STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission **Case 14-M-0101**

in Regard to Reforming the Energy Vision

Association for Energy Affordability, Citizens for Local Power, the Clean Coalition, E2 Environmental Entrepreneurs, Environmental Advocates of New York, The Nature Conservancy, New York Public Interest Research Group, the New York Geothermal Energy Organization, and the Pace Energy and Climate Center

September 10, 2015

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Reply Comments on Benefit Cost Analysis White Paper in the Reforming the Energy Vision Proceeding Case 14-M-0101
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I. Preliminary Statement

The following members of the Clean Energy Organizations Collaborative ("CEOC")[1] welcome this opportunity to submit reply comments on the papers that were filed on the "Staff White Paper on Benefit-Cost Analysis in the Reforming the Energy Vision Proceeding" (White Paper).

This White Paper takes significant steps toward developing an effective Benefit-Cost Analysis (BCA) for use in the Reforming the Energy Vision (REV) effort. Staff should continue to strengthen and improve the BCA framework.

Implemented correctly, REV has the potential to transform New York's electricity system and encourage the greater deployment of clean energy across the state, as well as help achieve New York's ambitious policy goals included in the 2015 State Energy Plan. These goals include reducing total State greenhouse gas emissions by 80% from 1990 levels by 2050 and energy-

[1] The Pace Energy and Climate Center co convenes an independent group called the Clean Energy Organizations Collaborative on REV-related matters. This collaborative is made up of national and state-based environmental organizations, clean energy companies and organizations, renewable energy industry trade associations, consumer groups, energy efficiency providers, and academic centers. The CEOC seeks to ensure environmental outcomes that are consistent with New York's overall pollution reduction goals; break down existing barriers to clean energy services; and inform its members on market and rate design issues.

related greenhouse gas emissions by 40% by the year 2030. An updated BCA would help ensure these goals are achieved.

We strongly support the request by the City of New York that "the Commission establish a specific timeframe for development of the BCA so that a full and thorough analysis can be completed without unreasonably delaying the implementation of other REV- related initiatives."[2]

We understand and support the development of the BCA as a continuing process, rather than the product of a single Commission decision. Still, the Commission should clearly spell out a process and timeline for completing the initial BCA framework, as well as its updates and reviews. The Commission should establish clear milestones, including planned periods for comprehensive review, in order to ensure that an updated BCA moves forward in a timely and transparent way.

In general, our reading of the party comments suggests widespread stakeholder agreement with many key points. In one form or another, many parties urged the Commission to: a) provide more clarity on the ways in which the BCA will be applied; b) use the Societal Cost Test as the primary screen for assessing REV investments; c) use a societal discount rate rather than the utility weighted average cost of capital as the discount rate for the BCA; d) consider the value of the wholesale market impacts in the BCA framework in some way; and e) incorporate environmental externalities in the framework and as use marginal damage estimates as the preferred way to incorporate their value.

Multiple Intervenors (MI) argued that environmental externalities should not be included in the BCA. We take this opportunity to rebut several of their arguments in the next section.

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[2] Case 14-M-0101, BCA Comments of City of New York (Aug. 21, 2015), at 3.

II. Environmental Externalities Should Be Included in the BCA

The White Paper proposes to incorporate environmental externalities in a limited way. The White Paper explains that damaging air pollutants—SO_2, NO_x and CO_2—are quantified at the bulk power system, and can be estimated at the distributed energy resource level. The White Paper then presents three options for valuing the social benefits and costs of greenhouse gas emissions and other pollutants. It does not make a judgment on the three options but presents them for public comment.

In their filing, however, Multiple Intervenors argues that the "alleged costs" of environmental externalities are already included in the cost of electricity. They argue that state and federal regulations already place stringent environmental requirements on bulk generators. Therefore, they oppose the White Paper's proposal to quantify and include selected environmental externalities in the BCA. We respectfully disagree.

Excluding environmental externalities from the BCA would be contrary to the Commission's already stated policies.[3] In the section on the BCA, the Commission stated in the REV Track One Order that "accounting for environmental factors in analyzing investment decisions, and internalizing them into market transactions, are priorities of REV and are logical a continuation of past policies…"[4] The debate is not *whether* to include these benefits and costs. The debate is over the best ways to quantify them.

[3] Case 14-M-0101, "Order Instituting Proceeding" (Apr. 2014) at 2, citing "Reduction of carbon emissions," as a policy objective of REV; and at 20, stating that "DSPP markets...should serve...both functions -- incentive and compensation – via market mechanisms that more properly value both environmental benefits and system contributions."

[4] Case 14-M-0101, "Order Adopting Regulatory Policy Framework and Implementation Plan" (Feb. 26, 2015) at 124.

MI also ignores a significant loophole in the current regulatory construct. State and federal environmental cap and trade policies, which internalize some of the value of NOx, SO2, and CO2 or CO2 equivalents, currently affect central station generators that are 25 megawatts or larger in size. *These policies do not apply to smaller, distributed fossil generators.* In the case of these units, and contrary to MI's claims, environmental externalities are not internalized into the cost of the electricity they produce. Updating the BCA to incorporate these costs is one method to address this gaping loophole. We remain concerned that the failure to address the loophole, either through the BCA or some other policy, could result in the proliferation of dirtier distributed generation not subject to the stricter emissions controls of the bulk power system.

While cap and trade programs located at the bulk power level have internalized *some* of the social costs of pollution into the cost of electricity, we agree with the New York State Department of Environmental Conservation (DEC) that the compliance costs of environmental externalities that are included in these markets are not "a full or accurate representation of the damages caused by climate change or new sources of air pollution from the generation system."[5] And we agree with the DEC that best approach when placing a value on environmental externalities is one that accurately accounts for the harm caused by the activity. Therefore, we recommend tying the estimates of externality values to marginal damage costs.

MI furthers argues that neither the Commission, nor any other party, is capable of accurately quantifying the value of environmental externalities in the short or long-term. They go on to argue that quantifying environmental externality values is difficult because of changing state and environmental laws. Once again, we respectfully disagree.

[5] Case 14-M-0101, BCA Comments of the Department of Environmental Conservation (Aug. 21, 2015), at 1.

With respect to greenhouse gas emissions, MI's argument dismisses significant work that has already been undertaken by an interagency group of eleven federal agencies, including the U.S. Environmental Protection Agency and the U.S. Department of Energy, to estimate the Social Cost of Carbon (SCC), or full social cost per ton of greenhouse gases. This work is already being applied in a number of regulatory settings. The White Paper also acknowledges that EPA method is "largely transparent and repeatable" and allows parties to understand and challenge the assumptions. We recommend that the Commission start with EPA's method, which is the most defensible method for estimating these costs to date. MI should bring its specific comments about the methodology to this proceeding as requested for a full review.

Although the White Paper states that damage costs for CO2 differ dramatically depending on the discount rate used in this analysis, the Office of Management and Budget (OMB) has offered guidance on the question of how to handle discount rates and uncertainty within these estimates more generally.[6]

We are also encouraged that the New York State Energy Research and Development Authority (NYSERDA) is conducting a study that will help project externalities values. We do not recommend, however, waiting for this study to be completed before releasing the next iteration of the BCA. Instead, the Commission should develop externality values based on current methodologies and add NYSERDA's findings as appropriate.

MI's argument about the difficulty of developing accurate estimates of the value of externalities based on the changing nature of environmental laws should be dismissed. The

[6] Office of Management and Budget, Circular A-94 Appendix C, "Discount Rate for Cost-Effectiveness, Lease Purchase, and Related Analyses," available at https://www.whitehouse.gov/omb/circulars_a094/a94_appx-c.

potential for state and federal policy changes should not be used as an excuse for inaction. The BCA values can be adjusted based on changing requirements.

MI also argues that regularly updating the BCA will require the "expenditure of substantial resources" by both the Department of Public Service and by the utility or distributed energy resources provider.[7] Applying an existing methodology such as EPA's SCC will significantly cut down on costs. Once a methodology is established, regular updates will be less resource intensive for all parties.

III. The Vast Majority of Stakeholders Seek Including the Environmental Externalities in the BCA

The vast majority of other stakeholders submitting comments supported including environmental externalities in the BCA. This is not surprising because including externalities improves economic efficiency by ensuring that goods and services are accurately priced in the market and that customers and providers receive actual price signals. These stakeholders recognize that valuing the environmental impacts of REV-related investments is essential to carry out the purposes the Commission has set to guide the REV process. Among them:

- New York City fully supports the White Paper's proposal to value environmental externalities, and recommends collaborative processes to identify the optimal price of carbon.[8]
- The Association for Energy Affordability endorses that damages based calculations be used for valuing environmental externalities, as well as externalities not addressed in the White Paper, such as land and water impacts.[9]

[7] Case 14-M-0101, BCA Comments of Multiple Intervenors (August 21,2015) at 11.
[8] Case 14-M-0101, BCA Comments of the City of New York (August 21, 2015) at 13-14.
[9] Case 14-M-0101, BCA Comments of Association for Energy Affordability (August 21, 2015) at 9-10.

- The Advanced Energy Economy Institute endorses that damages based calculations be used for valuing environmental externalities, as well as externalities not addressed in the White Paper, such as land and water impacts.[10]
- Joint Utilities endorse the first measure proposed in the White Paper for valuing environmental externalities.[11]
- PSEG Long Island endorses the first option proposed in the White Paper for valuing environmental externalities.[12]
- Consumer Power Advocates endorses that "full marginal damage cost must be included when estimating the value of future emission reductions."[13]
- Exelon Companies point Staff towards the National Academy of Science's externality estimates for CO2, SO2, NOX, PM-2.5, PM-10.[14]
- The Alliance for a Green Economy, Binghamton Regional Sustainability Coalition, Center for Social Inclusion, DE-Squared, Green Education and Legal Fund, Good Old Lower East Side (GOLES), New York State Sustainable Business Council, Nobody Leaves Mid-Hudson, People United for Sustainable Housing (PUSH) Buffalo, and Solar One call for the BCA to explicitly measure "comprehensive, lifecycle environmental pollution" associated with environmental externalities.[15]
- The Acadia Center endorses valuing GHG emissions in the BCA and calls attention to strengths of all three proposed options in the externalities discussion of the White Paper.[16]
- The Citizen's Environmental Coalition notes that far too many environmental costs will be excluded from the BCA as it is considered in the White Paper.[17]
- NYS DEC endorses that damage estimates be made for new and existing emission sources for valuing externalities.[18]
- The Environmental Defense Fund proposes using a combination of the first and second options proposed in the externalities discussion in the White Paper for valuing environmental costs.[19]
- The Energy Storage Association endorses that benefits, including higher penetration of renewables and resulting reduced GHG emissions, be recognized and quantified where possible.[20]

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[10] Case 14-M-0101, BCA Comments of Advanced Energy Economy Institute (August 21, 2015) at 3.
[11] Case 14-M-0101, BCA Comments of Joint Utilities (August 21, 2015) at 21-22.
[12] Case 14-M-0101, BCA Comments of PSEG-LI (August 21, 2015) at 4.
[13] Case 14-M-0101, BCA Comments of Consumer Power Advocates (August 21, 2015) at 2.
[14] Case 14-M-0101, BCA Comments of Exelon Companies (August 21, 2015) at 13.
[15] Case 14-M-0101, BCA Comments of the Agree et al. (August 21, 2015) at 3.
[16] Case 14-M-0101, BCA Comments of the Acadia Center (August 24, 2015) at 3-4.
[17] Case 14-M-0101, BCA Comments of the Citizens Environmental Coalition (August 21, 2015) at 4.
[18] Case 14-M-0101, BCA Comments of NYS DEC (August 21, 2015) at 4.
[19] Case 14-M-0101, BCA Comments of Environmental Defense Fund (August 21, 2015) at 5.
[20] Case 14-M-0101, BCA Comments of Energy Storage Association (August 21, 2015) at 4.

- The New York Geothermal Energy Association endorses that damages based calculations be used for valuing environmental externalities.[21]
- Peak Power LLC notes that all GHGs, and not just carbon, should be considered in calculating environmental externalities.[22]
- The Alliance for Solar Choice recommends that damages based calculations be used for valuing environmental externalities.[23]
- The Nature Conservancy notes that environmental externalities should be monetized to the greatest extent possible, and difficult to measure environmental damage costs should be estimated according to proxy values, alternative benchmarks, regulatory judgment, or multi-attribute decision analysis.[24]
- Citizens for Local Power endorses that damages based calculations be used for valuing environmental externalities.[25]
- The Natural Resource Defense Council endorsed using EPA's social cost of carbon to value GHG externalities.[26]

Among commenters, all endorsed some valuation of environmental externalities or abstained from addressing the question. Multiple Intervenors appears to stand alone in its opposition to valuing environmental externalities in the BCA.

IV. Conclusion

We appreciate the opportunity to provide reply comments. We strongly encourage the Commission to include the value of environmental externalities in the BCA, as well as more clearly describe the process for completing the initial BCA framework.

[21] Case 14-M-0101, BCA Comments of the New York Geothermal Energy Association (August 21, 2015) at 4.
[22] Case 14-M-0101, BCA Comments of Peak Power LLC (August 21, 2015) at 8.
[23] Case 14-M-0101, BCA Comments of The Alliance for Solar Choice (August 21, 2015) at 15.
[24] Case 14-M-0101, BCA Comments of The Nature Conservancy (August 21, 2015) at 8.
[25] Case 14-M-0101, BCA Comments of Citizens for Local Power (August 21, 2015) at 2-3.
[26] Case 14-M-0101, BCA Comments of Natural resource Defense Council (August 21, 2015) at 4.