Application No.: Exhibit No.: Witnesses: A.24-10-002 SCE-11 M. Backstrom D. Ford C. Lautenberger S. Menon



(U 338-E)

Woolsey Fire Cost Recovery Application – Rebuttal Policy Testimony

Before the

Public Utilities Commission of the State of California

Rosemead, California July 15, 2025

SCE-11: Woolsey Fire Cost Recovery Application – Rebuttal Policy Testimony

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INTRODUCTION

I.

Two parties submitted prepared testimony in response to SCE's application and testimony in this proceeding: the Public Advocates Office (Cal Advocates) and Energy Producers and Users Coalition (EPUC) (collectively, "Intervenors"). Through this rebuttal testimony, SCE identifies key flaws in Intervenors' testimony and highlights the heavy reliance on hindsight in their review of the record.

Cal Advocates presents multiple volumes of testimony describing the history of utility-associated wildfires in SCE's service area, all of which simply prove the following points:

First, high-voltage electrical equipment can pose an ignition risk, and that risk is elevated when wildfire risk is elevated (i.e., during times when the local National Weather Service office has issued a Red Flag Warning for the area). As discussed below, SCE has long recognized the risk of wildfires and the risks specific to the electric utility industry, and SCE manages its systems to reduce that risk, as described in more detail in SCE-01, SCE-03, and SCE-12, Vols. 1-4.

Second, the area where the Woolsey Fire ignited has previously experienced wildfires and Red Flag Warning conditions, particularly during the fourth quarter of the calendar year. As SCE noted in its opening testimony, the area where the Woolsey Fire ignited is designated as High Fire Threat District (HFTD) Tier 3 in the Commission's final Fire Threat Map, reflecting extreme wildfire risk. It would be particularly surprising and unusual if the area had not previously experienced any wildfires or Red Flag Warning conditions, particularly during Santa Ana wind conditions, which commonly occur in the fourth quarter of the calendar year in Southern California. 20

Third, the Big Rock Circuit has experienced wire down events and outages, including during Red Flag Warning conditions. It is well known that elevated wind conditions can both increase the risk of wildfires, creating Red Flag Warning conditions, and also the potential for incidents on an electric system, such as wire down events and outages.

None of these observations calls into question SCE's showing that its design, inspection, maintenance, and operations programs at the time of the Woolsey Fire were prudent.

Intervenors discuss the facts and circumstances that led to ignition of the Woolsey Fire, asserting 27 that SCE acted imprudently in its design and maintenance of the specific assets involved. Intervenors' 28 focus on perceived issues with those assets is misplaced, as prudence should be evaluated 29 programmatically. Yet Intervenors' arguments also fail on their own terms. SCE's opening testimony 30 demonstrated that the single initiating event that caused the fire—a subtransmission down guy at the 31

Subject Pole becoming slack and making contact with energized distribution facilities—was not 1 attributable to any imprudence on the part of SCE. SCE had examined the Subject Pole just six weeks 2 prior to the fire and confirmed the subtransmission down guys were in good condition at that time, 3 importantly without the slack observed after the fire. With the benefit of hindsight, Cal Advocates 4 argues that SCE should have done more after a single outage in January 2017 caused by a slack down 5 guy and goes so far as to suggest SCE should have installed a covered conductor in response. Yet the 6 ability to prophetically predict in 2017 that a slack down guy contacting a distribution jumper during 7 windy conditions in 2018 would be the initiating event of Woolsey Fire is not the measure of prudence. 8 The January 2017 outage was an isolated incident, which SCE properly responded to and fully 9 remediated. The event did not put SCE on notice of any larger issue that would have warranted the 10 extreme response now suggested by Cal Advocates. To the contrary, SCE's notification data show it is 11 12 incredibly rare for a slack guy to occur on the same pole on more than one occasion.

Unable to mount a serious challenge to SCE's showing with respect to the initiating event, 13 Intervenors instead criticize the chain of events that led to the secondary ignition. However, SCE already 14 acknowledged in its opening testimony that there were potential missed opportunities to identify and 15 remediate certain conditions associated with the secondary ignition, though none of those was associated 16 with the initiating event. Moreover, Intervenors have not connected any of the WEMA costs SCE seeks 17 to recover in this proceeding to their criticisms of the secondary ignition. Nor could they. As shown in 18 SCE-04 and discussed further in SCE-13, the secondary ignition did not materially affect the ultimate 19 progression of the Woolsey Fire, and expert analysis shows that the material constraint during the 20 critical early hours of attack against the Woolsey Fire was the unavailability of sufficient fire 21 suppression resources due to the Hill Fire and other incidents, irrespective of the fact that there were two 22 ignitions that quickly merged as opposed to a single ignition. 23

Next, Intervenors critique the prudence of SCE's programs, which SCE addresses through the 24 four volumes of rebuttal testimony in SCE-12: Vol. 01-Design and Construction; Vol. 02-Inspection 25 and Maintenance; Vol. 03-System Operations; and Vol. 04-Telecommunications. As SCE showed in its 26 opening testimony, SCE's design, construction, inspection, maintenance, and operations practices at the 27 time of the Woolsey Fire were robust and met or exceeded industry standards. While Intervenors 28 criticize certain specifics of those programs and of SCE's implementation of those programs with 29 respect to the facilities at issue, Intervenors fail to rebut SCE's showing that the programs as a whole 30 were prudent. Cal Advocates, for example, takes issue with the design and construction of the Subject 31

Pole, arguing that SCE should have installed the subtransmission guy wire in a different location to
achieve greater clearance. Cal Advocates acknowledges, however, that the clearance achieved by a taut
guy wire well exceeded the requirements of General Order (GO) 95 and presents no specifics regarding
its recommendation for an alternative placement, nor a critique of SCE' design and construction
program as a whole. EPUC largely repeats allegations in the investigation report prepared by the
Commission's Safety and Enforcement Division (SED) related to the Woolsey Fire and fails to address
SCE's testimony explaining why those allegations do not show imprudence.

Cal Advocates criticizes SCE's approach to wildfire mitigation, effectively suggesting that SCE 8 should have made the same decisions as San Diego Gas & Electric Company (SDG&E) in lockstep 9 following the October 2007 wildfires, particularly with respect to developing a weather station network 10 and implementing a public safety power shutoff (PSPS) program. SDG&E was the sole electric utility in 11 12 California to pursue a PSPS program at that time, and SCE is not aware of any other utility in the country having such a program prior to 2018. This critique fails to recognize the reasonable differences 13 14 in approach that the Commission's prudence standard embraces. That SCE calibrated its wildfire mitigation approaches to the specifics of its system and service area and reached different conclusions 15 than SDG&E does not suggest any imprudence on the part of SCE. Each utility is unique and makes 16 decisions based on the risks and considerations specific to its service area and system at any given time. 17 Because SCE already had operational mitigations in place at the time of the October 2007 wildfires, 18 SCE reasonably and appropriately focused its efforts in subsequent years on enhancing fire risk 19 mitigations in other areas, including system hardening and developing and implementing an industry-20 leading pole loading program. The strong efficacy of SCE's approach to wildfire mitigation is also borne 21 out by the objective data regarding ignitions reported to the Commission by electric utilities. 22

Following the destructive 2017 wildfire season and in light of the increasing wildfire risk 23 landscape, SCE redoubled its efforts to mitigate wildfire risk across its service area. Through its Grid 24 25 Safety and Resiliency Program (GSRP), SCE designed and implemented additional mitigation measures to further reduce wildfire risk across its service area, including a formal, systemwide PSPS protocol in 26 May 2018 and the first large-scale deployment of covered conductor in California. Cal Advocates does 27 not fundamentally criticize the reasonableness of SCE's initial PSPS protocol or suggest that SCE could 28 have built a mature PSPS program or weather station network overnight. Instead, Cal Advocates argues 29 that SCE should have implemented these measures earlier than it did. PSPS is a mitigation tool of last 30 resort that comes with its own public safety impacts. It was the devastating 2017 wildfire season (which 31

was followed by the catastrophic 2018 wildfire season) that altered the risk landscape and justified the need for such an extreme tool in appropriate circumstances. Cal Advocates' testimony to the contrary is an attempt to recast history.

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Intervenors also do not rebut SCE's detailed testimony regarding the external factors that drove 4 the progression and destructiveness of the Woolsey Fire. SCE's opening testimony explained how the 5 firefighting response to the Woolsey Fire was impacted by what was described as "a perfect storm of 6 factors"1 that strained firefighting resources, complicated containment and suppression efforts, and 7 ultimately contributed to and exacerbated the fire's destructiveness. Cal Advocates largely does not 8 respond to or engage with the analysis in SCE-04, apart from conjecturing based on a statement from a 9 single witness that a Boeing fire truck might have been able to contain a single ignition at the Subject 10 Pole. In SCE-13, SCE presents rebuttal testimony demonstrating that this speculation is unsubstantiated 11 12 and inconsistent with the available evidence. Because of the significant resource drawdown and the priority given to the Hill Fire, which ignited just 20 minutes earlier, the limited fire suppression 13 14 resources that were available and dedicated to the Woolsey Fire were entirely insufficient to mount a successful initial attack. That remains true even in a counterfactual scenario involving a single ignition 15 at the Subject Pole. Thus, factors outside of SCE's control caused much of the damage wrought by the 16 Woolsey Fire. Intervenors do not otherwise challenge SCE's testimony regarding the role of external 17 factors that allowed the fire to spread and exacerbated damages, including SCE's analysis estimating 18 that approximately \$4.5 billion in fire damages could have been avoided or significantly reduced if 19 sufficient fire suppression resources had been available to enable firefighters to contain the Woolsey 20 Fire north of Highway 101. 21

In SCE-14, SCE provides an update regarding its claims resolution process and costs that SCE seeks to recover through this Application.

¹ Citygate Associates, LLC, County of Los Angeles After Action Review of the Woolsey Fire Incident (Nov. 17, 2019), *available at* <u>https://file.lacounty.gov/SDSInter/bos/supdocs/144968.pdf</u>.

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INTERVENOR TESTIMONY REFLECTS HINDSIGHT AND DOES NOT REFUTE SCE'S SHOWING THAT IT WAS A PRUDENT OPERATOR OF ITS ELECTRICAL SYSTEM

II.

Throughout their testimony, Intervenors raise arguments and critiques that reflect hindsight bias. With respect to ignition of the Woolsey Fire, Intervenors point to a prior outage in January 2017 as indicative of larger issues related to the Subject Pole that should have been addressed by SCE. But this single incident-which was appropriately identified and remediated by experienced SCE personnel-did not put SCE on notice of any larger issue. In fact, the Subject Pole was installed in 2008 and had been in the field for nearly a decade without incident prior to the January 2017 outage. Thus, there was no history of problems as Intervenors suggest. Intervenors' critiques of SCE's overall programs and practices are similarly unavailing. The record amply demonstrates that SCE had robust and comprehensive programs in place to support the safe and reliable operation of its system, and had redoubled its wildfire risk mitigation efforts following the destructive 2017 wildfire season. At the time of the Woolsey Fire, SCE was appropriately managing the area where the fire ignited as HFRA, but it was not an outlier relative to SCE's HFRAs generally. Ultimately, Intervenors' testimony does not undermine SCE's showing that its actions and practices were consistent with those a reasonable utility would have undertaken in good faith under similar circumstances at the time.

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A.

The Initiating Event of the Woolsey Fire Was Not Attributable to Any Imprudence

The single initiating event that led to ignition of the Woolsey Fire was a slack subtransmission down guy at the Subject Pole coming into contact with the energized distribution facilities. While Cal Advocates' testimony periodically refers to this contact as leading to the "first Woolsey Fire ignition,"² this single event indisputably caused both ignitions.

SCE demonstrated in its opening testimony that the slackness of the subtransmission down guy was not attributable to any imprudence on the part of SCE. In fact, the Subject Pole had been examined just six weeks prior to the fire when the adjacent transmission pole was replaced, and the subtransmission down guys were confirmed to be in good condition at that time.³ Before submitting the Application, SCE verified directly with the contractor foreman of the crew that performed the work that appropriate visual checks were performed after the work was completed and that the subtransmission

See, e.g., CA-01, p. 3; CA-02, p. 15. 2

³ SCE-02, pp. 8–9.

down guys on the Subject Pole were not visibly slack at that time. The foreman affirmed to SCE that his standard practice is to visually examine adjacent structures after a pole replacement to ensure there are 2 no problematic effects due to the work, and that he examined the Subject Pole sufficiently to identify 3 any issues with its guying and found none. Likewise, SCE verified with the experienced SCE Senior 4 Patrolman who conducted the post-construction checks that he traveled and examined the transmission 5 line between the adjacent pole where the work was performed and Chatsworth Substation, including 6 visually inspecting the conductors and guy wires at the Subject Pole, to ensure there were no issues 7 before re-energizing the line. This resolves EPUC's stated concern that SCE did not provide "proof or 8 support" for its understanding that the crew confirmed the tautness of the subtransmission down guys.⁴ 9

While Intervenors attempt to undermine this showing because it was only a visual check⁵ and 10 there is no paper record specifically confirming the guys were taught at that time,⁶ those critiques are 11 12 unjustified. A visual check of adjacent poles was and remains standard practice, and it is not typical to specifically document that check. Moreover, as described in SCE-12, Vol. 01, Section II.B.1, SCE 13 14 identifies thousands of slack guy wires each year through visual inspections. Notably, Intervenors do not identify any other utility that would have done this work differently. 15

In an attempt to show imprudence despite SCE's strong showing on the initiating event, 16 Cal Advocates focuses on the prior outage that had occurred on the Big Rock Circuit on January 20, 17 2017, and suggests it was indicative of a larger problem that SCE should have perceived and addressed 18 at that time. However, the evidence does not support that conclusion. As described in SCE-02, SCE 19 personnel responding to the January 2017 outage identified the subtransmission down guy at the Subject 20 Pole as slack and determined that contact between the slack guy wire and distribution facilities was the 21 likely cause of the outage. To remediate the issue, SCE personnel tightened both of the subtransmission 22 down guys and checked that the down guy anchors were solid and intact. While Cal Advocates 23 acknowledges that SCE responded promptly and appropriately to the outage, it goes so far as to suggest 24 25 SCE should have installed covered conductor in response to the January 2017 outage.⁷ Cal Advocates makes this argument notwithstanding that in 2019 Cal Advocates argued that SCE's covered conductor 26 program should be only a limited term pilot through 2020 and then re-evaluated because the technology 27

5 Id.

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7 CA-05, p. 16.

⁴ EPUC Testimony, p. 13.

CA-01, p. 15. 6

"ha[d] not yet been quantitatively demonstrated as effective in reducing wildfire risk in California" and needed to be assessed "alongside and in comparison with other technologies or approaches."⁸

Cal Advocates' critique reflects hindsight. Guy wires can become slack over time for various 3 reasons, and it is routine to identify and tighten slack guy wires when encountered on the system. 4 Indeed, Cal Advocates acknowledges that SCE identifies and remediates "many hundreds of down-guy 5 conditions on its system each year."⁹ It is not reasonable to suggest that identification of a slack down 6 guy at the Subject Pole in January 2017 and every other slack down guy on the system requires 7 immediate and piecemeal deployment of covered conductor or other ad hoc infrastructure hardening 8 measures. Cal Advocates' suggestions are particularly extreme given the absence of significant ignitions 9 attributable to slack guy wires at the time. Although Cal Advocates identifies the December 2017 Rye 10 Fire as "strikingly similar" to the Woolsey Fire, 10 that is incorrect. The Rye Fire involved a specific 11 equipment failure—failure of the hardware that attaches a down guy to its ground anchor, known as a 12 strandvise or "quickie"—that led to the down guy becoming entirely detached from its anchor support 13 and contacting distribution facilities. The Woolsey Fire involved no such equipment failure. In fact, Cal 14 Advocates does not challenge SCE's testimony that post-incident examination shows that the strandvise 15 "did not fail on November 8, 2018,"11 and the down guy at issue was slack, and not detached. 16

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In any event, whether and to what extent the slack condition observed in January 2017 and November 2018 could have been caused by the same issue is not known. Notably, even with significant study and investigation, SCE has been unable to determine why the subtransmission down guy at issue was slack at the time of the Woolsey Fire. While Cal Advocates speculates that the down guy may have

Ex. Cal Advocates-01, A.18-09-002 (Apr. 23, 2019), pp. 2–3. In A.18-09-002, Cal Advocates went on to join a settlement agreement that provided funding for SCE's forecast mileage for covered conductor installation, among other things, which was approved by the Commission in D.20-04-013. Cal Advocates has also argued for lesser funding for SCE's Wildfire Covered Conductor Program (WCCP) on multiple occasions. *See, e.g.*, Ex. PAO-09, A.19-08-013 (Apr. 10, 2020), pp. 14–15 (recommending \$237.3 million reduction from SCE's forecast of wildfire-management related capital expenditures for 2021, 90% of which were budgeted for WCCP); Ex. CA-02, A.19-08-013 (Feb. 15, 2023), pp. 10–11 (recommending 300 miles less in mileage and \$211.9 million less in funding for SCE's Wildfire Covered Conductor Program for 2024); Ex. CA-11, A.23-05-010 (Feb. 29, 2024), pp. 23–27 (recommending less funding than SCE requested for its WCCP in every year between 2023-2028, including \$235.7 million less in 2023 and \$197.9 million less in 2024.)

⁹ CA-06, p. 5 (emphasis by Cal Advocates).

¹⁰ See CA-01, p. 3 ("The causes of the Rye Fire were strikingly similar to the causes of the first Woolsey Fire ignition: a down-guy contacting a distribution jumper cable."); CA-02, p. 15 (stating that "a guy wire became loose and contacted a jumper wire.").

<u>11</u> SCE-02, p. 12.

become slack due to contact with adjacent vegetation,¹² SCE's metallurgical expert determined that the guy wire itself showed no sign of that.¹³ This theory also seems unlikely given the Subject Pole was installed in 2008 and had been in the field for nearly a decade without incident prior to the January 2017 outage. And even after January 2017, there is no record of an outage at the Subject Pole until the day of the Woolsey Fire—not even during the unprecedented string of Red Flag Warnings issued in December 2017 around the time of the Thomas Fire.

As of the date of the Woolsey Fire, the January 2017 outage was an isolated incident that had 7 8 been appropriately addressed, and did not put SCE on notice of any larger issue that would have warranted the extreme response that Cal Advocates now suggests with the benefit of hindsight. In fact, 9 as explained in SCE-12, Vol. 1, SCE notification data show that it is exceedingly rare for a structure to 10 have a slack guy wire on more than one occasion. For instance, analyzing notifications identifying slack 11 12 guy wire conditions during the 2013-2018 period, less than 1.5 percent of structures with such notifications also had a slack guy wire condition identified on a separate date during the period, and 13 those structures represent a small fraction (less than 0.025 percent) of all SCE structures. 14

Cal Advocates is also critical of the chain of events that led to the secondary ignition. While 15 none of these is associated with the initiating event, SCE acknowledged in its opening testimony that 16 there were potential missed opportunities to identify and remediate certain conditions. Almost all of 17 these issues were related to SCE communication facilities, which are subject to distinct regulatory 18 requirements and generally considered lower risk given they are not energized. As discussed in SCE-12, 19 Vol. 04, Cal Advocates' testimony affirms that SCE's Transmission Telecom (TTC) inspection and 20 maintenance program at the time of the Woolsey Fire conformed to regulatory requirements. While that 21 program was not executed perfectly in light of the inadvertent omission of the 06051 Line from the list 22 of communication lines to inspect during the relevant period, and other issues, the Commission has 23 repeatedly emphasized that prudence is "not a standard of perfection."14 As described below, and 24

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¹² See CA-05, p. 14.

¹³ See SCE-02, p. 15 (testimony of SCE's metallurgical expert stating that he observed "no signs of strain (excessive loading) or mechanical damage, such as from another object exerting force on the wire or abrading it over time.").

¹⁴ D.22-06-032, p. 8 ("The prudent manager standard is not a standard of perfection."); D.14-06-007, p. 36 ("This is not a 'perfection' standard: it is a standard of care that demonstrates all actions were well planned, properly supervised and all necessary records are retained."); D.18-07-025 at p. 6 (same) (quoting D.14-06-007, p. 36); D.17-11-033, p. 10 ("[H]olding utilities accountable under the reasonable and prudent manager standard in no way imposes a standard of perfection.").

throughout SCE's testimony, SCE was a prudent operator of its electrical system and telecom system at the time of the Woolsey Fire. Moreover, the secondary ignition did not materially affect the ultimate progression of the Woolsey Fire, as shown in SCE-04. While Cal Advocates speculates about the possibility that initial attack efforts could potentially have been more effective without the secondary ignition, expert analysis shows that the material constraint during the critical initial hours of attack was the unavailability of fire suppression resources due to the Hill Fire and other incidents, regardless of whether the fire involved one or two ignitions. This is addressed in SCE-13.

EPUC largely repeats the alleged violations in the investigation report prepared by the
 Commission's Safety and Enforcement Division (SED) regarding the Woolsey Fire.¹⁵ SCE's opening
 testimony explained in detail that the SED report is not evidence of any imprudence by SCE.¹⁶ EPUC
 ignores and fails to rebut SCE's testimony on this.¹⁷

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B.

SCE's Programs Were Robust and Met or Exceeded Industry Standards

SCE's design, inspection, maintenance, and operations practices are set forth in SCE-03, first with respect to SCE's electric transmission and distribution system and then with respect to SCE's telecommunications network. At the time of the Woolsey Fire, SCE had robust programs in each of these areas—programs that met or exceeded industry standards at the time. While Intervenors critique certain specifics of SCE's programs, Intervenors present no evidence showing imprudence on the part of SCE and certainly not an infirmity that would rise to the level of undermining the prudence of any of SCE's programs.

SCE's opening testimony described in detail how SCE designed and constructed its electric system to provide safe and reliable service to its customers, accounting for various risks across its geographically diverse service area including wildfire risk. This included detailed testimony regarding the distribution reconductoring project in 2008 that SCE undertook to accommodate higher customer loads and improve reliability on the Big Rock Circuit. As part of that project, SCE installed the Subject

¹⁵ EPUC Testimony, pp. 21–24.

<u>16</u> SCE-02, pp. 21–26.

¹⁷ To the extent EPUC cites the Commission-approved Administrative Consent Order (ACO) with SED, such reliance is contrary to the terms of the ACO and should be disregarded. *See* Resolution SED-5 (Dec. 16, 2021), Administrative Consent Order and Agreement, § 3.E ("In entering into this ACO, SED and SCE expect and intend that neither the fact of this ACO nor any of its specific contents will be admissible as evidence of fault or liability in any other proceeding before the Commission, any other administrative body, or any court.").

Pole. Intervenors point to no specific issue with SCE's overall design and construction standards or the 1 merits of the reconductoring project. Instead, with the benefit of hindsight Intervenors identify specific 2 critiques with SCE's design and construction of the Subject Pole. For instance, Cal Advocates argues 3 that SCE should have installed the subtransmission guy wire in a different location to achieve greater 4 clearance.¹⁸ Yet Cal Advocates acknowledges that a taut guy wire in that location would achieve 5 clearance well in excess of GO 95's requirements-specifically, at least 133% of the required 6 clearance-and Cal Advocates fails to present any specifics regarding its recommendation for an 7 8 alternative placement. Despite SCE producing hundreds of pages from the work orders for the Big Rock reconductoring project and associated work, which included installation of the Subject Pole, 9 Cal Advocates faults SCE for not having post-construction documentation measuring every clearance 10 required by GO 95 on the as-built pole. That SCE does not have such documentation does not suggest 11 12 any imprudence by SCE. Cal Advocates points to no utility or industry practice that agrees with what Cal Advocates now suggests, and SCE is aware of none. Cal Advocates does not even allege that the 13 subtransmission down guy was loose at installation. 14

Likewise, SCE's opening testimony also described the robust programs SCE used to inspect and 15 maintain all aspects of its electric system. This includes SCE's Distribution Inspection and Maintenance 16 Program (DIMP) pursuant to which SCE identified and repaired or replaced deteriorated poles, 17 conductors, and other equipment, resolved conductor clearance issues, and identified tree or vegetation 18 encroachments for trimming, among other remediations, all of which reduced wildfire ignition risk and 19 supported the safety and reliability of SCE's system. Contrary to Cal Advocates' testimony, 20 notifications issued on the Big Rock Circuit and SCE's system overall in the years prior to the fire, 21 particularly those relating to guy wires, do not indicate any imprudence or recurring asset condition on 22 the Big Rock Circuit. In fact, those notifications confirm the robustness of SCE's inspection and 23 maintenance programs, which are specifically designed to identify and remediate conditions based on an 24 25 appropriate assessment of risk. Cal Advocates has not identified any overdue or outstanding notifications on the Big Rock Circuit that had any connection to ignition of the Woolsey Fire. 26

EPUC criticizes SCE for not having a specific protocol that governs tightening a guy wire and suggests "it's not clear how the lineman would be instructed to restore the guy wire to comply with GO

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¹⁸ CA-05, p. 16.

95."19 Yet SCE has demonstrated that the guy wire was appropriately tightened in January 2017 and 1 confirmed taut in September 2018, six weeks before the fire. EPUC provides no evidence to the 2 contrary, and the absence of a written protocol does not undermine SCE's showing. As discussed, 3 tightening of guy wires is a routine maintenance practice performed by linemen. The fact that SCE 4 appropriately identifies guy issues on its system and the remediation work is performed by SCE's 5 experienced linemen pursuant to SCE standards is what defines prudence, not whether SCE has a 6 discrete guy wire tightening protocol. Equally misguided is Cal Advocates' suggestion that SCE's 7 inspectors should specifically measure every guy clearance with a measuring device. Such a requirement 8 would be impractical and expensive. Cal Advocates points to no utility or industry practice that agrees 9 with what Cal Advocates now suggests, and SCE is aware of none. 10

SCE's opening testimony also described how it operated its electric system using practices and 11 12 protocols designed to reduce the risk of ignition from its facilities, including on November 8, 2018. SCE's System Operating Bulletin (SOB) 322 was in effect at the time the Woolsey Fire ignited, and 13 SCE's protection devices operated as intended, with the reclose function of protective relays on the Big 14 Rock Circuit appropriately blocked at the time in light of the Red Flag Warning conditions. The specific 15 facilities at issue were located in HFRA, and SCE was appropriately managing them as such at the time 16 of the Woolsey Fire. SCE's electrical inspection and remediation timelines conformed to HFRA 17 requirements. From an operational perspective, the Big Rock Circuit was among the HFRA distribution 18 circuits potentially subject to SCE's PSPS protocol, and SCE had implemented Fast Curve settings on 19 the RAR closest to Chatsworth Substation to maximize coverage on the Big Rock Circuit pending 20 replacement of the electromechanical relays at the substation. While Intervenors' testimony is critical of 21 SCE's implementation of PSPS in 2018, those critiques are colored by hindsight and do not show any 22 imprudence on the part of SCE, as addressed below in Section C. 23

With respect to communication facilities, Cal Advocates' testimony affirms that SCE's inspection and maintenance program conformed to regulatory requirements. At the time of the Woolsey Fire, SCE was appropriately prioritizing inspections of communication lines in HFRAs and took reasonable steps to identify such lines based on its detailed maps with master lists. While Cal Advocates' testimony criticizes the fact that the 06051 Line was inadvertently omitted from the list of lines to be inspected in this time frame, SCE inspected the adjacent communication lines supported on

¹⁹ EPUC Testimony, p. 14.

the same poles numerous times in the years prior to the fire, and no safety or compliance issues were reported related to the Secondary Span.

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SCE Reasonably Evaluated and Managed Wildfire Risks in Its Service Area

Cal Advocates' testimony criticizes SCE as "lagg[ing] about nine years behind SDG&E in 4 developing both a weather station network and a public safety power shutoff (PSPS) program."²⁰ This 5 comparison to SDG&E is misguided given the fundamental differences in the service areas of SCE and 6 SDG&E. SCE's service area is significantly larger and more geographically diverse than SDG&E's and 7 encompasses far more customers and facilities, all of which are relevant to operational decision-making. 8 Moreover, Cal Advocates' criticism fails to recognize that each utility is unique and makes decisions 9 based on the risks and considerations specific to its service area and system at the time.²¹ SCE has long 10 recognized the risk of wildfires in its service area and was reasonably hardening its infrastructure and 11 12 operating its system to mitigate that risk in the years prior to the Woolsey Fire. Wildfire was consistently among the top risks identified for SCE and a key area of focus. SCE-03 set forth SCE's detailed 13 showing on the robust operational and other procedures that SCE had in place in to mitigate the risk of 14 utility facilities igniting a wildfire. And, as discussed further below and in Appendix A, the effectiveness 15 of SCE's measures in this regard is borne out in the data. Following the destructive 2017 wildfire season 16 and in light of the increasing wildfire risk landscape, SCE redoubled its efforts in this area. Through its 17 Grid Safety and Resiliency Program (GSRP), SCE designed and implemented additional wildfire 18 mitigation measures to further reduce wildfire risk across its service area. 19

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1.

SCE's Early Wildfire Mitigation Measures Were Effective and Appropriately Calibrated to SCE's Service Area

Cal Advocates' testimony highlights the wildfires that occurred in Southern California prior to the Woolsey Fire, including the fires that occurred during a strong Santa Ana wind event in October 2007. During that anomalous event, more than a dozen wildfires ignited across Southern California. The October 2007 wildfires were certainly significant, and caused SCE and the industry

²⁰ See CA-01, p. 6. See also CA-04 (comparing SDG&E and SCE in the years preceding 2018).

Even instance, SCE understands that San Diego County had firefighting challenges that may have impacted SDG&E's operational considerations at the time. See D.10-12-053, pp. 33–34 (SDG&E Z-factor decision referencing "San Diego County's inadequate firefighting resources"); San Diego County Grand Jury Report, The Fire Next Time – Will We Be Ready? (May 29, 2008) (noting that San Diego County and the City of San Diego had not developed or funded sufficient firefighting resources), available at https://www.sandiegocounty.gov/content/dam/sdc/grandjury/reports/2007-2008/Firereport.pdf.

more broadly (including the Commission) to reflect and re-evaluate to make sure reasonable and appropriate steps were being taken to mitigate wildfire risk, including by electric utilities and others. In 2 2007, SCE already had in place operational practices to mitigate wildfire risk based on its understanding 3 of risk at the time, the cornerstone being SCE's longstanding practice of blocking automatic reclosing on 4 lines traversing high fire areas to mitigate the risk of wildfires, as set forth in SOB 322.²² Under SOB 5 322, when a protection device operated to de-energize a line in response to faults, the line would not be 6 re-energized until it first was patrolled and deemed safe. SOB 322's operating restrictions were in effect 7 during all Red Flag Warning events. (Indeed, as discussed in SCE-02 and SCE-03, SOB 322 was in 8 effect on the day of the Woolsey Fire and prevented SCE's relays on the Big Rock Circuit from 9 attempting to reclose after they operated in response to the initiating event.) 10

Following the October 2007 wildfires, SCE looked deeply at wildfire mitigation issues. 11 12 SCE was an active participant in the Fire Safety Rulemaking initiated by the Commission in 2008.²³ SCE participated in the development of the statewide fire threat maps adopted by the Commission for 13 14 use by the California utilities. As described in SCE-03, SCE had already developed its own internal fire map for purposes of implementing SOB 322.24 SCE incorporated additional areas into the Commission-15 adopted maps to capture risks specific to its service area. Consistent with D.12-01-032, SCE submitted 16 its first formal Fire Prevention Plan (FPP) to the Commission in December 2012. SCE's FPP outlined 17 measures the company undertook to mitigate the risk of utility-caused ignitions that could result in a 18 wildfire throughout its service area, including SOB 322, its engineering, design, and construction 19 standards, inspection and maintenance programs, vegetation management practices, and pole assessment 20 and remediation program. 21

Because SCE already had operational mitigations in place at the time of the October 2007 wildfires, in subsequent years SCE reasonably and appropriately focused its efforts on enhancing fire risk mitigations in other areas, including system hardening. For instance, in 2009 Cal Advocates argued that SDG&E should "build[] its system to withstand . . . local conditions" such as Santa Ana winds

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<u>22</u> See SCE-03, pp. 64–65. SCE's first record of SOB 322's publication is February 18, 1974 (prior to 1999, it was known as SOB 22), and SOB 322 was updated on numerous occasions between 1974 and the date of the Woolsey Fire. SCE-03, p. 64.

²³ Rulemaking (R.) 08-11-005.

²⁴ SCE-03, pp. 6–8 & Fig. II-2.

rather than implement "extreme" measures like PSPS.²⁵ That is precisely what SCE did in the years
following the 2007 fires, and what Cal Advocates now suggests was not sufficient. For example,
following the 2007 Malibu Canyon fire and 2011 San Gabriel Valley Windstorm, SCE developed and
implemented an industry-leading pole loading program. This program directly enhanced public safety by
focusing on the ignition and other public safety risks created by pole failures. In fact, this program
resulted in the replacement of 83 poles on the Big Rock Circuit prior to the Woolsey Fire.

SCE also reasonably and appropriately focused efforts on other important safety risks in 7 its service area, including downed wire. For example, as described in SCE-03, SCE developed risk-8 informed programs for conductor replacement that helped reduce safety risks related to downed 9 energized conductor across its system. SCE's Overhead Conductor Program (OCP), launched in 2014, 10 evaluated and established new minimum conductor sizes and protection device requirements for 11 12 mainline and branch line systems. The program also implemented a risk-informed approach for conductor replacement that involved analyzing "risk factors" for each of SCE's distribution circuits. 13 14 Under OCP, SCE also reviewed wire-down events to determine repair requirements, and in some cases upgraded circuit segments as part of SCE's immediate restoration efforts. These efforts not only reduced 15 the risk of wire-down events, but also had the impact of reducing the risk of ignition. 16

SCE appropriately calibrated its mitigation approaches to the specifics of its system and 17 service area and reached different conclusions than SDG&E; those differences do not suggest any 18 imprudence on the part of SCE. Contrary to the view suggested by Cal Advocates' testimony, the 19 Commission has repeatedly emphasized that prudence is not defined by a single course of conduct: "The 20 reasonable and prudent act is not limited to the optimum act, but includes a spectrum of possible acts 21 consistent with the utility system need, the interest of the ratepayers, and the requirements of 22 governmental agencies of competent jurisdiction."²⁶ Each utility is unique and makes decisions based on 23 the risks and considerations specific to its service area and system at the time. 24

The effectiveness of SCE's approach to wildfire mitigation in the years preceding the destructive 2017 wildfire season is also borne out by the data. Appendix A presents analysis of data regarding ignitions reported to the Commission by electric utilities pursuant to D.14-02-015 (referred to

²⁵ A.08-12-021, Joint Opening Comments of the Consumer Protection and Safety Division and the Division of Ratepayer Advocates (Mar. 27, 2009), p. 2 (referring to PSPS as "the most extreme of the proposed preventative measures") & p. 4, n.6.

²⁶ D.05-08-037, p. 11 (emphasis added); see also D.04-09-003, Appendix A (The Office of Ratepayer Advocates Reasonable Manager Standard).

herein as CPUC reportable ignitions) in 2014–2017.²⁷ The analysis supports the efficacy of SCE's wildfire mitigation efforts during this period.²⁸

It is worth noting that none of the 2008-2016 wildfires identified by Cal Advocates in CA-02 resulted in a formal investigation or any citations issued by the Commission.²⁹ More broadly, Cal Advocates' data actually support the effectiveness of SCE's measures in mitigating wildfire risk on its system and the Big Rock Circuit in particular. Until the destructive 2017 wildfire season, none of the prior wildfires identified by Cal Advocates was anywhere near the size or destructiveness of the Thomas Fire. And while Cal Advocates' testimony highlights dozens of prior Red Flag Warning events from 2013-2018 in the area of ignition of the Woolsey Fire, Cal Advocates does not identify a single consequential ignition involving electrical facilities in these specific areas during those Red Flag Warning periods.³⁰ This supports the efficacy of SCE's mitigation efforts, including SCE's consistent implementation of SOB 322 during Red Flag Warning conditions.

To the extent Cal Advocates includes data on whether prior fires ignited during Red Flag 13 Warning conditions to suggest that SOB 322 was not effective in reducing risk, that is misguided.³¹ It is 14 a truism that Cal Advocates' analysis of past *fires*—some of which ignited during fire weather 15 conditions when the risk of ignition was highest-does not show how many ignitions were prevented 16 and never occurred because SCE's operational mitigations were in effect. And Cal Advocates' focus on 17 the December 2017 wildfires, including the Rye Fire and the destructive Thomas Fire, 32 merely 18 confirms the pivotal nature of the 2017 wildfire season. The Thomas Fire, for example, grew into what 19 was the largest wildfire in California history at the time, burning over 281,000 acres. Indeed, it was the 20 devastating back-to-back wildfire seasons of 2017 (including the North Bay wildfires and the Thomas 21 Fire) and 2018 (including the Camp Fire and the Woolsey Fire) that caused California to fundamentally 22

- ²⁹ CA-02, pp. 3–4, Table 1: SCE Wildfire History from 1998 to 2018.
- <u>30</u> CA-04, pp. 12–22 & Table 3.
- <u>31</u> CA-02, pp. 6–7, Table 2.

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²⁷ In accordance with the fire-related reporting requirements, SCE excludes from its reporting fires that are under active investigation where the origin has not been determined at the time of submitting its report.

 $[\]frac{28}{5}$ See Appendix A, Tables A-1 – A-2 and Figures A-1 – A-3.

³² See CA-02, pp. 13–18. Cal Advocates suggests that "SCE incurred an estimated \$3 billion in financial liabilities from the significant wildfires that occurred in SCE's territory across 1998-2018 (prior to the Woolsey Fire)." CA-02, p. 4. But the cited data request response included the destructive 2017 fires, particularly the Thomas Fire, which accounted for nearly all of that total: fires before December 2017 accounted for approximately \$386 million.

change its view of wildfire risk (and specifically, utility wildfire risk). These events led the California electric utilities and the State (including the Commission, Governor's Office, and Legislature) to take 2 extraordinary measures to address a materially increasing risk profile. As discussed below, SCE took 3 immediate action to implement a systemwide PSPS program and began implementing Fast Curve 4 settings as well as other additional wildfire mitigations. 5

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SCE Significantly Expanded Its Wildfire Mitigation Efforts Following the **Destructive 2017 Wildfire Season**

As SCE explained in its opening testimony, the events of the destructive 2017 wildfire season and the increased risk profile those events first brought to light prompted SCE to take further immediate action. SCE redoubled its efforts and quickly developed and implemented or took steps to implement extraordinary measures to further mitigate wildfire risk in its service area, and SCE simultaneously sought the associated funding from the Commission. In September 2018 SCE sought Commission approval of its multi-year Grid Safety and Resiliency Program (GSRP),33 which included "the first large-scale deployment of covered conductor in California to harden the distribution system against extreme weather events and . . . reduce wildfire ignition events."34

SCE could and did deploy certain measures immediately. For instance, in the first half of 16 2018 SCE quickly began implementing its Fast Curve program on compatible protection devices that 17 supported it. Just months later, SCE had already reconfigured relay settings for over half of its RARs in 18 HFRAs and approximately 400 relays on circuit breakers to implement Fast Curve. SCE implemented 19 Fast Curve in a risk-informed manner. On the Big Rock Circuit, for example, that meant implementing 20 Fast Curve settings on the RAR closest to the substation, thereby protecting as large a portion of the 21 circuit in HFRA as feasible.³⁵ In the first half of 2018, SCE also implemented its initial systemwide 22 PSPS protocol. 23

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Other measures like covered conductor installation and accelerating the upgrade of protective devices to support greater Fast Curve deployment required large-scale capital investments and took time to implement. These measures were deployed over a number of years across SCE's service

³³ See A.18-09-002.

<u>34</u> D.20-04-013, p. 2.

³⁵ SCE targeted RAR 0104 first because it was the most upstream recloser on the circuit, which would typically allow it overreach the downstream reclosers to provide an increase in the amount of circuitry to be protected by the Fast Curve settings. See SCE-03, p. 35, n.70.

area on a risk-informed basis. For instance, since 2018 SCE has been aggressively installing covered 1 conductor across its distribution circuits in HFRA and, even though SCE is entering the final stages of 2 its planned covered conductor deployment, SCE still continues to install hundreds of miles annually. 3 Likewise, SCE also has been consistently upgrading older style circuit breaker relays in substations with 4 microprocessor-based relays to support expanded Fast Curve deployment in HFRA. SCE upgraded the 5 electromechanical-type relays on the Big Rock Circuit at Chatsworth Substation as of June 2020 and as 6 of the end of 2024, has upgraded nearly all such devices protecting HFRA distribution circuits across its 7 system.³⁶ To the extent Cal Advocates now suggests that SCE should have upgraded substation relays 8 sooner or more quickly, Cal Advocates has not shown that SCE's multi-year plan to replace such 9 devices was somehow imprudent. In fact, SCE notes that Cal Advocates resisted increased funding for 10 substation protection equipment upgrades in SCE's 2015 General Rate Case (GRC)-the most recent 11 GRC decision in effect at the time of the Woolsey Fire-arguing that funding for these upgrades should 12 be reduced in 2014 and 2015 because SCE's 2013 capital expenditure for substation protection upgrades 13 exceeded its forecast.³⁷ The Commission adopted Cal Advocates' proposal over SCE's objection, 14 concluding that "[f]or the long lasting equipment contemplated here being replaced according to a multi-15 year plan, it is reasonable to expect that increased spending in one year would lead to a decreased need 16 to replace equipment in the following years."38 17

The timeline in Figure IV-1 in SCE-01 (reproduced below in Figure II-1) provides a
helpful illustration of how SCE deployed the key wildfire mitigation elements over time:

 $[\]frac{36}{100}$ From 2019 to 2024, SCE upgraded 564 circuit breaker relays to microprocessor relays.

³⁷ D.15-11-021, pp. 175-76; A.13-11-003, Ex. ORA-12, pp. 36–37.

<u>38</u> D.15-11-021, p. 176.



Figure II-1 Timeline of Key Additional Wildfire Mitigation Measures

Cal Advocates criticizes SCE for its PSPS program and supporting weather station 1 network, arguing that "SCE's weather station network remained small (relative to its service territory) 2 and its PSPS program was new" and "[n]either program was mature and effective."³⁹ Cal Advocates 3 does not fundamentally criticize the reasonableness of SCE's approach to developing its first, 4 systemwide PSPS program. Cal Advocates also does not argue that SCE could have built a mature PSPS 5 program and a comprehensive network of supporting weather stations overnight. Indeed, it takes time to 6 install a network of weather stations across a service area as large and geographically diverse as 7 SCE's—a service area that includes both the highest and the lowest elevation points in the continental 8 United States. It also takes time to develop the calibrated forecast and monitoring tools to support 9 informed decision-making that appropriately balances the multiple competing risk factors necessary for 10 PSPS implementation. This is an area of continuous focus and improvement for California utilities like 11 SCE, even today. Cal Advocates argues that SCE should have started earlier and had a more developed 12

³⁹ CA-01, p. 6; see also CA-04.

and mature program in 2018. But, as discussed in SCE-12, Vol. 03, the record shows that SCE's developing weather station network and initial PSPS protocol were exactly where they should have been at that time.

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Following the October 2007 wildfires, SCE collaborated with SDG&E on wildfire mitigation practices and approaches, and SCE ultimately concluded that systemwide PSPS was not warranted for SCE at the time. It was the devastating 2017 wildfire season that fundamentally changed the understanding of wildfire risk in California—risk that has only increased in the years thereafter—and drove SCE and other utilities to further expand wildfire mitigation efforts, including the adoption of measures such as PSPS and fast trip settings which come with their own public safety impacts but were determined to be justified in light of the increased risk profile.

PSPS is an extreme measure that runs counter to the primary mission of electric utilities: 11 to provide continuous electric service to customers. Modern society in the United States runs with the 12 expectation of a continuous supply of power-power that energizes residential homes, businesses, and 13 critical infrastructure, and enables the provision of essential services, from streetlights to public 14 schools.40 Indeed, power grid reliability metrics are a fundamental performance indicator for the electric 15 utility industry.⁴¹ For this reason, PSPS poses significant public safety risks. In light of these risks, 16 Cal Advocates (and numerous other parties) vigorously opposed SDG&E's proposed PSPS program in 17 2009, highlighting the significant public safety and reliability concerns implicated by proactive de-18 energization.⁴² Cal Advocates said at the time that "SDG&E's plan will do little, if anything to prevent 19 fires; and . . . will be deleterious to, amongst other things, safety, emergency communications and 20 firefighting capabilities."43 So serious were these concerns that Cal Advocates supported a temporary 21

⁴⁰ For instance, this is codified in Public Utilities Code section 330(g), a provision cited repeatedly by the Commission in its decisions addressing SDG&E's PSPS plan: "Reliable electric service is of utmost importance to the safety, health, and welfare of the state's citizenry and economy."

⁴¹ For example, prior to 2017, the Commission measured the performance of electric utilities, including SCE, by grid uptime (e.g., SAIDI, SAIFI, and CAIDI). See D.16-01-008. Programs such as PSPS and fast trip erode those measures.

⁴² A.08-12-021, Joint Opening Comments of the Consumer Protection and Safety Division and the Division of Ratepayer Advocates (Mar. 27, 2009), pp. 2 & 11 ("The Commission should reject both SDG&E's deenergization plan and the proposed change to Rule 14."); Joint Motion to Deny and Dismiss San Diego Gas & Electric's Application A.08-12-021 (Apr. 30, 2009).

⁴³ A.08-12-021, Joint Movants' Reply to San Diego Gas & Electric Company's Opposition to Joint Movants' Motion to Deny and Dismiss San Diego Gas & Electric Company's Application A.08-12-021 (May 29, 2009), (Continued)

restraining order to prevent implementation of SDG&E's program prior to a final Commission decision, warning that "SDG&E's shut-off plan poses a very real threat to . . . lives"⁴⁴ and "would create many more disastrous consequences than it purports its shut-off plan would prevent."⁴⁵

In rejecting SDG&E's initial proposed PSPS plan, the Commission emphasized the significant adverse impacts of power shut-offs identified by Cal Advocates and numerous other opposing parties, and concluded that SDG&E had not demonstrated that "the benefits of its Power Shut-Off Plan outweigh the significant costs, burdens, and risks imposed on customers and communities in the areas where power is shut off under the Plan."⁴⁶

At the time, a systemwide proactive de-energization program was untested, and without 9 precedent for a service area comparable to SCE's. SCE had previously implemented the earliest iteration 10 of a proactive de-energization program in California, the Protective Outage Plan (POP). This targeted 11 12 and localized program was initiated in 2004 in response to Resolution E-3824 directing SCE and other utilities in Southern California to take reasonable and necessary actions in light of emergency conditions 13 14 related to a bark beetle infestation that had created the potential for catastrophic forest fires in specific areas of the state.⁴⁷ POP focused specifically on the extreme fire risk created by bark beetle infested 15 forests in the San Bernardino mountains, and SCE's experience also highlighted the public safety 16 impacts of such proactive de-energizations. SCE prudently terminated POP at the conclusion of the bark 17 beetle infestation emergency, a decision the Commission described favorably in its denial of SDG&E's 18

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p. 6. At the time of the SDG&E proceeding, Cal Advocates was known as the Division of Ratepayer Advocates (DRA). In this and other chapters of SCE's testimony, SCE uses Cal Advocates to refer to all predecessor entities including DRA and the Office of Ratepayer Advocates (ORA). A.08-12-021, Joint Opening Comments of the Consumer Protection and Safety Division and the Division of Ratepayer Advocates (Mar. 27, 2009), pp. 4, 11 (Cal Advocates further emphasized that customers in "SDG&E's deenergization territory would be in a perpetual state of emergency and would face the same extreme peril to their safety that they did in the energy crisis[,]" which according to Cal Advocates included "the imminent threat of widespread and prolonged disruption of electrical power to California's emergency services, law enforcement, schools, hospitals, homes, businesses and agriculture.") (internal quotations omitted).

⁴⁴ A.08-12-021, Joint Response by the Consumer Protection and Safety Division and the Division of Ratepayer Advocates in Support of August 5, 2009 Joint Motion Seeking Temporary Restraining Order Against San Diego Gas & Electric (Aug. 17, 2009), p. 4.

<u>45</u> *Id.*, p. 3.

⁴⁶ D.09-09-030, Conclusion of Law (COL) 1, p. 69

⁴⁷ Specifically, the Governor issued a March 7, 2003 Proclamation declaring a State of Emergency in Riverside, San Bernardino, and San Diego Counties where a bark beetle infestation had created the potential for catastrophic forest fires.

application for approval of its initial PSPS plan (A.08-12-021), stating: "The lesson we draw from SCE's power shut-off program is that it may be appropriate to implement a power shut-off program 2 when emergency conditions are present, but the program should end when the emergency is over."48 3 The Commission emphasized that SDG&E and the Commission had already implemented numerous 4 measures other than PSPS "to reduce the fire hazard to an acceptable level."49 5

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That SCE did not pursue a PSPS program prior to 2017 in light of these considerations 6 does not suggest any imprudence on the part of SCE. SCE began exploring the development of a 7 systemwide PSPS program in late 2017, recognizing the changing wildfire risk landscape evidenced by 8 the destructive 2017 wildfire season. Just months later, in May 2018, SCE implemented its formalized 9 PSPS protocol as an operational measure of last resort. As described further in SCE-03 and SCE-12, 10 Vol. 03, SCE's initial PSPS protocol was reasonable and calibrated to the specifics of SCE's service 11 12 area. SCE adopted SDG&E's Fire Potential Index (FPI) tool to provide context for fire potential utilizing modeled forecasted meteorological and fuel conditions. With respect to wind thresholds, SCE 13 14 worked with SCE district personnel familiar with local conditions and experiences unique to their particular areas to develop wind thresholds for PSPS. Cal Advocates' attempt to draw an unfavorable 15 comparison between SCE's and SDG&E's wind thresholds at the time is simplistic and unsupported 16 given the material differences in the size and complexity of their service areas. While SCE promptly 17 began installing weather stations—having installed 125 weather stations by November 2018— 18 development of a weather station network of this magnitude is a complex multi-year effort, as described 19 in GSRP and SCE's WMP. To support PSPS decision-making, a weather station network has to be 20 sufficiently dense, and to that end, SCE was initially targeting to install two weather stations on each of 21 the roughly 1,300 distribution circuits in HFRAs at the time.⁵⁰ A weather station network also presents 22 unique challenges from a communications infrastructure and data systems/computational perspective 23 given the volume and continual reporting of data coming online from the weather stations. In light of 24

D.09-09-030, pp. 54-55. The Commission described SDG&E's initial proposed PSPS plan as "not limited to 48 emergency conditions" because it "applie[d] to situations that occur annually (e.g., sustained winds of 35 mph)."

⁴⁹ D.09-09-030, p. 68 (Finding of Fact 6) ("SDG&E's power lines pose an ongoing fire hazard. SDG&E and the Commission have implemented numerous measures to reduce the fire hazard to an acceptable level, including (i) the elements of SDG&E's Community Fire Safety Program other than its Power Shut-Off Plan, and (ii) the Commission's General Order 95") (emphasis added).

See SCE's 2020 WMP, p. 3. SCE's 2018 GSRP application described the 850 weather stations planned for the 2018–2020 time frame.

these realities, Cal Advocates' criticism that SCE did not use these initial weather stations in 2018 for
their "intended purpose" is simply misguided.⁵¹ While building out its weather station network, SCE
engaged IBM to provide a circuit-level forecasting tool that could support immediate implementation of
SCE's PSPS protocol. Cal Advocates' argument that SCE should have started the process of developing
its weather station network after the 2007 wildfires such that it would have been further along by 2018 is
without merit.

⁵¹ See CA-04, p. 10.

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IMPRUDENCE MUST BE CAUSALLY RELATED TO THE COSTS AT ISSUE TO SUPPORT A DISALLOWANCE

III.

As explained in SCE-01, Vol. 1 and Vol. 2, to disallow cost recovery, there must be a causal nexus between a utility's imprudence and the costs at issue. Cal Advocates did not submit testimony addressing topics in SCE-06 (Claims Resolution), SCE-07 (Outside Legal Expenses), SCE-08 (Financing Costs), or SCE-09 (Restoration Costs); though EPUC takes issue with SCE's outside legal expenses and financing costs, its arguments are derivative of its view regarding SCE's conduct related to ignition of the Woolsey Fire.⁵² Thus, that means that alleged imprudence must relate to ignition of the Woolsey Fire in order to provide any support for a disallowance of costs. Accordingly, much of the Intervenors' testimony provides no basis for disallowance.

The Commission has affirmed this principle in precedent showing that its focus in determining a disallowance is to identify the costs fairly attributable to imprudence. This aligns with public policy as described in the testimony of Dr. Debra Aron. As explained by Dr. Aron, a stand-alone finding of imprudence should not be sufficient to deny cost recovery, because to be consistent with the advancement of social welfare and to align the utility's incentives with those of the social-welfare maximizing regulator, a disallowance should be imposed only if the imprudence *caused* the wildfire and the disallowed costs are attributable to that imprudence.⁵³ Dr. Aron notes that, when imprudence does not cause a wildfire, the Commission may use other tools, such as penalties, if warranted by the circumstances.⁵⁴

With respect to ignition of the Woolsey Fire, SCE has shown that the initiating event that caused the fire—the electrical fault that occurred when the subtransmission down guy contacted the distribution jumper cable—was not the result of any imprudence by SCE. Post-fire examination of the facilities showed that the down guy had become slack, which allowed the contact to occur during windy

⁵² EPUC Testimony, pp. 48–49.

⁵³ SCE-01, Vol. 2, pp. 30–34, 47–51.

⁵⁴ As set forth in SCE-01, Vol. 1, pp. 11–12, SCE entered into an ACO with SED to resolve allegations that SCE violated certain rules and regulations in connection with the 2018 Woolsey Fire, as well as the 2017 Thomas Fire and 2018 Montecito debris flows and smaller 2017 fires (Resolution SED-5, p. 1). SED then presented a revised resolution, with no substantive changes to any agreement terms, which the Commission approved by Resolution SED-5A on July 15, 2022; *see* D.22-04-057. Pursuant to the ACO, SCE paid \$110 million in fines, allocated \$65 million in shareholder funds to wildfire safety measures, and waived its right to seek recovery of \$250 million of third-party claims arising from the Woolsey Fire.

conditions. Post-incident analysis also shows that a taut guy wire would provide approximately twelve 1 inches of clearance—considerably more than the 9 inches required by GO 95. SCE confirmed that the 2 Subject Pole was in good condition and that the relevant subtransmission down guy was taut just six 3 weeks before the fire. And at no point between then and the fire did SCE receive any indication that the 4 subtransmission down guy had become slack. Though SCE acknowledged missed opportunities before 5 the Woolsey Fire to identify and remediate certain conditions associated with the secondary ignition, 6 none of those conditions related to the initiating event and Intervenors do not argue otherwise. Thus, the 7 record strongly supports that the cause of the Woolsey Fire was not the result of any imprudence by 8 SCE. 9

Moreover, even if the Commission were to find some imprudence with respect to the secondary 10 ignition, the record shows that the secondary ignition was not the cause of the costs at issue. As 11 12 explained further in SCE-13, fire progression modeling and fire suppression analysis show that the Woolsey Fire would have burned the same footprint even if there had been only a single ignition at the 13 Subject Pole caused directly by the initiating event. In other words, even setting aside the secondary 14 ignition, the Woolsey Fire would have caused the same destruction and SCE would have incurred the 15 same costs. So even if the Commission were to find some imprudence with respect to the secondary 16 ignition, there are no costs that SCE would not have incurred but for that conduct. 17

More broadly, in light of the Commission's precedent and fair public policy to not impose 18 disallowances that cannot be tied directly to imprudence, the Commission should disregard 19 Cal Advocates' attempts to use selective data about SCE's programs and facilities to criticize SCE's 20 prudent conduct in hindsight. In most instances, Cal Advocates makes no effort to tie the program or its 21 criticism to the ignitions. For example, and as described in more detail in SCE-12, Vol. 2, Cal Advocates 22 critiques certain aspects of SCE's operation and maintenance of facilities on the Big Rock Circuit 23 outside of the area where the Woolsey Fire ignited, but such issues cannot be causal. Cal Advocates' 24 25 criticism of SCE's pole loading program is likewise not causal because Cal Advocates does not allege that the Woolsey Fire involved a pole failure.⁵⁵ Such testimony has no bearing for the Commission's 26 decision here because nothing Cal Advocates suggests would have prevented the Woolsey Fire. 27 As discussed further in SCE-12, Vols. 1–4, even for the few areas where Cal Advocates speculates about 28 a possible connection to ignition, Cal Advocates provides no evidence to support that theory or even tie 29

⁵⁵ CA-03, pp. 21–24.

 its suggested practices to industry standards at the time. Absent evidence of any imprudence causally related to the costs at issue, the Commission should approve SCE's cost recovery request.

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INTERVENORS IGNORE THE "PERFECT STORM OF FACTORS" THAT DROVE THE WOOLSEY FIRE'S IMMENSE DESTRUCTION

IV.

Intervenors do not rebut SCE's detailed testimony regarding the external factors that drove the progression and destructiveness of the Woolsey Fire.⁵⁶ As SCE explained in SCE-04, the firefighting response to the Woolsey Fire was impacted by what was described as "a perfect storm of factors"⁵⁷ that strained firefighting resources, complicated containment and suppression efforts, and ultimately contributed to the fire's destructiveness. Indeed, SCE showed that external factors allowed the fire to spread and exacerbated damages. These external factors included the Red Flag Warning conditions and remote location of the fire combined with a string of other significant emergency incidents in the State that had occurred earlier in the day, including the Camp Fire which had ignited early that morning in Northern California and the Hill Fire, which had ignited just 20 minutes before the Woolsey Fire in Ventura County.

On November 8, 2018, nearly 60% of California's population was under Red Flag Warnings. In the early hours of that same day, Ventura County law enforcement and emergency personnel were activated in response to a mass shooting incident in Thousand Oaks.⁵⁸ Later that morning, the Camp Fire ignited in Northern California and descended on the town of Paradise to become the State's most destructive and deadly wildfire, drawing firefighting resources from across the State. Then that same afternoon, Ventura County saw first the Hill Fire⁵⁹ and then the Woolsey Fire ignite roughly 20 minutes and just 14 miles apart. The close succession of these events significantly affected the fire suppression and containment response, especially for the Woolsey Fire. The Hill Fire initially received fire suppression priority as the earlier ignition and the perceived threat it posed, including its potential to

⁵⁶ See SCE-04.

⁵⁷ Citygate Associates, LLC, County of Los Angeles After Action Review of the Woolsey Fire Incident (Nov. 17, 2019), available at <u>https://file.lacounty.gov/SDSInter/bos/supdocs/144968.pdf</u>.

⁵⁸ The LA County After Action Review noted the impact the mass shooting incident had on local firefighting and law enforcement resources. LA County After Action Review, pp. 1–2, 80. For instance, a Ventura County Fire Chief dispatched to the Woolsey Fire on November 8 had been acting as deputy Incident Commander for the mass shooting incident through the early morning hours of November 8. See SCE-04.

⁵⁹ To be clear, the Hill Fire was not associated with SCE's equipment and public reports indicate that fire agencies determined the Hill Fire was human caused. See, e.g., Tyler Hersko, Investigators point to human activity as cause of Hill Fire; containment at 100 percent, VC Star (Nov. 16, 2018), available at https://www.vcstar.com/story/news/2018/11/16/hill-fire-update-fully-contained-californiawildfire/2024113002/.

cross Highway 101. Those early efforts successfully kept the Hill Fire contained to just 4,531 acres in total, with only six structures damaged or destroyed and a minimal footprint south of Highway 101.

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By contrast, because local agencies and emergency personnel were already overwhelmed 3 responding to the Hill Fire when the Woolsey Fire ignited, the immediate response to the Woolsey Fire 4 was limited and insufficient, both in terms of ground resources and, most significantly, aerial resources 5 such as air tankers. The resource constraints and prioritization of the Hill Fire response continued to 6 negatively impact the Woolsey response during the critical initial hours of attack. The Camp Fire also 7 had an impact because mutual aid resources that would otherwise have been available to support 8 suppression efforts in Southern California were already fully committed in Northern California. 9 In contrast to firefighters' ability to keep the Hill Fire mostly north of Highway 101, the Woolsey Fire 10 crossed Highway 101 in the early morning of November 9, 2018. And once that occurred, the fire 11 quickly burned all the way to the Pacific Ocean in Malibu, California, where much of the overall 12 destruction occurred. SCE estimates that approximately \$4.5 billion in fire damages could have been 13 avoided or significantly reduced if the Woolsey Fire had been contained north of Highway 101. 14

SCE SHOULD BE AUTHORIZED TO RECOVER ITS LEGAL AND FINANCING COSTS

EPUC argues that SCE should not be allowed to recover the costs that it incurred to defend against claims arising from the Woolsey Fire and to finance the WEMA balance pending the Commission's review and decision in this proceeding.⁶⁰ EPUC's objection is derivative of its view regarding SCE's conduct related to ignition of the Woolsey Fire. For the reasons set forth in SCE's opening testimony and summarized below, however, those costs should be authorized for recovery irrespective of the Commission's ultimate prudence determination regarding SCE's ignition-related conduct.

In light of the doctrine of inverse condemnation as applied to investor-owned utilities in 10 California, utilities like SCE incur incremental legal expenses to manage and reasonably defend against 11 12 wildfire liability claims. As discussed in SCE-05 and SCE-06, that was the case for SCE here with respect to claims arising from the Woolsey Fire. Much of the litigation stemming from the Woolsey Fire 13 involved claims brough under California's inverse condemnation doctrine, which requires a utility to 14 pay for property damages (plus interest and attorneys' fees) from a wildfire caused by its equipment 15 regardless of the utility's fault (or lack thereof). Thus, a process to record and review the reasonableness 16 of such incremental legal expenses is necessary, and this application under SCE's WEMA tariff 17 provides such a process. EPUC's basis for objecting to SCE's legal costs derives from its view regarding 18 the Woolsey Fire ignition, rather than any objection to the underlying costs.⁶¹ Yet EPUC's testimony 19 ignores the fact that SCE faced purported strict liability under the doctrine of inverse condemnation and 20 incurred significant legal expenses as a result—costs that would have been incurred irrespective of the 21 Commission's ultimate prudence determination regarding SCE's ignition-related conduct. Thus, the 22 Commission should authorize SCE to recover its legal costs. 23

Similarly, in light of the legal and regulatory framework governing SCE's WEMA cost recovery request, there was an inherent delay between when SCE made claims payments and incurred legal expenses and when SCE could file an application and when the Commission could review and issue a decision. This inherent delay makes financing costs necessary in order to bridge that multi-year period and to facilitate the Commission's regulatory process. As described in SCE-07, SCE utilized a variety of

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⁶⁰ EPUC Testimony, pp. 48–49. Cal Advocates presents no testimony addressing these categories of costs.

⁶¹ EPUC Testimony, p. 48.

tenors to obtain efficient rates of financing while aiming to avoid being under- or over-financed and
having large, concentrated debt maturities. SCE's actual incurred financing costs—and forecasted to
continue to be incurred—are incremental to the financing costs SCE is authorized to recover in the
general rate case and other cost recovery proceedings, at rates as authorized in the cost of capital
proceeding. As reflected in SCE-14, the amounts that SCE has requested for financing costs after May
2025 are estimated on a forecast basis and will be trued up to actual costs in connection with SCE's
financing order application or other recovery from customers of the costs authorized in this proceeding.

EPUC raises a further alternative argument that financing costs "should be limited to SCE's 8 commercial paper rate."62 Notably, EPUC's argument is grounded in policy objections, rather than an 9 actual review of the underlying costs or SCE's financing decisions. EPUC simply ignores that SCE's 10 WEMA tariff provides for tracking of SCE's actual cost of financing amounts eligible for recording in 11 WEMA-not the commercial paper rate.⁶³ EPUC also ignores that commercial paper is meant for short-12 term borrowing, not multi-year financing of claims costs necessitated by the Commission's regulatory 13 process. SCE must incur financing costs irrespective of the Commission's ultimate prudence 14 determination regarding SCE's ignition-related conduct. Thus, the Commission should authorize SCE to 15 recover its financing costs. 16

⁶² EPUC Testimony, p. 49.

⁶³ SCE Tariff Book, Preliminary Statement Part N, Section 52.b. (defining "Costs Arising From Wildfires" as "All incremental amounts paid by SCE that are the direct or indirect result of a wildfire, including (1) payments to satisfy Wildfire Claims, including any co-insurance, deductibles and other insurance expense paid by SCE, (2) outside legal expenses incurred in the defense of Wildfire Claims, (3) payments made for liability and property wildfire insurance and related risk-transfer mechanisms, including associated fees and taxes, (4) *the cost of financing these amounts*, and (5) expenses associated with the storage of equipment and materials related to wildfire investigations") (emphasis added).

VI.

COST RECOVERY IS IN THE PUBLIC INTEREST

As explained in SCE-01, Vol. 1, over the long term, both utilities and their customers benefit from a regulatory framework that enables recovery of wildfire claims costs when utilities employ prudent policies, systems and practices. Such a regulatory structure is perceived by credit agencies and investors as reasonable and predictable. Indeed, market confidence in the California regulatory framework governing cost recovery—i.e., one that reflects a predictable and reasonable business environment—is foundational for California utilities to access capital on reasonable terms, thus fostering the financial health of California's investor-owned utilities. This financial health is essential for Californians' safe access to reliable, clean, and affordable electricity, as it enables California utilities to raise the capital necessary to achieve those goals.

12 As the Commission recognized in D.25-01-042, the credit and investment community has focused intently on wildfire cost recovery and viewed A.23-08-013 related to the 2017 Thomas Fire "as 13 an important indicator of the California regulatory environment."64 So too here. While the Woolsey 14 Fire—like the Thomas Fire—is not a covered wildfire subject to Assembly Bill (AB) 1054, the 15 Commission's resolution of this proceeding will be viewed within the context of how the Commission 16 will ultimately implement the AB 1054 framework. Through AB 1054 and Senate Bill (SB) 901 before 17 it, "California created a comprehensive strategy to address and minimize the risk of catastrophic 18 wildfires posed by electrical equipment."65 This includes a number of elements, including the California 19 Wildfire Fund, Wildfire Mitigation Plan requirements, the safety certification process, and the 20 presumption of prudence. These reforms were understood as constructive and credit supportive features 21 of the California regulatory environment and significantly improved the financial landscape for 22 California's investor-owned electric utilities. However, the investment community has expressed 23 reservations about implementation risk associated with AB 1054, including how its prudence standard 24 25 would be applied and what happens if the California Wildfire Fund is depleted.⁶⁶ The Commission has

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⁶⁴ D.25-01-042, p. 21.

⁶⁵ *Id.*, p. 32.

⁶⁶ See, e.g., Research Update: Edison International And Subsidiary SoCalEdison Outlooks Revised To Negative From Stable On Potential Risk For WildFire Fund Depletion: Ratings Affirmed, S&P Global (Feb. 3, 2025) (expressing concern that California Wildfire Fund could materially deplete earlier than expected without an automatic replenishing mechanism), available at <u>https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101612769</u>.

yet to issue a decision regarding a covered wildfire under the AB 1054 framework, so the investment community naturally looks to proceedings like this one as potential harbingers.⁶⁷

The January 2025 wildfires in the Los Angeles area have brought these investor concerns into sharp relief, with immediate and significant impacts for all of the large energy utilities in California. Though structural reforms regarding fund durability and long-term risk reduction will require action by the Legislature and other policymakers, there is significant focus on California and specifically on actions taken by the Commission. In other words, the Commission's decision in this proceeding assumes even greater importance for investor confidence in the California market and providing a meaningful signal regarding the constructiveness of the California regulatory environment. A decision that evaluates and authorizes cost recovery based on a reasonable assessment of the prudence of SCE's policies, systems and practices would support credit rating agencies' and investors' confidence in the fairness and predictability of California's cost-recovery framework. A negative signal in this proceeding, however, would undermine perceptions of the fairness and predictability of the California's cost-recovery framework. A negative signal in this proceeding, however, would undermine perceptions of the fairness and predictability of the California regulatory environment.

A. <u>EPUC's Criticisms of SCE's Financial Policy Testimony Are Misplaced and Ignore the</u> <u>Broader Context</u>

My name is Dan Ford, and I am Vice-Chairman for Citigroup Global Markets, Inc. (Citi) in its Natural Resources group and a former research analyst with over 25 years of experience in the utility sector. EPUC, the only Intervenor to address my direct testimony presented in SCE-01, Vol. 3, argues that it is irrelevant and unsupported.⁶⁹ As detailed herein, however, my testimony is directly relevant to this proceeding and is supported by substantial evidence.

Investor perception is relevant to this proceeding because if investors perceive the Commission's prudence assessment and cost recovery decision as unreasonable or extreme, it will increase the cost of capital for SCE and other California large energy utilities, which will harm customer affordability.⁷⁰

⁶⁷ See SCE-01, Vol. 3, pp. 31–32 (quoting credit opinions and analyst reports drawing this conclusion).

⁶⁸ Contrary to EPUC's assertions (EPUC Testimony, p. 44), SCE has not signaled to investors that cost recovery in this proceeding is unlikely. The wildfire loss estimates provided in EIX's 2023 and 2024 10-K annual reports are reflective of an accounting determination necessitated by the extreme 2017 SDG&E WEMA Decision as explained in the excerpts EPUC quotes.

⁶⁹ See generally EPUC Testimony, pp. 37–48.

 $[\]frac{70}{2}$ See generally SCE-01, Vol. 3.

This is not mere speculation or a guess, as EPUC implies,⁷¹ but rather based on the evidence of what actually occurred following the Commission's denial in 2017 of SDG&E's application to recover costs associated with the 2007 San Diego wildfires (the 2017 SDG&E WEMA Decision). Contemporaneous statements from analyst and investor reports, and financial data spanning 2007 through 2024, prove that investors perceived that decision to be extreme and that this perception resulted in a significant increase in SCE's cost to finance the debt needed to fund its operations—costs that are ultimately borne by SCE's customers.⁷² EPUC's various attempts to dismiss or downplay this evidence fall flat.

First, EPUC misinterprets the reason investors reacted negatively to the 2017 SDG&E WEMA 8 Decision. This negative perception was not because investors expected a "softening" of the prudence 9 standard or for the Commission to authorize cost recovery irrespective of a utility's actions.73 10 Instead, investors viewed the decision to authorize zero dollars of the \$379 million requested as 11 inconsistent with customary standards of utility prudence and cost recovery.74 This extreme precedent 12 for utility cost recovery for wildfire losses—which occurred close in time to the ignition of the Thomas 13 Fire and a statewide consensus emerging regarding a "new normal" of destructive wildfires-made 14 California a riskier place to invest than other jurisdictions and directly contributed to the subsequent 15 flight of capital away from California utilities.⁷⁵ Nor did investors regain confidence after seeing the 16 Commission's reasoning in the November 2018 denial of SDG&E's application for rehearing.76 17 Afterwards, investors continued to point to the 2017 SDG&E WEMA Decision as a major contributor to 18

- 73 EPUC Testimony, pp. 38, 40.
- <u>74</u> SCE-01, Vol. 3, pp. 2–4.

T1 EPUC Testimony, p. 47.

⁷² See generally SCE-01, Vol. 3.

 ⁷⁵ Id., pp. 2–4, 12–21. For example, the same day this decision issued, Wells Fargo issued a Flash Comment stating they were "concerned that [the California] utilities are being held to ill-defined hindsight standards." *CPUC Votes 5-0 Against SDG&E Wildfire Recovery, Raising CA Risk Profile ("Flash Comment; Utilities")*, Wells Fargo, p. 1 (Nov. 30, 2017). Subsequently, in July 2018, S&P revised SCE's rating outlook to negative due to the "lack of predictability in California's regulatory compact for utilities to consistently recover the costs of a wildfire from ratepayers" which "creates substantial risks and vulnerability on electric utilities in California that is unlike those in any other regulatory jurisdiction in North America." *Edison International and Subsidiary Outlooks Revised to Negative on California Wildfire Risk, Ratings Affirmed*, S&P Global Ratings, p. 3 (July 9, 2018), *available at https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/10619706*.

The EPUC Testimony, p. 43.

the financial stress of the California investor-owned utilities,⁷⁷ which continued to trail behind most publicly traded utilities in the United States in share price performance and price-to-earnings multiple trading.⁷⁸

Second, my testimony does not ignore that inverse condemnation and an increase in utility-4 related wildfire ignitions also affected SCE's equity valuation and debt borrowing costs during this 5 time.⁷⁹ To the contrary, my testimony is that those other factors exacerbated the investor concerns 6 caused by the 2017 SDG&E WEMA Decision.⁸⁰ For example, in April 2018, Moody's revised SCE's 7 outlook to negative due to the "higher regulatory risk for investor-owned utilities in California due to 8 inverse condemnation exposure and the uncertainty that they will be able to recover related costs from 9 ratepayers, as evidenced by the SDG&E's [sic] disallowance in its 2007 wildfire case."81 Similarly, a 10 June 2018 S&P report cited the "disconnect between the CPUC's prudence standard ... and the 11 12 courts['] strict liability standard" in indicating that continued utility exposure to wildfire losses via inverse condemnation "could result in a deterioration of credit quality and lower credit ratings for all of 13 the California regulated electric utilities."82 14

Third, the adverse financial effects on SCE and its customers caused by this confluence of factors are real and significant. My analysis (which EPUC does not substantively challenge⁸³) estimates that the excess financing costs SCE's customers will pay through maturity for the non-wildfire-claims-

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81 Moody's Changes Edison International and Southern California Edison's Rating Outlooks to Negative ("Ratings Action"), Moody's, pp. 2–3 (Apr. 11, 2018).

See, e.g., Assessing the Latest CA Headlines: Wildfire Comm Report Drives Legislative Potential ("North America Equity Research"), JP Morgan, p. 6 (Jun. 6, 2019) (explaining, more than six months after the rehearing denial, that JP Morgan continues to "see the prudency language (dating back to SDG&E's WEMA decision) as a major contributor to the current financial stress of the CA IOUs given lack of clarity around the evaluation of prudency and ultimate cost recovery").

SCE-01, Vol. 3, pp. 14–15 (Figures III-4 and III-5) (showing that after the November 2018 denial of the application for rehearing, SCE and PG&E's parent companies continued to underperform the utility sector index in share price performance and FY+1 price-to-earnings multiple trading).

⁷⁹ See EPUC Testimony, pp. 42–43.

⁸⁰ See, e.g., SCE-01, Vol. 3, pp. 2–3 ("Given strict liability via inverse condemnation in California courts for damages caused by utility-associated wildfires, this combination of an extreme cost recovery precedent and a 'new normal' of destructive wildfires caused a flight of capital away from SCE and the other California investor-owned utilities (IOUs) as investors re-directed their capital to jurisdictions where cost recovery outcomes were more predictable and less extreme.").

⁸² Will Wildfires Scorch California's Utilities? S&P Global Ratings, pp. 3–4 (June 18, 2018).

⁸³ EPUC states that this is speculation but does not provide any other commentary on my methodology or results. EPUC Testimony, p. 38.

related debt issued between the late 2017 SDG&E WEMA Decision and the announcement of the 1 Thomas Fire cost recovery settlement will be between \$1.0 billion and \$1.7 billion.⁸⁴ Thus, regardless of 2 gradual improvements by 2024 in the share price of SCE's parent company, Edison International (EIX), 3 and in SCE's credit ratings,⁸⁵ that extreme precedent has caused a significant sunk cost, borne in part by 4 SCE's customers. Moreover, EPUC overstates the import of these gradual improvements in financial 5 health. While EIX's share price did increase between 2017 and 2024 on an absolute basis, the more 6 relevant fact is that EIX's share price and price-to-earnings ratios significantly underperformed against 7 its utility peers during this time.86.87 And while SCE's credit ratings also somewhat improved from their 8 lows during this period, due to intervening events like the passage of AB 1054, the table in EPUC's 9 testimony shows they did not recover to their level before the 2017 SDG&E WEMA Decision.⁸⁸ 10

EPUC also misinterprets the significance of EIX paying dividends during this time.⁸⁹ Utilities are expected to pay dividends as a core part of investors' total return expectations for the sector. Cutting dividends in this sector is seen by both investors and credit rating agencies as a measure of last resort with strongly negative repercussions. If EIX had decreased or stopped these dividend payments, investors and credit rating agencies would have viewed EIX as a riskier investment, ultimately resulting in even higher financing costs for SCE's customers. For example, only a few utilities reduced their dividends in response to worsening financial and trading performance over the last several years, and

85 See EPUC Testimony, pp. 39, 43.

86 As shown in my direct testimony, from August 21, 2017, the day prior the Proposed Decision in SDG&E's WEMA case, through August 28, 2024, the day prior to the announcement of the Thomas Fire Settlement, the EIX stock price rose just 6.1% compared to 39.7% for the utility sector index (UTY). SCE-01, Vol. 3, p. 14, Figure III-4. While EIX's share price subsequently reached its all-time high of \$88.77 per share on September 4, 2024, this notably did not occur until *after* the Commission approved the Thomas Fire settlement on August 29, 2024.

87 Based on publicly available information from Yahoo Finance, on a forward price-to-earnings basis, EIX traded at an average discount of ~30% (approximately 4.1x) to the PHLX Utility Sector Index (UTY) in 2024.

88 See EPUC Testimony, p. 39. Moreover, after being downgraded by Moody's in September 2018, it would take more than four years for SCE to receive its first upgrade by one notch from a single rating agency. SCE-01, Vol. 3, p. 15.

89 EPUC Testimony, pp. 46–47.

p. 39, 43.

⁸⁴ As compared to the financing costs paid by customers of SCE's non-California peers. See SCE-01, Vol. 3, pp. 22–29.

those that did, such as PG&E's parent company (PGC) and CenterPoint Energy (CNP), experienced further decreases in share price and investor confidence.⁹⁰

Finally, while the Commission's recent approval of the Thomas Fire settlement was an important signal to investors about the California regulatory environment, its read-through to other prudency proceedings is necessarily limited. On the one hand, the fact that this settlement approval apportioned wildfire loss costs between ratepayers and shareholders is widely viewed in the market as helping counteract the negative 2017 SDG&E WEMA precedent.⁹¹ On the other hand, it is a single data point facilitated by a settlement agreement and does not establish that the Commission will *consistently* reach reasonable outcomes in wildfire loss cost recovery proceedings, which is critical for investor confidence.

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B. <u>SCE's Cost Recovery Proposal Supports Affordability</u>

As described in SCE-01, Vol. 1 and SCE-09, SCE proposes to finance the WEMA costs associated with the Woolsey Fire through the issuance of recovery bonds pursuant to Public Utilities Code sections 850 *et seq.* and to recover the CEMA restoration costs in the normal course. This cost recovery proposal supports customer affordability by reducing the cost incidence on customers and protecting low-income customers, who are exempt from paying recovery bond charges under the law governing such securitizations.

⁹⁰ See e.g., PCG Has Suspended Dividends, Citing Uncertainty Regarding Wildfire-related Liabilities, Evercore ISI, p. 1 (Dec. 21, 2017) ("PCG shares are down another +/-9.5% to \$46.35/share in aftermarket trading after this dividend cut announcement[.]"); CPN Takes its Medicine and Cuts Dividend nearly 50% After ENBL Cuts LP Distribution, BMO Capital Markets, p. 1 (Apr. 2, 2020) ("Dividend cuts have been rare among utilities the last few years and while we acknowledge the extraordinary and uncertain environment we think investors may focus on [sic] this tomorrow.").

⁹¹ See, e.g., SCE-01, Vol. 3, p. 33 (citing investor reactions to the announcement of the settlement agreement). See also Research Update: Edison International And Subsidiary SoCalEdison Outlooks Revised To Negative From Stable On Potential Risk For WildFire Fund Depletion: Ratings Affirmed, S&P Global, p. 2 (Feb. 3, 2025), available at https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/101612769.

Appendix A

Analysis of 2014-2017 CPUC Reportable Ignitions

Appendix A: Analysis of 2014-2017 CPUC Reportable Ignitions

This appendix presents analysis of ignitions reported to the Commission by electric utilities pursuant to D.14-02-015 (referred to herein as CPUC reportable ignitions). The analysis uses CPUC reportable ignitions reported by SCE, San Diego Gas & Electric Company (SDG&E) and Pacific Gas and Electric Company (PG&E) for the period from 2014 to 2017.

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Table A-1 shows total CPUC reportable ignitions during the 2014–2017 period, including the number that occurred during Red Flag Warning conditions.⁹² Figure A-1 shows the average, annual total CPUC reportable ignitions during the 2014-2017 period for each utility normalized on the basis of 100 overhead line miles.⁹³ Figure A-2 shows the percentage of CPUC reportable ignitions during the 2014-2017 period that occurred during Red Flag Warning conditions.

_		Total	Non-RFW	RFW	Unknown	Annual Average / 100 Line Miles	Percentage in RFW
	SCE	346	338	5	3	0.17	1.4%
	PG&E	1552	1508	43	1	0.31	2.8%
	SDGE	115	110	5	0	0.36	4.3%

Table A-1CPUC Reportable Ignitions (2014 - 2017)

⁹² Due to certain limitations in the reported data (e.g., insufficient location information), SCE is unable to determine whether certain ignitions occurred during Red Flag Warnings or within a high fire area. These ignitions are labeled "Unknown" in Table A-1 and Table A-2.

⁹³ The data in "Annual Average / 100 Line Miles" column of Table A-1 uses total overhead line miles of 50,999 for SCE, 8,120 for SDG&E, and 98,751 for PG&E based on data for 2020 submitted in the Q3 quarterly reports by SCE, SDG&E, and PG&E to the Office of Energy Infrastructure Safety (OEIS) for the 2021 Wildfire Mitigation Plans.

Figure A-1 Average Annual CPUC Reportable Ignitions per 100 Line Miles (2014 - 2017)



Figure A-2 Percentage of CPUC Reportable Ignitions During Red Flag Warnings (2014 - 2017)



Table A-2 shows total 2014–2017 CPUC reportable ignitions that occurred in areas designated as 1 High Fire Threat District (HFTD) Tier 2 and Tier 3 under the Commission's final Fire Threat Map for 2 each utility, including the number that occurred during Red Flag Warning conditions. Figure A-3 shows 3 the average, annual CPUC reportable ignitions in HFTD areas during the 2014–2017 period for each 4 utility normalized on the basis of 100 overhead line miles in HFTD Tier 2 and Tier 3.94 Note, this 5 analysis uses total overhead line miles in HFTD Tier 2 and Tier 3 based on data for 2020, and those 6 figures reflect the classifications under the Commission's final Fire Threat Map adopted in D.17-12-024. 7 Though the Commission's interim maps were in effect during the 2014–2017 period,⁹⁵ there is not 8 comparable reporting of overhead line miles in high fire areas for the 2014–2017 time period consistent 9 with the Commission's interim maps. Accordingly, for consistency in the analysis, Table A-2 and Figure 10 A-3 use HFTD Tier 2 and Tier 3 to classify ignitions, though this does not necessarily reflect the fire 11 12 risk designation for the area at the time of the ignition in light of changes between the interim maps and the final Fire Threat Map.⁹⁶ 13

Table A-2CPUC Reportable Ignitions in HFTD (2014 - 2017)

_	HFTD Total	Non-RFW	RFW	Unknown	HFTD Annual Average / 100 HFTD Line Miles	HFTD Percentage in RFW
SCE	128	123	5	0	0.23	3.9%
PG&E	503	488	15	0	0.41	2.98%
SDG&E	70	62	5	3	0.40	7.14%

95 See D.09-08-029, pp. 22–24 and Ordering Paragraph (OP) 2; D.12-01-032, pp. 179–80 and OP 12(i)-(ii).

⁹⁶ For instance, there was a material change to the areas in PG&E's service area designated as high fire risk under the Commission's interim fire threat map for Northern California and the final Fire Threat Map.

⁹⁴ The data in "HFTD Annual Average / 100 HFTD Line Miles" column of Table A-2 uses total overhead line miles in HFTD Tier 2 and Tier 3 of 13,713 for SCE, 4,426 for SDG&E, and 30,729 for PG&E based on data for 2020 submitted in the Q3 quarterly reports by SCE, SDG&E, and PG&E to the Office of Energy Infrastructure Safety (OEIS) for the 2021 Wildfire Mitigation Plans.



Figure A-3 Average Annual CPUC Reportable Ignitions in HFTD per 100 HFTD Line Miles (2014 - 2017)