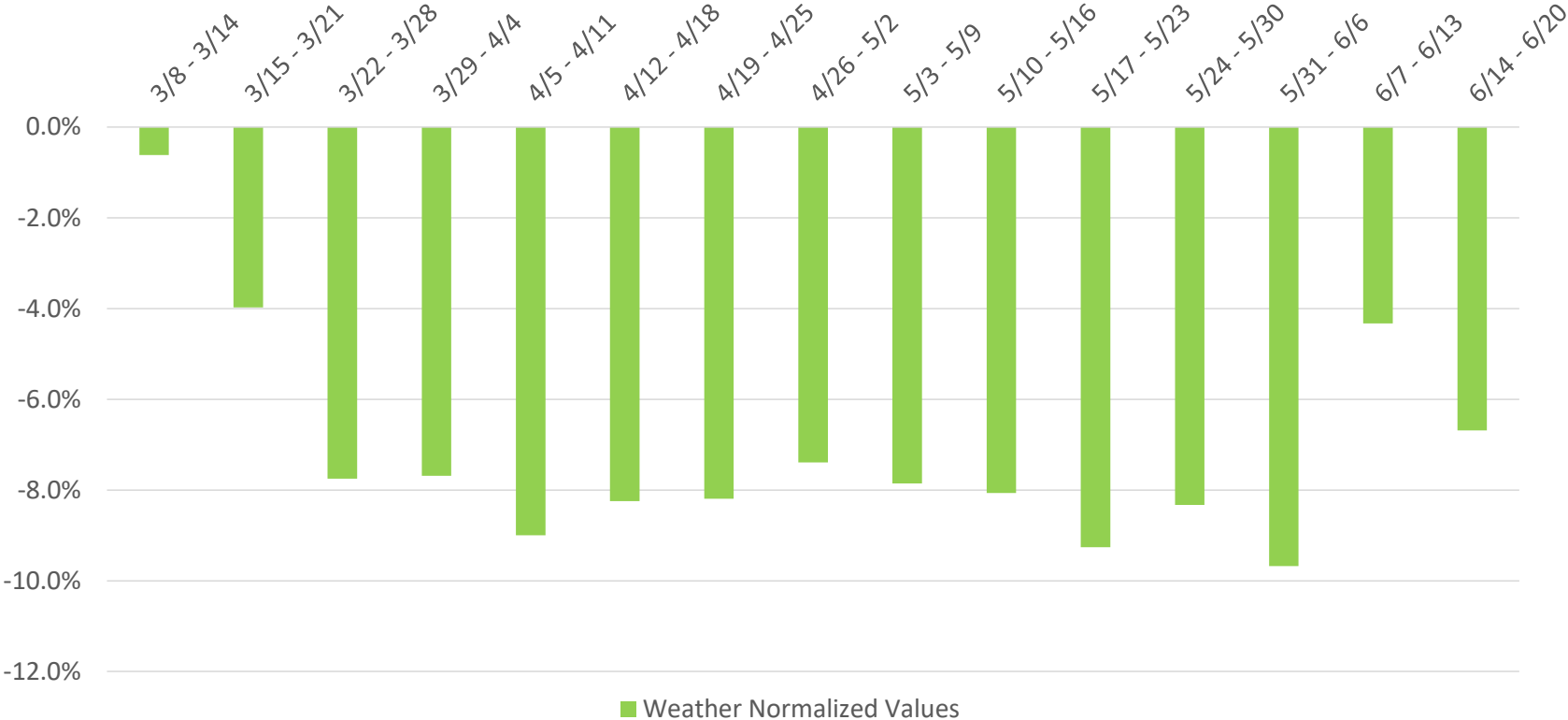# Forecasting and Operation Challenges Under Coronavirus Conditions: A US Point of View

Chuck Alonge & David Edelson

NYISO Forecasting & Operations Analysis

Energy Systems Integration Group

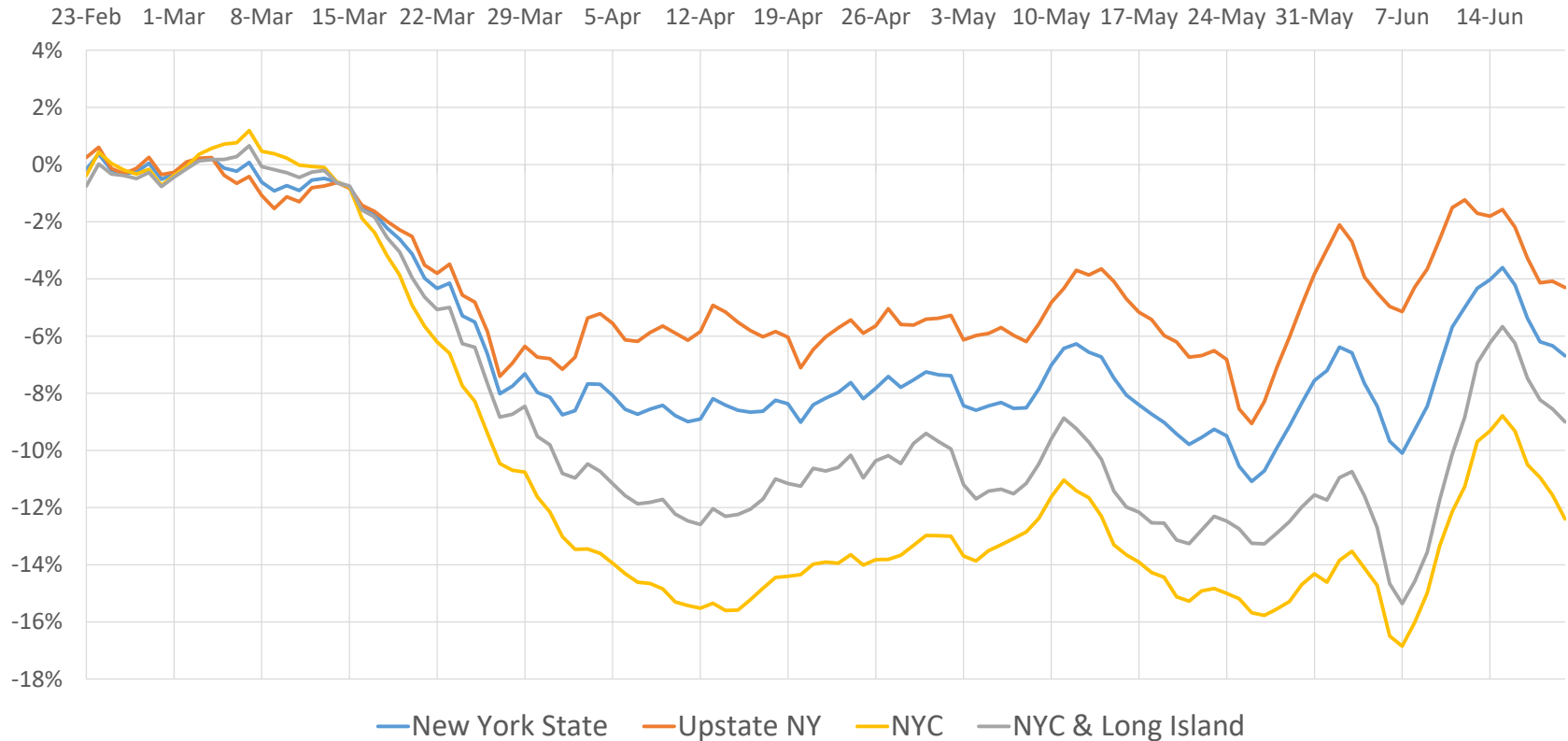2020 Meteorology and Market Design for Grid Services Workshop

June 29, 2020

Recent Impacts on Energy

Weekly Energy Use - % Versus Expected (NY State)
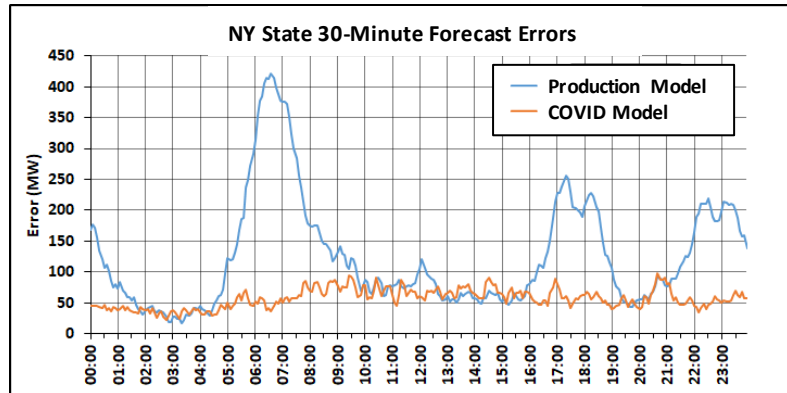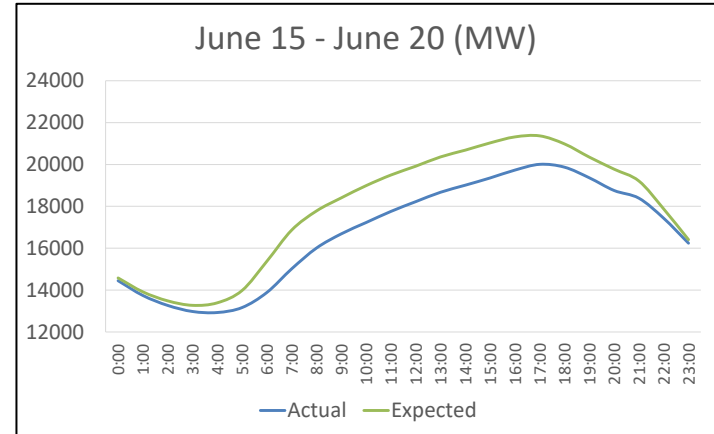

■ Weather Normalized Values

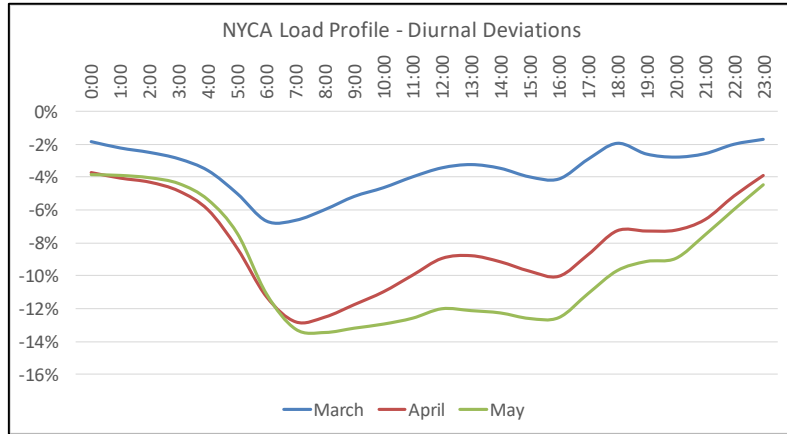# Regional Impacts on Daily Energy Patterns

2020 Weather Normalized Load Relative to Expected Load, 7-Day Moving Average (Daily Energy)

New York State — Upstate NY — NYC — NYC & Long Island

Recent Impacts on Forecasting

NYCA Load Profile - Diurnal Deviations

March — April — May

June 15 - June 20 (MW)

Actual — Expected

NY State 30-Minute Forecast Errors

Production Model — COVID Model

- Modeling the "Wedge"
- Tracking regional changes in base loads and profiles
- Additional model training exercises
- Tracking weather/load sensitivity changes throughout the spring and summer

New York ISO

Operational Impacts

Challenge	Mitigation
Strain of Operator on-site sequestration.	Voluntary program, access to entertainment and fitness, trailers in parking lot for personal space, process to receive care packages from family, etc.
Generator and transmission maintenance deferrals creating backlog of work.	Accommodating more outages than~ normal during the summer months.
Lower than normal loads.	Market rules provide incentives for lower min gen levels by allowing negative LMPs and 5-minute price signals. Renewables are dispatchable down. Virtual trading that helps converge Day-Ahead to Real-time.
Major infrastructure and software deployments typically done in person with a group of IT professionals working together are now done from numerous remote locations.	Practice remote deployments in test environments first, video conference calls, etc.

Questions?

DRAFT – FOR DISCUSSION PURPOSES ONLY

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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

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