PRELIMINARY 2021 RAMP WORKSHOP

October 15, 2020

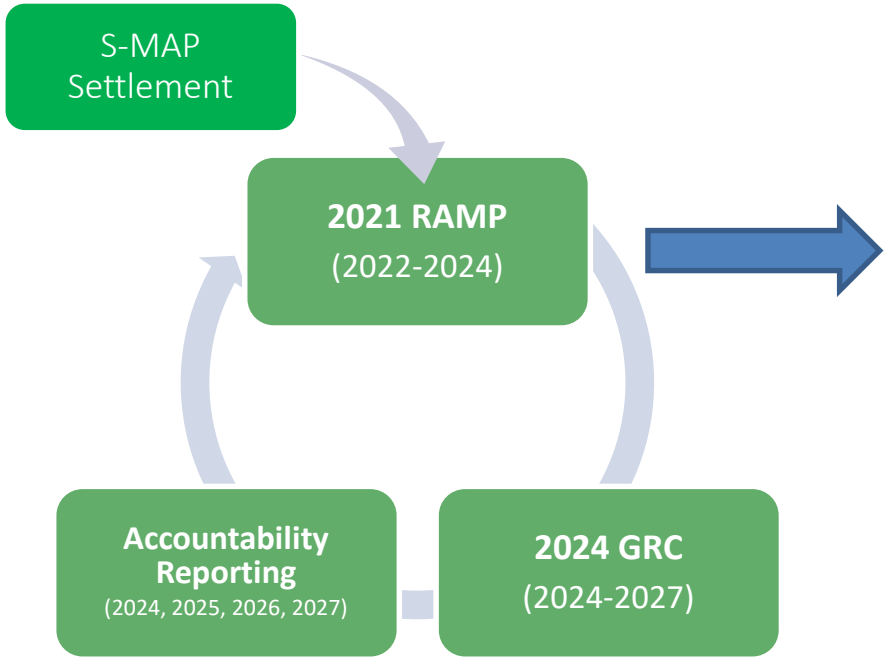
Agenda

Topic	Presenter	Start	End
Opening Remarks and Safety Moment	Safety Policy Division	10:00 AM	10:15 AM
First Phase of Test Year 2024 General Rate Case	Chuck Manzuk	10:15 AM	10:25 AM
Overview of Workshop Requirements & Risk Assessment Methodology	Mason Withers	10:25 AM	10:35 AM
Risk Quantification Overview	Mason Withers	10:35 AM	11:00 PM
Risk Assessments	Mason Withers	11:00 PM	11:15 PM
Break		11:15 PM	11:45 PM
Preliminary RAMP Risks	Mason Withers	11:45 PM	12:00 PM
Risk Quantification Examples	Jeff Bunting / Mason Withers	12:00 PM	12:30 PM
Anticipated Changes to 2021 RAMP Report & Addressing Feedback	Joe McCawley	12:30 PM	1:15 PM
Meeting RAMP Requirements	Joe McCawley	1:15 PM	1:30 PM
Q&A, Wrap-up, and Agenda for 2nd Workshop in January	Joe McCawley	1:30 PM	2:00 PM

OPENING REMARKS
&
SAFETY MOMENT

FIRST PHASE OF THE TEST YEAR 2024 GENERAL RATE CASE (GRC)

Test Year 2024 GRC Cycle



2021 RAMP
Filing: 5/15/2021

Base Year	Forecast Years		
2020 Recorded	2022 Forecast	2023 Forecast	2024 Forecast
			TEST YEAR

Test Year 2024 GRC
Filing: 5/15/2022

Base Year	Forecast Years			Post-Test Years		
2021 Recorded	2022 Forecast	2023 Forecast	2024 Forecast	2025 Calculate	2026 Calculate	2027 Calculate
			TEST YEAR			

S-MAP Settlement Process

Step 1A: Build a multi-attribute value function (MAVF), also referred to as a risk quantification framework, required to be constructed once based on set principles, but the utility may be adjusted over time

Step 1B: Start with Enterprise Risk Register for identifying the risks that will be included in the RAMP

Step 2A: Perform a risk assessment on each risk included in the Enterprise Risk Register using risk quantification framework

Step 2B: Select enterprise risks for RAMP after discussing at a pre-filing, public workshop

Step 3: Perform mitigation analysis in RAMP

WE ARE HERE

OVERVIEW OF WORKSHOP REQUIREMENTS & RISK ASSESSMENT METHODOLOGY

Overview of Pre-RAMP Workshop

Purpose

The intent of this Pre-RAMP Workshop is to gather input from stakeholders to inform the determination of the final list of risks to be included in the 2021 RAMP filing.

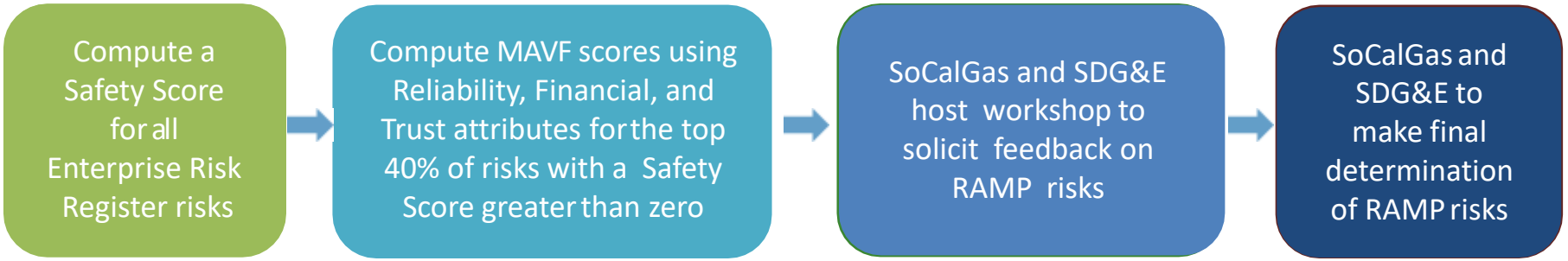
Pre-Workshop Requirements

The Settlement Agreement requires the utilities to show the following (at least 14 days) in advance of this workshop:

1) Preliminary list of Risk Assessment and Mitigation Phase (RAMP) risks;
2) the Safety Risk Score for each risk in the Enterprise Risk Register (ERR); and
3) the Multi-Attribute Value Function (MAVF or Risk Quantification) for the top 40% of risks in the ERR with a Safety Risk Score greater than zero

Consistent with the S-MAP Settlement Agreement, SoCalGas and SDG&E will address the rationale for taking or disregarding input during the Pre-RAMP Workshop within their respective 2021 RAMP Reports.

Risk Assessment & Risk Ranking in Preparation for RAMP



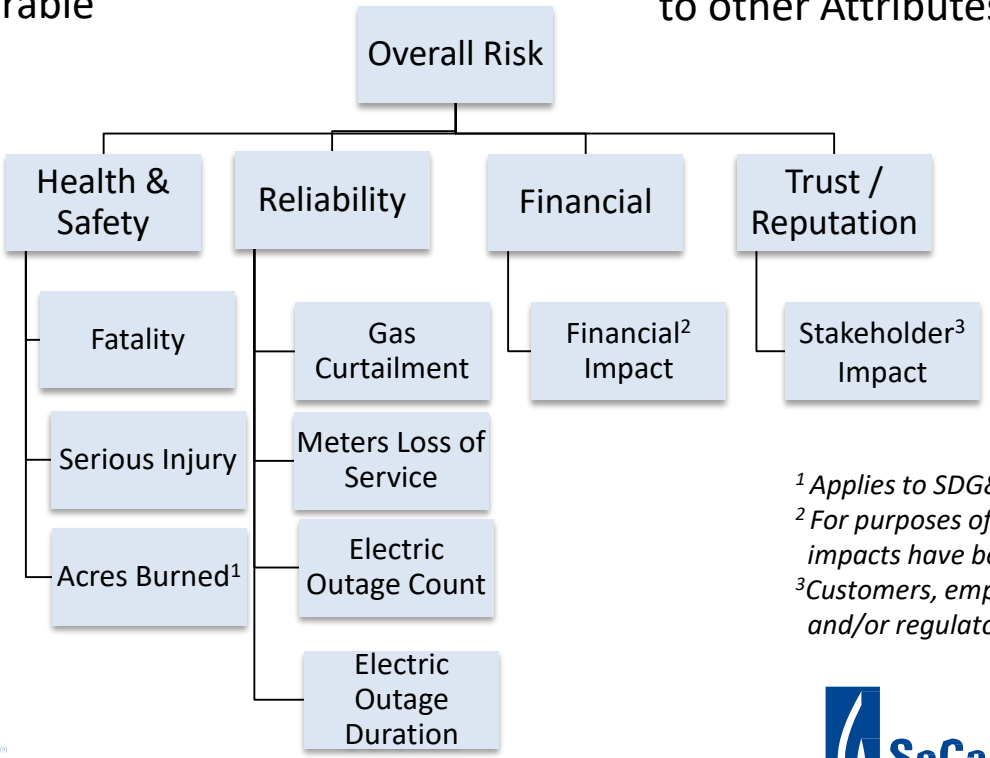
	SoCalGas	SDG&E
Number of risks in the 2020 ERR	14	22
Number of risks with a safety score greater than zero	9	14
Number of risks in the Top 40%	4	6
Number of preliminary RAMP risks	7	9

RISK QUANTIFICATION OVERVIEW

Risk Quantification Framework

In accordance with the S-MAP Settlement, SoCalGas and SDG&E constructed our Risk Quantification Framework by following six principles:

1. Combine Attributes in a hierarchy
2. Express each lower-level Attribute in its own range of observable, natural units
3. Use a measurable proxy for an Attribute that is logically necessary but not directly measurable
4. Assess the uncertainty in the Attribute levels
5. Construct a scale
6. Assign a weight to each attribute reflecting its relative importance to other Attributes



[1] Applies to SDG&E Wildfire Risk Only
[2] For purposes of RAMP, shareholder financial impacts have been removed
[3] Customers, employees, the public, government, and/or regulators

Risk Quantification Framework

Attribute	Unit	Range	Weight
Health & Safety	Index	0 - 20	60%
Reliability	Index	0 - 1	20%
Financial	$M	$0 - 500M	15%
Trust/Reputation	Index	0 - 100	5%

Risk Quantification Framework

Attribute	Unit	Range	Weight
Health & Safety	Index	0 - 20	60%
Reliability	Index	0 - 1	20%
Financial	$M	$0 - 500M	15%
Trust/Reputation	Index	0 - 100	5%

Health & Safety Index

Sub Attribute	Value
Fatality	1
Serious Injury	0.25
Acres Burned*	0.00005

*Applies to wildfire risk only

Trust / Reputation

Stakeholders Affected*	Severity	Duration	Value
Five Stakeholders	Extreme	6+ Months	100
Three to Four Stakeholders	Major	1 - 6 Months	50
Two to Three Stakeholders	Moderate	<1 Month	25
One Stakeholder	Minor	<1 Week	5

*Stakeholders: customers, employees, public, government, and regulators

Reliability Index (SDG&E / SoCalGas)

Sub Attribute	Unit	Range	Weight
Gas Curtailment (80 / 250)	# MMcf	0 – 250 / 0 - 500	25% / 50%
Meters Loss of Service	# of meters	0 - 50,000 / 0 - 100,000	25% / 50%
Electric Outage Count	SAIFI Outages	0 – 1	25% / 0%
Electric Outage Duration	SAIDI Minutes	0 – 100	25% / 0%

Risk Score: Illustrative Example

SDG&E: Employee Safety

Average Consequence of Event	
Safety Units	0.4
Reliability Units	0
Financial ($M)	$1.1
Trust/Reputation	2

Pre-Mitigation Risk Score	
LORE	**0.9**
CORE	((0.4 / 20) * 60% + 0 + (1.1 / 500) * 15% + (2 / 100) * 5%) * 100000 = **1298**
Risk Score	LORE * CORE = 0.9 * 1298 = **1168**

CORE values are multiplied by a constant factor of 100,000 to improve readability.

RSE Methodology

- RSEs are numerical values *that attempt to portray changes* in risk scores per dollar spent
- The change in a risk score is *one data point* that *can help to inform* decision-making and can be due to:
  - The amount of risk reduction when a new activity is completed, or
  - The amount of risk increase if a currently on-going activity is ceased

- **As of the date of this workshop, the calculation of RSEs for the 2021 RAMP have not been completed.**

RSE: Illustrative Example

SDG&E: Employee Safety

Mitigation: Safe Driving Program	
Annual Reduction of Likelihood of Risk Event	1.2%
Cost	$1M
Life of Benefits	3 years

Pre-Mitigation	
LORE	0.9
CORE	((0.4 / 20) * 60% + 0 + (1.1 / 500) * 15% + (2 / 100) * 5%) * 100000 = 1298
Risk Score	LORE * CORE = 0.9 * 1298 = 1168

Post-Mitigation	
New LORE	0.89
CORE	((0.4 / 20) * 60% + 0 + (1.1 / 500) * 15% + (2 / 100) * 5%) * 100000 = 1298
Mitigated Risk Score	New LORE * CORE = 0.89 * 1298 = 1154
RSE	(1168-1154) *3 / $1M= 42*

*3 years of benefits

Subject Matter Experts and Tranches

- Subject Matter Experts (SMEs):
  - Where available, quantitative data is preferred over pure SME input.
  - SME input is vetted through ERM to calibrate results.
  - When non-utility-specific data is used, SME input supplements the analysis.

- **Tranches**: Sub-division of individual mitigations, based on differing aspects of the benefits of the mitigation.
  - All mitigations to have a “tranche review” to determine the appropriateness of tranches.

  - Are there preferences within the mitigation?

RISK ASSESSMENTS

SoCalGas RAMP Risks & Quantification

Line No.	2020 ERR Risk	Annual Consequences				Risk Score	Recommended Inclusion in the RAMP?
		Safety	Reliability	Financial ($M)	Trust		
1	Incident on the Distribution System (Excluding Dig-Ins)	0.94	0.16	9.74	11.96	6,817	Yes
2	Incident Involving an Employee	0.61	0	10.73	1.31	2,228	Yes
3	Dig-In on the Distribution System	0.31	0.09	5.86	6.05	3,171	Yes: Combine with Dig-In on the Transmission System
4	Incident Involving a Contractor	0.11	0	1.69	0.49	418	Yes
5	Incident on the Transmission System (Excluding Dig-Ins)	0.11					Yes
6	Incident on the Storage System (Excluding Dig-Ins)	0.08					Yes
7	Dig-In on the Transmission System	0.06					Yes: Combine with Dig-In on the Distribution System
8	Cybersecurity	0.01					Yes
9	Inability to Recover Critical Technology and Applications	0.001					Cross-Functional Factor
10	Insufficient Supply to the Natural Gas System	0					No

^

Top 40% of ERR risks with a Safety Risk Score Greater than Zero

Note: D.18-12-014 (and the Settlement Agreement included therein) permits the utilities to adjust their MAVFs over time. These risk scores are based on SDG&E's and SoCalGas' current MAVF and may evolve prior to filing. In the event adjustments are made, they will be addressed in the 2019 RAMP filing. All calculations are derived through the prescriptive analysis and parameters of D.18-12-014 and must be interpreted within that context.

Additional SoCalGas 2020 ERR Risks

No.	SoCalGas	Safety Annual Consequence	Recommended Inclusion in the RAMP?
11.	Capacity Restrictions or Disruptions to the Natural Gas System	0	No
12.	Environmental Compliance	0	No
13.	Consumer Privacy	0	No
14.	Energy System Resilience	0	TBD

Note: D.18-12-014 (and the Settlement Agreement included therein) permits the utilities to adjust their MAVFs over time. These risk scores are based on SDG&E's and SoCalGas' current MAVF and may evolve prior to filing. In the event adjustments are made, they will be addressed in the 2019 RAMP filing. All calculations are derived through the prescriptive analysis and parameters of D.18-12-014 and must be interpreted within that context.

SDG&E RAMP Risks & Quantification

Line No.	2020 ERR Risk	Annual Consequences				Risk Score	Recommended Inclusion in the RAMP?
		Safety	Reliability	Financial ($M)	Trust		
1	Wildfires Involving SDG&E Equipment	1.30	0.04	225	6.87	11,804	Yes
2	Contractor Safety	0.53	0	2	1.76	1,738	Yes
3	Customer & Public Safety – Contact with Electric Equipment	0.41	0	0	5.45	1,500	Yes
4	Incident Related to Gas Distribution System (Excluding Dig-Ins)	0.36	0.05	5.65	4.36	2,480	Yes
5	Employee Safety	0.35	0	1	1.76	1,168	Yes
6	Electric Infrastructure Integrity	0.18	0.15	6	7.50	4,095	Yes
7	Incident Related to Gas Transmission System (Excluding Dig-Ins)	0.09					Yes
8	Dig-In on the Gas Distribution System	0.09					Yes: Combine with Dig-in on the Gas Transmission System
9	Aviation Incident	0.03					No
10	Dig-In on the Gas Transmission System	0.02					Yes: Combine with Dig-in on the Gas Distribution System

^

Top 40% of ERR risks with a Safety Risk Score Greater than Zero

Note: D.18-12-014 (and the Settlement Agreement included therein) permits the utilities to adjust their MAVFs over time. These risk scores are based on SDG&E's and SoCalGas' current MAVF and may evolve prior to filing. In the event adjustments are made, they will be addressed in the 2019 RAMP filing. All calculations are derived through the prescriptive analysis and parameters of D.18-12-014 and must be interpreted within that context.

Additional SDG&E 2020 ERR Risks

No.	SDG&E	Safety Annual Consequence	Recommended Inclusion in the RAMP?
11.	Cybersecurity	0.01	Yes
12.	Workplace Violence	0.01	No
13.	Physical Security of Critical Electric Infrastructure	0.01	No
14.	Inability to Recover Critical Technology and Applications	0.001	Cross-Functional Factor
15.	Customer & Public Safety – After Meter Gas Incident	0	Included in Incident Related to Gas Distribution System
16.	Electric Grid Failure and Restoration	0	No
17.	Environmental Compliance	0	No
18.	Negative Customer Impacts Cause by Outdated Customer Information Systems	0	No
19.	Massive Smart Meter Outage	0	No
20.	Capacity Restrictions or Disruptions to the Natural Gas Transmission System	0	No
21.	Insufficient Supply to the Natural Gas Transmission System	0	No
22.	Consumer Privacy	0	No

Note: D.18-12-014 (and the Settlement Agreement included therein) permits the utilities to adjust their MAVFs over time. These risk scores are based on SDG&E's and SoCalGas' current MAVF and may evolve prior to filing. In the event adjustments are made, they will be addressed in the 2019 RAMP filing. All calculations are derived through the prescriptive analysis and parameters of D.18-12-014 and must be interpreted within that context.

BREAK

PRELIMINARY RAMP RISKS

SoCalGas Preliminary RAMP Risks

Incident Related to the Distribution System†

The risk of failure of a distribution pipeline (including supply lines, appurtenances, facilities both before and beyond the meter) which results in serious injuries, fatalities, and/or damages to the infrastructure.

Incident Involving an Employee

The risk of conditions and practices of employees that may lead to an incident threatening health and safety caused by non-adherence to Company policies, procedures and programs or by external factors.

Dig-In on the Distribution & Transmission Systems

The risk of a Distribution & Transmission line pipe dig-in, including non-line pipe and appurtenance piping caused by excavation activities, which results in serious injuries, fatalities and/or damages to the infrastructure

Incident Involving a Contractor

The risk of conditions and practices of contractors that may lead to an incident threatening health and safety caused by non-adherence to Company's and/or contractor's policies, procedures and programs or by external factors

Incident Related to the Transmission System†

The risk of failure of a transmission pipeline (including non-line pipe, appurtenances, and facilities) which results in serious injuries, fatalities, and/or damages to the infrastructure.

Incident Related to the Storage System†

The risk of damage caused to the storage system, including wells, reservoirs, and surface equipment, which results in serious injuries, fatalities and/or damages to the infrastructure.

Cybersecurity

The risk of a major cybersecurity incident, which results in disruptions to energy operations (Supervisory Control And Data Acquisition (SCADA) system, supply, transmission, distribution) and/or damage or disruption to Company operations (HR, payroll, billing, customer services), reputation, or disclosure of sensitive customer or Company data.

† Excluding Dig-ins

SDG&E Preliminary RAMP Risks

Wildfires involving SDG&E Equipment

Catastrophic wildfire resulting in fatalities, property destruction, and a multi-billion dollar liability

Contractor Safety

The risk of conditions and practices that threaten contractor or subcontractor employee safety caused by non-adherence to safety policies, procedures, and programs, which results in serious injuries or fatalities.

Customer and Public Safety – Contact with Electric Equipment

The risk of a customer, third-party, or member of the public making contact with in-service electrical facilities/equipment, which may result in adverse consequences.

Incident Related to the Distribution System†

The risk of damage caused by a distribution main, as defined by 49 CFR 192.3, supply line, appurtenance piping and/or distribution assets failure event that results in serious injuries, fatalities and/or damages to the infrastructure.

Employee Safety

Risk of conditions and practices that threaten employee safety, caused by non-adherence to Company safety policies, procedures, and programs, which results in severe injuries or fatalities

Electric Infrastructure Integrity

Asset failure or an asset no longer complying with the latest engineering standards, which results in a safety environmental, or reliability incident

Incident Related to Gas Transmission System†

The risk of damage caused by a Transmission line or asset, including non-line pipe and appurtenance piping failure event, which results in serious injuries, fatalities and/or damages to the infrastructure.

Dig-In on the Gas Distribution & Transmission Systems

The risk of a Distribution & Transmission line pipe dig-in, including non-line pipe and appurtenance piping caused by excavation activities, which results in serious injuries, fatalities and/or damages to the infrastructure

Cybersecurity

The risk of a major cyber security incident, which results in disruptions to energy operations (Supervisory Control And Data Acquisition (SCADA) system, supply, transmission, distribution) and/or damage or disruption to Company operations (HR, payroll, billing, customer services), reputation, or disclosure of sensitive customer or Company data.

† Excluding Dig-Ins

RISK QUANTIFICATION EXAMPLE- SOCALGAS: DIG-IN ON THE DISTRIBUTION SYSTEM

Risk Quantification – SoCalGas: Dig-In on the Distribution System

Methodology

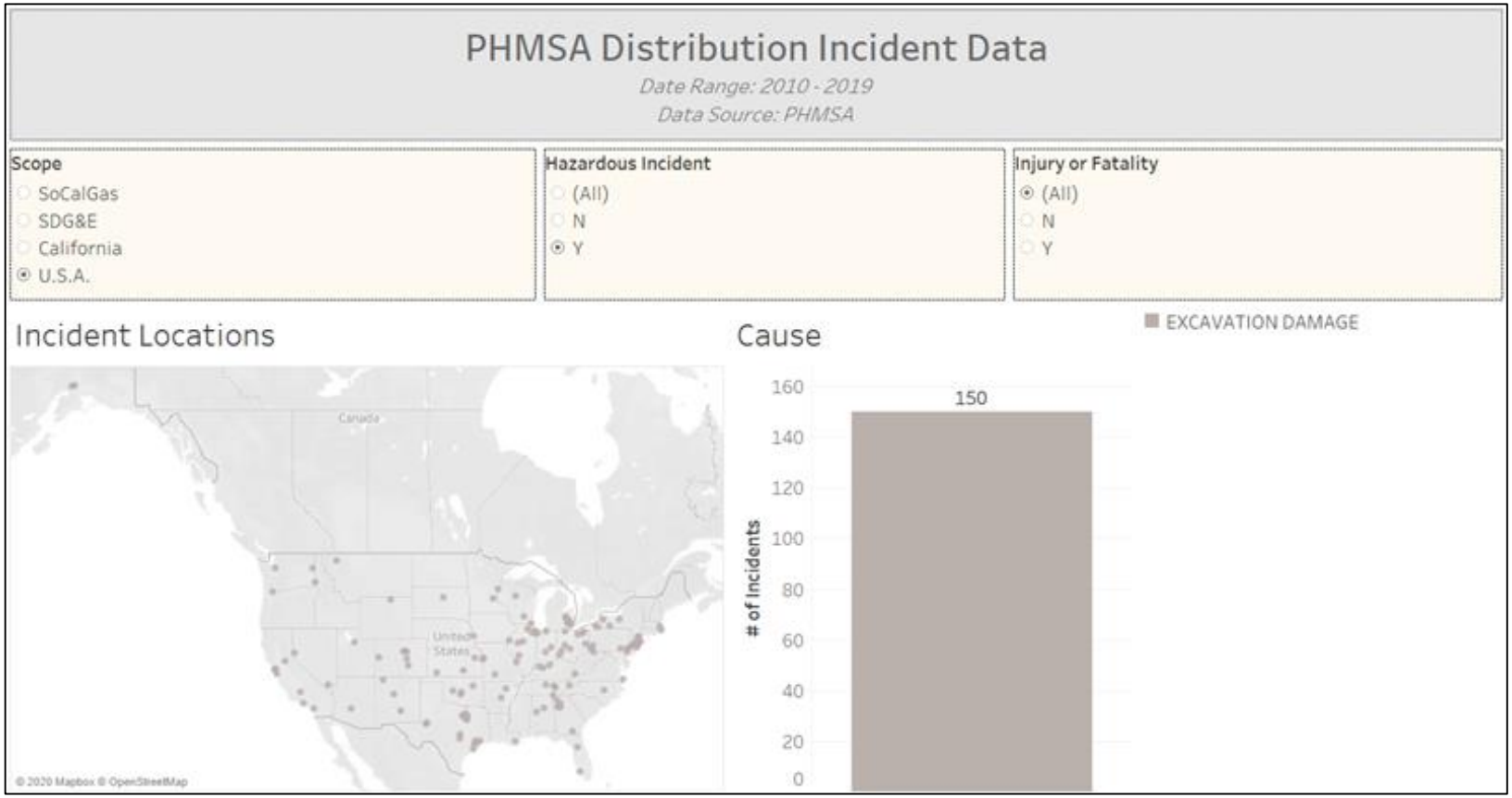
- Risk broken down into three sub-events to capture range of possible outcomes
  - High Consequence Incident
  - Low Consequence Incident
  - Supply Line Incidents Incident

- Combination of national and company data is used
  - Pipeline and Hazardous Material Safety Administration (PHMSA)
    - Department of Transportation
    - Publicly available data source
      - Includes incidents from various sources, conditions, etc.
  - National data is adjusted to reflect SoCalGas mileage and territory where necessary

- Determined incident rate for each sub-event
- Estimated distribution of consequences
- Performed Monte Carlo
  - 10,000 runs; probabilistic occurrence and consequence.

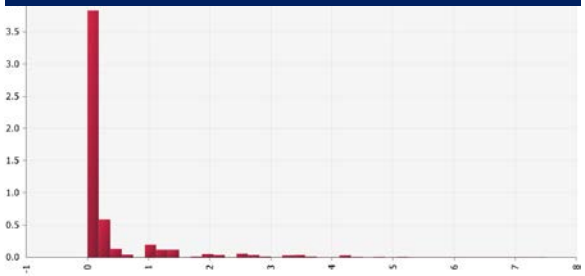
Risk Quantification – SoCalGas: Dig-In on the Distribution System

Data

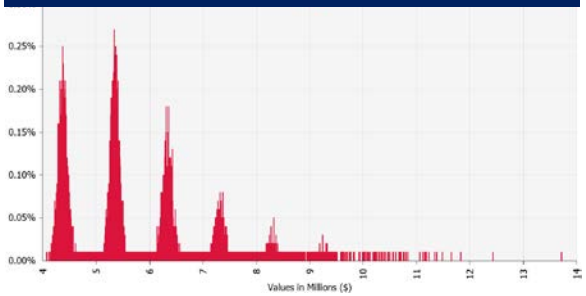


Risk Quantification – SoCalGas: Dig-In on the Distribution System

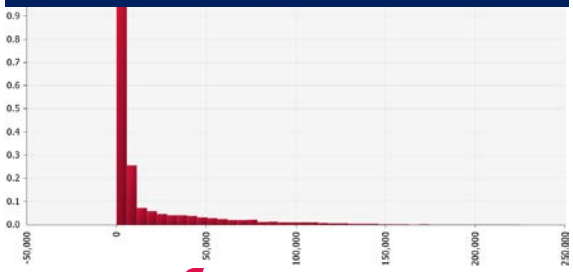
Safety



Financial



Reliability (Meters Out)



Annual Likelihoods						Safety
Safety Unit	[10+)	[3-10)	[1-3)	(0-1)	0	Expected Value
Likelihood	0.000	0.024	0.114	0.172	0.690	0.31

Annual Consequences – Expected Values

	SAFETY	FINANCIAL	RELIABILITY		TRUST
SCG	Expected Value	Expected Value ($M)	Expected Value (Meters Out)	Expected Value (MMscf Curtailed)	Expected Value (Trust Index)
Dig-In on Dist.	0.31	5.863	17,227	0	5.91

SDGE A Sempra Energy utility

SoCalGas A Sempra Energy utility

Risk Quantification – SoCalGas: Dig-In on the Distribution System

Risk Score Calculation:

CORE = Attributes -> Risk Quantification Framework

Risk Score = CORE x LORE

Attribute Consequences Per Risk Event:

- **Safety**: 0.0001 SIFs
- **Reliability**: 6.02 gas meters out; 0 MMscf curtailed
- **Financial**: $0.002 Million
- **Trust**: 0.002

- **CORE** = ((0.0001/ 20) * 60% + (6.02/100000*50%) * 20% + ($0.002M/ $500M) * 15% + (0.002/ 100) * 5%) * 100,000 = **1.09**

- **LORE** = **2914**

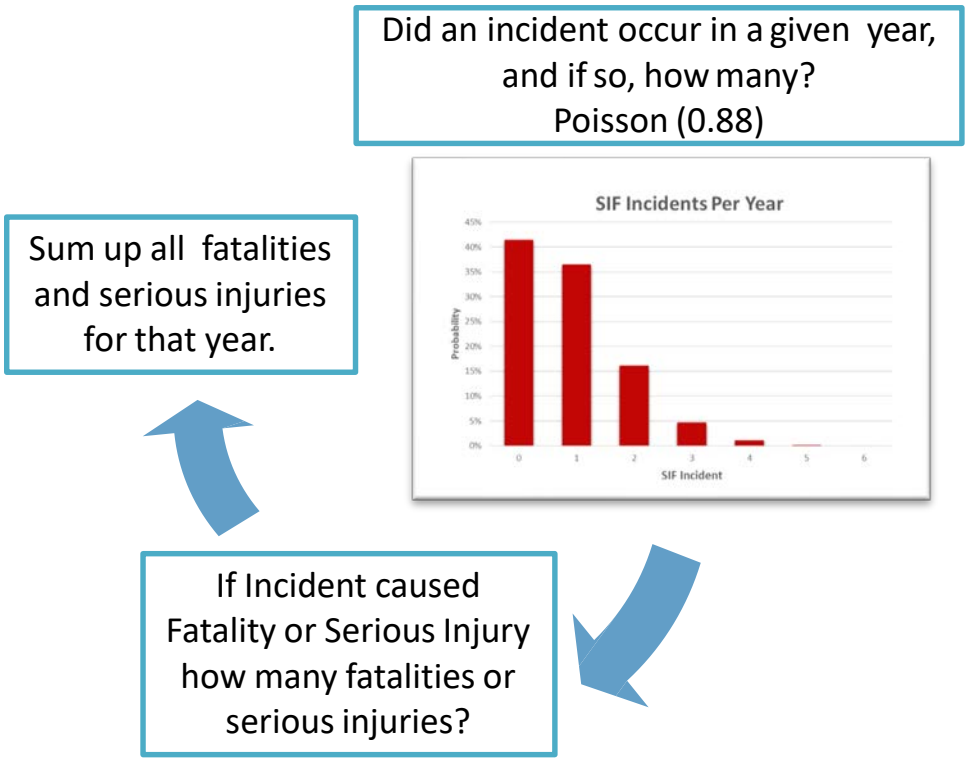
- **Risk Score** = 2914 x 1.09 = **3171**

RISK QUANTIFICATION EXAMPLE
SDG&E: EMPLOYEE SAFETY

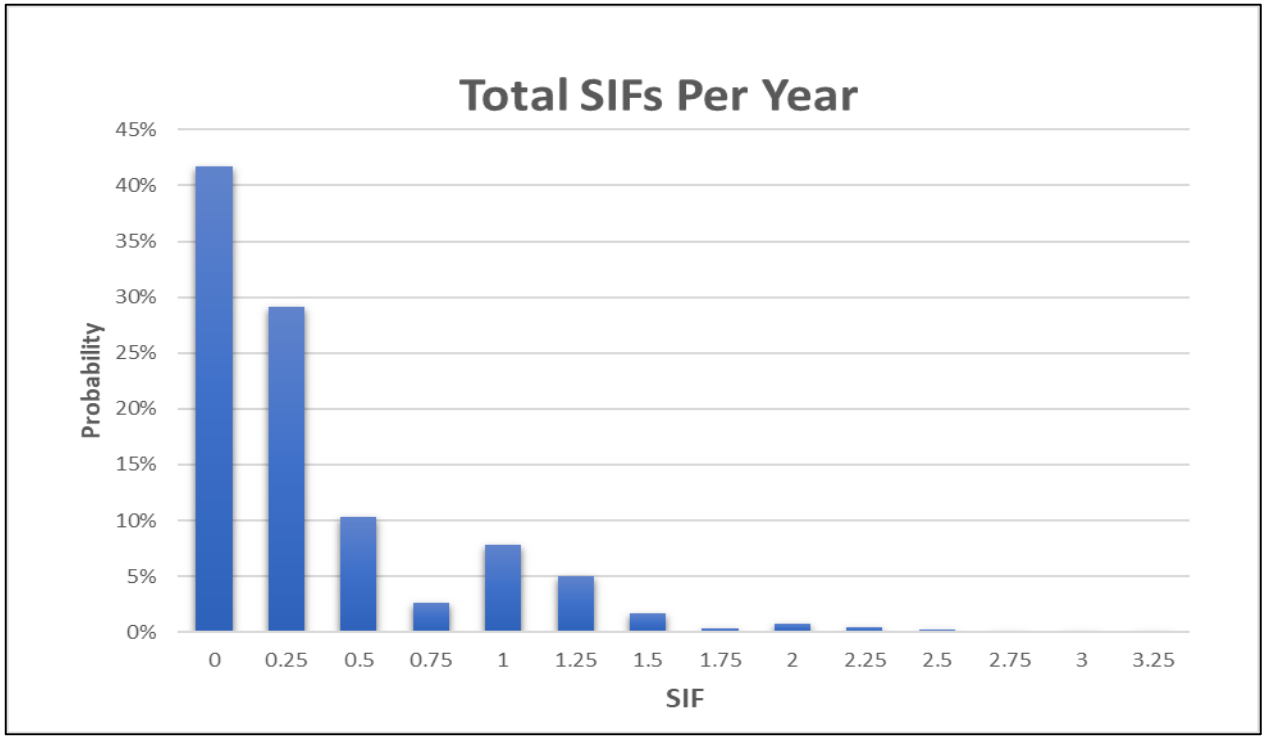
Risk Quantification – SDG&E: Employee Safety

Methodology

- ❑ Company Data (2015 – Current)
  - Determined incident rate
  - Estimated distribution of consequences
- ❑ Performed Monte Carlo. 10,000 runs, probabilistic occurrence and consequence.



Risk Quantification – SDG&E: Employee Safety



Safety Attribute	Value
Fatality	1
Serious Injury	0.25

Expected Value **0.35**

Risk Quantification – SDG&E: Employee Safety

Annual Likelihoods						Safety
Safety Unit	[10+)	[3-10)	[1-3)	(0-1)	0	Expected Value
Likelihood	0.0000	0.0008	0.1630	0.4193	0.4169	0.35

Annual Consequence – Expected Values

Safety	Reliability	Financial	Trust
0.35	0	1	1.76

Risk Quantification – SDG&E: Employee Safety

Risk Score Calculation:

CORE = Attributes -> Risk Quantification Framework

Risk Score = CORE x LORE

Attribute Consequences Per Risk Event:

- **Safety**: 0.4 SIFs
- **Reliability**: no reliability impacts
- **Financial**: $1.1 Million
- **Trust**: 2

- **CORE** = ((0.4/ 20) * 60% + (0) * 20% + ($1.1M/ $500M) * 15% + (2/ 100) * 5%) * 100,000 = **1298**

- **LORE** = **0.9**

- **Risk Score** = 0.9 x 1298 = **1168**

ANTICIPATED CHANGES TO 2021 RAMP REPORT

Cross-Functional Factors

What are cross-functional factors?

- Initiatives (drivers, consequences, and/or mitigations) that are related to safety and are associated with RAMP risks, but are not specific to one risk.
- May not be risks in the Company's Enterprise Risk Register.

Anticipated Cross-Functional Factors	
Asset Management	Pandemic
Climate Change Adaption and Natural Forces	Records Management
Emergency Preparedness and Response	Safety Management Systems
Information Technology Resiliency	Workforce Planning / Qualified Workforce

Cross-Functional Factors (cont.)

Addressing cross-functional factors in RAMP:

- Create a new chapter in the RAMP, separate from the risk chapters, to address these factors.
- Allows for a clear presentation in the RAMP of such items in one place rather part and parceling in multiple risk chapters.
- Dedicated chapter will:
  - Describe the factor;
  - Describe the associated controls and mitigations;
  - Map the controls and mitigations to respective RAMP chapter(s); and
  - Summarize the costs and quantitative details.

Lessons Learned and Addressing Feedback on 2019 RAMP

Topic: Modifications to MAVF, such as additional attributes and revised scales

- Revisited risk quantification framework and added attributes; adjustments were made to accommodate the new attributes

Topic: Excluding shareholder interests

- Excluded shareholder interests in MAVF

Topic: Accounting for secondary impacts

- Will review each risk for secondary impacts; if material then will consider including

Topic: Additional tranches

- Will provide more tranches where appropriate

Topic: Changes to RSEs, including when to perform and use of ranges

- Planning to review all activities to evaluate the usefulness of performing an RSE; continuing to evaluate the use of ranges to express uncertainty

Topic: Additional details on alternatives, including RSEs

- Will meet the CPUC Decision requirements to provide two alternative activities and will also calculate RSE for alternatives

Lessons Learned and Addressing Feedback on 2019 RAMP (cont.)

Topic: Frequency vs. likelihood

- Appropriately provided and quantified frequency and likelihood

Topic: Accounting for internal labor costs

- Will include estimates for internal labor costs, where applicable

Topic: Discounting costs

- Will present RAMP in base year (2020) constant dollars, consistent with the GRC; no additional discounting is needed

Topic: Creating stand-alone risks in RAMP for climate change, Public Safety Power Shutoff (PSPS), and cyber attacks on the electric grid

- Created a cross-functional factor to address climate change adaptation
- Treats PSPS as a sub-risk to SDG&E's ERR risk of Wildfire
- Considering tranching electric and gas cyber attacks to demonstrate how each will impact the risk event

Topic: Addressing overpressure events and utility/contractor dig ins

- Are and will continue to be included within our existing ERR risks

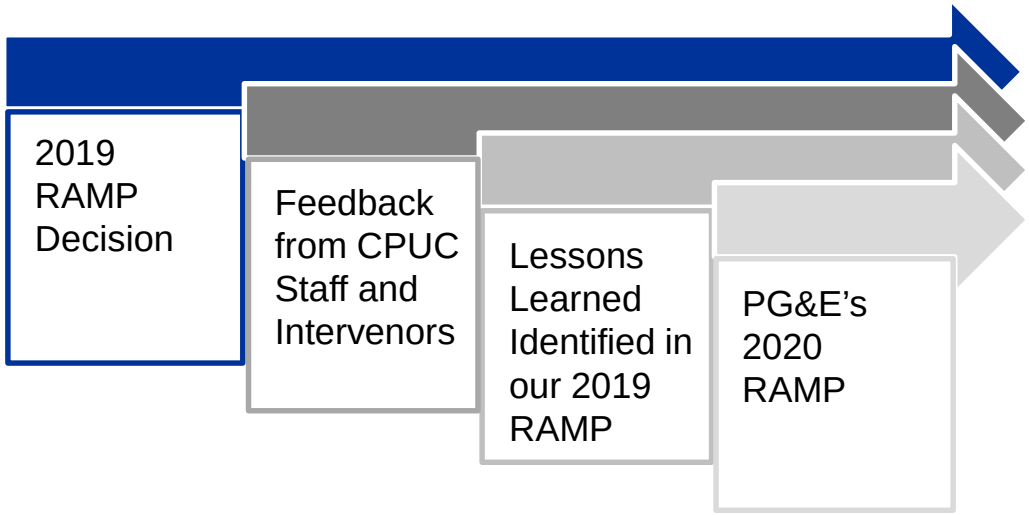
FULFILLING RAMP REQUIREMENTS

S-MAP Settlement Requirements Applicable To Date

- Construct Risk Quantification Framework following six principles in the S-MAP Settlement
- Use the Enterprise Risk Register as the starting point for identifying the risks that will be included in the RAMP
- Compute a Safety Risk Score using only the Safety Attribute for each risk in the Enterprise Risk Register
- Compute a Multi-Attribute Risk Score for the top 40% of Enterprise Risk Register risks with a Safety Risk Score greater than zero
- Communicated the required information at least 14 days in advance of this public workshop

RAMP Requirements

1. Identify top risks
2. Describe mitigations currently in place
3. Present plan for improving the mitigation of each risk
4. Present two alternative mitigation plans
5. Provide risk reduction & Risk Spend Efficiency (RSE) calculations
6. Identify lessons learned to apply in future rounds
7. Move towards probabilistic calculations
8. Improve data collection
9. Describe the company's safety culture
10. Respond to immediate crises outside of the RAMP/GRC process



Q&A / WRAP-UP

Agenda Topics for Workshop #2 (January 2021)

APPENDIX

SoCalGas 2020 Enterprise Risks*

Capacity Restrictions or Disruptions to the Natural Gas System	Consumer Privacy	Cybersecurity
Dig-In on the Distribution System	Dig-In on the Transmission System	Energy System Resilience
Environmental Compliance	Inability to Recover Critical Technology and Applications	Incident Involving a Contractor
Incident Involving an Employee	Incident on the Distribution System (Excluding Dig-Ins)	Incident on the Storage System (Excluding Dig-Ins)
Incident on the Transmission System (Excluding Dig-Ins)	Insufficient Supply to the Natural Gas System	

* Enterprise Risk Register

SDG&E 2020 Enterprise Risks*

Aviation Incident	Capacity Restrictions or Disruptions to the Natural Gas Transmission System	Consumer Privacy
Contractor Safety	Customer and Public Safety – After Meter Gas Incident	Customer and Public Safety – Contact with Electric Facilities
Cybersecurity	Dig-in on the Gas Distribution System	Dig-in on the Gas Transmission System
Electric Grid Failure and Restoration (Blackout/Failure to Black Start)	Electric Infrastructure Integrity	Employee Safety
Environmental Compliance	Inability to Recover Critical Technology and Applications	Incident Related to the Gas Distribution System (Excluding Dig-in)
Incident Related to the Gas Transmission System (Excluding Dig-in)	Insufficient Supply to the Natural Gas Transmission System	Massive Smart Meter Outage
Negative Customer Impacts Caused by Outdated Customer Information Systems	Physical Security of Critical Electric Infrastructure	Wildfire Involving SDG&E Equipment (Including Third Party Pole Attachments)
Workplace Violence		

* Enterprise Risk Register