



Annual Public Safety Briefing

August 29, 2024



Presenters & Panelists

PRESENTERS



Rob Borthwick
Chief Risk Officer, Sempra
Board Safety Committee Chair



Kevin Geraghty
Chief Operating Officer &
Chief Safety Officer, SDG&E

PANELISTS



Brian D'Agostino
VP, Wildfire Mitigation &
Climate Science, SDG&E



Tashonda Taylor
VP, Gas Operations
SDG&E



Jonathan Woldemariam
Director, Wildfire
Mitigation, SDG&E

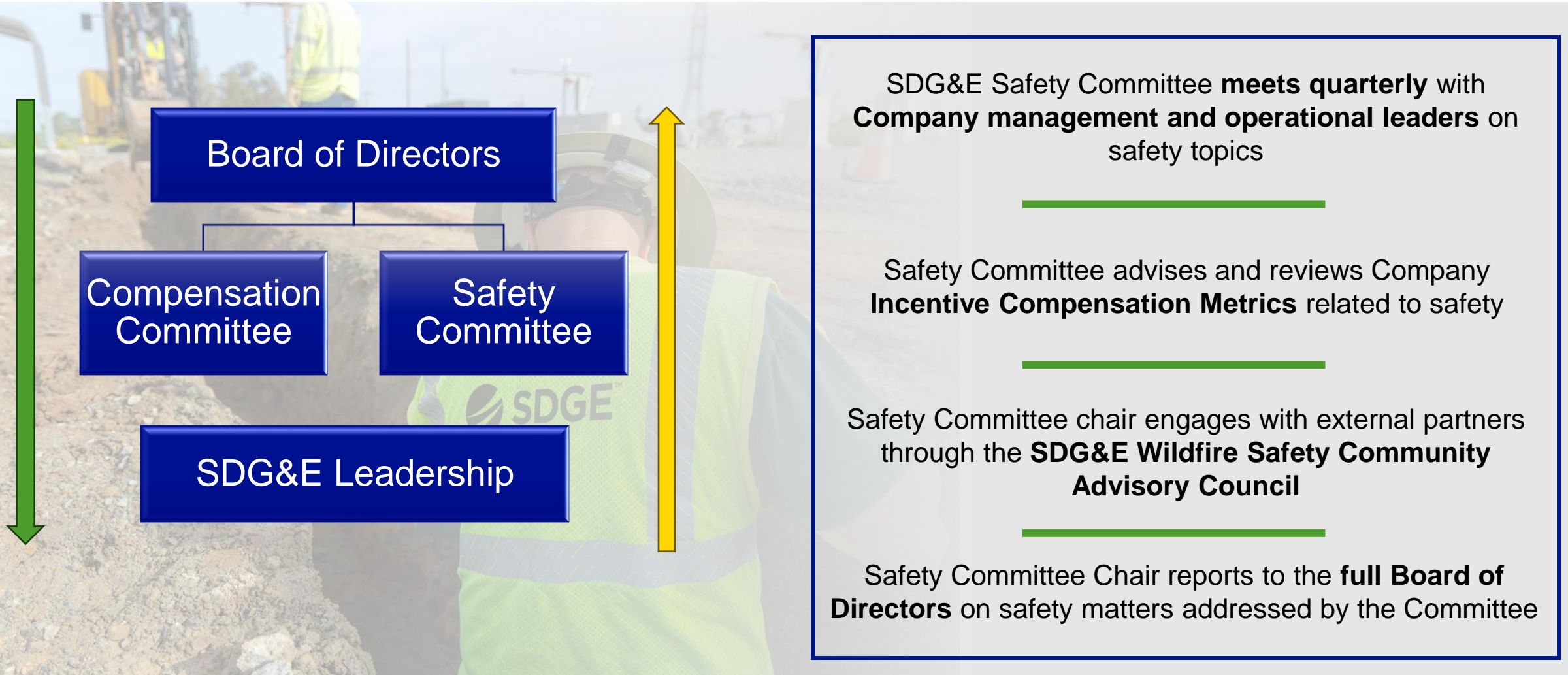
Customer, Community & Workforce Safety is a Core Component of SDG&E's Governance

SDG&E Board Safety Committee

- Reviews safety culture, goals and risks
- Reviews incidents, measures and management strategies to prevent, mitigate or respond to safety-related incidents involving employees, contractors, customers or community members
- Monitors current and emerging safety matters and issues raised by safety audits
- Provides strategic guidance and recommendations to management on safety issues
- Continuous review of governance practices through annual review of Committee charter



Safety Governance Model



Ongoing Leadership Commitment to Safety Across the Company's Field Operations



The Safety Committee Monitors Safety Performance Using a Robust Set of Metrics Across Key Safety Areas

Safety Culture



Contractor Safety



Public Safety



Wildfire Safety

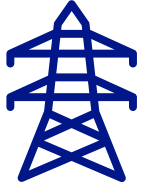


Employee Safety



SDG&E 2024 Goals: Operational & Safety Metrics

SDG&E's 2024 safety goals demonstrate ongoing commitment to safety across our entire organization and culture.



- Wildfire & PSPS System Hardening
- Vegetation Contacts in High Fire Threat District (HFTD)
- PSPS Average Circuit Restoration Time (Hours)
- Electric Overhead Fault Rate
- Annual Average Phishing Report Rate



- Lost Time Incident (LTI) Rate
- Safe Driving Observations
- Field Safety Engagements
- Near Misses Reported



- Distribution Integrity Management Programs
- Damage Prevention Rate
- P1 Gas Response Time

Living our Values

Do The Right Thing | Champion People | Shape The Future

Our values drive SDG&E's culture of safety

- Application of a holistic view of safety
- Safety governance and risk ownership
- Learning through collaboration with our stakeholders
- Building trust and psychological safety
- Increased transparency and information sharing
- Leveraging our safety culture assessments for continuous improvement

Our values form the foundational alignment for us to achieve our mission to deliver clean, safe and reliable energy

Our commitment to

Public Safety

Protecting the safety of the communities we serve is the foundation of our business and a core value. SDG&E continues to invest in advancements, technologies and partnerships that:

- Strengthen and protect our gas and electric infrastructure;
- Enhance data analysis and risk modeling for proactive mitigation measures;
- Better inform investment strategies and risk-based decision-making;
- Prepare communities for increasing hazards brought on by climate change; and

Mitigate the risk of catastrophic events, serious injuries and fatalities.



Data-driven Risk Mitigation

SDG&E's Safety Management System provides the enterprise-wide framework to mitigate safety risk



Early Risk Identification

- Increased use of leading indicators and data analytics



Risk Prioritization

- Asset Integrity Management program
- Serious Injury and Fatality (SIF) potential
- Field Safety Engagements (incorporating High Energy Control Assessments)



Culture of Safety

- Increased collaboration and information sharing
- Enhanced two-way communication



Damage Prevention Program

SDG&E's proactive approach to public safety

SDG&E's Damage Prevention Program safeguards infrastructure from harm that could occur during digging operations



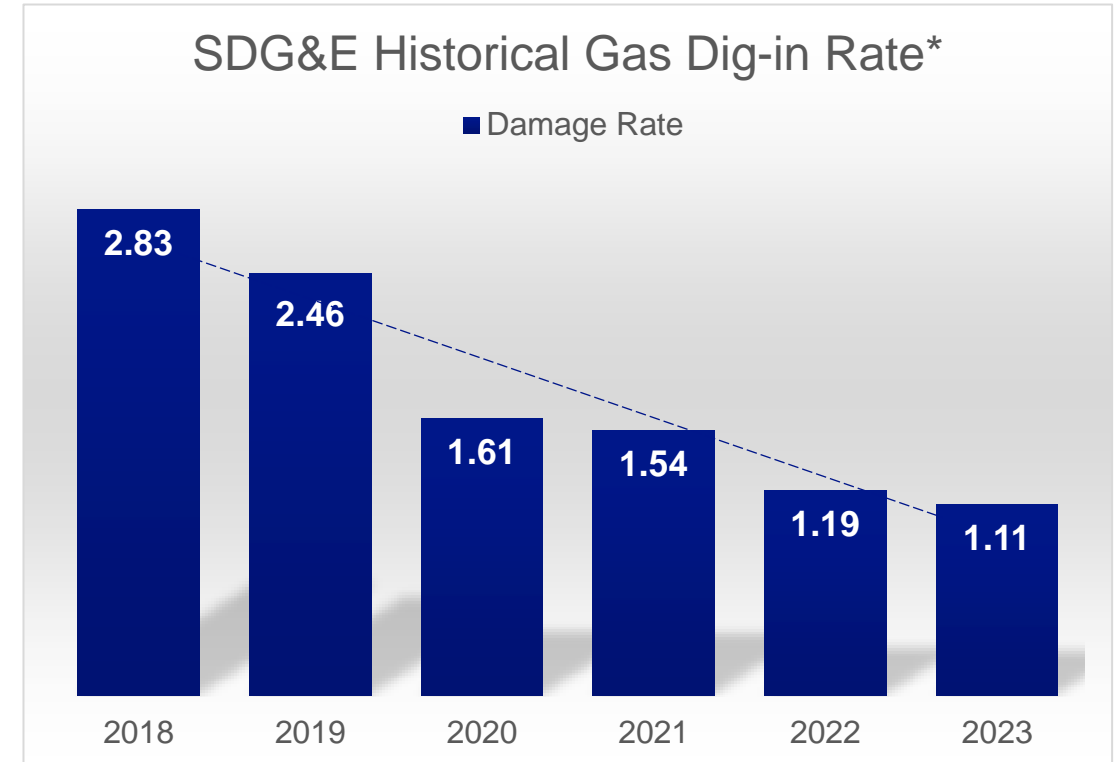
Data Driven Strategy

- Ticket Risk Assessment Tool
- Quality Management Reviews



Public Awareness, Outreach & Education

- Damage Prevention Analyst Program
- Radio, Billboard & TV ads
- 811 Champion Campaign



*Third-party Dig-ins per 1,000 USA tickets

Recognized as a Global Leader in Wildfire Mitigation

 **16 YEARS**

without a large utility-related wildfire

 **100% RISK INFORMED**

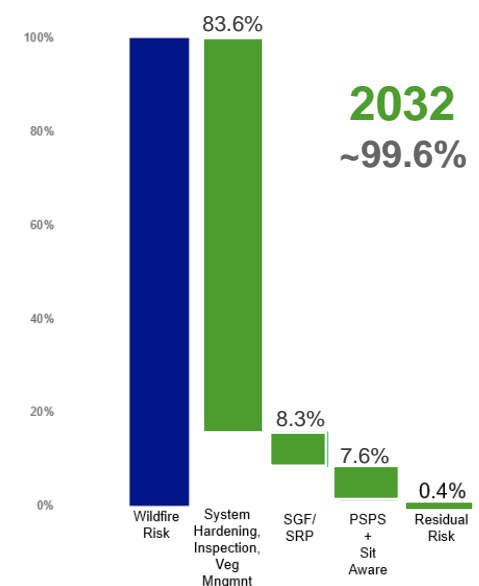
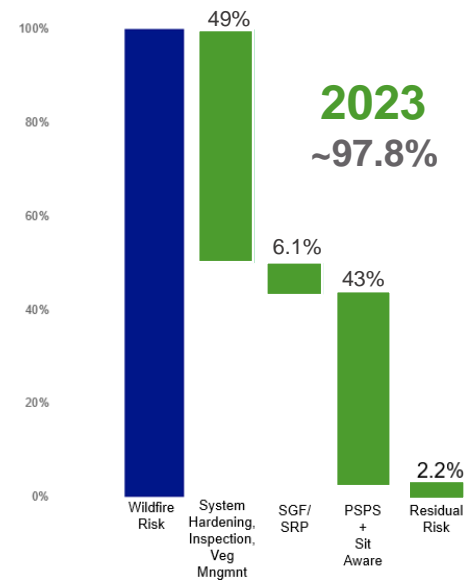
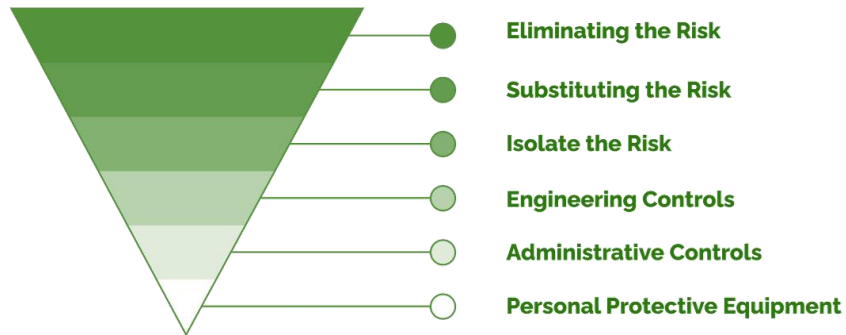
Industry-leading risk models informing grid hardening investments

 **INDUSTRY LEADER**

Scored most mature wildfire mitigation program across international utilities

SDG&E has seen major risk reductions since 2007 through infrastructure modernization and operational enhancements with additional mitigation plans to continue through 2032

Hierarchy of Control



Wildfire Mitigation By The Numbers



**COVERED
CONDUCTOR**
40 miles

Planned to be installed in 2024
13 miles installed YTD



**STRATEGIC
UNDERGROUNDING**
125 miles

Planned to be installed in 2024
8 miles installed YTD



**ASSET INSTALLATIONS /
REPLACEMENTS**
2,500 assets

Planned to be replaced in 2024
> 1300 replaced YTD

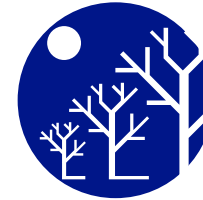
**POLES
BRUSHED**
>33,000
poles

Planned to be brushed in 2024
> 32,500 brushed YTD



**TREES TRIMMED /
REMOVED**
>11,000
trees

Planned to be trimmed/removed in
2024 > 5,900 trimmed/removed YTD



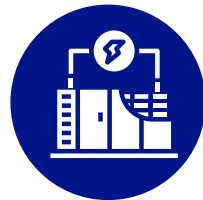
**VEGETATION
INSPECTIONS**
>485,000
inspections

Planned to be performed in 2024
> 245,000 performed YTD



**DETAILED ASSET
INSPECTIONS**
>17,000
inspections

Planned to be performed in 2024
> 16,000 performed YTD



**SUBSTATION
INSPECTIONS**
>350
inspections

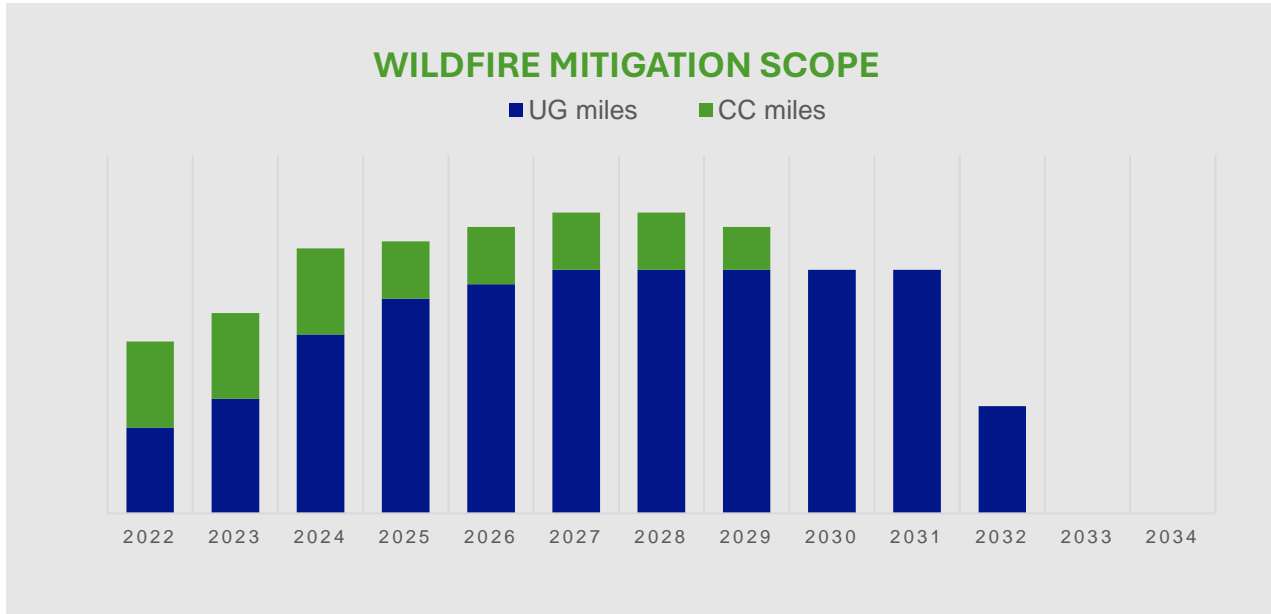
Planned to be performed in 2024
>200 performed YTD



**PATROL
INSPECTIONS**
100%
assets

Planned to be patrolled in 2024
72% completed YTD

Where We Are Going – Covered Conductor & Strategic Undergrounding



100% Risk-Informed

Industry-leading risk models inform grid hardening investments



80%+ Wildfire Risk Reduction



93% PSPS Risk Reduction

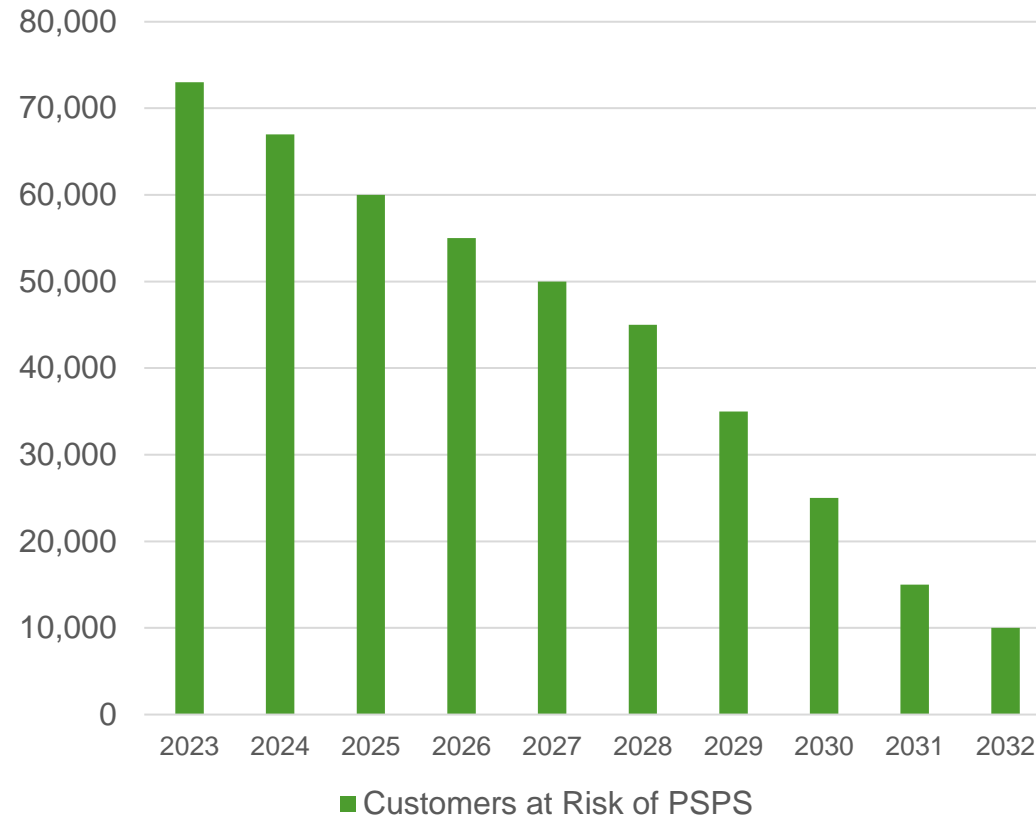
HFTD Hardening	YTD 2024	2032
Undergrounding	2,847 miles (45%)	4,235 miles (65%)
Covered Conductor	119 miles (<2%)	392 miles (6%)
Trad Hardening	891 miles (14%)	570 miles (9%)
Unhardened	2,400 miles (38%)	1,275 miles (20%)

When considering factors such as the degradation of covered conductor over time, climate change, life cycle costs of maintaining an overhead system in the HFTD, speed of mitigation implementation, and the societal and economic impacts of Public Safety Power Shutoffs impacting future generations in California, **Undergrounding provides the best lasting solution to protect our communities from Wildfires and PSPS.**

Targeted Risk Reduction

Latest undergrounding scope enhancements are optimized to expedite both reductions in the highest wildfire risk and the need for frequent PSPS amidst worsening climate conditions.

Customers at Risk of PSPS



Focused Grid Hardening
Highest risk circuits (top 30%) are directly targeted by increased undergrounding strategy



90+%

RISK REDUCTION FOR HIGHEST RISK CIRCUITS COMPLETE BY

2027

Focused PSPS reduction
Most frequently impacted PSPS circuits* are directly targeted by increased undergrounding strategy



93%

REDUCTION IN PSPS FOR FREQUENTLY IMPACTED CIRCUITS COMPLETE BY

2032

*customers who have experienced 5+ PSPS

Wildfire Innovation + Technology

Technology and Innovation are foundational to SDGE's Wildfire Mitigation Program



Situational Awareness

- Expanding **AI applications** across weather networks, cameras, and satellite
- Enhancing **risk modeling**, informing hardening strategy
- Performing **drone** inspections in high-risk areas



Engineering & Operations

- Re-engineering system undergrounding to **reduce costs**
- **Risk-informed** inspections and vegetation management
- **Advanced Protection:** falling conductor protection and high-speed relays
- Enhanced **fuels management**



Stakeholder Education and Outreach

- Operation Megaphone: **enables** communicating with all customers in **one hour**
- **Wildfire Safety Fairs** educate communities on wildfire safety and emergency preparedness
- **Award-winning application** to keep communities informed



Advancing as a Learning Organization

Identifying opportunities for improvement from internal and external event teachings



Employee & Contractor Safety

- Safety Culture Assessments & Employee Dialogue Sessions: Advance Customer Notifications; deployed mobile field technology enhancements for improved hazard awareness



Gas Infrastructure & Public Safety

- Natural Gas Industry Incidents: Reviewed findings; assessed and updated internal gas standards, procedures, processes and trainings; field verified infrastructure



Electric Infrastructure & Public Safety

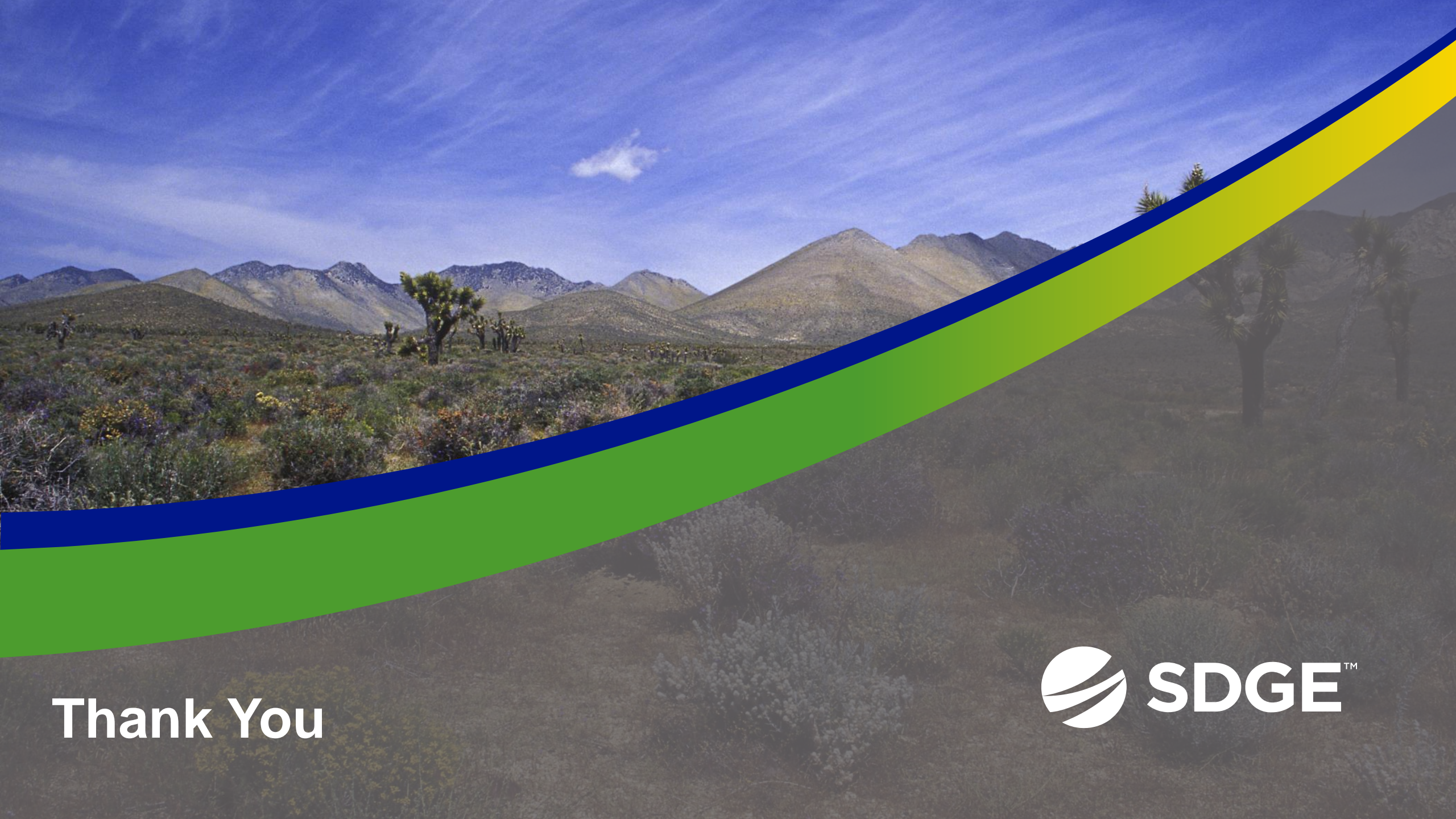
- Climate Adaptation & Vulnerability Assessment: Tropical Storm Hilary agency coordination, communication and infrastructure resiliency



Committed to Continuous Learning, Innovation & Improvement

- Advancements in safety are value driven.
 - Embracing innovative technologies
 - Fostering a culture of safety
 - Continually reviewing, assessing and validating
- Together, we have the power to drive change, inspire innovation, and set new standards of safety excellence.





Thank You





APPENDIX



Public Safety & Operational Performance



January 1 – June 30, 2024

CPUC Reportable Metric	YTD 2024	2023	2022	2021	Trend
Public Serious Injuries and Fatalities (# Serious Injuries # Fatalities)	2 0 ●	2 1	0 0	2 0	Zero Public SIFs due to system/equipment failures
Fire Ignitions (# CPUC-reportable ignitions)	8 ●	16	20	25	Continuous year-over-year improved performance
T&D OH Wires Down – including secondary & MEDs (# instances)	136 ●	462	339	341	Improved performance; primary wire downs decreased 50% YTD from 2023
Electric Emergency Response (Average time in minutes)	48.08 ●	47.15	46.59	49.71	YTD increased order count; consistent performance
Gas Emergency Response Time (Average time in minutes)	28.50 ●	28.30	28.60	29.06	Consistent performance over the last few years attributable to 24/7 crews and improved dispatch times.
Gas Dig-ins (Third party dig-ins per 1,000 USA tickets)	1.09 ●	1.11	1.19	1.54	Continuous year-over-year improved performance; strategy to reduce excavation damages includes proactive outreach and education initiatives
Control Time – Gas Shut-in Time Mains (Median time in minutes)	349.50 ●	416.00	833.00	871.00	Continuous year-over-year improved performance
Control Time – Gas Shut-in Time Services (Median time in minutes)	100.94 ●	88.58	98.08	127.00	Continuous year-over-year improved performance; Q1 2024 winter storm activity contributing to YTD increase



Employee & Contractor Safety Performance

January 1 – June 30, 2024

Rate = (# Incidents X 200,000 / hours worked)

Overview: Through the first half of the year, we continue to see improved performance across key metrics. Measurable leading indicators introduced in 2024 include Field Safety Engagements and Driving Observations. Field Safety Engagements incorporate High Energy Control Assessments (HECA) to observe tasks where high energy is present. Identified high energy hazards and controls are compiled and reviewed with Safety and Operational teams for opportunities for learning and safety improvement. Driving Observations are proactive means to help address static Controllable Motor Vehicle Incidents (CMVIs) in recent years. SDG&E's enhanced damaged prevention efforts are attribute to continued year-over-year historical bests in damage prevention rates with proactive outreach, education and engagement.

Safety Culture	Near Miss Submittals		Field Safety Engagements	Driving Observations	
	Employee	Contractor			
	YTD 2024	226 ●	182 ●	52 ●	195 ●
	2023	436	190	N/A	N/A
2022	371	146	N/A	N/A	

	Employee Safety				Contractor Safety			
	SIF Rate	P-SIF Rate	TRIR	LTI Rate	SIF Rate	P-SIF Rate	TRIR	DART Rate
YTD 2024	0.00 ●	0.10 ●	1.25 ●	0.35 ●	0.20 ●	0.07 ●	0.71 ●	0.60 ●
2023	0.00	0.19	1.48	0.39	0.05	0.17	0.64	0.45
2022	0.04	0.15	1.97	0.48	0.03	0.30	0.76	0.33
2021	0.22	0.24	1.81	0.55	0.03	0.29	0.85	0.56

- Positive year over year trend; continuous safety improvement
- No significant change (+/- 10%) in year over year trend; opportunity for improvement
- Negative year over year trend; needs attention for safety improvement

2022 & 2023 Wildfire Safety Culture Assessment Report Recommendations

Leadership Prioritization of Safety	Risk from Interactions with the Public	Safety Event Reporting & Tracking	Increased Survey Participation
<ul style="list-style-type: none"> Consistent messaging; weekly company-wide leadership safety messaging; annual Start Strong safety event 	<ul style="list-style-type: none"> Launching SDG&E's Advance Field Customer Notifications companywide initiative 	<ul style="list-style-type: none"> Implemented process to assess, assign and track all actionable Near Misses through resolution 	<ul style="list-style-type: none"> Increasing awareness of safety culture initiatives at Contractor Safety Quarterly Meetings
<ul style="list-style-type: none"> Monthly Electric & Gas Safety Subcommittee meetings where employees can raise and discuss safety topics that are documented and tracked through resolution 	<ul style="list-style-type: none"> Issuance of customer courtesy text messages and emails 	<ul style="list-style-type: none"> Deployed enhancements to employee-wide Near Miss reporting dashboard; tracking anonymous reporting trends 	<ul style="list-style-type: none"> Hosting Wildfire “Double Down” and “Challenge” listening sessions to solicit input from cross-functional employees
<ul style="list-style-type: none"> Leadership engagement in Quarterly Executive Safety Council meetings soliciting direct feedback from front-line operational employees and supervision 	<ul style="list-style-type: none"> Advancing deployment of Geocall Electric Pre-Construction Mobile Fielding Application with enhanced hazard warnings 	<ul style="list-style-type: none"> Issuance of Weekly Near Miss Summary Report illustrating reporting trends, recognizing employees for speaking up, and providing updates on resulting safety improvements 	<ul style="list-style-type: none"> Identifying additional tools and resources to promote increased survey participation

SDG&E Board Safety Committee

Topics reviewed by the Safety Committee during the past 12 months include:

SDG&E Contractor Safety Program

Envista Root Cause Analysis Report on 2017-2018 Wildfires and Applicable Lessons for SDG&E

Moreno Compressor Modernization

SDG&E Cybersecurity Update

SDG&E's 2023 Wildfire Safety Challenge Sessions

Wildfire Safety and Wildfire Mitigation Plan Update

SDG&E's Gas Integrity Management Programs

SDG&E 2023 Wildfire Safety Culture Assessment and Recommendations

2020 PacifiCorp Fires

SDG&E Office Safety Program

Battery Storage Safety and Risk Management

Risks Associated with Transmission Static Wire

Recent SDG&E Board Safety Committee Recommendations

Recommendation	Status
Report on inspections of legacy gas transmission lines , and SDG&E's programs to address public safety during gas incidents	☑
Report on SDG&E's 2023 internal wildfire challenge sessions and any actions taken by SDG&E in response to prepare for the fall Santa Ana season	☑
Report on 2020 PacifiCorp Fires	☑
Wildfire hardening site visit	☑
Report on potential hazards associated with battery energy storage systems, and SDG&E's efforts to mitigate battery safety risks	☑
Report on Company's efforts to prepare for extreme weather events , including flooding and tropical storms, as well as lessons learned from prior events (February 2024)	
Report on potential safety hazards associated with pole failures , SDG&E's efforts to mitigate pole failure risks, and pole replacement safety (July 2024)	