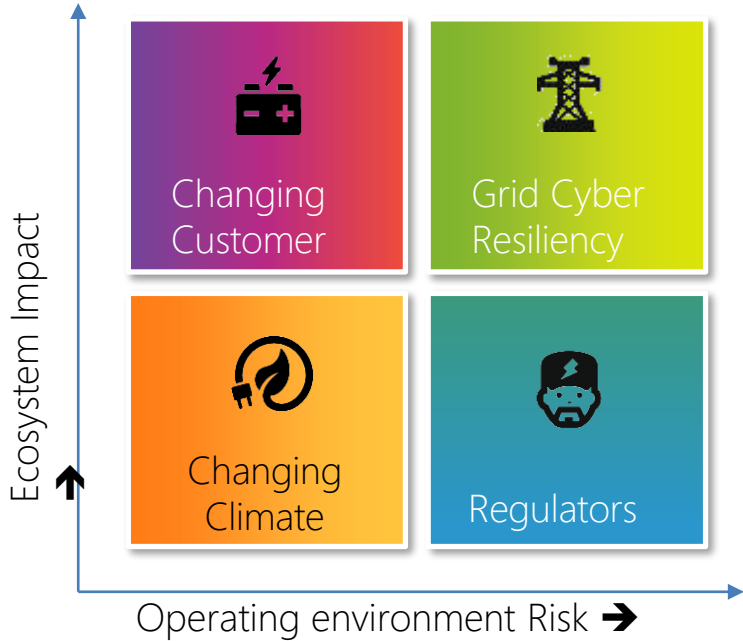
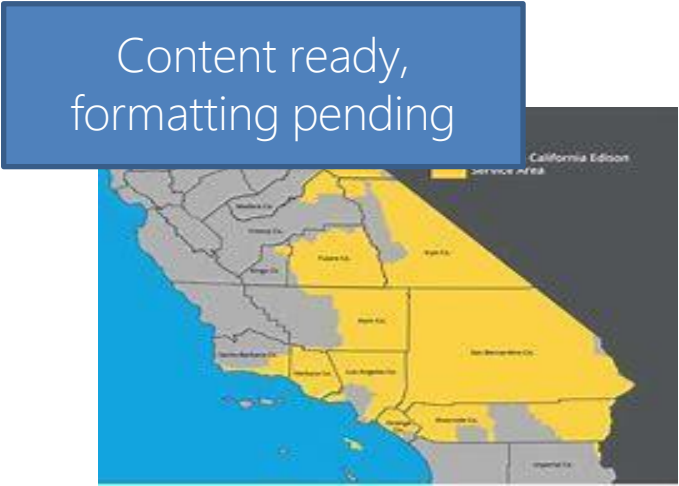


## *Community Wildfire Safety Program*

*(TCS helps US utility major mitigate wildfire risks and save hundreds of lives, billions of dollars in damages in California)*

# About the customer – A Fortune 500 Utility in the West Coast

One of America's largest investor-owned public utility  
 Fortune #179, Revenue: US\$18.7B, Customer Served: 5.5Mn, Population Served: 15Mn



## Changing Customer

- 3M+ Customers powered by New CCA
- 10k Miles Transmission lines to be undergrounded in next 10 years. 177 miles completed in 2022
- 36K+ EV and growing

## Sustainability

- Net Zero By 2040, 5 years ahead of CA timelines
- 3Mn EVs By 2030 and reduce 58+MMT of Carbon
- 50% Reduce Carbon Emission by 2030

## Addressing Wildfire Threats

- 3.6k miles Transmission lines targeted for undergrounding by 2026
- 11k miles Distribution Circuit covered by Enhanced Powerline Safety Setting
- Report It App For customers to report Fire Threats, in addition to drones, helicopters, weather stations and cameras

## Changing Regulations

- CCPA, CPUC, FERC, NERC, WPC
- 10 Senate Bills every year apart from standard rate case filings. Impacting 5 M accounts
- New Regionalization – 5 Regions created

# TCS G&T Wildfire Program | *How we are addressing the Wildfire & the "New Normal"*

## TECHNOLOGY LEVERS

### Grid Automation

Hardened Grid ensuring better control and faster restorations

### Predictive Analytics

Improved prediction capabilities, with weather and spatial analytics leveraging Palantir Foundry

### Platform Approach

Improved scalability and efficient manner of adding on new capabilities to the One Veg platform

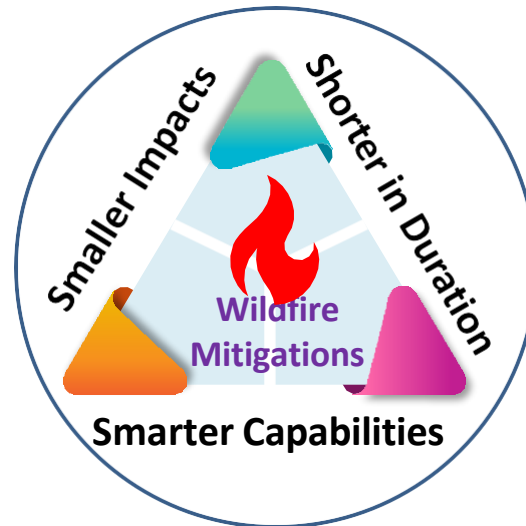
### Agile Delivery

Incremental value delivered in sprints helped in making progressive steps to better manage Wildfires

### Intelligent Modelling

Helped in increasing risk profiling, better visibility of the grid and efficient modelling of fire hazards

Large Scale Field and Work Management Transformation in ESRI, SAP, PALANTIR, SALESFORCE and AWS



## BUSINESS IMPERATIVES

### Public Safety Power Shutdown

Selective and targeted PSPS events to mitigate risks of wildfire

### Smarter Power Restoration

Live metrological data drives automated restorations after PSPS outages

### Enhanced Situational Awareness

Actional Insights leveraged from multiple data points  
Weather Analytics | Spatial Analytics | Data Analytics | Live data feeds

### Improved Regulatory Compliance

Selective and targeted PSPS events to mitigate risks of wildfire

### Customer Engagement

Medical Baseline customers can plan for outages  
Accuracy in customer communications

**TCS teamed up with customer's Wildfire Team to ensure find out how Technology can help avert wildfire, reduce loss of life , prevent economic loss and help the organization become more resilient to Wildfire**

# Key Program Metrics for TCS

**\$26.82  
million**

Program Contract Value for  
CY 2022

**11 +**

Technologies leveraged to  
deliver the Solution

**100%**

Agile mode of Delivery with  
15+ scrum teams

**90%**

Automation across testing  
& deployment processes

**97%**

Customer Satisfaction  
Index

**250+**

Peak Team Size

**6**

Service Lines, IoTDE, GIS,  
ADM, AWS, CBO, EAS

**89%**

Sprints where actual Velocity  
exceed the committed one

# Results Delivered

## PRESERVES NATURE



PURPOSE DRIVEN

## COMMUNITY OUTREACH



ADAPTABLE SERVICES

## MITIGATE WILDFIRE RISKS



EMBRACE RISK

## HARDENED POWER GRID



RESILIENT

**88%**

Fewer customers affected per PSPS outages (w.r.t 2019)

**>99.5%**

Accuracy of customers communicated actually affected by outages

**638 miles**

Circuit miles hardened

**6k+ miles**

Conducted enhanced vegetation safety work for high fire prone zones

**26%**

Fewer Counties in Service Areas impacted by Outages

**85%**

Fewer Medical Baseline Customers affected

**4 sq km**

Spatial Resolution of Weather Forecast Granularity

**96%**

Of risks due to wind driven catastrophic fires captured in PSPS protocols

**43%**

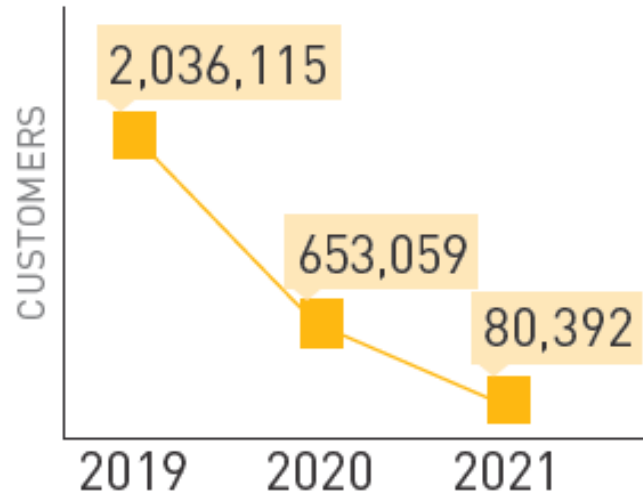
Reduction in outage durations between 2019 - 2021

# Wildfire Remediation Performance – As Reported to the Regulators



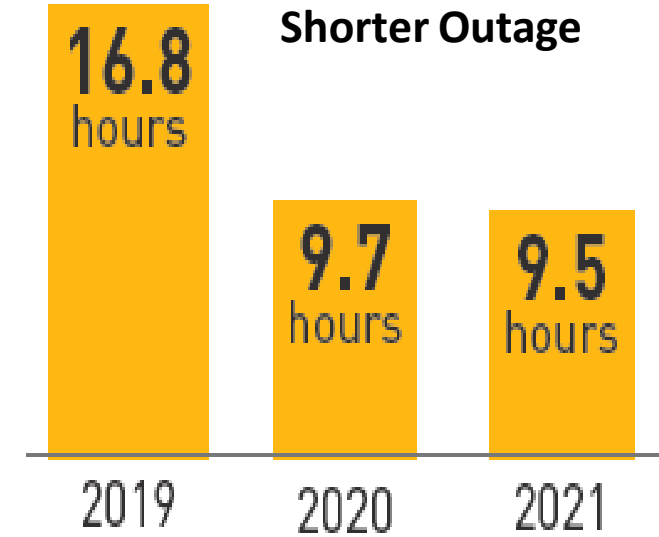
Program contributed to improvement in Efficiency gain, Regulatory Compliance, and Emergency Response. Increased in productivity and thus significant cost saving for the customer.

## CUSTOMERS IMPACTED BY PSPS



- 88% fewer customers impacted per PSPS outage
- 85% fewer Medical Baseline customers impacted
- 26% fewer counties in service area impacted

## Shorter Outage



- Quickly Power restoration
- 37% increase from 2020 in inspection via Helicopters
- 22% increase from 2020 in on-the-ground personnel for inspection and power restoration

From the data plots shown, it can be inferred that Power disruption length is reduced significantly from ~17 Hrs to 9.5 Hrs. Also, impacted customers due to PSPS outage in 2021 has been improved by more than 95% from 2019.

# Voice of the Customer



*“Thank you, team!*

*I am very proud of this milestone. The new PSPS Viewer will help us better serve our customers and keep them safe. We can now do that with an application that is more stable, that is showing performance levels 40% faster than the legacy tool, that can produce maps that accurately inform who will be out of power at a property parcel level and that can scope an event hours faster to allow us to be more nimble in targeting the use of PSPS.*

*For us, this is the first application built on our public cloud and it is a mature modern application using a CI/CD pipeline and a micro service, cloud native architecture. Thank you to each of you for all for your hard work!”*

**Senior Director (Business Technology) of the Customer**