

Guiding Principle 7 Reliability and Resiliency

Public Utility Board

March 27, 2024



Overview



- **Progress to Date**
- **Challenges and Barriers**
- **Priorities for 2024**

Measurement 1

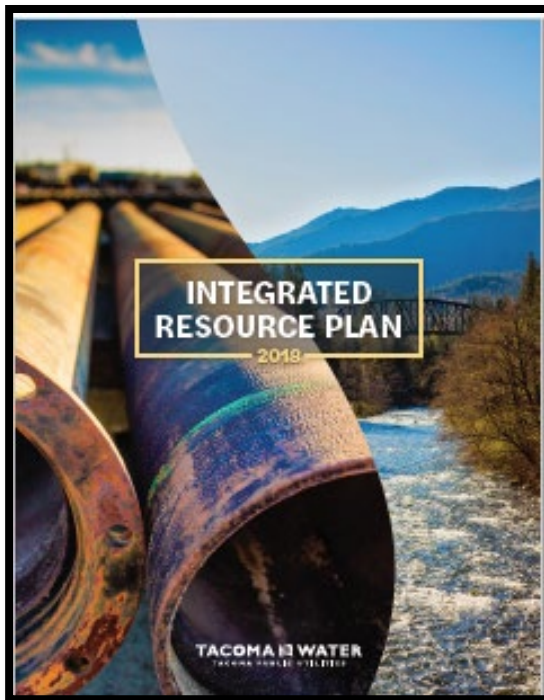
On an average basis, TPU expects power outages among all residential customers within its service area, on average, one outage per year and those outages will not exceed 75 minutes in duration. TPU will calculate the outage frequency and duration measures using industry-standard methods.

On average,
Tacoma Power Customers
have experienced:
0.60 outages
lasting an average of
55 minutes in 2023



*Measurement 2

The Tacoma Water Resource Adequacy Standard (RAS) was developed to maintain sources and system sufficient such that a mandatory curtailment will not occur more than once in 25 years. Using the Water Yield Supply and Demand Model (WYSDM), developed with the 2018 Water Integrated Resource Plan (IRP) and regularly updated, the long-term mix of supply resources to meet the Resource Adequacy Standard shall be identified annually.



- Tacoma Water has had no customer curtailments since 2015 (Voluntary)
- An update to the Integrated Resource Plan (IRP) is being done in 2024

Measurement 3



Tacoma Water will maintain compliance with State and Federal drinking water regulations 100 percent of the time.

- Tacoma Water has no violations to report.
- Water will report on this measure annually in the **Annual Water Quality Report**.

Three-Year Compliance History by Quarter (EPA ECHO Detailed Facility Report)

Statute	Violation Type/Category	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12
SDWA (Source ID: WA5386800)		10/01-12/31/20	01/01-03/31/21	04/01-06/30/21	07/01-09/30/21	10/01-12/31/21	01/01-03/31/22	04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23
Facility-Level Status		No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation	No Violation
	Category	Violation Type											

*Quarter 13 data is voluntarily entered and/or incomplete, and may not form a complete picture for that quarter. [Read more](#)

Measurement 4

Tacoma Rail expects to deliver intermodal trains at least 95 percent on-time and will deliver commercial carloads at least 85 percent on-time.

2023 Commercial KPI:

98.7% On-Time Performance

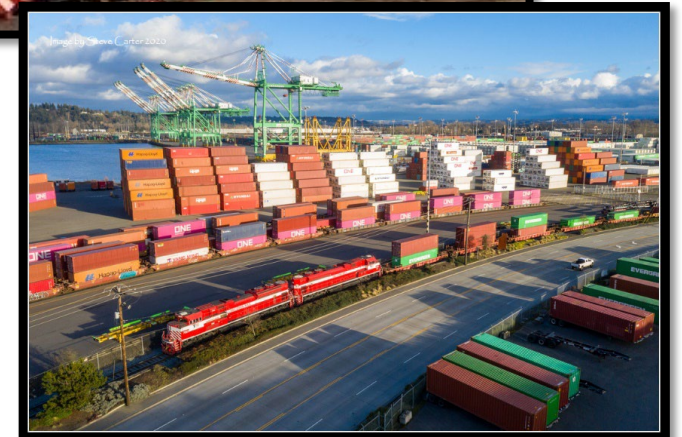
2023 Intermodal Train Departure KPI:

100% On-Time Performance

2023 Customer Satisfaction Survey:

Dependability Rating:

3.7 out of 4 points (92.5%)



Measurement 4 Continued

Tacoma Rail will maintain compliance with all aspects of our Oil Spill Contingency Plan (OSCP); and continue to refine our ability to implement rapidly with other key partners.

- Ecology, Coast Guard, Puyallup Tribe, Tacoma Fire Department, and Port of Tacoma
- Two deployment drills and one Tabletop exercise per year. (2024 WCS)
- Unannounced Drills
- Bi-Monthly ICS training sessions for Tacoma Rail Spill Management Team



*Measurement 5

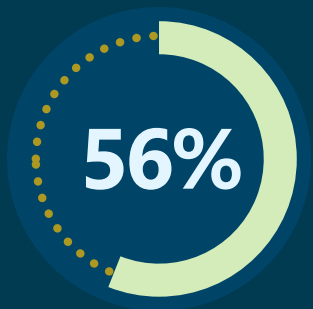
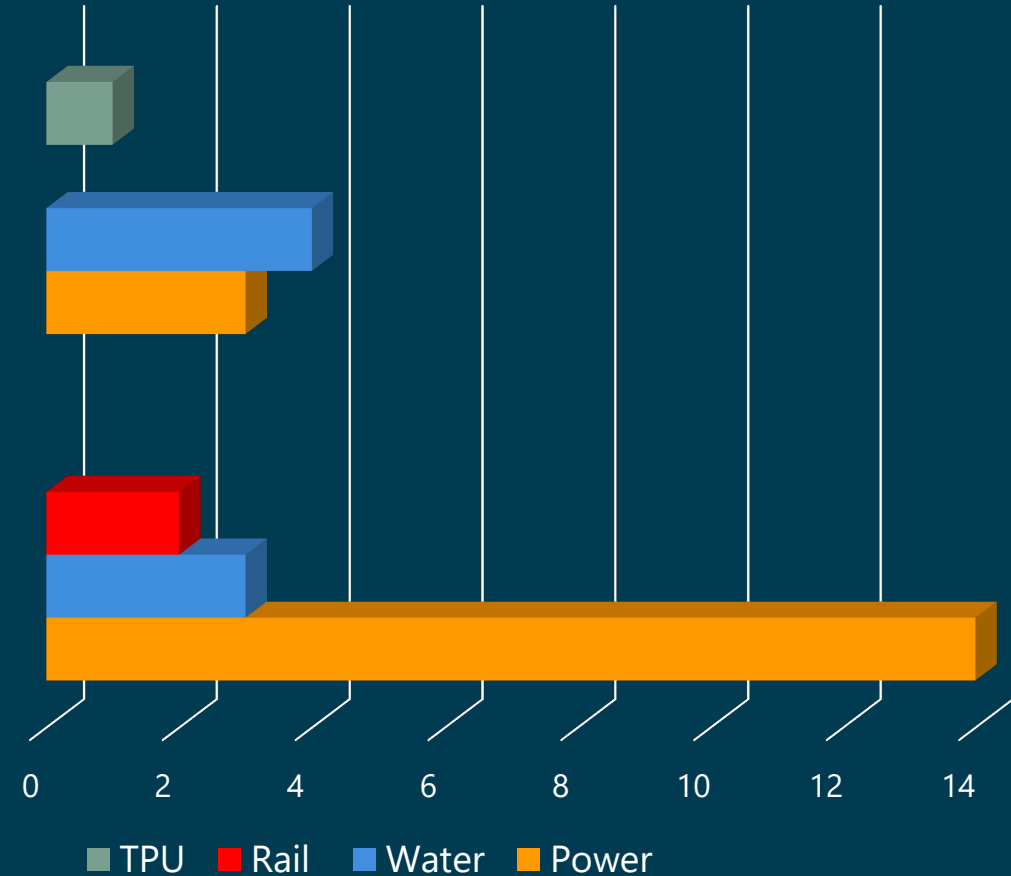
TPU will track all emergency responses based on TPU's incident classification scheme, Tiers One-Four.

Activation Levels	IMPACT
5—Routine Operations/Steady State	Low
4—Elevated Monitoring	
3—Utility Only/Local Response	
2—Multi-agency Response	High
1—Regional Response	

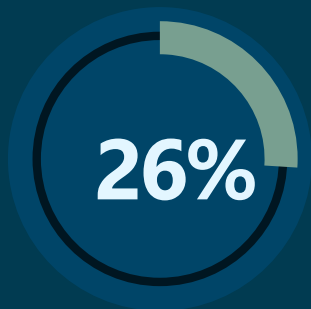
Activation Level 3

Activation Level 4

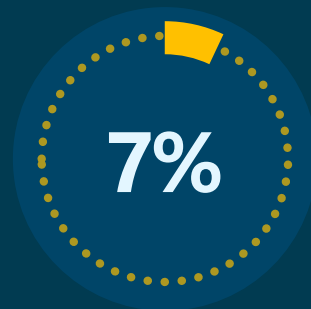
Utility Activations



Natural



Human-caused



Technological



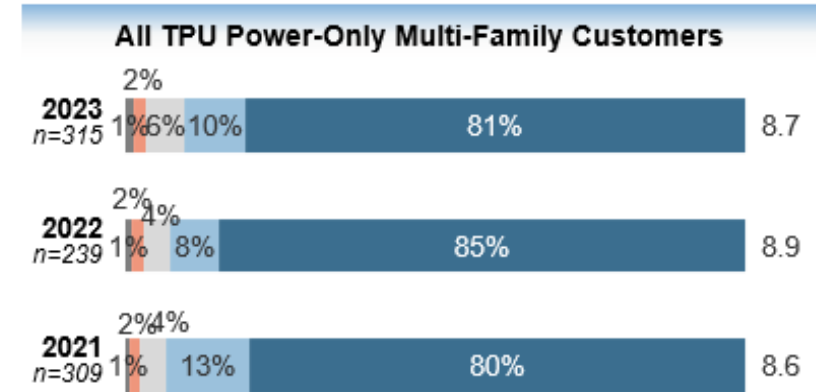
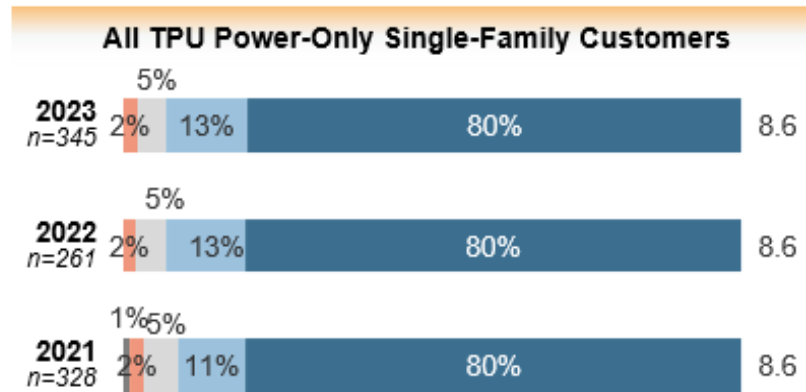
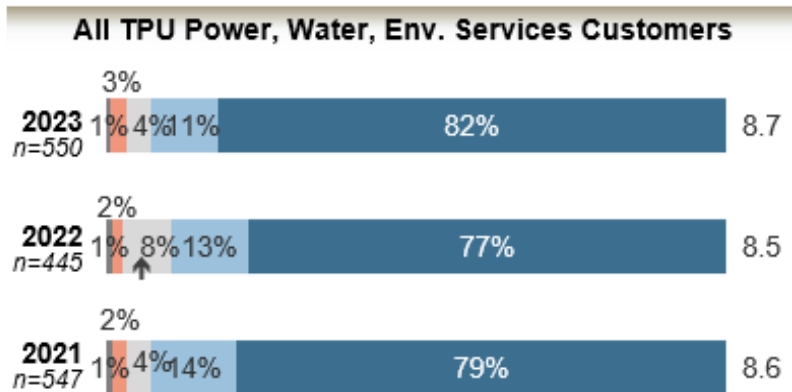
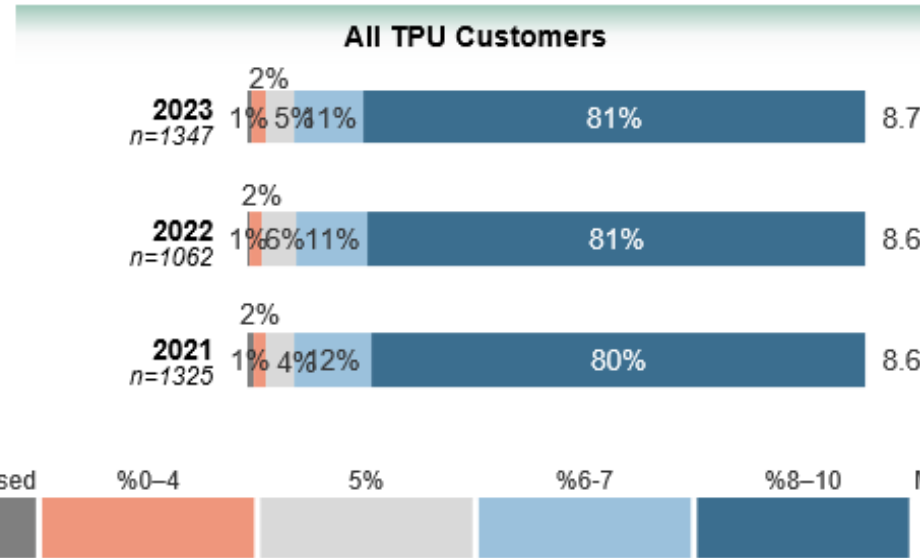
Pre-Planned
Events

Measurement 6



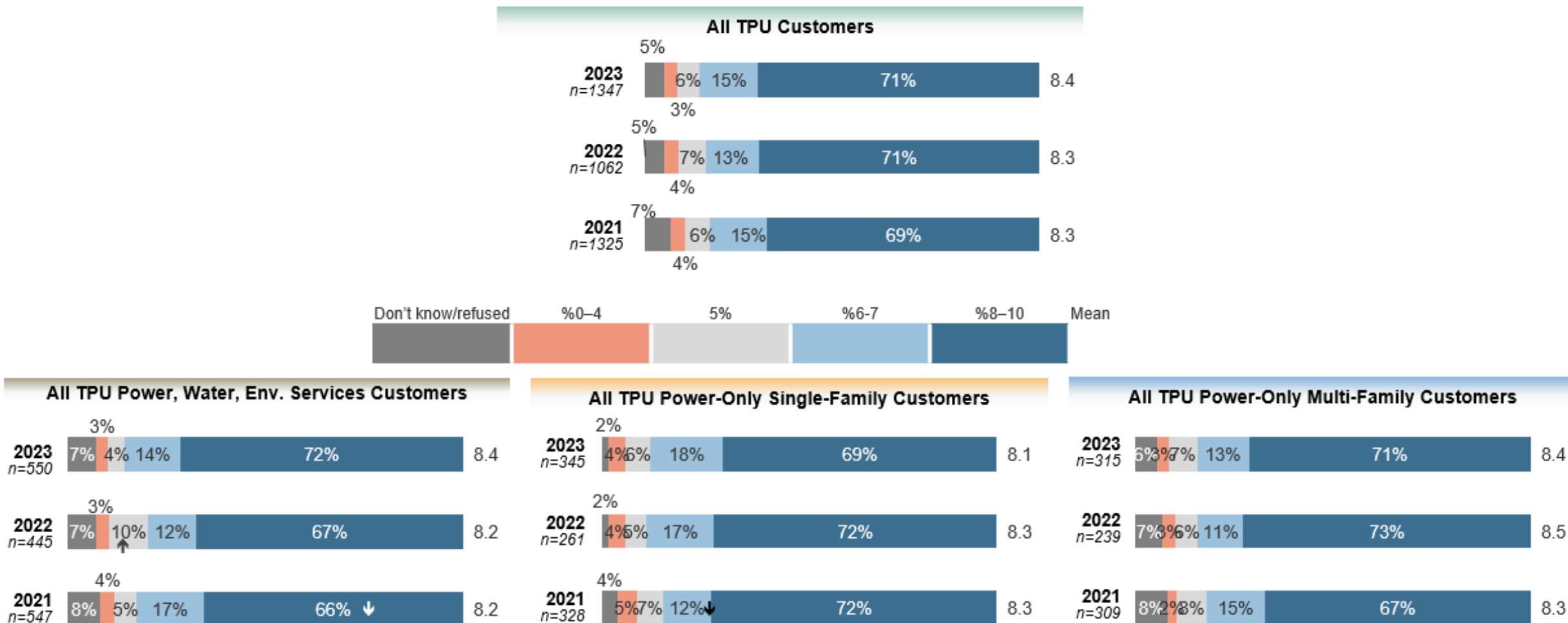
Customer satisfaction regarding restoration of utility services after disruption is one measure of effectiveness of emergency planning.

Providing Reliable Electric Service- Tacoma Power



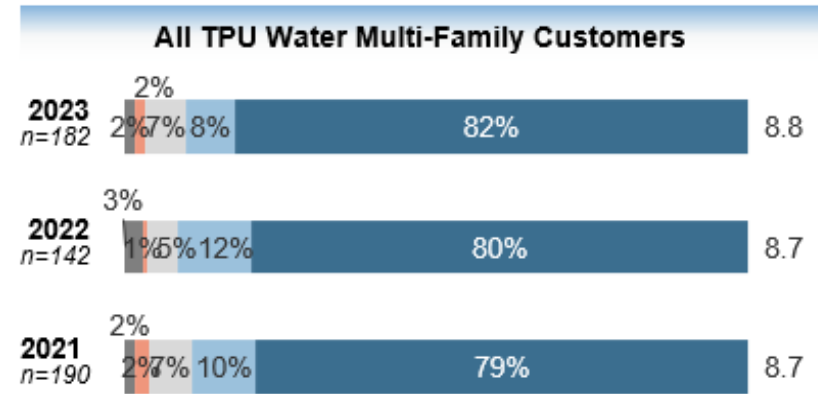
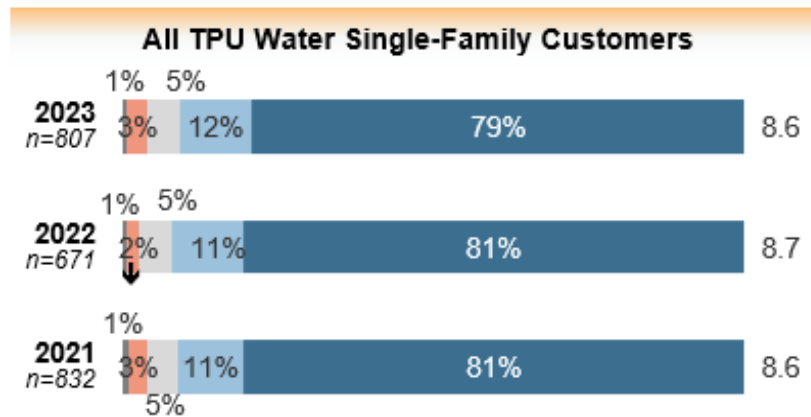
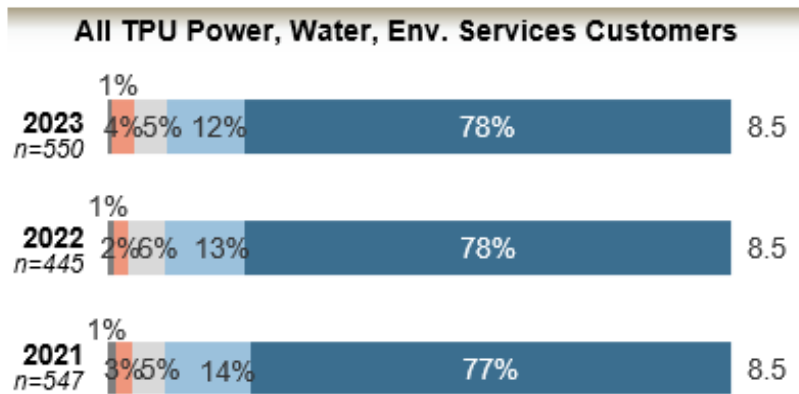
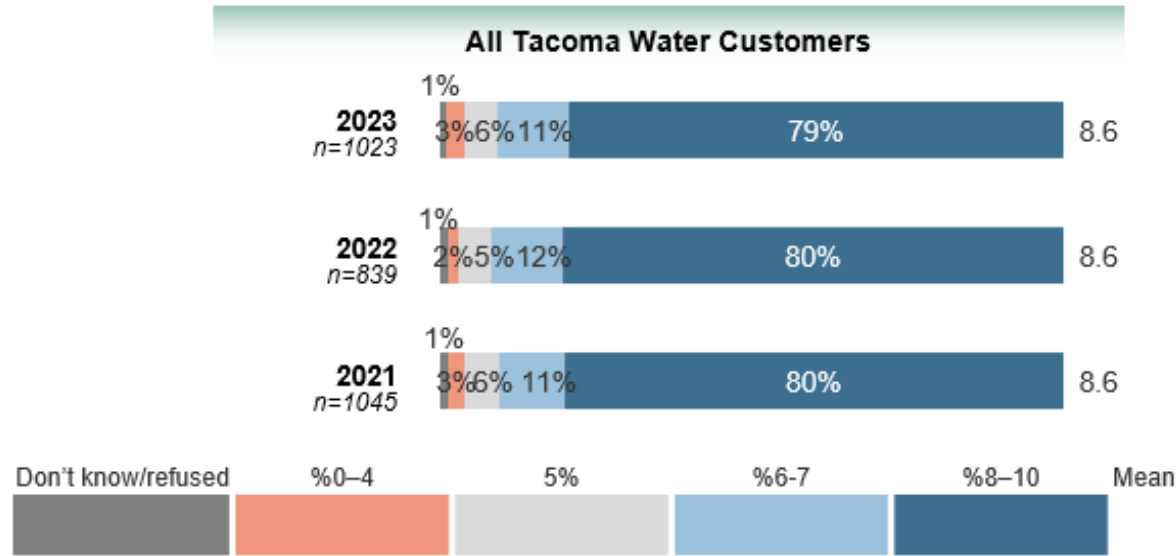
How would you rate T-P-U's performance with regard to...?
 RELIABLE. Providing reliable electric service
 ↑↓ Indicate significant differences between the current wave and previous waves.

Restoration after Interruption- Tacoma Power



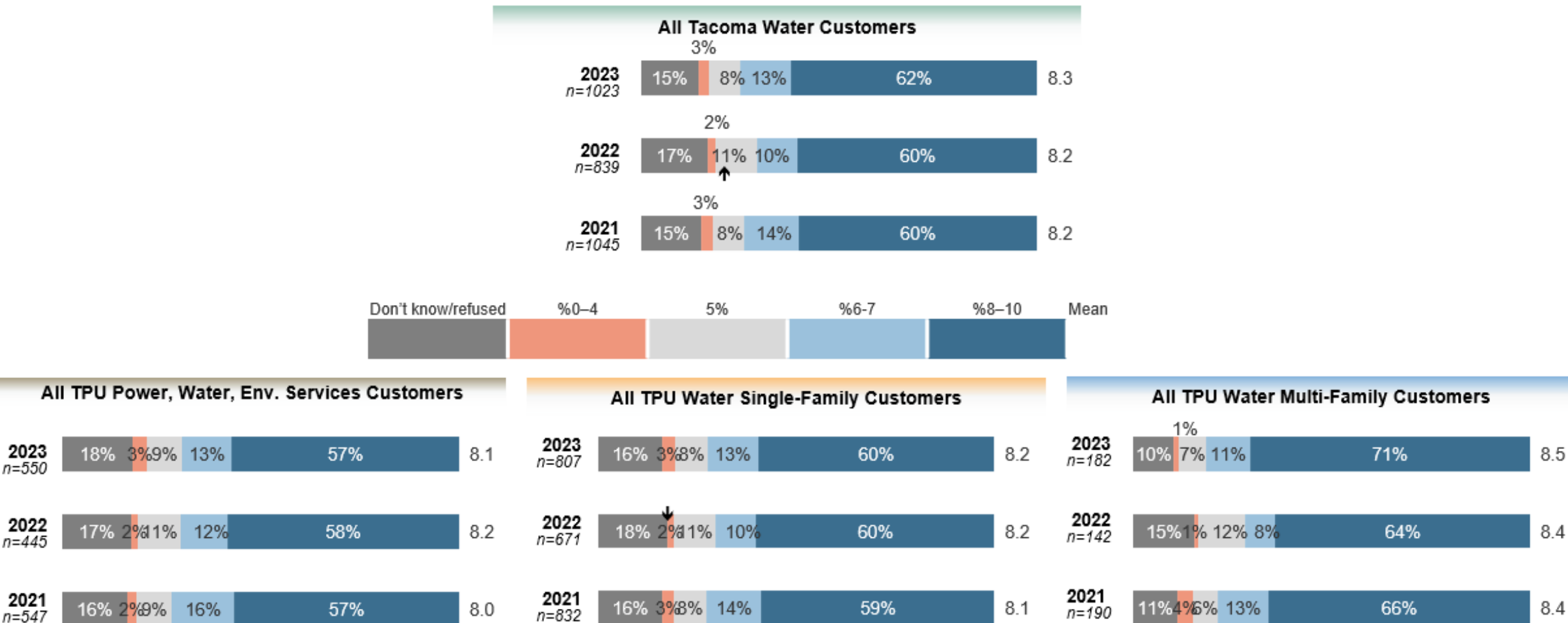
How would you rate T-P-U's performance with regard to...?
 ELECREST. Restoring electric service at your residence after an interruption occurs
 ↑↓ Indicate significant differences between the current wave and previous waves.

Tacoma Water Service Reliability



How would you rate Tacoma Water's performance with regard to...?
 WTRREL. Overall reliability of water service
 ↑↓ Indicate significant differences between the current wave and previous waves.

Restoration after Interruption – Tacoma Water



How would you rate Tacoma Water's performance with regard to...?
 WTRREST. Restoring water service at your residence after an unexpected disruption
 ↑↓ Indicate significant differences between the current wave and previous waves.

Measurement 7



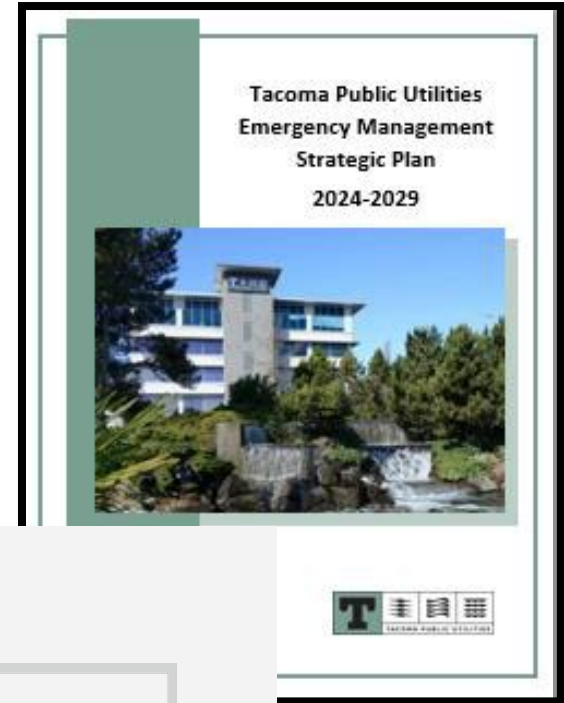
Significant emergency preparedness plans (such as Continuity of Operations Plan), policies and procedures should be reviewed annually and updated as needed to reflect changes in planning goals, available resources and changing threat assessments.

Measurement 7: TPU



Completed in 2023

- COVID-19 After-Action Report
- 5 Year Strategic Plan
- Utility Activation Levels
- Incident Command System Organizational Chart
- Employee Emergency Preparedness

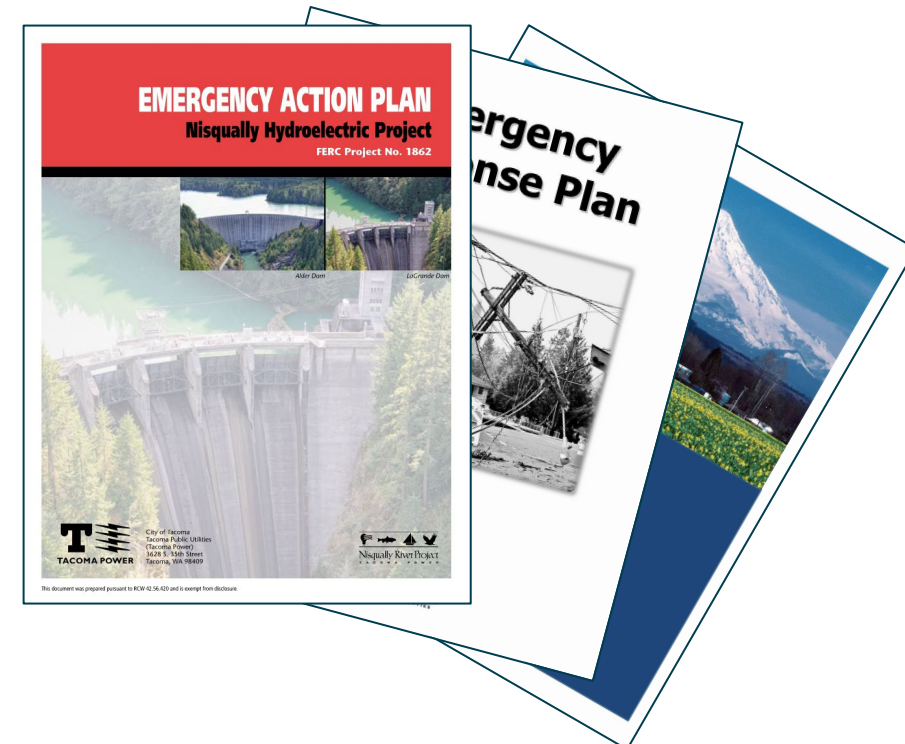


Measurement 7: Power



Completed in 2023:

- Power Transmission & Distribution's Emergency Response Plan: Last Updated, November 13, 2023
- Power Transmission & Distribution's Emergency Operations Plan: Last Updated, October 24, 2023.
- All Four of Generation's Hydroelectric Project's (Cowlitz, Cushman, Nisqually & Wynoochee) Emergency Action Plans (EAPs): Last Updated, December 14, 2023.
- Power Management's Water Release Notification Plan (WRNP): Last Updated, January 16, 2024.
- Utility Technology Services' Cyber Incident Response and System Recovery Plan: Last Updated, February 12, 2024.
- Pierce County DEM Mt. Rainier Incident Response Plan: Last Updated, May 12, 2023
- Conducted Power **Substation Hardening Efforts Including:**
 - DHS CISA SAFE Assessment
 - E-ISAC VISA Assessment
 - Grant Funding Opportunities
- Wildfire Mitigation Planning Efforts

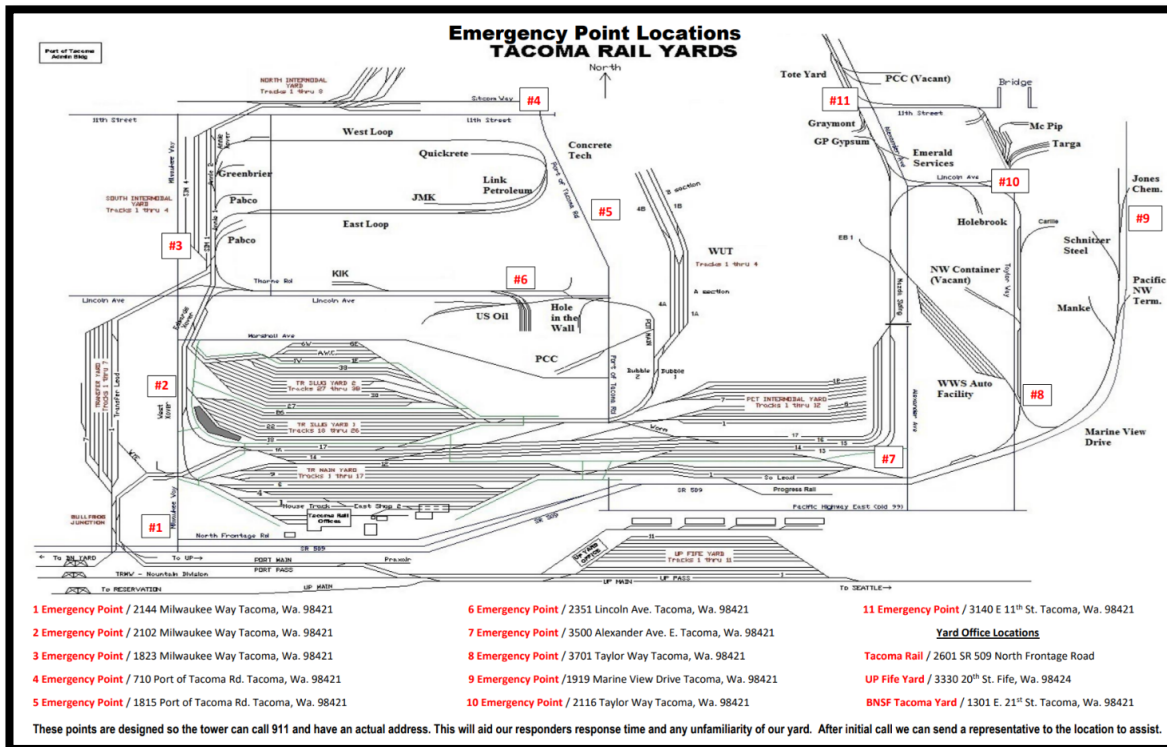


Measurement 7: Rail



Completed in 2023:

- Oil Spill Contingency Plan 5 Year Update
- Emergency meeting locations for first responders.



TACOMA RAIL
TACOMA PUBLIC UTILITIES

Oil Spill Contingency Plan
Pursuant to WAC 173-186

and

Comprehensive Oil Spill Response Plan
Pursuant to 49 CFR Part 130

2601 SR 509 North Frontage Road
Tacoma, Washington 98421-3134

July 31, 2023

ECY FORM 070-559

Measurement 7: Water



Completed in 2023:

- Annual Emergency Operations Plan (EOP) review
 - Plan developed for comprehensive update to the EOP per America's Water Infrastructure Act (AWIA)
- Annual review and update of 18 Standard Operating Guidelines (SOGs)
- 2 new SOGs were developed associated with cyber security response
- Finalized the response and recovery processes for incident response
 - Created new SharePoint based process and site and migrated all data
 - Developed tracking tool for all corrective actions in alignment with the TPU Corrective Action Plan
- Finalized the Tacoma Water Incident Command System organizational structure for Level 1 and 2 activations

Measurement 7: Exercises



TPU	Power	Rail	Water
<ul style="list-style-type: none"> • GridEx Executive TTX 11/16/23 • GridEx Functional 11/14/23 • Great ShakeOut Drill 10/19/23 	<ul style="list-style-type: none"> • Mt. Rainier Nisqually River Basin Lahar Siren Test: 1st Monday of Each Month (12) • Cowlitz Full Power EAP Siren Test: 4/5/23 • Cushman Full Power EAP Siren Test: 4/5/23 • Mt. Rainier Volcanic Incident Functional Exercise: 5/18/23 • Cowlitz Hydroelectric Project EAP Functional Exercise: 7/11/23 • Wynoochee Annual Phone Call Drill: 11/1/23 • Nisqually Annual Phone Call Drill: 11/7/23 • Cushman Annual Phone Call Drill: 11/14/23 	<ul style="list-style-type: none"> • OSCP annual Tabletop 10/17/23 • Drill 7/25/23 • Drill 4/18/23 • Planning P training & exercises 	<ul style="list-style-type: none"> • Headworks tabletop exercise: 4/5/23 • Water Supply Forum workshop: 6/19/23

Challenges & Barriers



- **Accessibility and availability to grant funding**
- **Continued Logistics Supply Chain issues**

Priorities for 2024



- **COOP Updates**
- **Revise ICS Job Aids**
- **Finalize ICS Org Structure**
- **Implementation of Utility-wide Activation Levels**
- **Finalize & Approve a Wildfire Mitigation Plan**
- **Update Emergency Fuel Plan and Exercise**
- **Development of Public Communications Plan (Power)**
- **Development and implementation of ICS learning plans within Docebo (Water)**

Thank You

