High Intermittent Renewable Resources

Recommendations	Action Item	Due Date
The study shows that 3,046 MW of UCAP resources would be added to the NYCA under existing unforced capacity rating methodologies, but that this addition allowed for the elimination of only 2,442 MW of UCAP to return the system to criteria. Likewise, NYC and Long Island were assumed to add 588 MW and 788 MW of UCAP respectively for the analysis, but those additions only enabled eliminating 233 MW and 344 MW of UCAP respectively to return the system to criteria. These results indicate that the reliability value of the added intermittent resources was less than expected and indicates a need for further analysis to understand what is driving the result.	TAM (Tailored Availability Metric) Market Design Complete Revised Analysis - redo the analysis to see if the values converge or if additional study is required	Q2 2020 Q3 2020
The State also has plans for substantial Energy Storage Resources (ESR) that was not evaluated as part of this study. As MARS capability of modeling storage resources is improved, modeling of ESR should be added to future studies.	RNA Study Team working on developing Energy Storage Model. ICS will review the Energy Storage Model developed by the RNA Study Team and propose a recommendation.	July 1, 2020 May 1, 2020
This study was performed using non-coincident annual generation shapes for FTM PV, onshore wind, and offshore wind. As more annual generation data is developed, these resource shapes should be aligned so that the study can evaluate the reliability risk of coincident periods of low renewable generation.	This is covered in the Modeling Correlation of on-shore wind, solar, off-shore wind, run-of-river and landfill white paper.	2021
This study should be performed periodically as a function of experience with intermittent resources and plans for future developments. Additionally, the analysis should be refined as clean energy plans are further developed that include electrification of the entire economy, aggressive energy efficiency and higher customer load response, transmission expansion and reinforcements, and increases in renewable resources and energy storage and modeling of those resources.	On-going effort depending on timing of ESR model and lessons learned from RNA, CARIS, and Climate Change studies currently evaluating 70/30 system.	2021