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**VIA ELECTRONIC MAIL**

September 23, 2024

Hon. Michelle L. Phillips, Secretary  
New York State Public Service Commission  
3 Empire State Plaza  
Albany, New York 12223-1350  
secretary@dps.ny.gov

**Re: Case 15-E-0302 - Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard.**

**Notice Soliciting Comments: Draft Clean Energy Standard Biennial Review**

Dear Secretary Phillips,

EDF Renewables ("EDFR") respectfully submit for filing the attached comments in response to the Notice Soliciting Comments issued July 24, 2024, in response to the New York State Department of Public Service (DPS) staff and the New York State Energy Research and Development Authority's (NYSERDA) July 1, 2024, filing of the Draft Clean Energy Standard Biennial Review (Biennial Review or Draft).

EDFR has actively participated in New York's land-based Tier 1 Renewable Energy Standard (RES) program competing to previously secure seven awards providing over 1,400 MW of new solar capacity and over 250 MW of companion energy storage that would have powered over 350,000 homes and created over 1,600 jobs for New York's construction labor force. EDFR has invested hundreds of millions in development and construction dollars to date across its New York portfolio. EDFR thus appreciates these efforts taken by NYSERDA and the DPS to canvas the industry and receive input on the future design of New York's land-based Tier 1 RES program.

EDFR submits the following comments with sincere appreciation for the thoughtful assessment and proposals put forward by NYSERDA and DPS and their continued leadership in support of New York State's clean energy transition.

Our comments include:

- i. A summary of key takeaways from the Draft in its entirety; followed by
- ii. Detailed responses to the suite of potential options enumerated in Section 6 of relevance to EDFR.

## i. Key Takeaways from the Draft

Since New York's Clean Energy Standard (CES) was established in 2016, the state's commitment to renewable energy has set the stage for modernizing its aging, fossil-fuel-dependent electricity grid.

While significant progress has been made under the CES framework, it is not enough, as detailed in Sections 2 and Appendix A of the Draft. With substantial load growth expected in the next decade—*"driven by data center expansion, clean tech manufacturing, and electrification"* (p.47)—further progress is crucial. Meeting New York State's 2019 Climate Leadership and Community Protection Act (CLCPA, Climate Act)<sup>1</sup> goals will require even bolder actions. We commend Governor Hochul's strong support for renewable energy, as highlighted in her October 2023 announcement of New York State's 10-point Renewable Energy Action Plan.

We also note that the Draft continues to focus on the CLCPA's 2030 target of 70% renewable energy, rather than the Climate Act's ultimate goal of a zero emissions grid by 2040. Given the long lead times and extensive planning required for such complex projects, 2030 is rapidly approaching, and 2040 is imminent. Therefore, we recommend that the CES be reviewed with a focus on achieving the Climate Act's 2040 goal, including the specific targets of 9 GW offshore wind by 2035, 6 GW distributed solar by 2025, and 3 GW storage by 2030 as minima where the State's studies following the enactment repeatedly demonstrate that much more is needed. Consistency among state agencies and stakeholders regarding the 2040 goal will be key in maintaining focus on both short-term (e.g., procurements) and long-term (e.g., supply mix, transmission) coordination and decision-making.

Section 3 of the Draft acknowledges several factors affecting progress, including global interest rates, inflation, supply chain pressures, transmission and interconnection challenges, federal initiatives such as the 2022 Inflation Reduction Act (IRA),<sup>2</sup> and siting issues. However, this section could be strengthened in three important ways:

1. *Impact of New York State's historic and current supply mix and the complexities and opportunities of straddling the clean energy transition.*

It would be beneficial to explore how the CES can support the responsible retirement of the State's aging fossil fleet and address the chronic under investment in the State's grid since the 1980s.

As highlighted in New York's Climate Action Scoping Plan (Scoping Plan),<sup>3</sup> using data from the 2020 NYISO Gold Book and 2020 NYISO Power Trends, over 53% of New York's generation units

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<sup>1</sup> PSL §66-p.

<sup>2</sup> U.S. Congress, H.R. 5376 – Inflation Reduction Act of 2022 (2022), available at: <https://www.congress.gov/bill/117th-congress/house-bill/5376> (Inflation Reduction Act).

<sup>3</sup> December 19, 2022. New York State Climate Action Council Scoping Plan. Appendix A. <https://climate.ny.gov/resources/scoping-plan/>  
<https://climate.ny.gov/Resources/-/media/project/climate/files/Draft-Scoping-Plan-Appendix-D.pdf>

are "nearing retirement". This includes 76 of 106 (72%) gas turbines older than 47 years, 11 of 46 steam turbine units (24%), and an additional 12 anticipated to retire in the next decade.

The Scoping Plan also notes the significant under investment in New York State's transmission infrastructure, with 84% of transmission facilities being older than 1980. Additional investment in transmission is crucial for integrating new generation capacity, enhancing grid reliability, improving public health, and reducing Environmental Justice impacts. Maximizing the reuse of the existing grid with renewable energy, alongside its modernization and expansion, is essential to meet demand growth and support New York's leadership in a 21st-century clean energy economy.

The future of New York State's nuclear fleet and potential new nuclear resources also warrants attention in the Draft, given the ongoing proceedings. While the existing nuclear fleet remains a key part of New York's electricity mix, new nuclear resources come with their own cost, risk implications, long lead times, limited operational flexibility, and serious concerns related to public health, the environment, and long-term nuclear waste containment.

Balancing these complexities and risks with the urgency of meeting the State's Climate Act goals, we recommend a stronger focus on the *deliverability* of the RES program to simultaneously support grid strengthening, resource adequacy, system reliability, and the delivery of economic and climate benefits to New Yorkers.

## 2. *Size of the Goal and Progress To-Date:*

Reflecting on Sections 4 and 5 of the Draft Review with a look at the current state of contracted renewables and the path to achieving the 70% Goal:

- Out of 156 RES Tier 1 projects that have been awarded, approved, or are pending approval by NYSERDA since 2004, 30 are operational and 23 are still under development.
- 11 of 25 land-based wind projects are operational and 9 of 116 solar projects are operational. Operational projects have added 1,016 MW of capacity, 821 MW of which are land based wind projects.
- 11,000 MW of capacity has been cancelled or is still under development.

This snapshot of the RES program's struggle to deliver viable projects aligns with the Draft's assessment of progress to-date.<sup>4</sup> Both emphasize the urgent necessity to evolve the RES program to meet the CES original demand projections in 2016 let alone the demand resulting from tripling of the load growth rate by 2040.<sup>56</sup> Recognizing the size of this current and growing

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<sup>4</sup> Draft CES Biennial Report. Table 1. 2022 Renewable and Zero-Emission Energy in New York by Program references Total Renewable and Zero-Emission Energy: 70,053 GWh = 46.1% zero-emissions (incl. nuclear) of which 38,061 GWh from RE (incl. hydro). Compared with Appendix A. Table 10 (p.83): 15,102.8 GWh, with more than 12,000 GWh still in active development, infers the addition of less than 3,000 GWh are operational from NYSERDA project awards.

<sup>5</sup> NYISO. 2024 Gold Book. Further emphasized in remarks delivered by Zach Smith, NYISO VP Vice President, System and Resource Planning at the ACENY 2024 Fall Conference. Baseline energy average annual growth rate for the 2024-29 period is 0.81%, growing to 2.65% for the 2034-39 period, per NYISO's 2024 Gold Book.

<sup>6</sup> NYISO. 2024 Gold Book. Further emphasized in remarks delivered by Zach Smith, NYISO VP Vice President, System and Resource Planning at the ACENY 2024 Fall Conference.

gap further underscores the urgent **need to prioritize project viability and expand the RES solicitation volume to meet the Climate Act's goals and system reliability.**

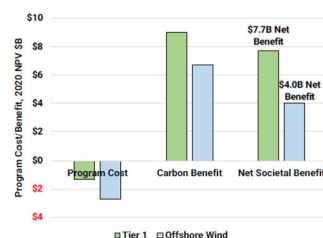
### 3. *The important distinctions between project cost, price, and portfolio value:*

We encourage valuing renewable energy projects for the full range of benefits they provide to New York State, including electricity, capacity, reliability, transformative upgrades to transmission and distribution infrastructure, grid strengthening, ancillary services from modern generation technology, resource diversity, energy security, job creation, economic growth, health, environmental benefits, and protection against fossil fuel price volatility (including local supply and demand spikes and geopolitical events). The Levelized Net Renewable Energy Credit (LNRC) Cost evaluation framework used by NYSERDA does not capture these benefits, focusing mainly on tangible values such as energy, capacity, and RECs, and specifically on the proposed price of RECs rather than their deliverability.

Prioritizing long-overdue transmission expansion to support system reliability and increased renewable generation with free fuel will help New York State build a clean, reliable grid. These investments will ultimately lead to lower system-wide energy costs and better protection against fuel price volatility for end-users.

We recommend that New York State and NYSERDA reframe procurement processes to consider not only cost and specific project pricing but also the net societal return on investment as confirmed in the 2020 CES White Paper [right] and reflect the urgency of the Climate Act's desired benefits in project deliverability. This will better communicate renewable energy projects as long-term investments in modernizing our grid and supporting the well-being of New Yorkers in accordance with the just transition principles outlined in the Climate Act and the Climate Action Council's stakeholder consultations.

#### Costs and Benefits Analysis to Reach 70 by 30



- > Both the Tier 1 and Offshore Wind programs are expected to accrue carbon benefits that far outweigh program costs, delivering a **combined net societal benefit of \$11.7B** over the life of the projects.
- > Extending the offshore wind program through 2035 (to capture the State's full 9 GW mandate) **increases these net societal benefits to \$17.3B.**
- > These net societal benefits capture only the value of avoided carbon emissions and do not include billions of dollars of other notable societal benefits, including PM2.5 reductions that would decrease premature deaths and hospitalizations.

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We suggest focusing on perspectives and framing for the CES and its competitively awarded projects that align with New York's Climate Law, emphasizing the net societal benefits and return on investment.

Given the urgency of enabling projects by 2030 and achieving the Climate Law goals for 2040, and the Draft's focus on procurement and fair pricing strategies, we recommend a greater emphasis on project deliverability. This includes measures to ensure fair pricing, price resiliency, and project delivery as essential means of delivering value to ratepayers in the 2040 portfolio and supporting the PSC's preference for competitive solicitations through the CES to protect ratepayers and maintain a robust competitive market.

## ii. Responses to Section 6: CES Reform Options – Tier 1 Program:

### *Reduce 70% price scoring component in favor of increased weight on project deliverability*

One modification proposed in the CES Biennial Review was to “reduce the 70% bid price component to a smaller share of overall evaluation scoring and re-allocate those points into Project Viability, Operational Flexibility and Peak Coincidence.” (p.65)

As discussed above, the vast majority of Tier 1 projects that have been awarded contracts with NYSERDA have not begun commercial operation or construction. The CES Biennial Review acknowledges that: “[t]he current scoring framework favors projects that bid and are modeled as least expensive based on their REC pricing, potentially, in some cases, over projects that could be more viable and offer greater net value to New York State.” (p. 64) This suggests that the current evaluation framework is not delivering best value for New York customers or supporting achievement of the objectives embodied in the Climate Act. Reducing the weight that is given to price and assigning these points to project viability in the RESRFP evaluation framework is likely to result in projects that reflect a better balance of price versus project viability and yield more viable project proposals and reduce project attrition.

Furthermore, the significant level of competition in the RESRFPs indicates that reducing the weighting on pricing is unlikely to significantly reduce the competitive discipline that incents bidders to price their proposals based on their underlying costs without undue markups. While reducing the price weighting may result in the selection of some proposals with higher Index REC Strike Prices, New York state customers will benefit from the timely realization of promised environmental benefits and greater long-term value.

The vast majority of the 20 points allocated to Project Viability, Operation Flexibility and Peak Coincidence focus on project viability. Therefore, there is not an obvious opportunity to reallocate points to project viability considerations. In sum, reducing the weight allocated to price in the evaluation process and increasing the total number of points that are allocated to project viability is a straightforward approach that will address the objective identified in the CES Biennial Review of selecting projects that are “more viable and offer greater value to New York State.” (p. 64)

Given the high rate of project attrition being experienced in NYSERDA RESRFPs as well as experience in other jurisdictions with other renewable energy procurements where greater weight is often given to non-price criteria to ensure project viability, EDFR recommends a 50% price, 40% Project Viability, Operational Flexibility and Peak Coincidence, and 10% Economic Benefits scoring weighting be employed by NYSERDA. For the full impact of this scoring change to produce intended results of favoring projects that are more viable, EDFR encourages NYSERDA to ensure that the RFP evaluation framework provides greater transparency regarding the weight assigned to these evaluation criteria so that project proponents can make informed decisions regarding how they can mature their projects to secure higher Project Viability, Operational Flexibility and Peak Coincidence scores.

The Project Viability, Operational Flexibility, and Peak Coincidence Subcategories include the following criteria: Permitting Viability, Energy Deliverance, Peak Coincidence, Project Development, Generation Site Control, and Interconnection Right of Way Control. A bid proposal is awarded points for meeting the minimum threshold for each criterion and additional points for exceeding the minimum threshold. Progress and subsequent points awarded in these subcategories are good indicators of a project's maturity. For example, permitting and interconnection are rigorous processes that require a lot of time, resource commitment, and problem-solving. Working through these processes gives developers time to identify issues and resolve them, resulting in more accurate pricing representative of a project's actual risk. Projects that have made greater progress in these subcategories have fewer hurdles to clear (because they have already been cleared) from the time the project is contracted to its construction and operation. Thus, projects with mature permitting and interconnection efforts present less risk and are more likely to be successful.

Because (i) the selection of more mature projects would reduce attrition from NYSERDA's awarded and contracted project pipeline and increase the probability that New York State meets its target of 70% renewables by 2030 and (ii) non-price Project Viability, Operational Flexibility and Peak Coincidence Subcategories such as interconnection, permitting viability, project development, financing and creditworthiness are vital in the assessment of project maturity and viability, EDFR suggest the following changes: (1) The evaluation grid should be recalibrated to reflect the significance of the Project Viability, Operational Flexibility and Peak Coincidence subcategories: (a) Pricing (50%); (b) Project Viability, Operational Flexibility and Peak Coincidence Subcategories (40%); and (c) Incremental Economic Benefits to New York State (10%)

A more detailed breakout of the weighting attributed to the various requirements associated to the Project Viability, Operational Flexibility and Peak Coincidence Subcategories requested by NYSERDA should be provided to more accurately reflect the level of effort associated with the non-pricing criteria and their respective importance in realizing project viability. EDFR's proposed breakout of the weight for these evaluation criteria is presented below:

- Interconnection: 5 points
  - 0 points for meeting minimum criteria
  - Other categories in between for 1-4 points related to the transitional cluster process
  - 5 points for an executed LGIA
- Permitting: 5 points
  - 0 points for meeting minimum criteria
  - 1 to 4 points for having secured road use agreements, PILOT agreement, host community agreement, submitted application to ORES, application deemed complete, application received, Army Corps of Engineers Permit received, etc.
  - 5 points for having all permits and compliance filings and having NTP with ORES or SEQRA
- Energy Deliverability: 5 points
  - 0 points if project significantly affects other projects curtailment and basis
  - Partial points if project is nominally deliverable or has a small impact on other projects



- 5 points if project is fully deliverable and has insignificant impact on existing operational pipeline of projects
- Peak Coincidence: 5 points
  - Criteria to be established
- Agricultural and Forested Land (i.e. Scorecard): 10 points
  - 0.1 rated criteria points for every 1 scorecard points achieved. Projects that have 100+ scorecard points receive maximum rated criteria points
- Project Development, Financing and Creditworthiness: 5 points
  - 0 points for companies with little experience
  - Partial points for companies who have operational projects at least 33% of the capacity or greater size in New York or anywhere in North America
  - 5 points for companies who have operational or under construction projects at least 50% of the capacity or greater size in New York
- Stakeholder Involvement (new criterion): 5 points
  - 0 points for no support letters & no host community agreement and/or PILOT agreement
  - 1 point for support letters from non-profits, academia and special interest groups
  - 2 points for support letters from local businesses or IPP lead community programs (workforce development, educational programs in local schools and universities, scholarships, disadvantaged community households programs, agri-PV, etc.)
  - 3 points for support letters from at least one host town board or supervisor
  - 4 points for support letters from at least one host town board or supervisor and/or executed host community agreement and/or PILOT agreement
  - 5 points for support letters from all host towns Town Board or supervisor

**EDFR emphatically supports NYSEDA and DPS Staff's acknowledgement of the importance of ensuring that the relative value of more mature projects is appropriately recognized such that full project costs and benefits will be more accurately known, with two significant benefits: (1) awarded projects will have the highest chance of achieving commercial operation within the deadlines, and (2) less mature and speculative projects with more unknowns in project costs that could lead to the need for price adjustments down the road are not selected.**

Moreover, based upon EDFR's experience as a global leader in electricity generation and with our specific experience across North America, renewable energy procurements that place more weight on price than viability or experience incent participants to 'bid to win' rather than 'bid to build'. EDFR further believes that the pool of eligible mature projects will be large enough to maintain the competitive nature of RES procurements. As per above, more mature projects translates to less price variability risk and ability to meet advanced timelines for commercial operation.

In addition to allocating additional points to reward more mature projects, to promote project viability NYSEDA can employ stringent minimum thresholds that require projects to be well advanced so that they can better assess project costs and risks. Specifically, EDFR strongly supports maintaining the minimum threshold requirement for interconnection such that the

proposed Bid Facility has, either an executed Large Generator Interconnection Agreement (LGIA) or is participating in the NYISO's Transition Cluster Study. Maintaining this existing minimum threshold for interconnection ensures that eligible projects are sufficiently advanced, meaning their costs and assumptions are firm and these projects would be able to reach commercial operation in a timely manner. In addition, EDFR strongly supports maintaining the minimum threshold requirement for permitting such that the proposed Bid Facility can demonstrate that the New York State Office of Renewable Energy Siting permit has been approved, is under review, or has been submitted within 180 days of bid submission. Finally, EDFR encourages NYSERDA to include as an element of its evaluation criteria whether the developer has contracted with, or secured input on its project pricing, as demonstrated by an attestation letter, from an engineering, procurement and construction firm that is building renewable energy projects in New York State.

#### *Expand definition of cost component beyond bid price*

The price evaluation framework currently employed by NYSERDA compares the Index REC Strike Price that the bidder offers with a forecast of the market value of energy and capacity over the proposed contract period. This price evaluation framework in theory does a reasonable job of assessing the cost to customers of proposed projects and distinguishing between the relative economic value of projects. However, it requires bidders to project the anticipated level of curtailment as well as basis differentials. The risks that this poses to bidders are discussed further below.

Another alternative outlined by NYSERDA and DPS Staff is reconstituting what is considered in the bid price evaluation to move beyond the current LNRC framework. NYSERDA and DPS Staff note that *"the cost component of proposals could be adjusted for evaluation purposes, based on the input of experts on the Technical Evaluation Panel and specialist reviewers convened for the bid evaluation of each RES Tier 1 solicitation."* (p. 65) Such an approach would move away from the relatively high level of transparency of the current bid price evaluation, which is a foundational aspect of the evaluation process. Under the LNRC evaluation framework bidders can assess how different locations, project configurations and alternative technologies are likely to yield different LNRC values, allowing them to optimize projects and bids. This transparency enhances competitive tension and incents bidders to refine their proposals to offer the greatest value to customers. Therefore, this element of the evaluation process should not be open for adjustment by experts on the Technical Evaluation Panel because that would reduce the transparency of the evaluation process and by so doing prevent bidders from optimizing their project to seek to deliver the greatest value to ratepayers.

#### *Consolidate and re-allocate non-price points*

NYSERDA and DPS staff also proposed *"re-allocating points within the 20% component of Project Viability, Operation Flexibility and Peak Coincidence, such that greater weighting within this 20% non-price score would be given to attributes that reflect more mature projects."* (p.66)

In NYSERDA's RESRFP24-1, there were six criteria that encompass the Project Viability, Operational Flexibility and Peak Coincidence evaluation criteria. The six criteria included: (1) **interconnection**, focusing on the degree of progress in the interconnection approval process; (2) **permitting viability**, considering the progress in the permitting process and the



completeness and credibility of the schedule for obtaining permits within the proposed development schedule; (3) **energy deliverability**, considering the ability to address grid congestion and delivery constraints, and deliver firm power; (4) **peak coincidence**, considering how closely the project's expected generation profile matches future estimates of the NYISO load net of the portfolio of already operating and contracted, under development renewable and zero-emissions generation in New York State; (5) **agricultural and forested land**, whereby non-solar facilities score full points; and (6) **project development, financing and creditworthiness**, considering the relative level of project development and financing experience demonstrated, particularly with respect to facilities of comparable scale, similar technology and location.

To give greater weight to criteria that favor more mature projects, less weight would have to be assigned to the other evaluation criteria. As the review above indicated, other than peak coincidence and agricultural and forested land, the four remaining evaluation criteria focus on project viability and favor more mature projects. While the points awarded to peak coincidence could be reallocated to the other evaluation criteria, EDFR believes that this is an important criterion that appropriately reflects the value of a resource's contribution to serving peak load. Similarly, agricultural and forested land reflects what EDFR understands to be an important consideration for New York policymakers, seeking to minimize the impacts of solar projects on agricultural and forested lands. **From EDFR's perspective, there appears to be little opportunity to reallocate points within the existing Project Viability, Operational Flexibility and Peak Coincidence evaluation criteria so as to award more mature projects. As discussed above, a more appropriate strategy would be to reduce the weight given to price and increase the weight given to project viability considerations.**

#### ***Onshore wind-specific Tier 1 carve-out***

NYSERDA and DPS Staff also proposed a Tier 1 carve-out for onshore wind whereby a specific quantity of energy per solicitation could be set aside for onshore wind. This alternative was described in the Draft as: *"Any onshore wind generation proposals received would be scored and ranked in the bid stack and then awarded first within the carve-out until either all onshore wind proposals were awarded or the carve-out was filled. Once the allocated quantity is awarded, any additional onshore wind generation projects could still be considered and awarded depending on their ranking in the overall combined bid stack of bids from all generating technologies."* (p.67)

This approach would give priority to onshore wind projects without any consideration for their respective costs and benefits relative to other Tier 1 projects bid in the RESRFPs. By so doing it fails to consider what premium for onshore wind projects exceeds the incremental value that they offer. For example, under this approach, a wind project with a LNRC that was 50% higher than a solar project that was not selected could be offered a provisional contract even if the value of the project's output was only 20% higher. Clearly, this approach lacks protections against onshore wind project developers securing undue price premiums if there were insufficient competition from other onshore wind project developers. Therefore, **EDFR believe that this approach does not exert enough competitive discipline on acceptable onshore wind pricing and is likely to not maximize the value realized by New York customers.** Furthermore,

if the changes that EDFR has proposed to increase the weight given to Project Viability, Operating Flexibility and Peak Coincidence to 40 points are implemented then EDFR believes that the relative ranking of onshore wind projects should improve such that an onshore wind-specific is unnecessary.

#### *Onshore wind-specific solicitation*

Another alternative would be for NYSERDA to “conduct one or more onshore wind-specific RES Tier 1 solicitations. This would provide a stand-alone mechanism for onshore wind generation to compete for Tier 1 awards without having to also compete against solar generation or other technologies within the Tier 1 solicitation scoring framework.” (p. 67). Similar to the onshore wind specific carve out, it does not contain sufficient cost containment protections to ensure that customers realize reasonable value. **Therefore, EDFR does not support an onshore wind-specific solicitation.**

#### *Price bonus for onshore wind generation projects*

Another alternative outlined by NYSERDA and DPS Staff for promoting onshore wind is to maintain the existing 70 price/30 non-price point allocation but establish a point bonus for onshore wind projects that reflects the incremental value to the system such projects offer. NYSERDA and DPS Staff identified various options for considering this value using: (1) a more beneficial discount rate for calculating the LNRC for onshore wind proposals; (2) adding a less-than-one multiplier to the LNRC for all onshore wind projects; or (3) modifying onshore wind strike prices for the purpose of LNRC calculations. A challenge of these approaches is that they require that assumptions be made regarding the variables to be modified in the LNRC calculations. Ideally, these modifications would be based on the incremental value that wind offers. Quantifying this value is difficult and to the degree that it could be readily quantified then it could presumably be included in the LNRC calculation.

Recognizing that projects are selected by NYSERDA based on their rank ordered score, with highest scoring projects selected first, **EDFR proposes that NYSERDA could establish a threshold value (e.g., 20%) such that wind projects scoring within 20% of the lowest scoring non-wind project selected would be offered a contract.**

Such an approach could promote additional onshore wind projects to the benefit of New York customers, with appropriate protections to ensure that the resulting projects are likely to deliver value to customers and do not represent an undue cost premium that will inappropriately increase costs to customers.

#### *Strike Price Adjustments*

**EDFR emphatically endorses the Commission’s support of NYSERDA’s authorization to support project and portfolio adjustments as such complications arise through the life of the contract.**

Price adjustments that respond to unforeseen events and exogenous impacts to project costs and required contract pricing beyond the project developer’s control reflects good public policy to: (1) deliver on the time urgency of the State achieving the Climate Act’s outcomes; (2) mitigate unnecessary administrative costs in duplicative solicitation processes; (3) avoid undue

risk premia in contract pricing for risks that project developers cannot manage; (4) uphold complex and integrated transmission upgrades and associated portfolio cost through greater certainty in the interconnection process and cluster cost allocations (a process which is recognized to be unpredictable in terms of risk – let alone endemic challenges to congestion and curtailment risks due to grid underinvestment and limited line of sight to retirements as well as capacity additions that typically are triggered by NYSERDA procurement decisions and influence congestion);<sup>7</sup> (5) uphold the reciprocity of stakeholder engagement and project support garnered – which can be quickly undone if the project is perceived as precarious; and (6) support robust competition in NYSERDA procurements by upholding New York State’s reputation as a sophisticated and trusted contracting partner.

EDFR has found in the renewable generation sector - these types of adjustments to be critical elements to any Power Purchase Agreement (PPA) signed since 2020. As a global leader in electricity generation and with our specific experience across North America – EDFR has been engaged in carefully crafting several inflation and cost of capital adjusters in all PPAs since that time. Despite the level of project maturity - these adjusters are still important tools to enable successful completion of any development project.

On the specific point of interconnection process risks we support ACENY’s observations that congestion-driven curtailment and basis risk is outside of the control of the bidder and a significant risk to project price viability. Sometimes, this risk comes into play years after a project is operational due to additional projects being awarded in a zone that creates congestion and increased basis risk, and could not have been predicted by the developer at time of bid, sometimes years ago. We encourage the State to take lessons learned from the Offshore Wind program where risk-sharing of interconnection costs and cluster study allocations is now common practice.

To the extent that specific “black swan” events, or, chronic market headwinds, *including substantial interconnection cost impacts*, trigger price adjustments in development and over the life of the project, we share our confidence that the State, and specifically NYSERDA, is a sophisticated contracting entity that is well capable of adequately and transparently engaging with its awarded contract portfolio to assess the price impacts of such factors and formulate suitable price adjustments to project and/or portfolio adjustments to effectively balance the continued ratepayer advantages inherent in upholding project deliverability.

### **Congestion-Driven Curtailment and Basis Risk**

NYSERDA can reasonably expect that risks that are outside the control of bidders, such as transmission congestion risk, will cause bidders to raise their strike price bids. By limiting these risks for bidders, NYSERDA will be able to contract at lower Index REC prices for the 20-year tenor of the PPA, saving tens of millions of dollars per contract.

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<sup>7</sup> February 2024. Brattle Group. Generator Interconnection Scorecard. <https://www.brattle.com/wp-content/uploads/2024/03/Generator-Interconnection-Scorecard.pdf>. NYISO receives a grade of “C-”, citing: “NYISO gets its highest recognition for design of its interconnection process, with mostly reasonable study assumptions and criteria. However, the process has not produced compelling results, with **long timelines and unpredictable costs that come late in the process**. NYISO’s use of regional transmission planning to expand opportunities for new generation resources has some promise but is not yet delivering substantial benefits. The availability of interconnection alternatives in NYISO is more limited than in other Regions.” [emphasis added]

Transmission congestion causes: (1) curtailment of offered energy; and (2) LBMP basis risk (the risk that energy revenues will be significantly lower than the Reference Energy Price (REP) that NYSDERDA will withhold from the Indexed REC payment as a proxy for realized energy revenues). When a local renewable resource is partially curtailed, it sets the LBMP for itself and for its nearby competitors that are constrained by the same transmission facility limit. This local LBMP is usually a negative value, while the Reference Energy Price at the zone level is a positive value. Therefore, during times of high local energy production, when congestion occurs, many MWh are paid a negative LBMP. A small percentage of the MWh that were available would not be produced, and the project does not receive revenue from either the Market or the NYSDERDA contract for curtailed output.

The LBMP depression has a much more significant impact on a project than curtailment. An example to illustrate this could involve two renewable resources, each producing 100 MWh in a single hour, when the first is curtailed 1 MWh (1%) and the other is not curtailed at all. The combined output (199 MWh) would be paid LBMP equal to the negative offer price of the curtailed resource, for example -\$35/MWh. If the REP for the settlement month were higher than \$20, this example would show a net loss of at least \$55 for each of 199 MWh, with 1 MWh not produced. This is a major financial risk for project developers that they cannot easily hedge (other than through investment in behind-the-meter energy storage).

Strike Prices reflect the Bidder's anticipated risk of future congestion, but it is NYSDERDA's procurement decisions that drive the actual (realized) congestion and the congestion costs that project owners bear, in particular when grid capacity is limited. Therefore, a risk sharing approach where these congestion costs are capped and NYSDERDA assesses these congestion costs as part of its procurement decisions is likely to be more efficient than requiring project developers to bear these risks and pass them through to ratepayers in a higher indexed REC strike price.

### **Proposed Congestion Cap Provision**

As NYSDERDA/ DPS rightly and repeatedly recognized through changes to the Tier 1 RFP requirements and evaluation criteria, mitigating congestion and curtailment risk is critically important to ensure the viability of existing and contracted project pipeline. EDFR believes that if this risk is not further mitigated, it would (a) erode the economics of existing Tier 1 projects by reducing their saleable output and increasing their congestion basis costs, (b) erode the economics of contracted Tier 1 projects by reducing their expected saleable output and increasing their congestion basis risk, undermining their financial viability and continued investment in their development, and (c) substantially increase strike prices in future procurements, ultimately increasing the ratepayer costs.

As the principal contracting entity in New York, NYSDERDA should consider as part of its awarding of REC contracts to projects in each constrained area the "costs" of energy curtailment and the severe LBMP depression that accompanies it. If NYSDERDA accepts that some curtailment risk may be unavoidable in this process, NYSDERDA should offer some protection against severe LBMP depression via a new congestion capping mechanism that would make the resource owner whole for extremes of lost revenue caused by factors that are

outside its control. In other words, the resource owner would not be obligated to absorb this risk above a given threshold.

Although NYSERDA would occasionally make a payment to exceptionally affected facilities, overall savings would accrue to NYSERDA from paying a lower Bid Price for every delivered REC given the de-risking of the REC cash flow. The implementation of this mechanism would compare the nodal price at the facility Point of Interconnection (POI) and the REP. Any losses sustained by the project above the cap on basis would then be a supplement to the REC price every month. As basis and curtailment are usually interrelated the same concept should be applied to the deemed MWh from the project. If subject to major curtailment, i.e. grid curtailed energy above [10%] of the resource's potential, then the generator would be compensated at the REC settlement price, with the rules regarding contract energy default notwithstanding.

EDFR believes that such a mitigation mechanism can help achieve the state goals at lower costs for ratepayers and the state of NY as bidders would no longer include risk premiums in their bids, and would advance their development projects without concerns about excessive congestion risk. Such a capping mechanism would also provide clear signals for avoiding further procurement and development of clean energy projects in areas where such congestion caps are met or forecast to be met. NYSERDA, as the principal contracting entity that drives capacity expansion, will have higher control on the outcome of procurement decisions and locations of new generation relative to the available grid capacity. Furthermore, NYSERDA, via its coordination with state agencies and entities responsible for transmission planning (e.g. NYISO, DPS for the CGPP) can provide meaningful and actionable input for design and approval of transmission expansion projects that provide more headroom for future resources with minimum congestion risk.

### *Strike Price Escalators*

**EDFR supports NYSERDA being authorized to allow strike price escalators, as an option available to Tier 1 developers, as a means to deliver value to ratepayers by supporting the viability of individual projects.**

Use of escalators ensures risk alignment on factors directly relevant to project developers (notably inflation) and with the supply chain, who typically include escalation factors in component and service contracts until project delivery (which inevitably follows the duration of development offtake and permits) as well as operations and maintenance. Absent a price escalator, developers have no option but to front-load the entirety of inflation, contingency, risk, and escalation factors embedded in project subcontracts into the initial strike price.

### *Increased maximum Tier 1 contract tenor to 25 years*

EDFR supports bidders ability to select a contract tenor of up to 25 years, as an important means by which to support responsible reductions in contract pricing. Particularly in the case where Tier 1 procurements continue to be for mixed resources (utility-scale solar PV, land-based wind, etc.) this optionality can play an important role in conditioning project pricing in line with the expected useful lifetimes and certification lifetimes of project equipment. **EDFR**

**supports NYSERDA's authority to support such potential optionality in its procurement approaches.**

***Allow for adjustments to the nature and consequences of COMD deadlines.***

Experience in project development since the beginning of the CES program has consistently demonstrated the challenges of upholding strict project development timelines. As described in Section 3 of the Draft, permitting headwinds, complexities and timing associated with the NYISO interconnection process, supply chain and service availability and delivery schedules, all present real risks to project schedules.


Strict contracting requirements only serve to exacerbate these challenges. Furthermore, adherence to 'abstract' deadlines that are not in sync with these challenges can adversely affect important relationships with project Stakeholders. While we are in complete alignment with the State on the urgency of project delivery, strict COMD deadlines can be counterproductive to the endemic challenges experienced in New York renewables project development and further pressurize an already challenging development paradigm.

**Consequently, EDFR strongly supports the Commission strengthening NYSERDA's authority to monitor project progress, in the context of project-specific and market-wide headwinds, and their ability to adjust COMD deadlines to ensure dates are realistic and consequences for failing to achieve these COMD deadlines are reasonable and do not unnecessarily stress a project's development.**

We further emphasize the benefit of such a flexible approach not only applies to an individual project, but to the renewable portfolio under development at large - where artificially induced timeline jeopardy to an otherwise successful project undermines the integrity of New York's development climate with significant commercial and social consequences to the detriment of the State. **Stated simply, EDFR believes it to be of strong benefit to a project and to the entire portfolio that NYSERDA be authorized to work in partnership with its competitively contracted projects to ensure their successful delivery.**

EDFR appreciates this opportunity to submit comments on the NYS CES Biennial Review and will make itself available to expeditiously address any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Stephane Desdunes".

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