Submission to:
The Massachusetts Department of Energy Resources;
The Massachusetts Office of the Attorney General; and
EDCs that operate in Massachusetts

An Act to Promote Energy Diversity

December 28, 2016

nalcor energy

Nalcor Energy provides the following comments in response to questions posed by the DOER, the EDCs, and the AGO regarding the development of the request for proposals (RFP) for the competitive solicitation of bids to enter into cost-effective long-term contracts for clean energy generation pursuant to Section 83D of Chapter 169 of the Acts of 2008 (Section 83D), as amended by Chapter 188 of the Acts of 2016, *An Act to Promote Energy Diversity*.

OVERVIEW

Nalcor Energy (Nalcor) is a Canadian provincial crown corporation with responsibility for the development of Newfoundland and Labrador's energy resources. The purpose of Nalcor's submission is to provide suggestions that would enable broad participation and maximize competition among energy suppliers considering a submission in response to the RFP.

NALCOR ENERGY

Nalcor is a corporation owned by the Province of Newfoundland and Labrador. The company's business includes the development, generation, transmission and sale of electricity; the exploration, development, production and sale of oil and gas; industrial fabrication; and energy marketing. Nalcor's six lines of business include:

1. Newfoundland and Labrador Hydro (Hydro), a regulated utility serving Newfoundland and Labrador
2. CF(L)Co., which owns and operates the 5,400 MW Churchill Falls hydroelectric facility
3. Oil and Gas, which holds and manages interests in three offshore oil developments
4. Lower Churchill Project, which manages hydroelectric development on the lower Churchill River in Labrador
5. Bull Arm Fabrication, which manages a 6,300 acre world class fabrication facility
6. Energy Marketing, which manages Nalcor's growing energy marketing activities

Nalcor's currently operates over 7,000 megawatts (MW) of electrical generating capacity that is predominately hydroelectric and is also actively developing

additional large scale hydroelectric projects with the next project under construction and scheduled to come on-line in 2020.

ISSUES FOR STAKEHOLDER COMMENT

2. Section 83D of Chapter 169 of the Acts of 2008 ("Section 83D"), as amended by Chapter 188 of the Acts of 2016, An Act to Promote Energy Diversity, requires a solicitation be issued by April 1, 2017, including a timetable for the procurement. What is the appropriate amount of time needed by bidders between the issuance of the solicitation and the date for submission of proposals?

Recommendation: The RFP should allow 6 months following the issuance of the solicitation for bidders to prepare and submit quality proposals. Proposals submitted under the RFP will represent multi-million to multi-billion dollar commitments to the State. In order for companies to fully assess the terms and conditions of the RFP, prepare proposals that may involve partnering amongst suppliers and transmission companies, and seek the requisite corporate approvals to proceed (which can take as long as a month after the proposal is fully developed for commitments of this magnitude), sufficient time must be allotted to insure quality bids. Compressing the schedule could likely lead to higher costs to the State as companies will assign higher risk premiums in the absence of quality analysis.

3. Section 83D contemplates that the electric distribution companies operating in Massachusetts ("EDCs") will solicit bids to enter into cost-effective long-term contracts for clean energy generation. Clean energy generation means either: (i) firm service hydroelectric generation from hydroelectric generation alone; (ii) new Class I renewable portfolio standard ("RPS") eligible resources that are firmed up with firm service hydroelectric generation; or (iii) new Class I renewable portfolio standard eligible resources. As recognized in Subsection (h) of Section 83D, a long-term contract for clean energy generation may also include, in addition to the procurement of energy, the procurement of renewable energy certificates ("RECs") attributed to Class I RPS eligible resources, and renewable energy certificates not attributed to Class I RPS eligible resources (e.g., those generated by firm hydroelectric generation); hereinafter referred to as "environmental attributes associated with non-Class I RPS eligible resources."

Please discuss the methodology that the Section 83D bid evaluation process should use to value the environmental benefits associated with either RECs attributed to Class I RPS eligible resources or the environmental attributes associated with non-Class I RPS eligible resources. Your discussion should address the following:

a. Please describe the quantitative methods that the Section 83D bid evaluation process should incorporate for the purposes of evaluating the monetary value of the environmental attributes of RECs attributed to new Class I RPS eligible resources and environmental attributes associated with non- Class I RPS eligible resources.

b. Explain how your recommended methodology for the quantification of the monetary value of environmental benefits associated with RECs attributed to new Class I RPS eligible resources and environmental attributes associated with non- Class I RPS eligible resources: (i) treats Class I eligible resources and hydroelectric generation equitably; and (ii) does not result in double counting of environmental benefits.

c. Explain whether you propose to incorporate the avoided compliance costs of Chapter 298 of the Acts of 2008, Global Warming Solutions Act ("GWSA") into your recommended methodology for quantification of the environmental benefits associated with RECs attributed to new Class I RPS eligible resources and environmental attributes associated with non- Class I RPS eligible resources.

Recommendation: The RFP is seeking to procure competitive supplies of both hydroelectric and Class I renewables to meet the carbon reduction objectives of the State. To insure fair competition between (for example) hydroelectric and Class I resources, incentives that are offered through other programs should not be counted as contributions by the bidders in the comparative evaluation of proposals submitted under the RFP. To accomplish this for purposes of fair evaluation of preferred proposals (and not to be carried through the contracting), the bids submitted that rely on hydroelectric resources could be credited with a "green" value that is equivalent to the forecast for REC prices. Alternately, and again only for purposes of evaluation of preferred proposals and not to be carried through the contracting, the bids submitted that rely on Class I resources could be reduced in value by an amount equivalent to a forecast of REC prices.

5. Section 83D requires a long-term contract to "utilize an appropriate tracking system to ensure a unit specific accounting of the delivery of clean energy, to enable the department of environmental protection, in consultation with the department of energy resources, to accurately measure progress in achieving the commonwealth's Global Warming Solutions Act ("GWSA") goals under chapter 298 of the acts of 2008 or chapter 21N of the General Laws." What requirements should be imposed on bidders so that, if selected, they are able to enter into long-term contracts that utilize an appropriate tracking system that ensures the procured clean energy can be counted towards GWSA compliance?

Recommendation: The bidders should be obligated to commit to use a reliable system to effectively track the delivery of the procured clean energy. New England's existing Generation Information System (GIS) including the NERC e-tagging system is an effective tool to accomplish this objective however energy delivered to Massachusetts from areas beyond those that are "adjacent" to the New England control area is not eligible for "GIS generated credits". Necessary modifications to the GIS rules, already contemplated by the NEPOOL working group, can be easily incorporated to accommodate resources from non-adjacent control areas such as Newfoundland and Labrador.

6. Please respond to the following questions regarding the evaluation of the potential benefits associated with a clean energy generation unit's ISO-NE market qualifications other than the energy and REC markets in the Section 83D solicitation process.

a) Should the Section 83D bid evaluation process attempt to quantitatively evaluate the potential benefits associated with a clean energy generation project's potential qualification and participation in other ISO-NE markets, (e.g., the forward capacity market or ancillary services market)?

b) Although capacity is not being purchased under the procurement, electric customers may benefit if a project provides a capacity resource to the region and eliminates the need to purchase other additional capacity from the market. Should the bid evaluation consider such potential benefits of capacity?

c) With respect to evaluating capacity, one potential approach is to have the resource bid its capacity and take the financial risk of qualifying and

clearing their capacity in the market. Another potential approach is to ascribe a capacity value based on technology to all resources with the expectation that if capacity revenue is sufficient, resources will have an incentive to pursue a Capacity Supply Obligation. Please explain how the evaluation process might appropriately consider and quantitatively evaluate the potential costs, benefits, and risks of each approach.

Recommendation: Yes, the evaluation process should evaluate the potential capacity or ancilliary services benefits when comparing projects. Bidders should be required to commit to capture the actual realized market value of those benefits and assign those to customers. If bidders are able to retain those benefits for themselves, they should not be credited with their value in the comparative evaluation of projects.

9. Should the bid evaluation process allow repricing, and if so, how would you structure bidder repricing to ensure that the initial and final bid is a lowest priced bid?

Recommendation: Development of new large scale generation projects and associated transmission to deliver power to Massachusetts is a complex undertaking involving significant capital investment. The timeframe and process for procurement of these supplies should reflect the magnitude of these investments. They should allow for the negotiation complexities and lead times associated with projects of this magnitude. The bid process should allow for selection of preferred suppliers/transmitters based on initial bids followed by opportunities for repricing prior to concluding final contracts. Execution of final contracts should be preceded by an independent review to insure the competitiveness of an initial bid is maintained in the final contract.

10. Section 83D requires that the clean energy resources to be used by a developer under the proposal to guarantee energy delivery in winter months. How would bidders demonstrate that proposed long-term contracts can meet this requirement? How should the evaluation process consider bids that cannot demonstrate an ability to meet this requirement?

Recommendation: Proposals should demonstrate willingness to accept and be bound by performance guarantees against winter deliveries.

12. Section 83D requires the solicitation and consideration of proposals for long-term contracts for a period of 15 to 20 years for clean energy generation. Does 83D allow for the solicitation and consideration of proposals, as one form of bid, in the form of a delivery commitment model approach as contained in the New England Clean Energy RFP (available at: https://cleanenergyrfpdotcom.files.wordpress.com/2015/11/clean-energy-rfp-final-111215.pdf). If so, should such proposals be allowed in response to this Section 83D procurement, and do you think the ability to submit such proposals would potentially be utilized by bidders? Would your firm potentially submit such a proposal if allowed as an option?

Recommendation: Nalcor Energy would not submit a bid in the form of a delivery commitment model.