

# RPU Performance Winter 2020-21

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**MIWG**

December 2, 2021

# Reserve Pickup Event Performance Data

# RPU Event Performance Results

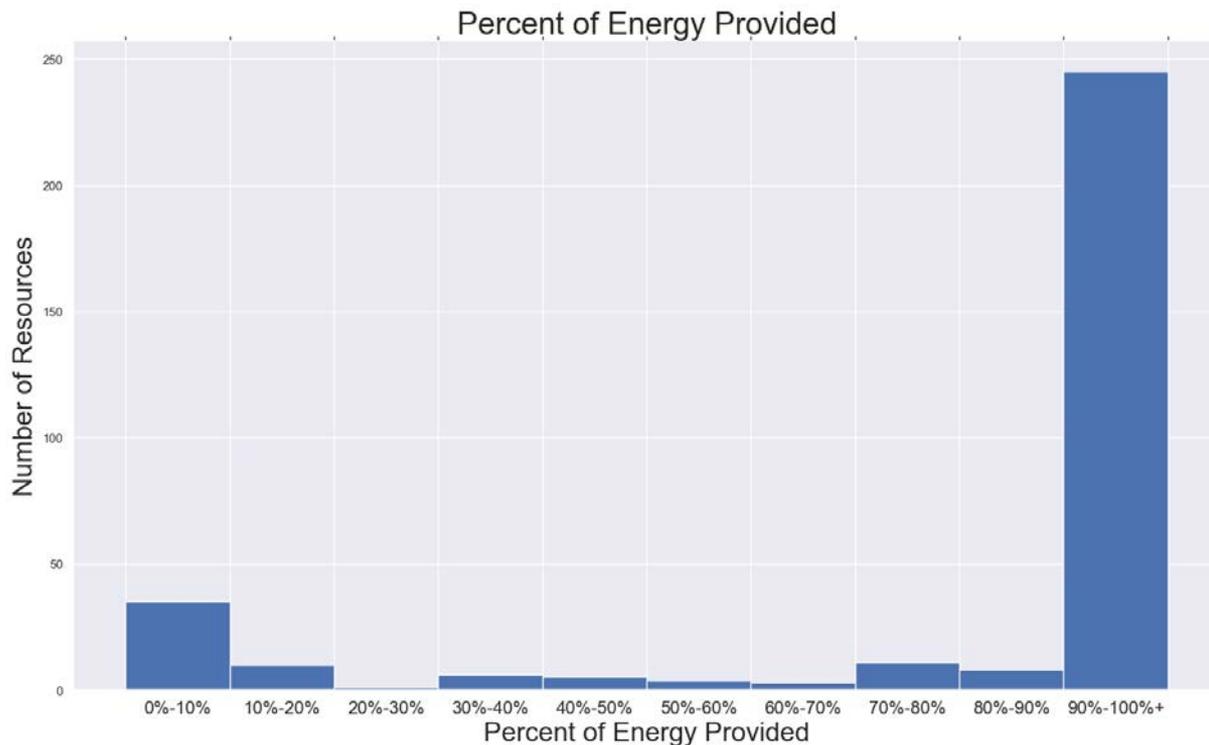
- The below tables summarize the results of NYISO's analysis
  - Time Period: November 1st, 2020 though April 30th, 2021
  - 31 RPUs occurred in this period

| Pass and Fail Rates During a RPU |      |      |       |        |
|----------------------------------|------|------|-------|--------|
|                                  | Pass | Fail | Total | Pass % |
| GTs                              | 84   | 24   | 108   | 77.8%  |
| All Resources                    | 263  | 61   | 324   | 81.2%  |

| Total Quantity of Energy Expected and Provided During a RPU |                            |                            |                            |
|---|----------------------------|----------------------------|----------------------------|
|   | Total Energy Expected (MW) | Total Energy Provided (MW) | Percent of Energy Provided |
| GTs   | 4086                       | 3957                       | 89.5%                      |
| All Resources   | 10112                      | 11830                      | 117%                       |

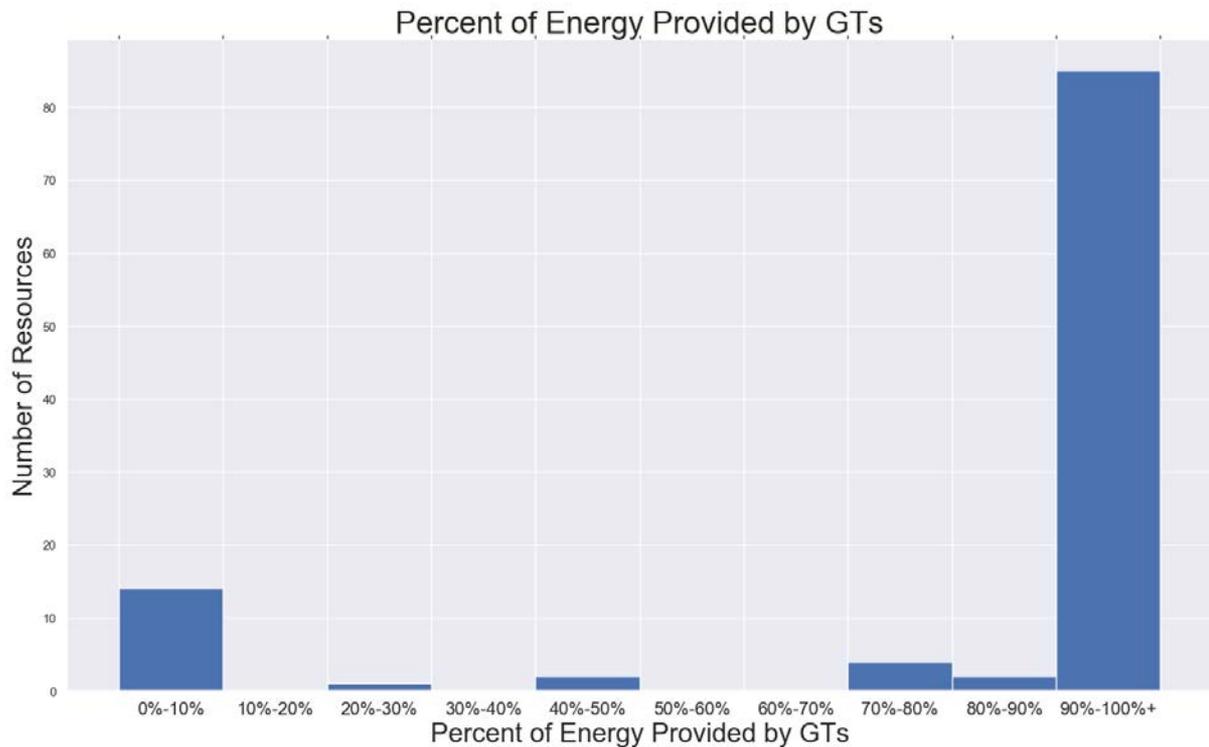
Note: These tables have not changed since last presented at the [February 10, 2020 MIWG/ICAPWG](#).

# Percent of Energy Provided



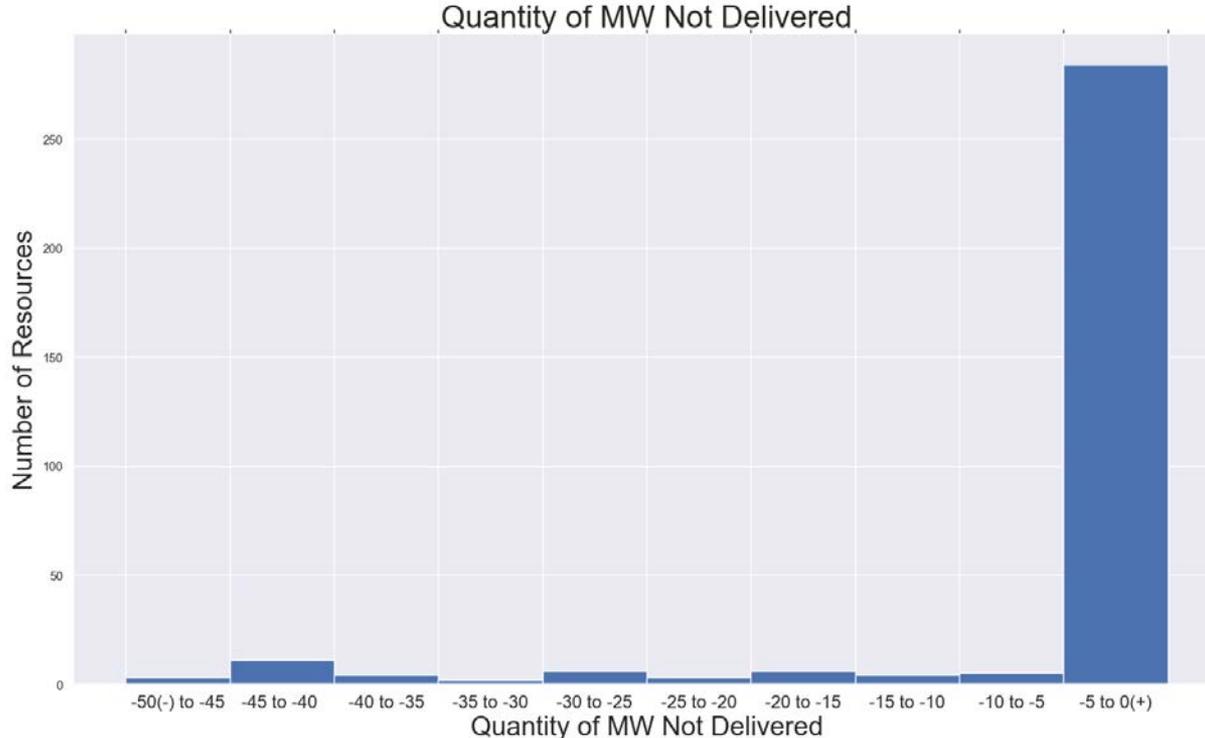
- This graph shows the distribution of the percent of energy (total energy provided/total energy expected) provided by each reserve provider that was asked to convert reserves to energy when an RPU was activated in real time
  - 31 RPUs occurred between November 1st, 2020 and April 30th, 2021
  - There were 324 unique instances in which a resource was asked to convert reserves to energy
  - For GTs, total energy provided was measured at the 11<sup>th</sup> minute after the start of the RPU. For all other resources, total energy provided was measured one minute after the end time of the RPU
- This graph shows that 75% of the time, resources provided more than 90% of total energy expected

# Percent of Energy Provided by GTs



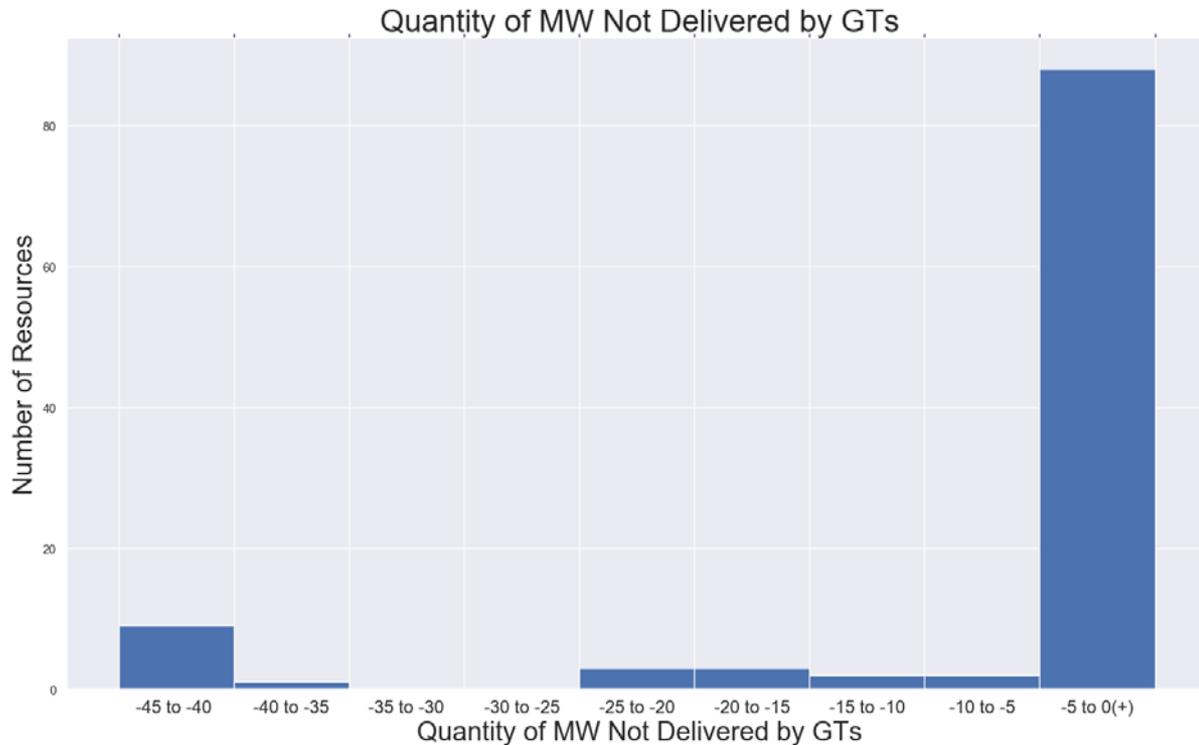
- This graph shows the distribution of the percent of energy (total energy provided/total energy expected) provided by 10-Minute GTs when asked to convert reserves to energy when an RPU was activated in real time
  - 31 RPUs occurred between November 1st, 2020 and April 30th, 2021
  - There were 108 unique instances in which a GT was asked to convert reserves to energy
  - Total energy provided was measured at the 11<sup>th</sup> minute after the start of the RPU
- This graph shows that 79% of the time, units provided more than 90% of total energy expected

# Quantity of MW Not Delivered



- This graph shows the distribution of the quantity of MW not delivered (total energy expected minus total energy provided) for each reserve provider when asked to convert reserves to energy when an RPU was activated in real time
  - 31 RPUs occurred between November 1st, 2020 and April 30th, 2021
  - There were 324 unique instances in which a resource was asked to convert reserves to energy
  - For GTs, total energy provided was measured at the 11<sup>th</sup> minute after the start of the RPU. For all other resources, total energy provided was measured one minute after the end time of the RPU
- This graph shows that 87% of the time, a resource met, exceeded, or missed its expected energy by less than 5 MW

# Quantity of MW Not Delivered by GTs



- This graph shows the distribution of the quantity of MW not delivered (total energy expected minus total energy provided) for 10-Minute GTs when asked to convert reserves to energy when an RPU was activated in real time
  - 31 RPUs occurred between November 1st, 2020 and April 30th, 2021
  - There were 108 unique instances in which a GT was asked to convert reserves to energy
  - Total energy provided was measured at the 11<sup>th</sup> minute after the start of the RPU
- This graph shows that **81%** of the time, a unit met, exceeded, or missed its expected energy by less than 5 MW

# 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

