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ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
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July 23, 2018

Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 5th Floor
Boston, MA 02110

RE: Petitions for Approval of Proposed Long-Term Contracts for Renewable Resources Pursuant to Section 83D of Chapter 188 of the Acts of 2016, DPU 18-64, 18-65, 18-66.

Dear Secretary Marini:

On July 23, 2018, Fitchburg Gas and Electric Light Company, d/b/a Unitil (“Unitil”), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”), and NSTAR Electric Company and Western Massachusetts Electric Company, each d/b/a Eversource Energy (“Eversource”) (collectively, the “Electric Distribution Companies” or “EDCs”), filed long-term contracts for the New England Clean Energy Connect (“NECEC”) project for review and approval by the Department of Public Utilities (“Department”), pursuant to Section 83D of Chapter 169 of the Acts of 2008, as amended by Chapter 188 of the Acts of 2016 (“Section 83D”). Under the legislation, the EDCs were required to competitively solicit proposals for clean energy generation and any associated environmental attributes and/or renewable energy credits (“RECs”) for an annual amount of electricity equal to approximately 9,450,000 megawatt-hours (“MWh”). In accordance with Section 83D, the EDCs issued a Request for Proposals (“RFP”) on March 31, 2017. The outcome of this process was the selection of the NECEC project and the execution of cost-effective long-term contracts for the clean energy generation output of the NECEC project that are in the public interest.

The NECEC clean energy generation long-term contracts filed by the EDCs represent over a year's worth of collaboration and consultation among the EDCs, the Department of Energy Resources ("DOER"), and Independent Evaluator ("IE"), and are a significant milestone in the Commonwealth's transition to a clean, diversified energy portfolio. As detailed below, at a total levelized price of 5.9 cents/kilowatt hour, the NECEC clean energy generation long-term contracts provide a highly cost-effective source of clean energy generation for Massachusetts customers.¹ As shown in the EDCs' filings, on average, these contracts are expected to result in approximately 2 – 4% reduction in customer monthly bills, all else being equal.² The NECEC project achieves the requirements and objectives of Section 83D and the Department's regulations, 220 C.M.R. 24.00,³ including assisting the Commonwealth with meeting its Global Warming Solutions Act ("GWSA") goals and supplying the Commonwealth with reliable and firm clean energy generation. In addition, by providing firm delivery of clean hydroelectric generation, the NECEC Project will be particularly beneficial during the winter months when the region experiences high energy prices due to reliance on natural gas for both electricity and heating. The DOER looks forward to the Department's review of the long-term contracts filed in this proceeding, and respectfully requests that the Department approve the long-term contracts as serving the best interests of Massachusetts customers.

I. Section 83D Process Overview

On February 2, 2017, pursuant to Section 83D, the EDCs proposed a timetable and method for solicitation of long-term contracts for clean energy generation to the Department for review and approval. Subsequently, the Department approved the RFP, and the EDCs and DOER, (together the "Evaluation Team"), as monitored by the IE, began a highly competitive and robust solicitation for compliant projects. A total of 46 bid packages, with 53 distinct proposals, were received from projects that included singularly or in portfolios large-scale hydro, small hydro, solar, on-shore wind, and off-shore wind resources as well as energy storage. In aggregate, the proposals submitted included over 17,000 megawatts ("MW") and 99,000,000 MWh of annual clean energy generation.

The evaluation process comprised of three evaluation stages, including both a quantitative and qualitative assessment of bids. At the conclusion of the evaluation process, the Evaluation Team determined that the two highest ranked project portfolios capable of fulfilling Section 83D's objective of 9,450,000 MWh of cost-effective clean energy generation were the NECEC project and the Northern Pass Transmission ("NPT") project. Both projects provided

¹ All dollar figures in this document are expressed in 2017 real dollars.

² Exhibit JU-11, EDC Initial Filing (DPU 18-64, 18-65, 18-66).

³ Pursuant to Section 83D, the Department was required to promulgate regulations. The regulations required the long-term contracts for Clean Energy Generation resources to: 1) provide enhanced electricity reliability within Massachusetts; 2) contribute to reducing winter electricity price spikes; 3) be cost effective to Massachusetts electric ratepayers over the term of the contract, taking into consideration potential economic and environmental benefits to the ratepayers; 4) avoid line loss and mitigate transmission costs to the extent possible and ensure that transmission cost overruns, if any, are not borne by ratepayers; 5) allow long-term contracts for clean energy generation to be paired with energy storage systems; 6) guarantee energy delivery in winter months 7) adequately demonstrating project viability in a commercially reasonable time frame, and; 8) create and foster employment and economic development in Massachusetts, where feasible.

competitive prices and demonstrated significant benefits to ratepayers.⁴ All other evaluated individual projects and portfolios of combined projects that met the legislative requirement of approximately 9,450,000 MWh of clean energy generation were considerably more expensive and provided less benefit to Massachusetts customers.

At the conclusion of the evaluation process, the EDCs were unable to reach a consensus selection of the winning proposal between NECEC and NPT. Section 83D(c) provides that “if distribution companies are unable to agree on a winning bid following a solicitation under this section, the matter shall be submitted to the department of energy resources which shall, in consultation with the independent evaluator, issue a final binding determination of the winning bid...” Unitil, National Grid, and Eversource each provided a written recommendation to DOER, stating each EDC’s preferred selection, and the basis for its recommendation, with two EDCs preferring the selection of NPT and one preferring the selection of NECEC. In accordance with the statute, the failure of the EDCs to reach an agreement resulted in DOER, in consultation with the IE, selecting the winning bid.

In making that determination, DOER, in consultation with the IE, reviewed the results of the Stage Two quantitative and qualitative analysis, the reasoning provided by the EDCs in the EDCs’ selection letters, and key factors as outlined in Stage Three of the RFP. The NPT and NECEC projects both utilized the exact same generation resource, Hydro Quebec, and delivered similar quantities of clean energy generation annually. Importantly, both projects were very close to each other in terms of net benefits delivered to customers, in 2017 real dollars. The key difference between the proposals was that NPT’s proposed in-service date was before the end of 2020, which was two years earlier than NECEC’s proposed in-service date of December 13, 2022. By coming online earlier, NPT would provide additional and earlier GHG reductions assisting the Commonwealth in meeting GWSA requirements and limiting exposure to winter price spikes.⁵

Shortly after the selection of NPT, the New Hampshire Site Evaluation Committee (“NHSEC”) voted on February 1, 2018 to deny a Certificate of Site and Facility for NPT. The vote had the potential to significantly affect the timeframe of the NPT project’s in-service date. DOER and the IE conferred with the EDCs to determine next steps, including whether the EDCs should consider other bids. Ultimately, NECEC was conditionally selected to enter into contract negotiations with the EDCs concurrent with NPT. These concurrent contract negotiations proceeded until March 28, 2018, when the EDCs, at the direction of DOER, terminated NPT’s conditional selection after it was unable to secure the permits it needed from the NHSEC. Upon termination of the NPT selection, NECEC became the sole, winning bid to negotiate and finalize long-term contracts with the EDCs, which are now before the Department for its approval.

As noted above, the RFP process was rigorous and highly competitive. The Evaluation Team spent many hours evaluating bids within the framework provided by the RFP, and when differences of opinion arose among members of the Evaluation Team regarding the evaluation or

⁴ Per the 83D RFP schedule, the evaluation process, consisting of a Stage 1 threshold and eligibility review, a Stage 2 quantitative and qualitative review, and a Stage 3 portfolio analysis covered approximately six months of evaluation of bids.

⁵ See generally Exh. JU-7, see also Exh. JU-8 (DPU 18-64, 18-65, 18-66).

selection, members within the Evaluation Team and the IE worked diligently to steer all decision-making toward objectivity and consensus to the maximum extent feasible. Overall, any challenges experienced during the bid evaluation and selection process were ultimately addressed to achieve an outcome that achieved all of Section 83D's and the Department's requirements in a fair, transparent and open way, thereby resulting in contracts that are both cost-effective and in the public interest. *The outcome – a set of cost effective clean energy generation long-term contracts – will be extremely beneficial to Massachusetts customers for the reasons set out below.*

II. The New England Clean Energy Connect Project Provides Significant Value to Massachusetts Ratepayers

As previously stated, the DOER strongly supports the NECEC project, and recommends approval of the resulting clean energy generation long-term contracts now before the Department. The NECEC project is highly cost-effective, will deliver clean energy generation to the Commonwealth, and effectively meets the requirements and objectives of Section 83D. Specifically, the NECEC project significantly aligns with the Commonwealth's goals of creating a clean, affordable, and resilient energy future for the Commonwealth. The implementation of this project will result in nearly half (47%) of the electricity consumed by Massachusetts being generated from clean energy. The project's 9,554,000 MWh represents 17% of Massachusetts' total load, and 20% of the EDCs Massachusetts' state load. The project will significantly contribute to the Commonwealth meeting future GWSA goals. The NECEC project being in-service will reduce an estimated 36.61 million metric tons of carbon dioxide equivalents ("MMTCO₂e") in the Massachusetts Green House Gas Inventory from 2019 to 2040, an average of 1.93 MMTCO₂e annually.⁶ This is roughly equivalent to the emissions associated with 413,000 cars on the road each year.

Further, the project contributes to the Baker-Polito Administration's goal of creating an affordable energy future. The NECEC project will provide the Commonwealth with 9,554,000 MWh of clean generation which includes energy and all associated attributes, which are eligible for Clean Energy Standard ("CES") compliance, and the associated transmission required to ensure delivery, at a total levelized price of 5.9 cents/kilowatt hour ("cents/kWh") in 2017 dollars over the 20 year term of the clean energy generation long-term contract.⁷ The 5.9 cents/kWh levelized price includes 4.8 cents/kWh for energy and environmental attributes, and 1.1 cents/kWh for transmission.⁸ This total price is significantly below the projected cost of buying the same amount of wholesale energy in the market and the projected compliance costs for the CES, which is projected to total 7.5 cents/kWh over the 20 year term of the contract.⁹ Over the life of the contract, the NECEC project provides an average 1.5 cents/kWh of direct savings for ratepayers over buying the same amount of energy and CES compliance in the market.

⁶ *Id.*, this figure represents Greenhouse Gas Inventory reductions between 2019-2040; there are additional reductions in the final 2 years of the contract (2041-2042).

⁷ *Id.*

⁸ The breakdown of cost allocations are described in detail in the quantitative evaluation results.

⁹ Projections of future energy market and compliance costs are described in detail in the quantitative evaluation results.

In addition to the direct market benefits described above, the NECEC project also provides indirect benefits. These indirect benefits include energy market price suppression, reduced Renewable Portfolio Standard (“RPS”) compliance costs by fulfilling CES compliance and increasing the availability of RECs for the RPS market, and additional incremental GWSA compliance from the retirement of any additional attributes over and above CES compliance.¹⁰ Each of these indirect benefits provides value to Massachusetts ratepayers through reduced electricity and REC prices, and avoided GWSA compliance costs. Additional benefits include ratepayer price certainty through a fixed cost contract, and a commitment of \$50 million to low-income customers over 40 years. Overall, the total direct and indirect benefits to Massachusetts ratepayers from the long-term contracts with NECEC are expected to be 4 cents/kWh, or \$40/MWh on average over the term of the contract, with total net benefits of approximately \$4 billion.¹¹

Finally, the firm delivery of clean hydroelectric generation will provide targeted consumer and environmental benefits in the winter months. During cold temperature periods in New England, natural gas capacity is dedicated to thermal customers, constraining natural gas availability for electric generation. As a result, the region has increased utilization of higher priced and more carbon-intensive fuel, including oil and imported liquefied natural gas (LNG) which has resulted in acutely expensive and volatile winter energy pricing and raised serious regional reliability concerns. The NECEC project will mitigate these challenges by providing consistent clean energy production during cold temperatures. Specifically, winter delivery is guaranteed in the contracts, and the developer will face damages if delivery is inconsistent with the terms of the contracts. As a result, the project is a critical component in supporting the Baker-Polito Administration’s goals of creating a clean, resilient, and affordable energy future for the Commonwealth.

¹⁰ Specific indirect benefits were determined as a part of the evaluation process. See JU-6 (TCR Report) (DPU 18-64, 18-65, 18-66).

¹¹ *Id.* at Exh. JU-7, *see also* Exh JU-8

III. CONCLUSION

The NECEC project and the corresponding contracts provide a cost-effective source of clean energy generation for Massachusetts customers, meet the requirements of Section 83D, and are in the public interest. Accordingly, the DOER respectfully requests that the Department approve the long-term contracts filed by the EDCs.

Respectfully submitted by,

THE MASSACHUSETTS DEPARTMENT
OF ENERGY RESOURCES

By its attorneys,

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