EPUC Revised
Straw Proposal
R.13-11-006

I. Introduction

Since the San Bruno natural gas pipeline explosion in 2010, the California Public Utilities Commission has faced a need to transform its policies concerning the safety and infrastructure reliability of utility operations. In response to date, the Legislature has enacted multiple statutes, and the Commission has also opened several investigations and rulemakings.

The Commission instituted this rulemaking to integrate into General Rate Case (GRC) proceedings the capability to ensure the use of systematic and effective risk assessment and risk management processes. The GRC, in which the utility's proposed capital and operational spending is evaluated, is the most appropriate proceeding to ensure that verifiable risk management processes have guided that spending. By the end of the Rulemaking, the Commission will adopt utility risk management methodologies that:

- Are transparent and provide for increased utility accountability;
- Encourage stakeholder participation and incorporate stakeholder input;
- Result in improvements to the overall safety record of each utility; and
- Reduce the number and duration of system outages.

As the initial step in this Rulemaking, the Commission asked stakeholders for proposals to more effectively integrate safety infrastructure reliability into the utility GRCs and to streamline the GRC process. Over eighteen different stakeholders filed comments in response to the Rulemaking. This Staff Proposal draws on the ideas proposed by the stakeholders in comments and throughout three days of workshops on risk assessment and GRC policy and procedure.

The goal of this proposal is to develop regulatory processes for defining, acquiring, and disseminating risk-based information to support utility safety and infrastructure reliability. The proposed two-phase proceeding will establish a methodology that allows for easy evaluation and validation of utility risk management plans by SED and stakeholders. In Phase 1 of the proceeding, completed in 2014, the Commission will define common terms, establish an objectives hierarchy, establish a Risk Assessment Planning Proceeding (RAPP) and adopt a verification requirement. In Phase 2, completed in 2015, the Commission will adopt a risk management methodology to ensure that utility spending is supported by systematic risk management methodologies. This proposal identifies inputs, outputs and design principles of a risk management methodology, but leaves the details to be further determined by stakeholders participating in Phase 2.

As a result of this rulemaking, utilities may need to expand their risk management processes, and the Commission, as well as stakeholders may need to expand their own capabilities and understanding of risk management. This proposal creates a process by which the Commission, the utilities and the stakeholders can work together to develop this expertise.

On a parallel track, the Commission will consider changes to the Rate Case Plan that will address procedural elements of the GRC. While the RAPP and verification will necessarily add complexity to the GRC, these changes intend to simplify the GRC and counterbalance the added intricacies.

II. Phase 1

Phase 1 will implement an initial RAPP and adopt key elements in the Commission's overall safety and infrastructure reliability risk management framework by the end of 2014. The key issues to resolve in Phase 1, with stakeholder input, is how the utilities balance the fundamental objectives of safe and reliable service at reasonable rates, and how the utilities communicate these values to the Commission. In order to identify the proper balance, all stakeholders must speak the same language, identify their priorities and understand the potential tradeoffs.

In Phase 1, the Commission will adopt:

- A common risk lexicon;
- An objective hierarchy;
- A process for incorporating a RAPP procedure and timeline into the GRC; and
- A verification system.

These principles and procedures are the foundation for a more robust risk management methodology that will be adopted in Phase 2 of the Rulemaking.

a) Common Risk Lexicon

Discussions at the workshop highlighted the need for stakeholders to adopt common terminology for discussing safety, infrastructure reliability and risk assessment. In order to have a productive discussion, stakeholders must be confident that they are speaking the same language; confusion arises when stakeholders use the same terminology to refer to different ideas, or different terminology to refer to the same ideas. The first step to developing an objective hierarchy and RAPP is the adoption of a common lexicon.

The common lexicon should initially focus on just those terms that are central to the RAPP. As risk management methodology and procedure is expanded, additional terms and concepts should be added to the lexicon. A proposed initial risk lexicon is attached as Attachment A. The Department of Homeland Security (DHS) Risk Lexicon was developed to discuss the threat posed primarily by terrorism, and as a result its definitions are not well suited for the utility setting. Despite these differences, some of the proposed definitions were developed using the DHS definition as a base. The lexicon also includes terms that are specific to the utility context including, most notably, safety and infrastructure reliability.

The risk lexicon should be a collaborative document, and the Commission should solicit input from interested stakeholders before adopting the lexicon. A workshop that allows for collaborative discussion and development in an informal setting is the best means for refining the DHS definitions and adopting a risk lexicon.

b) Objective Hierarchy

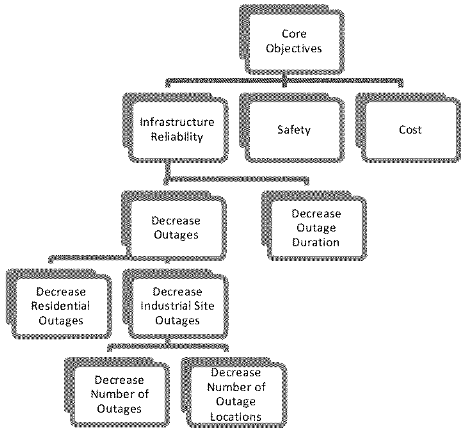
An objective hierarchy is a structured way to evaluate, through numeric scoring and ranking, how a specific project contributes to one or more policy objectives. It is not a strategic risk management methodology, but rather a means to rank and prioritize projects that have been identified using a strategic risk management program.[1] An objective hierarchy, informed by stakeholder values, provides a means of evaluating whether a utility's choice of projects best contributes to the identified policy objectives; *i.e.*, whether a utility's choice of projects meet the policy objectives at the lowest expected cost.

An objective hierarchy is used in order to measure and weight attributes so that different projects can be compared on an equivalent basis. If the ultimate policy objectives are increased "safety" and "infrastructure reliability," there *must* be a way to compare how different projects contribute to those broad policy objectives. That entails identifying a set of measurable attributes that can be weighted together in a consistent, logical manner. For example, suppose we want to evaluate a program for replacing transformers against a program for replacing wooden poles. Each program is likely to have different impacts on safety and infrastructure reliability. An objective hierarchy provides a way of measuring and comparing those impacts to decide which program is more valuable.

To do this, we break down the overall policy objectives until we can describe them with measurable attributes. For example, starting with the overall policy objective of "infrastructure reliability" we ask, "What does that mean?" Suppose the answer is "decreased outages and decreased duration of outages." This is the second level of the hierarchy. To drill down to the next level of the hierarchy, we may ask, "what does it mean to decrease outages"? We may examine, for example, residential and industrial site outages. We may then ask "what does it mean to decrease outages at an industrial site?" We may measure outage reduction by the number of outages resulting in service interruption to industrial sites and by the number of sites affected by outages.

[1] The objective hierarchy is used by a utility within the Operational Management Assessment that is performed as a part of its overall risk management program, as described in Section III.c.

The following figure illustrates these steps of hierarchy construction.



At the bottom level – number of industrial site outages -- we have a *measurable* attribute.[2]

Stakeholders must now measure the value of this attribute against other attributes. There is a formal, specific, repeatable, analytic, and transparent procedure for measuring values of attributes and developing weights among attributes at each hierarchy level. This process will yield a numeric score for each project being evaluated, allowing the utility to determine which projects to pursue.

At the bottom level of the hierarchy, numeric values are placed on *changes to* the measurable attributes.[3] Each attribute has its own set of possible levels, from worst to best, measured on a uniform scale. The benefit, or value, associated with an individual project is based on how it changes the attribute levels. Also, at this level of the hierarchy, each attribute is assigned a weight, indicating the importance stakeholders place on each attribute relative to other attributes at that level of the hierarchy.

Above the attribute level of the hierarchy, weights are then assigned within each objective at the same level of the hierarchy. For example, stakeholders might ask "Is it more important to reduce residential outages or to reduce outages at industrial sites" and "How much more important?" After assigning weights, the same evaluation would be done at the next higher level of hierarchy, continuing until the top of the hierarchy is reached.[4]

The weights and values are measured throughout the entire hierarchy and are "rolled up" to yield an overall project score that is simply a weighted sum of the benefits provided by the attribute changes on the lowest level. This process should be completed for every project under consideration, and the

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2 For the purposes of simplicity in this example, the attributes related to decreasing residential outages are excluded.

3 Note that the hierarchy is logically developed from the top objectives downward, until the measureable attributes that projects affect are defined. In contrast, the scoring procedure begins at the bottom, at the attribute level, and proceeds to make tradeoffs by comparing the objectives and their weights at higher levels, until the overall score is determined.

4 Higher-level objectives are never weighted without reference to the specific attribute changes that a project can accomplish. In other words, a question like "How important is Infrastructure Reliability versus Safety" is never asked because such question is meaningless with respect to project evaluation.

projects should be prioritized based on their overall scores. When budgets are constrained, however, project choices should be guided by necessity. Additionally, priorities should be based on which projects can be safely deferred rather than which projects provide the greatest benefit to cost ratio.

The weights assigned to each attribute and objective in this process will vary by stakeholder because the relative importance of each attribute or objective varies by stakeholder. In order for the utilities to use the hierarchy to select projects, the Commission will develop a method, through stakeholder input, to establish a single set of weights that reflect the competing preferences among stakeholders. This method should be formal, specific, repeatable, analytic, and transparent.

c) Risk Assessment Planning Proceeding

The primary focus of Phase 1 is to adopt a procedure to review utility risk management, the RAPP, which will occur at the outset of each utility's GRC (including the PG&E GT&S). In the RAPP, the utility will provide information on projects planned to address safety and reliability risks, and the Commission's Safety and Enforcement Division will determine whether the proposed projects reasonably address these risks. Stakeholders will have an opportunity to participate in public workshops on the utility proposal and SED report during the RAPP phase and to cross-examine SED on their conclusions during the traditional GRC litigation.

To incorporate the RAPP without extending the GRC proceeding, the Notice of Intent (NOI) should be eliminated, and the RAPP filing be made at the time the NOI traditionally would be filed. While there will be no ruling on the RAPP, it will serve as the first phase of the utility GRC.

Proposed Timeline	
Day 1	Utility submits RAPP Filing
Day 30	Utility holds workshop on RAPP Filing
Day 90	SED releases a draft report on the RAPP Filing
Day 135	Workshop on SED Report
Day 150	SED Issues Updated Report (optional)
Day 180	Utility files GRC Application

1. RAPP Filing

In the proposed RAPP, the utility presents to SED and stakeholders a series of one page "validation reports" for each project designed to address safety and infrastructure reliability risks. A "project" refers to a specific measure to address a specific risk, and validation reports will be provided based on a project basis rather than a risk basis. The utility will also provide a filing describing how, based on the validation reports and the objective hierarchy, risk management projects have been prioritized. Once the Phase 2 methodology has been finalized, the utility will provide validation reports for all proposed projects. Until that occurs, it may be useful to somehow limit the scope of the initial RAPP filings.

The stakeholders will finalize the format of the validation report in Phase 1. The validation report must include:

- Clear identification of the project, including a description of the utility asset addressed and information on the proposed project including estimated costs, and a timeline for completion;
- Identification of the benefits of the project and when they will be realized;
- Assumptions used when evaluating the project and proposed alternatives;
- Risks mitigated by the project, including the quantified impact on: safety, infrastructure reliability, environment and economics;
- A description on the verifiable method used to estimate the risk;
- Existing controls in place to address the asset and their cost;
- Alternative mitigation measures considered including one or more reduced-scope alternative projects, cost and associated risk reduction, and
- Potential obstacles to project completion.

These validation reports and project scoring based on the objective hierarchy should be used by the utility to determine the prioritization of projects. This information will be provided to SED and will be available to all interested stakeholders.

The utilities will hold a workshop for SED and interested stakeholders on their RAPP filing within one month of the filing. The utility will have an opportunity to explain project identification, risk assessment methodologies and the prioritization process. Stakeholders should use the workshop as an opportunity to provide feedback to the utilities and highlight potential concerns for SED.

2. SED Report

Approximately three months after the utility makes its RAPP filing, SED will issue a report that performs two functions:

- Audit: SED will confirm that the utility has fully complied with the requirements for the RAPP filing and provided all necessary information.
- Evaluation: SED will determine if the utility proposal provides a reasonable approach for addressing its overall risk profile.

After the SED releases its report, SED will hold a workshop outlining its methodology, findings and conclusions. Similar to the workshop held by each utility, the workshop provides stakeholders and the utilities a more informal forum to comment on the report. SED will answer questions about their methodology and conclusions.

After the workshop, SED will have an opportunity to update the report based on stakeholder feedback. The utility will file its GRC Phase 1 Application 6 months after the initial RAPP filing is made. The utility can incorporate the SED Report findings but it is not required to do so.

While there will be no decision in the RAPP, at the outset of the GRC the ALJ will adopt a ruling that incorporates the final SED report and the validation filings into the record. The cost and reasonableness of each project and the overall risk management program will be evaluated in the SED report and will be subject to litigation in the GRC Phase 1. SED will present a representative for cross-examination on the report, giving the utility and stakeholders the opportunity to address and challenge SED's conclusions.

d) Verification

The Commission should require a uniform and simple verification system. The verification report confirms whether the utility has carried out authorized projects and provides the final cost of those projects. For example, the utility could verify that it replaced 2000 poles at the authorized cost of $200 million. The verification will rely on project tables submitted at the same time as the RAPP, which specifies in chart form:

- What was authorized (e.g., replacement of 2,000 poles)
- The authorized cost (e.g., $200 million)
- What was actually replaced (e.g., 1,900 were replaced)
- The actual cost (e.g., $190 million)
- A narrative explaining the discrepancy.

SED will verify what the utility has claimed and issue a report detailing the results of their verification, addressing whether the utility has provided verification amounts for all projects funded in the prior GRC. An ALJ ruling will adopt this report into the record, and stakeholders can rely on the report and the verification reports during GRC litigation.

SED's testimony in the GRC will be limited to the RAPP evaluation, not the verification of utility spending.

III. Phase 2

Phase 1 assumes the utility has in place an effective risk management program. The objective hierarchy, without effective risk management to inform project ranking, will do little to ensure safety. For this reason, the Commission and stakeholders ensure that a utility employs an effective and complete risk management program, with the goal of achieving safety and reliability goals at the lowest expected cost. The risk management program should be centered on maintaining safe and reliable asset condition, since assets in good condition are less likely to suffer catastrophic failures or be affected by outside events, such as fires and earthquakes.

There are four parts to a successful risk management program:

- Organizational Management: Adoption of a corporate structure focused on safety and infrastructure reliability;
- Strategic Asset Management: Identification of the overall strategy for repair, replacement, and testing actions to best address risks over time;
- Operational Asset Management: Prioritization of the strategic actions and mitigation projects based on budget and other constraints; and
- Management of the Risk of Uncontrollable Events: Estimation of uncontrollable risk and identification of strategic and operational approach to mitigate the potential impact of the risk event.

Rather than specifying the exact form of risk management to be adopted, this proposal outlines the required components for a comprehensive risk management system, focusing in detail on the key components of a strategic asset management methodology. This approach gives the utilities and stakeholders the latitude to present to the Commission a methodology that can be adopted and implemented within reasonable cost and time. The Commission will use the utility and stakeholder proposals as a starting point for developing a risk management methodology, and, if possible, the Commission should engage a risk management expert to assist in model development.

The establishment of a common risk management system will ease the burden on Commission and stakeholder resources. If utilities all address risk management in the same manner, stakeholders will only be required to establish expertise on one management system (and related methodologies). In the long run, this will streamline the RAPP and the GRC since the Commission and stakeholders will only be required to verify the outcome of the methodology rather than mount challenges to the methodology chosen.

a) Organizational Management

The utilities should adopt an organizational structure that values safety and infrastructure reliability risk management as their top priority. One widely used structure, which is today used by PG&E, relies on PAS 55 or ISO 31000 [define] to organize personnel and corporate structures. These systems do not provide a specific methodology for addressing risk management, but instead provide a system to encourage increased awareness of potential risks.

b) Strategic Asset Management Methodology

A strategic asset management methodology specifies a plan, over a sufficiently long time horizon, for replacing, repairing, maintaining and testing the utility's inventory of aging assets. The result of a well-designed asset management methodology is a plan that enables the utility to achieve safety and reliability goals at the lowest cost possible. If a methodology is properly designed, the CPUC should be able to make its revenue requirement reasonableness determination with ease.

Although there are many alternative analytical methodologies available, all well-designed asset management methodologies are based on mathematical optimization. The nature of the asset management problem, however, is that asset conditions change over time, so there are important interdependencies that link the future behavior of assets with the choice of current asset management strategies. In particular, it is not possible to determine the optimal asset management action at any point in time without considering the longer-term consequences of any particular action. A dynamic optimization methodology will respond to the fact that assets are aging when identifying the best asset management strategy.

The output from the strategic asset methodology will be a set of investments and actions – what to repair, what to replace, and what to test – and the order of when to do it. Associated with that list will be expected costs and expected cash flows over time, which can then be used in the operational phase to prioritize the projects identified. A proper strategic asset methodology is required to implement an optimal operational asset management strategy

1. *Required Inputs*

Implementing a strategic methodology begins with a comprehensive set of input data. There are six classes of inputs required:

- Asset inventory: including what they are and where they are located;
- Asset condition definitions and dynamics: Definitions provide a consistent means of converting different asset attributes into a consistent, overall measure of asset condition and dynamics describe how the asset changes over time;
- Asset hazard rates: condition-dependent hazard rates that measure how much more likely the asset is to fail as the asset condition worsens;
- Asset test specifications: for discovering asset condition;
- Asset management alternatives: including replace, repair, maintain and do nothing as well as measures such as tree trimming that improve overall safety and infrastructure reliability without directly impacting the asset; and
- Costs: Including the cost of each asset management alternative and the consequences of asset failure.

In order to accurately address asset management the Commission's methodology must include each of these considerations. While some of these considerations are easy to determine, some will require additional data collection. In the meantime, the utilities can rely on the expertise and knowledge of their workforce, who are most familiar with the current condition of the assets, to value the inputs. The

Commission should require the utilities to document any heuristics, anecdotal measures or normative "best practices" used to make such valuations until the data are collected.

2. *Required Outputs*

There are, at a minimum, three outputs that a well-designed asset management methodology should provide. First, the *optimal strategy* specifying what actions to take (e.g., repair, replace, maintain or test), when to take them, and under what conditions to take them, over a typically long time horizon. Second, the *optimal test strategy*, which specifies when to test an asset and what actions to take as a consequence of the test outcome. Third, the *inventory and cash flow forecasts*, which describe the future behavior of the assets (number of failures, number of repairs, number of replacements, etc., and the age and condition of assets in service at any time) and the future costs that will be incurred as a consequence of implementing the optimal strategy.

3. *Design Principles and Transformation Processes*

The input data will be transformed to the identified outputs using the strategic asset management methodology. A well designed methodology must:

- Transform the asset inventory and the asset condition definitions and dynamics into a forecast of asset condition.
- Transform the asset condition forecast and the condition-dependent hazard rates into a forecast of asset failure.
- Transform the forecast of asset failure, the set of alternatives (with their costs and effects on asset condition), and the consequences of asset failure into the optimal policy.

The fundamental principle that governs this third transformation of inputs into outputs is dynamic optimization. The dynamic optimization is based on the interplay between the changing behavior of asset condition over time and the costs of actions that attempt to avoid or mitigate the consequences of asset failure compared with the costs of accepting the risk of asset failure. Dynamic optimization minimizes the total cost over time for achieving and maintaining a given (acceptable) risk profile.

There are many ways to implement the transformation processes. Regardless of the transformation process adopted, the final methodology implemented should be:

- Quantitative. All relevant aspects of the asset management problem should be expressed in quantitative terms for further analysis.
- Optimal. All policy decisions and strategies should be based on the solution of a well-formulated optimization problem; in this case, a dynamic optimization problem.
- Grounded. The fundamental analytic assumptions of the methodology should be based on agreed upon and well known principles of engineering and economic analysis. Where latitude is given to substitute local norms or heuristics, such substitutions should be expressly identified.
- Repeatable. The methodology should be implemented in such a way that the same methodology can be applied to any parts of the asset inventory at any future time.

- Transparent. It must be clear how inputs are transformed into outputs. The underlying logic of the transformation processes, and the statistical methods and/or probability distributions used to address uncertainties, must be explainable and apparent.
- Responsive. Material changes in values of inputs should cause material changes in values of outputs. In particular, as new information is obtained, the methodology should allow the strategy to change as needed with minimal administrative burden.
- Flexible. If the type of input needs to be changed, the methodology should accommodate such changes without becoming impossible to apply.

These principles will result in a successful strategic asset management methodology that will allow the utility to achieve optimal asset management at the lowest cost, and also provides for a streamlined review of asset methodology by the Commission and stakeholders in the GRC.

When adopting a common methodology, the Commission should avoid common methodological errors. First, the methodology should use dynamic risk measures that consider how the risk to the asset changes over time as the asset's condition changes. Second, the methodology must distinguish asset health among categories of assets. For example, a "healthy" transformer is not the same as a "healthy" underground pipeline. Third, the utilities should not rely on fixed-time replacement strategies. The condition of assets vary, as a result hazard rates will vary, and the replacement timeline for assets will vary. Finally, policy alternatives should be ranked using total expected net benefits rather than benefit/cost ratios.

c) Operational Asset Management Methodology

An operational asset management methodology specifies how best to implement the strategic asset management strategy in the short term. In other words, the operational asset methodology selects a specific project or program from among the available mitigation alternatives to address the identified risk at a particular time. One approach to determining the operational strategy is the comparison of projects using the CPUC's objective hierarchy. Proper application of that hierarchy, as discussed in that section, will provide an operational asset management methodology.

The fundamental operational questions are how best to (1) choose among competing projects, and (2) coordinate implementation such that schedule is met and lowest cost is achieved. When budgets are constrained, one must decide which projects can be safely deferred and which projects must be done immediately. It is also important to assess the potential synergies among various projects, synergies that may allow for cost efficiencies and compression of project schedules. The underlying principles of an appropriate methodology for operational asset management, however, are the same as those discussed above: quantitative, optimal, grounded, repeatable, transparent, responsive, and flexible. Further specifics of the operational methodology should be developed in phase 2.

d) Management of the Risk of Uncontrollable Events

The strategic and operational asset management methodologies seek to address risks within the utility's control by addressing the overall condition of its assets. Although the asset management methodology adopted obviously cannot prevent outside events and natural disasters, it can reduce the risks arising from those events. For example, an earthquake will be less likely to rupture a well-maintained underground gas line than a poorly-maintained one. Similarly, gas lines routed/re-routed so as to avoid potentially active faults would directionally reduce risk profile.

In principle, it is possible to estimate the risks arising from outside events and natural disasters by specifying arrival rates for such events as additional and independent hazards. The Commission should encourage utilities to specify such independent arrival rates. Once the arrival rates have been identified, the strategic and operational risk management methodologies can be used to identify the asset management strategy that would minimize the impact of uncontrollable risks.

IV. Rate Case Plan Changes

The adoption of the RAPP, an additional "phase" in the proceeding, will ultimately result in a GRC that is more complex and more resource intensive. In light of this additional complexity, the Commission and stakeholders should attempt to simplify the GRC where possible. In a separate track of the proceeding, the Commission should consider changes to the Rate Case Plan that will contribute to a more streamlined process.

a) Eliminate the Notice of Intent

Currently, the utility files an NOI approximately 4-6 months before the Application is filed. ORA studies the NOI and provides the utility with a list of deficiencies that the utility should address in the final GRC application. Utilities have expressed a willingness to assume the risk that the Application will address all potential issues and will have no deficiencies without this review process by ORA. In addition, many stakeholders do not rely on the NOI. In light of these facts and since the RAPP will add 6 months to the GRC otherwise, the NOI should be eliminated in order to provide the time required to complete the RAPP without further extending the GRC.

b) Maintain Three Year GRC Cycle

The Commission should maintain the current three-year GRC cycle. The current schedule balances the need for a schedule staggered for each utility with the need for regular considerations of the utility revenue requirement. Under the current system, very little attention is paid to attrition year ratemaking. The added complexity of the RAPP filing makes it unlikely that the Commission, the utilities or stakeholders will begin to spend any additional time on attrition year rate making. If the GRC cycle were to be further extended, it is likely that attrition year ratemaking would be less accurate and that the verification procedures outlined above would become even more complex to audit as a result. The current three-year cycle mitigates the impact of attrition year ratemaking, and provides that projects are authorized closer in time to their actual completion.

c) When Possible, Assign Two Administrative Law Judges to each GRC

Currently each Phase of each GRC is assigned a single ALJ. This ALJ is tasked with reviewing thousands of pages of testimony and pleadings, weeks of cross-examination and volumes upon volumes of workpapers. This review results in decisions that are hundreds of pages long and, in recent GRCs, delays. While settlements between the stakeholders would alleviate the burden on the ALJ, settlement is not always an option. The GRCs are among the most critical of the utility proceedings, and it is imperative that the decisions be timely and reasoned. The assignment of two ALJs to the Phase 1 of each utility GRC encourages both of these results. While we understand that the Commission has a limited number of ALJs, we request that when possible the ALJ division assign two ALJs to the GRCs.

d) Establish a Rate Change Reporting Mechanism

Utility rates are a key budget input for every class of ratepayers. Without advance notice of rate changes, ratepayers cannot plan for changes in their budgets. Under the current system, other than the annual true up, rate changes are not regular and advanced notice is rarely provided. While not all mid-cycle rate changes are increases, any variability makes budgeting difficult; all ratepayers benefit from more stable rates.

The Commission should limit the rate changes resulting from the GRC to once annually. The utilities should be required to provide ratepayers formal, standardized notice of the timing and magnitude of all changes resulting from Commission proceedings. This notice can be provided by bill inserts, website updates, or via other regular means of communication with ratepayers. Additionally, the utilities should be required to submit in each GRC, and maintain on their website, a list of rate schedules, forecasted changes for each rate schedule and reasons for the change (e.g., GRC revenue requirement increase, GHG compliance, etc.).

e) Publish Compliance Register

The utilities are subject to compliance requirements from both the CPUC and FERC. The utilities should submit in each GRC, and maintain on their website, a compliance catalog outlining all safety and infrastructure reliability compliance requirements and projects initiated in response to the compliance requirement. The compliance register will provide a holistic picture of the requirements in place at any given time. Stakeholders can use this information to better understand the utility revenue requirement requests and identify funds requested in order for the utilities to meet their compliance requirements. This information is a valuable resource since not every stakeholder has the resources to intervene in every CPUC proceeding, so may not fully understand the requirements of utility service in place at any point in time. Additionally, the compliance register may provide information required for purposes of prioritizing projects since some projects will contribute to compliance requirements.

V. Next Steps

This proposal in whole is and will be an iterative process. Staff will revise and reissue this proposal. The re-issued proposal will become part of the record and formal opening and reply comments will be requested. A prehearing conference will be held in April, and the ALJ and Staff will announce workshops to address the objective hierarchy and risk lexicon more closely. Staff will rely on additional rounds of comments to develop a final RAPP and verification procedure.