SCOPE

IRM IMPACT OF RENEWABLE CAPACITY ADDITIONS

Study Purpose and Summary

ICS will conduct a sensitivity study as part of the 2018-19 IRM Study to evaluate the IRM impact of increases of renewable resources. Certain types of renewable capacity, such as wind and solar, have a lower availability than conventional resources, and based on previous IRM studies, increase IRM requirements. Renewable capacity – including hydro, wind, and solar – is projected to provide approximately 20% of the total NYCA generation capacity mix in the 2018 Capability Year. This sensitivity study includes scenarios which significantly increase renewable capacity from 2018-19 base case projections, to as high as 30% of the generation capacity mix.

Study Scope

The sensitivity study will start with the preliminary 2018-19 IRM Study preliminary base case and determine the IRM assuming various levels of wind and solar capacity, as follows:

- *Renewable Scenario 1:* No wind and solar (all wind and solar capacity removed from the preliminary 2018-19 base case).

- *Renewable Scenario 2:* Preliminary 2018-19 base case, including projected base case wind and grid connected solar capacity. (The 2017-18 IRM base case assumed 1,676 MW of wind and 32 MW of grid connected solar.)

- *Renewable Scenario 3:* Add 2,000 MW of wind capacity, above the preliminary base case level, in Upstate Zones A, C, D, and E.

- *Renewable Scenario 4:* Add 2,000 MW of grid connected solar capacity above the preliminary base case level.

- *Renewable Scenario 5:* Combine Scenarios 3 and 4 wind and solar capacity additions.

The NYISO staff will provide recommendations as to the zonal distribution of wind and solar resource capacity additions in Scenarios 3 to 5. Scenarios 2 to 5 will utilize tan 45 analyzes in accordance with Policy 5 procedures.

The results of this sensitivity will be discussed in the 2018 IRM Study report.

Study Schedule

This sensitivity study will be conducted during the September-October 2017 period in accordance with the 2018-19 IRM Study milestone schedule for conducting sensitivity cases.