

# Impacts of COVID-19 on NYISO Demand

Information current as of 4/6/2020

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Chuck Alonge

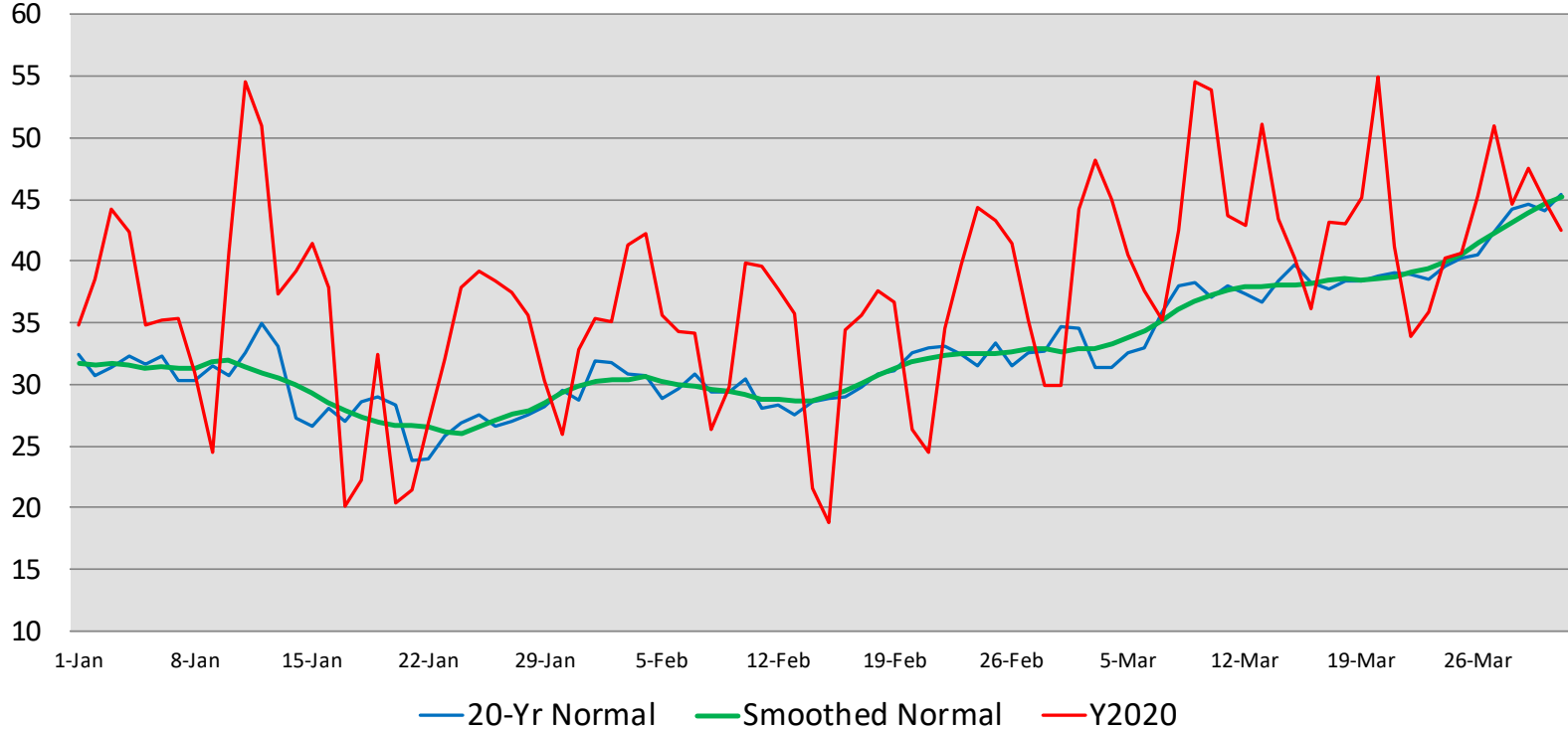
Demand Forecasting & Analysis

**Load Forecasting Task Force**

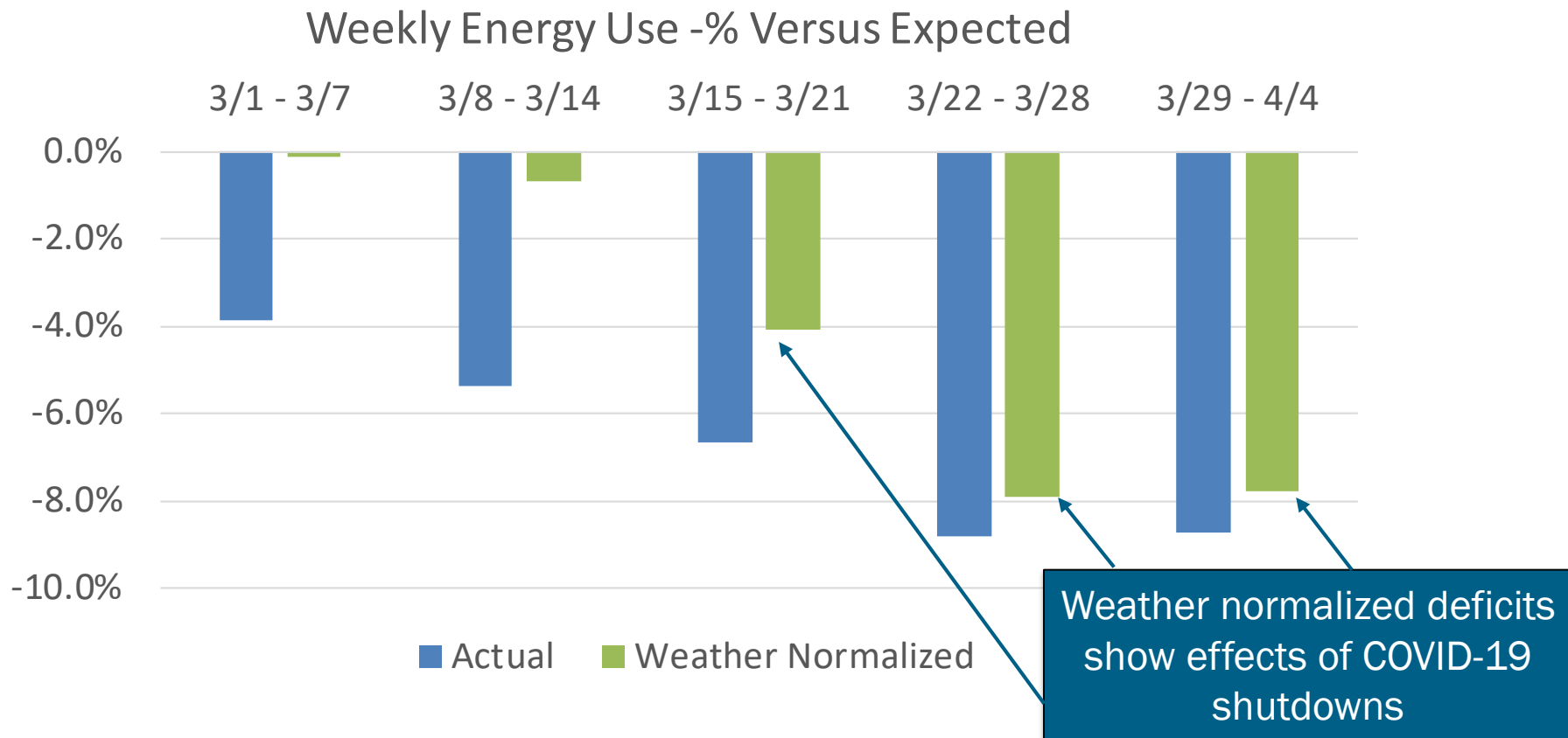
April 13, 2020, Teleconference

# NYCA Recent Temperature Trends

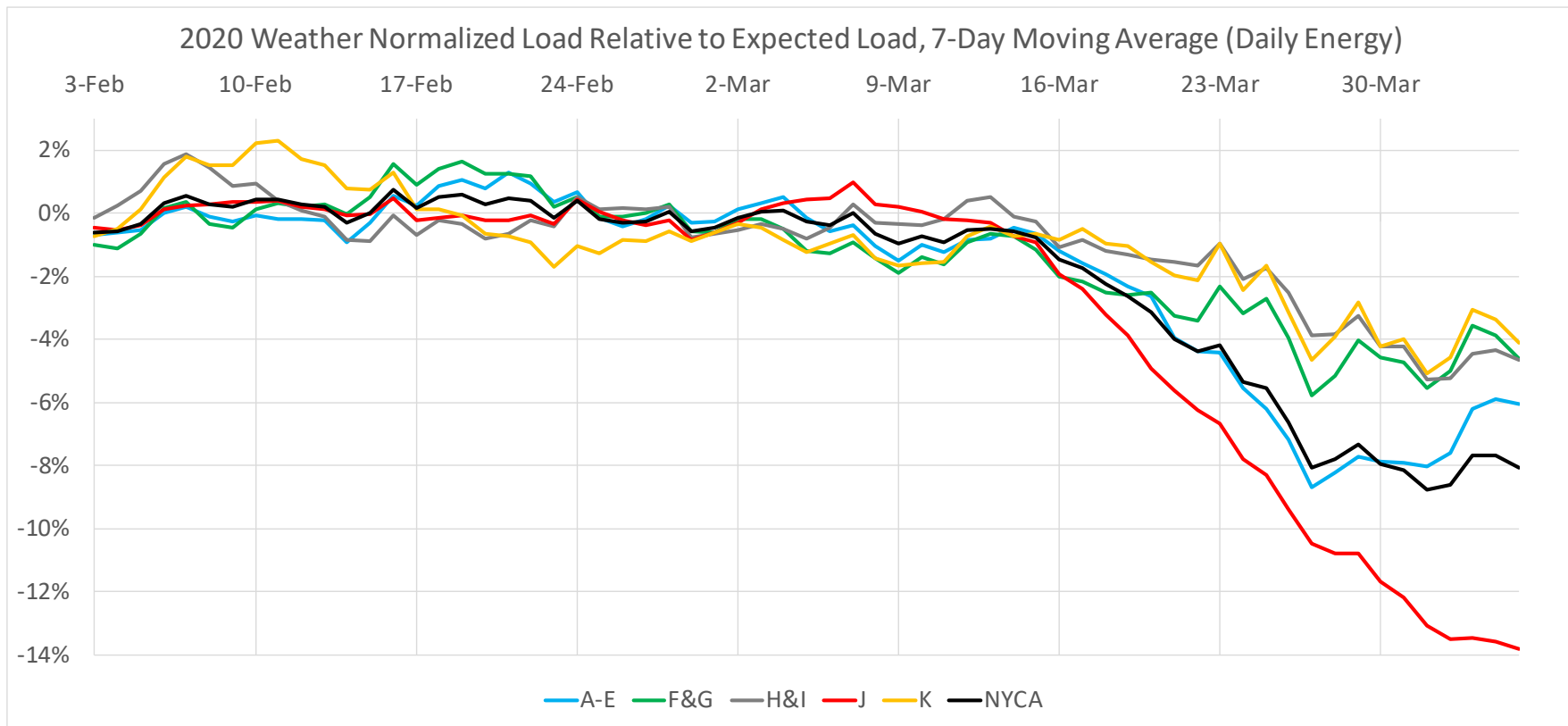
## NYCA Daily Average Temperature



# Recent Impacts on Daily Energy by Week

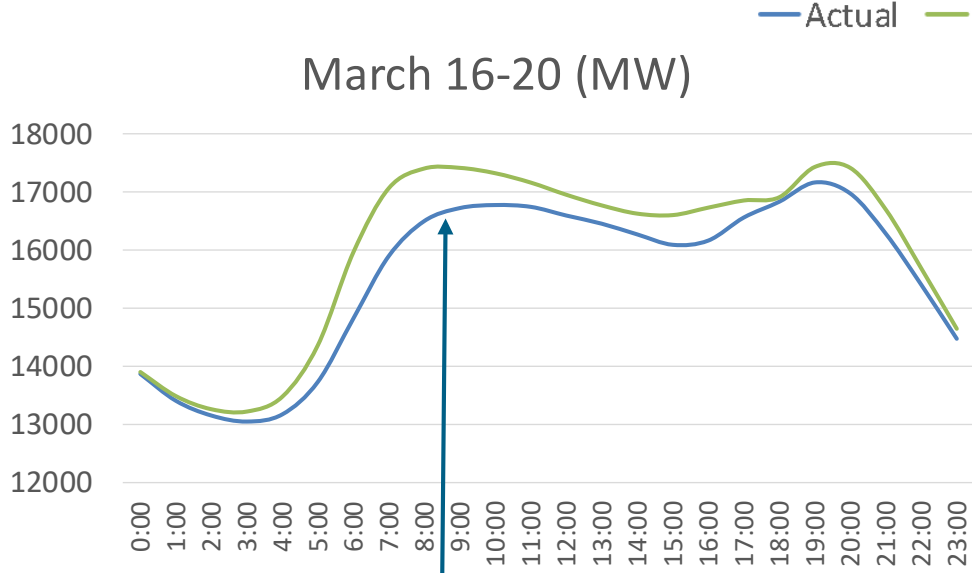


# Regional Impacts on Daily Energy Patterns

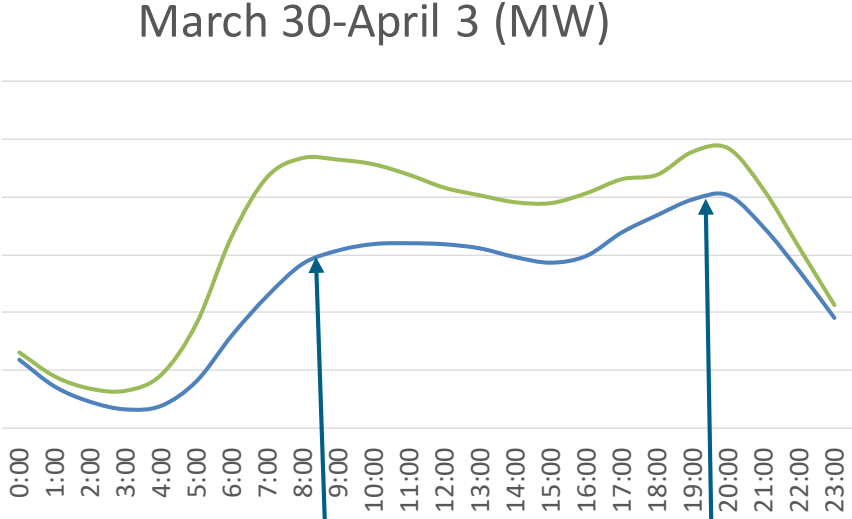


Level of decline is proportional to commercial percentage of load in region 

# Recent Impacts on Hourly Load Patterns



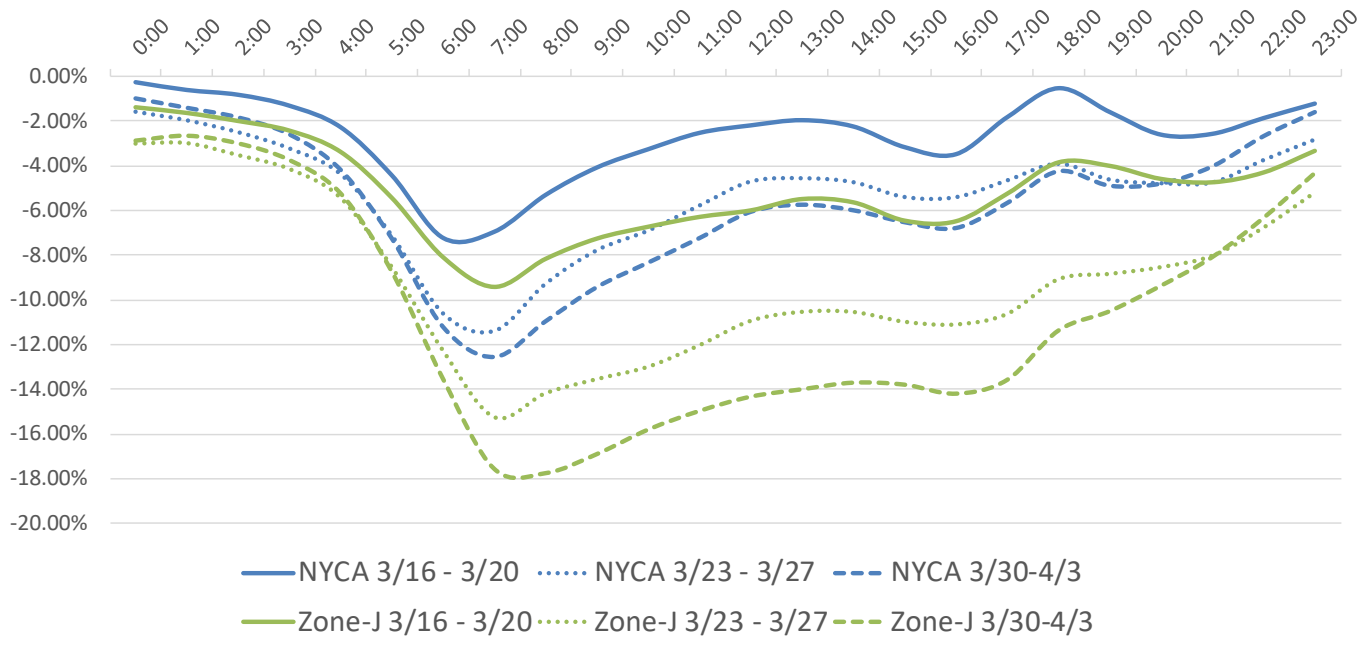
Morning peak arrives later in the day (“snow day” pattern)



Decrease in load as additional restrictions are enacted

# Recent Impacts on Hourly Load Patterns

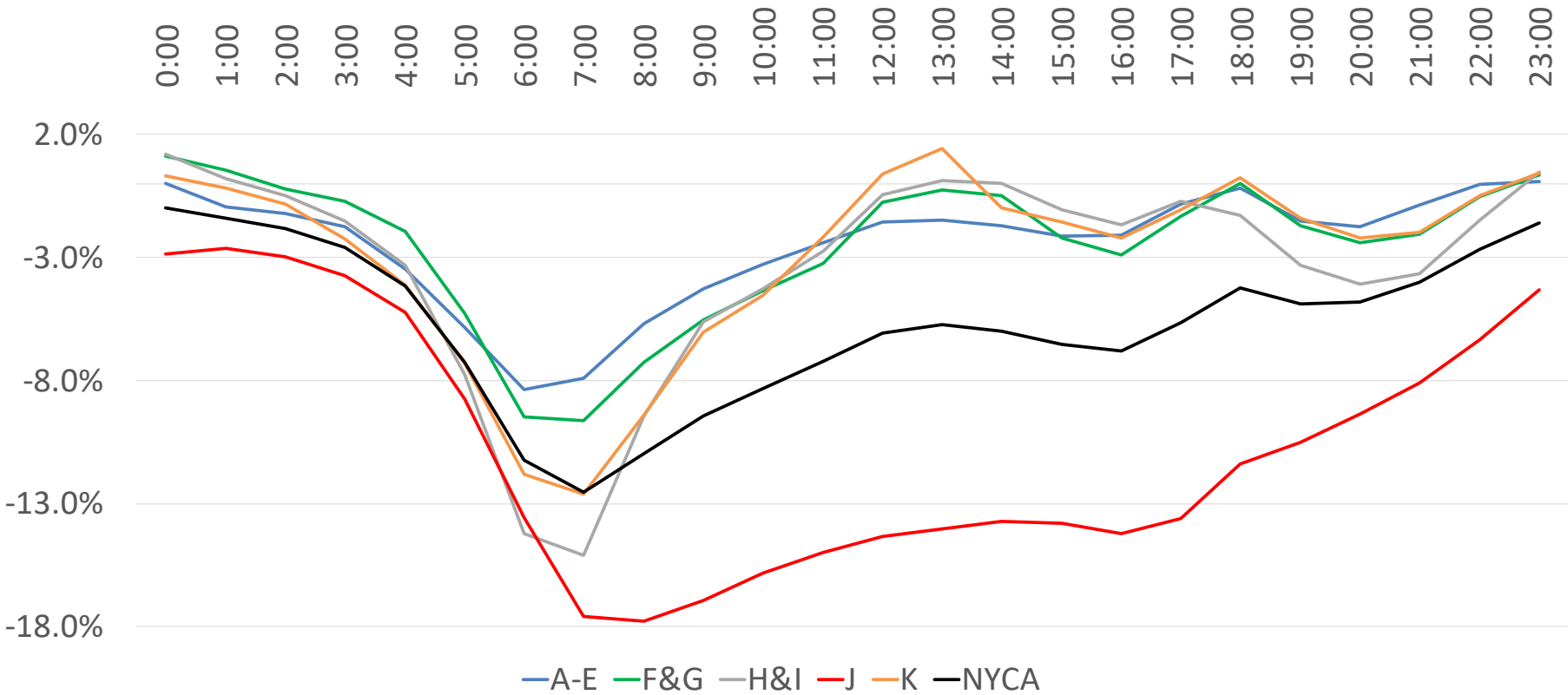
NYCA/Zone-J Load Profile - Weekday Diurnal Load Changes



- ConEd, with large commercial share of load, has significant reductions in energy relative to other load zones
- Residential energy use has increased during the mid-day (partially offsetting drop in commercial sector)

# Recent Impacts on Hourly Load Patterns (Area)

Average Hourly Deficit by Area - Week of 3/30 - 4/3 (Weekdays)



# Recent Impacts on Hourly Load Patterns (Area)

## Average Hourly Load Deficit By Area – Week of 3/30-4/3

Hour	A-E	F-G	H-I	J	K	NYCA	Hour	A-E	F-G	H-I	J	K	NYCA
0:00	0.0%	1.1%	1.2%	-2.9%	0.3%	-1.0%	12:00	-1.5%	-0.8%	-0.5%	-14.3%	0.4%	-6.1%
1:00	-1.0%	0.5%	0.2%	-2.7%	-0.2%	-1.4%	13:00	-1.5%	-0.3%	0.1%	-14.0%	1.4%	-5.7%
2:00	-1.2%	-0.2%	-0.5%	-3.0%	-0.8%	-1.8%	14:00	-1.7%	-0.5%	0.0%	-13.7%	-1.0%	-6.0%
3:00	-1.8%	-0.7%	-1.5%	-3.7%	-2.2%	-2.6%	15:00	-2.1%	-2.2%	-1.1%	-13.8%	-1.6%	-6.5%
4:00	-3.5%	-1.9%	-3.3%	-5.2%	-4.1%	-4.2%	16:00	-2.1%	-2.9%	-1.7%	-14.2%	-2.2%	-6.8%
5:00	-5.9%	-5.3%	-7.8%	-8.8%	-7.3%	-7.3%	17:00	-0.8%	-1.3%	-0.7%	-13.6%	-1.1%	-5.7%
6:00	-8.4%	-9.5%	-14.2%	-13.6%	-11.8%	-11.2%	18:00	-0.2%	0.0%	-1.3%	-11.4%	0.2%	-4.2%
7:00	-7.9%	-9.6%	-15.1%	-17.6%	-12.6%	-12.6%	19:00	-1.5%	-1.7%	-3.3%	-10.5%	-1.4%	-4.9%
8:00	-5.7%	-7.3%	-9.5%	-17.8%	-9.4%	-11.0%	20:00	-1.8%	-2.4%	-4.1%	-9.4%	-2.2%	-4.8%
9:00	-4.3%	-5.5%	-5.6%	-16.9%	-6.0%	-9.4%	21:00	-0.9%	-2.1%	-3.7%	-8.1%	-2.0%	-4.0%
10:00	-3.3%	-4.3%	-4.3%	-15.8%	-4.5%	-8.3%	22:00	-0.1%	-0.5%	-1.5%	-6.3%	-0.5%	-2.7%
11:00	-2.4%	-3.2%	-2.8%	-15.0%	-2.2%	-7.2%	23:00	0.1%	0.3%	0.5%	-4.3%	0.4%	-1.6%



# Next Steps

- **Present update to Operating Committee for information on April 16**
- **NYISO Operations and Demand Forecasting Team continue to monitor and assess the impacts of the COVID-19 shutdowns**
  - Identify the inflection point in daily energy declines
  - Track best available economic forecasts and consult with Transmission Owners on sector impacts
- **Gold Book Forecast Updates**
  - Baseline Forecast
  - Adding Economic Considerations to Low Energy Scenario
- **Forecasting system updates for Day-Ahead and Real Time Commitment**

# Questions and Discussion

# Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit 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 power system

