



Institute for  
**Policy Integrity**  
NEW YORK UNIVERSITY SCHOOL OF LAW

March 22, 2021

Hon. Michelle L. Phillips  
Secretary  
Public Service Commission  
Three Empire State Plaza  
Albany, NY 12223-1350

**VIA ELECTRONIC SUBMISSION**

**Attn.:** Case 20-E-0197 – Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act

**Subject:** Comments of the Institute for Policy Integrity

Dear Secretary Phillips:

The Institute for Policy Integrity at New York University School of Law<sup>1</sup> (Policy Integrity) appreciates the opportunity to submit these comments to the New York Public Service Commission (Commission) in response to its February 3, 2021 Notice Seeking Comment and Staff Questions on the January 19, 2021 Initial Report on the New York Power Grid Study (Initial Report). 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.

Sincerely,

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<sup>1</sup> This document does not present the views of New York University School of Law, if any.

## Comments of the Institute for Policy Integrity

New York is undertaking to rapidly transform its energy system and to make the electric grid the backbone of the state's decarbonized economy. The Climate Leadership and Community Protection Act (CLCPA) commits the state to achieving 70% renewable electricity by 2030 (70x30) and 100% clean electricity by 2040 (100x40).<sup>2</sup> And the Accelerated Renewable Energy Growth and Community Benefit Act (Siting Act)'s directive to the Commission to establish a planning process for local transmission and distribution development is both critically important and timely for the purpose of complying with those renewable and clean electricity targets.<sup>3</sup> As the Commission proceeds in its planning efforts, however, it should be guided not only by those numeric targets but also the CLCPA's overarching mandate to abate greenhouse gas emissions and to do so in a way that gives appropriate priority to environmental justice.

In practical terms, this mandate means that the Commission should direct utilities, as they implement the Siting Act's accelerated schedule of transmission planning and development, to orient their efforts not only to the *entry* of clean resources but also the *exit* of dirty ones, and also to consider not only the market value of unbottling transmission, as estimated by renewable energy credit (REC) and offshore wind renewable energy credit (OREC) values, but also the value of a project or project portfolio in terms of global and local pollution abatement. More concretely, therefore, Policy Integrity recommends that the Commission require utilities to take two additional analytical steps, with respect to the current slate of projects (Phase 1 and Phase 2) and future projects as well.

### **1. Utilities should quantify and monetize benefits of transmission project portfolios related to avoided emissions**

To comply with the Commission's May 2020 Order in this proceeding, in which the Commission directed utilities to propose ways to measure "the contribution of [transmission and distribution] projects to the State's climate goals,"<sup>4</sup> the joint utilities have proposed a Local Transmission Benefit Cost Analysis (LT BCA) that uses REC and OREC prices and avoided renewable curtailments to estimate the "CLCPA benefits" of different portfolios of transmission projects.<sup>5</sup> Utilities argue that a REC (or OREC) is the "[s]ocietal value of each MWh of unbottled renewable energy."<sup>6</sup> This problematic definition could undervalue the benefits it purports to tally.

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<sup>2</sup> 2019 N.Y. Sess. Laws 106 § 4 (hereafter CLCPA).

<sup>3</sup> 2020 N.Y. Sess. Laws 58 § 7 (hereafter Siting Act).

<sup>4</sup> Order on Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, N.Y. Pub. Serv. Comm'n Case 20-E-0197, at 4 (May 14, 2020).

<sup>5</sup> JOINT UTILITIES, UTILITY TRANSMISSION & DISTRIBUTION INVESTMENT WORKING GROUP STUDY 33 (2020) [hereafter UTILITIES STUDY].

<sup>6</sup> *Id.* at 38.

The value to society of additional units of renewable energy that is not curtailed includes avoided energy and capacity costs as well as the avoided emissions associated with that energy. The value for avoided energy and capacity costs can be calculated using location-based marginal price (LBMP) and installed capacity (ICAP) calculations respectively, as the utilities have suggested in their analysis. However, REC and OREC values are not good proxies for the societal value related to the avoided emissions that result from unbottling renewable energy.

Calculating the societal values associated with avoided emissions requires quantifying these emissions and then monetizing them using the best available monetary estimates for the harms they cause. For greenhouse gases, the appropriate metric is the Social Cost of Carbon—a monetized estimate of the damage resulting from each marginal unit of greenhouse gas emissions. For local pollutants, multiple damage monetization methods exist.<sup>7</sup> Notably, the New York State Research and Development Authority (NYSERDA) quantified or monetized avoided pollution-related damages when developing the Zero Emissions Credit program and reviewing policy options for offshore wind development.<sup>8</sup>

This kind of analysis can and should be done even though it would require several quantitative steps.<sup>9</sup> Relying on REC and OREC prices may make for a simpler calculation but estimating the value of a project portfolio in terms of avoided emissions is important for at least two reasons.

*First*, it could reveal problematic assumptions, analytical missteps, or a lack of appropriate urgency. Conducting an analysis using both values could serve to highlight, for instance, that the utilities' LT BCA yields a less aggressive schedule of unbottling than a BCA informed by appropriately quantifying and monetizing the societal benefits would.

*Second*, relying on REC and OREC prices instead of a more direct value of emissions is likely to yield a portfolio that allows for emitting generation to persist or even be repowered over the next ten years. And this in turn introduces a greater risk of path dependencies in the 2030s and possibly the 2040s as well. While the Initial Report concludes that “[t]he proposed Phase 1 projects . . . appear sufficient . . . to meet the State’s 2030 objective,”<sup>10</sup> it also indicates that additional bulk transmission investments from upstate to downstate areas will become necessary as 2040 approaches, and possibly sooner because many of the assumptions in the studies informing the Initial Report are optimistic with respect to where renewable and storage resources

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<sup>7</sup> JEFFREY SHRADER, BURCIN UNEL & AVI ZEVIN, VALUING POLLUTION REDUCTIONS 30 tbl.3 (2018), [https://policyintegrity.org/files/publications/Valuing\\_Pollution\\_Reductions.pdf](https://policyintegrity.org/files/publications/Valuing_Pollution_Reductions.pdf) (listing tools to calculate damage per unit of emissions).

<sup>8</sup> See CLEAN ENERGY STANDARD WHITE PAPER – COST STUDY 215 (Apr. 8, 2016).

<sup>9</sup> For example, a simple back of the envelop calculation, if more detailed modeling is not feasible, could rely on the assumptions made to calculate avoided LBMP and ICAP values. See UTILITIES STUDY, *supra* note 5, at 320. Assuming there is a basis for calculating the type and location of the facilities whose generation is avoided, average emission factors for each type of generation could be used to quantify the avoided emissions. See SHRADER ET AL., *supra* note 7, at 10.

<sup>10</sup> N.Y. DEP’T OF PUB. SERV. ET AL., INITIAL REPORT ON THE NEW YORK POWER GRID STUDY 94 (2021).

will be located and the efficiency and reliability of several operational features of the grid.<sup>11</sup> Valuing transmission projects in terms of their potential to avoid emissions would help to prioritize investments that would reduce the risk of path dependent reliance on emitting facilities in the 2030s and possibly beyond 2040.

## **2. Quantifying and monetizing avoided local pollution is especially important for ensuring that project portfolios serve the CLCPA’s environmental justice goals**

The Initial Report is peppered with references to “CLCPA benefits,” but the characterization of those benefits embodied in the LT BCA fails to appropriately consider environmental justice communities and the impacts of local pollutants on those communities. This failure is at odds with the CLCPA itself, which makes unmistakably clear that New York’s policy objectives are not limited to achieving the 70x30 and 100x40 targets, but include prioritizing environmental justice in the process.<sup>12</sup> That the CLCPA does not establish numeric targets for environmental justice objectives is not grounds for failing to put those objectives on co-equal footing with others.

An analysis of costs and benefits that gives due priority to environmental justice considerations would take into account the value of avoiding emissions of local pollutants from downstate facilities that could potentially be run less often or even shuttered if more transmission capacity were available to enable clean, upstate resources to displace them. Quantifying and monetizing avoided local pollution is feasible.<sup>13</sup> Further, assessing projects in terms of the local pollution they would help to avoid would align with the Commission’s instruction to the utilities to “[i]dentify the possibility of fossil generation retirements and the impacts and potential availability of those interconnection points.”<sup>14</sup>

## **3. The Commission should request at least two Zero Emissions Study sensitivities**

The Zero Emissions Study (Appendix E of the Initial Report) underlies key features of the planning recommendations in the Initial Report. Because that Study relies on problematic assumptions, the Commission should seek an updated analysis that includes at least two sensitivities to address the Study’s low carbon price and reliance on the availability of renewable natural gas (RNG). To elaborate, the Study applies a carbon price of \$22 by 2040<sup>15</sup>—less than one-fifth of the \$125/ton Social Cost of Carbon central estimate recommended for *present* use by

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<sup>11</sup> *Id.* at 98.

<sup>12</sup> CLCPA § 2, N.Y. Env’t Conserv. L. §§ 75-0103(7), -(12), -(15). *See also* 2019 N.Y. Sess. Laws 735, N.Y. Env’t Conserv. L. § 48-0105(1)-(2) (establishing Environmental Justice Advisory Group and Environmental Justice Interagency Coordinating Council).

<sup>13</sup> *See* SHRADER ET AL., *supra* note (describing methodology and identifying tools to support analysis); *see also, e.g.*, FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT IN CASE 15-E-0302 et al., at 4-3 to 4-5, exh.4-3 (2016) (estimating volumes of avoided local pollution).

<sup>14</sup> May Order, *supra* note 4, at 6.

<sup>15</sup> ZERO-EMISSIONS ELECTRIC GRID IN NEW YORK BY 2040—FINAL REPORT 17 (2020).

Department of Environmental Conservation (DEC)<sup>16</sup>—and it assumes the availability of renewable natural gas (RNG). Indeed, the Study assigns a price to RNG to facilitate its inclusion in modeled scenarios that extend to 2040 and beyond. As the Initial Report explains: “By 2040, no fossil-fired generation would be permitted, so renewable natural gas (RNG) would be needed when wind generation is low for extended periods beyond the duration of battery storage resources. RNG is assumed to cost \$23/MMBtu, which translates to over \$160/MWh.” Notably, the Study also limits the modeled volume of available RNG to 32 Tbtu per year, a tiny fraction of the natural gas presently consumed in New York.<sup>17</sup>

Even if transmission planning proceeds under the assumptions present in the Net Zero Study, the Commission should at least inform itself of how that Study’s outputs would differ if the price assigned to emissions were in alignment with what DEC has recommended in compliance with the CLCPA’s call for an estimate of the Value of Carbon.<sup>18</sup> This obviously aligns with the use of the Social Cost of Carbon suggested in the prior section because it encourages the Commission to direct stakeholders to employ the Social Cost of Carbon when valuing emissions (or their avoidance). Such usage is a critical feature of CLCPA compliance, because the availability of a Social Cost of Carbon to agencies like the Commission is not merely a convenience but a means of ensuring coherence across policy areas and appropriate ambition and priority for the elimination of emissions sources.

As for RNG, even recognizing that the Zero Emissions Study’s high analytical guardrails might prevent *heavy* reliance on RNG as a means of making a 100%-clean grid scenario work, we encourage the Commission to examine a scenario that excludes all RNG from the bulk power system and potentially adjusts the prioritization of Phase 2 or later projects accordingly. The feasibility of RNG as a low or zero-net-emissions feedstock is uncertain, both because RNG’s emissions profile is unclear and likely non-zero,<sup>19</sup> and because no model can, at present, credibly show how adequate and timely volumes of RNG would be produced and transported so as to support grid reliability. Considering a no-RNG scenario is likely to highlight how transmission capacity would need to respond to make up for a failure of RNG to meet expectations. Such a scenario could be treated as a sensitivity, and would likely be a valuable one, as it could reveal instances where accelerating the development of one or more Phase 2 projects might be more cost-beneficial than suggested by application of the LT BCA.

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<sup>16</sup> N.Y. DEP’T ENV’T CONSERV., ESTABLISHING A VALUE OF CARBON: GUIDELINES FOR USE BY STATE AGENCIES 3 (2020).

<sup>17</sup> See *New York State Energy Profile*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/state/print.php?sid=NY> (accessed Mar. 18, 2021).

<sup>18</sup> CLCPA § 2, Env’t Conserv. L. § 75-0113.

<sup>19</sup> Emily Grubert, *At Scale, Renewable Natural Gas Systems Could Be Climate Intensive: The Influence of Methane Feedstock and Leakage Rates*, 15 ENV’T RES. LTRS. 084041 (2020).