

Discussion Agenda

Second Public Workshop, Sustained Interruptions

Workshop Objective: To identify and discuss issues related to tracking and reporting sustained interruptions by electric companies. To identify additional analytical requirements and establish plans for continuing staff's analysis of sustained interruptions issues.

I. Welcome and Introductions

II. Agreement on Basic Terms

- Propose IEEE 1633 standard for terms only - list available at meeting
- Define term "sustained interruptions"
- Discuss any terms not defined in IEEE 1633

III. Issues Discussion

A. Staff Responsibilities and Difficulty Doing Them

- Knowing what "safe, adequate and efficient, and in all respects just and reasonable," service reliability is, and tracking it, in order to advise commissioners that each utility is headed in the right direction and is making reasonable decisions related to reliability, or not.
- Assisting customers with reliability complaints find good answers and solutions to their problems.
- Staff assessment that current situation does not allow adequate tracking of reliability nor sufficient guidance as to what constitutes adequate reliability.

B. General Information - See Table 1

Table 1 outlines the kind of general information that would be helpful to staff to track and assess reliability. We would like to discuss whether stakeholders agree or disagree with the contents of this table, and what should be added or subtracted.

C. Specific Information - See Table 2

Table 2 provides examples of specific measures that can be gathered and combined to assist staff in tracking and assessing the reliability of sustained interruptions. We would like to discuss whether stakeholders agree or disagree with the contents of this table, what should be added or subtracted, and what issues are raised by tracking and assessing reliability by any one or combination of these measures.

D. Example Indices - See Tables 3,4,5 and 6

Tables 3 - 6 are examples of the way specific measures can be combined from Table 2 to form indices by which reliability can be measured. Tables 3 - 5 are proposed industry standards from IEEE 1366 Trial-Use Guide for Electric Power Distribution Reliability Indices. Table 6 is an index, not necessarily proposed, created by combining measures from Table 2 for example purposes. Under each table is a description of the data requirements for generating the index.

We would like to discuss what indices - industry proposed and those that can be created - stakeholders believe would be best for electric companies to track and report on, and the data requirements of each. We would like to discuss the issues raised by requiring the companies to track and report on specific indices, including: technological capabilities, implementation issues, and benefits and costs.

IV. Scheduling of Next Steps

Development of a plan and time line to complete the analysis of tracking and reporting issues for sustained interruptions, including: analytical methodology, data and research requirements, and stakeholder tasks.

Table 1: General Information

Characteristics of Sustained Interruptions	
Frequency - The number of interruptions customers have	
Duration - How long interruptions last	
Location - Where interruptions occur	
Timing - When interruptions occur	
Cause - Why interruptions occur	

Table 2: Examples of Specific Information

Example Gross Measures			
Total number of outage events			
Total number of customers interrupted			
Total number of customer interruptions			
Total hours of interruption			
Causes of interruptions			

Table 3: 1366 SAIFI for specified time period (day, month, quarter, year)

Total number of customer interruptions			
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Requirements:

Defining and measuring total number of customers on system for selected period.

Defining and measuring total number of customer interruptions on system for selected period.

Defining major storms and measuring the total number of customers in (or outside) the storm area for exclusion (or inclusion) in interruption data during the storm period.

Table 4: 1366 SAIDI for specified time period (day, month, quarter, year)

Total hours of interruption			
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Requirements:

Defining and measuring total number of customers on system for selected period.

Defining and measuring total number of hours of customer er interruptions on system for selected period.

Defining major storms and measuring the total number of customers in (or outside) the storm area for exclusion (or inclusion) in interruption data during the storm period.

Table 5: 1366 CAIDI for specified time period (day, month, quarter, year)

Total hours of interruption			
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Requirements: Same as for SAIDI

Table 6: Daily Non-storm Individual Customer Interruption Duration

Total hours of interruption			
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Requirements:

Defining and measuring hours of interruption for each customer daily.

Defining major storms and measuring hours of interruption during storms for each customer daily.