Please respond to the following data requests in regard to the 2016 SDG&E rate case:

***The following questions are in regard to SDG&E’s response to question MGRA-25 of MGRA Data Request No. 1, specifically regarding the risk assessment matrix used for evaluating circuits:***

1. Please provide the risk matrix shown in Figure 2 of SDG&E’s response to question MGRA-25 as an Excel spreadsheet.
2. Circuit length in Figure 2 is given in Column C. Please state which of the Risk and Impact columns have values that have a dependence on overall circuit length (extrinsic) and which measure the properties of the circuit or its location regardless of length (intrinsic). For example, number of capacitors would likely be an intrinsic value because it is a fixed number regardless of circuit length. For another example, if fuel risk were averaged over the line length, then a 5 mile segment through a #2 fuel hazard would present lesser risk than a 20 mile segment with the same fuel risk. This would be an extrinsic risk factor. The purpose of this question is to determine how the effect of weighting the score by circuit length would affect the relative rankings. However such a weighting would only be appropriate for extrinsic risk and impact factors, not intrinsic ones.
3. Risk and impact factors in Figure 2 are given a rating of 0 to 3. Please provide quantitative and qualitative criteria for the 0-3 classification for the following columns described in Figure 1. We assume that 0 means lowest risk/impact and 3 means highest risk impact, however we’re looking for specific details how each of the risk and impact factors is categorized.:  
   #2 Wind Factor  
   #3 Tree Factor  
   #4 Fuel  
   #5 Fire ignition risk  
   #6 Number of capacitors in each segment  
   #7 Expulsion fuse factor  
   #8 Switch factor  
   #9 Conductor factor  
   #10 Transformer factor  
   #11 High risk transformer factor  
   #12 Ranking by District Operation Center  
   #13 5 year outage history  
   #14 Relative structure value  
   #15 Reduction in number of customers impacted by safety shutoff plan  
   #16 Service to critical facilities  
   #17 Environmental  
   #18 Cultural
4. How is risk Factor 5, Fire ignition risk, determined? How is it differentiated from fuel and wind risk factors?

***The following questions are related to the response of SDG&E to question MGRA-13, MGRA-20, and MGRA-32, regarding measures that SDG&E is taking to reduce risk of wildfire ignition.***

1. What fraction of the 3,400 circuit miles of distribution line and 923 miles of above ground transmission line within the FTZ have currently been analyzed by the FiRM A-Team and had a fire risk determination?
2. What fractions of the SDG&E distribution and transmission systems that have already been evaluated by the FiRM A-Team currently meets the new SDG&E design specifications described in the response to MGRA-13?
3. When is the FiRM A-Team expected to complete its evaluation of risk factors for the entire SDG&E distribution and transmission networks?
4. What is the estimated total cost to bring the entire SDG&E infrastructure up to the current SDG&E fire safety design specifications?
5. Of the total distribution network in the FTZ already analyzed, what fraction will require some form of remediation in order to meet current fire safety design standards. This fraction can be in terms of circuit miles, where appropriate, or in asset fractions (poles or other system components).
6. What are the criteria for successful completion of the FiRM program?
7. Does completion of the FiRM program mean that all SDG&E distribution and transmission segments in the FTZ will be compliant with new SDG&E design standards?
8. In the reply to MGRA-32, it states that “SDG&E has a ‘tool box’ of hardening methodologies available to reduce risk. Many of the efforts listed in the toolbox do not relate to a fraction of the system in any general format.”  
   Please clarify which ‘toolbox’ components cannot be related to a fraction of the system?
9. How many miles of Hendrix spacer cable have currently been deployed in the FTZ? What are the criteria for adoption of Hendrix spacer cable in an area?

***Regarding SDG&E’s response to MGRA-14 and the division of the FTZ into Potential Damage Zones:***

1. Please provide a map of the Potential Damage Zones in PDF and shapefile formats.

***Regarding SDG&E’s responses to MGRA-16, MGRA-17 and MGRA-18 regarding the SDG&E fire camera program - Answers were not fully responsive and we restate some of these questions in other terms:***

1. What fraction of the area of the SDG&E FTZ is currently visible from the fire cameras?
2. The SDG&E response to MGRA-17 indicates that the fire cameras monitor assets “located primarily along the 500 KV line in the backcountry of the SDG&E service territory”. What fraction of the cameras monitor assets along the 500 kV line as described in this response?
3. SDG&E’s response to MGRA-17 also states that “there have been a number of cases where the system did detect fires and the appropriate action was taken to notify First Responders.” Please give a list of incidents identified by SDG&E cameras, the reported location of the fire, the first responder notified, and the time of the first responder notification.

***The following questions relate to the SDG&E response to MGRA-21 and MGRA-22. The answers were not responsive. We restate these here in nearly identical terms. We believe these to be extremely important questions because they identify the incremental benefit of SDG&E fire safety program spending. We urge SDG&E to undertake a study to identify which programs might be harmed by a decrease in spending, and conversely which other programs might be added or more hastily completed with an increase of spending, and how these programs affect public safety.***

1. How would a 20% smaller request affect wildfire safety? Please provide quantitative and qualitative estimates.
2. How would a 20% larger allocation than requested for wildfire safety spending be expected to affect system safety? Please provide quantitative and qualitative estimates.

***The following questions relate to SDG&E’s response to MGRA-32, regarding the portion of the transmission and distribution network that has already been hardened. The purpose of this question is to ascertain the impact that SDG&E fire prevention work has had on the outage rate under high-stress conditions for upgraded circuits.***

1. Please specify the circuits that were remediated as part of the FiRM A-Team effort in 2014, the length of the circuit, and the date any upgrades were completed.
2. Please specify any circuits (transmission or distribution) that were upgraded as part of the FiRM A-Team effort or previous RIRAT program prior to 2014, the length of the circuit, and the date any upgrades were completed.
3. Please state which circuits were upgraded as part of the wood-to-steel pole upgrade program, if not previously described in the previous questions. State the length of the circuit, and the date any upgrades were completed.
4. Please give the outage history for the circuits specified in the above three questions during the following calendar periods, running from 0:00 the originating (FROM) date and 23:59 on the final date (TO). Also include the peak wind gust measured at a) the nearest SDG&E weather station and b) the peak wind gust measured at the nearest RAWS station for that circuit.

FROM TO

|  |  |
| --- | --- |
| 12-Feb-15 | 14-Feb-15 |
| 23-Jan-15 | 26-Jan-15 |
| 24-Nov-14 | 26-Nov-14 |
| 30-Apr-14 | 3-May-14 |
| 8-Mar-14 | 10-Mar-14 |
| 2-Feb-11 | 4-Feb-11 |
| 22-Jan-11 | 24-Jan-11 |
| 10-Jan-09 | 13-Jan-09 |
| 9-Dec-08 | 11-Dec-08 |
| 5-Dec-08 | 7-Dec-08 |
| 6-Nov-08 | 8-Nov-08 |
| 12-Oct-08 | 15-Oct-08 |
| 17-Jan-08 | 19-Jan-08 |
| 1-Jan-08 | 3-Jan-08 |
| 21-Oct-07 | 24-Oct-07 |
|  |  |

1. For the circuits described in MGRA-54 through MGRA-57, please give the outage history for the calendar dates July 1 – July 15 for each calendar year from 2007 to 2014. This is intended as a control sample.
2. If advanced reclosers, advanced relays or wireless fault indicators were installed that affect the circuits described in the previous questions, please give the date when the installation of those devices was completed for these circuits.

***The following questions relate to SDG&E’s fire preparedness programs and projects in the previous GRC.***

1. What was the total funding request for fire-related issues during SDG&E’s previous GRC (2012 cycle)?
2. What amount of funding directly related to fire preparedness and prevention was approved for the 2012 GRC request?
3. What amounts have been spent for fire-related issues during the 2012-2015 funding cycle?
4. What specific prevention and preparedness projects were undertaken during the 2012-2015 funding cycle, how much was allocated for them, and how much was spent on them?