

Report on Adjustments to the IRM Base Case Database

To Align the Established IRM to the IRM Study Database

(For the 2015 IRM Study)

Introduction

On July 11, 2014, the NYSRC Executive Committee (EC) approved Policy 5-8. This policy is the foundation for the procedure to calculate a technical installed reserve margin for the upcoming capability year. Policy 5-8 was utilized to produce results for the 2015-2016 capability year. Appendix D of that policy (attached) provides instruction to the Installed Capacity Subcommittee (ICS) on final database adjustments needed to align the IRM database to the established statewide Installed Reserve Margin (IRM). This aligned database is used, by the NYISO, as a starting point in setting the final LCR values.

This report documents the relationship between the technical IRM result and the established IRM set by the NYSRC to determine the correct course of action to be used to implement Appendix D of the policy. The report also documents the results of that alignment, if warranted.

Description of Process

For IRMs that are established above the technical study report IRM value, the database needs no further alignment and the NYISO will calculate the LCRs based on the established IRM. For established IRMs that are lower than the technical study report IRM value, the database of the base case is adjusted to meet the 0.1 days/year LOLE criterion by increasing the amount of Emergency Demand Response Program (EDRP) MWs in the zones until 0.1 days/year is achieved at the established IRM value.

The 2015 IRM Base Case Alignment

For the 2015-2016 Capability Year, the NYSRC set the IRM at a value of 17.0%. The technical study results were for an IRM of 17.3%. Per Appendix D, an alignment of the technical database was performed to match the 17.0% IRM. When the database was run at the approved IRM level of 17.0%, the LOLE was driven to 0.104 days/year. By adding 100 MW of EDRP resources, the LOLE was returned to the criterion of 0.100 days/year. This resulted in a database that meets the LOLE criterion at the approved 17.0% IRM with indicative LCRs of 83.4% and 103.7% for Zones J and K, respectively.

APPENDIX D (of NYSRC Policy 5-8)
**Procedure for Aligning the Base Case IRM to the Final IRM in Preparation
for the Locational Capacity Requirement Study by the NYISO**

The IRM base case model is used as the foundation for establishing the IRM, the Locational Capacity Requirements (LCRs), and for certain other NYISO reliability studies. Appendix D discusses the potential changes to the IRM base case model needed by the NYISO to conduct various NYISO studies, including the LCR Study.

Establishing Final IRMs above the Study's Base Case Results

When the NYSRC Executive Committee establishes a final IRM that is higher than the IRM study's base case result, it is adding an IRM margin to the base case results. The purpose of this margin is to ensure, considering base case assumption uncertainties, that the NYSRC resource adequacy Loss of Load Expectation (LOLE) criterion is met at the final IRM level. NYISO studies maintain this margin in using the IRM data base for calculating and setting the LCRs and External Capacity Rights.

Establishing Final IRMs below the Study's Base Case Results

When the NYSRC Executive Committee establishes a final IRM that is lower than the base case IRM – after weighing consideration of sensitivity studies and other factors – it is confident that this lower IRM will meet the NYSRC resource adequacy criterion.

It is understood that in establishing LCRs the NYISO will calculate LCR values, that together with the final IRM, will meet the NYSRC 0.100 LOLE criterion. Since the introduction of a lower IRM into the study's base case data base could result in a LOLE above the criterion, the data base is adjusted so as to maintain the 0.100 days/year LOLE criterion. This adjustment is accomplished by increasing the EDRP MW values modeled in each zone.

After completion of the above base case alignment analysis, the NYISO will prepare a report for ICS review, which includes a description of the adjusted EDRP MW values and other assumption changes, the resulting LOLE, and the calculated LCRs.

After ICS approves the base case alignment analysis, the base case database is provided to the NYISO for use in NYISO studies, including the LCR study described in Section 3.5.5.