Southern California Edison

WSD-011 – Resolution implementing the requirements of Public Utilities Code Sections 8389(d)(1), (2) and (4) related to catastrophic wildfire caused by electrical corporations subject to the Commission's regulatory authority

DATA REQUEST SET M G R A - S C E - 0 0 6

To: MGRA
Prepared by: Eric X Wang
Job Title: Senior Advisor - Predictive Analytics/Data Science
Received Date: 3/3/2021

Response Date: 3/8/2021

Question 006:
SDG&E observes the following probabilities for ignitions arising from outages:

5-year Average from 2015 - 2019

	Ignition Rate			
Location	Normal	Elevated	Extreme	ALL
Non-HFTD	1.17%	2.91%	0.00%	1.46%
Tier 2	2.20%	5.07%	10.34%	3.37%
Tier 3	1.62%	4.31%	10.00%	2.74%
HFTD (Tier 2 + Tier 3)	1.92%	4.69%	10.20%	3.07%
System	1.42%	3.91%	6.10%	2.09%

SCE's POI model uses only outages, not ignitions, as input. What assumptions does it make about probability of ignition from any given outage?

Response to Question 006:
SCE's POI model was developed in two steps. The first step is to output the probability of spark-causing outages at sub driver level (e.g., CFO, EFF). Not all sparks-causing outages lead to ignitions, as ignitions may depend on the presence of other factors such as weather and fuels. The second step is to calibrate the output to POI by calibrating against historical fires. The calibration is performed at the sub driver level so that the results reflect the outage to ignition potential. This calibration gives us greater granularity than applying a probability across the entire area. For example, we can estimate total ignitions across a territory as well as estimate ignitions from an equipment failure versus a vegetation contact at a segment or circuit level.