M-2	
BPS Transmission Related Events Resulting in Loss of Load (Excluding Weather)	
Submittal Date	February 27, 2009

Proposal Type Is this a proposed new metric, a revision to an existing metric, or a proposal for a type of analysis?	New ☐	Revision ☒ Revised August 16, 2022 November 12, 2013	Metric Analysis ☐
Definition	This metric counts BPS transmission-related events resulting in the loss of firm load, excluding weather-related outages.		
New: Rating Criteria	• **Red (actionable)**: The count of events and MW of load loss increased from the year before or the count of events or MW of load loss are greater than median value. • **Yellow (monitor)**: The count of events or MW load loss increased from year before or stable and greater than median value. • **White (stable)**: The count of events or MW of load loss is slightly less than median value or the same as the year before and below the median value. • **Green (good/improving)**: The count of events and MW of load loss for the year is less than the year before and below median value or count of events is zero.		
Purpose	The purpose of this metric is to track transmission related events that result in loss of firm load. This allows planners and operators to validate their design and operating criteria, assuring acceptable performance of the system.		

Formula or Type of Statistical Analysis	An "event" is an unplanned disturbance that produces an abnormal system condition due to equipment failures/system operational actions that result in the loss of firm load. The reporting criteria are a combination of what is reported in EOP-004 and Event Analysis process for such events are as follows:
	
	• The loss of firm load for 15 minutes or more:
	
	    ▪ 300 MW or more for entities with previous year's demand of 3,000 MW or more
	
	    ▪ 200 MW or more for all other entities
	
	• A BES emergency that requires manual firm load shedding of 100 MW or more		

M-2					
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	• A BES emergency that resulted in automatic firm load shedding of 100 MW or more via automatic under-voltage or UFLS schemes or SPS/RAS • A transmission loss event with an unexpected loss within an entity's area, contrary to design, of three or more BES elements caused by a common disturbance (excluding successful automatic reclosing) that results in a firm loss of load of 50 MW or more.				
Time Horizon	Rolling 5 years				
Metric Start Time or Baseline	2002, or whenever data first became available				
Data Collection Interval and Roll Up	NERC Standard EOP-004 requires reporting of the data. OE-417 can be used in lieu of an EOP-004 report. Applicable Event Analysis reports will also be included.				
Ease of Collection	Data is available; may require some adjustments to accommodate all the different groups for measurement.				
Aggregation	BA, Reliability Organization, Planning Authority, or Interconnection				
Links to NERC Standard	NERC Standard EOP-004-4				
Data Sources	Includes EOP-004-4, OE-417 notifications and the brief reports (EA) which are driven by the defined EA criteria; EEA 3 (SA). Notifications and reports can include customers, load or both.				
Data Source Owner	NERC Event Analysis and NERC Situation Analysis				
Data to be Submitted By	NERC Standard EOP-004 requires reporting of the data. OE-417 can be used in lieu of an EOP-004 report. Applicable Event Analysis reports will also be included.				
PAS and NERC Staff Use					
Need for Validation or Pilot	Initially, needed to validate completeness and consistency of reporting by entities.				
SMART Rating	Total Score	Specific/Simple	Measurable	Attainable	Relevant	Tangible/Timely

M-2						
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PAS SMART rating of proposed metric, metric revision, or new metric analysis method	15	3	3	3	3	3
Publications and Documentation	State of Reliability Report and NERC Reliability indicator dashboard.					