

Request for Information: Contracting for Offer Control

Prepared for the Balancing Pool by London Economics International LLC

January 15th, 2019



The Balancing Pool is a corporation established under the Alberta Electric Utilities Act. Its duties include managing the financial accounts arising from Alberta's transition to a competitive generation marketplace. This transition included the creation and sale of Power Purchase Agreements ("PPAs"). The PPAs separated ownership and offer control for the majority of the province's regulated power plants. The Balancing Pool has offer control over a portfolio of PPAs consisting of 2,284 MW of coal-fired generation. It currently does not have the internal capability to implement certain types of offer strategies and is evaluating options to obtain such capability by contracting with an appropriate third party. Through this Request for Information ("RFI"), the Balancing Pool seeks to establish a pool of qualified, independent third parties that have the capability and expertise to implement certain types of offer strategies should the Balancing Pool, at its sole discretion, choose to pursue such strategies. The third party would be responsible for offer tactics and execution within the broad strategic parameters determined by the Balancing Pool. London Economics International LLC ("LEI") has been engaged as an independent advisor to guide this process. All questions are to be submitted to BalancingPoolRFI@londoneconomics.com. RFI responses must be received by February 15th, 2019 at 5 PM MST.

Table of contents

- 1 BACKGROUND AND SERVICES REQUESTED.....3
 - 1.1 ABOUT THE BALANCING POOL3
 - 1.2 BALANCING POOL'S PPA PORTFOLIO AND OPERATIONS3
 - 1.3 SERVICES REQUESTED.....4
- 2 REQUEST FOR INFORMATION PROCESS6
 - 2.1 KEY DATES6
 - 2.2 PARTICIPANT REGISTRATION6
 - 2.3 Q&A WEBINAR6
 - 2.4 COMMUNICATION AND RFI PARTICIPANT QUESTIONS6
 - 2.5 EVALUATION OF SUBMISSIONS.....7
- 3 RESPONDING TO THE RFI.....8
 - 3.1 FORM OF SUBMISSION8
 - 3.2 REQUIRED RESPONSE SECTIONS8
 - 3.2.1 Cover letter8
 - 3.2.2 Table of contents.....9
 - 3.2.3 Participant information9
 - 3.2.4 Experience and capabilities.....9
 - 3.2.5 Proposed approach.....10
 - 3.2.6 Appendix - Curriculum Vitae of Key Staff11
- 4 DISCLAIMERS12
- 5 APPENDIX: ABOUT LONDON ECONOMICS INTERNATIONAL.....13

Table of figures

FIGURE 1. LIST OF ACRONYMS	2
FIGURE 2. CURRENT BALANCING POOL ENERGY OFFER CONTROL PORTFOLIO	3
FIGURE 3. LEI'S PREVIOUS CLIENTS AND REGIONAL EXPERIENCE	13

Figure 1. List of acronyms

AESO	Alberta Electric System Operator
CV	Curriculum Vitae
EUA	Electric Utilities Act
EMOC	Energy Management Operations Centre
FEOC	Fair, Efficient and Open Competition regulation
LEI	London Economics International
MST	Mountain Standard Time
MSA	Market Surveillance Administrator
OBEG	Offer Behavior Enforcement Guidelines
PPA	Power Purchase Arrangement
RFI	Request for Information
RFP	Request for Proposal

1 Background and services requested

1.1 About the Balancing Pool

The Balancing Pool supports the transition to a fair, efficient, and openly competitive electricity market in Alberta by performing the duties and responsibilities set out in its mandate. These duties and responsibilities include managing any generation assets controlled by the Balancing Pool in a commercial manner, acting as a backstop to certain extraordinary events, and remitting or collecting funds from consumers and generators.

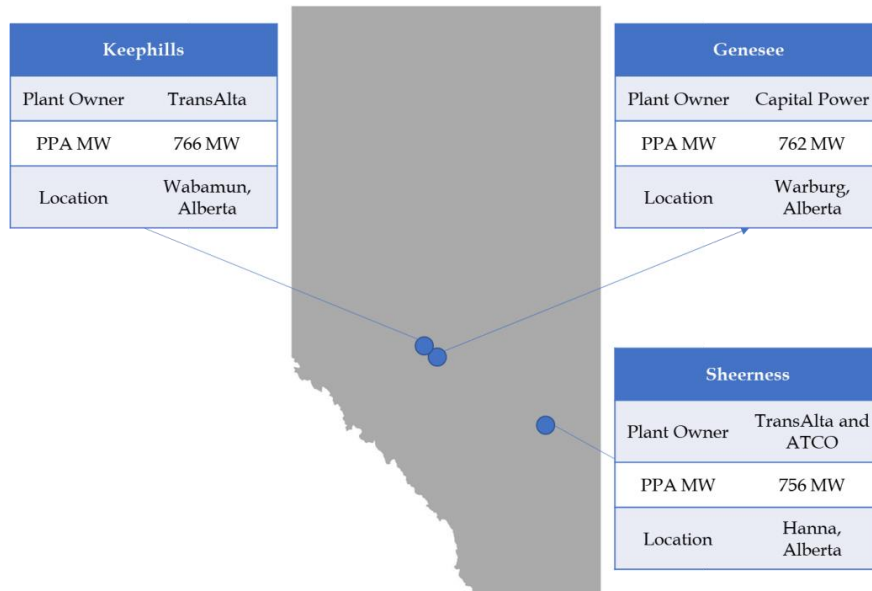
The Balancing Pool’s mandate and duties are established by statutes and regulations including:

- [Electric Utilities Act](#);
- [Balancing Pool Regulation](#);
- [Power Purchase Arrangements Regulation](#);
- [Fair, Efficient and Open Competition Regulation](#); and
- [Alberta Public Agencies Governance Act](#).

1.2 Balancing Pool’s PPA portfolio and operations

To facilitate the transition to a competitive market structure and the deregulation of Alberta’s power industry, PPAs were designed as legislative instruments that separated ownership of a power plant from the right to sell the electricity and capacity from that plant. PPAs applied to the majority of the province’s regulated power plants, including all coal-fired units.

Figure 2. Current Balancing Pool energy offer control portfolio



Source: Balancing Pool

By operation of statute the Balancing Pool has offer control over a PPA portfolio consisting of 2,284 MW of coal-fired generation PPAs, which expire in December 2020. This portfolio consists of the Keephills PPA (766 MW), the Sheerness PPA (756 MW), and the Genesee PPA (762 MW).¹ The Keephills and Sheerness assets were only recently acquired by the Balancing Pool. Details of these PPAs are illustrated in Figure 2.

Capital Power's Energy Management Operations Centre ("EMOC") currently provides the Balancing Pool with 24-hour real time desk services for price offer and plant availability submissions to the Alberta Electricity System Operator ("AESO"), relaying of unit dispatch instructions from the AESO to the power plants, any necessary energy or plant availability restatements and compliance support.

1.3 Services requested

The Balancing Pool has the option to consider alternative offer strategies or to maintain its existing offer strategy, as it deems appropriate, as long as it continues to fulfil its mandate to manage generation assets in a commercial manner. In accordance with its statutory obligations and mandate, the Balancing Pool is evaluating options to potentially alter its offer strategy in the future.² Such options may require greater trading capability than the Balancing Pool presently possesses.

Although the Balancing Pool's generation portfolio has recently increased significantly, it is not commercially reasonable or practical for the Balancing Pool to develop its own trading operations and staff to implement any major potential changes to its offer strategy given the limited time left before the PPAs expire. Through this RFI, the Balancing Pool seeks to establish a pool of qualified independent third parties that have the capability and expertise to potentially implement alternative offer strategies for the Balancing Pool's portfolio.

The Balancing Pool invites input from third parties regarding the development and implementation of alternative offer strategies, however the parameters of such strategies and the decision whether to implement such strategies shall ultimately remain at the sole discretion of the Balancing Pool. If the Balancing Pool chooses to pursue an alternative offer strategy, the third party's role will be to use its expertise to optimize the Balancing Pool's portfolio within the parameters of that strategy. The third party would be responsible for implementation and execution of the strategy and would have full discretion over price/quantity pairs and ongoing offer tactics within the broad strategic parameters set by the Balancing Pool.

¹ The Hydro PPA has not been discussed as TransAlta Corporation, the owner of the hydro plants, retains offer control of those assets.

² Balancing Pool. *Condensed Interim Financial Statements and Review For the three and nine months ended September 30, 2018 (Unaudited)*. Nov 28, 2018. <<http://www.balancingpool.ca/wp-content/uploads/2018/06/Q3-2018-Interim-Financial-Report-Final.pdf>>

This engagement could be for up to approximately 18 months given the expiry of the PPAs in December 2020. The Balancing Pool may invite selected respondents to participate in a subsequent Request for Proposals (“RFP”). If deemed appropriate, the selection of the final service provider will be made from the RFP participants.

Participation in the RFI may be prerequisite to participate in the RFP

While the Balancing Pool reserves the right to adjust parameters when or if an RFP is issued, the Balancing Pool anticipates it may restrict participation in the RFP to those who have responded to this RFI. The Balancing Pool may decide to communicate solely with selected RFI participants regarding the content and timing of the RFP and make no further public announcement regarding the RFP. The Balancing Pool also reserves the right to only communicate with those service providers it chooses to invite to participate in the RFP if one takes place.

The key tasks that the service provider could be expected to undertake may include some or all of the following:

- **Commercial optimization:** The Balancing Pool would require that the selected service provider design and implement offer tactics to optimize the PPAs in the energy and ancillary services markets within the strategic parameters set by the Balancing Pool, continuing to fulfil the Balancing Pool’s mandate to operate the PPA assets in a commercial manner. This service would be provided utilizing the Balancing Pool’s current energy management services provider, EMOC.
- **Forward trading:** The service provider selected may assist in determining and executing energy hedging strategies, should such strategies become possible and prudent for the Balancing Pool, to facilitate the optimization of the Balancing Pool’s assets in the Alberta energy market.
- **Compliance assessment:** The service provider selected would need to have a strong understanding of prevailing legislation, regulation and market rules, including the Fair, Efficient, and Open Competition (“FEOC”) Regulation, and understand how their bidding behavior would be viewed by the MSA. The service provider would also be required to adhere to the AESO rules to ensure regulatory compliance as stipulated by Section 20 of the EUA.

The Balancing Pool encourages proposals from all service providers who can demonstrate the qualifications and skill-sets described within this solicitation. Joint applications and subcontractors are also permitted.

2 Request for Information process

2.1 Key dates

The text box below details key dates for participation in the RFI. Details regarding these dates are found in the following sections.

<u>Key RFI dates</u>
RFI issued: January 15 th , 2019
Q&A webinar: January 30 th , 2019, 2 PM Mountain Standard Time (“MST”)
Deadline to submit written questions: February 5 th , 2019, 5 PM MST
RFI response deadline: February 15 th , 2019, 5 PM MST

If appropriate, the Balancing Pool tentatively expects to launch an RFP process following the RFI process with prequalified RFI participants.

2.2 Participant registration

Formal registration as an RFI participant is required in order to receive future correspondence and updates regarding the RFI process. In order to register, send an email to BalancingPoolRFI@londoneconomics.com with the subject “Register – (RFI participant name)”. In the body of the email, the name of the organization and contact information for the primary point of contact (email and telephone) must be included.

2.3 Q&A webinar

The Balancing Pool will conduct a Q&A webinar on January 30th, 2019, at 2 PM MST to provide a general overview of the RFI requirements, discuss the submission process, and answer questions from RFI participants. Registered RFI participants will receive details of the webinar via email.

Participants are requested to pre-submit a list of questions by emailing BalancingPoolRFI@londoneconomics.com with the subject “Questions – (RFI participant name)”; selected pre-submitted questions will be answered prior to taking questions from the webinar. Following the Q&A webinar, written answers will be circulated to all registered RFI participants.

2.4 Communication and RFI participant questions

All communications from participants regarding this RFI will be initiated by submitting questions via email. Questions can be submitted at any time until February 5th, 2019, 5 PM MST by emailing BalancingPoolRFI@londoneconomics.com with the subject “Questions –” (RFI

participant name). Participants are encouraged to submit questions before the deadline and questions will be answered in order of receipt. The Balancing Pool will make best efforts to answer all questions within 5 business days of receipt, however, the Balancing Pool reserves the right not to respond. Relevant answers will be shared periodically with all registered RFI participants.

2.5 Evaluation of submissions

London Economics International (“LEI”) has been engaged by the Balancing Pool to serve as an independent advisor to guide the RFI and RFP processes. LEI will only consider the information submitted in the RFI response for the purposes of the evaluation process. All submissions will be evaluated by LEI and recommendations will be summarized in a report for the Balancing Pool’s review. Entities with significant load control, offer control or financial positions in Alberta’s electricity market may be viewed as having an irreconcilable conflict of interest. The Balancing Pool will make the final selection of qualified candidates.

RFI responses will be evaluated on:

- completeness and clarity of the submission;
- the depth and breadth of the service provider’s relevant experience;
- financial stability of the organization, potential conflicts of interest and staffing approach; and
- clarity and appropriateness of the proposed approach.

Responses that do not follow the prescribed form and structure may be disqualified. For any minor deviations from the requirement, LEI may (but is not required to) contact the RFI participant for clarification or require a correction prior to evaluation.

3 Responding to the RFI

3.1 Form of submission

All RFI submissions must be emailed to BalancingPoolRFI@londoneconomics.com and received by February 15th, 2019, 5 PM MST. RFI submissions must conform with the following specifications:

- i. Submissions must be sent as an attachment via email; mailed or hand delivered submissions will not be accepted
- ii. File format of submission must be in Microsoft Word (.doc, .docx) format and/or Adobe Portable Document Format (.pdf)
- iii. Files must be saved such that text is searchable and hyperlinks are embedded properly (i.e. URLs and links within the document can be followed) – files must not be scanned
- iv. Individual files should be 10MB or less in size; large files should be sent ahead of the deadline to allow for transmission and confirmation of receipt
- v. Naming convention for the submission must be “BP RFI -” (participants name)
- vi. All pages must state the name of the participant and be marked “***Commercially Sensitive***”
- vii. Submissions are to be written in a clear and concise manner. RFI submission must conform to the structure discussed in more detail in Section 3.2 and the page limit suggestions outlined below. Submissions exceeding the suggested limits may not be reviewed.
 - a. Cover letter: up to 2 pages
 - b. Table of contents: up to 2 pages
 - c. Participant information: up to 2 pages
 - d. Experience and capabilities: up to 10 pages
 - e. Proposed approach: up to 10 pages
 - f. Appendix - Curriculum Vitae of key staff: each CV should be no longer than 4 pages
- viii. Pages are to be letter size (8.5” x 11”); body text will be no less than size 11 font, and use no less than single paragraph spacing (including at minimum 6 pt spacing between paragraphs)

3.2 Required response sections

RFI responses must conform with the following structure and include responses regarding all subsections and questions listed.

3.2.1 Cover letter

A brief introduction to the respondent and summary of qualifications and proposed approach.

3.2.2 Table of contents

Present an outline of the RFI response including section names and page numbers; using a built-in Microsoft Word Table of Contents which has cross-references within the document is encouraged

3.2.3 Participant information

Provide details about the organization and any subcontractors, including company structure and discussion of financial stability:

- i. Name of organization
- ii. Primary contact information
 - a. Name
 - b. Title
 - c. Email
 - d. Address
 - e. Telephone
- iii. Company profile and structure
- iv. Brief history of the organization
- v. Describe financial stability or financial strength of organization

3.2.4 Experience and capabilities

The Balancing Pool is seeking a service provider with substantial expertise and experience in the following areas:

- i. Asset optimization
 - a. Providing asset optimization of energy and ancillary services for third-party electricity generation portfolios
 - b. Optimization of thermal generation assets, with plants and portfolios of comparable size to the Balancing Pool's
 - c. Utilizing a portfolio approach to asset optimization as allowed under Alberta market rules
 - d. Bidding strategy under an energy only market
- ii. Physical and financial electricity trading
 - a. Financial and physical trading on electricity forward markets
 - b. Risk management and hedging strategies for generation assets
- iii. Experience in Alberta market (may be for individuals within the organization rather than the organization itself or subcontractors)
 - a. Understanding of AESO rules and regulations
 - b. Understanding of FEOC regulations and how bidding actions could be viewed by the MSA
 - c. Alberta market participant status
 - d. Information sharing and internal compliance programs

- iv. Scheduling and offer pricing
 - a. Understand scheduling and dispatch services provided for an electricity generation portfolio, in particular with respect to thermal generation assets

Describe qualifications, expertise and professional experience in the relevant areas. This description should detail:

- the number of years of experience;
- regions or markets operated in;
- types of financial products utilized;
- fuel-type and capacity of generation portfolios;
- the specific responsibilities and/or strategy; and
- other details as required.

3.2.5 Proposed approach

Submissions must include responses and discussion regarding the following questions, which are intended to help the Balancing Pool understand how the service provider proposes to approach certain issues in this engagement. If an RFP is released, the selected participants may be given additional information and would be given the opportunity to provide revised detailed discussion of a final proposed approach.

- i. Within a broader overall strategy, what tactics would you use to approach optimization of the Balancing Pool's portfolio?
- ii. What role, if any, could forward trading play in the potential engagement?
- iii. Given recent communication from the MSA regarding Offer Behavior Enforcement Guidelines ("OBEG")³, how would your organization balance the objective of maximizing revenue to the Balancing Pool in a commercially reasonable manner against the need to assure appropriate compliance with competition oversight?
- iv. How would staffing be approached for the services requested? Are any subcontractors envisioned? Would any staff physically be located in Alberta?
- v. What infrastructure do you have in place to support the services requested (i.e. backup communications, backup power systems, 24-hour trading desk, etc.) and what would need to be augmented?
- vi. How would you propose structuring compensation and incentives for the services requested?

³ Alberta MSA. *Re: Offer Behaviour Guidelines prior to the implementation of a capacity market*. Dec 10, 2018. <<https://albertamsa.ca/uploads/pdf/Archive/000000-2018/2018-12-10%20Notice%20re%20Guidelines%20and%20CRA%20Report.pdf>>

- vii. Given the remaining timeframe of the PPAs is relatively short (expiry at the end of 2020), when could the services be fully implemented? An illustrative start date of July 1st, 2019 can be assumed for simplicity. Describe key steps and the proposed implementation schedule
- viii. What risk management and oversight processes are currently in place or have been implemented in the past for similar engagements?
- ix. How is compliance handled in the markets in which you operate? The service provider firm should have a strong internal compliance plan that complies with all regulatory requirements, including those set out in the FEOC Regulation.
- x. What types of credit or collateral requirements would be barriers to your participation?
- xi. Are there any conflicts which could prevent you from providing the services requested, and if applicable, how would any prospective conflicts be addressed?

3.2.6 Appendix - Curriculum Vitae of Key Staff

Provide the resumes or curriculum vitae (“CVs”) of key staff that are proposed to be managing and/or providing the services requested. RFI participants are requested to organize the CVs in a structure which aligns with the desired experience and capabilities discussed in Section 3.2.4.

4 Disclaimers

The Balancing Pool reserves the right to postpone or cancel this invitation at any time for any reason whatsoever. The Balancing Pool may:

- reject any or all of the RFIs;
- accept any RFI;
- if only one RFI is received, elect to accept or reject it;
- elect to discontinue the RFI and/or RFP process at any time, including after the identification of selected participant(s);
- alter any aspect of this RFI;
- elect not to enter into negotiations or execute a contract with selected participant(s); and
- cancel this RFI and subsequently advertise or call for new proposal(s) for the same or different subject matter of the RFP.

The Balancing Pool reserves the right to verify any statement or claim contained in any RFI or made subsequently in any interview or negotiation. Any such verification may be made by whatever means the Balancing Pool deems appropriate and may include contacting references provided by the participant. The Balancing Pool may also contact other parties that are not provided as references by the participant.

The Balancing Pool is not obliged to seek clarification, verification or rectification of any aspect of a proposal or any statement by a participant, including any ambiguity in a proposal or in a statement made by a participant.

A participant is solely responsible for its own costs and expenses in relation to this RFI including the costs and expenses associated with preparing and submitting an RFI, attending Information Meetings, attending interviews, meetings or discussions with the Balancing Pool, and finalization and execution of an RFI, an RFP, and any resulting contract. For the avoidance of doubt, the Balancing Pool will not assume any liability whatsoever for any of the foregoing costs and expenses.

The Balancing Pool will not be held liable or accountable for any error or omission in any part of this RFI, the RFI and RFP process, responses to participant questions or any other information provided to participants. While the Balancing Pool has attempted to ensure an accurate presentation of information in this RFI and responses given to participant questions, the information is supplied solely as a guide for all participants. The information is not guaranteed or warranted to be accurate by the Balancing Pool, nor is it necessarily comprehensive or exhaustive. Nothing in this RFI is intended to relieve participants from conducting their own investigations and due diligence into the facts and forming their own opinions and conclusions with respect to the matters addressed in this RFI, including, all aspects of providing the services as well as risks, contingencies and other circumstances that may influence a participant's evaluation of the cost to it of providing the services.

5 Appendix: About London Economics International

Figure 3. LEI's previous clients and regional experience



London Economics International LLC (“LEI”) is a global economic, financial, and strategic advisory professional services firm specializing in energy and infrastructure. The firm combines detailed understanding of specific network and commodity industries, such as electricity generation and distribution, with a suite of proprietary quantitative models to produce reliable and comprehensible results.

In Alberta, LEI has supported a wide range of market participants on a variety of wholesale market issues, renewable policy design, transmission cost allocation, performance-based rate making, and retail market design. LEI has advised private sector clients, market institutions, and governments on privatization, asset valuation, deregulation, tariff design, market power, and strategy in virtually all deregulating markets worldwide, and has acted as the administrator and evaluator of numerous competitive procurements.

The following attributes make LEI unique:

- *clear, readable deliverables* grounded in substantial topical and quantitative evidence;
- *internally developed proprietary models* for electricity price forecasting incorporating game theory, real options valuation, Monte Carlo simulation, and sophisticated statistical techniques;

- *balance of private sector and governmental clients* enables LEI to effectively advise both regarding the impact of regulatory initiatives on private investment and the extent of possible regulatory responses to individual firm actions; and
- *worldwide experience* backed by multilingual and multicultural staff.