

NYISO Summer 2019 Hot Weather Operations

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VICE PRESIDENT, OPERATIONS

New York State Reliability Council – Executive Committee

November 7, 2019

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Agenda

- **Summer 2019 Hot Weather Operations**
- **Summer Ambient Temperatures & Loads**
 - Thursday, July 18 – Sunday July 21
 - Monday, July 29 – Tuesday, July 30
- **Loads & Peaks**
- **Renewable Forecasting & Actual Generation**

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July 18-21 Hot Weather Operations

- Heat indexes as high as 110 F over the weekend
- Recorded all-time peak for a Sunday on July 21 at 30,339 MW
- Met reliability criteria with surplus operating margins
- No activations of SCR/EDRP required
- No need for statewide supplemental capacity commitments
- Operations participated in one NPCC conference call
- Prior to July 18, Transmission Owners rescheduled transmission work
- Local reliability commitments per NYSRC ARR rules
- Transmission Owners did activate utility (retail) demand response programs
- No need for emergency actions such as emergency purchases or voltage reduction

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July 29-30 Hot Weather Operations

- Met reliability criteria with surplus operating margins
- No activations of SCR/EDRP required
- No need for statewide supplemental capacity commitments
- Prior to July 29, Transmission Owners rescheduled transmission work
- Local reliability commitments per NYSRC ARR rules
- Transmission Owners did activate utility (retail) demand response programs
- No need for emergency actions such as emergency purchases or voltage reduction

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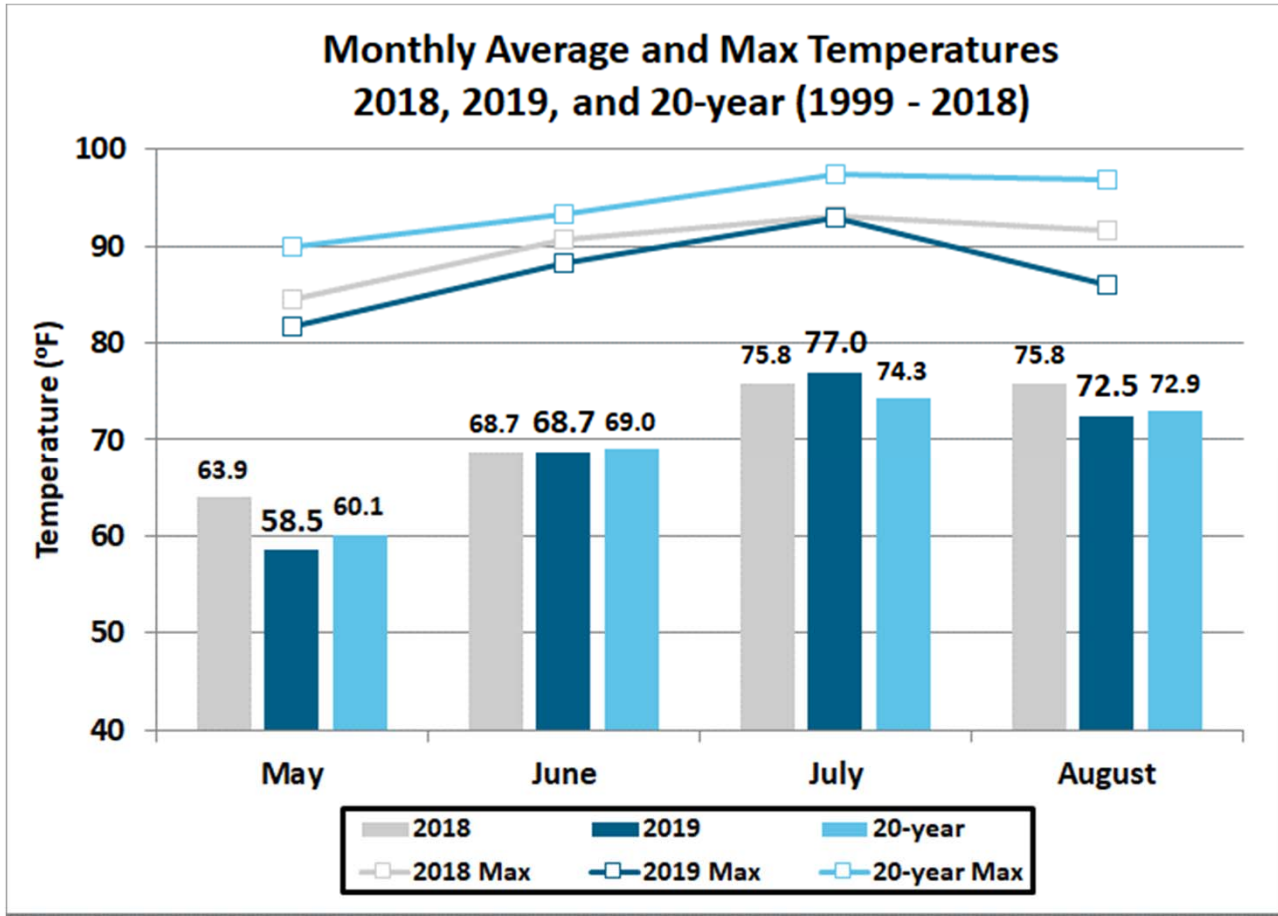


Ambient Conditions

- Daily mean temperatures were above the 20-year average in July; near average in June and August; and below average in May
 - 12 days with highs above 90F in Albany (<https://www.weather.gov/media/aly/Climate/90DegreeDays.pdf>)
- Total load (GWh) was below 50/50 projections
- Peak load was below the 50/50 projection for the 6th consecutive summer
 - Summer 2019 50/50 forecast was 32,382 MW
 - Summer 2019 actual peak load was 30,397 MW (July 20)
 - Summer 2018 actual peak load was 31,861 MW
- Four days with peak loads over 30,000 MW

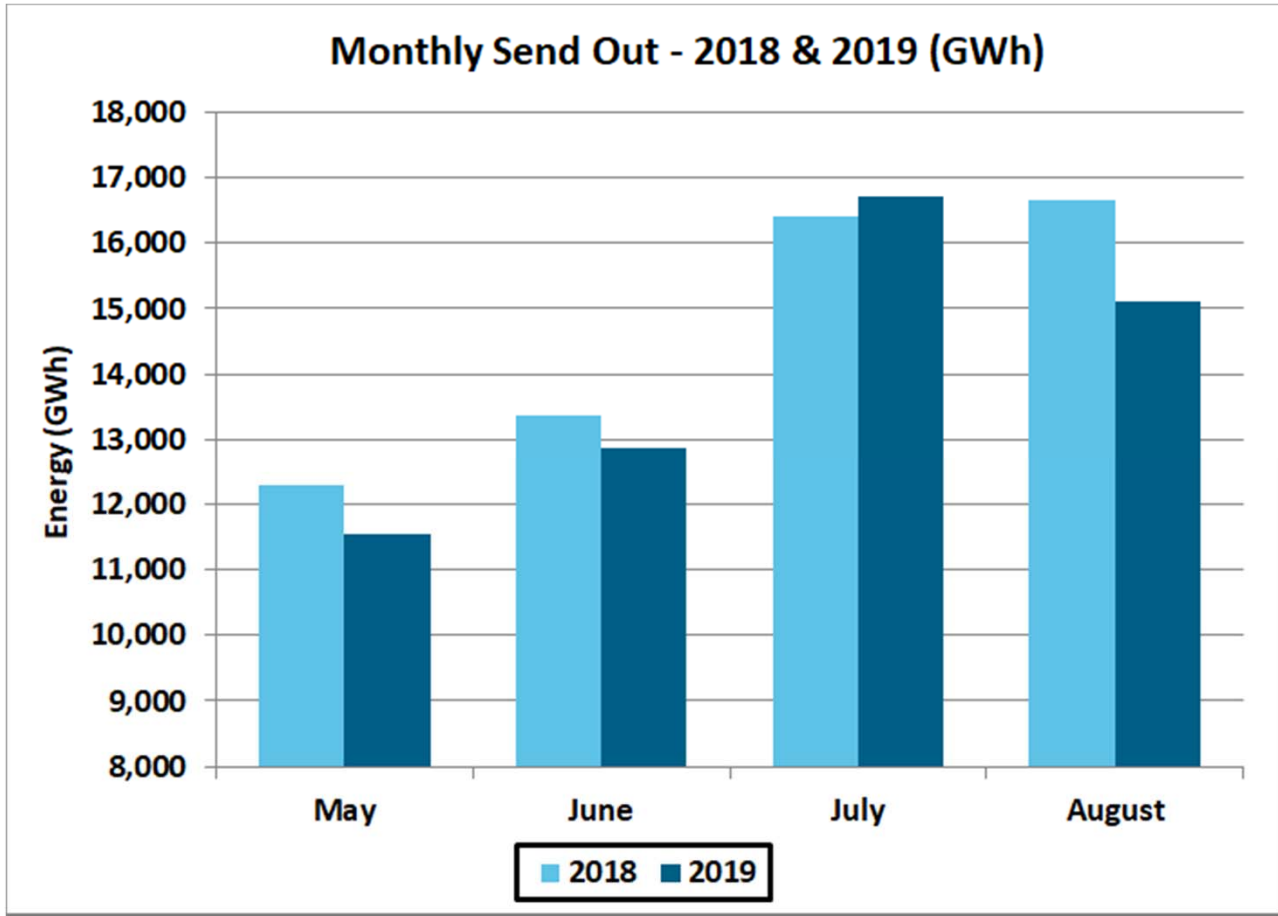
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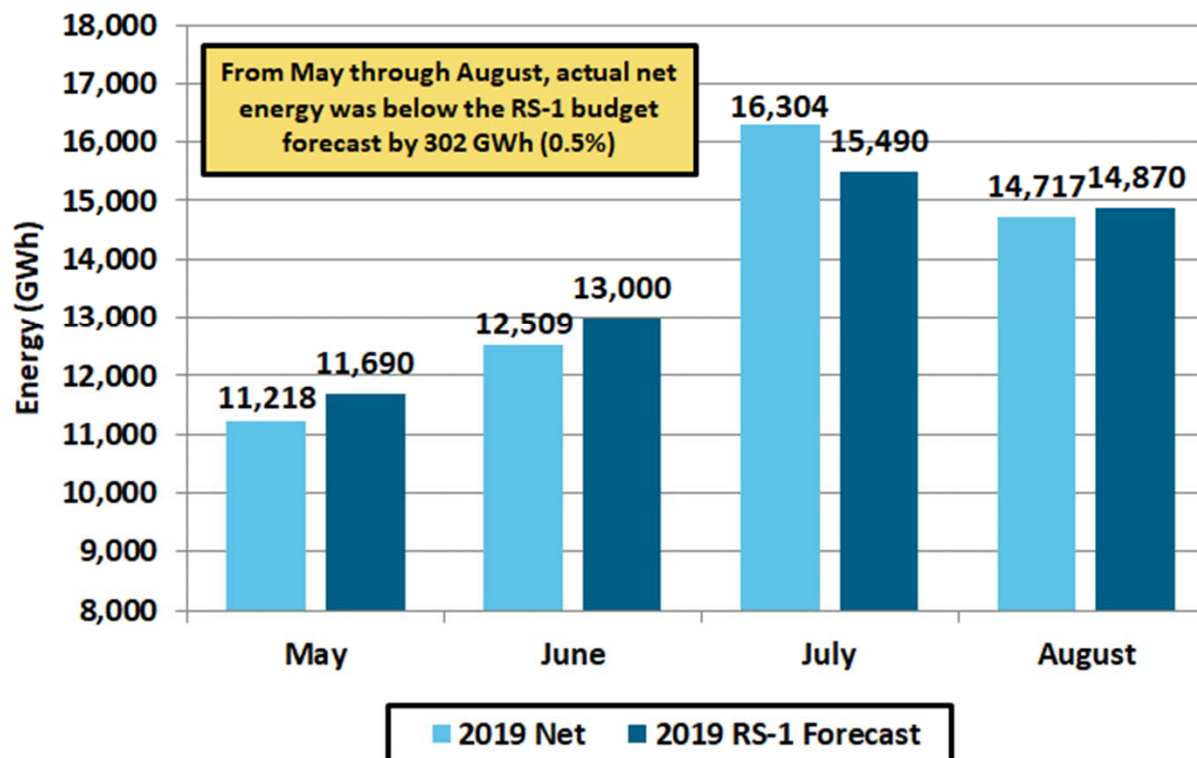




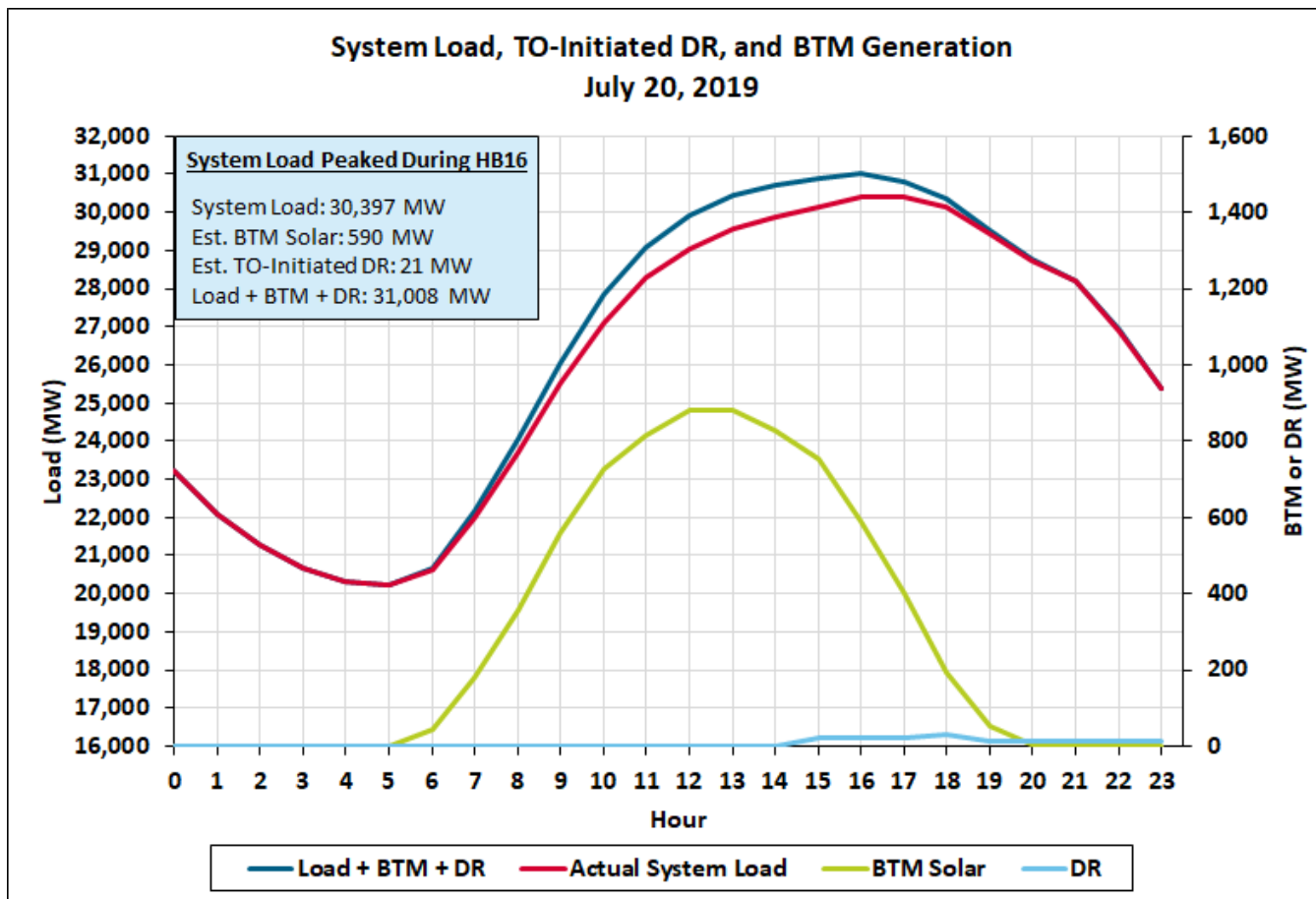
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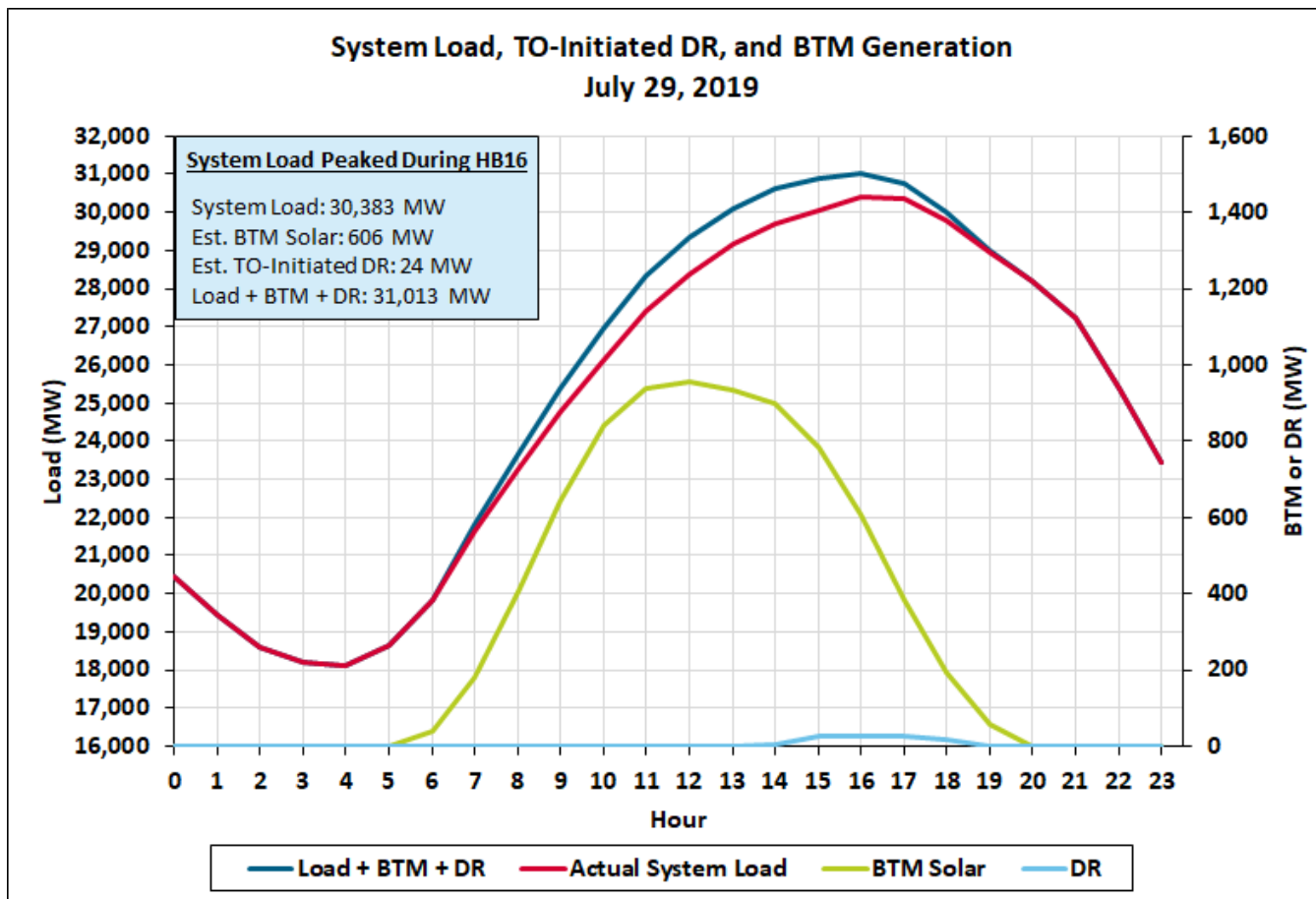
2019 Monthly Net Energy - GWh Actual and RS-1 Budget Forecast



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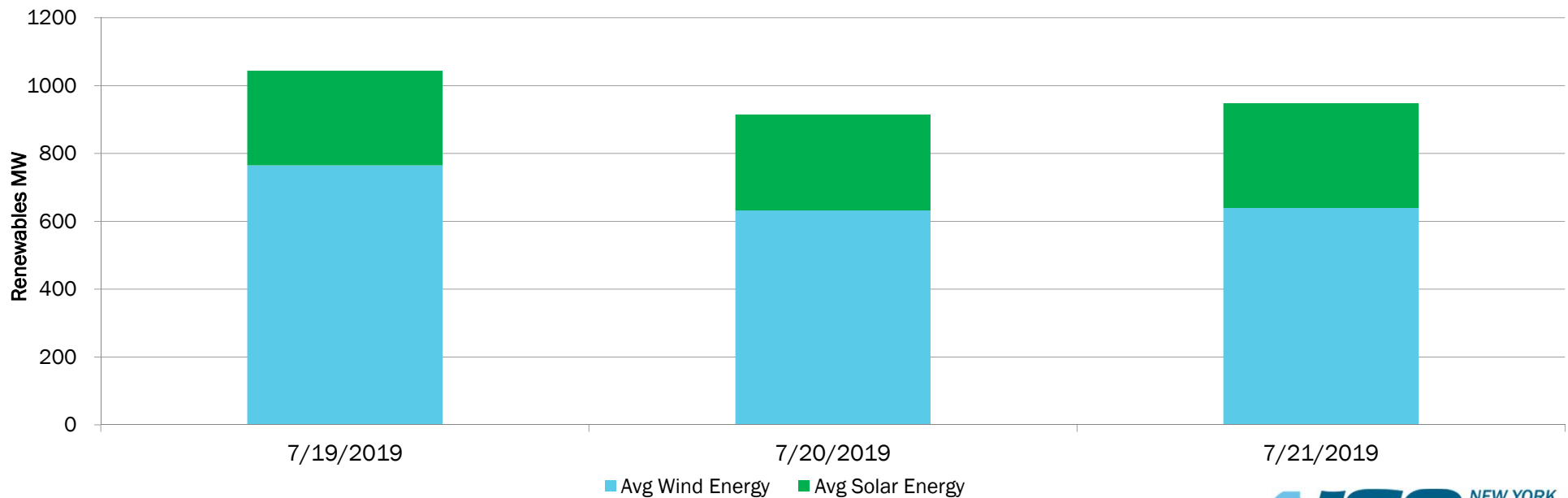
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Renewable Production (Daily)

Daily Wind & Solar Production
07/19/2019 - 07/21/2019

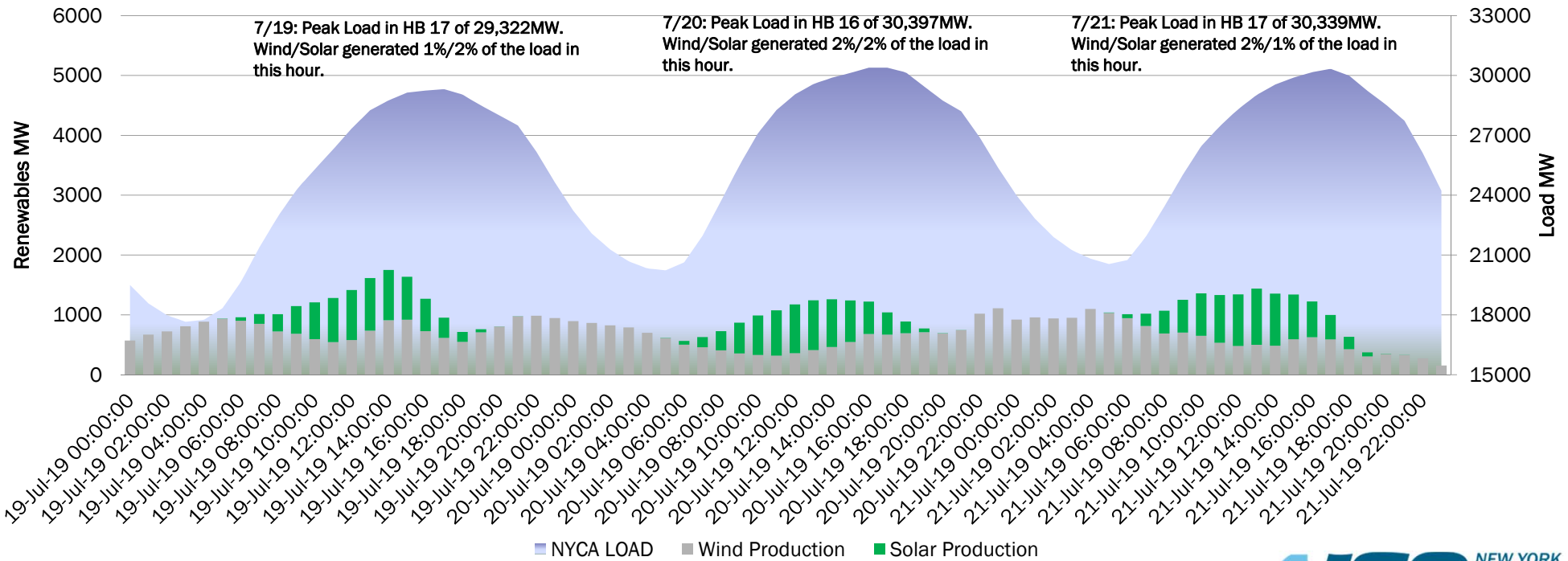


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Renewable Production (Hourly)

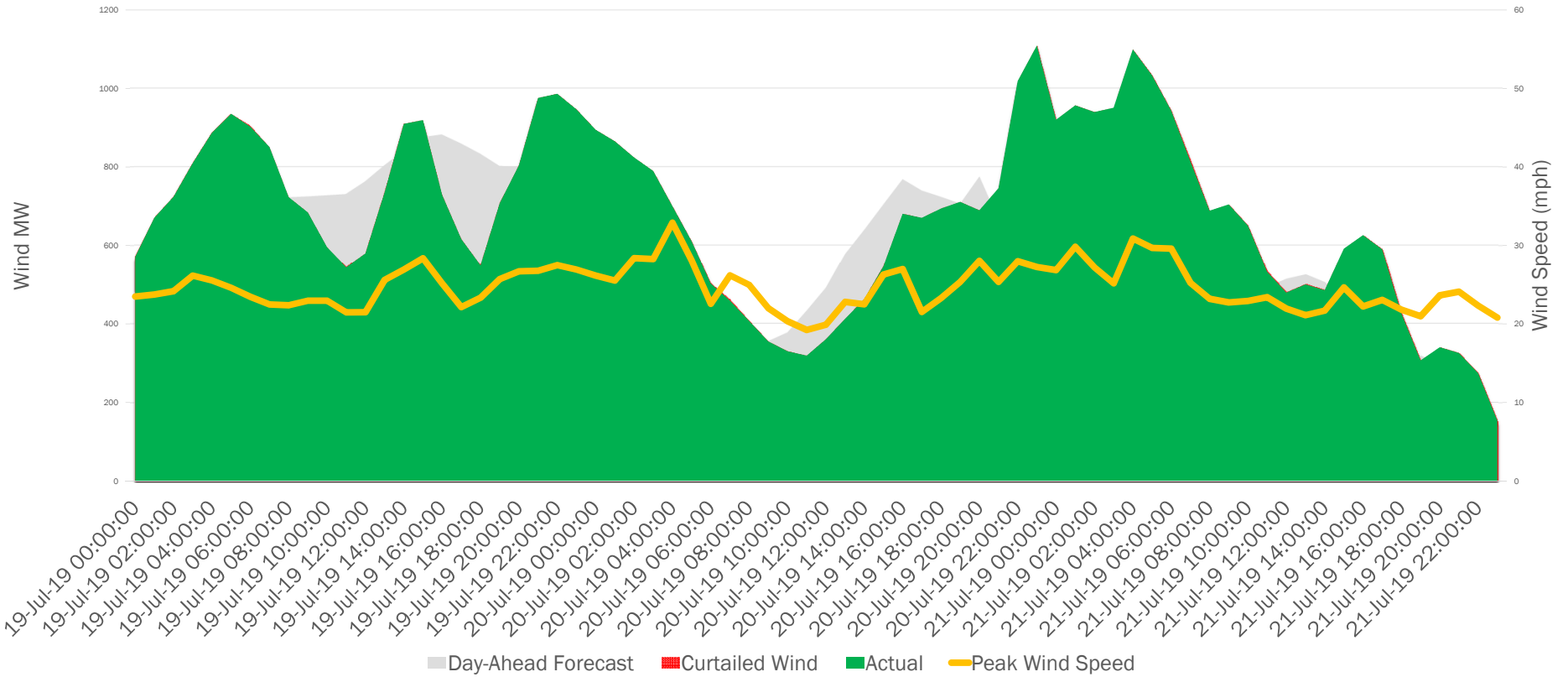
Hourly Wind & Solar Production
07/19/2019 - 07/21/2019



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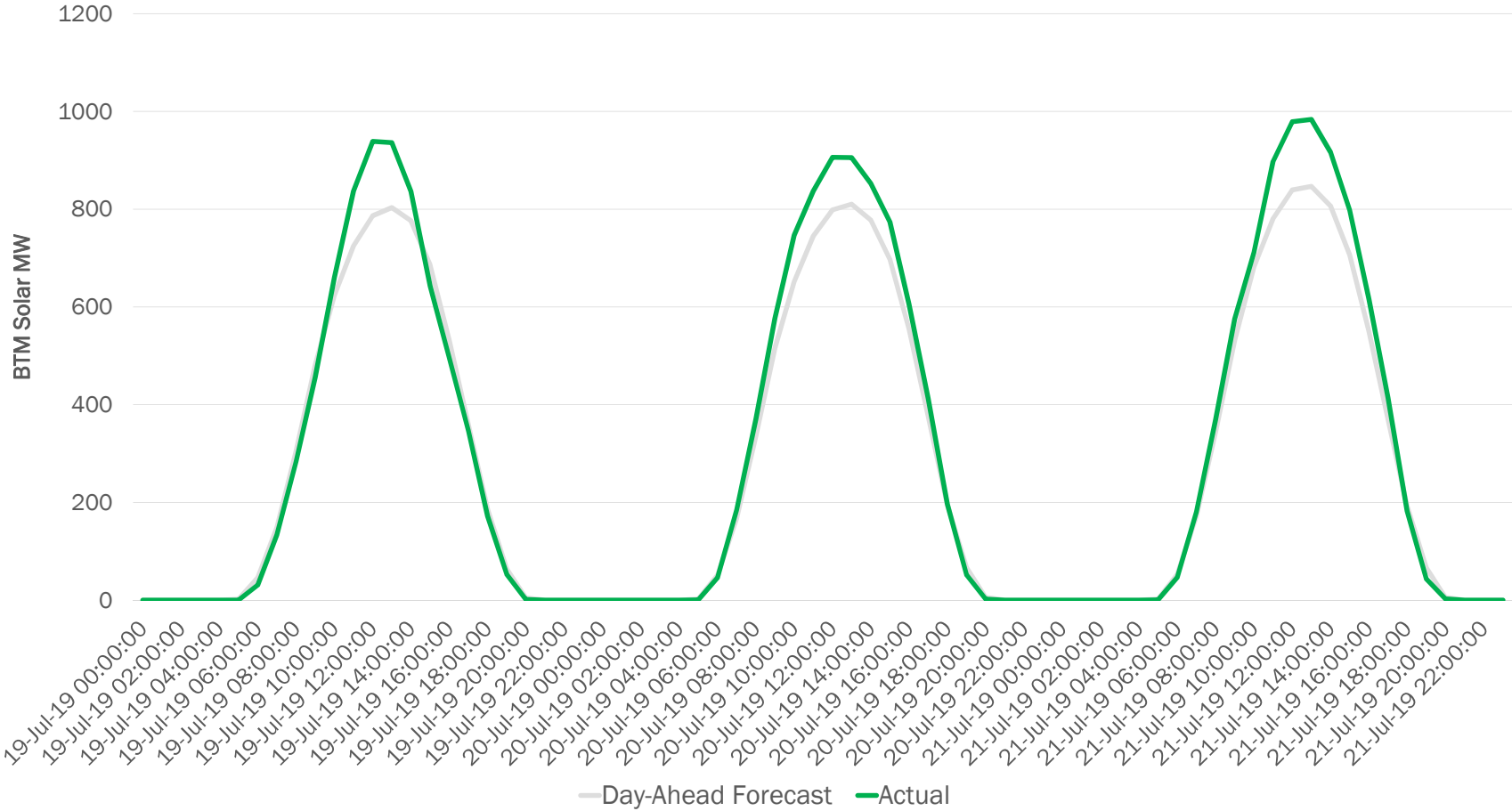
Heat Wave - NYCA Wind Profile 7/19/2019-7/21/2019



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July 19-21, 2019 NYCA BTM Solar Profile (~1,614MW)

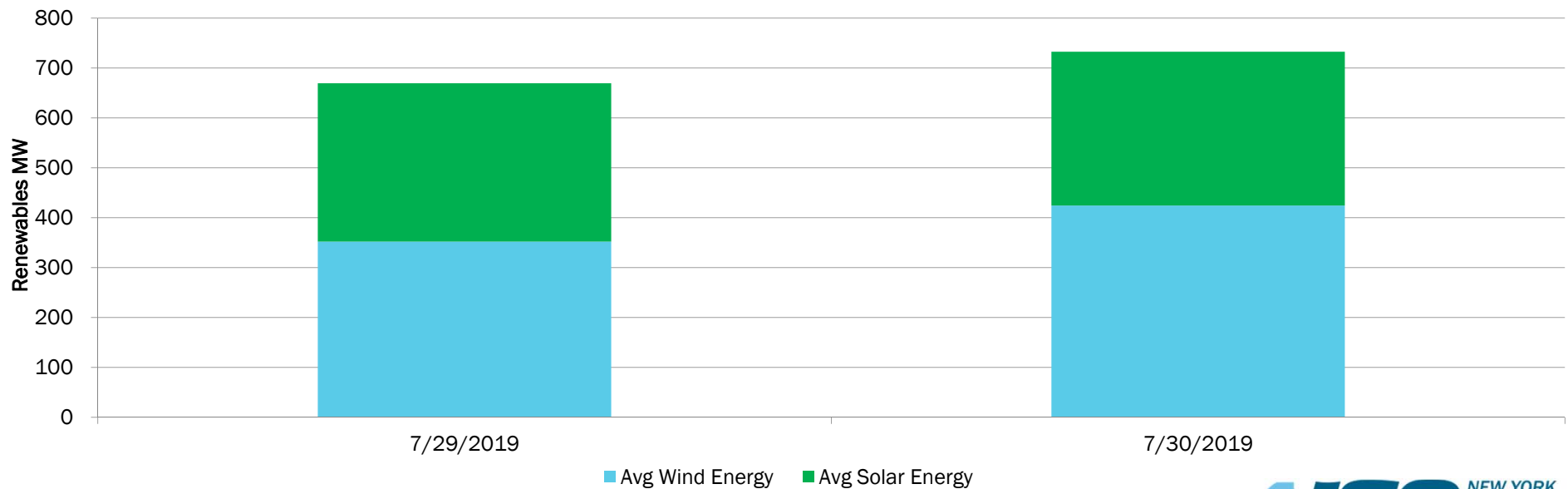


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Renewable Production (Daily)

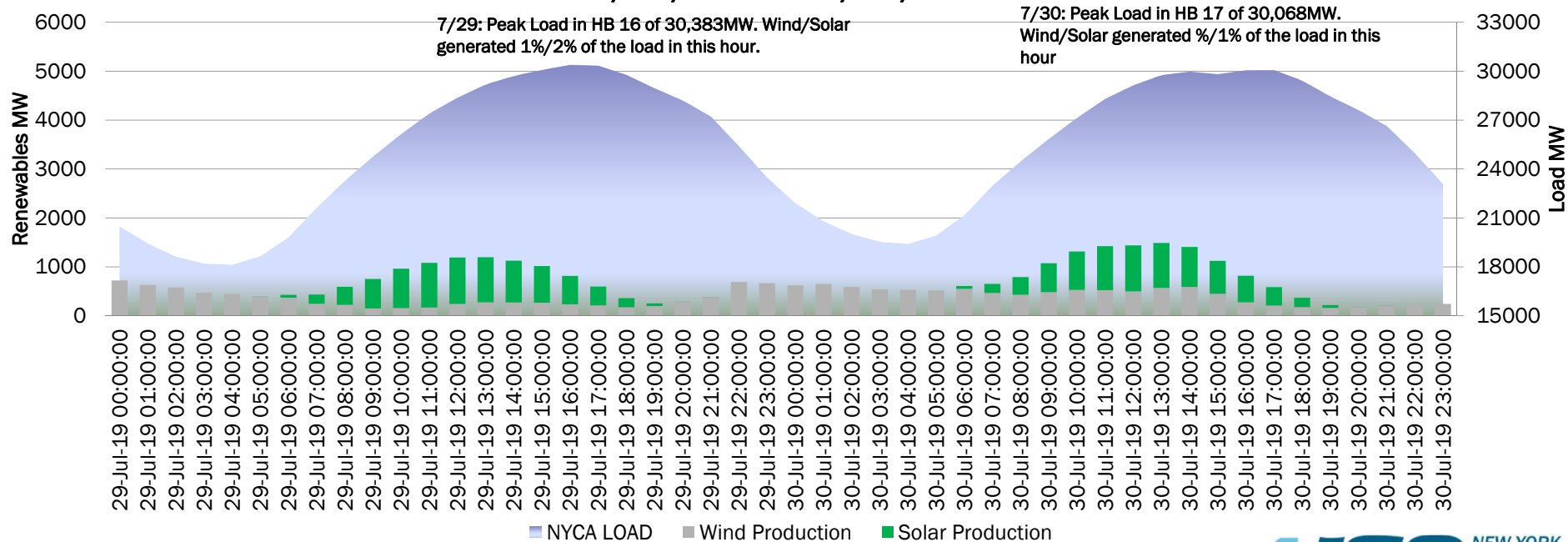
Daily Wind & Solar Production
07/29/2019 - 07/30/2019



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Renewable Production (Hourly)

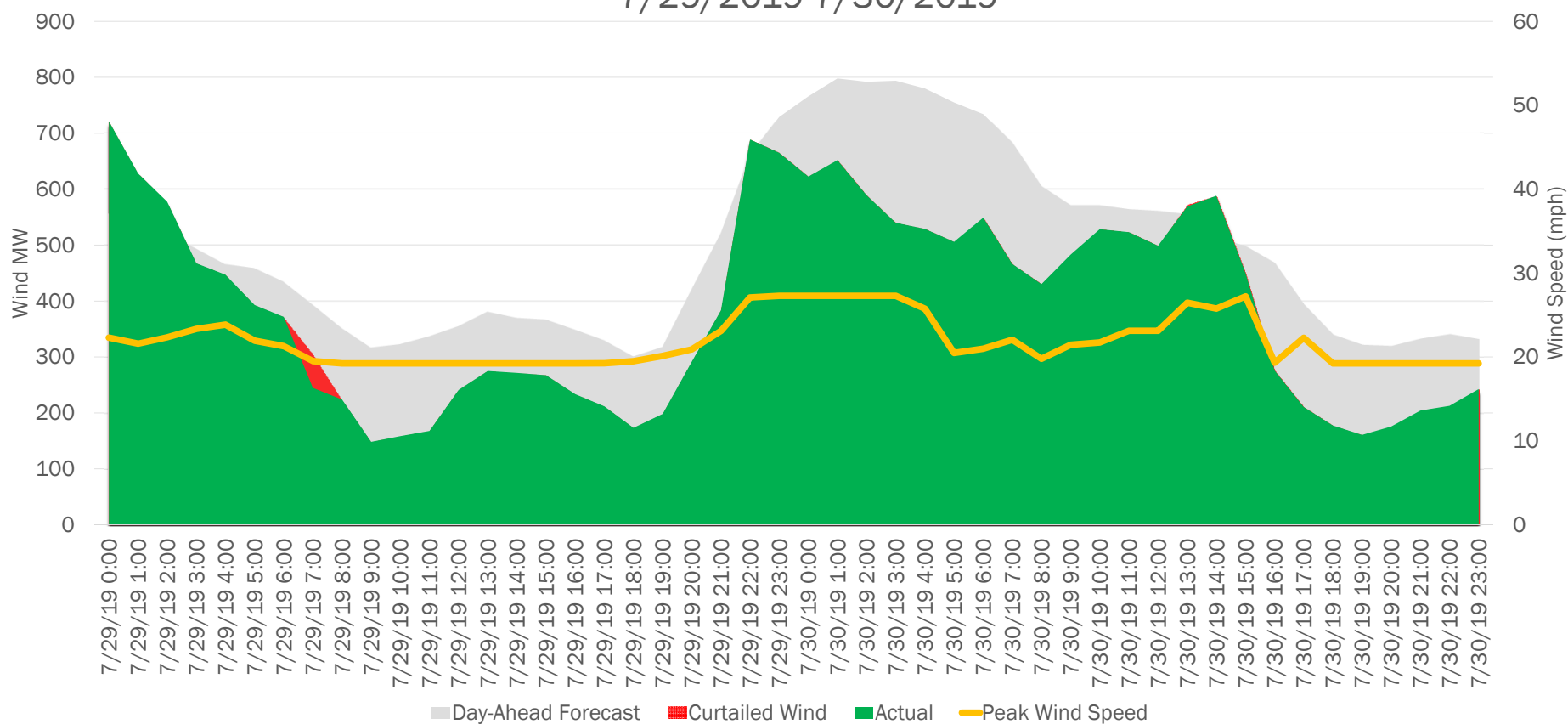
Hourly Wind & Solar Production 07/29/2019 - 07/30/2019



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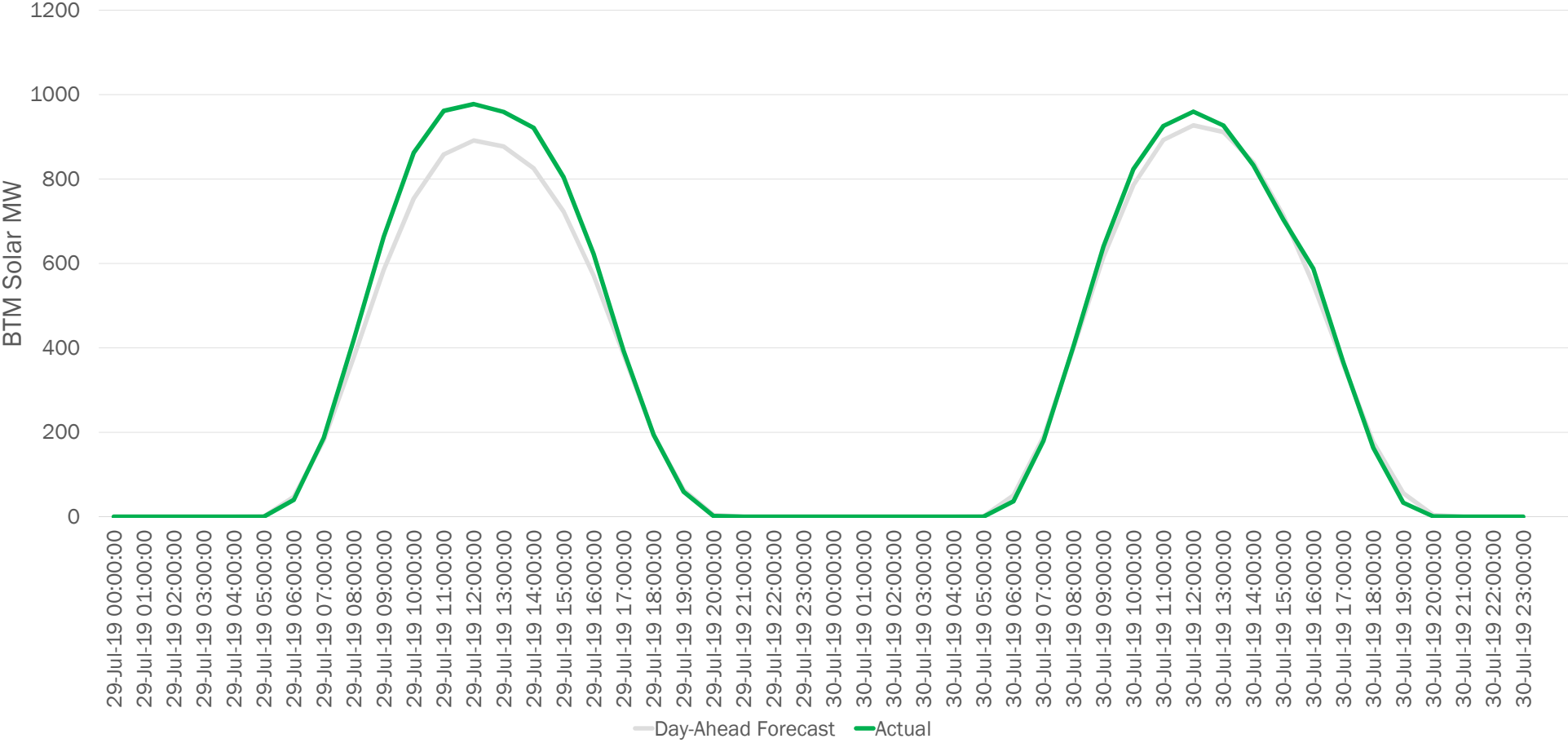
Heat Wave - NYCA Wind Profile 7/29/2019-7/30/2019



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July 29-30, 2019 - NYCA BTM Solar Profile (~1,614MW)



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Retail Demand Response Program Activations

Date	Transmission Owner
June 27, 2019	Con Ed, LIPA, National Grid, Orange & Rockland
July 10, 2019	RG&E
July 11, 2019	RG&E
July 16, 2019	RG&E
July 17, 2019	Con Ed, LIPA
July 18, 2019	RG&E
July 19, 2019	Central Hudson, Con Ed, National Grid, NYSEG, RG&E
July 20, 2019	Con Ed, LIPA
July 21, 2019	Con Ed, LIPA
July 22, 2019	Con Ed
July 29, 2019	LIPA, RG&E
July 30, 2019	Central Hudson, Con Ed, LIPA
July 31, 2019	Orange & Rockland
August 08, 2019	Central Hudson
August 19, 2019	Central Hudson, Con Ed, NYSEG, RG&E
August 20, 2019	Con Ed
August 22, 2019	Con Ed

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- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system

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