The NYISO filed, and FERC approved, tariff changes that enhance the ability of duration limited resources to participate in the NYISO markets. These rules allow output limited resources to inform the NYISO of their energy output duration limitations, and to participate in the markets consistent with those limitations. Effective May 1, 2021, generation resources may participate in an Energy Limited Resource (ELR) program administered by the NYISO. Under this program, participating generators were required to submit their elected limitations to the NYISO by August 1st for the upcoming capability year (i.e., August 1, 2020 for the Capability Year beginning on May 1, 2021).

To accommodate this new classification of resources, the NYISO and GE have been working to expand the GE-MARs program to allow a more detailed modeling of ELRs. Due to insufficient time for testing of the new functionality, previously developed simplified modeling techniques of these resources have been utilized for the 2021 IRM Study. The simplified modeling approach dispatches the ELR units at pre-determined output levels, consistent with the resources' operational capabilities. Resource output is aligned with the NYISO's peak load window, when most loss-of-load events are expected to occur.

While these pre-determined output shapes were aligned with the periods that typically experience the highest loss-of-load risk, the profiles were not dynamic nor optimized. Thus, a more flexible or optimal dispatch schedule for these resources, such as that being developed within the MARS program, will be reviewed by ICS for adoption in future IRM studies.

Due to the confidential nature of these output limitations, the elections made, and the identity of units participating, the hourly representation of each unit was developed by NYISO and several of the NYSRC consultants taking into consideration the elections and operating history, particularly over the peak load conditions.

The new modeling resulted in an increase in the IRM of 1.5% (Table 6-1)