

Odessa Disturbance Report

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Odessa Disturbance Background

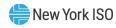
- Date & Time May 9, 2021 at 11:21 AM CT
- Fault Type A single-line-to-ground (Phase A) fault occurred on a generator step-up (GSU) transformer at a combined-cycle (CC) power plant near Odessa, Texas.
- Resulted in loss of the affected cc plant, but also other nonconsequential generating facilities.

Table ES.1: Reductions of Output by Unit Type	
Plant Type	Reduction [MW]
Combined Cycle Plant	192
Solar PV Plants	1,112
Wind Plants	36
Total	1,340



Causes of Loss of Generations

Table 1.1: Causes of Reduction	
Cause of Reduction	Reduction [MW]
PLL Loss of Synchronism	389
Inverter AC Overvoltage	269
Momentary Cessation	153
Feeder AC Overvoltage	147
Unknown	51
Inverter Underfrequency	48
Not Analyzed	34
Feeder Underfrequency	21



Odessa Report Recommendations*

- Improve requirement and processes
- Update NERC standards to address performance gaps in inverter-based resources
- Update NERC standards to address modeling and studies gaps for inverter-based resources



NYISO Interconnection Process

- Interconnection projects that are subject to the NYISO interconnection procedures shall be conducted in accordance with Applicable Reliability Standards.
 - Applicable Reliability Standards shall mean the requirements and guidelines of the Applicable Reliability Councils, and the Transmission District, to which the Developer's Large Facility is directly interconnected, as those requirements and guidelines are amended and modified and in effect from time to time; provided that no Party shall waive its right to challenge the applicability or validity of any requirement or guideline as applied to it in the context of the Large Facility Interconnection Procedures.
 - Applicable Reliability Councils shall mean the NERC, the NPCC and the NYSRC.



NYISO Interconnection Process (cont.)

- The procedure used to identify upgrades to ensure reliability is in compliance with Applicable Reliability Requirements.
 - Applicable Reliability Requirements shall mean the NYSRC Reliability Rules, NPCC Basic Design and Operating Criteria, NERC Planning Standards, ISO rules, practices and procedures, and the Connecting Transmission Owner criteria included in FERC Form No. 715



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