Agenda

• Introductions
• Renewable Electricity Program Background
• REP Round 3
• Fairness Advisor
• Request for Qualifications (RFQ)
• Request for Proposals (RFP)
• Renewable Electricity Support Agreement (RESA)
• Next Steps and Key Dates
Presenters

• AESO
  – Elizabeth Moore, Vice President, Commercial
  – Lisa Boire, Director, Procurement
  – Mohamed Kamh, Manager, Procurement Implementation

• P1 Consulting Inc.
  – Louise Panneton, Fairness Advisor
Renewable Electricity Program
Background
Renewable Electricity Program background

2030 30% target

**2015**
- **NOVEMBER**
  - Climate Leadership Plan announced

**2016**
- **MAY**
  - AESO provided recommendations to GoA
- **NOVEMBER**
  - GoA directed AESO to develop REP

**2017**
- **MARCH**
  - AESO opened Round 1 with REOI
- **APRIL**
  - Round 1 RFQ
- **SEPTEMBER**
  - Round 1 RFP
- **DECEMBER**
  - Winning projects were awarded
Leveraging success of REP Round 1

• REP Round 1:
  – Attracted the lowest renewable electricity pricing in Canada
  – Exceeded the procurement target
  – Attracted national and international interest
  – Positions Alberta as a global player in the renewable electricity field

$30.90 \quad \text{range of winning bid prices} \quad = \quad \$37/\text{MWh}

$43.30 \quad \text{weighted average price}
Competition design features and principles

- Utilize competitive market forces to drive down the cost of support for renewables projects
- Conduct a fair and transparent three-stage competition overseen by an independent fairness advisor
- Minimize barriers to participation
- Be straightforward and efficient
- Do not jeopardize the performance and reliability of the Alberta Interconnected Electric System (AIES)
- Be guided by the principle of allocating risk to those best able to manage it
REP Round 3
Government of Alberta direction

• On March 27, 2018, the Minister approved the AESO’s competition proposal and specifically directed the AESO with respect to the following competition elements:
  – Procure up to 400 MW of renewable generation capacity
  – Utilize an indexed renewable energy credit (Indexed REC) payment mechanism
  – Set the target commercial operation date (COD) for Round 3 projects at June 30, 2021
REP Round 3 key features

• Procure renewable attributes from up to 400 MW of renewable generation projects that meet the following criteria:
  – 5 MW or more
  – New or expanded projects in Alberta
  – Utilize an eligible renewable fuel
  – Connect to existing transmission or distribution system
  – Target COD of June 30, 2021
Anticipated timeline

- **REOI**
  - Opens March 29, 2018
  - EOI forms due April 20

- **RFQ**
  - Opens April 27, 2018
  - RFQ submissions due June 21

- **RFP**
  - Opens September 17, 2018
  - RFP submissions due October 23

- **Award**
  - by December 31, 2018
Development on reserve/settlement lands

- **RFQ**
  - RFQ submissions due June 21
  - Project location confirmed

- **RFP**
  - RFP submissions due Oct 23
  - Reserve: (i) Land designation; (ii) Binding agreement to lease; and (iii) Band Council Resolution requesting lease finalization from the Crown

- **Award**
  - By Dec 31
  - Reserve: Confirm Generator has secured a lease
  - Settlement: Confirm bylaw passed

- **Development**

- **Commercial Operation**

(i) Land designation; (ii) Binding agreement to lease; and (iii) Band Council Resolution requesting lease finalization from the Crown

- Settlement: Lease Agreement subject only to bylaw approval
Fairness Advisor
Fairness Advisor (P1 Consulting) is engaged by the AESO to oversee the procurement process and confirm that it is fair

We monitor:

• Compliance with the AESO’s procurement process, policies and guidelines

• Compliance with confidentiality and avoidance of conflict of interest requirements

• Review and oversight of the evaluation process to ensure that it is consistent with the RFQ/RFP and applied fairly, objectively and free of bias

• Fair and equitable treatment of all Bidders
Actively participates through all stages by:

- Reviewing procurement documents throughout the drafting phases
- Reviewing all communication with Bidders
  - Written (e.g. REOI, RFQ, RFP, Addenda, Requests For Information (RFI) responses, feedback, Requests for Clarification (RFC))
  - Verbal – attending all meetings (e.g. Bidder meetings, de-briefing meetings)
Role of the Fairness Advisor

Actively participates through all stages by:

• Observing and validating evaluation process
• Investigating fairness issues upon request
• Preparing report at conclusion of procurement process
The Fairness Advisor:

• Is overseeing both Round 2 and Round 3 procurements

• Has validated that the procurement processes, including the transmission assessment and selection process, are fair and transparent

• Will oversee that the processes are being applied in a fair manner in both Round 2 and Round 3
Request for Qualifications (RFQ)
RFQ requirements

• Respondents must:
  – Have an eligible project or projects
  – For each project, demonstrate that the respondent can meet the June 30, 2021 target COD
  – Provide evidence of site control for each project
    • Different requirements for projects located on or off reserve or settlement lands
  – Have sufficient tangible net worth (TNW) for all projects submitted
Submission fee

• Fee calculation
  – $1,000/MW (aggregate nameplate capacity)
    • Minimum $10,000 & maximum $50,000
  – $2,500 per additional project if more than one project proposal submitted

• Sample calculations (before GST)

<table>
<thead>
<tr>
<th>Number of Projects (n)</th>
<th>Project Size (MW)</th>
<th>n x MW x 1,000 ($)</th>
<th>Fee per additional project ($)</th>
<th>Submission Fee ($)</th>
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</table>
RFQ respondent requirements

• Respondent control group members are:
  – Designated Equity Providers (DEPs)
  – Project team leads

• Each respondent may submit multiple projects in one qualification submission
  – Each project may have its own project team
  – A project can only be submitted in one round

• Respondents must:
  – Demonstrate sufficient tangible net worth
  – Have no control group members that violate the common ownership restrictions

• Control group members cannot be members of the control group of another respondent team
RFQ project proposal requirements

• Project information
• Project plan
  – Timeline to COD
  – Key risks and mitigation plan
  – Approvals
  – Interconnection to the AIES
• Site control
  – Different requirements for projects located on or off reserve or settlement lands
• Approach to stakeholder engagement
• Team member roles
RFQ project proposal requirements

• Demonstrate comparable experience in each stage of project delivery
  – Development and planning
  – Financing
  – Construction
  – Operation and maintenance

• Respondents may use between a minimum of 2 and a maximum of 8 comparable facilities to demonstrate experience
Designated Equity Provider

• Designated Equity Providers (DEPs) are responsible for 51% of the total equity for each project
  – Demonstrated through a commitment letter

• Each DEP must demonstrate sufficient tangible net worth to support all projects submitted

• AESO will provide a definition of tangible net worth in the RFQ
  – DEPs will provide calculated tangible net worth and a description of the methodology used in the calculations
  – AESO will evaluate to ensure consistency with the AESO definition
Demonstration of tangible net worth

• Tangible net worth will be assessed using financial statement information

• DEPs must submit:
  – Financial statements for each of the last 2 fiscal years, and if applicable, the last interim fiscal period
  – Tangible net worth calculation
RFQ Evaluation
RFQ evaluation

• Submissions will be evaluated on a pass/fail basis
  – No scoring

• Evaluation will include an assessment of:
  – Compliance with RFQ requirements
  – Projects submitted
  – Experience
  – Financial strength and equity commitment
  – Ability of each project to connect to the existing system
RFQ evaluation

• Project evaluation
  – **Reasonable expectation** that project will meet target COD

• Experience
  – Sufficient experience with project delivery (including financing) to ensure proposed project is likely to meet target COD

• Financial strength and equity commitment

• Meet tangible net worth requirements
  – If submitting more than one project, respondents may indicate the order in which to assess their projects against the tangible net worth requirement
Transmission capacity assessment

• Projects will be individually assessed to ensure they can connect their full capacity to the existing system without requiring any expansion

• If a project requires expansion to the existing transmission system, it will not be considered further

• This assessment will be based on the project information provided in the RFQ submission

• Projects will be assessed using a specific base case
Base case assumptions

• Existing topology, including approved system projects that will be energized by 2021

• Existing generation and load
  – Generation dispatched using AESO dispatch methodology
  – Load forecast based on AESO 2017 Long-term Outlook

• Non-REP Round 2 & 3 market participants
  – Generation projects
    • Facilities under construction
    • Paid Generating Unit Owner’s Contribution (GUOC)
    • REP Round 1 projects that were awarded RESAs
  – Load projects
    • Projects that received permit and licence and requested service prior to June 30, 2021
Available transmission capacity in the Central East region

- The Central East region has limited transmission capacity to integrate additional generation.
- The AESO expects to be able to connect approximately 130 MW of additional generation in Central East.
- The AESO continues to plan and execute transmission expansion projects to accommodate future needs.
- Please refer to the *2017 Long-term Transmission Plan* available on aeso.ca.
Request for Proposals (RFP)
RFP submission requirements

• Qualified at RFQ
  – No changes to respondent team without prior consent
  – No material changes to project or other qualifications

• Bid security provided
  – $25,000/MW of each project’s contract capacity

• Strike price (bid price)
RFP submission requirements

• Projects on reserve lands
  – Land designation
  – Binding agreement to lease
  – Band Council Resolution

• Projects on settlement lands
  – Lease Agreement subject only to bylaw approval
RFP Evaluation
RFP evaluation

• To be considered for a RESA, Round 3 projects must meet the following:
  – RFP requirements
  – Ability to connect full capacity to the existing system
RFP evaluation

• The Minister will have previously approved the volume to be procured for Round 2 (successful Round 2 projects) before considering the volume to be procured for Round 3

• If a proponent has a DEP supporting successful projects in Round 2 and projects in Round 3:
  – the DEP must have sufficient TNW to cover its Round 3 projects in addition to its successful Round 2 projects
  – If the DEP does not have sufficient TNW, the AESO will first consider successful Round 2 projects and then consider the remaining TNW available for Round 3 projects
• The RFP transmission assessment for Round 3 projects will consider the transmission capacity remaining based on the Round 2 volume approved by the Minister

• The RFP transmission assessment will determine if Round 3 projects can connect the project’s full contract capacity based on Round 3 strike price ranking

• Projects unable to deliver full capacity based on the above will be not be considered further

• Successful proponents will be awarded a RESA
Renewable Electricity Support Agreement (RESA)
• Agreement between the AESO and successful proponent(s)
• Establishes the terms and conditions under which the successful proponent receives support payments in exchange for the renewable attributes produced
• Governs the development and operation of each successful project
  – Support period is for 20 years
• Support is provided through an indexed REC payment mechanism
• The key RESA terms and conditions have been provided as part of the REOI stage of the competition
How an Indexed REC works

<table>
<thead>
<tr>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
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<tbody>
<tr>
<td>Bid price</td>
<td>Pool price</td>
<td>Government pays generator</td>
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Prices in $/MWh
Flow of funds

Government of Alberta

REFA
Renewable Electricity Funding Agreement

AESO

RESA
Renewable Electricity Support Agreement

Generators
Target COD and longstop dates

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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</table>

- **December 2018**
  - RESA executed

- **April 1, 2020**
  - Earliest support payment

- **June 30, 2021**
  - Target operational date

- **December 2022**
  - AESO right to terminate project if not operational

- **June 30, 2021**
  - AESO right to terminate project if not under construction
Round 3 RESA

• Updates relate to development on reserve or settlement lands

• No changes to:
  – Change in Law
  – Curtailment
  – Security
  – Fees
  – Indexation
  – Dispute Resolution
Next Steps & Key Dates
Round 3 next steps

• REOI forms are due April 20
  – Not a prerequisite to participate in RFQ
• FAQs will be updated until RFQ opens
  – Submit questions to rep@aeso.ca by April 20
• RFQ opens April 27
• Parties who wish to participate in the RFQ stage should register an account on Bonfirehub to access the RFQ and draft RESA
  – Bonfirehub registration begins April 18
  – Visit aeso.ca/rep for further details on Bonfirehub registration
• RFQ and draft RESA will be available for viewing on aeso.ca/rep
Staying informed

• Visit our website at aeso.ca/rep
• Sign up for the AESO’s stakeholder newsletter
• This presentation will be posted at www.aeso.ca/rep

REP Rounds 2 and 3 now open

Find out more ➤
Thank you

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