

**APPUI EXTERNE RELATIF À L'APPEL D'OFFRES A/O 2013-01
POUR LES ACHATS D'ÉLECTRICITÉ**

**RAPPORT DU CONSULTANT
MERRIMACK ENERGY GROUP INC.**

Final Report

***Assessment of Hydro-Quebec Distribution's Call for
Tenders Process for Wind-Generated Electricity For a
Total of 450 MW of Installed Capacity***

A/O 2013-01

February, 2015

Prepared by

Merrimack Energy Group, Inc.



Assessment of Hydro-Quebec Distribution’s Call for Tenders Process for the Purchase of Wind-Generated Electricity For a Total of 450 MW of Installed Capacity A/O 2013-01

I. Introduction

Merrimack Energy Group, Inc. (Merrimack Energy) has served as Independent Consultant to Hydro-Quebec Distribution (Hydro-Quebec or “Company”) to assist Hydro-Quebec Distribution with the bid evaluation and selection process associated with the Wind-Generated Electricity Call for Tenders For a Total of 450 MW of Installed Capacity (A/O 2013-01). The Call for Tenders is for purchase of a block of wind power produced by facilities in Quebec with an installed capacity of 450 MW, comprised of 300 MW from wind farms in the Bas-Saint-Laurent and Gaspesie-Iles-de-la-Madeleine regions and 150 MW from projects across Quebec, which will be connected to Hydro-Quebec’s main grid by the following deadlines: (1) 100 MW by December 1, 2016; and (2) 350 MW by December 1, 2017. As Independent Consultant, Merrimack Energy’s role in the process has included the following: ¹

- Provide independent input and advice on issues requested by Hydro-Quebec Distribution based on our experience with other competitive solicitation processes throughout North America for renewable and conventional resources. ²
- Review the detailed evaluation criteria, evaluation of bids received at each Step in the process, and resulting documentation developed and utilized by Hydro-Quebec Distribution’s evaluation team to complete the evaluation and selection to ensure that there is consistency in how the scoring of bids was undertaken.
- Conduct an independent assessment of the price and non-price evaluations of all or a sample of the bids received to ensure that Hydro-Quebec Distribution’s bid evaluation process is fair, equitable, consistent and unbiased.
- Serve as a member of the Call for Tenders Committee.
- Conduct research, as required, on key issues based on industry practices from other jurisdictions.

This report addresses the activities associated primarily with the bid evaluation and selection stages of Hydro-Quebec Distribution’s Call for Tenders (A/O 2013-01) for the purchase of 450 MW of electricity generated in Quebec from wind farms. The objective

¹ The scope of the mandate for services for Merrimack Energy ends at the conclusion of the Step 3 evaluation and does not include contract award.

² The Principal of Merrimack Energy and Project Manager for this assignment has served as Independent Evaluator or Monitor on over sixty competitive procurement assignments and has assisted utilities and other power buyers in nearly eighty major procurement processes, conducting independent evaluation and review of thousands of power supply proposals for renewable and conventional resources.

of this assessment is to comment on the fairness and consistency of the bid evaluation and selection process. The assessment will focus on the established Call for Tenders procedures and evaluation processes and the consistency and fairness of the actual evaluation process relative to the requirements of Hydro-Quebec Distribution's Wind-Generated Electricity Call for Tenders (A/O 2013-01) and with general industry standards for similar competitive solicitation processes. The report primarily addresses the three steps of the evaluation and selection process, including (1) evaluation of bids as per the minimum requirements, (2) ranking of bids based on the cost of electricity and qualitative or non-price criteria, and (3) simulation of bid combinations to determine the lowest total cost in \$/MWh.

This report also focuses largely on the role and activities performed by Hydro-Quebec Distribution's Evaluation Team during the bid evaluation and selection process, leading to the selection of the preferred projects.

For purposes of undertaking this assessment of the Wind-Generated Electricity Call for Tenders process and procedures associated with the evaluation and selection of bids, the following issues will be addressed in this report:

1. A brief summary and overview of the major aspects of the Call for Tenders Process for Wind-Generated Electricity For a Total of 450 MW of Installed Capacity.
2. A brief discussion of the various steps or activities in the bid evaluation process as defined in the Call for Tenders documents and related documents, including a discussion of the major requirements of the Wind-Generated Electricity Call for Tenders.
3. A general description of how the bid evaluation process and procedures were carried out by Hydro-Quebec Distribution. Included in this assessment will be a description of the key tasks, the roles of Hydro-Quebec Distribution's Evaluation Team and the role of Merrimack Energy in the process, procedures undertaken to complete the evaluation, documentation prepared by Hydro-Quebec Distribution to support the bid evaluation process, and any issues raised during the bid evaluation and selection process.
4. An overall evaluation of the performance of Hydro-Quebec Distribution in completing these stages of the process.

The overall bid evaluation and selection process and procedures required are identified in the Call for Tenders document. The Call for Tenders document and associated addendum³ explains the process and procedures as implemented, as well as the evaluation criteria. This document effectively establishes the "rules of the game" and the requirements of bidders for competing in this process. In general, the evaluation and

³ This Call for Tenders included three Addenda, which were eventually included in a final Call for Tenders document which included all Addenda.

selection process and procedures followed by Hydro-Quebec Distribution are generally similar to the process followed in other Calls for Tenders or Request for Proposals in other jurisdictions. The changes made to this Wind-Generated Electricity Call for Tenders (A/O 2013-01) relative to previous processes will also be highlighted in this report.

II. Summary and Overview of the Call for Tenders Documents

Through this Call for Tenders (A/O 2013-01), Hydro-Quebec Distribution seeks to purchase electricity generated in Quebec from wind farms in Quebec. The quantity requested is 450 MW of installed capacity on Hydro-Quebec's main power system and is comprised as follows:

- 300 MW resulting from projects from the Bas-Saint-Laurent and Gaspesie-Iles-de-la-Madeleine regions; and
- 150 MW resulting from projects from across Quebec

The term of the contract could be twenty (20) or twenty-five (25) years starting from the commencement of deliveries at the discretion of the bidders. The wind turbines part of the wind farm must be designed to be operated commercially for a term that is equivalent to the term of the contract.

Of the total 450 MW requested, 100 MW must be in service by December 1, 2016 and 350 MW must be in service by December 1, 2017.

The Call for Tenders document also establishes a number of eligibility requirements that bidders must meet to submit a bid:

- A bidder must register for the Call for Tenders;
- The electricity supplier must meet and demonstrate the following requirements:
 - The local environment⁴ holds a participation representing 50% or more of the control of the project; and
 - The project is recognized by a resolution adopted to that end by every regional county municipality and by every local municipality where the project takes place.
- The electricity must originate from the wind farm specified in the bid that is entirely located in Quebec;
- All of the energy generated by the wind farm must be sold to Hydro-Quebec Distribution, except for the energy required for the operation of the auxiliary services and electrical losses up to the delivery point.

⁴ Local environment is defined as having one or more of the following constituents: (1) a regional county municipality (RCM); (2) a local municipality; (3) a Native community; (4) an inter-municipal board; (5) a cooperative the majority of whose members have their domicile in the administrative region where the project takes place.

The Call for Tenders process was initiated with issuance of the Call for Tenders Document (A/O 2013-01) on December 18, 2013. The Pre-bid conferences were held on February 11, 2014 in Montreal and February 13, 2014 in Quebec City. The long lead time allowed bidders the opportunity to collect wind resource data, conduct an exploratory study if preferred and begin the development of their projects. The Bid submission deadline was originally scheduled for September 3, 2014 but was extended by the Regie to November 5, 2014, with Bid opening scheduled for November 6, 2014. A revised consolidated Call for Tenders document, including all Addenda, was issued on October 22, 2014.⁵

Although the due date for receipt of bids was moved back nearly two months, it was not expected that the date for completion of the evaluation would be revised.

Bidders may, in any given bid, submit up to two variants in addition to their main offer. The main offer of a bid cannot be conditional on the acceptance of another project. A bid may contain up to three separate and mutually exclusive offers. A variant may involve differences pertaining to the following:

- Installed capacity of the wind farm;
- Price, among others if the bidder wishes to vary it based on the term of the contract or on the voltage level at which its project could be connected to Hydro-Quebec's system or if the project shares a common delivery point with another (or more) wind farm(s);
- The localization of the delivery point;
- Designated wind turbine manufacturer;
- Wind turbine model.

A site other than the one proposed in the main offer cannot be considered as a variant and must be presented in a separate bid.

Hydro-Quebec Distribution may select the main offer or any of the variants being offered.

With regard to pricing, the price paid for electricity by Hydro-Quebec is a single price that includes the energy and capacity components. The bidder must use one of two pricing formula options described in the Call for Tenders document. The price for electricity offered by the bidder, excluding the cost of the load-balancing services and the complimentary capacity, must not exceed \$90.00/MWh (Cn\$) in 2014 dollars, indexed annually to the Consumer Price Index (CPI). Option one includes a starting price in 2014 escalated at 100% of the CPI. Under Option two, the price is indexed to CPI until the earlier of (a) the guaranteed commencement date of deliveries or (b) the commencement date of deliveries. Starting from the second contract year, 80% of the first contract year price remains fixed and 20% of the first contract year price remains indexed to the CPI

⁵Addendum 1 was issued on July 7, 2014, Addendum 2 was issued on August 21, 2014 and Addendum 3 was issued on October 22, 2014.

for the entire term of the contract to reflect the change in variable costs after commissioning. A bid-year with a price greater than the maximum price will be rejected.

Hydro-Quebec Distribution's objective is to evaluate the bids received and choose the combination of projects that offer electricity at competitive prices by selecting a combination of bids that meets the requirements identified including the requested amount and starting date requirements and will result in the best solution based on the lowest average total cost in \$/MWh, while taking applicable transmission costs into account.

This Call for Tenders process, similar to others conducted by Hydro-Quebec Distribution, is effectively a targeted solicitation process, open only to a specific type of resource (i.e. wind-generated electricity) and eligible participants. Thus, issues associated with fairness and equity in the process will be limited to treatment of individual bidders, not to different types of resources, technologies, project sizes, etc. as is common in other jurisdictions. As a result, these issues will be addressed in this report from the perspective of the unique nature of this solicitation.

In summary, this Hydro-Quebec Distribution Call for Tenders has a number of unique characteristics that distinguish it from other renewable resource solicitation processes. These include:

- Regional and Quebec content requirements, including (a) a requirement that expenses related to the manufacturing of the wind turbines must be realized in wind turbine component plants located in the RCM of La Matanie and the administrative region of Gaspésie-Iles-de-la-Madeline ("eligible region") for a minimum amount equivalent to 35% of the cost of the wind turbines⁶ part of the proposed project and (b) a requirement that expenses related to the bidder's wind farm must be made in Quebec for an amount equivalent to at least 60% of the wind farm's total costs⁷;
- Involvement of a wind turbine manufacturer in the solicitation process. The Bidder must include a statement jointly signed with its wind turbine manufacturer indicating that they have entered into an agreement regarding the manufacture, delivery and price of the wind turbines required for the wind farm. The bidder must also identify the wind turbine components, which it agrees to have manufactured in plants located in the eligible region or elsewhere in Quebec.
- The presence of a ceiling price, which is established at \$90.00/MWh in 2014 dollars, indexed annually to the Consumer Price Index (CPI). Appendix 5 to the Call for Tenders document also provides the pricing options and rules that apply

⁶ A bidder who elects to guarantee the attainment of a regional content exceeding the minimum 35% must indicate this in its bid.

⁷ A bidder who elects to guarantee the attainment of a Quebec content exceeding the minimum of 60% must indicate this in its bid.

in submitting pricing options. A bid year with a price greater than the allowed maximum price will be rejected;

- A cost evaluation process designed to select the optimal combination of bids subject to constraints (and including the transmission costs for each combination or portfolio) necessitated by the established quantity and timing constraints.
- The presence of detailed transmission access, cost and integration implications designed to assist project developers regarding project locations decisions. (described on pages 16-17 of the Call for Tenders document).

Many of the other requirements of the Call for Tenders are consistent with industry practices, including the overall evaluation process, threshold criteria, the number and type of most of the evaluation criteria, requirements of bidders, and contract provisions. These issues will be discussed in the next section of this report.

III. Description and Implementation of the Wind-Generated Electricity Call for Tenders Bid Evaluation Process

A. Description of the Bid Evaluation and Selection Process

The bid evaluation and selection process followed in this Call for Tenders was clearly identified in the Call for Tenders document and is similar to the process followed in other Calls for Tenders issued by Hydro-Quebec Distribution, including the three major steps of (1) evaluation of bids as per the minimum requirements; (2) ranking of bids based on the cost of electricity and qualitative or non-price criteria; and (3) simulation of bid combinations to determine the combination with the lowest overall cost. As will be discussed, the major steps in the process are similar to other Hydro-Quebec Distribution Calls for Tenders, although the criteria developed for this process were specific for this Call for Tenders.⁸

This Chapter of the Report will also provide an overview of the response to the Call for Tenders and identify decisions made at each stage of the process to arrive at a final selection of bids or bid combinations.

As a brief background, the Call for Tenders process was a reasonably competitive process, particularly for projects with a delivery date beginning by 12/1/2017. A total of fifty-four (54) bids representing 6,627 MW were submitted. Including variants, the total number of offer years submitted was one hundred seventy-two (172). A total of nearly fifteen (15) times the amount of generating capacity was submitted relative to the amount requested. Ten project sponsors submitted bids. Five different manufacturers were also represented. A number of bids with both a December 1, 2016 and a December 1, 2017 delivery date were submitted.

⁸ The criteria and weights were revised prior to the original date for bid submission.

Hydro-Quebec Distribution responded to a large number of questions from bidders during the bid preparation stage. A total of 127 questions and answers were posted on the Call for Tenders website. Hydro-Quebec Distribution also issued three addenda to the Call for Tenders in an attempt to ensure that bidders would possess all the information they needed to effectively structure a bid. The three addenda were included in a consolidated Call for Tenders document issued on October 22, 2014.

Step 1 of Evaluation Process: Minimum Requirements

As noted, fifty-four submissions with a total of 172 offer years were received prior to or at the deadline of November 5, 2014 established in the Call for Tenders. Bid opening took place on November 6, 2014 as scheduled.

Consistent with the Call for Tenders process, upon receipt of the bids, a summary of bids is compiled and made public. The evaluation team also reviews the bids to determine if there are any breaches which would automatically result in disqualification.⁹ Hydro-Quebec Distribution shall reject any bid that it deems to be frivolous or non-conforming and bidders have no recourse. A total of seven bids¹⁰ representing 16 offer years were automatically rejected at this stage for failure to provide a signature of participation from a local community.¹¹

All remaining bids were deemed conforming.

In the Step 1 process subsequent to the initial completeness check, the evaluators shall conduct a more detailed review of the bids to determine if there was missing information or if any information presented by the bidders needed further clarification or raised additional questions for follow-up. Any bid deemed frivolous or non-conforming would be disqualified.

Also included during Step 1 in the evaluation process was the evaluation of bids to ensure they conformed to the minimum requirements listed in the Call for Tenders. At this stage,

⁹ Some of the breaches identified in the Call for Tenders document which automatically disqualify a bid include: (1) late submission; (2) the bidder or designated wind turbine manufacturer is not registered; (3) the bid does not state the bidder's name; (4) The bid was not signed by an authorized person or the constituents; (5), the bid does not include a statement signed by both the bidder and his turbine manufacturer regarding an agreement for the manufacture, delivery and price of the wind turbines for the wind farm; (6) the price of electricity offered by the bidder cannot exceed the maximum price or does not conform to the mandatory pricing formula; (7) the dynamic behavior simulation model for the wind farm has not been submitted: and (8) payment for the assessment of the bid and credit evaluation, if applicable, has not been included.

¹⁰ The bids rejected included 7 of the 8 bids submitted by one Supplier.

¹¹Section 1.3.1 of the Call for Tender document states that to participate in Hydro-Quebec Distribution's Call for Tenders, the electricity supplier must meet and demonstrate the following requirements:

- The local government holds a participation representing 50% or more of the control of the project;
- The project is recognized by a resolution adopted to that end by every regional county municipality and by every local municipality where the project takes place.

bidders received clarification and follow-up questions from Hydro-Quebec Distribution on a range of issues, if necessary.¹²

The minimum requirements were expanded in this Call for Tenders to account for the unique requirements of this Call for Tenders. The identified minimum requirements include:

1. Identification of the site for the proposed project and demonstration of control over the site. The site shall be located in Quebec and must be capable of being connected to Hydro-Quebec's integrated system. The bidder must have obtained the rights or undertaken the necessary steps to secure the rights to the land that make up the project site. In the case where the wind farm is located in part or in whole on private land, the bidder must have signed valid letters of intent or option agreements for at least 60% of the units of assessment on which the wind farm infrastructures are to be located. If the wind farm is located on provincial public lands under the administration of the Ministère de l'Énergie et Ressources naturelles (MERN) or any other government ministry, the bidder must submit a letter of intent or an equivalent agreement, signed by an authorized representative from the ministry in question for the awarding of land rights on the public land that the bidder intends to use for the wind farm project. If the ministry issues letters of intent to more than one interested party for a given site, Hydro-Quebec Distribution shall consider only one bid for a given site as part of each bid combination that will be created in Step 3 of the selection process.
2. The price of electricity offered by the bidder, excluding the cost of balancing and complimentary power service, must not exceed \$90.00/MWh (Cn\$) in 2014 dollars indexed annually at 100% to the Consumer Price Index (CPI). A bid year with a price greater than the maximum price will be rejected.
3. For the total quantity of 450 MW, the eligibility for participation in the Call For Tenders process is reserved for bidders who demonstrate that:
 - The local environment has a participation in the control of the project representing 50% or more; and
 - The project is recognized by a resolution of the RCM and by the local municipality where the project is located.
4. All successful projects will have to pay to the local municipality or RCM or the Native community, the annual sum of \$5,000 per MW installed in the territory of the local municipality, the RCM or the Native community.

¹² A number of follow-up questions were issued by Hydro-Quebec Distribution to the bidders during the completeness stage and first stage of the evaluation. Hydro-Quebec Distribution reported that bidders were cooperative in responding to these requests.

5. The bidder or its affiliates must have experience in the development or operation of at least one similar commercial electricity generation project. For the purposes of the evaluation, the achievements of the key personnel of the bidder and of its partners are taken into account;
6. Demonstration of technological maturity of the generation technology proposed. Wind turbine models are considered technologically mature if they are operated in at least three wind farms that have been delivering electricity, on a commercial basis, to public utilities for at least one year with an adequate level of performance. Wind turbines from manufacturers with no experience in the manufacturing and marketing of wind turbines in the same power range are not eligible for this Call for Tenders;
7. With regard to the time required for the connection and integration of the generation facilities, it is the bidder's responsibility to set the time required from the initial energizing of the substation to the guaranteed commencement dates of deliveries that the bidder is proposing. It must be possible to complete all the work necessary for a firm connection and to integrate the generation equipment proposed by the bidder to Hydro-Quebec's integrated system in time to meet the date requested by the bidder for the initial energizing of the substation. Hydro-Quebec Distribution will determine, based on an evaluation prepared, at its request, by Hydro-Quebec TransEnergie, which of among the guaranteed commencement dates of deliveries offered by the bidder, meet this requirement;
8. The wind turbines of the wind farm must be designed so that they can be installed and operated in a cold climate, down to -30 degrees C. The bidder must provide a certification that the wind turbines can operate at such low temperatures;
9. The regional content guaranteed by the bidder for the cost of wind turbines in the wind farm must be at least 35%;
10. The Quebec content guaranteed by the bidder for the implementation of the wind farm must correspond to at least 60% of the wind farm's total costs;
11. The bidder must have wind measurements that originate from wind measurement instruments installed at the wind farm offered in the bid obtained over a period of at least eight months, including the months of December, January, February and March. The bidder must also submit a wind study completed by an expert corroborating the validity of the results obtained, including the estimated generation of the wind farm expressed as average net energy generated over the long term on a monthly and annual basis (P50) along with the annual net energy generated over the long term at level 90% (P90).

In addition, the Call for Tenders document requires bidders who are selected to sign contracts to deposit financial security to cover their contractual commitments for the period preceding the commencement of deliveries (Commencement of Deliveries Security) and for the period following the commencement of deliveries (Operating Security). As listed in the Standard Electricity Supply Contract, delivery term security reaches a cumulative amount of \$20/kW, while operating security reaches a cumulative amount of \$40/kW.

All the information necessary to evaluate the bids from the perspective of meeting minimum requirements was requested in the Bid Form included as Appendix 12 (Bid Form) in the Call for Tenders document. Hydro-Quebec TransEnergie was responsible for making the determination whether the proposal could meet the required commercial in-service date. Hydro-Quebec TransEnergie, therefore, reviewed and evaluated sections of the bids pertaining to this information. At this stage, Hydro-Quebec TransEnergie conducted assessments of the bids submitted on two occasions to determine if the bids could be interconnected in time to meet the proposed commercial in-service date.

Based on Hydro-Quebec TransEnergie’s assessment, 24 bids representing 108 offer years were classified as non-conforming since it was determined that the proposals could not meet the proposed commercial in-service date based on the timing of interconnection and network upgrade requirements. All but one of the bids proposing a December 1, 2016 in-service date were classified as non-conforming. As a result of this determination, twenty-three (23) remaining bids representing 48 offer years and 3,227 MW of generating capacity were eligible for the Step 2 process.¹³ Of the 48 offer years eligible for Step 2, only 1 had an in-service date of December 1, 2016 and 47 had an in-service date of December 1, 2017.

In addition, Step 2: Ranking of Bids

The remaining bids that met the minimum requirements criteria were subject to evaluation based on the seven criteria listed in Exhibit 1 below, which are included in the Call for Tenders document. Once all eligible bids are evaluated in Step 2, the bids shall be ranked according to the number of points obtained for each project. Only the bids with the top points in Step 2 will be retained for Step 3 of the process.

**Exhibit 1
Evaluation Criteria**

| Criteria | Weighting |
|--|------------------|
| i. Cost of electricity | 35 |
| ii. Regional content in excess of the 35% minimum requirements | 15 |
| iii. Quebec content in excess of the 60% minimum requirements | 10 |

¹³ The remaining bids included 13 bids located in Bas-St-Laurent, 1 bid located in Gaspésie, and 9 bids located in the Rest of Quebec.

| | |
|---|-----|
| iv. Manufacturing of strategic components in Quebec | 23 |
| v. Financial strength | 6 |
| vi. Project feasibility | 8 |
| vii. Relevant experience | 3 |
| Total | 100 |

From the cost of electricity perspective, the number of points attributed to a bid is established by comparing its price with that of the other bids. The bid which comprises the lowest price is attributed the maximum points for this criterion. The bid that comprises the highest price gets five points. All other bids are attributed points based on the linear function between the two extremes.

The Step 2 evaluation process also encompasses six qualitative or non-price criteria listed in Exhibit 1. In addition, there were several sub-categories within each of the major categories listed in Exhibit 1. For example, the sub-categories included in manufacturing of strategic components in Quebec list eight components specifically with point totals attributed to each component. Another criterion, project feasibility, includes the following sub-criteria: (1) connection to the transmission system; (2) project master plan; (3) wind data and electricity generation forecast; and (4) environmental permitting plan. Financial Capability also has two sub-criteria such as (1) financial strength of the Supplier; and (2) financing plan. Finally, relevant experience includes two sub-criteria: (1) Prior experience of the bidder and partners in successfully completing similar projects; and (2) designated wind turbine manufacturer's experience and share of the world wind market. Furthermore, Appendix 12 (Bid Form) in the A/O 2013-01 Call for Tenders provided a list of questions, information required to be submitted by the bidder in their proposal, and in some cases forms for completing and incorporating such information in the proposal.

The Call for Tenders document also described each criterion and the important characteristics of each criterion for consideration by the bidder. The evaluation criteria were therefore transparent in the process and all bidders knew the criteria on which they would be evaluated and the weights afforded to each criterion. In addition, Hydro-Quebec's bid evaluation team developed more detailed evaluation worksheets and scoring criteria on which to evaluate and score the bids. As is common in most solicitation processes, these detailed evaluation sheets were used for the internal evaluation process and serve as documentation supporting the award of points in a specific category for each eligible bid. One of the unique aspects of the evaluation criteria is that for the most part the criteria are objective in nature, effectively removing most of the subjectivity generally applied in competitive procurement processes.

Within the non-price evaluation categories, individual team members were responsible for conducting the evaluation of all bids within their specific area of expertise. A second evaluator was assigned to each of the criteria to provide support and verify the results, if needed. The objective of this process was to ensure that all proposals were evaluated fairly and consistently. Each bid would be evaluated based on each of the criteria using

the evaluation sheets developed by the Evaluation Team member responsible for that criteria.

The price evaluation (i.e. Cost of Electricity) in this stage of the process was designed to compare each bid based on the price of energy offered by the bidder including the chosen indexation formula and the transmission costs estimated by Hydro-Quebec TransEnergie. Bidders must use one of the two pricing formulas identified in Appendix 5, Mandatory Pricing Formula, of the Call for Tenders document. These include:

- Pricing indexed to 100% of CPI – under this formula the starting price offered by the bidder (E2014) will be indexed to the CPI. First, the bid price is fully indexed to the CPI to the earliest date between the guaranteed commencement date of deliveries and the commencement date of deliveries. Starting from the second contract year, the price still remains fully indexed to the CPI for the remainder of the contract;
- Pricing indexed to 20% of CPI – under this formula the price is indexed to CPI until the earlier of the guaranteed commencement date of deliveries and the commencement date of deliveries. Starting from the second contract year, 80% of the first contract year price remains fixed and 20% of the first contract year price remains indexed to the CPI for the entire term of the contract to reflect changes in variable cost after commissioning.

The pricing formulas in Appendix 5 are subject to a maximum starting price which will be determined at the earliest of the guaranteed commencement date of deliveries or the commencement date of deliveries. The maximum starting price will be established on the basis of the discounted cost for the Distributor calculated using the pricing formula CPI at 100%, the goal being to obtain an equivalent cost to the Distributor between the pricing formulae.¹⁴

For purposes of Step 2, the cost of electricity takes into account (1) the price of energy offered by the bidder, indexed at CPI, and (2) transmission costs estimated by Hydro-Quebec TransEnergie as described below. The yearly cash flows of the aggregate of these costs over the entire term of the contract are levelized in 2014 dollars and are then expressed as a unit cost of electricity (\$/MWh) using the lesser of the following three amounts (1) Contract energy (annual guaranteed energy) indicated in section 2.1.2 of the Bid Form, (2) Average net long-term forecast energy on an annual basis (P50) as established in the experts report submitted in Section 3.6 of the same formula, (3) Average net long-term forecast energy on an annual basis (P50) as established in the second-opinion report obtained by Hydro-Quebec Distribution, as applicable.

¹⁴ The methodology required to undertake this evaluation is identified in two steps in Appendix 5. In step 1, the objective is to evaluate the unit price for each of the contractual years based on the pricing formulae with CPI at 100% and derive a cash flow based on constant annual deliveries. This cash flow will then be actualized to obtain a new present value (NPV) expressed in 2014 dollars. The second step is designed to find the 2014 price which provides the same NPV as the first step but using the CPI pricing formula at 20% to determine the cash flows. The price of the year 2014 thus determined will establish the maximum starting price.

Hydro-Quebec Distribution used its forecasts of inflation indices, discount rate, and other inputs to estimate the long-term cost of power for each proposal. Forecasts of the input assumptions and index values were developed IHS Global Insight, an independent firm, before bids were submitted.

As noted above, as part of the evaluation and selection process, Hydro-Quebec Distribution takes into account a bid's impact on the total transmission cost applicable, first for each bid in Step 2 of the selection process, and then for each combination of bids assessed in Step 3 of the process. The applicable transmission costs were included in arriving at the cost of energy for each proposal. The impact on transmission costs takes into account the following factors:

- The cost of connecting the wind farm to the regional transmission (315 kV and less) or distribution system, including the cost of modifying the regional system lines and substation and, if applicable, the curtailment cost ;
- Cost of the wind farm's switchyard as defined in the Call for Tenders;
- Electrical loss rate associated with the wind farm's generation;
- Avoided costs associated with any future transmission system investments, if applicable;
- Cost of reinforcing the bulk transmission system (735 kV) as a result of adding new wind farms (only applied in Step 3).

The studies and estimates conducted by Hydro-Quebec TransEnergie at Hydro-Quebec Distribution's request are aimed at establishing a basis for comparison between the various bids being assessed. Since a detailed assessment of each bid's impact on the total transmission cost is both too long and costly to perform, the procedures discussed below are used.

In Step 2 of the process, Hydro-Quebec TransEnergie conducts a summary study in order to determine a connection scenario for each bid. On the basis of this scenario, Hydro-Quebec TransEnergie will estimate the cost of the substation, which is added to the cost of the wind farm collector system as estimated by the bidder, up to Hydro-Quebec's maximum contribution applicable to the cost of the switchyard. Hydro-Quebec TransEnergie will also provide an estimate of the cost of connection to the regional system, the electrical loss rate and the time required to complete the work. If the proposed project results in investments being avoided or deferred, which would otherwise have been required as part of the expansion of Hydro-Quebec TransEnergie's system, these avoided costs will be estimated for the project.¹⁵

Hydro-Quebec TransEnergie also provides an option for bidders to request an exploratory interconnection study for the connection of the wind farm in order to obtain an indication

¹⁵ The Call for Tenders document contains a detailed description regarding the requirements for connection to the Hydro-Quebec transmission system as well as the basis for assessing such costs. The Call for Tenders document contains a map of the Gaspesie Area with the costs and capacity to integrate a project at various points on the transmission grid for purposes of providing guidance to bidders to assist in their project location decisions.

of the connection scenario and costs. This additional step is intended to avoid having significant costs incurred in the preparation of a bid where the electricity transmission costs would be prohibitive and make the bid potentially non-competitive. In addition to costs, the study also provides an estimate of the lead times to integrate the project.

From a cost of electricity perspective, each bid is to be evaluated using the same set of assumptions for each of the indices included in the proposal's pricing formula. Furthermore, since bidders did not have access to the input assumptions, bidders had to present their preferred pricing proposals under the maximum pricing limits established for the allowable indices rather than attempt to "game" their bids relative to the inputs.

The result of this analysis would therefore be a single unit price of power (i.e. the real levelized cost in 2014 dollars, which is the price in year one, which, if escalated by inflation, provides the same net present value price stream as the pricing formula proposed by the bidder). Hydro-Quebec Distribution established the prices for each price formula option to provide the same Net Present Value based on the forecast of the indices used.

For the cost of electricity criteria, the number of points attributed to a bid is established by comparing its price with that of the other bids. The bid which comprises the lowest price is attributed the maximum points for this criterion. The bid that comprises the highest price gets five (5) points. All other bids are attributed points based on the linear function between the two extremes.

The eligible bids will be evaluated and scored relative to the evaluation criteria and associated weights given in the Call for Tenders. The rankings of each bid at this stage of the evaluation would be determined based on the total points obtained for all the criteria, combining both price scores and qualitative factors.

The points attributed for the price and non-price criteria are added up for each bid and the scores shall be ranked in decreasing order of results. No additional offer years were removed from the remaining list of 23 bids and 48 offer years. Thus, all offers that were evaluated in Step 2 were selected and these offer years were then subject to the Step 3 evaluation. Of the total offer years remaining, only one had an in-service date of December 1, 2016. All the others were 2017 projects.

Step 3: Simulation of Bid Combinations

The next step in the evaluation process is the simulation of bid combinations. In this stage of the evaluation, various combinations of bids are formed using the best bids identified and ranked in Step 2 to form the 450 MW requested, by using the bids that obtained the highest score in Step 2.

The cost of these combinations of bids is to be assessed in detail in order to identify those that may constitute the best solution based on the lowest total cost in \$/MWh, including

the impact on applicable transmission costs.¹⁶ To assess the transmission costs in this step, the best combinations are submitted to Hydro-Quebec TransEnergie so that Hydro-Quebec TransEnergie can evaluate the total transmission costs for each combination.¹⁷

In the selection process of the bids in Step 3, various combinations of bids are formed using the best bids identified at the end of Step 2. The number of bids selected for a given combination as well as the number of times a given bid is included in various combinations depends on several factors, including pricing of the bid and applicable transmission cost, the total and annual amount requested for each block, and the award conditions or limits.

The annual cash flows of the aggregate of the electricity costs and total transmission costs over the entire term of the contracts related to those combinations are discounted and levelized in 2014 dollars and expressed as a unit cost of electricity (\$/MWh). The combination of bids that is closest to the requested amount with the lowest average cost in \$/MWh, including transmission costs, will be retained.

The methodology used for selecting and evaluating the preferred combination of bids is based on Integer Programming model software developed internally at Hydro-Quebec. The model allows Hydro-Quebec Distribution to optimize the selection of the project bids and effectively address the constraints¹⁸ that could affect resource evaluation and selection. The model selects the combination of bids with the lowest average cost in \$/MWh (objective function).

Merrimack Energy is familiar with the model from previous Call for Tenders.

B. Implementation of the Bid Evaluation Process

This section of the report describes the actual implementation of the bid evaluation and selection process. This includes identifying and describing the organization of the Evaluation Teams and procedures established by Hydro-Quebec Distribution, the roles and activities of the Hydro-Quebec Distribution's Evaluation Team, the role and activities of Merrimack Energy, and an evaluation of the three steps of the evaluation and selection process.

Management Structure and Organization

¹⁶ Hydro-Quebec Distribution realizes that while a project may bear significant transmission costs on an individual evaluation basis, there may be a significant reduction in transmission costs when these projects are grouped with others to take advantages of synergies with other projects.

¹⁷ It is possible that bids could be less competitive on a stand-alone basis from a transmission cost perspective. However, in combination with other bids, the entire portfolio may be competitive.

¹⁸ The constraints included in the analysis include total capacity requested (450 MW), totals by year (100 MW by December 1, 2016 and 350 MW by December 1, 2017), the MW totals established by Region (300 MW from projects from the Bas-Saint-Laurent and Gaspesie-Iles-de-la-Madeleine regions and 150 MW resulting from projects from across Quebec).

The team responsible for evaluating the bids was managed by the Director, Electricity Supply (Director), who was in charge of implementing the bid assessment and evaluation process and of assigning qualified personnel for this purpose. He was responsible for ensuring compliance with the process and of supervising communications with consultants, bidders, and other divisions of Hydro-Quebec involved in the process. He will be assisted by the Chef Gestion et optimization des approvisionnement (the “Chef GOA”) and by the Chef Planification et fiabilite (the “Chef PF”).

The team is comprised of Hydro-Quebec Distribution personnel, with support from other Hydro-Quebec units (such as Hydro-Quebec TransEnergie). Raymond Chabot Grant Thorton & Cie (“RCGT”) and Merrimack Energy Group, Inc. (“Merrimack Energy”) shall also take part in the bidding process. RCGT acted as Official Representative. The role of Merrimack Energy also consisted of reviewing the documentation used to evaluate the various criteria once the evaluation has been completed by the designated team members to ensure the results are consistent and equitable from one bid to another. They may also be called upon to advise the various team members during the evaluation process.

As was the case with other Call for Tenders, one of the most important aspects of the solicitation process was that the methodologies and criteria underlying the bid evaluation process (Steps 1 and 2) were developed by Hydro-Quebec Distribution¹⁹ prior to receipt of bids and identified to bidders either in the Call for Tenders documents or Addendum to the Call for Tenders. The solicitation process conducted by Hydro-Quebec Distribution is a very transparent process, with a level of transparency that exceeds the levels in most other competitive procurement processes. For example, it is not typical in many Call for Tenders or Request for Proposals processes for the utility to identify how all points or scoring criteria will be applied as Hydro-Quebec has done.

Project Team members responsible for bid evaluation were also involved in designing the criteria and detailed evaluation sheets for scoring purposes for their specific categories for each Step in the process. The criteria underlying the evaluation process were developed to be consistent with the type of resource requested and the unique considerations underlying the wind-generated electricity Call for Tenders.

A representative of Hydro-Quebec Distribution’s Project Team was assigned to each specific criterion. The representative was required to evaluate each bid relative to the same criteria to ensure consistency of the evaluation. A Bid Evaluation Guide was developed prior to receipt of bids and served as an important reference and documentation guide during the evaluation process.²⁰

¹⁹ In its Decision D-2014-180, the Regie requested some adjustments to the non-price evaluation criteria and weights which were implemented by Hydro-Quebec Distribution in its evaluation process.

²⁰ A copy of the Bid Evaluation Guide was provided to Merrimack Energy by the Energy Supply Manager prior to receipt of bids. The Bid Evaluation Guide contains a detailed description of the evaluation criteria along with the evaluation sheets for each criteria that serve as the basis for the documentation of bid results.

The role of Merrimack Energy in the process was defined as reviewing and assessing the evaluation process and documentation prepared and used by members of the Evaluation Team to complete all steps of the evaluation process to ensure consistency in the evaluation and selection results. Merrimack Energy was primarily responsible for reviewing the technical assessment and pricing aspects of the evaluation associated with the application of the evaluation criteria in the evaluation process, including a review and assessment of the minimum requirements evaluation in Step 1, the price evaluation and the non-price evaluation in Step 2, and review of the combination of bids and results in Step 3. Merrimack Energy staff met with each member of Hydro-Quebec Distribution's evaluation team to review and challenge their assessment of bids in Step 1 and 2 and raise any issues, if warranted. To perform this role, Hydro-Quebec Distribution provided Merrimack Energy with a copy of each bid submitted as well as any documentation requested by Merrimack Energy underlying the evaluation of bids.

Consistent with the procedures followed in other Calls for Tenders, Hydro-Quebec Distribution organized a Call for Tenders Committee comprised of the President of Hydro-Quebec Distribution, the Director of Electricity Supply, the Chef GOA and Chef PF, Hydro-Quebec Distribution legal staff and other members of the project team, and representatives from the RCGT and Merrimack Energy. The Committee met several times during the bid evaluation and selection process at each step in the process to discuss the status of bids and address any issues that arose with regard to the bid evaluation and selection process. The meetings of the Committee were generally held at or around the completion of a specific Step in the process to reach a decision on bid selection at each Step.

Bid Evaluation Process

As noted, bids were received on November 5, 2014 and were publicly opened on November 6, 2014. A total of 54 bids representing 172 offer years from 10 bidders were received with a total of 6,627 MW, or approximately 15 times the generating capacity sought. Five wind turbine manufacturers were also represented.²¹

No bids were initially rejected at bid opening.

However, shortly after bid opening, seven of the eight bids from one bidder representing 16 offer years were automatically rejected for failure to provide a signature of participation from a local community to verify the involvement of the community in the project in conformance with the requirements of Section 1.3.1 of the Call for Tenders.

In the case of the projects rejected, Hydro-Quebec Distribution sought legal advice (both internal and external) as to whether the bidders met the requirements of the Call for Tenders and Quebec statutes. Based on both issues, the offers were classified as non-conforming with the basic requirements of the Call for Tenders. Merrimack Energy reviewed the assessment and felt that the decision to reject these offers as being non-

²¹ The wind manufacturers whose equipment was included in the bids included Senvion, Vestas, GE Canada, Siemens, and Enercon.

conforming was reasonable and was supported by legal opinion. As a result, 47 bids representing 156 offer years were eligible for the first step in the evaluation process, the Minimum Requirements assessment.

Also during this stage, Hydro-Quebec Distribution sent out a number of clarifying questions to bidders.

Also during Step 1, Hydro-Quebec TransEnergie conducted an assessment whether the offers could be interconnected on time to meet the latest initial energizing date being requested by the bidder. Based on its assessment, Hydro-Quebec TransEnergie concluded that 24 bids representing 108 offer years would not be able to meet the proposed commercial in-service date based on the timing of interconnection and network upgrade requirements. Only one bid with a 2016 in-service date was deemed eligible. In total, twenty-three remaining bids representing 48 offer years and 3,227 MW of generating capacity were eligible for the Step 2 process. Although the number of eligible bids was reduced significantly and only one option for 2016 remained, the process was very competitive for projects with an in-service date of December 1, 2017.

In the second step of the process, Hydro-Quebec Distribution undertook a detailed price and non-price evaluation of the remaining bids and variants, consistent with the evaluation criteria identified in Exhibit 1 of this report. The pricing analysis (i.e. cost of electricity) and non-price aspects of the evaluation proceeded on parallel paths as well, with separate team members responsible for the price and non-price evaluation.

Cost of Electricity (Price Evaluation or Monetary Criteria)

From the price evaluation perspective, a “check and balance” process was built in to ensure the bids were fairly and consistently evaluated. Hydro-Quebec’s price evaluation team conducted its assessment based on the bidders pricing formula, utilizing its own model and standard assumptions to estimate the real levelized cost of energy for each proposal. One member of the project team reviewed and checked the results of the price evaluation. Merrimack Energy also reviewed the model results completed by Hydro-Quebec Distribution to ensure the results were consistent based on the pricing formulas submitted. Merrimack Energy’s approach involved assessment of the results of the evaluation based on two options for the pricing formulas proposed by comparing the differences between the starting prices for bids escalated at 100% of the CPI with those who have offered 80% of the bid price to be fixed with 20% of the bid price escalating by the CPI. Merrimack Energy reviewed and modeled a sample of the bids to ensure the results were consistent. Merrimack Energy met on two occasions with members of the price evaluation team to review and question the results of any bids deemed appropriate. The first meeting involved review of the bid pricing formulas themselves to ensure the pricing is consistent and does not exceed the ceiling price requirements. The second meeting focused on the calculation results for each of the eligible bids.

Bidders were allowed to use one of the two admissible pricing formulae contained in Appendix 5 of the Call for Tenders document and were required to complete one of the

two tables included in Section 2.2 of the Bid Form. The admissible pricing formulae and starting price offered in the bid will be reproduced in the contract to be awarded. The pricing formula mirrors the contract provisions and therefore clearly identifies how pricing will be affected in the contract depending on whether the bidder meets the guaranteed commencement date of deliveries. The evaluation process assumes the guaranteed commencement date of deliveries is met.

Non-Price Evaluation Criteria

All eligible bids were also evaluated by Hydro-Quebec Distribution's non-price evaluation team members using the established evaluation criteria and weights as the basis for the evaluation, as well as the methodology described in the Bid Evaluation Guide.

The process followed by Hydro-Quebec Distribution for undertaking the non-price evaluation was similar to past solicitation processes. For the non-price evaluation, project team members were assigned to specific criteria and were required to evaluate all bids relative to the specified criteria. All criteria had more detailed and comprehensive sub-criteria to ensure the projects could be effectively evaluated. Project team members completed an initial evaluation of the bids based on the established criteria. The Project Manager from Merrimack Energy also reviewed the bids and focused on the information required to evaluate the bids relative to each criteria.

During the Step 1 and Step 2 processes, a Merrimack Energy representative and Hydro-Quebec Distribution's project team members met to review and discuss the detailed criteria applied by Hydro-Quebec Distribution, the results of the evaluation within each category and justification for the evaluation. Detailed evaluation sheets for several criteria were provided to Merrimack Energy during the initial bid review and evaluation discussions. Merrimack Energy generally considers its role in assessing the non-monetary evaluation in this and other similar processes as "challenging" the utility's evaluation to ensure the results are thorough and consistent. As a result of these meetings and discussions, in some cases certain aspects of the evaluation went through a reassessment of the evaluation results before final assessments were complete. This served to ensure that the evaluation process was fair and consistent, and all reasonable information was accounted for in conducting the evaluation.

The non-price evaluation review was reasonable and relatively straightforward since Hydro-Quebec's project team had developed evaluation criteria that were highly objective as opposed to many other non-price evaluation processes that are subjective or based on subjective evaluation on the part of the evaluation team.

The objective of this process was to ensure that a consistent evaluation of each bid was achieved. Merrimack Energy was of the opinion that the evaluation process undertaken by Hydro-Quebec Distribution's project teams was thorough and comprehensive and marked by very detailed documentation to support the evaluation and scoring results. Merrimack Energy's view was that the level of effort, level of detail and thoroughness of

the evaluation completed by all non-price team members was again more comprehensive than any other evaluation process we have been involved with.

Nevertheless, the evaluation in Step 2 was performed for each of the 48 qualified offer years for final evaluation. The offers were ranked based on total scores for the price and non-price criteria. After the price and non-price scores were compiled, the bids were ranked on the basis of total score. Transmission cost impacts were included in the ranking. Hydro-Quebec's project team management presented detailed information on the evaluation results for each offer and provided graphs that easily depicted the rankings and basis for bid selection.

For the Step 2 process, all 48 eligible bids were selected for the Step 3 process.²² One of the key factors used by Hydro-Quebec Distribution to select all remaining offers was that the one eligible bid with a 2016 in-service date ranked 47th out of 48 bids. Thus, Hydro-Quebec Distribution contemplated whether to include 47 or 48 bids on the list of eligible bids for Step 3 and decided to select all remaining bids for Step 3. The total MWs available to compete for the 450 MW of installed capacity was significantly in excess of the amount required, with 23 projects and 3,227 MW or over 7 times the required amount, indicating the presence of a very competitive process.

However, since Hydro-Quebec Distribution decided to select all 48 eligible bids in Step 2 for the Step 3 combinations process, the detailed non-price evaluation did not influence the selection of the bids

Bid Combinations

In Step 3 of the selection process, various combinations of bids were formed using the bids accepted in the Step 2 process. The basic principle that is applied by Hydro-Quebec Distribution involves selecting the combination of bids that is closest to the requested amount, based on the lowest unit cost for the conditions requested, while taking applicable transmission costs into account.

For the Step 3 process, Hydro-Quebec Distribution provided ten combinations with different weighted average costs (in \$2014/MWh). The combinations selected were based on capacity amounts targeted around 450 MW but with a range of plus or minus 5 MW. Most of the combinations included three projects, while three combinations included four projects. All told, thirteen projects were included in the combinations reported. The lowest cost combination had a cost of energy of \$75.58/MWh in 2014 dollars and the highest cost combination had a cost of energy of \$77.13/MWh in 2014 dollars. All combinations included transmission costs for the entire combination of projects. The lowest cost combination was selected for contract award.²³

²² As a result the non-price evaluation essentially had no impact on selection for Step 3 since all remaining eligible bids were accepted for Step 3.

²³ This combination had a cost of energy of \$75.58/MWh in 2014 dollars, which was comprised of a commodity cost of \$70.64/MWh and transmission cost of \$4.94/MWh. The total MW included in this combination was 446.4 MW.

To assess the reasonableness of the cost of these projects, Hydro-Quebec Distribution asked Merrimack Energy to undertake a benchmark assessment of wind project costs in other North American markets. The results of this analysis are included in Merrimack Energy's report entitled "Competitive Cost of Wind Power". The results of that study illustrate that the levelized cost in 2014 dollars for the combination of bids selected by Hydro-Quebec Distribution is very competitive when compared to market benchmarks in the North American market, including recent wind projects in the Northeast and study results under the capital cost scenarios considered in Merrimack Energy's assessment. The levelized cost in 2014 dollars calculated by Hydro-Quebec Distribution, excluding network upgrade and other transmission costs which are not included in Merrimack Energy's benchmark analysis, result in levelized costs in Canadian dollars in the low \$70/MWh range.

IV. Framework and Principles for Evaluating Hydro-Quebec Distribution's Performance in the Bid Evaluation and Selection Process

This Wind-Generated Electricity Call for Tenders For a Total of 450 MW of Installed Capacity (A/O 2013-01) is classified as a targeted solicitation process limited to a specific resource and product. Based on Merrimack Energy's experience with competitive bidding processes and observations regarding such processes, the key areas of inquiry and the underlying principles used by Merrimack Energy to evaluate the bid evaluation and selection process include the following:

1. Were the solicitation targets, principles and objectives clearly defined?
2. Did the solicitation process result in competitive benefits from the process?
3. Was the solicitation process designed to encourage broad participation from potential bidders?
4. Did Hydro-Quebec Distribution implement adequate outreach initiatives to encourage a significant response from bidders?
5. Was the solicitation process consistent, fair and equitable, comprehensive and unbiased to all bidders?
6. Were the bid evaluation and selection process and criteria reasonably transparent such that bidders would have a reasonable indication as to how they would be evaluated and selected?
7. Did the evaluation methodology reasonably identify how quantitative and qualitative measures would be considered and applied?

8. Did the Call for Tenders (i.e. Call for Tenders document, the Bid Form, and Standard Contract) describe the bidding guidelines, the bidding requirements to guide bidders in preparing and submitting their proposals, and the bid evaluation and selection criteria?
9. Did the utility adequately document the results of the evaluation and selection process?
10. Did the solicitation process include thorough, consistent and accurate information on which to evaluate bids, a consistent and equitable evaluation process, documentation of decisions, and guidelines for undertaking the solicitation process?
11. Did the solicitation process ensure that the Power Purchase Agreement was designed to minimize risk to the utility customers while ensuring that projects selected can be reasonably financed?
12. Did the solicitation process incorporate the unique aspects of the utility system and the preferences and requirements of the utility and its' customers?

The implementation of the Wind-Generated Electricity Call for Tenders for 450 MW of Installed Capacity (A/O 2013-01) solicitation process relative to the characteristics identified previously is described below. Merrimack Energy has not been involved in the contract preparation process and is thus not in a position to discuss this objective.

1. Solicitation Targets

The Call for Tenders (A/O 2013-01) document, consistent with other Hydro-Quebec Distribution Call for Tenders, clearly defined the amount of capacity requested, the timing for providing the capacity, the type of products and product characteristics required, the duration of the contract, amount of MW required by location within Quebec, bidder eligibility, and the context of the Call for Tenders with regard to the Quebec Government mandate. Merrimack Energy's opinion is that the solicitation targets and product requirements are clearly defined in the Call for Tenders.

2. Competitive Benefits

The solicitation process received a robust response from the market. A total of 54 bids were submitted by 10 project sponsors representing 6,627 MW and 172 offer variant years. The amount of MW offered represented 15 times the amount requested. Even after a significant number of offer years were deemed ineligible, primarily due to the time required to interconnect the projects to Hydro-Quebec's transmission system, a total of 23 bids and 48 offer years were eligible for the Step 3 process. These bids represented 3,227 MW or 7 times the amount requested. Furthermore, the average cost of the combination of the bids selected is very competitive with recent actual wind project costs

and study results, illustrating the competitive nature and benefits from the Call for Tenders process.

The one major drawback in the process was the lack of competitive options for projects with a December 1, 2016 commercial in-service date. For the final evaluation, there was only one bid with a total MW capacity of 74.8 MW which resulted in Hydro-Quebec not meeting the MW target for 2016 projects.

3. Broad Participation from Potential Bidders

As noted above, the process encouraged a competitive response from large, highly experienced, and financially sound project developers and equipment manufacturers. Five wind turbine manufacturers were represented in the solicitation process. Many of the bidders have participated in previous Hydro-Quebec Distribution Call for Tenders. In our view, this response indicates the bidders have confidence that Hydro-Quebec will undertake a fair process, carry out the process as indicated, follow the bidding guidelines and protocols, and select projects through the process as indicated. Also, the level of community participation was outstanding.

4. Outreach Initiatives

Hydro-Quebec has done a very effective job of maintaining communications with bidders through their website which is bidder friendly and accessible. The availability of documents, questions and answers, addenda, and notifications about the process allow bidders to maintain accessible contact. The integration between the Quebec Government, the Company, the Regie, and trade associations in Canada has served to effectively “advertise” the process. In addition, Hydro-Quebec Distribution held two bidder’s conferences with high levels of participation at each conference, indicating significant market interest and involvement.

5. The solicitation process should be consistent, fair and equitable, unbiased, and comprehensive

The principal focus of our assessment of Hydro-Quebec Distribution’s Call for Tenders process and the Company’s performance in carrying out the process was on the bid evaluation and selection process. The key criteria (fair, equitable, consistent and unbiased) are applied to Hydro-Quebec Distribution’s implementation of the evaluation and selection process as well as Hydro-Quebec Distribution’s ability to adhere to the requirements outlined in the Call for Tenders document and associated Addendum. Therefore, the critique will focus on the implementation of the process rather than specific issues regarding the process.

In our view, as has been typical of other Call for Tenders processes, Hydro-Quebec Distribution’s evaluation and selection process was consistent throughout. From a non-price perspective, the approach of requiring individual team members to evaluate specific criterion for all bids ensures that bids should be consistently evaluated since the evaluator

has the opportunity to not only evaluate one specific criterion in conjunction with their expertise but to review the relative scoring of each bid within the established criterion. The presence of a back-up for each criteria also provides a second level of review and serves to identify any questions or issues with the evaluation. Merrimack Energy's independent review of the evaluation confirms that the bids were consistently evaluated from a non-price perspective.

In addition, the level of detail and comprehensiveness of the non-price evaluation continues to exceed any solicitation process we have been associated with. The thoroughness of the evaluation process was exemplary and the supporting documentation thorough.

The price evaluation methodologies were designed to evaluate bids using the same or consistent set of input parameters and assumptions. In addition, the real levelized cost analysis applied in Step 2 is an excellent methodology for comparing bids of this nature (i.e. similar resources) on a consistent basis. To ensure consistency in the evaluation, Hydro-Quebec Distribution conducted an initial evaluation along with an internal review of the results. Merrimack Energy also conducted an independent review of the model outputs to ensure the results were consistent with the bid pricing formula submitted and are accurate. In addition, the presence of a price ceiling or cap can encourage bidders to bid prices just below the cap therefore serving to drive up prices. That was not the case in this solicitation where most bidders submitted pricing formulas substantially below the cap. It certainly appears based on review of the bids that the bidders recognized the competitive nature of the process and sought to offer competitive prices.

With regard to bias, the most obvious consideration is whether the process favors one type of bidder over another. Since all bids were for a similar type resource (and technology) any presence of bias would likely be in the implementation of the process itself, rather than the criteria or other information that could affect different bidders. Based on our direct involvement in the process, we could find no examples where one bid was more favorably treated than another. First, the presence of RCGT as Official Representative and its role as link between Hydro-Quebec Distribution and the bidder ensures that all bidders have access to the same information at the same time. In addition, the process was a fairly open process with information pertinent to all bids provided on the Website for review. Hydro-Quebec Distribution responded to large number of questions from bidders and posted all responses on the Website in a timely manner. The Call for Tenders was also designed to explain in detail the evaluation process, the requirements of Hydro-Quebec Distribution, and the information that all bidders were required to submit.

We do not believe any bid had an inherent competitive advantage within the parameters of the Call for Tenders. The non-compliance assessment and follow-up information requirements ensured all bidders provided the same information for evaluation purposes. Also, Hydro-Quebec Distribution was focused on ensuring that all bidders competed on an equal footing and had access to the same information.

In cases where offers were considered non-compliant, Hydro-Quebec provided the bidder an opportunity to provide information clarification when necessary. In cases where it appeared the offers were non-compliant, Hydro-Quebec Distribution still sought an internal and for this solicitation external legal opinion to ensure the decision of non-compliance was reasonable and consistent with Quebec statutes. There were no cases where a specific bidder was completely eliminated from the process. While 7 of the 8 projects submitted by one bidder were eliminated for failure to demonstrate it had secured a firm agreement with a local community, this bidder still had one eligible bid.

The Call for Tenders process was well structured to ensure that the information required in the Call for Tenders document was linked to the evaluation criteria. Hydro-Quebec Distribution requested a considerable amount of information from the bidder to gain an in-depth assessment of the proposed project and utilized all the relevant information to evaluate and score the bid.

The thoroughness of the evaluation criteria also enhanced the ability of Hydro-Quebec Distribution to develop comprehensive information base and documentation to support the non-price and price related evaluation. Merrimack Energy reviewed the non-price and price evaluation documentation and recognizes the thoroughness of the documentation process.

6. Transparency of the Process

The Call for Tenders documents and responses to questions led to a process where bidders would be aware how to effectively compete. The weights of each criterion were provided as well as a description of the requirements within each criterion. The information required of bidders was clear and concise as witnessed by the very complete and consistent proposals submitted by bidders. In addition, the evaluation criteria used for the Step 2 process to score and rank bids is classified by Merrimack Energy as being very objective. As a result, bidders can effectively determine their own non-price scores and develop their projects to maximize project value. Few of the criteria are subject to a subjective evaluation. This served to minimize any subjective analysis of bids and potential bias in the evaluation.

7. Application of Quantitative and Qualitative Measures

The Call for Tenders document clearly articulated the quantitative and qualitative techniques and requirements associated with the evaluation process. The methodologies and models were described in the Call for Tenders. Since many, if not all the bidders who participated, have been participants in other Hydro-Quebec Distribution Call for Tenders, bidders generally are well versed in the Bid Form Template.

8. The Call for Tenders Documents should describe the process clearly and provide adequate information on which bidders could complete their proposals

This objective deals with the quality of the documents contained in the Call for Tenders package (i.e. Call for Tenders, Standard Contract, and Bid Form) and the integration among the documents. Hydro-Quebec Distribution's Call for Tenders provided considerable detail regarding the information required of bidders, the basis for evaluation and selection, and the criteria of importance. The Call for Tenders process clearly provides a direct link between the Call for Tenders document, Bid Form and Standard Contract. The quality of the Call for Tenders documents and the clarity of such documents for the bidders can be observed by the quality and organization of the bids. For the most part, the proposals submitted were complete, thorough in terms of providing the information requested and well organized. We view this to largely be the result of the quality of the Bidding documents. As previously noted, Merrimack Energy has found Hydro-Quebec Distribution's Call for Tenders documents and processes to be among the most transparent processes in which we have participated.

9. Documentation of Results

Based on our review, it is obvious that all evaluators maintained very detailed information to support their evaluation of the bids. This included information contained in the bids, and supporting information provided by other groups within Hydro-Quebec. While Hydro-Quebec Distribution has relied upon outside third-party information and resources, when necessary, in other solicitations, that was not the case in this solicitation with the exception of outside counsel.

10. The solicitation process should include thorough, consistent, and accurate information on which to evaluate bids

The bid form requires a significant amount of information that bidders must include in their proposals. Under Hydro-Quebec's evaluation process, the vast majority of this information is used in the analysis and is consistent with the evaluation criteria developed. The level of information required of bidders ensured that Hydro-Quebec Distribution could undertake a consistent and comprehensive analysis of each proposal and reflect the individual attributes of each proposal into the bid evaluation process. Our review and evaluation has continued to find that Hydro-Quebec's evaluation and selection process was the most thorough and comprehensive assessment we have seen. Every "point" was scrutinized in the evaluation and the internal evaluation criteria on which the analysis was based were carefully and expertly developed to ensure that bids characteristics could be distinguished. We found no biases in the evaluation criteria or process and the documentation to be very thorough.

11. Electricity Supply Contract

Merrimack Energy has reviewed the Electricity Supply Contract to ensure the provisions were consistent with industry standards for wind-generated electricity. Based on our review of this contract along with other contracts issued by other utilities as well as executed agreements, we found that the contract was consistent with industry standards

and provided a fair balance between the needs of the Company and its customers, as well as the bidders.

V. Conclusions

The Call for Tenders procedures followed by Hydro-Quebec Distribution and the subsequent bid evaluation and selection processes and methodologies are, in substance, consistent with industry standards and represent a fair, consistent, and unbiased evaluation and selection process. The following summarize some of the major considerations relative to the consistency of the Call for Tenders with industry standards.

In the opinion of Merrimack Energy, the bid evaluation and selection process was undertaken by Hydro-Quebec Distribution in a fair, consistent and comprehensive manner. In addition, in our view, this process was again among the most thorough, rigorous, and comprehensive evaluation and selection process we have observed, with every eligible bid scrutinized in great detail, despite the reduced schedule imposed in this solicitation. Both the price and non-price assessments were expertly undertaken, which should result in reasonably competitive prices, viable projects, and benefits to customers.

The bid evaluation and selection process was consistent with industry standards for similar procurement processes. Furthermore, the bid evaluation and selection process was undertaken in a consistent and comprehensive manner with all bids treated fairly and equitably. A list of important aspects of the Call for Tenders bid evaluation and selection process is provided below.

1. The Call for Tenders was a very competitive process, with over 15 times the amount of Megawatts initially bid than the amount required. Five different wind turbine manufacturers were also represented.
2. The Call for Tenders Document (A/O 2013-01) was a detailed and transparent document that clearly identified the unique nature of the solicitation process, the products requested, the information required of the bidders, and the bid evaluation and selection process.
3. Hydro-Quebec Distribution responded to a number of questions from bidders and issued three addenda to the Call for Tenders in an attempt to ensure that bidders would possess all the information they needed for submitting a bid. The three addenda were included in a consolidated Call for Tenders document issued on October 22, 2014. In our view, Hydro-Quebec Distribution staff was very responsive to the needs of bidders and such communication with bidders led to comprehensive and responsive proposals.
4. The three-stage evaluation process followed by Hydro-Quebec Distribution (i.e. Minimum Requirements, Ranking of Bids based on price and non-price criteria, and Simulation of Bid Combinations to determine lowest overall cost) outlined in the Call for Tenders is, in substance, consistent with the

approaches followed by other utilities for renewable resource solicitations for the same type of resource. In particular, the use of pricing analysis as the final criteria for selection of the preferred combination or portfolio of bids is common practice in the industry.

5. The price analysis undertaken in Step 2 assessed each proposal based on the pricing formulas proposed by the bidder, subject to maximum price allowable. The analysis used the same consistent set of economic assumptions and forecasts of indices selected by bidders in their proposals, thus ensuring that all bids were fairly and consistently evaluated. All bids were assessed in the second stage of the evaluation using a typical price evaluation methodology (i.e. real levelized cost analysis) standard in the electric utility industry. None of the bidders violated the maximum price level. The results actually illustrated that bidders submitted pricing proposals significantly below the cap, illustrating the level of competition expected and experienced.
6. The economic screening methodology used in Step 2 was effective in comparing bids with different commercial operation dates and generation levels. Given the number of bids received and the time allotted to conduct the analysis, this methodology proved effective in evaluating and ranking the different proposals and variants.
7. All proposals that passed the Minimum Requirements stage were thoroughly and consistently evaluated and ranked based on a detailed price and non-price assessment. All evaluation scores were thoroughly scrutinized by Hydro-Quebec Distribution's bid evaluation team and Merrimack Energy staff. Merrimack Energy reviewed the economic model outputs and assessed the results of the price evaluation.
8. Hydro-Quebec Distribution followed an approach to bid evaluation that included auditing of the results of several non-price criteria by members of the Company's Evaluation Team. Merrimack Energy also reviewed a sample of the bids. Merrimack Energy met with the members of the bid evaluation team responsible for each evaluation criteria to assess the results and discuss the basis for evaluation. In all cases it was very obvious that members of the evaluation team had carefully defined the detailed criteria on which to evaluate each bid within their overall criterion, conducted a thorough and comprehensive review, and prepared detailed documentation to support the results. The result was that "every point" was scrutinized.
9. The non-price criteria were developed to reflect the unique nature of the product sought (i.e. wind generated electricity). Criteria such as regional content in excess of minimum requirements, sustainable development, quality of the wind data, and the consistency of the wind data with the projected generation levels were important for distinguishing bids. Merrimack Energy also found that the non-price criteria were very objective in nature as

developed by Hydro-Quebec's project team. The objective nature of the criteria minimizes any bias that may be associated with more subjective criteria.

10. Hydro-Quebec Distribution included all direct project costs as well as system transmission and interconnection costs associated with each bid in Step 2 and evaluation combinations in Step 3 in the evaluation process, in conformance with the Call for Tenders procedures. This is consistent with the approach undertaken by most utilities in the bid evaluation process, which is designed to include all costs in the analysis.
11. The implications of the timing of the commercial in-service date for the projects proposed in conjunction with the time required by Hydro-Quebec TransEnergie to interconnect the resources to the Hydro-Quebec grid was a significant issue affecting the number of allowable bids at the Step 2 and Step 3 processes. A total of 23 bids and 108 offer years were determined to be non-conforming during the Step 1 evaluation and assessment. Only one bid with a December 1, 2016 commercial in-service date was eligible for the Steps 2 and 3 evaluation process.
12. The final list of bids selected for the Step 3 combinations was comprised of 23 bids and 48 offer years. All bids that were evaluated in the Step 2 process were selected for the Step 3 evaluation based on the ranking of the only bid qualified to meet the 100 MW target for 2016 of 47th out of 48. However, selection of a relatively large number of bids for competition in the Step 3 process ensured the process would remain extremely competitive.
13. The combination recommended was the combination of bids that resulted in the lowest overall average cost of the portfolio, consistent with the requirements of the Call for Tenders. Our assessment is that the cost of the bids selected results in overall average costs (both without and with transmission costs included) that are very competitive with wind projects contracted in other regions of North America, which should provide overall benefits to customers.

In conclusion, it is our view that the approach and assessment undertaken by Hydro-Quebec Distribution is fair, consistent, comprehensive and unbiased. Hydro-Quebec Distribution established procedures and rules which guided the evaluation and selection process, and consistently applied such procedures. The evaluation and selection process (both price and non-price) was again the most detailed and rigorous process we have observed. As a result, all bidders were evaluated under the same detailed standards and "every point" was carefully scrutinized.