

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop a Risk-Based Decision-Making Framework to Evaluate Safety and Reliability Improvements and Revise the General Rate Case Plan for Energy Utilities.

Rulemaking No. 13-11-006  
(Issued November 14, 2013)

**MUSSEY GRADE ROAD ALLIANCE REPLY COMMENTS ON STRAW  
PROPOSAL FOR RISK-BASED DECISION MAKING IN GRCS**

Diane Conklin, Spokesperson  
Mussey Grade Road Alliance  
P.O. Box 683  
Ramona, CA 92065  
Telephone: (760) 787-0794  
Facsimile: (760) 788- 5479  
Email: [dj0conklin@earthlink.net](mailto:dj0conklin@earthlink.net)

June 13, 2014

# MUSSEY GRADE ROAD ALLIANCE REPLY COMMENTS ON STRAW PROPOSAL FOR RISK-BASED DECISION MAKING IN GRCS

## I. INTRODUCTION

In accordance with the Ruling Regarding the Refined Straw Proposal issued by Administrative Law Judge Wong (which set an original filing date of May 12, 2014),<sup>1</sup> and the Scoping Memo issued by President Peevey and Administrative Law Judge Wong (which extended the filing date for reply Comments to June 13, 2014),<sup>2</sup> the Mussey Grade Road Alliance (MGRA or Alliance) files these comments timely.

## II. BACKGROUND

The Alliance filed comments<sup>3</sup> on the Refined Straw Proposal in accordance with the process laid out by President Peevey and ALJ Wong, as did many other parties to this proceeding<sup>4</sup>. The

---

<sup>1</sup> R.13-11-006; ADMINISTRATIVE LAW JUDGE'S RULING REGARDING REFINED STRAW PROPOSAL; April 17, 2014. (Straw Proposal Ruling)

<sup>2</sup> R.13-11-006; SCOPING MEMO AND RULING OF THE ASSIGNED COMMISSIONER AND ADMINISTRATIVE LAW JUDGE; May 15, 2014.

<sup>3</sup> R.13-11-006; MUSSEY GRADE ROAD ALLIANCE COMMENTS ON STRAW PROPOSAL FOR RISK-BASED DECISION MAKING IN GRCS; May 23, 2014. (MGRA SP Comments).

<sup>4</sup> Some comments received include:

R.13-11-006; OPENING COMMENTS OF THE ENERGY PRODUCERS AND USERS COALITION ON THE REFINED STRAW PROPOSAL; May 23, 2014. (EPUC Comments)

R.13-11-006; OPENING COMMENTS ON THE REFINED STRAW PROPOSAL OF COMMUNITIES FOR A BETTER ENVIRONMENT; May 23, 2014 (CBE Comments)

R.13-11-006; COMMENTS OF THE UTILITY REFORM NETWORK ON THE REFINED STRAW PROPOSAL; May 23, 2014. (TURN Comments)

R.13-11-006; OPENING COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES REGARDING THE REFINED STRAW PROPOSAL ON A RISK-BASED DECISIONMAKING FRAMEWORK TO EVALUATE SAFETY AND RELIABILITY IMPROVEMENTS AND REVISE THE GENERAL RATE CASE PLAN FOR ENERGY UTILITIES; May 23, 2014. (ORA Comments)

R.13-11-006; OPENING COMMENTS OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) AND SOUTHERN CALIFORNIA GAS COMPANY (U 904 G) ON REFINED STRAW PROPOSAL; May 23, 2014. (SDG&E Comments)

R.13-11-006; SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) OPENING COMMENTS TO REFINED STAFF STRAW PROPOSAL IN THIS RULEMAKING; May 23, 2014. (SCE Comments)

R.13-11-006; PACIFIC GAS AND ELECTRIC COMPANY'S OPENING COMMENTS ON THE REFINED STRAW PROPOSAL; May 23, 2014. (PG&E Comments)

R.13-11-006; OPENING COMMENTS OF UTILITY CONSUMERS' ACTION NETWORK (UCAN) ON THE REFINED STAFF STRAW-PROPOSAL; May 23, 2014. (UCAN Comments)

R.13-11-006; OPENING COMMENTS OF EXXONMOBIL POWER AND GAS SERVICES, INC. ON REFINED STRAW PROPOSAL; May 23, 2014. (ExxonMobile Comments)

Alliance’s primary concern in this and other proceedings has been to reduce the risk of catastrophic wildfires associated with utility infrastructure in a way that most effectively makes use of ratepayer funds. To this end we generally supported the Refined Straw Proposal (RSP), particularly its division of risk assessment proceedings into a periodically occurring general review (S-MAP) coupled with an assessment tied to each rate case (RAMP). We raised additional points about the restrictiveness and appropriateness of a utility-defined “top ten” list for risks, and emphasized the Commission’s responsibility for developing expertise in the area of risk assessment. Some parties supported these or related positions, while others do not. In general, the major electrical utilities are not pleased with the RSP as is and suggest fundamental modifications, while most non-utility parties address specific issues with the RSP but support its fundamental framework. We address some of the key issues that parties raised that we believe will be crucial to determining whether this proceeding is successful in its goal to create a risk-informed general rate case process.

### III. ISSUES

#### A. A Periodic S-MAP is Key to Maximizing Safety and Minimizing Costs

Many parties expressed a position on the concept of a recurrent S-MAP tied to the GRC cycle but outside of the scope of any particular GRC. The Alliance strongly supported this position in our Opening Comments,<sup>5</sup> and a number of other parties do as well, including ORA, UCAN, TURN, and EPUC.<sup>6</sup> In general, the large utilities opposed the idea of a recurring S-MAP process, suggesting that it either be a one-time event (SCE and PG&E) or eliminating it altogether (SDG&E, SCE, and SCGC).<sup>7</sup>

---

R.13-11-006; FIRST ROUND OPENING COMMENTS OF THE COALITION OF CALIFORNIA UTILITY EMPLOYEES ON THE REFINED STRAW PROPOSAL; May 23, 2014. (CCUE Comments)

R.13-11-006; SOUTHERN CALIFORNIA GENERATION COALITION OPENING COMMENT ON REFINED STRAW PROPOSAL; May 23, 2014. (SCGC Comments)

R.13-11-006; Opening Comments of Utility Workers Union of America (UWUA); May 23, 2014. (UWUA Comments)

<sup>5</sup> MGRA Comments; pp. 5-6.

<sup>6</sup> Comments: EPUC p. 15; TURN p. 5; ORA p. 5.; UCAN p. 5.

<sup>7</sup> Comments: SCGC p. 3; PG&E p. 3; SCE pp. 3-4; SDG&E pp. 3-6.

## 1. Utilities make logically inconsistent claims regarding a periodic S-MAP

Both SCE and PG&E argue that if the Commission adopts an S-MAP process that it should be a one-time event and not held periodically. For instance PG&E states that the “S-MAP should be restructured as a one-time (not recurring) proceeding separate from GRCs.”<sup>8</sup> The justification for such an arrangement would be that “Once a framework is in place, the utilities could use those standards alone with their own judgment, business decisions, and risk management tools to determine appropriate risk mitigation strategies.”<sup>9</sup> In other words, the S-MAP would set initial direction and define terms but after that each utility will manage risks in its own way.

One basic problem with this premise is that the meaningful incorporation of risk management and safety prioritization into utility rate cycles will necessarily be a learning process. Guidelines determined in an S-MAP may turn out to be incomplete or poorly constructed when they are actually applied to specific utility situations through the RAMP process. In fact, such speed bumps should be expected, since this is a new process and the Commission is new at coordinating utility actions in the area of risk management. Both PG&E and SCE, however, admit that the process of incorporating risk management into utility planning is new and will be continually revised.<sup>10</sup> Given this, it is logically inconsistent to argue that the Commission and utilities should be bound to a fixed framework that derives from a process that is executed only once at the conclusion of this particular proceeding. In fact, this acknowledgment mandates that the S-MAP results be open to future revision and optimization.

Holding a one-time SMAP or equivalent process would not allow for improvements or revisions. An ad-hoc process of holding workshops or *en banc* for every issue that arises<sup>11</sup> would be highly inefficient, requiring participation of intervenors and utilities at any point in any utility’s GRC process, and also not necessarily associated with any proceeding. Even if a workshop on a general safety or risk issue were to be spawned from a GRC proceeding, it would require all parties

---

<sup>8</sup> PG&E Comments; p. 2.

<sup>9</sup> SCE Comments; p. 2.

<sup>10</sup> “Incorporating a risk-based framework into the GRC process will be an evolving process as parties gain experience with risk management tools and evaluation methods improve.” SCE Comments; p. 2.

“The formal use of risk analysis in planning and ratemaking is so new, models and processes will evolve and become more sophisticated over time. One size may not fit all and any model or process in use today is likely to change significantly as the utilities risk programs become more sophisticated.” PG&E Comments; p. 3.

<sup>11</sup> PG&E Comments; p. 2.

with an interest in that issue to become parties in the parent proceeding in order to have standing. For instance, if the Commission decided to spawn a workshop process to examine wildfire risk issues because of questions arising in an SCE GRC process, then all utilities and intervenors with an interest in wildfire would need to become parties in the SCE GRC proceeding, whether or not they had been before or have any other interest in the SCE GRC proceeding. Having to potentially become parties to all GRC rate cases in order to intervene on specific issues would be an extreme burden on smaller intervenors who typically participate only in topical proceedings or those proceedings related to a specific utility. Instead isolating process issues regarding safety and risk that potentially impact more than one utility into a periodic S-MAP proceeding provides a mechanism that allows the Commission, utilities, and intervenors to have a scheduled process where these issues can be addressed in an efficient and concentrated manner.

## **2. A periodic SMAP should reduce the time and cost for risk based GRCs**

It is right that parties be concerned regarding the cycle time required for GRCs and the costs associated with these proceedings, which in the end are borne by customers. However, two things must be kept in mind when discussing cost and efficiency of these proceedings. First, there are costs of not addressing risk properly. The 2007 wildfires, many of which were started by power lines, not only resulted in fatalities but resulted in over \$2 billion in losses.<sup>12</sup> The San Bruno explosion took eight lives, with liabilities of over \$500 million<sup>13</sup> and potential fines yet to be assessed. Time and money spent on better risk management in the course of the GRC proceedings should be looked upon as an investment in avoiding future tragedies and their concomitant costs.

The second point is that certain risk-related issues that are managed in GRCs will be common to all utilities. In lieu of a periodic proceeding such as S-MAP, utilities and intervenors will need to expend the time and resources to re-litigate the same issue over and over. This will be wasteful of resources and also prolong the GRC proceedings. Indeed, the Commission should encourage the utilities to push as much risk analysis work as possible into S-MAP so that the RAMP processes deal solely with utility-specific issues.

---

<sup>12</sup> A.09-08-020; Evidentiary Hearings; January 11, 2012. Testimony of Lee Shavrien, SDG&E; p. 245.

<sup>13</sup> PG&E Third Quarter Earnings Call; October 30, 2013;

<http://www.pgecorp.com/news/pdf/2013Q3EarningsSlides.pdf>, Downloaded June 7, 2014.

### 3. Unification of Processes will Result in Cost Savings

The utilities argue that the periodic S-MAP process as proposed is of limited use because each utility has its own particular risk model tied to its business needs. SCE states that “Utilities differ in their specific assets, asset conditions, data maturity, and data modeling capabilities.”<sup>14</sup> Likewise, “PG&E’s risk management program has been developed to address the needs of PG&E’s business operations and has evolved over time to incorporate PG&E’s planning and budgeting processes.”<sup>15</sup> This is not surprising, since to date there has been no incentive for utilities to share processes and tools with each other, particularly when they are in competition as businesses and have spent time and effort developing their own tools. Since each utility has established and staffed its own risk management department it has an interest in supporting the investment that it has made. Likewise, risk management resources at the utilities are providing feedback to the management and staff as to what the implications of this proceeding could be, and they have a particular interest in preserving the work they’ve done. Furthermore, each risk management organization exists within the larger context of the business, which has encouraged “tight coupling” to form between the risk management processes and other business processes, as described above by PG&E. While tight coupling provides convenience to the business, it results in fragile systems that are expensive to modify. We believe this provides some context as to why all major utilities vigorously oppose unification of risk analysis methods and practices through an S-MAP process.

What is vital to remember is that all of this investment that utilities have made in developing and maintaining their current risk management schemes has been paid for by utility customers. To the extent that the work done by each utility is duplicative, there is a potential for cost savings if that duplication can be eliminated. Furthermore, there is the potential to improve safety by selecting best practices. As we quote from SCE above, the utilities differ in “data maturity” and “data modeling capabilities”. This begs the question of why ratepayers who live in the service area of a utility that lags behind other utilities in its risk modeling capabilities should suffer reduced levels of safety solely because their utility wants to do things “its own way”. As far as the link between risk modeling and other business processes, the S-MAP process would encourage utilities

---

<sup>14</sup> SCE Comments; p. 5.

<sup>15</sup> PG&E Comments; p. 3.

to adopt a “loose coupling”<sup>16</sup> approach to the inputs and outputs of their risk management process to other business activities such as budgeting. While it would require initial investment, this approach would allow change to risk management processes to be made at a significant cost reduction. EPUC succinctly summarizes this point: “The adoption of uniform methodologies will best address safety and reliability risk and will streamline the GRC process. Uniformity also encourages administrative efficiency and stakeholder participation.”<sup>17</sup>

## **B. List of Risks Should be Inclusive and Maintained by the Commission**

As we stated in our opening comments, the Alliance does not believe that the utilities should be left in charge of determining what the “top ten” risks are, and that furthermore that using “ten” risks as the safety baseline is arbitrary.<sup>18</sup> This view is shared by TURN, who state: “If the top ten is intended to be the exclusive focus, then TURN respectfully suggests that the RSP needs modification.”<sup>19</sup> SCE, PG&E and EPUC<sup>20</sup> also argue that creation of a top-ten list is overly restrictive.

### **1. Utilities will over-emphasize business risks at the expense of safety**

As we noted in our opening comments: “*California utilities compete for investor funds. At the end of the day they are businesses. While there is value to conducting operations in a cost effective way in order to improve profitability, there is a significant risk that this will result in business priorities superseding safety priorities.*”<sup>21</sup> Likewise, the fact that they are businesses means that they will have an inevitable tendency to weight risks that affect their business priorities higher than risks affecting safety.

We find significant support for this assertion in the utility comments. SCE states that “Once a framework is in place, the utilities could use those standards alone with their own judgment,

---

<sup>16</sup> “Loose Coupling” is a widely used architectural principle used in computer science, systems design, and organization theory. Current (June 7, 2014) definition in Wikipedia is: “a **loosely coupled** system is one in which each of its components has, or makes use of, little or no knowledge of the definitions of other separate components.”

<sup>17</sup> EPUC Comments; p.2.

<sup>18</sup> MGRA Comments; pp. 3-4.

<sup>19</sup> TURN Comments; p. 6.

<sup>20</sup> SCE Comments; p. 6. EPUC Comments; p. 18. PG&E Comments; p. 6.

<sup>21</sup> MGRA Comments; p. 6.

***business decisions***, and risk management tools to determine appropriate risk mitigation strategies.”<sup>22</sup> (Emphasis added) PG&E asserts that “the details of each utility’s risk models should be based on their own ***business decisions***.”<sup>23</sup> (Emphasis added) Included in all business decisions must be the basic fiduciary responsibility that each utility has to its shareholders to ensure that the utility earns the maximum profit it can within its regulatory restrictions. This will inevitably lead to conscious or unconscious bias in the risk prioritization that a utility makes.

Other parties express concern that utilities will downplay safety in their risk assessments. TURN expresses concern that the RSP as stated would emphasize risk to assets rather than to public safety.<sup>24</sup> Likewise CBE urges that the Commission ensure “the new risk-based decision-making proceedings, first and foremost, emphasize safety over all other considerations.”<sup>25</sup> UWUA expresses concern that the RSP “appears to measure risks in terms of potential of the financial value of utility assets and invites the substitution of financial considerations”.<sup>26</sup> MGRA shares these concerns.

The Alliance therefore re-iterates the suggestion we made in our opening comments that the Commission maintain a list of top risks that all utilities must address in the RAMP phase of their GRCs. This list should be created and maintained within the structure of the S-MAP process, and would track risks that have been determined to have potential public safety impacts. We agree with SDG&E’s statement that “safety is the goal”,<sup>27</sup> but we differ in that we believe that a risk identification and management process guided by an independent Commission is an essential prerequisite to achieving that goal.

### **C. Reliability and Safety**

A number of parties link reliability to safety and suggest that risk to reliability should be explicitly considered in risk assessments. Among these are EPUC, who correctly note that “Maintaining a reliable infrastructure will impact the safety of customers beyond the grid since

---

<sup>22</sup> SCE Comments; p. 4.

<sup>23</sup> PG&E Comments; p.

<sup>24</sup> TURN Comments; p. 6.

<sup>25</sup> CBE Comments; p. 2.

<sup>26</sup> UWUA Comments; p. 3.

<sup>27</sup> SDG&E Comments; p. 8.



delivery outages can have significant safety implications,”<sup>28</sup> a fact also noted by CBE.<sup>29</sup> SCE urges that risks to reliability be included in any risk ranking.<sup>30</sup> ExxonMobil asserts that “The terms “safety” and “reliability” go hand in hand.”<sup>31</sup>

While we concur that maintaining reliability is a vital goal for utilities, reliability is not synonymous with safety. As noted by parties in their comments, reliability is a *prerequisite* for a safely operating system, since loss of service can have safety impacts to customers (as well as significant financial impacts). However, it is not necessarily true that a reliable system is safe. A system may be statistically “reliable” in that it meets and exceeds its availability goals, but if it has the potential for rare catastrophic failures it still is not “safe”. As an example we take the case of SDG&E. SDG&E has annually won the ReliabilityOne award for the western United States and Canada since 2006 for the reliability of its electrical distribution system.<sup>32</sup> However, its lines were involved in starting several of the fires during the 2007 firestorm, which occurred during the very period it was winning reliability awards. This clearly demonstrates that reliability is no guarantor of safety.

Another example of the complex relationship between safety and reliability is the proposal that SDG&E made in A.08-12-021 that would have enabled it to set its own criteria for proactive power shut-off. The motivation behind this proposal was that when extreme fire-weather events occurred, eliminating power to the area would eliminate the risk that a utility line would cause a fire. MGRA along with other intervenors opposed the SDG&E proposal. Opponents enumerated a number of impacts to public health and safety that a power shut off would impose, particularly during extreme fire hazard conditions,<sup>33</sup> leading the Commission to determine that “operating a safe

---

<sup>28</sup> EPUC; p. 11.

<sup>29</sup> CBE Comments; p. 7.

<sup>30</sup> SCE Comments; p. 6.

<sup>31</sup> ExxonMobil Comments; p. 3.

<sup>32</sup> “SDG&E Recognized For Outstanding Reliability, Outage Response and Customer Care”; SDG&E press release; November 12, 2012.

<http://www.sdge.com/newsroom/press-releases/2012-11-28/sdge-recognized-outstanding-reliability-outage-response-and> Downloaded 6/7/2014.

“We are honored to be recognized for the seventh straight year as the ‘Best in the West’ for electric reliability,” said David L. Geier, vice president of electric operations for SDG&E.”

<sup>33</sup> D.09-09-030; “DECISION DENYING WITHOUT PREJUDICE SAN DIEGO GAS & ELECTRIC COMPANY’S APPLICATION TO SHUT OFF POWER DURING PERIODS OF HIGH FIRE DANGER”; pp. 30-40.

system also includes the reliable provision of electricity.”<sup>34</sup> The Commission directed SDG&E to prepare a cost/benefit analysis if it wished to pursue a formal shut-off plan that would justify its shut-off criteria by demonstrating that the risk from power loss would be exceeded by the risk of fire.<sup>35</sup> MGRA was the only opposing intervenor, however, who urged the Commission to allow shut-off in the case where wind loading approached the design limits of utility infrastructure. In fact the Commission determined that “SDG&E’s statutory obligation to operate its system safely requires SDG&E to shut off its system if doing so is necessary to protect public safety. For example, there is no dispute that SDG&E may need to shut off power in order to protect public safety if Santa Ana winds exceed the design limits for SDG&E’s system and threaten to topple power lines onto tinder dry brush.”<sup>36</sup> So the Commission has also indicated that there are limits – circumstances in which the risks from loss of power may be less than the risk of having continued service. We see two results arising from this proceeding: first that the Commission acknowledges that reliability is necessary for safety. The other is that there is a difference between “reliability” and “providing service under all circumstances”.

We urge the Commission to emphasize safety as it formulates the S-MAP and RAMP processes. To the extent that reliability affects public safety and has financial impacts on the public, risks to reliability may be included in analyses and rankings. However, safety should be the *primary* consideration. The Commission should discourage the illusion that improving reliability and eliminating reliability risks will somehow eliminate all other safety risks as well – it will not.

## **D. Assets, Safety, and People**

### **1. Prioritize safety over assets**

There was an emphasis on utility “assets” in both the RSP and some of the intervenor replies. For instance, the Refined Straw Proposal’s suggestion of a “top-ten” list was specifically for “top ten *asset-related* risks”.<sup>37</sup> (Emphasis added) As we stated previously, a “top ten” list in this process is inappropriate. Even more inappropriate is a focus *solely* on utility assets. PG&E’s

---

<sup>34</sup> Id.; p. 57.

<sup>35</sup> Id; pp. 59-60.

<sup>36</sup> Id. pp. 61-62.

<sup>37</sup> Refined Straw Proposal; p. 2.

interpretation of the “top ten” list, for instance, would *exclude wildfire*.<sup>38</sup> EPUC goes so far as to propose an “asset-based” methodology, and provides some analytical underpinning for the concept of basing risk analysis on assets: “The proper focus of a risk-based decision making methodology is the condition of utility assets; the safety and reliability of utility infrastructure is a direct result of the condition of the utility’s assets. Assets maintained in good condition are more likely to operate in a safe and reliable manner and are less likely to suffer damage as a result of outside events including fires and earthquakes.”<sup>39</sup>

Other parties are less sanguine about this emphasis on assets. CCUE is concerned that “[t]he straw proposal is too narrowly focused on assets and not systems”,<sup>40</sup> and has a specific concerns regarding the workforce: “The RAMP must include evaluating whether there is an adequate workforce to maintain the assets as a top ten risk.”<sup>41</sup> UWUE expresses similar concerns: “The RevSP fails to recognize that utility infrastructure is an integrated operational system involving both physical facilities and human operators – the workforce – that provides the public with vital services.”<sup>42</sup> In fact in our original OIR comments, MGRA also pointed out the necessity of analyzing workforce-related risks, using as an example a pandemic that reduced the available workforce.<sup>43</sup> So we concur with these parties that restricting risk analysis to utility assets does not capture the full spectrum of utility-related risks facing the public. Nor would we even favor such a restriction as a “stepping stone” to later inclusion of other risks, as per PG&E’s understanding. Asset-related risks may or may not present the greatest potential public impact – only a full review within the S-MAP process will determine the appropriate risk prioritization.

## **2. Asset risk analyses need to incorporate exogenous event probabilities**

As far as EPUC’s asset-based risk methodology, the value of this methodology needs to be examined in the course of the S-MAP process. This phase of R.13-11-006 should not be making

---

<sup>38</sup> “However, it is possible that the RAMP could be expanded over time to include additional risks that are not related directly to assets, e.g., Emergency Response, Wildfire, and Qualified Personnel.” Note that PG&E does not see wildfire as an “asset-related” risk, and therefore likely out of scope for initial S-MAP/RAMP proceedings. PG&E Comments; p. 4.

<sup>39</sup> EPUC Comments; p. 2.

<sup>40</sup> CCUE Comments; p. 4.

<sup>41</sup> Id. p. 5.

<sup>42</sup> UWUE; p. 4.

<sup>43</sup> R.13-11-006; MUSSEY GRADE ROAD ALLIANCE COMMENTS ON INCORPORATING RISK-BASED DECISION MAKING INTO GENERAL RATE CASES; January 15, 2014; p. 7.

technical determinations but rather process determinations. However, we would like to mention a technical issue with the EPUC’s presentation that further illustrates the limitations of a primarily asset-based approach. EPUC’s filing contains a paper by Feinstein and Lesser<sup>44</sup> that urges the creation of state-dependent hazard models that incorporate current asset conditions as well as known failure rates. They demonstrate that failure probability curves can depend on asset condition. While there may be value in this approach, which may be examined during the S-MAP process, we note that there will be some classes of risk that this model might not represent well. Specifically, the Feinstein-Lesser model seems to be geared to a continuous process of asset deterioration. However, our experience in the utility wildfire area has demonstrated that for some risks *asset condition may be determined by exogenous events*. For example, major windstorms, earthquakes, wildfires and geomagnetic storms may put stress onto a system that changes the asset condition in a discontinuous manner, and furthermore affects many assets over a wide geographic area. Therefore it is not possible to talk of the projected “lifetime” of an asset without knowing something about the frequency of stressors that will affect the asset lifetime. For example, the probability of catastrophic power line initiated fire is driven by weather to an extraordinary degree (with outage rates acting as a potential proxy),<sup>45</sup> as has been acknowledged by the Commission: “It is virtually certain that Southern California will continue to experience Santa Ana windstorms. Thus, there is a grave and ongoing risk that Santa Ana windstorms will again cause power lines to ignite catastrophic wildfires unless electric utilities plan and prepare for such events.”<sup>46</sup> The failures that initiate catastrophic fires usually occur at the system’s “weakest links”, and EPUC notes that identifying and eliminating weak links will make the system more robust against exogenous events.<sup>47</sup> However the very definition of asset condition depends on the design requirements for the system. For example, a pole that will fail in 75 mph winds may be considered to be in good condition if it has been designed for

---

<sup>44</sup> “A new approach to utility asset management”; Charles D. Feinstein and Jonathan A. Lesser; Public Utilities Fortnightly; January 2014.

<sup>45</sup> Mitchell, Joseph W.; “Power Lines and Catastrophic Wildland Fire in Southern California”; Presentation to the Fire & Materials 2009 Conference, San Francisco CA, Jan 26, 2009. [http://www.mbartek.com/FM09\\_JWM\\_PLFires\\_1.0fc.pdf](http://www.mbartek.com/FM09_JWM_PLFires_1.0fc.pdf)  
 Mitchell, Joseph W.; Power line failures and catastrophic wildfires under extreme weather conditions; *Engineering Failure Analysis*; Volume 35, 15 December 2013, Pages 726–735 (ICEFA V, The Hague, The Netherlands, July 3, 2012) <http://www.sciencedirect.com/science/article/pii/S1350630713002343>

<sup>46</sup> D.12-01-032; p. 48.

<sup>47</sup> “Assets maintained in good condition are more likely to operate in a safe and reliable manner and are less likely to suffer damage as a result of outside events including fires and earthquakes.”; EPUC Comments; p. 2.

56 mph winds, but would be considered in poor condition if the design requirement was for 92 mph winds.

### **3. Leverage data and analysis from R.08-11-005**

While technical discussions of this type will have a more proper home within S-MAP and RAMP workshops and proceedings, we bring the issue with EPUC's proposal up now to raise an important point. In our opening comments we urged that the Commission ensure that the S-MAP process be integrated with the outputs of the fire safety proceeding R.08-11-005.<sup>48</sup> This integration should be at the least in two areas: first, the utility collection of fire data to be shared with the Commission, which is an important metric for both risk estimation and for measuring success of countermeasures, and second, with the creation of a statewide fire hazard map. The work currently being done by the fire hazard map working group in proceeding R.08-11-005 will have outputs that can be used by risk models. More specifically, the Commission has authorized a working group of independent consultants led by CAL FIRE to prepare a fire hazard map that is customized to identify areas of specific risk to electrical utilities.<sup>49</sup> This expert panel is currently analyzing weather history data in addition to other fire-related indicators in order to create a fire hazard map that incorporates the exogenous risk of extreme weather events. This analysis can provide key inputs to risk analysis models (whether asset-based as suggested by EPUC or any other model evaluated in the S-MAP process), since it will provide a probability distribution for extreme events that have the potential to impact utility assets in a way that leads to the ignition of catastrophic fires.

### **E. Staff Report Weight**

A number of parties, including UCAN, CCUE, ORA, and TURN<sup>50</sup> argue that the RSP's proposal would give the Staff Report issued in response to the utility RAMP excessive weight. We concur with these parties that making the Staff Report the primary RAMP response would violate the principle of Participatory Inclusivity and preclude other parties from successfully putting forward their own analyses. We request that the Commission encourage full participation by parties,

---

<sup>48</sup> MGRA Comments; pp. 4-5.

<sup>49</sup> D.14-01-010; "DECISION APPROVING THE WORK PLAN FOR THE DEVELOPMENT OF FIRE MAP 1"; January 22, 2014.

<sup>50</sup> UCAN Comments; p. 6. CCUE Comments; p. 2. ORA Comments; p. 2. TURN Comments; pp. 8-12.

including opportunities for them to present independent analysis that can be given weight according to its merit.

Respectfully submitted this 13<sup>th</sup> day of June, 2014,

By: /S/ **Diane Conklin**

Diane Conklin  
Spokesperson  
Mussey Grade Road Alliance  
P.O. Box 683  
Ramona, CA 92065  
(760) 787 – 0794 T  
(760) 788 – 5479 F  
[dj0conklin@earthlink.net](mailto:dj0conklin@earthlink.net)