# 2019 CARIS 1 Background

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### **Agenda**

- Schedule
- Model Development/Key Basecase Assumptions
- Preliminary Assumptions Matrix
- Emissions Allowance Price Development
- Fuel Price Forecast Methodology
- Preliminary Benchmarking Results



#### June 2019

- Review Preliminary Key Base Case Assumptions and Assumptions Matrix
- Review Emissions Allowance Price Methodology
- Review Fuel Price Methodology



#### July 2019

- Review Benchmark Analysis
- Present Final Base Case Assumptions and Assumptions Matrix
- Present Final Emissions Allowance Price Forecasts
- Present Final Fuel Price Methodology and Forecasts
- Initial Discussion of Additional Metrics and Scenarios



#### August-September 2019

- Present Historic and Forecasted Congestion Analysis
- Review and Finalize Three Study Cases
- Review and Finalize Generic Solutions
- Review and Finalize Generic Cost Data



- October-November 2019
  - Review Primary Metric Results
  - Review Additional Metric Results
  - Review Scenario Analysis Results
- December 2019 January 2020
  - Draft and Final CARIS 1 Report



- February 2020
  - BIC and MC Presentations/Approvals
- March 2020
  - Submit to NYISO Board for Approval
- April 2020
  - Public Information Session



### **Model Development**

- Based upon 2018 Comprehensive Reliability Plan (CRP)
  - Reliable system through-out study period
    - No Market-Based or Regulated-Backstop solutions required
    - No Generic Capacity Additions Required
  - Study period 2019-2028
- August 1<sup>st</sup> Lock-Down for Base Case



## **Updates from 2018 CARIS 2 Database** (Generation)

#### Additions

- Ball Hill Wind (Zone A, 100 MW,12/2019)
- Swinging Bridge (Zone G, 9 MW,3/2019)
- Riverhead Solar (Zone K, 20 MW, 5/2019)

#### Modified in-service dates

- Ogdensburg (from 6/1/2018 to 8/1/2019)
- Cassadaga Wind (from 12/2019 to 12/2020)
- Cricket Valley (from 1/2020 to 3/2020)

#### Retirements

- Hudson Ave 4 (Zone J, 16.2MW, 4/1/2019)
- Auburn/State St GT (Zone C, 7.3 MW, 4/9/2019)
- Steuben (Zone C, 3.2 MW, 3/22/2019)
- Monroe Livingston (Zone B, 2.4 MW, 2/14/2019)
- Schuylerville Station (Zone F, 1.2 MW, 6/13/2019)
- Selkirk I and II retained in the model due to rescinded retirement notice (in 12/2018)



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- Receipt of DEC Compliance Plans prior to Database Lockdown will be incorporated (reflecting update to Tariff-defined inclusion rules)



## **Updates from 2018 CARIS 2 Database** (Transmission)

- B-3402 & C-3403 Feeders out of service(2019)
- L33P (Ontario PAR) out of service until 1/2022
- Specific Selected AC PP Transmission projects (Segments A and B) in-service (2024) – T27/T19
  - 2018 CARIS 2 generic project
- Expanded monitoring and securing of lower voltage system consistent with NYISO market operations
- Additional recent updates included as an Appendix.



## Appendix: Transmission Facilities (previously included in 2018 CARIS 2)

- Erie South Ripley series reactor(2019)
- Rainey-Corona PAR (2019)
- Leeds Hurley SDU(2020)
- Empire State Line Project/Western PP Selected project(2022)
- Generic AC PP Transmission project(2024)



### The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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