

April 29, 2022

**Independent Electricity System Operator**

120 Adelaide Street West, Suite 1600  
Toronto, Ontario  
M5H 1T1

**Reference: Long-Term 1 RFQ**

Dear Sir, Madam,

Thank you very much for providing AB Energy Canada Ltd. (ABECA) with an opportunity to provide input for the upcoming LT1 RFQ.

At ABECA we have successfully designed, built and operated 8 greenhouse CHP projects under CHP 1 and CHPSOP 2, totalling an installed capacity greater than 55 MW as well as several other greenhouse CHP plants that operate independent from the grid due to lack of grid power availability, bringing the total installed capacity we have delivered into the greenhouse sector to more than 80 MW.

The typical ownership structure of a greenhouse CHP project is different from typical power projects as the greenhouse owner typically owns the entire greenhouse facility, including energy plant, boilers, chillers, etc. A CHP plant installed at a greenhouse site also typically is owned by the greenhouse. As was demonstrated most recently from the CHPSOP 2 program, greenhouses are quite capable of developing CHP plants integrated in their greenhouse operation without prior generation ownership experience.

At ABECA we believe that greenhouses continue to represent a tremendous opportunity to contribute to Ontario's electricity needs for the following reasons:

- All heat recovered from the generators can be utilized in the greenhouse, resulting in an overall system efficiency greater than 90%.
- Exhaust gases can be cleaned such that they can be sent directly into the greenhouse for plants to absorb the CO2 to increase crop production and quality
- CHP plant is fully dispatchable at any given time and can run against market price
- CHP plant can go from standstill to full load operation within 5 minutes
- Any heat produced by the CHP plant that cannot immediately be used in the greenhouse can be stored in already existing thermal buffer tanks for use later
- The growing electricity needs in Southwestern Ontario are very much driven by the growing greenhouse sector. Implementing CHP in greenhouses results in electricity being produced where it is needed, avoiding transmission and distribution losses while also minimizing investment in expanding transmission and distribution capacity
- Typical project timeline is 14-16 months from date of contract award to Commercial Operation Date
- The CHP plant is also capable of running on renewable natural/hydrogen gas when this becomes widely available which will facilitate a transition to low carbon or carbon neutral operation.
- Adding CHP to Ontario Greenhouse operations not only creates additional employment and diversification of energy supply to the greenhouse, it also strengthens the financial position of participating greenhouses which in turn improves the food security in Ontario.

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**AB Energy Canada Ltd. > [gruppooab.com](http://gruppooab.com)**

30 Fair Road, Unit 2, Guelph, Ontario, N1K 0A1, Canada

T. +1 (519) 846 93 69 F. +1 (416) 907 39 76 - [abenergycanada@gruppooab.com](mailto:abenergycanada@gruppooab.com)

BUSINESS #: 832149462 - HST#: 832149462 - CORPORATION NUMBER/NUMÉRO DE SOCIÉTÉ: 855222-3

AB Energy Canada Ltd. is a company of the / est une société de AB HOLDING SPA GROUP - 25034 Orzinuovi BS (Italy) - VAT IT02243290984

To better accommodate for greenhouses to participate in the LT1 RFQ and LT1 RFP we recommend the following changes to the draft LT1 RFQ:

**Paragraph 1.4: Participation in the LT1 RFQ**

Currently the LT1 RFQ envisions Small-Scale projects which would range from 1-5 MW and Large-Scale projects which would range from 5-600 MW.

*We recommend the IESO adds a 3<sup>rd</sup> category that is from 5-30 MW (perhaps up to 50 MW) as this is a size range that would be very well aligned with today's modern greenhouse sizes and their energy needs.*

**Paragraph 3.3: Qualifying Experience**

As we demonstrated during the CHPSOP 2 program, a successful development team for greenhouse CHP projects included the following team members:

- Greenhouse (proponent/owner)
- Project developer (AB Energy Canada Ltd.) also acting as prime contractor
- Engineering Firm
- Mechanical, electrical, and civil contractors

Although there is no greater Ontario experience available to develop greenhouse CHP projects, we do not meet the qualification criteria for LT1 RFQ because we do not have prior generation ownership experience. Furthermore, if the IESO requires proponents to have prior generation ownership experience, this will not only add significant cost to the development of projects, it will also eliminate many potential projects that otherwise would be able to deliver the most efficient and cost effective electricity to the Ontario power grid. This as was demonstrated by 7 projects built in response to CHPSOP 2, which all achieved Commercial Operation before the contract deadline and have successfully operated ever since.

*We therefore strongly recommend against prior generation ownership as a requirement to meet the required development experience. Instead, we would suggest that demonstrating that if a Control Group Member has successfully developed 2 or more projects that achieved commercial operation would be acceptable as meeting the required development experience.*

We also believe that several CHPSOP 2 proponents that either did not qualify or proceed with a project at the time are able to participate in the Expedited RFQ.

Although not relevant for LT1-RFQ, we believe there are several additional contract enhancements possible that will help lower the cost of new capacity. We would be very interested in a dialogue with the IESO to discuss how this could be incorporated in the LT1-RFP.

Should you have any questions, or require any additional information, please do not hesitate to contact me either by email or at [REDACTED].

Yours truly,

A handwritten signature in blue ink, appearing to read 'Jan Buijk', is written over a white background.

**Jan Buijk, Ing.**  
CEO

[REDACTED]

# Feedback Form

## Draft Long-Term RFQ – Version 2 posted April 22, 2022

### Feedback Provided by:

Name: Jan Buijk

Title: CEO

Organization: AB Energy Canada Ltd.

Email: [REDACTED]

Date: April 29, 2022

The Independent Electricity System Operator (IESO) is seeking feedback from participants on the proposed revisions captured in version 2 of the draft Long-Term Request for Qualifications (LT1 RFQ). The LT 1 RFQ will seek to ensure that interested parties have sufficient financial capacity and experience to undertake project development for the LT1 RFP.

The draft LT1 RFQ can be found on the [Long-Term RFP webpage](#).

**Please provide feedback by May 2, 2022 to [engagement@ieso.ca](mailto:engagement@ieso.ca).**

Please use subject header: *Draft Long-Term 1 RFQ*. To promote transparency, this feedback will be posted on the [Long-Term RFP webpage](#) unless otherwise requested by the sender.

The IESO will work to consider and incorporate comments as appropriate and post responses on the webpage.

Thank you for your contribution.

## Draft LT 1 RFQ

<b>Topic/ RFQ Section</b>	<b>Feedback</b>
<b>Qualification Submission</b>  Qualification Submission / Section 2.7 (b)(i)	No comments
<b>Team Member Mandatory Requirements</b>  Large-Scale Team Member Experience / Section 3.2 (a)	No comments
<b>Team Member Mandatory Requirements</b>  Small-Scale Team Member Experience / Section 3.2 (b)	No comments

Topic/ RFQ Section	Feedback
<p data-bbox="181 163 854 233"><b>Evaluation of Entity Development Experience Threshold</b></p> <p data-bbox="181 275 906 344">Large-Scale Entity Development Experience Threshold / Section 3.3 (a)</p>	<p data-bbox="935 174 1511 321">As was demonstrated during the CHPSOP 2 program, a successful development team for greenhouse CHP projects included the following core team members:</p> <ul data-bbox="984 344 1507 516" style="list-style-type: none"> <li data-bbox="984 344 1414 373">• Greenhouse (proponent/owner)</li> <li data-bbox="984 373 1507 428">• Project developer (also acting as prime contractor)</li> <li data-bbox="984 428 1235 457">• Engineering Firm</li> <li data-bbox="984 457 1406 516">• Mechanical, electrical, and civil contractors</li> </ul> <p data-bbox="935 583 1511 772">Although there is no greater Ontario experience available to develop greenhouse CHP projects, a team like this does not meet the qualification criteria for LT1 RFQ because it does not have prior generation ownership experience.</p> <p data-bbox="935 800 1511 1346">Furthermore, if the IESO requires proponents to have prior generation ownership experience, this will not only add significant cost to the development of projects, it will also eliminate many potential projects that otherwise would be able to deliver the most efficient and cost effective electricity to the Ontario power grid. This as was demonstrated by 7 projects built in response to CHPSOP 2, which all achieved Commercial Operation before the contract deadline and have successfully operated ever since. For non of these projects did any of the team members have prior generation ownership experience</p> <p data-bbox="935 1373 1511 1759"><b><i>We therefore strongly recommend against prior generation ownership as a requirement to meet the required development experience. Instead, we would suggest that demonstrating that if a Control Group Member has successfully developed 2 or more projects that achieved commercial operation would be acceptable as meeting the required development experience.</i></b></p>

Topic/ RFQ Section	Feedback
<p data-bbox="181 163 854 233"><b>Evaluation of Entity Development Experience Threshold</b></p> <p data-bbox="181 268 906 338">Small-Scale Entity Development Experience Threshold / Section 3.3 (b)</p>	<p data-bbox="935 170 1511 317">As was demonstrated during the CHPSOP 2 program, a successful development team for greenhouse CHP projects included the following team members:</p> <ul data-bbox="984 342 1507 512" style="list-style-type: none"> <li>• Greenhouse (proponent/owner)</li> <li>• Project developer (also acting as prime contractor)</li> <li>• Engineering Firm</li> <li>• Mechanical, electrical, and civil contractors</li> </ul> <p data-bbox="935 579 1511 768">Although there is no greater Ontario experience available to develop greenhouse CHP projects, a team like this does not meet the qualification criteria for LT1 RFQ because it does not have prior generation ownership experience.</p> <p data-bbox="935 800 1511 1346">Furthermore, if the IESO requires proponents to have prior generation ownership experience, this will not only add significant cost to the development of projects, it will also eliminate many potential projects that otherwise would be able to deliver the most efficient and cost effective electricity to the Ontario power grid. This as was demonstrated by 7 projects built in response to CHPSOP 2, which all achieved Commercial Operation before the contract deadline and have successfully operated ever since. For non of these projects did any of the team members have prior generation ownership experience</p> <p data-bbox="935 1373 1511 1759"><b><i>We therefore strongly recommend against prior generation ownership as a requirement to meet the required development experience. Instead, we would suggest that demonstrating that if a Control Group Member has successfully developed 2 or more projects that achieved commercial operation would be acceptable as meeting the required development experience.</i></b></p>

Topic/ RFQ Section	Feedback
<b>Determination of Eligibility</b>  Section 3.4	No comments

## General Comments/Feedback

### **Paragraph 1.4: Participation in the LT1 RFQ**

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