

PSE 3rd Revision Monitoring Plan and Reporting per WAC 480-100-393 starting from 2023 and Years after

Background/Introduction

This is Puget Sound Energy's ("PSE" or the "Company") revised Electric Service Reliability Monitoring and Reporting Plan that is required to be filed with and approved by the Washington Utilities and Transportation Commission ("UTC" or the "Commission") according to [WAC 480-100-393](#) (the "Plan"). The Plan details the electric service reliability information that PSE will be monitoring and providing in its annual electric service reliability reporting to comply with each section of [WAC 480-100-393](#), Electric service reliability monitoring and reporting plan, and [WAC 480-100-398](#), Electric service reliability report. The Plan is detailed and incorporated within as the outline form of the annual electric service reliability reporting. The terms and definitions used throughout the Plan and the reporting outline are consistent with [WAC 480-100-388](#), Electric service reliability definitions.

Information contained in the annual reporting will help the Commission, customers, and other interested parties better understand how PSE's full-system service reliability performance changes from year to year. However, factors such as variation in weather, natural disasters, and normal random variation in events such as third-party damage will all impact year-to-year comparisons of full-system performance. Assessing trends requires a longer-term perspective than looking for variations between two annual periods, therefore when possible PSE will report baseline year and the most recent 7 years of performance.

Per Order 17 of consolidated Dockets UE-072300 and UG-072301, PSE's Service Quality Program report and the Electric Service Reliability report have been filed as one document to facilitate external review (*i.e.*, the Combined Report). PSE filed a petition in October 2010 to consolidate the two reporting requirements, among other petition requests, following discussions with the UTC staff. The UTC granted PSE's petition in November 2010. The reporting consolidation became effective for the 2010 performance year (*i.e.*, calendar year 2010) and thereafter.

Per Order 29 of consolidated Dockets UE-072300 and UG-072301, under the Multi-Party Settlement Agreement, PSE started reporting Customers Experiencing Multiple Interruptions ("CEMI") in 2019.

This Plan pertains to Chapter 3 Electric Service Reliability reporting and associated appendices of the Combined Report.

Foremost, this revised Plan sets forth the following changes:

1. To relocate the performance reporting of PSE's Service Quality Program Service Quality Index ("SQI") No. 3 System Average Interruption Duration Index ("SAIDI") and SQI No. 4 System Average Interruption Frequency Index ("SAIFI") to the SQI section of the Combined Report¹;
 - a. Consistent with the other SQI's, PSE will report only SQI results.
2. To relocate the CEMI reporting to the SQI section of the Combined Report. This aligns with the other reporting agreements in Order 29 of consolidated Dockets UE-072300 and UG-072301;
3. To establish 2014 as the new baseline year;
4. To allow for flexibility in visualization/presentation of reliability performance results; and
5. To enable continuous improvement in methodologies to identify Areas of Greatest Concern.

¹ Per Order 24/10 of the consolidated Dockets UE-220066, UG-220067, and UG-210918 dated December 22, 2022, where the Commission approved the Settlement Stipulation and Agreement on Revenue Requirement and all Other Issues Except Tacoma LNG and PSE's Green Direct Program, SQI No. 3-System Average Interruption Duration Index and SQI No. 4-System Average Interruption Frequency Index ("SAIFI") will be computed using only the latest electric power distribution reliability standard number P1366, "Guide for Electric Distribution Reliability Indices", published by the Institute of Electrical and Electronic Engineers ("IEEE"). This IEEE standard also sets forth, in the electric service reliability performance calculation, the removal of Major Event day outages with additional adjustment for catastrophic events for SQI No. 4 SAIFI performance calculation. This IEEE approach is consistent with the current SQI No. 3 SAIDI performance calculation. The new SQI No. 4 benchmark will be at the average of no more than 1.2 interruptions per year per PSE electric-service customer.

Chapter 3 Electric Service Reliability Reporting Outline and the Description of PSE's 3rd Revision Monitoring Plan and Reporting Requirement(s) per WAC 480-100-393 and -398 pertaining within each Section

Executive Summary

Summary and highlights of the current reporting year and notable events and changes.

Summary of Reliability Performance

Per [WAC 480-100-393\(3\)\(a\)](#), this section reports annual results of PSE full system reliability measures including SAIDI and SAIFI² for the current year.

[Reference for the review of Plan only:

[WAC 480-100-393\(3\)\(a\)](#): What reliability statistics and information the utility will report to the commission *The utility must select and define statistics that track full-system reliability, and information [emphasis added]*, which may include statistics, that tracks localized reliability and identifies areas of greatest reliability concern.]

Summary of Customer Complaints

Per [WAC 480-100-398\(4\)](#), this section summarizes the number of complaints regarding outage duration, outage frequency, and power quality by the following three categories:

- UTC service quality complaints regarding outage duration, outage frequency, and power quality except Major Event related complaints
- Two or more inquiries received by PSE from the same customer regarding outage duration, outage frequency, and power quality in the reporting year and previous year excluding the inquiries related to a Major Event
- Major Event complaints that were a UTC complaint or at least one of the two PSE inquiries which were recorded during the Major Event and up to one week of end of Major Event. The initial UTC complaint or PSE inquiry must be regarding PSE electric service outage duration, outage frequency, or power quality.

[Reference for the review of Plan only:

[WAC 480-100-398\(4\)](#): The report must identify the total number of customer complaints about reliability and power quality made to the utility during the year, and must distinguish between complaints about sustained interruptions and power quality. The report must also identify complaints that were made about major events.]

² Reported results will align with current SQI-3 SAIDI and SQI-4 SAIFI methodology and SAIDI and SAIFI including Major Events

Summary of Major Event Days

This section lists the Major Event Days that occurred during the year.

Baseline Year

This section describes the Company's baseline statistics.

In this 3rd revision of the Plan, the Company updates the baseline year from 2003 to 2014. The existing baseline year is 20 years old and in those 20 years there has been continuous improvement in data recording and business processes which make 2003 technically not comparable to current results. As an example, PSE's 2013 implementation of its Outage Management System ("OMS"), Geographic Information System ("GIS"), and Customer Information System created data changes, making trends before 2014 not valuable. Prior to 2013, the number of customers impacted by an outage was an estimated guess by experienced outage managers. OMS, coupled with geospatial information from the GIS, produces an accurate number of customers impacted during an outage as compared to the estimated number prior to implementing OMS. With this more accurate number of customers impacted, reported reliability metrics trend higher and therefore are not comparable to 2003.

[Reference for the review of Plan only:

[WAC 480-100-398\(1\)](#): The report must be consistent with the electric service reliability monitoring and reporting plan filed under WAC 480-100-393. *As set forth in the plan, in an identified year, baseline reliability statistics must be established and reported [emphasis added].* In subsequent years, new reliability statistics must be compared to the baseline reliability statistics and to reliability statistics from all intervening years. The utility must maintain historical reliability information necessary to show trends for a minimum of seven years.]

Trends in Reliability Measures

Per [WAC 480-100-393\(3\)\(a\)](#) and [WAC 480-100-398\(1\)](#), this section reports system and localized reliability indices and trends. Those indices may include SAIDI, SAIFI, CEMI, Customer Complaints, Outages, or other industry wide accepted reliability indices.

The below table is an example of how the historical SAIDI and SAIFI performance may be presented. PSE will report the baseline year and the most recent seven years of performance.

Calendar Year	Annual Total SAIDI Results	Non-Major Event SAIDI Results	Annual Total SAIFI Results	Non-Major Event SAIFI Results
Baseline - 2014	540	154	1.89	1.32
2017				
2018				
2019				
2020				
2021				
2022				
2023				

The below table is an example of how the number of UTC, PSE, and Major Event customer complaints may be presented. PSE will report the baseline year and the most recent seven years results of customer complaints.

	WUTC			PSE		
	Non-Major Event		Major Event	Non-Major Event		Major Event
	Reliability	Power Quality		Reliability	Power Quality	
Baseline-2014						
2017						
2018						
2019						
2020						
2021						
2022						
2023						

Areas of Greatest Concern

Per [WAC 480-100-398\(3\)](#) and [WAC 480-100-393\(3\)\(a\)](#), annually, the Company will identify areas of greatest concern. Usually these are considered poor performing circuits in PSE's electric service territory. In each annual filing PSE will explain methodology used to identify the areas of greatest concern for the year.

This section of the annual reporting includes information on specific geographic areas the Company is targeting for specific actions to enhance the level of electric service reliability in the area. This section and an appendix report the following information on each of these areas of greatest concern:

1. Specifically identify the area,
2. Provide the reason the area met areas of greatest concern,
3. Detail the actions intended to mitigate any reliability issues,
4. Specify the status of the work being performed, and
5. Target the completion date for the work being outlined.

Data Collection—Methods and Issues

Per [WAC 480-100-398\(2\)](#), this section includes an explanation of how the various data were collected and issues. Changes in data collection methods since the baseline year of 2014 are highlighted and the impact of the new method on data accuracy are also be discussed in an appendix.

Appendix A: Terms and Definitions

This appendix lists the definitions of the terms used throughout PSE's monitoring plan and annual reporting per WAC 480-100-393 and WAC 480-100-398.

Appendix B: Areas of Greatest Concern

This appendix provides details on each of the areas of greatest concern:

1. Specifically identify the area,
2. Provide the reason the area met areas of greatest concern,
3. Detail the actions intended to mitigate any reliability issues,
4. Specify the status of the work being performed, and
5. Target the completion date for the work being outlined.