

RC Update

WECC OC – October 19, 2021

- Real time operational challenges
 - Record setting heat wave resulted in new summer peak
 - WECC separation on June 3 led to Under Frequency Load Shed
 - Unplanned separation from the WECC August 31st

- Progressing key reliability related work
 - Enhancing frequency responsiveness during system events
 - Launched Alberta's Extreme Events Steering Committee
 - September - Completed the WECC Operations & Planning Audit
 - September/October - Provincial Blackstart Restoration Exercise

- COVID-19
 - Mandatory Vaccination or Negative test required to enter AESO sites.
 - 1st Vaccine required by October 15th
 - 2nd Vaccine required by November 30th

- Summer heat wave from June 27 to July 2 resulted in an all-time summer peak load of 11,721 MW on June 29, 2021, a 5% increase from 2018, and 8 MW from winter peak
 - Energy Emergency Alert 1 declared
 - June 29 due to high demand
 - Energy Emergency Alert 2 declared
 - July 7th due to high demand and loss of generation
 - July 14 due to unplanned generation loss and inertia limitations due to insufficient reserves
- An under-frequency load shed event occurred on June 3, 2021 due to loss of the AB-BC intertie while importing 700 MW
 - About 270 MW of load, including 90 MW Load Shed Service for imports (“LSSi”), was shed during the event
 - Initial frequency response sufficient
 - Loss of an additional 100 MW of generation after 100 seconds caused the underfrequency load shed

- AESO kicked off the Extreme Events Steering Committee on June 29
 - Strong commitment from senior leadership of key generator owners/operators, key gas supply owner/operators, transmission facility owners (“TFOs”), Alberta Emergency Management Agency “(AEMA)”, Department of Energy (“DOE”)
- The steering committee has launched three working groups
 - Technical Working Group
 - Assess whether generation gas supply chain has sufficient risk mitigation plans in place and effective designs to address severe weather conditions that may be experienced in Alberta
 - Assess gas/electric industry interdependencies, including location of all critical sites
 - Assess system reliability under extreme weather scenarios and fuel supply impacts
 - Supply Shortage Prioritization Working Group
 - Develop supply shortage prioritization processes during emergency events
 - Identify any commercial challenges with required prioritization process
 - Communications Working Group
 - Ensure communication plans are in place between industry and government players, ensuring timely and aligned communication occurs during extreme events

- Each working group met late August to discuss next steps. Targeted questionnaires have been developed and sent to the industry groups:
 - 1) Natural Gas Facilities Survey
 - Major gas producers
 - Gas storage
 - Gas transportation
 - 2) Generating Facilities Survey
 - Key generating owner/operators
 - 3) Transmission and Distribution Facilities Survey
 - TFOs and DFOs

- AESO facilitated a separate meeting with Alberta Emergency Management Agency (AEMA) to get clarity when they would get involved in an event.
- Separate meetings at the executive level to tackle larger hurdles in the gas tariff world.
- AESO is currently reviewing questionnaire responses and planning to meet again with industry in late October.

Thank you