

# Load Forecast for 2016 IRM Study

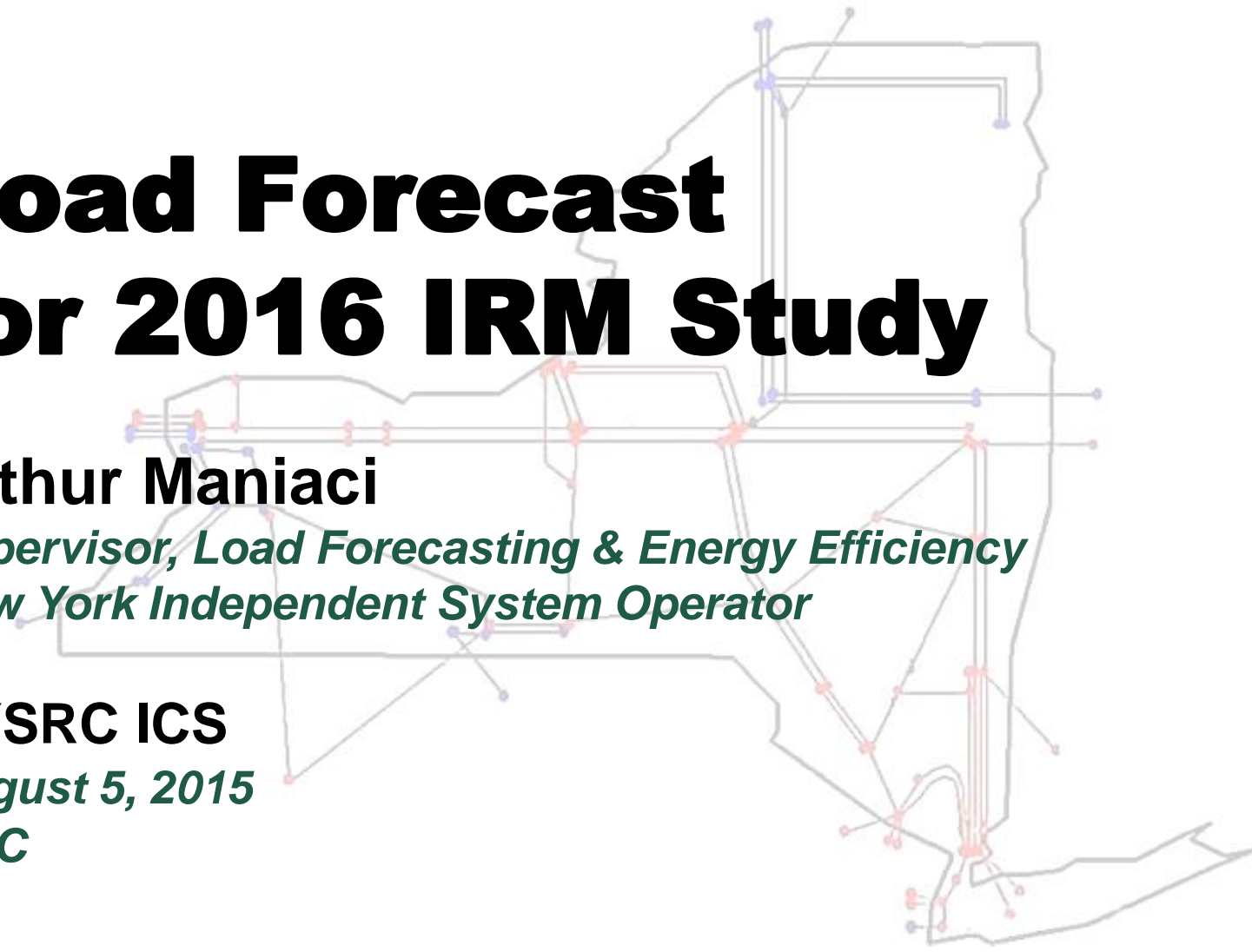
**Arthur Maniaci**

*Supervisor, Load Forecasting & Energy Efficiency  
New York Independent System Operator*

**NYSRC ICS**

*August 5, 2015*

**KCC**



# Methodology for 2014 IRM

- ◆ Three reference years were used:
  - *2006 – Load Forecast Uncertainty (LFU) Bin 1 (highest per-unit multiplier)*
  - *2002 – LFU Bin 2 (second highest per-unit multiplier)*
  - *2007 – LFU Bins 3 – 7 (consecutively lower per-unit multipliers)*
- ◆ Original reference shapes input to MARS
  - *Internal MARS routines were used to make adjustments*
- ◆ Load Adjustment Steps (for each reference year):
  1. *Set zonal Non-Coincident Peaks (NCPs)*
  2. *Adjust zonal NCPs for zones A – I to match NYCA Coincident Peak*
  3. *NYCA, Zone J Locality, and Zone K Locality criteria met*

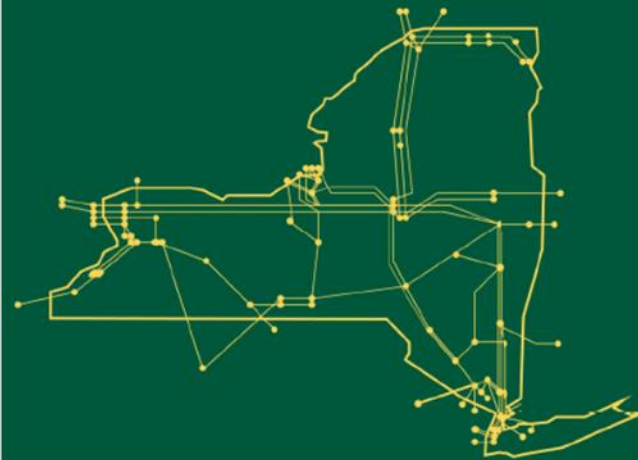
# Methodology for 2015 IRM

- ◆ Same three reference years as 2014 IRM
- ◆ Implementation of G-to-J Locality introduced an additional load modeling constraint.
  - *MARS routines cannot satisfy multiple load constraints.*
- ◆ New Method: All adjustments now made external to MARS; revised shapes are input to MARS.
- ◆ Load Adjustment Steps (per reference year):
  1. *Adjust zonal hourly loads to match 2015 zonal peaks (NCPs)*
  2. *Adjust zonal hourly loads on day of NYCA peak to match zonal load at time of NYCA peak*
  3. *Adjust zonal hourly loads in zones G-J on day of G-to-J Locality peak to match zonal load for zones G-J at time of G-to-J Locality peak*

# Methodology for 2016 IRM

- ◆ Same three reference years as 2015 IRM
- ◆ No change to load shape adjustment methodology
- ◆ NYISO SRP staff automated the load shape adjustment process used in 2015 IRM using MATLAB®

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



[www.nyiso.com](http://www.nyiso.com)