

RPU Performance Summer 2020

Jon Sawyer

Manager, Control Room Operations

ICAP/MIWG/PRLWG February 18, 2021, Conference Call

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Reserve Pickup Event Performance Data



RPU Event Performance Results

- The below tables summarize the results of NYISO's analysis
 - Time Period: May 1st, 2020 though October 31st, 2020
 - 56 RPUs occurred in this period

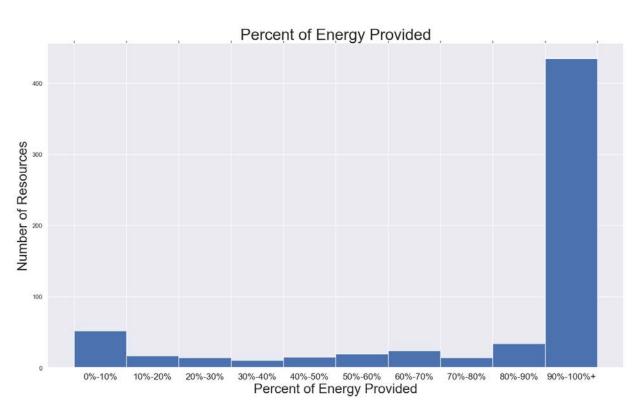
Pass and Fail Rates During a RPU						
	Pass	Fail	Total	Pass %		
GTs	132	25	157	84.1%		
All Resources	500	134	634	78.9%		

Total Quantity of Energy Expected and Provided During a RPU					
	Total Energy		Percent of Energy		
	Expected (MW)	Provided (MW)	Provided		
GTs	4887	5071	103.8%		
All Resources	12343	14787	119.8%		



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

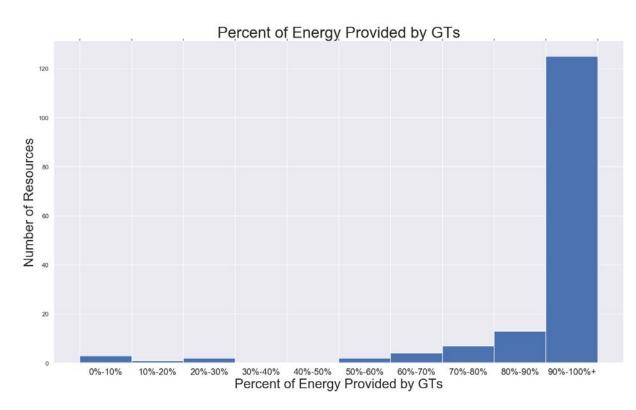
Percent of Energy Provided



- 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
 - 56 RPUs occurred between May 1st, 2020 and October 31st, 2020
 - There were 634 unique instances in which a resource was asked to convert reserves to energy
 - For GTs, total energy provided was measured at the 11th 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 69% of the time, resources provided more than 90% of total energy expected

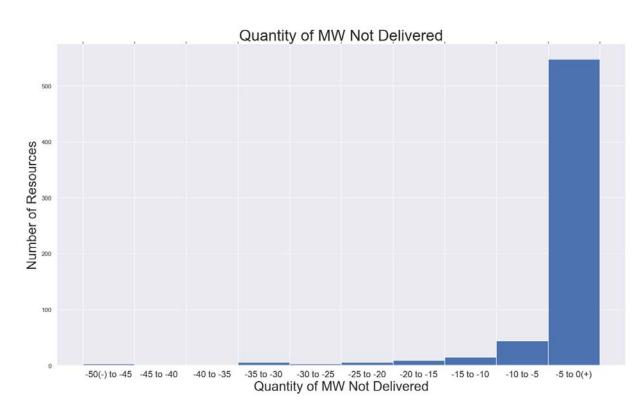


Percent of Energy Provided by GTs



- 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
 - 56 RPUs occurred between May 1st, 2020 and October 31st, 2020
 - There were 157 unique instances in which a GT was asked to convert reserves to energy
 - Total energy provided was measured at the 11th minute after the start of the RPU
- This graph shows that 80% of the time, units provided more than 90% of total energy expected

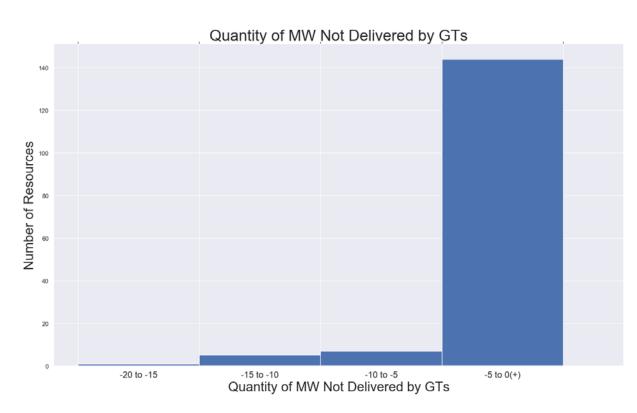
Quantity of MW Not Delivered



 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

- 56 RPUs occurred between May 1st, 2020 and October 31st, 2020
- There were 634 unique instances in which a resource was asked to convert reserves to energy
- For GTs, total energy provided was measured at the 11th 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 86% 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

- 56 RPUs occurred between May 1st, 2020 and October 31st, 2020
- There were 157 unique instances in which a GT was asked to convert reserves to energy
- Total energy provided was measured at the 11th minute after the start of the RPU
- This graph shows that 92% 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



