WHEN USED FOR PUBLIC DECISION-

The Commission should continue to use of the SCC to value the benefits of avoiding greenhouse-gas emissions in the state's Offshore Wind Policy.

II. The Commission Should Select Procurement Options that Make Clear That It Is Paying for the Environmental and Other Attributes of Offshore Wind Outside of the Federally Regulated Wholesale Markets.

The Offshore Wind Policy is an important public policy initiative because it will allow the state to get closer to fully internalizing the external costs of greenhouse-gas pollution. When those external costs are present, as in the case of greenhouse-gas emissions and local pollutants, market actors can continue polluting without taking the costs of the pollution into account, leading to a socially undesirable level of pollution.²⁷ The way to avoid that outcome and cut back on the polluting activity is to force market actors to take those external costs into account—or to “internalize the externality.”²⁸ The most economically efficient way to internalize the externality is to impose an economy-wide tax related to the external costs of emissions (“first-best” option).²⁹ But when an emissions tax is not a possibility, a reasonable alternative method for internalizing the externality is to pay generators in an amount that is reasonably tied to the cost of the avoided emissions (the “second-best” option).

In the Options Paper, NYSERDA's calculation of the benefits of paying for offshore wind generation makes clear that the payments under consideration would compensate generators for the value of avoided emissions along with other health and economic benefits. For example, the greenhouse-gas emissions reduction benefits of delivering 2,400 MW of offshore wind energy will amount to approximately \$1.9 billion (net present value), estimated using the SCC.³⁰ The monetized benefit of reducing greenhouse-gas emissions is approximately equal to the estimated program costs for the range of most cost-effective procurement options identified by NYSERDA.³¹ That does not even account for other external benefits like the significant air quality and health benefits that will be achieved from the reduction of local pollutants such as NO_x, SO₂, and PM_{2.5} in areas such as New York City.³² This indicates that the benefits of reducing greenhouse-gas emissions alone justify the costs of the State's commitment to 2,400 MW of offshore wind, even before accounting for other important anticipated benefits.

MAKING PROCESSES 2 (2014), <http://www.commerce.wa.gov/wp-content/uploads/2015/11/Energy-EV-Planning-Social-Cost-of-Carbon-Sept-2014.pdf>.

²⁷ N. GREGORY MANKIW, *PRINCIPLES OF ECONOMICS* 204 (3rd ed. 2004).

²⁸ *Id.* at 207.

²⁹ See Lawrence H. Goulder & Ian W. H. Parry, *Instrument Choice in Environmental Policy*, 2 REV. ENVTL. ECON. & POL'Y 152, 159 (2008).

³⁰ Options Paper at 19.

³¹ *Id.* at 4.

³² See *id.* at 100, 113.

The Commission is considering several different options for the procurement of Offshore-Wind Renewable Energy Credits (ORECs) to accomplish this goal.³³ There are at least two important considerations that the Commission should keep in mind as it reviews these options.

First, as proposed by NYSERDA, the Commission should not condition payment on participation in the wholesale markets.³⁴ As mentioned above, in its Options Paper, NYSERDA makes clear that the program is directed at achieving a variety of environmental and other benefits, in particular the greenhouse-gas emissions reductions and benefits of reducing local pollutants.³⁵ Because electricity grid operators must constantly ensure that there is enough electricity supplied to meet demand, any increase in generation on the grid from wind operators will offset electricity that would otherwise be produced by more polluting generators.³⁶ That environmental benefit can be obtained regardless of how the electricity is sold.

In addition, by avoiding any requirement that generators sell electricity into the wholesale markets, the Commission will not run afoul of *Hughes v. Talen Energy Marketing, LLC*, 136 S. Ct. 1288, 1299 (2016). As the Federal Energy Regulatory Commission recently made clear in its amicus brief to the Seventh Circuit in *Village of Old Mill Creek v. Star*, as long as a state-level program to compensate an electricity generator “does not require participation in FERC-jurisdictional wholesale auctions as a prerequisite” to receiving payments, the program will not run afoul of *Hughes*.³⁷

Second, when pursuing a second-best policy option, it is reasonable to consider the “hedgies” mentioned in the Options Paper as a way to keep costs to consumers down and to pay for the benefits of offshore wind at prices that are no higher than necessary to obtain those benefits.³⁸

Using a formula that reduces payments in this way would not cause preemption concerns in violation of *Hughes*.³⁹ As explained above, as long as the State does not require participation in wholesale markets, the payments will not be impermissibly tied to wholesale rates. And allowing periodic adjustments to the payments is not materially

³³ Notice at 4.

³⁴ See Options Paper at 25, 33, 35 (explaining that Fixed ORECs, Market ORECs, and Index ORECs would be paid based on production of the ORECs and that a facility would sell the associated energy and capacity “as it sees fit”).

³⁵ See Options Paper at 19.

³⁶ See U.S. DEP’T OF ENERGY, FED. ENERGY REG. COMM’N, ENERGY PRIMER: A HANDBOOK OF ENERGY MARKET BASICS 54, 59-61 (2015), <https://www.ferc.gov/market-oversight/guide/energy-primer.pdf>.

³⁷ Br. for the United States and the Fed. Energy Reg. Comm’n as Amici Curiae in Support Defendants-Respondents and Affirmance at 4, *Village of Old Mill Creek v. Star*, No. 17-2433 (7th Cir. May 29, 2018); see also *Coal. for Competitive Elec., Dynegy Inc. v. Zibelman*, 272 F. Supp. 3d 554, 570 (S.D.N.Y. 2017), appeal docketed No. 17-2654 (2d Cir. Aug. 25, 2017).

³⁸ See Options Paper at 37.

³⁹ *Hughes*, 136 S. Ct. at 1299.

different from a preemption perspective to the way that the Commission pays for other environmental programs. For example, prices for Renewable Energy Credits (RECs) are set through “supply and demand,” but those prices are affected by forecasted wholesale rates in a way that is similar to the options under consideration by the Commission. Renewable energy developers rely on wholesale energy and capacity forecasts to decide how much to charge for their RECs. If renewable energy developers expect to earn high revenues from the wholesale markets, they will be willing to build new generation resources with a smaller subsidy amount and submit lower bids into the REC auctions. As a result, the REC price will be lower. But if the wholesale-rate forecasts are low and developers expect to earn low revenues from the wholesale markets, then renewable energy developers need higher REC prices to fund the development of their generation. When that happens, developers submit higher bids into REC auctions, and the resulting REC price will be high.⁴⁰ The difference between RECs and the proposed OREC options is just that the price might adjust more often to potential changes in market prices with ORECs. But that does not mean that the OREC payments have replaced wholesale rates.⁴¹ As long as the OREC payments are made outside of the wholesale markets, the use of hedges should not make a difference from a preemption perspective.

In conclusion, the Commission is making great strides in considering and adopting policies that will help achieve New York State’s clean-energy goals. The Commission’s Offshore Wind Policy promises to provide significant environmental and other benefits and will help bring the state closer to internalizing the external cost of greenhouse-gas emissions.

Sincerely,



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⁴⁰ See, e.g., N.Y. STATE DEP’T OF PUB. SERV., CLEAN ENERGY STANDARD WHITE PAPER – COST STUDY, at 49 (Apr. 8, 2016), <https://www.nyserda.ny.gov/-/media/Files/Programs/Clean-Energy-Standard/Clean-Energy-Standard-White-Paper-Cost-Study-Report.pdf> (“[I]f energy prices are lower than initially forecast over a prolonged period of time, investors will likely lower their energy price expectations, and will thus start bidding new projects at a higher REC price than they would have done under the original price forecast.”).

⁴¹ *Hughes*, 136 S. Ct. at 1299.