

APPENDIX I

Proposed Measures

SoCalGas has identified several metrics and indicators as proposed methods to measure change in culture and progress in our plan. The outcome indicators are identified at the Element level to indicate an effort to measure change in culture, not track actions. Separately, SoCalGas has identified multiple progress measures at the Action level to track activities and progress.

In total, SoCalGas has identified and proposed:

- 11 Safety Culture Outcome Indicators
- 11 Safety Culture Improvement Plan Progress Metrics

Element 1: Communicate and implement a comprehensive approach to safety			
<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>
Qualitative assessment of leadership site visits	Outcome Indicator ¹ : Track leadership site visits and assess learning and engagement	Create a form with open text questions to gather information from the leadership site visits. Following each visit, the leader will be asked to share learnings and activities as part of a post-visit debrief and reflection. Data gathered will then be analyzed by SoCalGas team trained to analyze from a cultural perspective.	Assessing changes in leadership engagement, listening, and learning as well as the understanding of comprehensive safety. A visit that aligns with Safer Together could show increased focus on all aspects of comprehensive safety (e.g., security, actions impacting public safety, etc.); increased humility, listening, curiosity to understand employees concerns and ideas; discussion of potential “what if” scenarios; efforts to understand systemic impacts and opportunities to improve; and an effort to build trust, empower, and collaboratively improve. Since these sort of formally tracked site visits have not occurred in the past, SoCalGas proposes using the 2EC Report as a baseline. ² Based on the 2EC Report’s Theme 1 (Safety is most often perceived as personnel safety) and Theme 2 (Safety and risk are perceived as achieved by

¹ Effectiveness of Initiative at achieving intended objectives.

² For the purposes of measuring these qualitative metrics, “baseline” indicates a starting point, for example the 2EC report.

			compliance), a baseline ³ visit would likely show limited dialogue on comprehensive safety (e.g., would remain focused on personnel safety – PPE, CMVIs, etc.), less open and candid conversation on challenges, and include more one-way communication.
Qualitative assessment of weekly leadership safety messages	Outcome Indicator: Track and assess weekly leadership safety messages to assess change in communications	SoCalGas circulates a weekly leadership safety message – leaders allowed to choose their own safety topic to communicate to the company. SoCalGas proposes to collect and assess these messages as they are circulated.	Assess whether leader communications are communicating comprehensive safety topics and advancing our Safer Together North Star. SoCalGas proposes to assess leadership safety message topics: do they include employee, public, infrastructure, and/or contractor safety? Are they personal (e.g., show openness, transparency, and humility)? Do they include safety and culture concepts (HOP, psychological safety, safety management system)? To establish a baseline for comparison, SoCalGas will use safety messages at the time of the 2EC Report (2021/2022).
Qualitative assessment of individual and team safety awards	Outcome Indicator: Assess safety awards given by SoCalGas to employees	SoCalGas recognizes and rewards safety through its recognition policies and awards at its annual Safety Congress. SoCalGas proposes to identify and analyze what was rewarded previously and what is rewarded in the future to measure change	Assess safety rewards to assess how they communicate safety success. SoCalGas proposes to analyze individual and team rewards: do they reward leading efforts and indicators (or outcome focused)? Do they reward a comprehensive approach to safety (or focused on personnel safety)? Does it include considerations of our Safer Together North Star? To establish a baseline for comparison, SoCalGas will identify and assess individual and team safety rewards at the time of the 2EC Report (2021/2022).
<i>Action 1: Transform leadership norms by incorporating new safety and safety culture principles into development activities</i>			

³ For the purposes of measuring these qualitative metrics, “baseline” indicates a starting point, for example the 2EC report.

<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>
% of executive leaders engaged in safety and culture coaching	Progress Metric ⁴ : % of executive leaders engaged in safety and culture coaching	Track executive leaders engaged in safety and culture coaching and divide by executive leader population	Track executive leaders engaged in safety and culture coaching and divide by executive leader population. Higher percentage of leaders engaged shows increased leadership engagement and commitment. Since this is a newly proposed activity, the baseline is 0% for this coaching.
% of Leadership Excellence & Accelerated Development (LEAD) programs reviewed and updated (out of 3 LEAD programs identified)	Progress Metric: % of LEAD programs reviewed and updated	Track number of LEAD programs reviewed and updated and divided by three	Track number of LEAD programs reviewed and updated. Higher percentage of updated or created development activities, shows changes to SoCalGas development practices. Since SoCalGas is proposing to track reviews and updates, the baseline is 0.
<i>Action 2: Change how safety is communicated by updating reporting, recognition, and performance management tools</i>			
% of SoCalGas locations with visible measures of leading indicators and comprehensive safety	Progress Metric: % of SoCalGas locations with visible measures of leading indicators and comprehensive safety	Track number of SoCalGas locations with visible measures of leading indicators and comprehensive safety divided by total number of SoCalGas locations ⁵	Track percentage of SoCalGas locations with visible measures of leading indicators and comprehensive safety. Higher percentage of locations shows change in how safety success is being communicated. SoCalGas is proposing to track new installations and will use 0% as a baseline.
Element 2: Foster and celebrate curiosity and empower employees and contractors to speak up, question, and share their ideas			
<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>

⁴ Initiative implementation progress.

⁵ SoCalGas currently has 79 base locations.

Employee Survey	Outcome Indicator: measure awareness of changes, perceptions on transparency, and focus on learning	Survey data to be collected from Continuous Improvement Tracker users electronically and by paper for analysis	<p>Assess awareness of the Continuous Improvement Tracker, perceptions around SoCalGas transparency, and focus on learning over blame. Employees' scores will indicate if there has been progress in employee perceptions based on changes and continuous improvement.</p> <p>SoCalGas plans to include survey questions from the 2EC Safety Culture Perception Survey to allow for a baseline, including the following questions: (1) SoCalGas management wants concerns reported and willingly listens to problems; (2) SoCalGas management ensures any concerns raised are addressed; and (3) There is a high level of trust between management and employees. SoCalGas also plans to include time-barred questions related to improvement: (4) In the last 6 months, it has become easier to openly challenge decisions made by management; (5) In the last 6 months, I have seen increased organizational transparency around challenges and improvements; and (6) In the last 6 months, I have seen more focus on learning and improvement over blame or fault finding. SoCalGas also plans to include questions related to the continuous improvement tracker and related communications: (7) the continuous improvement tracker provides increased transparency; (8) the continuous improvement tracker encourages me to share ideas; and (9) company communications highlight impactful challenges, changes, and improvements.</p>
Assess a random sample of tailgates	Outcome Indicator: measure impact of changes in tailgate practices in advancing curiosity and	SoCalGas proposes to use a stratified random sample of work activities from departments that engage in tailgates. This way, SoCalGas can capture a snapshot of	Assess whether the change in tailgate practices increased focus on hazards, supported a more comprehensive understanding of safety, and advanced a questioning and learning environment. For example, a positive tailgate would include dialogue on the work, risks, and potential hazards; consider comprehensive safety impacts (e.g., potential impacts to the public); and show psychological

	comprehensive safety (20 each year) ⁶	practices across regions, departments, and bases. SoCalGas personnel who have been engaged in and completed dialogues and dialogue note taking training will observe to promote capturing of data from a cultural perspective.	<p>safety / a willingness to challenge and question (e.g., exploring “what if” considerations).</p> <p>For a baseline, SoCalGas proposes using findings in the 2EC Report. Based on the 2EC Report’s Theme 1 (Safety is most often perceived as personnel safety) and Theme 2 (Safety and risk are perceived as achieved by compliance), a baseline visit would likely show limited dialogue on comprehensive safety (e.g., would remain focused on personnel safety – PPE, CMVIs, etc.), less open and candid conversation on challenges (for example, “many employees especially working in the field do not feel that they can raise concerns and/or that they will be acted on.”).</p>
Assess a random sample of meetings	Outcome Indicator: measure impact of changes in meeting guidance in advancing curiosity and comprehensive safety (20 each year) ⁷	<p>SoCalGas proposes to use a random sample of meeting from across SoCalGas.⁸ This way, SoCalGas can capture a snapshot of practices across departments.</p> <p>SoCalGas personnel who have been engaged in and completed dialogues and dialogue note taking training will observe to promote capturing of</p>	<p>Assess whether the change in guidance on meetings increased adoption and considerations of comprehensive safety (e.g., was public safety discussed during the meeting?) and advanced a questioning and learning environment (e.g., were there discussion of potential safety impacts associated with the meeting topics?).</p> <p>For example, a positive meeting would include dialogue on potential challenges; consider comprehensive safety impacts (e.g., potential impacts to the public); and show psychological safety / a willingness to challenge and question. SoCalGas proposes using the 2EC Report as a baseline which found, for example, “...other than an initial Safety Tip, no mention of safety was made around the work processes being discussed” and “Observations of Safety Compliance calls at SoCalGas indicated that pipeline safety is</p>

⁶ SoCalGas proposes to start with this sample size but will assess variability across the sample size to understand if this approach provided adequate information for meaningful qualitative analysis

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⁸ As a starting point, for the sampling, SoCalGas plans to use the same universe of meetings provided to 2EC as part of their assessment. This way, SoCalGas is observing a relatively similar baseline set of meetings.

		data from a cultural perspective.	presented as beyond ‘normal safety.’ Normal safety is more concerned with driving, personnel and customer safety.”
<i>Action 1: Enhance practices to empower employees to question, challenge, and identify potential improvements</i>			
Report on completion of updated employee safety manual	Progress Metric: Report on completion of updated employee safety manual	Track creation of an updated employee safety manual	Report on completion of updated employee safety manual. Completion of our updated employee safety manual documents efforts to formalize and explain company-wide safety goals, strategies, and practices. Since SoCalGas is proposing to create an updated employee safety manual, the baseline is 0.
<i>Action 2: Create improved processes for receiving, tracking, and responding to employee challenges, suggestions, and ideas</i>			
# of learning and continuous improvement processes consolidated	Progress Metric: number of continuous improvement processes consolidated	Track number of SoCalGas continuous improvement processes consolidated	Track number of continuous improvement processes consolidated as part of continuous improvement tracker. Higher number of processes consolidated, shows increased interconnection and transparency. Since this effort is in progress, the baseline is 0.
Element 3: Commitment to engage in collective efforts to understand organizational challenges and better prioritize resources			
<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>
Report on results of the learning teams	Outcome Indicator: measure quality of learning teams	Leverage existing internal processes for documenting the learning team process (the problem statement, recommendations for improvement, and actions taken) ⁹	Assess quality of learning teams in advancing engagement, collaboration, alignment, and improvement. A productive learning team would show signs of sharing, collaboration, and understanding. For example, learning teams that effectively explore a problem statement related to safety resources and collectively problem solve would show progress in understanding safety resource challenges and identifying meaningful and systemic improvement. SoCalGas proposes using the 2EC Report as a baseline which found, for example, “concerns within SoCalGas about whether safety is prioritized through the

⁹ See Appendix K – Learning Team Overview for more details.

			allocation of resources” and “resources are needed to shape a healthy safety culture” (Theme 3).
Employee Survey	Outcome Indicator: measure perceived quality and impacts of learning teams	Survey data to be collected from learning team participants electronically and by paper for analysis	<p>Assess perceptions on collaboration and expected impact from the identified recommendations. Employees' scores will indicate if there has been progress in employee perceptions based on changes and continuous improvement.</p> <p>To enable a baseline to the 2EC Report, SoCalGas plans to include survey questions from the 2EC Safety Culture Perception Survey: (1) SoCalGas's strategic plans reflect safety as the overriding priority; (2) SoCalGas's staffing levels reflect safety as the overriding priority; (3) SoCalGas's decisions reflect safety as the overriding priority; (4) The way resources are allocated shows that safety is the overriding priority; and (5) SoCalGas management makes safety the overriding priority. SoCalGas also plans to include time-barred questions related to improvement: (6) In the last 6 months, the allocation of resources reflects greater focus on safety; and (7) In the last 6 months, resources have been more aligned to goals and expectations. SoCalGas also plans to include questions related to the learning team process: (8) the learning team provided an impactful vehicle for collaboration and change; (9) I would recommend participating in learning teams to colleagues; and (10) the improvements identified in the learning team are likely to result in positive change.</p>
<i>Action 1: Leverage Learning Teams to collaboratively explore resource issues identified in dialogues</i>			
# of learning teams completed	Progress Metric: number of learning teams completed	Track number of learning teams completed	Track number of learning teams completed as part of Element 3. The more learning teams completed, the more progress in exploring, learning, and identifying improvements. Since this is a newly proposed suite of learning teams, the baseline is 0.

<i>Action 2: Implement improvements to resource allocation and goal setting processes</i>			
# of improvements implemented from the learning teams	Progress Metric: number of improvements implemented from identified the learning teams	Track number of improvements implemented from identified the learning teams	Track number of improvement implemented from the learning teams identified in Element 3. The more improvements implemented, the more grassroots-based improvement to resource allocation and goal setting practices. Since this is a newly proposed suite of learning teams, the baseline is 0
Element 4: Advance collaboration and an integrated management system through enhancements to our Safety Management System			
<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>
Qualitative assessment of SMS meeting minutes	Outcome Indicator: measure change to integration, alignment, or collaboration	SoCalGas internal SMS team will keep and record meeting minutes for the SMS governance process. Minutes will then be analyzed by SoCalGas team trained to analyze from a cultural perspective.	Assess whether SMS governance improved integration, alignment, or collaboration (e.g., were all affected departments included with at least one representative? were goals aligned? were opportunities for collaboration identified?). An integrated SMS would show connections in across day-to-day operations, aligned goals and direction, clarified accountability (defining, documenting and promoting understanding of roles and responsibilities), and awareness of work beyond their organization’s scope. Indications of maturation would include (1) employees at all levels taking responsibility for safety within the management framework and/or seeking to improve safety performance by taking on additional tasks and responsibilities; and (2) recognizing potential organizational risks and challenges and proactively taking action to mitigate. SoCalGas proposes using the 2EC Report as a baseline which found, for example, “While SoCalGas management has described having developed and implemented a safety management system (SMS) it is still only partially implemented and does not appear to be integrated into everyday operations.”
<i>Action 1: Engage leaders to establish organizational Alignment on Safety management roles, responsibilities, shared goals, and governance</i>			

Report on completion of and produce SMS governance framework	Progress Measure: tracking and sharing SMS governance framework	Tracking the development of a SMS governance framework	Track development of SMS governance framework to engage leaders to establish clearer roles, responsibilities, shared goals, and relationships for SoCalGas's SMS. Creation of framework indicates leadership commitment and progress toward alignment. Since framework does not currently exist, the baseline is 0.
<i>Action 2: Develop new SMS policies to provide a clearer safety management framework</i>			
# of policies developed and published	Progress Measure: tracking number of policies developed	Identification of SMS policies developed	Track development of identified SMS policy documents. Progress on rolling out these policy documents across the company will indicate efforts to formalize connectedness between organizations. As a baseline, SoCalGas currently has overarching SMS Plan documents. Through this effort, SoCalGas is proposing to develop fourteen more detailed and specific documents of safety management and strategy.
Stakeholder dialogues to measure progress and iterate on changes to our safety culture improvement efforts			
<i>Metric/Indicators</i>	<i>Description</i>	<i>Data Collection</i>	<i>Purpose/Objective</i>
# of dialogues completed	Progress metric: tracking number of dialogues completed	Identification of dialogues completed	Measure number of dialogues to understand progress made in completing planned dialogues. Higher number of dialogues completed indicates progress made in assessing progress.
Qualitative analysis of information gathered to explore our journey toward a Safer Together culture	Outcome Indicator: analysis of dialogue data to evaluate our journey toward a Safer Together culture.	Data collected by trained notetakers at the dialogues. Data analyzed by SoCalGas team trained to analyze from a cultural perspective	Measure information gathered from dialogues to assess progress toward Safer Together North Star. Indicators of constructive dialogue could include participants sharing information that enhances SoCalGas's understanding of progress toward our North Star (includes successes, challenges, potential changes). For example, if progress is mentioned by participants in SoCalGas advancing a culture that empowers communication, curiosity, commitment, and/or collaboration.

			Baseline metric would be same qualitative analysis of prior dialogues with employees and contractors.
Behavioral Anchored Rating Scale ¹⁰ (BARS) to measure behaviors relative to predefined behaviors associated with the INPO traits of a healthy safety culture	Outcome Metric: quantify behaviors using a 5-point scale	BARS will be part of survey to be completed by dialogue participants using a 5-point scale.	<p>Measure the following BARS: Attention to Safety; Interdepartmental Communication; Resource Allocation; Organizational Learning; and Problem Identification and Resolution. See below for details on each scale.</p> <p>SoCalGas proposes using the 2EC Report as a baseline and proposes working with CPUC staff to determine where on the BARS the 2EC Report would have assessed SoCalGas using the above categories.</p>

¹⁰ This approach is based on Organizational Processes and Nuclear Power Plant Safety. Link: <https://www.sciencedirect.com/science/article/abs/pii/0951832094900787> [sciencedirect.com]

BEHAVIORAL ANCHORED RATING SCALES & INPO MAPPING

Attention to Safety

INPO Trait Mapping: Questioning Attitude, Leadership Safety Values and Actions, Environment for Raising Concerns

Attention to Safety refers to the characteristics of the work environment, such as the norms, rules, and common understandings that influence SoCalGas personnel's perceptions of the importance that the organization places on safety. It includes the degree to which a critical, questioning attitude exists that is directed toward SoCalGas improvement.

- Individuals at SoCalGas¹¹ believe safety is the number one priority and that perspective is reinforced by senior (high-level) management and clearly communicated to all individuals at SoCalGas.
- Personnel make an effort to correct problems in a timely and effective manner to ensure that safety levels are not compromised within at SoCalGas. Individuals have a clear understanding that safety is a top priority.
- SoCalGas management reflects a delicate balance of emphasizing safety, while at the same time, making it clear that there is a need to keep SoCalGas operating.
- At times, the interests of the stakeholders seem to take priority over concerns regarding the safe operation at SoCalGas and the lack of organization wide support for safe SoCalGas operations is clearly evident.
- Questions regarding safe operations are not welcome or addressed. Management's attitude is to keep SoCalGas operating regardless of evident safety issues.

Interdepartmental Communication

INPO Trait Mapping: Effective Safety Communication

Interdepartmental Communication refers to the exchange of information, both formal and informal, between the different departments or units at SoCalGas. It includes both the top-down and bottom-up communication networks.

¹¹ Please note, for clarity, and to adopt these nuclear facility-oriented BARS to SoCalGas, SoCalGas has revised references to a "facility" to reference SoCalGas.

- Departments keep other departments constantly aware of information they need to know. Individuals within a department know where to go and who to talk to within other departments to obtain information.
- Individuals can readily gain information from other departments when the need arises.
- Interdepartmental lines of communication are well defined and often used on both a formal and informal basis.
- Many departments think it is unnecessary and intrusive to communicate with other departments unless absolutely necessary.
- Departments only communicate with each other when reacting to problems. Most departments are uncommunicative with one or more other departments.

Resource Allocation

INPO Trait Mapping: Leadership Safety Values and Actions

Resource Allocation refers to the way SoCalGas distributes its resources including personnel, equipment, time and budget.

- Management and employee committees collectively gather, prioritize, and determine the hierarchy of goals so that all affected parties understand how corporate goals relate to their daily activities. Employees have sufficient resources to implement these goals.
- Goals are discussed with employees, established, then disseminated. Progress relative to these goals is then periodically assessed and publicized. Personnel are able to properly prioritize the correction and prevention of problems and seek appropriate guidance and/or materials when necessary.
- Information on current goal attainment is solicited and new goals are formulated based upon past performance. Most employees are aware of the goals of the organization but are not sure how the goals affect their own job. Personnel do not always have the support or resources necessary to correct, prevent, or implement procedures designed to achieve specific goals.
- Senior (high-level) management establishes broad, general goals and informs department heads and other managers in the department of their responsibilities. Employees at lower levels in the organization are not directly contacted about new goals and are not always informed of the measures they need to take to complete work directed at achieving goals.
- No functional goals are established by senior (high-level) management and employee behaviors do not match core values of management. There exist numerous barriers to both human and financial resources that are necessary for proper SoCalGas operations.

Organizational Learning

INPO Trait Mapping: Continuous Learning

Organizational Learning refers to the degree to which SoCalGas personnel and the organization use knowledge gained from past experience to improve future performance.

- Departments throughout SoCalGas hold regular meetings to discuss how various tasks have been performed and how they might be done better in the future. Whenever an event occurs at SoCalGas, a meeting is called to discuss the way the event was handled and more effective alternatives and the results of the meeting are communicated to the larger SoCalGas community.
- Individuals and groups of employees pay close attention to past behaviors and how they can be improved in the future. Information about past activities is formalized and available for future reference.
- SoCalGas usually holds review sessions to discuss operating problems and attempts to uncover solutions to past difficulties. The information is communicated to the larger SoCalGas population when it concerns significant activities.
- Many individuals seem to commit the same errors over and over, without regard for how these errors can be avoided via training or through analysis of past experience.
- Departments continue to use systems, procedures and work practices that have a history of inefficiency or failure therefore the same mistakes are made over and over.

Problem Identification and Resolution

INPO Trait Mapping: Problem Identification and Resolution

Problem Identification and Resolution refers to the extent to which the organization encourages SoCalGas personnel to draw upon knowledge, experience, and current information to identify and resolve problems.

- Employees are equipped with the knowledge and are encouraged to proactively identify potential problems (e.g., equipment, personnel, scheduling). Employees are asked to notify management of potential problems which are then properly addressed.
- Employees are encouraged to notify management of problems they observe. Problems identified by employees are funneled into a system that evaluates the problem and makes a determination regarding future action. Employees receive feedback about problems that were acted upon.

- Employees have a system to report problems they identify. Employees are given inconsistent feedback about problems they identified or problems that were fixed.
- Problems reported by the general employee group rarely receive consideration. Some employees lack the knowledge required to identify potential problems. In some situations, problem identification is met with extreme defensiveness.
- Problems go undetected, or unreported, since most employees lack the knowledge, experience and information necessary and/or fear the consequences of identifying problems.