### MGRA DATA REQUEST MGRA-SDG&E-DR-04 SDG&E 2016 GRC – A.14-11-003 SDG&E RESPONSE

DATE RECEIVED: MARCH 23, 2015 DATE RESPONDED: APRIL 1, 2015

MGRA-67 Please provide a list of fires associated with SDG&E power infrastructure between 2008 and 2014. Information should be tabular in an Excel spreadsheet and include:

- -Date and time of discovery
- -Associated circuit identifier
- -Approximate final size of fire in acres
- -Fire agency or agencies involved, if any
- -Name of fire given by fire agency, if any.
- -Apparent cause of fire as determined by SDG&E personnel (if under investigation or disputed, enter 'under investigation' or 'disputed')

### **SDG&E** Response:

SDG&E objects to this question, as it requests information that in all or part: is currently part of ongoing litigation, does not cite to funding requested in the current GRC, and seeks electric transmission infrastructure information that is out-of-scope of the GRC (being limited to distribution not FERC transmission) and thus is not reasonably tailored to lead to admissible evidence.

DATE RECEIVED: MARCH 23, 2015 DATE RESPONDED: APRIL 1, 2015

The following questions have to do with SDG&E's response to MGRA-35, which states that: "The FiRM team has moved some projects forward based on updated information on wind speeds and fire risk, and the evaluative methods are also subject to change."

MGRA-68 Please describe what kinds of updated information on wind speeds have led to project reprioritization.

#### **SDG&E** Response:

Since 2009, SDG&E has added 165 weather stations to its service territory. Prior to these weather stations becoming operational, SDG&E was able to get about 30 wind speed reads per hour received from non-SDG&E sources. With the addition of the 165 weather stations, SDG&E receives approximately 990 reads per hour. This is an increase of approximately 3300%. The additional locations and increased volume of data allows SDG&E to better understand known local conditions to allow our engineers to better assess operating conditions and prioritize work, in part, based on this information.

DATE RESPONDED: APRIL 1, 2015

MGRA-69 Please describe what kinds of updated information on fire risk have led to project reprioritization.

#### **SDG&E** Response:

Using the expanded weather data coupled with the review of historical electric system performance data, it was determined that aged copper conductor, splices and connectors represented a higher risk than previously recognized. In addressing these risks, it caused SDG&E to reprioritize projects.

DATE RECEIVED: MARCH 25, 2015 DATE RESPONDED: APRIL 1, 2015

MGRA-70 Please give examples of projects that have been moved forward in prioritization due to updated wind speed and fire risk information, and the justification that was used to move these particular projects.

### **SDG&E Response:**

Examples are copper conductor replacements, splices, rebuilds in high wind areas, upgrading of fuses, long spans, and long spans with dissimilar conductor types. These projects were moved up in priority when SDG&E learned that they represented greater risk than previously recognized.

DATE RECEIVED: MARCH 23, 2015 DATE RESPONDED: APRIL 1, 2015

The following questions are in regard to SDG&E's response to MGRA-37. We requested detailed information on how SDG&E's risk ranking numbers were determined. The response provided little information beyond the fact that the rankings were given by "experienced engineers and field personnel". We are specifically requesting what definitions that SDG&E's engineers and field personnel used in order to determine the ordinal risk ranking. Qualitative definitions or examples are sufficient. We restrict our request to the following risk factors:

MGRA-71 Please define the risk rankings of 0 through 3 used for Fuel.

#### **SDG&E** Response:

The Fire Coordination Team reviewed each line segment for qualitative assessment on fuel ranking. Inputs used were FRAP Fire Threat layer, as well as experience from field knowledge. Scores were assigned on a relative basis for comparative circuit segments in the Fire Threat Zone (FTZ)/Highest Risk Fire Area (HRFA) with zero representing minimal risk and three representing the highest risk.

DATE RECEIVED: MARCH 23, 2013 DATE RESPONDED: APRIL 1, 2015

MGRA-72 Please define the risk rankings of 0 through 3 used for Fire Ignition Risk.

### **SDG&E** Response:

The Fire Coordination Team reviewed each line segment for qualitative assessment on ignition risk. Inputs used were an assessment of field conditions coupled with weather knowledge. Field conditions included the location of line, terrain, and proximity of the line to trees and other vegetation. Scores were assigned on a relative basis for comparative circuit segments in the FTZ/HRFA with zero representing minimal risk and three representing the highest risk.

DATE RESPONDED: APRIL 1, 2015

MGRA-73 Please define the risk rankings of 0 through 3 used for Data Operation Center Risk.

### **SDG&E Response:**

Personnel from each SDG&E operating district ranked line segments based on their operating experience, segment configuration, and their perceived risk assessment. Scores were assigned on a relative basis for comparative circuit segments in the FTZ/HRFA with zero representing minimal risk and three representing the highest risk.

DATE RECEIVED: MARCH 23, 2013 DATE RESPONDED: APRIL 1, 2015

MGRA-74 Please define the risk rankings of 0 through 3 used for Outage History Risk.

### **SDG&E Response:**

Scores were assigned on a relative basis for comparative circuits in the FTZ/HRFA with zero representing a circuit with among the fewest unplanned outages over the previous five years and a score of three representing a circuit that had among the most number of unplanned outages during that period.

DATE RECEIVED: MARCH 23, 2015 DATE RESPONDED: APRIL 1, 2015

MGRA-75 This question is in regard to the SDG&E responses to questions MGRA-13, MGRA-35, MGRA-39 and MGRA-40. We note that response to MGRA-39 states that only 1% of infrastructure had been analyzed by FiRM A-Team in 2014 and 5% more scheduled for 2015. However, analysis of the FTZ Ranking Matrix provided by SDG&E analyzes risk for 3480 miles of line, which corresponds to the entire length of their distribution system as described in their data request responses and testimony. However, the response to MGRA 40 states that 6% of lines meet the new SDG&E standards and specification. Do we assume correctly that the response to MGRA-39 was in error and that the entire distribution network has had a risk assessment by FiRM A-Team (or RIRAT), and that this risk assessment is represented in the FTZ Ranking Matrix?

### **SDG&E Response:**

As stated in response to MGRA 35, the risk matrix that was developed by the RIRAT was used in planning the initial stages of FiRM at the time the GRC forecast was developed. This represented an initial risk assessment within the FTZ.

As stated in the response to MGRA-39, the 6% figure is associated with a more detailed engineering type analysis based on more current information.

3480 miles represents the approximate total miles within the FTZ. It was estimated that 1% of the total miles within the FTZ was analyzed (detailed engineering type analysis) and improved upon based upon updated design criteria in 2014, and approximately 5% will be analyzed and improved in 2015, totaling 6% by the end of 2015.

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MGRA-76 Do we also assume correctly that the 6% number given in the MGRA-40 response corresponds to the fraction of the distribution system that will be upgraded to the new design specifications by the end of 2015?

### **SDG&E Response:**

Yes, based on current forecasts.

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MGRA-77 What is the total cost of the remediation done in 2014 and 2015, corresponding to the 6% of the distribution system as per the previous question?

### **SDG&E Response:**

SDG&E estimates the total direct cost for Fire Risk Mitigation remediation work for 2014 was approximately \$16.5M. Work for 2015 is not complete and therefore data is not available.

DATE RESPONDED: APRIL 1, 2015

MGRA-78 In the FTZ Ranking Matrix as described in SDG&E's response to MGRA-25, there is a column regarding "Reduction in number of customers impacted by safety shutoff plan". Please describe any safety shutoff plan currently implemented, including criteria used for shutoff of power to customers. Please also state why SDG&E believes this power shutoff plan is in compliance with D.09-09-030.

#### **SDG&E** Response:

As noted in the response to MGRA-25, the matrix was developed by the RIRAT and used in planning the initial states of FiRM at the time the GRC forecast was developed. The origins of the matrix can be traced back to the 2008/2009 timeframes when SDG&E began intensively studying fire risk and proposed, via Application (A.) 08-12-021, its Emergency Power Shutoff (EPSO) plan. The subject column was created at that time for this purpose. With the decision rendered in D.09-09-030, SDG&E no longer pursued its EPSO plan and this column became a legacy field that is no longer relevant and has no association with this GRC application.

DATE RESPONDED: APRIL 1, 2015

The following questions are in regard to the Fire Threat Zone ranking matrix.

MGRA-79 Please explain why the FTZ Ranking Matrix provided to the Alliance in response to MGRA-35 has the "Shutoff" column removed.

### **SDG&E Response:**

As explained in the response to MGRA-78, this column is no longer relevant and therefore appropriate for removal.