

September 30, 2022

Independent Electricity System Operator 120 Adelaide Street West, Suite 1600 Toronto, Ontaro M5H 1T1

Reference: E-LT1 RFP and LT1 RFP

Dear Sir, Madam,

Thank you very much for providing AB Energy Canada Ltd. (ABECA) with an opportunity to provide input for the E-LT1 RFP. Our comments and questions also would apply to the LT1 RFP that will follow and overlap the Expedited program. Some comments have been made at an earlier date, but we believe it is important to repeat them to provide some context to our feedback.

## **Background:**

At ABECA we have successfully designed and built 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 currently in operation in the Ontario greenhouse sector to more than 80 MW.

The greenhouse 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 there is no interest nor requirement for 3<sup>rd</sup> party ownership of CHP plants in a greenhouse application.

At ABECA we believe that the greenhouse sector continues 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%
- Due to this high system efficiency, fuel charged to power is kept to an absolute minimum, which will result in the lowest possible cost to be bid into the Day Ahead Market
- 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 expanding 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 COD
- 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, but it also strengthens the financial position of participating greenhouses which in turn improves the food security in Ontario.



## In reference to the E-LT1 RFP and the LT1-RFP, we have the following questions and comments:

- Although at AB Energy Canada we are a Qualified Applicant, our interest is to develop multiple projects where the host will own the power generation asset. This project ownership would be identical to ownership of similar projects under CHPSOP, CHP and FiT programs. We strongly recommend the IESO allows for a proponent structure whereby the qualified proponent and its designated team members is required to be part of the entity that submits the final bid but does not necessarily own or have controlling ownership of the project itself. This model has been successfully applied for 8 CHP projects currently in operation and under contract with the IESO.
- Is the 10-proposal limit specific to E-LT1 RFP or will this also apply to LT1 RFP?
  - We already have interest from many more than 10 sites interested in working with us on a bid submission and strongly recommend for the LT1 RFP to either remove the proposal limit or significantly increase it.
- Even-though there may be a 10-proposal limit for the LT1-RFP, can a Qualified Applicant submit more than 10 projects for deliverability tests?
- It is our understanding that a unique project entity (a person) can be created with the Qualified Applicant as controlling owner. Can such entity, be created after deliverability test results are provided, but prior to bid submission?
- Can a proponent form multiple "unique project entities" for multiple bid submissions?
- And can these "unique project entities" submit different prices to reflect location specific requirements/costs?
- If a project is deliverable, can a different qualified applicant other than the one that submitted the deliverability test submit the actual bid?
- If a proponent submits a bid in response to the E-LT1 RFP, and is interested in submitting the same project in response to the LT1 RFP in the event proponent is not successful under the E-LT1 RFP, does the proponent have to submit the deliverability test on January 4, even though it will not be known until February 28 if the E-LT1 bid was successful? Or can a bid that was not successful under E-LT1 RFP, automatically be resubmitted under LT1 RFP without the January 4 deliverability test?
- Is there a price limit on bids into Day Ahead Market (DAM)?
- In the event the bid into the DAM is rejected, can electricity produced by the generator be used for another purpose, such as behind the meter generation?

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

Yours truly,

Jan Buijk, Ing.

CEO