

Backgrounder

Transmission Must-Run (TMR)

ROLE OF THE ALBERTA ELECTRIC SYSTEM OPERATOR

- The Alberta Electric System Operator (AESO) is an independent not-for-profit government agency that exists to ensure the province has reliable and affordable power.
- We do this by working hard on behalf of Albertans in four key areas of our mandate:
 - **Plan the transmission system** (wires and related infrastructure) for the future so Alberta's grid is ready as more power needs to travel from where it is generated to where it is used.
 - **Connect customers** (electricity generators and large industrial operations) to the grid.
 - **Develop and operate** the wholesale electricity market (manage the buying and selling of power).
 - **Operate the grid** to ensure supply meets demand every minute of every day.

TRANSMISSION MUST-RUN (TMR) SERVICE

- Transmission Must-Run (TMR) is generation that is required to be online and operating at specific levels in parts of the province's electricity system to compensate for insufficient local transmission infrastructure relative to local demand. TMR is used to ensure reliability until adequate transmission infrastructure is built in that local area.
- Given the location-specific nature of TMR, only specific generating units in Alberta may be required to provide this service. The AESO can conscript or contract for this service as described in the Tariff depending on foreseeable need.
- In circumstances when this service is required for an unforeseeable event and there is no contracted TMR, non-contracted generators may be dispatched to provide this service (referred to as conscripted TMR). In the event of foreseeable TMR, the AESO may enter into a contract with a generator to provide TMR service.

CURRENT TMR CONTRACTS

- The AESO has contracts in place with various generators to provide TMR service in local areas of the province where transmission infrastructure is inadequate.
- The AESO does not currently have TMR contracts in effect in our Grande Prairie planning area. As identified in the [2022 AESO Long-term Transmission Plan](#), TMR service is likely required until a new local transmission line is added in the Grande Prairie planning area to help reduce flow constraints and bolster future load growth in the region.

STRUCTURE OF THE TMR COMPETITION FOR THE GRAND PRAIRIE PLANNING AREA

- The procedure for procuring foreseeable TMR service is set out in [Appendix B](#) of the ISO Tariff and, depending on contestability, includes the following two stages:
 - **Stage 1:** The Request for Expressions of Interest (REOI) stage seeks to identify market participants who are interested in competing for a commercial agreement(s) to provide TMR service in the Grande Prairie planning area.
 - **Stage 2:** If the AESO, following consultation with the Market Surveillance Administrator (MSA), determines that the REOI is contestable, a Request for Proposals (RFP) will be issued. Otherwise, a bilateral negotiation will commence.
- Market participants that are eligible to participate in the RFP stage will be invited to submit a proposal.
- Selection of a TMR service provider(s) will occur through a fair and transparent evaluation process.

TMR ELIGIBILITY CRITERIA

To be eligible to participate in the TMR procurement competition, a market participant's generating unit must meet the following criteria:

- A single-source asset.
- Located within the Alberta Balancing Authority Area and be connected to the AIES via one of the following seven (7) substations located in the Grande Prairie planning area (area 20):
 - Poplar Hill 790S
 - Goodfare 815S
 - Elmworth 731S
 - Lowe Lake 944S
 - Updike 886S
 - Saddle Hills 865S
 - Wapiti 823S
- Capable of ramping and maintaining a minimum of 35 MW of Real Power in response to a TMR dispatch, except when a planned outage, unplanned outage, or force-majeure event is in effect for the generating unit.
- Capable of maintaining the Real Power at the TMR dispatched volume for the full duration that the dispatch is in effect, subject to an allowable dispatch variance.
- Able to provide this TMR service by July 1, 2022.

SPECIFIC REQUIREMENTS FOR PROVIDING TMR

In addition to complying with the ISO rules, a market participant must:

- Acknowledge the TMR Dispatch within a specified period of time and comply with each TMR dispatch provided by the AESO.
- Reach the MW output level within a specified, or such shorter period of time, as required by the ISO rules following receipt of a TMR dispatch.
- Be capable of maintaining generation of their unit at the MW output level or above specified in the TMR dispatch, subject to an allowable dispatch variance.

STRUCTURE OF THE PAYMENT MECHANISM

A market participant's payment for providing the TMR service will include two components:

1. **Fixed payment:** a monthly capacity payment, which is adjusted based on the availability of the generating unit to be dispatched for TMR.
2. **Variable cost payment:** an additional monthly payment for those hours when dispatched for TMR and when the variable cost to produce the dispatched volume is greater than the pool price.

MORE INFORMATION ABOUT TMR

- More information about TMR can be found on the AESO's website at www.aeso.ca by following the path **Market > Ancillary Services > Transmission Must-Run service**.