Updated EFORd Figures in the IRM Assumption Matrix

Jack O'Connell Resource Adequacy

NYSRC – Installed Capacity Subcommittee Meeting #222

July 30, 2019 NYISO, Rensselaer, NY

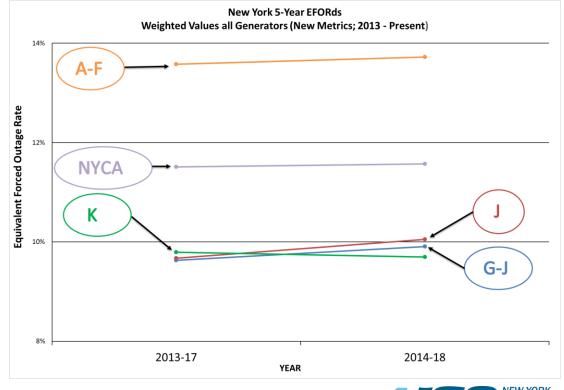


Background

- October 2018, proposed figure update was presented and approved
 - Update the EFORd figure between the IRM PBC assumptions matrix and the IRM Final Report
 - Add an EFORd series for the G-J Locality by swapping out the F-I EFORd measure
 - Replace "A-E" EFORd series with a Zones "A-F" EFORd series
- Update EFORd values to be consistent with:
 - Values used in the IRM ICAP-to-UCAP translation (i.e., for shifting ICAP)
 - Measures used to shift ICAP in the Tan45 process
- Create a five year EFORd figure (same as before) but do not create the annual EFORd figure
- Figure update will include all resources
 - Old model only considered conventional units

Results

- EFORd values increased slightly for all groups but Zone K
- Will become figure
 A.5 Five-Year
 Zonal EFORds in
 the IRM report



Implications

IRM increased slightly

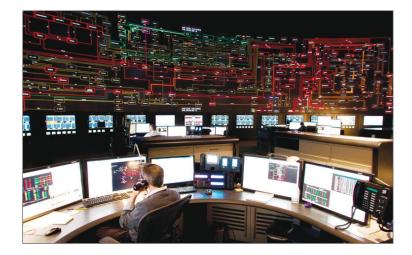
Group	2013-17 FBC	2014-18 РВС
A-F	13.58%	13.72%
G-J	9.63%	9.91%
J	9.67%	10.05%
к	9.74%	9.70%
NYCA	11.47%	11.57%

Questions?



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 policymakers, stakeholders and investors in the bulk power system



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Appendix



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NYISO proposal to update weighted EFORd figures in the IRM assumption matrix and IRM Report

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NYSRC – Installed Capacity Subcommittee Meeting #212

October 3, 2018 NYISO, Rensselaer, NY



Purpose

 The purpose of this presentation is discuss the updated process to identify zonal EFORd values in the IRM assumptions matrix and Figures A-4 and A-5 in the 2018 IRM Final Report



Presentation summary

- The IRM assumptions matrix EFORd graph has historically shown general EFORd trends for large hydro and thermal units
 - These figures have not shown the EFORd values used to shift ICAP in the Tan45 process
- This presentation proposes an updated process for showing snapshots of zonal EFORd values in the IRM assumption matrix and report
 - The updated EFORd values would be consistent with the EFORd measures used to shift ICAP in the Tan45
 process
 - With ICS approval, the NYISO would adopt this proposal going forward, including for the 2019 IRM Final Report and Appendices



Current IRM figures

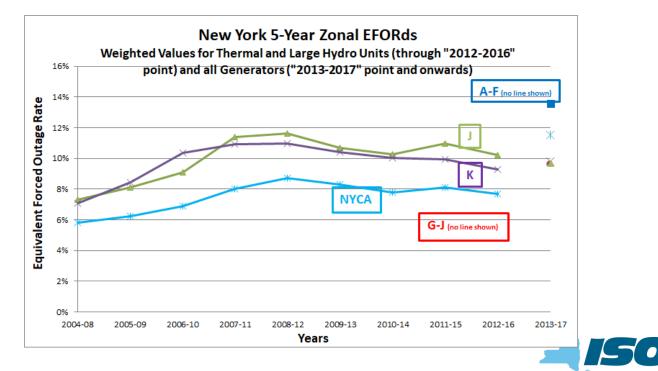
- Provide a snapshot of zonal EFORd based on
 - GADS-based EFORd values for existing resources and class average rates for new resources
 - Shows thermal and large hydro resources
- Fixed at the time of their creation (*i.e.*, are not updated within the IRM cycle)



Proposed figure updates

- Update the EFORd figure between the IRM PBC assumptions matrix and the IRM Final Report
 - The preliminary EFORd figure will still be created for the preliminary base case
 - The update for the IRM Final Report will capture changes in the supply mix
- Update the EFORd values shown to be consistent with the EFORd values used in the IRM ICAP-to-UCAP translation (*e.g.*, for shifting ICAP)
 - Notably, the EFORd for shifting ICAP includes Intermittent and Run-of-River resources
- Add an EFORd series for the G-J Locality by swapping out the F-I EFORd measure currently shown
 - This adds additional information while keeping the graph readable
- Replace the Zones "A-E" EFORd series with a Zones "A-F" EFORd series
- Create the five year EFORd figure (same as today) but do not create the one-year EFORd figure
 - Shorter term EFORd data (*i.e.*, historic EFORd data used to administer ICAP auctions) will continue to be available in Appendix C of the IRM Report
 - See pages 56 60 of the 2018 IRM Report Appendices
- Note the snapshot nature of the figures
- Note the method change for calculating the EFORd in the figure

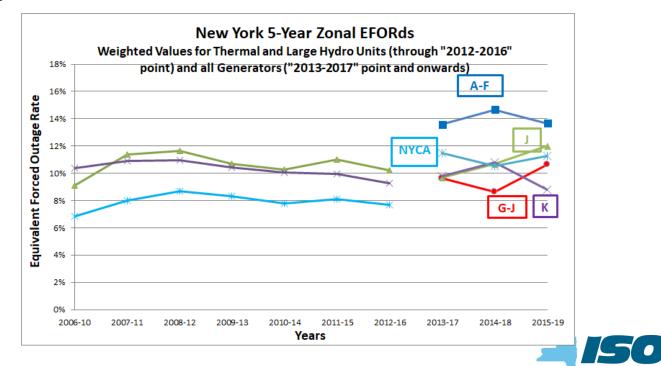
Example of the proposed EFORd figure



NDEPENDEN1

Illustration of how new data would roll on

Note: "2014-18" and "2015-19" points are not based on actual data. These points only show how the figure will change over time as new data become available.



2019 PBC EFORd values used to shift ICAP

Zone(s)	Model EFORd
NY_A	0.0485
NY_C	0.1128
NY_D	0.3352
NY_G-I	0.0956
NY_J	0.0967
NY_K	0.0979
System	0.1151



Questions?

Questions or comments can be sent to Nathaniel

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