

TPU SD 7

Reliability & Resiliency

Power, Water, & Rail Emergency Management

Public Utility Board Study Session
March 24, 2021



OVERVIEW

- Progress to Date
- Challenges and Barriers
- Priorities for 2021.

●●● 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 0.59 outages lasting an average of 59 minutes in 2020.*

●●● Measurement 2:



Tacoma Water will maintain sufficient source supply to avoid residential customer curtailments 99 percent of the time on average.

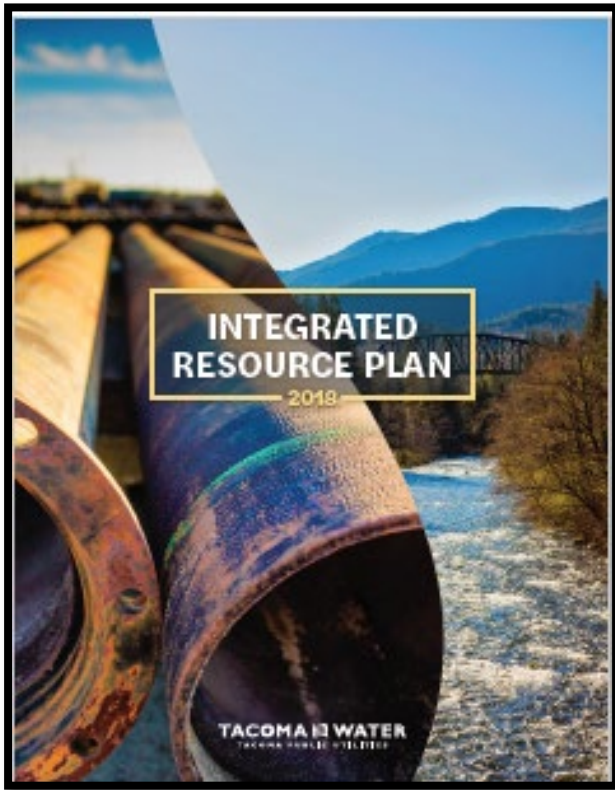
- *No residential customer curtailments have occurred the past year.*

●●● Measurement 2: Continued



Proposed Amendment:

“Tacoma Water will maintain sufficient supply sources to avoid mandatory curtailment in 96 percent of years on average.”



Why

- *2018 Integrated Resource Plan - Resource Adequacy Standard*
- *1 mandatory curtailment in 25 years on average*
- *Optimizes the investment in our supply assets.*

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*

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13*
SDWA (Source ID: WA5386800)		10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-09/30/20	10/01-12/31/20
	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	Undetermined

*Quarter 13 data is voluntarily entered and/or incomplete, and may not form a complete picture for that quarter.

●●● 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

Intermodal



Commercial

Measurement 5:



TPU will chart the time taken to activate emergency plans against the complexity of the incident or disaster.

- *2020 activations:*
 - *Water Release Notification Plan (WRNP) activation for February flooding.*
 - *Tacoma Mall BLVD water main break*
 - *COVID-19 (FEMA Disaster Declaration)*
 - *Demonstrations*
- *2021 activations:*
 - *January windstorm*

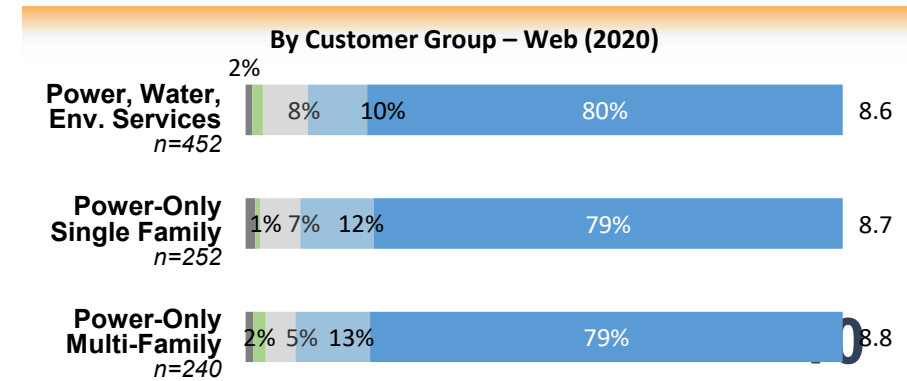
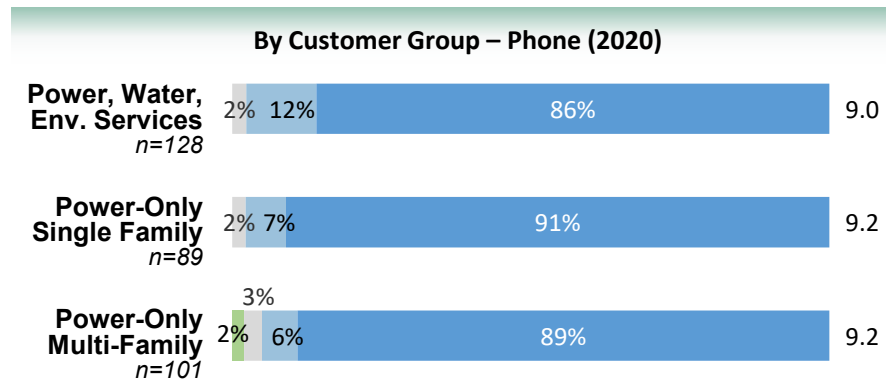
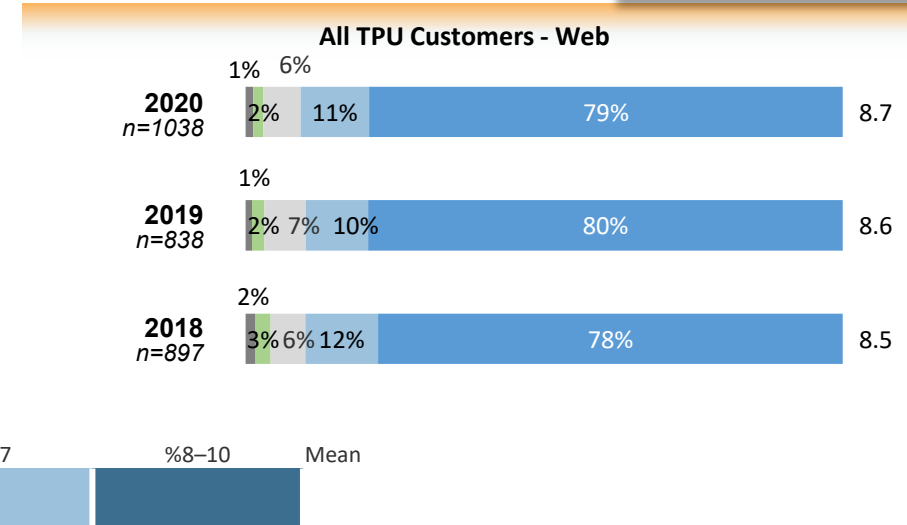
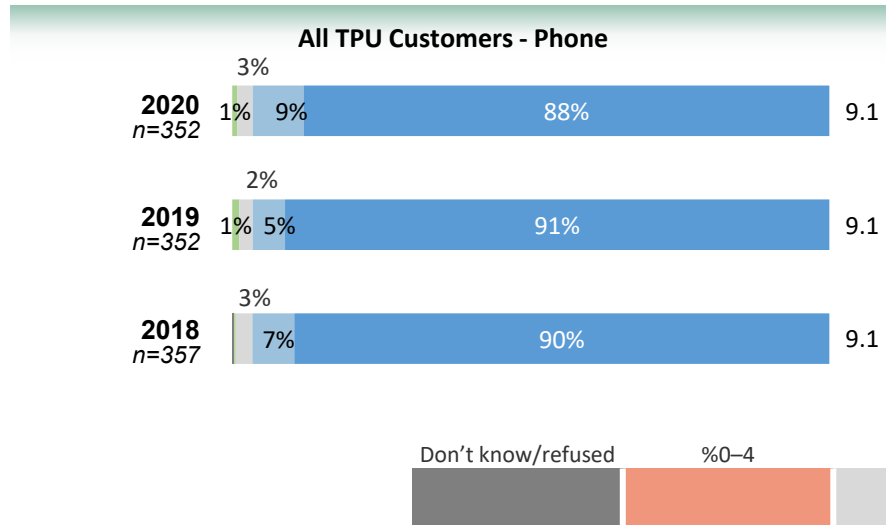
● ● ● Measurement 6:



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

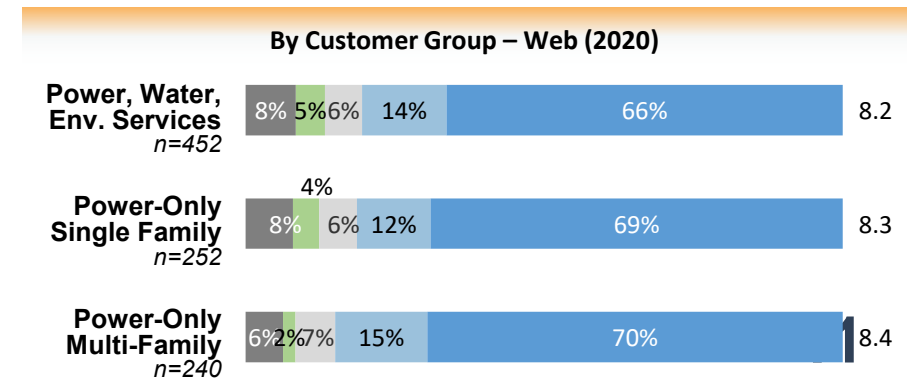
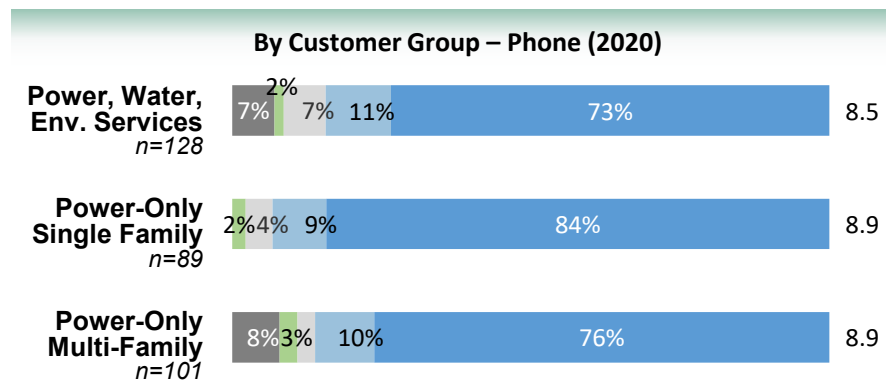
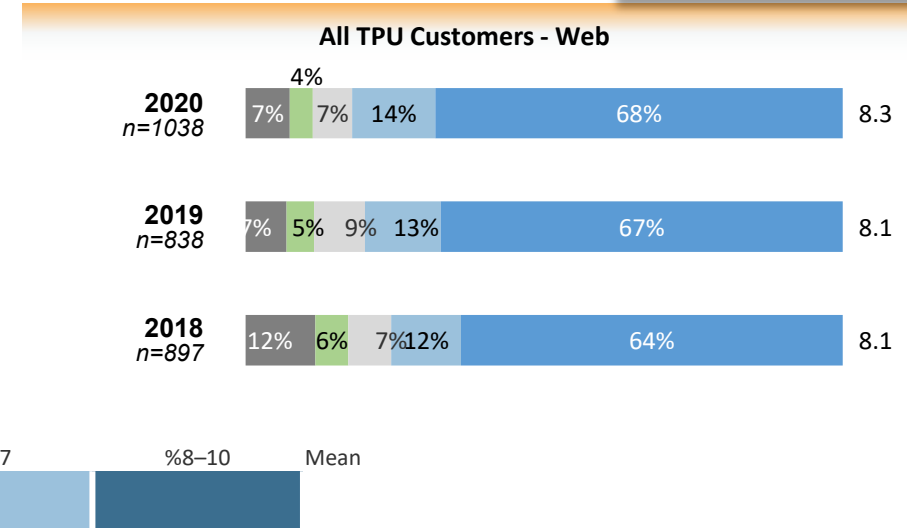
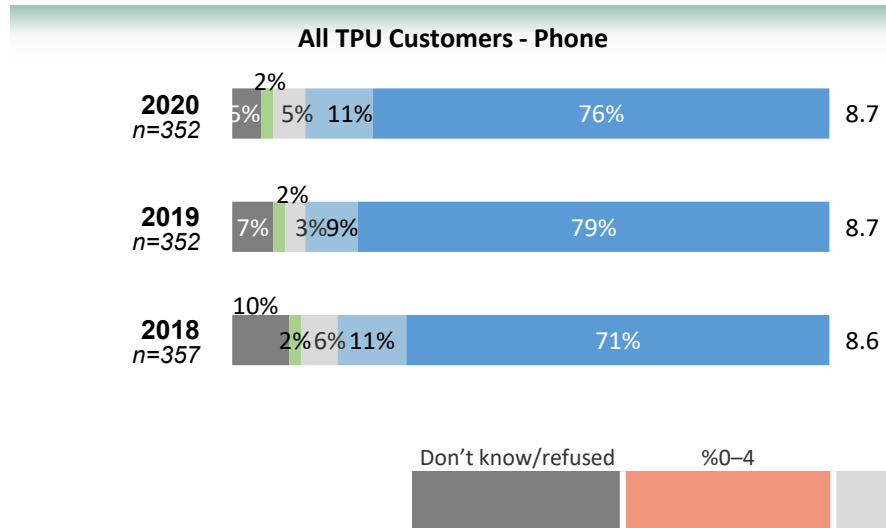
Providing Reliable Electric Service

● ● ● – Tacoma Power



How would you rate T-P-U's performance with regard to...?
RELIABLE. Providing reliable electric service

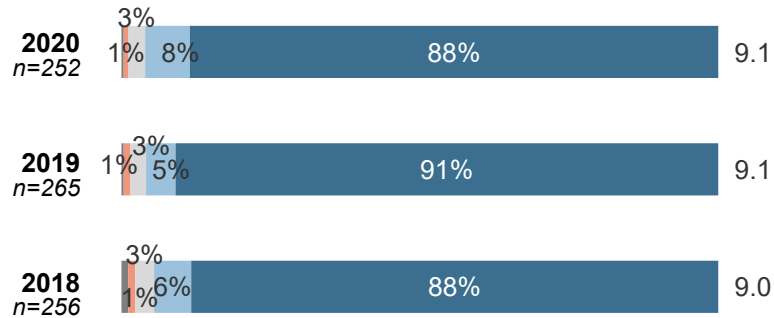
Restoring Power After an Interruption-Tacoma Power



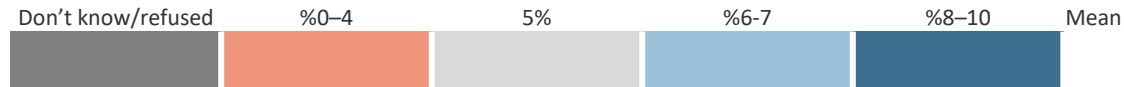
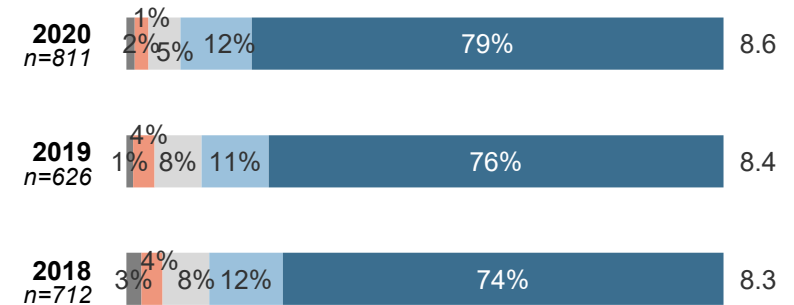
Tacoma Water Service Reliability & Maintenance



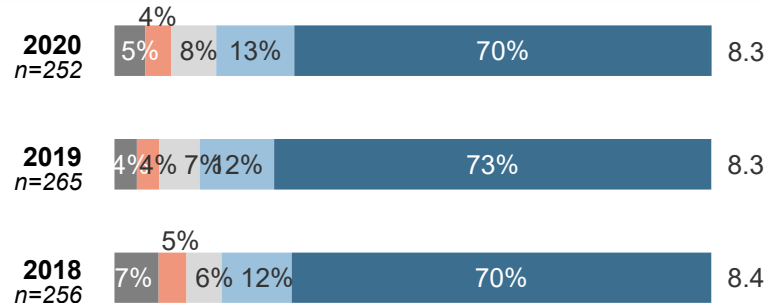
All Tacoma Water Customers - Phone



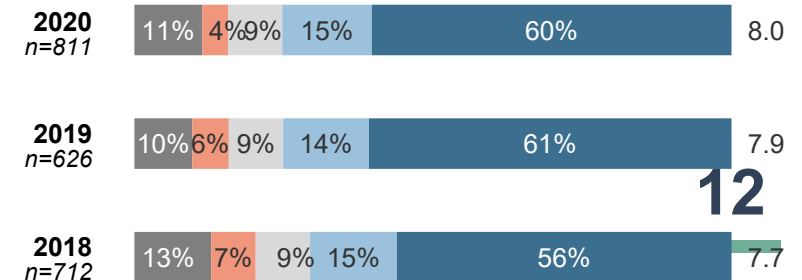
All Tacoma Water Customers - Web



All Tacoma Water Customers - Phone



All Tacoma Water Customers - Web

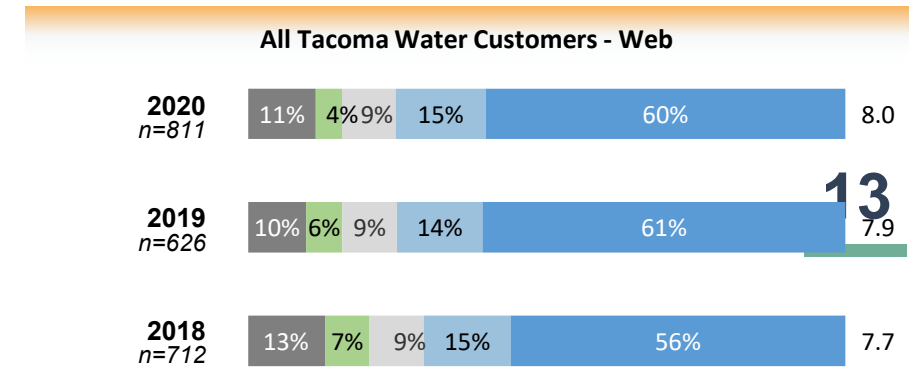
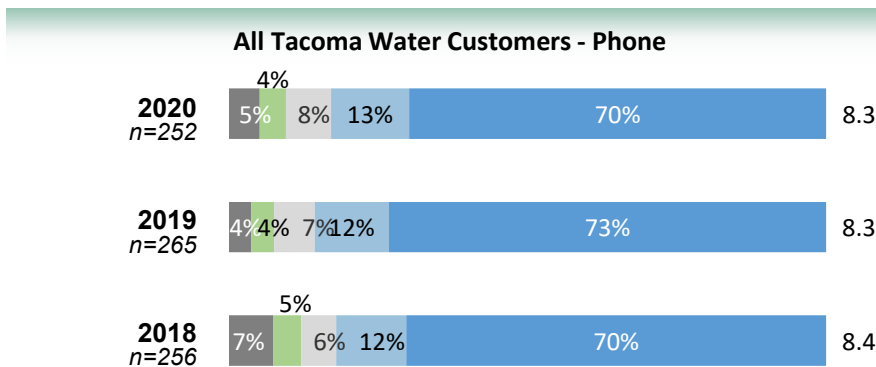
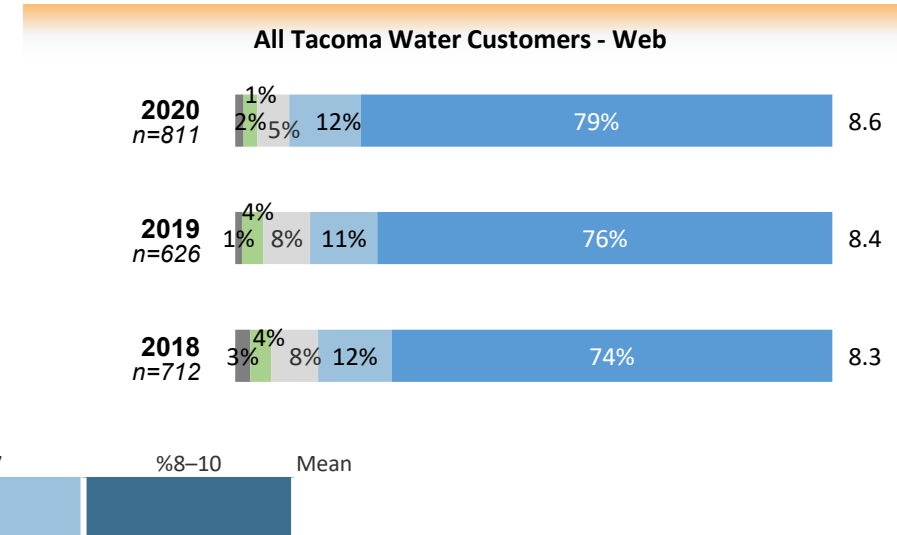
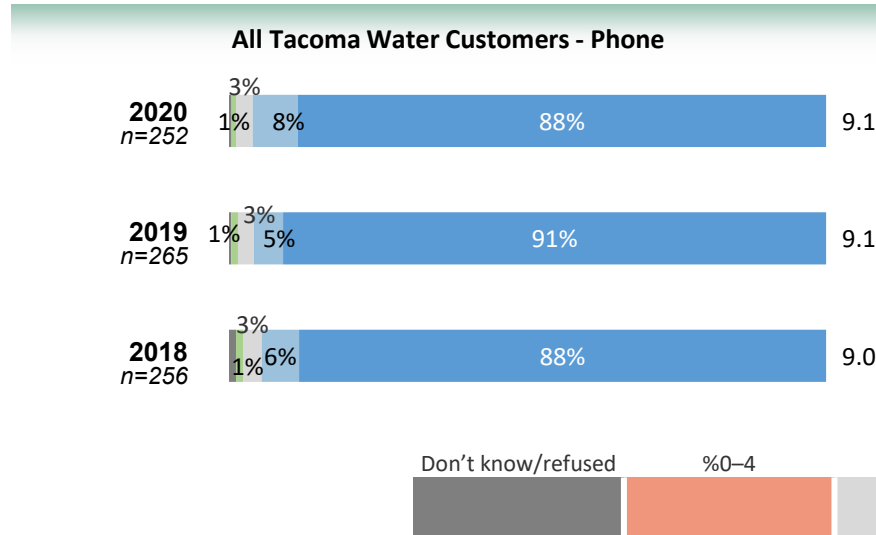


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Tacoma Water Service Reliability & Maintenance



Reliability of Water Service



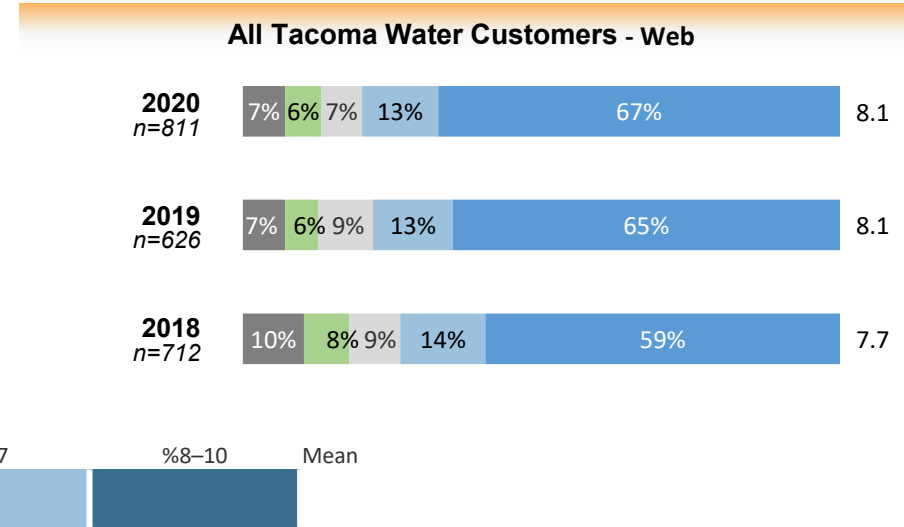
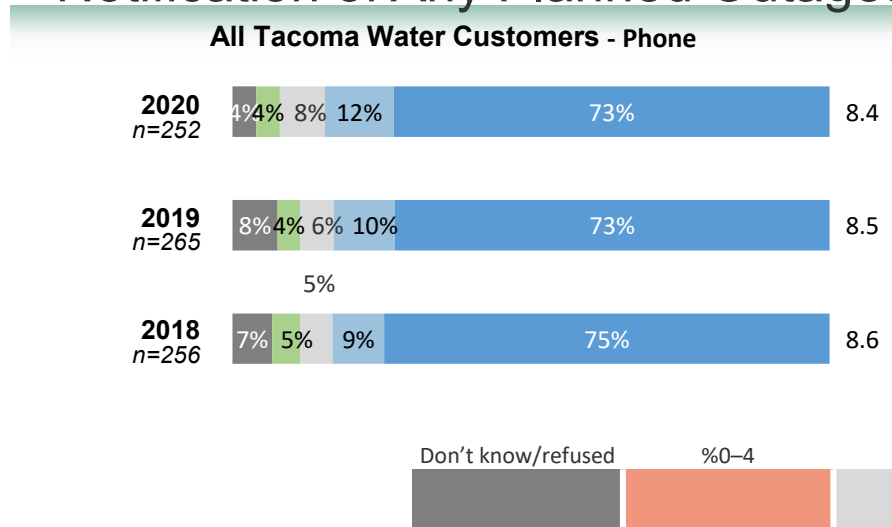
How would you rate Tacoma Water's performance with regard to ?

13

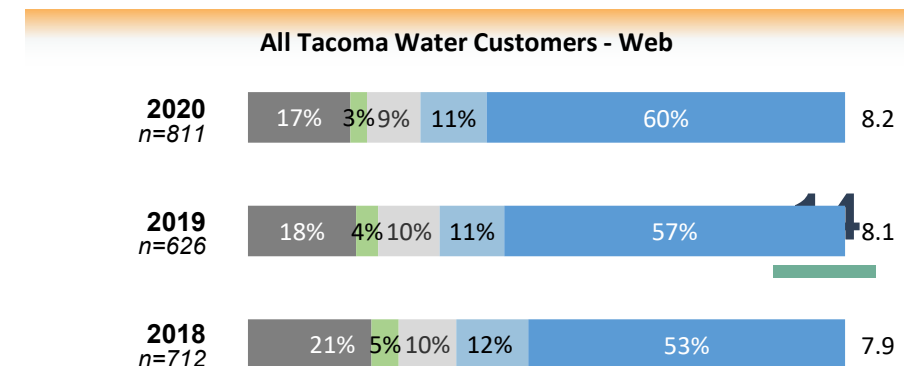
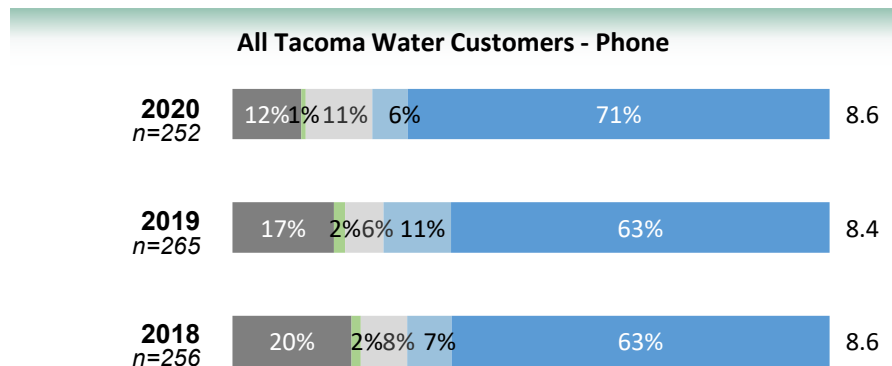
Water Notification of Planned Outages & Restoration



Notification of Any Planned Outages



Restoring Water After an Interruption



● ● ● Measurement 7:

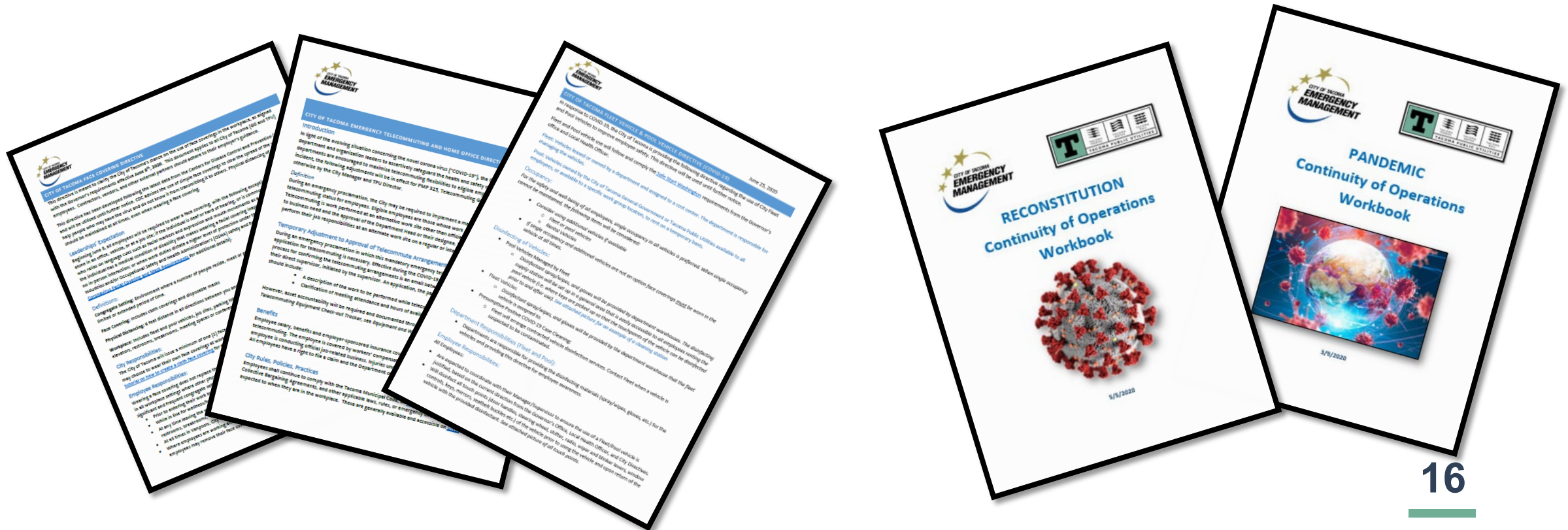


Significant emergency preparedness plans (such as Continuity of Operations Plan), policies and procedures should be reviewed annually and updated as need to reflect changes in planning goals, available resources and changing threat assessments.

Measurement 7: COVID-19



COVID-19



Measurement 7: COVID-19



Virtual Operations Center

- Created in response to the current COVID-19 challenges.

Virtual EOC Homepage (View Only) : [Report Abuse](#) [Help](#)

Virtual EOC Home

Forms

- 201 Incident Briefing
- 202 Incident Objectives
- 203 Organization Assignments
- 204 Assignment List
- 205 Incident Radio Communication Plan
- 205A Communications List
- 206 Medical Plan
- 207 Incident Organization Chart
- 208 Safety Message
- 209 Incident Status Summary
- 210 Resource Status Change
- 211 Incident Check In List
- 213 General Message
- 213RR Resource Request
- 214 Activity Log
- 215 Operational Planning Worksheet
- 215A IAP Safety Analysis
- 217A Communication Resource Availability
- 218 Support Vehicle Equipment Inventory
- 220 Air Operations Summary
- 221 Demobilization Checklist
- 230 Daily Meeting Schedule
- 211P - Incident Check In List
- Appendix H Spill Assessment Checklist
- Appendix H Oil Spill Information and Notifi...

Dashboards

- Incident or Unified Command
- Operations Section
- Planning Section
- Logistics Section
- Finance Section

[Click here to see original PDF forms](#)

View Submitted Forms

- 201 Incident Briefing
- 202 Incident Objectives
- 203 Organization Assignments
- 204 Assignment List
- 205 Incident Radio Comm. Plan
- 205A Communications List
- 206 Medical Plan
- 207 Incident Organization Chart
- 208 Safety Message
- 209 Incident Status Summary
- 210 Resources Status Change
- 211 Incident Check In List
- 213 General Message
- 213RR Resource Request
- 214 Activity Log
- 215 Operational Planning Worksheet
- 215A IAP Safety Analysis
- 217A Comm. Resource Availability
- 218 Support Vehicle Equip. Inventory
- 220 Air Operations Summary
- 221 Demobilization Checklist
- 230 Daily Meeting Schedule

230 Daily Schedule

ICS 230 - Daily Meeting Schedule : [Report Abuse](#) [Help](#)

Card View Filter All Levels View by Status

Uncategorized (0)	Submitted (1)
	TEST
	10/30/20
	1200
	10/31/20
	1200

2. Operational Period Time To

● ● ● Measurement 7: Water EOP



- *Water Emergency Operation Plan*
- *Replacement of standby generators (214th Avenue East pump station & McMillin Operations building)*
- *Emergency Generator 198th Avenue East pump station planned for 2021*

Measurement 7: Water ICS

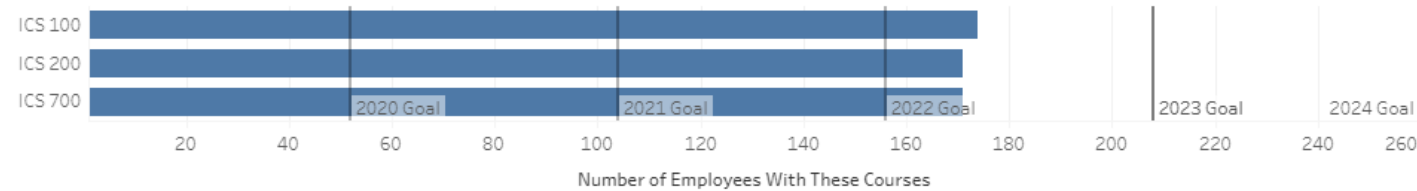


FEMA ICS Courses Summary



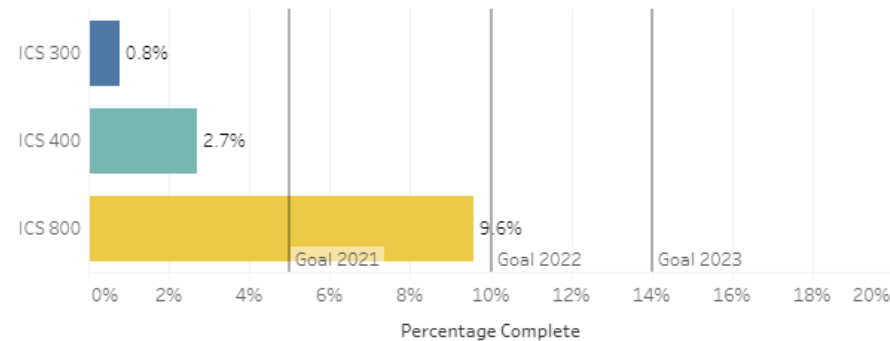
Hover over the info button for more information.

Required Training for All TW Employees



One of Tacoma Water's 2020 Goals is to "Prepare our workforce for the future: Emergency Response Training." This goal establishes a 20% completion rate annually to get to 100% compliance in five years. Note: we have used 260 as the total staff number to calculate these percentages.

Recommended Training for ICS Command and General Staff



TW Employees who may serve in ICS Command or General Staff roles are strongly recommended to take these courses.

We seek to reach 14% of our current staff being trained in these three courses in three years time. This will staff a full ICS implementation with two deep backup.

Because we have a longer way to go here than we do for required training, the following logic for goals was utilized:

1. Assume 36 trained employees is our ultimate goal (with each employee having taken ICS 300, 400, and 800). This would provide 2 deep backup for all expected roles in a full ICS deployment.
2. Assume this will occur over 3 years, not five. Therefore, we need 12 trained staff each year. This chart represents starting in 2021, finishing in 2023.



Measurement 7: Power Plans



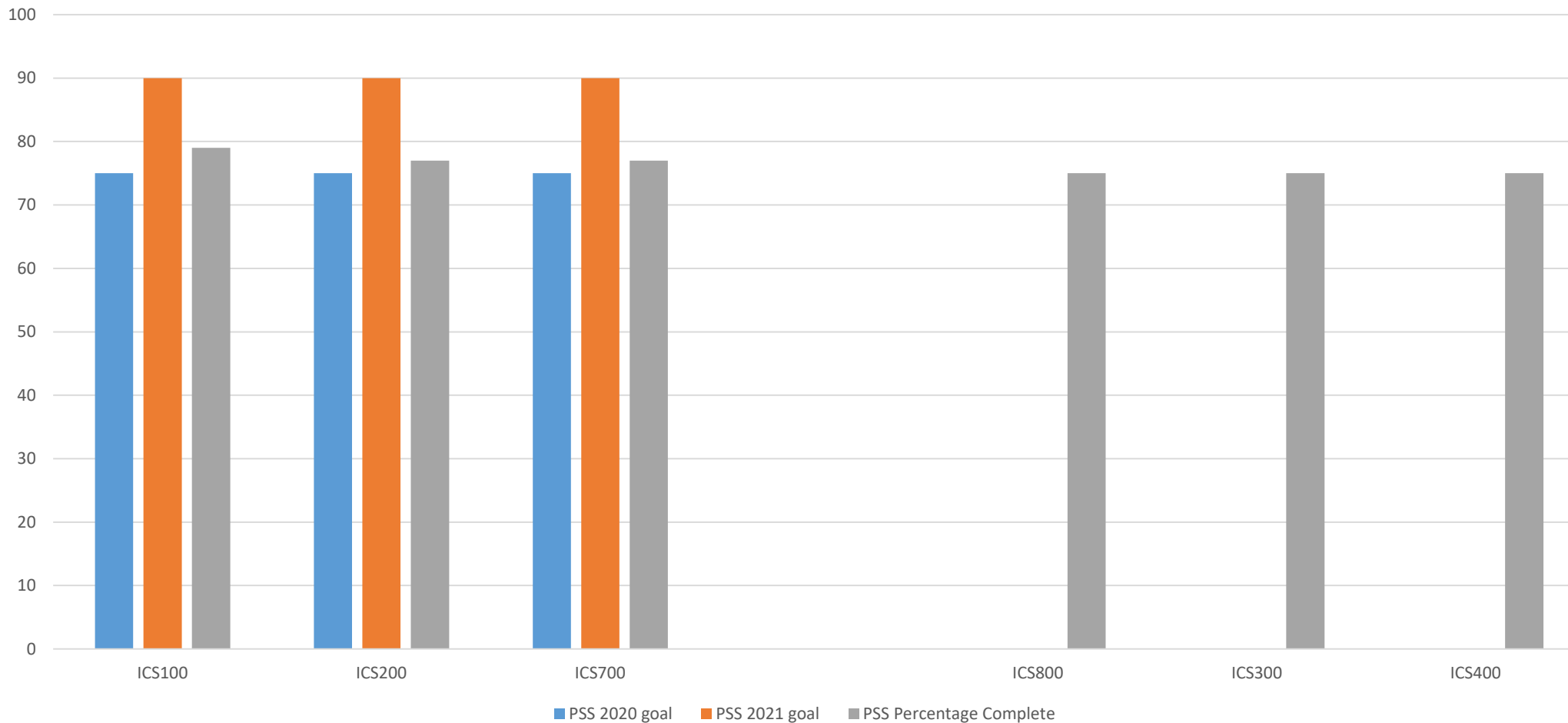
- *Power Plans and Updating:*
 - *Power Generation Emergency Action Plans (EAPs) for all four hydroelectric projects (Cowlitz, Cushman, Nisqually, and Wynoochee)*
 - *Updated: October 2020*
 - *Power Transmission & Distribution (T&D) Emergency Response Plan (ERP)*
 - *Updated: November 2020*



Measurement 7: Power ICS



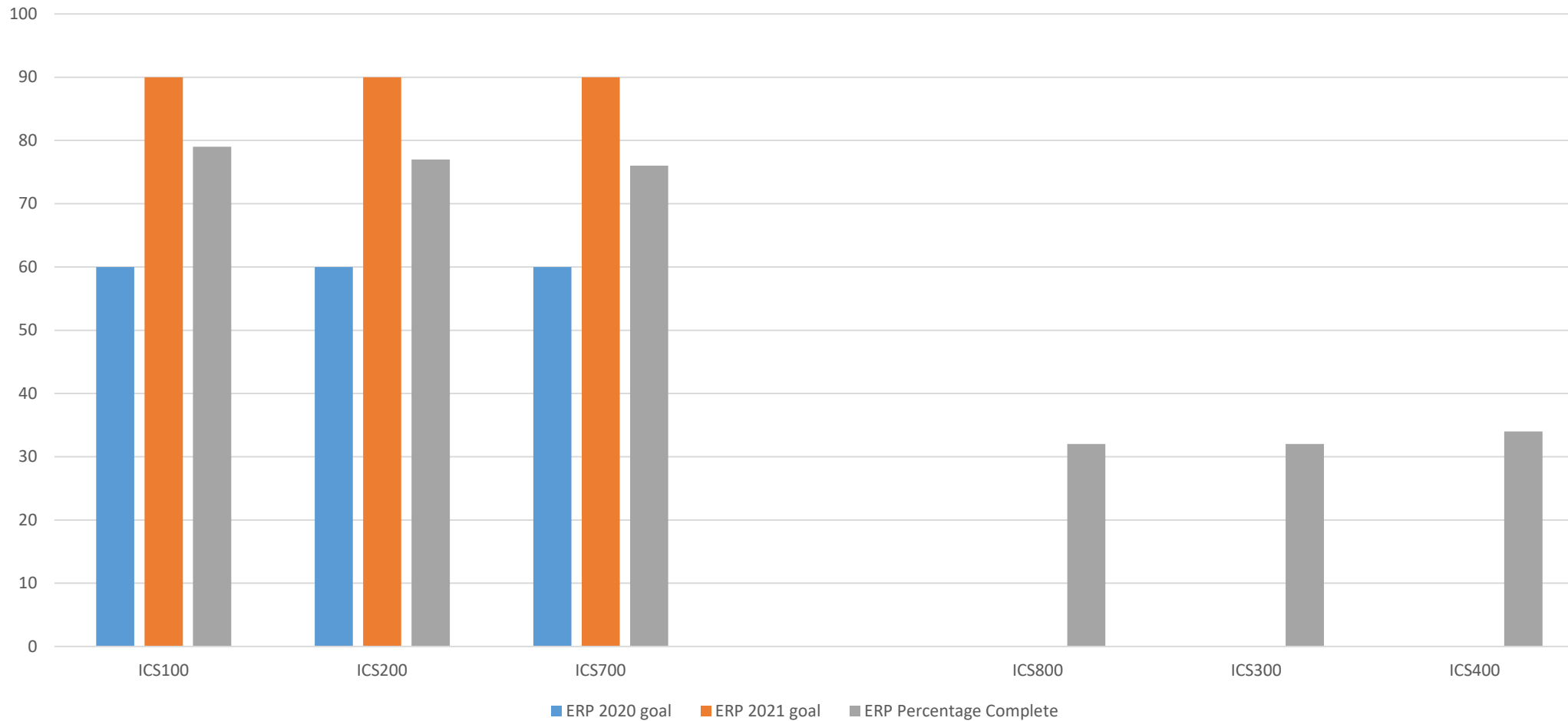
Power Shared Services (PSS)
Employee ICS Training



Measurement 7: Power ICS



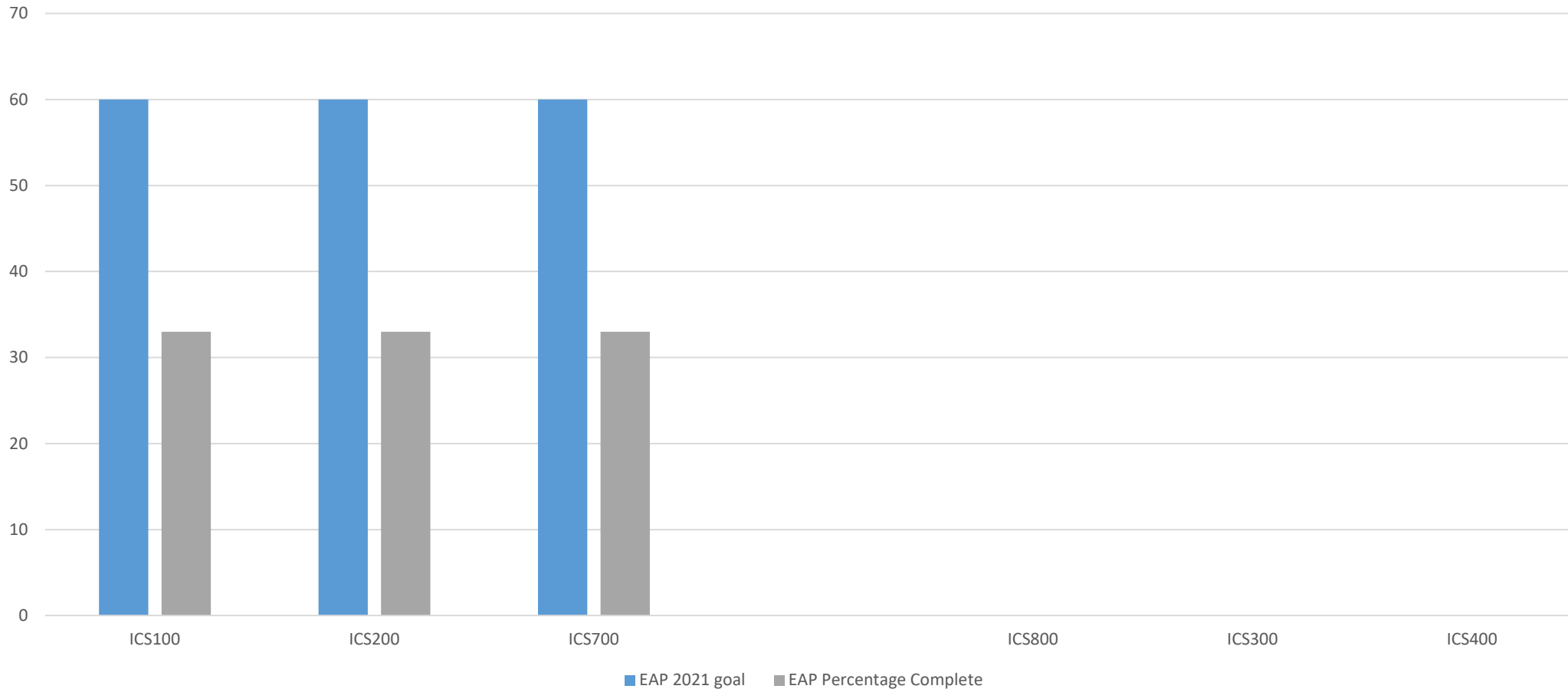
Transmission & Distribution (T&D)
Emergency Response Plan (ERP) Employee ICS Training



Measurement 7: Power ICS



Generation Emergency Action Plan (EAP)
Employee ICS Training
2021 Goal



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... Challenges & Barriers



- COVID-19 Pandemic
- Staffing Constraints

● ● ● Priorities for 2021



- Hire additional Emergency Manager (MA II)
- Emergency Preparedness for Employees and Customers
- TPU Continuity of Operations Plan (COOP)-All Hazards
- Incident Command Training

● ● ● Thank You!



Questions?