PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4576 May 23, 2013

RESOLUTION

Resolution E-4576.

PROPOSED OUTCOME:

Approves the Advice Letters (AL) of California Pacific Electric Company (CalPeco), Golden State Water Company (Bear Valley Electric Service) (BVES), Southern California Edison Company (SCE), San Diego Gas and Electric Company (SDG&E) and Pacific Gas and Electric Company (PG&E) as meeting Decision (D.) 12-01-032, Ordering Paragraphs (OP) 2 through 5, as filed, except that ALs filed by BVES, CalPeco, PG&E, and SCE are provisionally accepted with the requirement that the updated FPPs they submit with their next updated Emergency Response Plans pursuant to GO 166 comply fully with OP 5(i), or, alternatively, they file a petition to modify OP 5(i). SDG&E shall clarify its language to affirm its compliance with OP 6 by substitute sheet. Does not approve or disapprove the contents of the Fire Protection Plans attached to the ALs.

SAFETY CONSIDERATIONS: The CPUC recently revised General Order (GO) 95 to provide higher standards for power line designs in fire prone areas. GO 95 generally does not require upgrading of existing facilities to new design standards; Fire Protection Plans as part of the Emergency Plans under GO 166 were ordered for additional safety. The detailed FPPs provide the CPUC assurance that the IOUs have previously existing policies, such as vegetation management, and some new processes in place to minimize and mitigate the risk of power-line ignited fires.

ESTIMATED COST: Not determinable.

By Advice Letters (filed date): BVES 275-E (December 27, 2012), CalPeco 24-E (December 31, 2012), SCE 2828-E (December 20, 2012),

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SCE 2828-E, SDG&E 2429-E,

PG&E 4167-E/wmb

SDG&E 2429-E (December 7, and substitute on December 10, 2012) and PG&E 4167-E (December 21, 2012).

Pacific Power (PacifiCorp) AL 483-E is not subject to this resolution because it met the criteria in OP 3 for not requiring to file a Fire Protection Plan.

SUMMARY

This Resolution approves the instant ALs as complying with D.12-01-032, OPs 2 through 5 and 16, as applicable, which require the submittal of Fire Protection Plans. This resolution does not approve the contents of the Fire Protection Plans. These Fire Protection Plans will be incorporated into the annually submitted Emergency Action Plans/Reports of the Investor Owned Utilities (IOU) under GO 166. The ALs filed by BVES, CalPeco, PG&E, and SCE are provisionally accepted with the requirement that the updated FPPs they submit with their next updated Emergency Response Plans pursuant to GO 166 comply fully with OP 5(i), or, alternatively, they file a petition to modify OP 5(i). SDG&E is required to revise its Fire Protection Plan to clarify that proactive power shut off as a fire prevention measure will only be considered in accordance with OP 6 of D.12-01-032. PG&E must continue to file its FPP for its entire service area.

BACKGROUND

The California Public Utilities Commission (CPUC) initiated Rulemaking (R.) 08-11-005 on November 6, 2008, entitled "Order Instituting Rulemaking to Revise and Clarify Commission Regulations Relating to the Safety of Electric Utility and Communications Infrastructure Provider Facilities." The Rulemaking has been divided into three phases. Phase 1 was focused on fire-prevention measures that could be implemented in time for the 2009 fall fire season in Southern California. Phase 1 concluded with the issuance of D.09-08-029. In Phase 2, the CPUC considered additional new measures to reduce fire hazards associated with overhead power line facilities and communication facilities. Phase 2 concluded with the issuance of D.12-01-032 on January 12, 2012. In D.12-01-032, the CPUC also established Phase 3 of the proceeding for the purpose of developing and adopting additional safety measures and fire-threat maps. Phase 3 of this proceeding is currently in progress.

These ALs are submitted in response to the CPUC's Phase 2 decision. In addition to modifying GO 95, 165, and 166, D.12-01-032 requires IOUs in Southern

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AL CalPeco 24-E, BVES 275-E, SCE 2828-E, SDG&E 2429-E,

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California to file a Fire Protection Plan (FPP). Specifically, OP 2 of D.12-01-032 states:

"Each investor-owned electric utility in Southern California shall (i) prepare a fire prevention plan, and (ii) file and serve a copy of the fire-prevention plan by December 31, 2012, via a Tier 1 compliance advice letter."

OP 3 of D.12-01-032 further orders IOUs in Northern California to take the steps identified below to determine the risk of catastrophic fires originating at power lines in their service territories and prepare a FPP, if necessary and submit it by a Tier 1 AL, or provide notice that a FPP is not required.

- i. Identify overhead power line facilities in high fire-threat areas on the fire-threat maps adopted.
- ii. Make a good-faith effort to obtain historical records of Red Flag Warnings in the areas identified in (i), above.
- iii. Make a good-faith effort to obtain historical wind records from automated weather stations within 25 miles of the areas identified in (i), above.
- iv. Estimate the frequency of 3-second wind gusts occurring during Red Flag Warnings exceeding the maximum working stress specified in GO 95, Section IV for facilities identified in i.
- v. Develop a FPP if the steps above result in reasonably foreseeable determination that the probability of exceeding the working stress for subject facilities is 3% or more during a 50-year period.

OP 4 orders Fire Protection Plans to address situations where all three of the following conditions occur simultaneously: (i) 3-second wind gusts exceed the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire threat area.

OP 5 requires an explanation of how the IOUs will identify the exceedance of the structural or mechanical design standards for overhead power-line facilities and the countermeasures the IOU will implement to mitigate the threat of fire ignition.

OP 6 requires IOUs that intend to shut off power as part of their FPP to file this request in an application and include a cost-benefit analysis in accordance with D.09-09-030.

OP 16 defines Southern California as Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. Northern California is defined as all other counties in California.

NOTICE

Notice of subject ALs was made by publication in the Commission's Daily Calendar. The IOUs state that copies of the Advice Letters were mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

On January 7, 2013, all the subject Advice Letters (CalPeco, BVES, SCE, SDG&E and PG&E) were protested by the Mussey Grade Road Alliance (MGRA), although its protest was filed late for SDG&E's AL 2429-E.

SDG&E's AL was further protested late by CPUC's Safety and Enforcement Division (SED) on January 8, 2013. SDG&E's AL was not protested as such by Pacific Bell Telephone Company d/b/a/AT&T California (AT&T) on December 27, 2012, rather AT&T requested an amendment. PacifiCorp's AL was not protested.

On January 9, 2013, SDG&E on behalf of PG&E, SCE and BVES requested an extension of time to January 24, 2013, to jointly reply to the protests. Additionally, on January 10, 2013, CalPeco, and on January 11, 2013, PG&E requested an extension of time to January 24, 2013.

On January 15, 2013, the CPUC Executive Director granted the extensions. On January 14, 2013, CalPeco replied to MGRA's protest. On January 15, 2013, SDG&E replied to MGRA's and SED's protests. On January 16, 2013 SCE replied to MGRA's protest. On January 17, 2013, BVES replied to MGRA's protest. On January 24, 2013, PG&E replied to MGRA's protest.

SDG&E did not file a response to AT&T's request to amend the AL.

DISCUSSION

IOU PROPOSALS

Below is a summary of each IOU's FPP.

BVES

The FPP describes the inventory of the organizational and operational activities that BVES undertakes in order to address the risk of fire in its service territory. According to the CalFIRE map, BVES distribution lines are predominantly located in the Fire Threat Zone and Very High Risk Areas. BVES complies with GO 165 and the GO 95 vegetation clearance rules. Detailed inspections of facilities include verifying vegetation clearances, open wire secondary clearances, breaks and corona effects on cross-arms, rotten poles, leaking transformers, sagging wires, etc. Defects are prioritized for repair and those posing ignition risk in high fire threat areas must be corrected within 30 days. At least once a year inaccessible transmission lines are patrolled by helicopter.

Preventive measures are based on Red Flag Warnings, National Weather Service broadcasts and US Forest Service warnings. Each summer a lightly loaded major transmission line in heavily forested areas is de-energized to prevent potential fire ignition.

During Red Flag Warnings field personnel will patrol overhead lines to check if they are safe and that vegetation and debris are cleared. Reclosers will be set to non-reclose operation at wind speeds above 48 mph. Circuit portions that have cleared a fault are entirely patrolled before restoring service.

The plan describes the personnel responsibilities. Engineering will continue evaluating materials and methods to reduce the fire risk. Training in all aspects of operation is performed.

BVES' FPP is part of the Bear Valley Community Wildfire Protection Plan (WPP) developed by local, county and state fire and forestry departments. The WPP contains 13 fire mitigation measures.

CalPeco

Since CalPeco's territory lies in Northern California, it first assessed whether an FPP was required. It found that until calculations can determine that each

specific facility in Threat Zones 3 and 4 on the REAX maps passes the criterion in OP 3, v., a FPP is required. (The maps were composed from CalFIRE maps by REAX Engineering, Inc. commissioned by the California Communication Infrastructure Provider (CIP) Coalition for their infrastructure collocated with power lines.)

The FPP describes the operating measures taken during Red Flag Warnings, including increased inspections and patrols of the circuits depicted in attached REAX maps if the wind gusts exceed 76.5 mph. Some of the counter measures taken to reduce the risk of fires are placing reclosers on "fire settings", i.e., discontinuing discretionary maintenance and vegetation management activities, but de-energizing circuits only if no customer requires service, and the CPUC approves an application to do so.

Other measures taken are evaluating of field patrol/inspection information to be used to verify the adequacy of installed equipment and configurations, installing inter-phase spacers and anti-galloping devices, reducing span length, replacements/upgrades, increasing vegetation clearances and monitoring standards and regulatory changes.

SCE

The plan applies during Red Flag Warnings, regardless of measured wind speed, the areas affected and wind speeds exceeding design criteria of the facilities. From the period December 1 to September 30, when a Red Flag Warning is in effect, a relayed line section's recloser feature is disabled until the section is patrolled and the Red Flag Warning period ends.

From October 1 to November 30, the reclosing features of non-automatic circuits are disabled. A line patrol is not required. During Red Flag Warning periods relayed and subsequent line sections are patrolled until the fault is found. On reenergized lines or line sections the reclosing features remain disabled.

Remote controlled automatic circuits' reclosers will be disabled during Red Flag Warning periods. Relayed lines or sections will be patrolled prior to reenergizing and the reclosing feature disabled.

Fire management representatives confer with local, county, state and federal fire agencies. Additionally, certain transmission and distribution personnel have been trained as Fire Watchers. Overhead lines and structures are designed to

GO 95 standards and may be strengthened based on predictive models or studies. A supplemental design criterion is applied to lines in high fire threat and wind areas.

Aircraft may assist ground patrols and inspections performed per GO 95 and GO 165.

Vegetation management is coordinated with local, county and state fire agencies before the fire season.

SDG&E

SDG&E FPP provides a comprehensive inventory of the organizational and operational activities SDG&E undertakes in order to address the risk of fire in its territory.

The FPP is subject to the direct supervision of management and its effectiveness is a performance measure for many employees directly or indirectly responsible for the activities in the FPP.

SDG&E owns 145 weather stations, one of the largest private networks in the country. It will mobilize appropriate resources, including trained firefighters, communication and command facilities.

SDG&E describes its FPP as a living document being updated in coordination with community leaders and the public.

Although SDG&E records "three-second gusts", this information is not used as the single data point to put in place its many programs to prevent fire.

Minimizing sources of Ignition:

SDG&E developed the Fire Threat Zones and High Risk areas in its territory as easily understood, contiguous and constantly bound conservatively inclusive maps that were derived from Cal FIRE maps and its own expert knowledge of the areas of highest risks (schools, hospitals and homes, etc.), weather stations, vegetation and Geographic Information System (GIS). The maps are annually updated.

Using these maps SDG&E evaluates prudent and cost-effective system improvements to reduce the risk of its facilities to cause fires. To this end

SDG&E's system design manual was modified with proactive and reactive measures, e.g. fuses that trip at lower current. Other activities include: participating in revision of GO 95, replacement of wood poles with steel towers, undergrounding and replacement of facilities are other activities being performed. State-of-the-art pulse and SCADA operated reclosers are tied to fire-related operational schemes and allow managing the system with fewer fire risks from high energy activated reclosers. Rotating high-resolution cameras are installed on towers in Fire Threat area portions of the Sunrise Power Link 500 kV transmission line. Testing and deploying emerging technologies and more stringent inspection and repair programs are further conducted to minimize the potential for fires. The Reliability in Rural Areas Team (RIRAT) oversees the evaluation and approval of various system improvements and capital projects specifically from the perspective of minimizing fire risks in rural areas.

Operational practices:

In the Fire Threat Zones and Highest Risk Areas the frequency of facility patrols required by GO 165 is increased to once a year, the detailed inspections are performed every three years and the Quality Control and Quality Assurance improved. Work orders are then issued and other parties (e.g. CIPs) using SDG&E's structures are notified of required repairs, which will be followed up. The goal is to repair all equipment before September 1 of each year, subject to permits obtained.

Besides monitoring all 400,000 trees near SDG&E's power lines, the almost 100,000 trees in the Highest Fire Risk Areas are undergoing a second periodic inspection and hazard evaluation. Trimming is completed prior to September 1. A tree safety program assists customers. The vegetation clearance is increased from 10 to 11 feet for 35,000 poles with "non-exempt" attachments which could become a source of ignition, and/or the "non-exempt "attachments are replaced.

A new "Telecommunication Equipment Attachment Management System" (TEAMS) provides a web-based communication link between SDG&E and CIPs, including record keeping. This provides input for pole loading calculations and for tracking necessary repairs.

Specific fire threat workforce training and field practices are incorporated in the Electric Standard Practice Procedures (ESP 113.1) organized by the principles of the Incident Command System.

SDG&E has developed a high-resolution weather data base focusing on the Fire Threat Zones and Highest Risk Fire Areas. Two fulltime meteorologists assign four levels of operating conditions to regions of SDG&E's territory, which govern recloser settings, communication and personnel actions. A Red Flag warning triggers activation of the Emergency Operations Center.

SDG&E has developed a Fire Potential Index as a tool for making operational decisions, based on dead to live fuel moisture ratio and weather conditions.

During an elevated wind operating condition or Red Flag Warning period, crews stand by for immediate response to fire threat and field personnel patrol circuits suffering forced outages. SDG&E resources are also made available to public agencies for fire suppression and recovery.

SDG&E employs a full time staff of fire coordinators and contractors as needed. Five wildland fire-suppression engines are provided to SDG&E during the fire season. Additional engines are available. A helicopter and a full-time Industrial Fire Brigade are contracted for firefighting.

SDG&E's comprehensive community outreach and public awareness program includes partnering with fire-fighting agencies, volunteer and charitable organizations, a safety website and grants.

PG&E

Taking the steps in OP 3, PG&E determined that a FPP is not required for its entire service area but nonetheless submitted one. PG&E states that according to records of Remote Automated Weather Stations (RAWS) at Vandenberg Air Force Base and Figueroa, none of PG&E's facilities in Santa Barbara County, located in High Fire Threat areas on the REAX map, exceed the maximum working stresses specified in GO 95. PG&E prepared a Special Fire Threat Zone Plan addendum for Santa Barbara County to comply with OP 16.

Plan Components:

- Annual electric safety training for first responders of law enforcement, fire, public works and transportation agencies. Exercises and plan sharing.
- Gathering of weather and fire intelligence from national and state agencies.

Threat Mitigation:

- Vegetation management.
- Overhead patrols and inspections per GO 95 and GO 165.
- Operational readiness during High Risk Conditions for working and operation.
- Daily and weekly dissemination of fire threat conditions to personnel.

Pro-Active Responses to Fire Incidents:

- Support of firefighting efforts through allocation and procurement of personnel from unaffected areas and outside sources.
- Mobile communication and coordination centers.
- Pole treatment with wildland fire chemicals.
- Vegetation clearing/fuel reduction ahead or fire.
- Assistance with de-energizing lines.

Post Incident Recovery:

- Critique of incident after Operations Emergency Center activation and review of plans.
- Additional clearing of burned trees.
- Silt control and water bar construction in burnt areas.
- Cleaning of insulators.

Additional Measures taken in Santa Barbara County Special Fire Threat Zones:

- Vegetation management in State Responsibility Areas (SRA) or line sections in "Extreme" and "Very High" fire threat zones in Local Responsibility Areas (LRA) will include increased clearances from GO 95 requirements year-round.
- Overhead distribution facilities in rural areas in "Extreme" and "Very High" fire threat zones will be patrolled every year instead of every two years.

PROTESTS

The following parties filed protests:

MGRA

MGRA contends that the CPUC should reject all the FPPs on grounds that they fail to comply with the Decision's OPs 2 through 6 and may not be in compliance with D.09-09-030 regarding shut-off plans.

MGRA questions if the FPPs consider a "worst case" weather event (defined in D.12-01-032) and if such an event would lead to catastrophic fire ignition. MGRA quotes an SDG&E statistic showing that the number of outages in its electrical system increased exponentially with the wind gust speed. Electrical faults causing outages often result in arcing capable of igniting fires. Given that the American Society of Civil Engineers (ASCE) assigns the highest risk Level IV to structures whose failure could pose a substantial risk to the community, the great harm that multiple fires could pose clearly applies to this case. MGRA admits that the CPUC is not bound by the ASCE design criteria. None of the FPPs would prevent the "worst-case" weather event from resulting in catastrophe.

Exeedance Frequency:

MGRA credits that only PG&E attempted to estimate the worst-case risk per OP 3.v, but contends that it did so incorrectly by rationing off the 33 hours of observations in which the maximum working stress was exceeded against the approximately 200,000 Red-Flag warnings in 10 years. The probability of exceedance that an event will happen during a certain period of time is met in PG&E's case by 100% because the wind gust resulting in stress that exceeds the design criterion was met more than once (actually 33 times) within only 10 years, not by the probability of only 3% in 50 years specified in OP 3. Furthermore, summing correlated data (a weather event can affect many weather stations at the same time) cannot be used to predict probabilities. However, longer observed time periods can improve accuracy. MGRA stated that PG&E is subject to filing of an FPP for its entire service area.

Recognition of Extreme Fire Weather and Gusts:

MGRA finds that only SDG&E's network of weather stations allows countermeasures to be taken in extreme conditions. BVES only monitors National Weather Service forecasts and US Forest Service Red Flag warnings. This is not geographically precise for operation. While SCE does not consider application of wind gust information necessary because it applies the FPP during all Red Flag warnings, it does not address prevention of fires under historical "worst-case" conditions. MGRA says that PG&E incorrectly believes it does not need to prepare an FPP.

MGRA asserts that the use of automatic reclosers constitutes the IOUs' only mechanism for dealing with an extreme event that exceeds design criteria.

Reclosers:

MGRA faults all IOUs for only employing high current triggered reclosers and relays to turn off faulted line sections. Low impedance faults can still lead to ignition of fire over long time. The initial fault can still cause a fire. Disabling the reclose function can be a de facto power shut off which would require an application to be filed. Reliance on reclosers only is not compliant with the intent of D.12-01-032. ASCE Standard 7-10 would require structure designs to withstanding 116 mph wind gusts. Otherwise, MGRA contends, the IOUs are required to have contingency plans to prevent damage from power line caused fires.

Shut-Off:

MGRA says that sensitive (low current) recloser settings can result in de-facto shut-off of power at low wind speed. The CPUC should monitor all extended outages to determine if automatic shut-off is being used to compensate for substandard engineering, maintenance and vegetation management. MGRA refers to Phase 3 of R.08-11-005 which may determine how much risk of wildfires during wildfires during extreme weather conditions should be eliminated by using more rigorous engineering standards. It agrees with SED interpretation of GO 95 that wind speed of 92 mph should not result in failure of facilities. Above this limit, power shut-offs subject to CPUC review would satisfy prior CPUC decisions, as would a prior application that included a cost/benefit analysis.

<u>SED</u>

SED's protest focuses on two issues of SDG&E's AL. First it takes issue with the notion that SDG&E seeks "approval" of the FPP, when D.12-01-032 merely required the IOUs to "demonstrate" that they had developed such plans. The CPUC did not specify any particular countermeasure to mitigate the threat of power-line fire ignition. D.09-09-030 requires a collaborative process for developing a FPP, and if efforts fail, to submit a FPP by application.

Second, SED objects to the statement in the FPP that reclosers provide SDG&E the ability "whenever and wherever the risk of fire is high" to de-energize a line or circuit. D.12-01-032 requires an application and cost/benefit analysis if an IOU plans to shut off power to mitigate the risk of fire. SED contends that the AL process should not be used as a backdoor pre-approval for power shut-offs in lieu of the CPUC's authority to decide on granting an exemption from liability at that time.

SED states that SDG&E's AL should be rejected or amended so that it properly reflects the relevant decisions.

AT&T

AT&T does not protest SDG&E's AL. Rather, AT&T uses this occasion to request that the TEAMS web-based communication process with CIPs be amended to have SDG&E share its relevant load calculations and also allow copper wire attachments. AT&T furthermore requests that the AL should state that above and any other near-term issues related to TEAMS should be cooperatively resolved with AT&T.

REPLIES TO PROTESTS

CalPeco

CalPeco disagrees with MGRA's assertion that only SDG&E's weather station network is capable of identifying extreme weather conditions. D.12-01-032 does not require CalPeco to create its own weather stations. It only requires showing how this identification is done. Patrols beginning when gusts reach 90% of the minimum wind loading limits will allow CalPeco to take countermeasures to mitigate the risk of ignition of fires. MGRA is trying to relitigate the scope of the FPP by expanding the requirements to prevent ignition under worst case (1700 year recurrence) conditions. This requirement is not articulated in D.12-01-032.

CalPeco lists six (6) operational and five (5) physical countermeasures, not just recloser operation, to mitigate the threat of power-line fire ignition; MGRA's protest should therefore be rejected.

BVES

BVES objects to MGRA's claims that "worst case" scenarios need to be prevented because the decision has considered MGRA's contention and specified the conditions for the operational plan for mitigation of fire threats. BVES goes beyond those specifications and applies the plan regardless of wind speed during Red Flag Warning conditions and whether or not wind speeds in the area exceed design criteria, and takes specified actions regardless if Red Flag Warnings exist in high fire threat areas.

Southern California's IOUs are required to develop FPPs regardless of whether or not the probability of wind speeds exceeding the design loading during

wildfires is over 3% in 50 years. Therefore MGRA's protest that BVES has not estimated the worst case risk is unsupported, BVES says.

Due to its size, BVES relies on Red Flag Warnings from federal, state and surrounding communities to take operational countermeasures. In recognition of MGRA's statement that operational countermeasures can cause physical and financial harm to residents, D.12-01-032 states that these countermeasures should ideally be evaluated by a cost/benefit analysis when much greater harm from power-line fires is the likely consequence of inaction. BVES says that gold-plating the countermeasures would, without including a cost/benefit analysis, be contrary to this statement.

BVES says that MGRA's protest does not meet any of the Energy Division Rule 7.4.2 criteria and should therefore be rejected.

SCE

SCE replies that MGRA does not and cannot explain how each of its claimed non-compliance items is tied to any requirement of D.12-01-032 because no such connection exists. SCE's FPP applies regardless of wind speed and no determination is required if design criteria are exceeded before the actions to mitigate the threat of fire ignition from overhead lines are implemented. Therefore SCE's FPP meets OP 2, 4 and 5.

MGRA tries to relitigate its position that the IOUs prepare for "worst case scenarios". D.12-01-032 does not contain the actual phrase "worst case" nor imply that IOUs must develop operational contingencies for "worst case" weather events.

SCE says that MGRA's positions do not constitute a valid protest per GO 96-B, General Rule 7.4.2.

SDG&E

SDG&E echoes the other IOUs' replies to MGRA's protest that D.12-01-032 did not order specifically that the "worst case "scenario is addressed in the FPPs. With its multi-level approach for examining, measuring and reacting to the risk that its system creates an ignition source, SDG&E believes that its FPP not only meets but exceeds the requirements of GO 166, Standard 1.E.

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Resolution E-4576 AL CalPeco 24-E, BVES 275-E, SCE 2828-E, SDG&E 2429-E, PG&E 4167-E/wmb Reclosers:

SDG&E rejects MGRA's contention that turning off section reclosers and relays constitute the only mechanism for dealing with extreme events. Personnel are employed to patrol the system and observe field conditions. Crews are stationed at strategic locations to respond expediently.

Shut-Off:

Countering MGRA's concern of the lack of detail regarding shut-off, SDG&E refers to D.09-09-030 which provides that SDG&E would de-energize a circuit only in an emergency situation where public safety is in jeopardy.

SDG&E replies to SED's protest of using the word "approve" in conjunction with the instant AL is that it was not an optional filing and as such "approve" is the customary language. It would however not object to the CPUC finding the AL merely "in compliance".

SDG&E counters that SED had admitted that the CPUC noted that IOUs have authority under PUC 451 and 399.2(a) to shut off power in emergency situations when necessary to protect public safety. SDG&E also notes that D.12-01-032 anticipated use of reclosers as one of the countermeasures to the risk of fire at high wind speeds. SED does not explain how it would be possible to use reclosers as fire prevention countermeasures without interrupting power on a particular circuit. SED's comment is illogical and inconsistent with D.12-01-032, SDG&E concludes.

PG&E

PG&E maintains that it has complied with OPs 2 through 5 of D.12-01-032. It mentions that MGRA overlooks the fact that PG&E did submit an FPP which should moot the contention that MGRA considers PG&E's determination of not needing to do so faulty. PG&E does not rely on a "recloser only" strategy but lists a variety of other countermeasures to mitigate fire threats, including operational restrictions. PG&E considers the current FPP an interim step of a living document. It refers to Phase 3 of R.08-11-005 which may revise the fire threat maps and require additional design criteria. PG&E states that if the CPUC wanted to invoke the ASCE standards it would have done so. PG&E believes that he CPUC intended Northern California IOUs develop a FPP if there was a reasonable risk of ignition, not if there was a risk at all. PG&E does include proactive shut off of power as part of its FPP.

ANALYSIS

D.12-01-032 did not state that the FPPs would be subject to CPUC approval. Therefore it assigned a Tier 1 to the ALs. Because policy issues were raised in the protests that require the exercise of discretion, the ALs cannot be approved without a vote of the CPUC. Presenting this resolution to a CPUC vote should not in any way be construed as approving or disapproving the contents of the FPPs attached to the ALs. This resolution addresses the question whether the IOUs complied with D.12-01-032.

D. 12-01-032 specified the FPPs shall be updated annually as part of the GO 166 emergency plan requirements. If the IOUs are ordered in any related proceeding to alter the requirements of such plans, they shall update their FPPs accordingly.

Having said above, we agree with MGRA's reasoning that PG&E's determination that a FPP was not required is faulty. Nonetheless, PG&E submitted a FPP for its entire service area with an addendum for Santa Barbara County in compliance with OP 16. It further explained that this plan is continually being refined.

We therefore consider all respondent IOUs compliant with OP 2 and 3. Because of PG&E's faulty determination for not being required to submit a FPP for its entire service area PG&E shall remain subject to maintaining its "voluntarily" submitted FPP.

Northern California IOUs conservatively based the determination for submitting FPPs on only one or two of OP 3's required criteria occurring simultaneously and comply with OPs 4 and 5(i).

We also find that the FPPs will apply regardless of wind speed and no determination is required if design criteria are exceeded before the specified actions to mitigate the threat of fire ignition from overhead lines are implemented.

The FPPs specify to various degrees the countermeasures the IOUs will implement to mitigate the threat of power-line fire ignition. These countermeasures are operational and physical. This complies with OP 5(ii).

Only SDG&E's AL was protested by SED on grounds that it is not compliant with OP 6 of D.12-01-032, as it purports to seek approval of the FPP, including plans for pro-actively shutting off power without prior filing of an application including a cost/benefit analysis.

As explained above, this resolution only approves compliance with the relevant OPs of D.12-01-032, not the contents of the FPPs, which were not specified in D. 12-01-032.

SDG&E's FPP states on Page 15 that SDG&E may "de-energize selected segments of the system whenever and wherever the risk of fire is high," but it is not clear as to whether the action would be subject to CPUC's retroactive reasonableness review or relieve SDG&E from liability. Thus, we ask SDG&E to clarify by substitute sheets the relevant sections in its FPP to note that any plans for proactive shut-off of power to prevent the risk of fire ignition from its facilities would only be included in compliance with D.12-01-032, OP 6.

The other purported appearance of power shut off language that was protested is found in the table on Page 25, which contains the phrase, "All reclosers will be turned off". It is clear from the context that it properly should read, "All reclosing functions will be de-activated", meaning the power stays on until the recloser contact opens at its setting and stays so until closed by an operator.

Since D.12-01-032 did not specify the contents of the FPPs, we consider AT&T's request out of scope, but we agree with the request that SDG&E should consider furnishing relevant load calculations for jointly used power line structures to AT&T and permit applications for attachments involving copper wires.

COMMENTS

Public utilities code section 311(g) (1) generally provides that resolutions must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the CPUC. Accordingly, this draft resolution was mailed to parties for comments, to be placed on the CPUC's agenda no earlier than 30 days from the mailing.

Timely comments and replies to others' comments were received from PG&E, SDG&E, and MGRA. SCE and BVES did not file comments but reserved the ability to provide reply comments, which they did. After reviewing the draft resolution, SED did not file comments or a reply.

MGRA requested corrections to certain characterizations of its original protest, which are now incorporated in this Resolution. Additionally, MGRA sought a determination that, for various reasons, the Advice Letters – with the exception of SDG&E and CalPeco – be rejected.

MGRA contended that the Draft Resolution was in error in its finding that the Advice Letters are in compliance with OP 4 & 5, which the group maintains require certain content of the FPPs to address "worst case" weather conditions, not simply a requirement that FPPs be filed.

MGRA further sought the ordering of an annual planning process, as well as a qualitative assessment by the Commission of countermeasures described in the FPPs before approval of the Advice Letters, plus a directive that the FPPs be coordinated with an ongoing rulemaking process.

Alternatively, MGRA offered that the Commission could accept the ALs "provisionally" but that they be revised as described above when resubmitted in December 2013 as part of the annual GO 166 cycle.

Additionally, MGRA objected to the option provided to SDG&E to either clarify language related to use of reclosers, or to delete the language. SDG&E had already agreed to deleting the sentence in question.

In replies to MGRA, the IOUs countered that their ALs comply with the Decision and its OPs. PG&E wrote that MGRA "fundamentally misunderstands the function of the submitted advice letters" and is incorrect in its position that the Resolution should approve or disapprove the contents of the FPPs.

SCE and BVES replied that their FPPs include standards that apply regardless of extreme wind speed or wind gusts, and they should not be required to undertake additional steps to evaluate or determine wind speeds prior to activating their measures.

The IOUs also argued against imposition of additional requirements as being "burdensome and ambiguous" because they go beyond D.12-01-032.

Discussion:

The final Resolution adopted by the Commission includes several corrections requested by MGRA.

MRGA notes that OP 4 requires FPPs to address situations where all three of the following conditions occur simultaneously: (i) 3-second wind gusts exceed the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire-threat area. MGRA mistakenly asserts that most of the ALs fail to identify the specific countermeasures that will be implemented to address the extreme fire-weather conditions listed in OP 4. What MGRA inexplicably overlooks is that the FPPs identify in some detail the countermeasures that will be implemented, including countermeasures applicable to "worst case" weather conditions. These countermeasures are summarized previously in this Resolution.

MGRA argues unpersuasively that this Resolution fails to analyze the quality of the countermeasures contained in the FPPs. According to MGRA, "if a utility were to claim that putting garden gnomes on top of utility poles constituted operational and physical countermeasures, this could apparently be in compliance with the Draft Resolution's interpretation of OPs of D.12-01-032." As we explained previously, D.12-01-032 provides that "[e]ach utility should implement the countermeasures it deems appropriate for its circumstances.¹" Therefore, it is beyond the scope of this Resolution to analyze the quality of the countermeasures contained in the FPPs. We note, however, that the utilities have taken their responsibility to develop FPPs seriously. There is nothing in the FPPs that can be fairly compared to putting garden gnomes on top of utility poles. Ironically, MGRA complains that certain countermeasures (reclosers) may provide too much fire protection in some instances at the expense of service reliability.

MGRA is on firmer ground when it argues that all the FPPs except SDG&E's fail to address the requirement in OP 5(i) to specify how the utility will identify the

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¹ D.12-01-032 at page 51.

occurrence of 3-second wind gusts that exceed the structural or mechanical design standards for overhead power-line facilities. The utilities in question contend that it is unnecessary to comply with OP 5(i) because the FPPs apply regardless of wind speed. We find that although there may be some merit to the utilities' position, they should not have used their Tier 1 compliance advice letters as the procedural vehicle to obtain a waiver from OP 5(i). To resolve this matter, we will provisionally accept the ALs filed by BVES, CalPeco, PG&E, and SCE with the requirement that the updated FPPs they submit with their next updated Emergency Response Plans pursuant to GO 166 comply fully with OP 5(i), or, alternatively, they file a petition to modify OP 5(i). If they choose the latter, we will continue to accept on a provisional basis the FPPs included in their updated Emergency Response Plans pending the disposition of the petition to modify.

It appears that MGRA's underlying concern is that all the FPPs except SDG&E's do not do enough to address the extreme fire-weather conditions listed in OP 4. We agree that SDG&E's FPP provides a reasonable model for the other utilities. We expect the other utilities to follow SDG&E's lead and work aggressively to put into place a comprehensive suite of countermeasures to better address the extreme fire-weather conditions listed in OP 4.

FINDINGS

- 1. D.12-01-032, OPs 2 and 3 do not require CPUC approval of the FPPs, only filing and serving such by Tier 1 ALs. The contents of the FPPs are therefore not approved by this resolution.
- 2. PG&E must maintain an FPP for its entire service territory.
- 3. All IOUs' ALs have complied with D.12-01-032, OPs 2 and 3.
- 4. Because Northern California IOUs were unable to correlate all conditions that D.12-01-032, OP 3 specifies to occur simultaneously when determining the need for a FPP, they conservatively considered only one or two to occur simultaneously.
- 5. The FPPs specify operational and physical countermeasures the IOUs will implement to mitigate the threat of power-line fire ignitions in compliance with D.12-01-032, OP 5(ii).
- 6. The FPPs submitted by BVES, CalPeco, PG&E, and SCE do not comply fully with OP 5(i).

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AL CalPeco 24-E, BVES 275-E,

SCE 2828-E, SDG&E 2429-E,

PG&E 4167-E/wmb

- 7. SED protested SDG&E's AL because it uses the word "approval" of the FPP and intends to shut off power without filing an application required by D.12-01-032, OP 6.
- 8. To clarify the power shut-off concern by SED, SDG&E should add reference to the requirements of D.12-01-032, OP 6 in the appropriate sections of its FPP where proactive shut-off is planned.
- 9. In SDG&E's FPP the phrase "Turn off of reclosers" should be changed to read "Disable reclosing function" to avoid misconstruing it with "power shut-off".
- 10. AT&T's request for reciprocity of pole loading calculation information is out of scope of this resolution, however should be considered by SDG&E.
- 11. FPPs shall be updated annually as part of the GO 166 emergency plan requirements. If the IOUs are ordered in any related proceeding to alter the requirements of such plans, they shall update their FPPs accordingly.
- 12. SDG&E's FPP provides a reasonable model. BVES, CalPeco, PG&E, and SCE should follow SDG&E's lead and work aggressively to put into place a comprehensive suite of countermeasures to better address the extreme fire-weather conditions listed in OP 4. Of D.12-01-032.

THEREFORE IT IS ORDERED THAT:

- 1. The ALs filed by BVES, CalPeco, PG&E, and SCE are provisionally accepted with the requirement that the updated FPPs they submit with their next updated Emergency Response Plans pursuant to GO 166 comply fully with OP 5(i), or, alternatively, they file a petition to modify OP 5(i).
- 2. SDG&E's AL is conditionally approved subject to the following: within 10 days of effective date of this resolution, SDG&E shall clarify its statement in the FPP on Page 15 that, "These reclosers provide SDG&E's operator with the ability to intervene, whenever and wherever the risk of fire is high, to deenergize selected segments of the SDG&E system ..." A statement to the effect that this planned action would only be considered after complying with the requirements of D. 12-01-032, OP 6 must be added. As an alternative, the phrase may be deleted.
- 3. PG&E shall maintain its FPP in accordance with D.12-01-032, OPs 2 through 5 for its entire service area.
- 4. This resolution does not approve any of the FPPs attached to the ALs.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 23, 2013; the following Commissioners voting favorably thereon:

/s/PAUL CLANON
PAUL CLANON
Executive Director

President

MICHAEL R. PEEVEY

President

MICHEL PETER FLORIO

CATHERINE J.K. SANDOVAL

MARK J. FERRON

CARLA J. PETERMAN

Commissioners