Application No.: Exhibit No.:

A.25-06-017

Liberty-02-E

Witnesses:

T. FeeG. FowlerA. Lykens

E. Schwarzrock



(U 933-E)

Mountain View Fire Cost Recovery Application

Before the California Public Utilities Commission

Liberty-02: Ignition

Errata

(Clean Version)

Tahoe Vista, California December 9, 2025

Liberty-02: Ignition

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Liberty-02: Ignition

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I.

Executive Summary

This testimony sets forth Liberty's analysis of the origin and cause of the Mountain View Fire that ignited on November 17, 2020, near the town of Walker, in Mono County, California. The fire was first reported at approximately 11:58 a.m. in a field alongside Highway 395 between the Mountain View Barbeque Restaurant and the Andruss Motel. The California Department of Forestry and Fire Protection ("Cal Fire") conducted an investigation into the origin and cause of the fire and its findings are set forth in an investigation report, referred to throughout this testimony as the "fire agency report." As described in that report, Cal Fire concluded that the "most probable" cause of the fire was an energized conductor contacting the ground and igniting grassy fuels.2

In connection with the litigation arising from the Mountain View Fire, Liberty engaged an experienced wildland fire origin and cause expert to perform a technical peer review of the fire agency report and investigation. In his opinion, the fire agency investigation was not sufficiently thorough and did not meaningfully address conflicting witness statements. He notes that the ability of fire agency investigators to document and analyze fire movement indicators was limited due to rainfall in the area shortly after the ignition, and visual evidence of the early fire indicates the investigation likely identified an incorrect specific origin area.

Despite the investigation's limitations and shortcomings, the possibility that electrical facilities caused the Mountain View Fire cannot be ruled out, and Liberty acknowledges there is evidence consistent with such a conclusion. An eyewitness reported seeing sparking from electrical facilities at Pole 266731 (the "West Pole") and fire igniting near the base of that pole. After the fire ignited, one of Liberty's conductors was found separated and on the ground between the West Pole and Pole 40288 (the "East Pole"), and post-incident examination of the conductor showed damage consistent with phase-to-phase contact at the area of separation. Liberty's system protection also recorded electrical events on the circuit around the time of the reported ignition. Neither the fire agency investigation nor Liberty's own investigation identified significant evidence showing an alternate cause of the Mountain View Fire.

¹ The fire agency report for the Mountain View Fire is Appendix A to this testimony.

² See Appendix A at 21.

The Mountain View Fire

The Mountain View Fire ignited shortly before noon on November 17, 2020, near the town of Walker in Mono County, California. A 911 caller first reported the fire at approximately 11:58 a.m., and the fire was first observed in a grassy field adjacent to an area of Highway 395 that runs east and west. Cal Fire investigated the origin and cause of the Mountain View Fire and issued a report. Based on fire spread indicators, evidence collected, and witness statements, the report concludes that the "most probable" cause of the fire was an energized conductor contacting the ground and igniting grassy fuels between the East and West Poles.³ The origin area of the fire is shown in Figure 1.

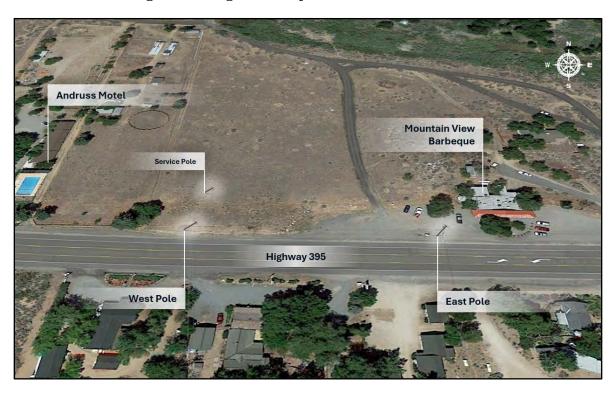


Figure 1: Origin Area of the Mountain View Fire

While my review identified certain shortcomings with the fire agency investigation and report, there is evidence consistent with a power line-caused ignition. Eyewitnesses to the ignition and early stage of the fire reported first seeing fire near the base of the West Pole closest to the Andruss Motel, as well as sparking from Liberty's electrical facilities. After ignition, the northern field (C phase)

³ See Appendix A at 21.

conductor on the Topaz 1261 Circuit between the West and East Poles was found separated and lying in the field near where the fire had ignited. Metallurgical examination of the conductors identified damage consistent with phase-to-phase contact—specifically, fresh arc marks and melting of the steel core and aluminum strands—at the point of separation. A protection device on Liberty's system recorded electrical faults on the Topaz 1261 Circuit around the time of the ignition consistent with phase-to-phase contact and the conductor separation. Specifically, the 1261 R2 Recloser—the nearest protection device upstream of the area of ignition—recorded a phase-to-phase fault before intermittent phase-to-ground faulting. This phase-to-ground faulting caused the recloser to operate and ultimately lock out to deenergize the line. In light of this evidence, Liberty acknowledges the possibility that its electrical facilities were associated with ignition of the Mountain View Fire.

A. The Fire Agency Investigation Was Not Sufficiently Thorough and Certain Conclusions in the Fire Agency Report Are Contradicted by the Evidence

I was engaged to perform a technical peer review of the fire agency investigation of the Mountain View Fire. Based on that review, I conclude that the investigation was not thorough and reached certain incorrect conclusions. The fire agency report acknowledged other "possible causes" of the fire that were not ruled out, but nevertheless found that "an energized conductor contacting the ground" was "the most probable cause of the Mountain View fire." In my view, the fire agency investigators did not conduct a sufficiently thorough investigation to rule out other potential causes of the fire and, based on my peer review of their work, the cause of the fire should have been identified as undetermined. The fire agency report notes that alternate ignition sources, such as arson or a malfunctioning vehicle, remained possible causes, but investigators do not appear to have thoroughly investigated alternate sources, notwithstanding the general origin area's proximity to a heavily trafficked highway. I believe it is possible the investigators' initial observation that an electrical conductor had separated and fallen to the ground resulted in expectation bias which impacted the investigation.

Properly identifying a specific origin area is a critical step in the wildland fire investigative process. It is only after identifying a specific origin area that investigators should seek to identify the cause of the ignition within that specific origin area. Here, the investigators did not conduct a broad enough search to accurately identify a specific origin area. The only area the investigators appear to have examined thoroughly was the area of the field where a section of damaged conductor was found

⁴ See Appendix A at 21.

lying on the ground adjacent to bleached rocks. The fire agency report indicates that investigators mistakenly identified and focused on stains they thought were burn marks on rocks near this area and indications of ignition, and failed to search for and consider further evidence. Smoke patterns on these rocks, however, would have been indistinguishable between any arc flash and consumption of nearby fuel by the fire, and were adjacent to vegetation that was consumed by the fire some time after its ignition. Based on this, the fire agency report identified a specific origin area—a six feet by twelve feet rectangular area near the end of the conductor and the burned rocks. This area is located between the West and East Poles, just west of a parking turnout, as shown in Figure 2.6 This location, however, appears unburned by an approaching flanking fire in photographic and video evidence captured by eyewitnesses shortly after the fire began (Figure 3), further indicating that fire agency investigators did not correctly identify the specific origin area of the fire.

Figure 2: Specific Origin Area Identified by Fire Agency Report, with the West and

East Poles Marked



⁵ See Appendix A at 19.

⁶ See Appendix A at 20.

Figure 3: 12:01 p.m. Photograph of Specific Origin Area After Ignition



The fire agency investigation was complicated by environmental conditions, which impacted the evidence available to fire agency investigators and, as a result, limited their ability to draw reliable conclusions regarding the fire's origin and cause. High winds and rain in the area of origin following ignition of the fire limited the quantity and availability of fire movement indicators that fire agency investigators could analyze (though the rainfall aided fire suppression efforts, as described in *Liberty-04: External Factors*). This rainfall occurred before fire agency investigators arrived on scene the day following the ignition, and may have limited their ability to draw reliable conclusions from the remaining markers. In standard wildland fire investigations, investigators meticulously identify, document, and analyze a large number of fire movement indicators in and around the suspected general area of origin to understand the fire's movement and progression, as well as to identify the specific area where it originated. In contrast, the number of fire movement indicators that fire agency investigators documented and analyzed for the Mountain View Fire was quite small, which limited their ability to draw reliable conclusions regarding the fire's specific origin area. It is also notable that one of the investigators assisting the fire agency investigation identified ignition points that appear to be outside the specific origin area identified by the fire agency report.

See Appendix A at 17 ("Extremely high winds on Tuesday, November 17, 2020, and prolonged rainfall overnight had eliminated any fire ash indicators in the fire areas I observed.").

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The investigators also failed to timely or thoroughly interview key witnesses. Early accounts by eyewitnesses of the fire are conflicting in their description of the ignition's connection to electrical facilities in the general vicinity where the ignition occurred. For instance, statements by certain eyewitnesses suggested the fire started before the conductor separated and contacted the ground. One eyewitness's testimony seemed to describe the field phase conductor separating and falling into the field after the fire started. Another witness who described observing sparks fall from electrical equipment from across Highway 395 testified that the fire started well before noon and that the conductors remained in the air when the fire started. After later obtaining all of the relevant witness statements, the investigators did not properly retest all possible hypotheses, or review phone records to establish a timeline for the witness's observations. Particularly in light of potentially conflicting accounts, it is critical for investigators to interview and document statements from all relevant eyewitnesses and further develop evidence to help resolve the inconsistencies. Yet, based on my review of the investigation, the fire agency investigators failed to interview some witnesses, and did not thoroughly interview others. For instance, investigators do not appear to have interviewed the witness making the initial 911 report, who did not reference electrical facilities in her report, or certain witnesses at the nearby Mountain View Barbeque that captured key early photos and videos of the fire.

B. Shortcomings of the Investigation Aside, There is Evidence Consistent with the Ignition Having been Caused by Electrical Facilities and Such a Possibility Cannot be Ruled Out

Notwithstanding the shortcomings of the fire agency investigation, I cannot rule out the possibility of an ignition associated with electrical facilities based on the available evidence. There is evidence consistent with the ignition having been caused by electrical facilities. Eyewitnesses reported seeing the fire ignite near the base of the West Pole—an area more consistent with being a specific origin area based on my review of the evidence. After the ignition, one of Liberty's conductors was found separated and on the ground, and I understand metallurgical examination identified damage consistent with phase-to-phase contact at the area of separation. Liberty's electrical event records also indicate electrical faults on the Topaz 1261 Circuit around the time of the ignition consistent with phase-to-phase contact and conductor separation.

1. Eyewitness Testimony Indicates the Mountain View Fire Likely Started Adjacent to
Liberty's Distribution Lines

Multiple eyewitnesses reported first identifying the fire near the base of the West Pole. The caller who first reported the Mountain View Fire to 911 was located directly across

Highway 395 from the West Pole and described seeing flames that had just started, though there was no specific mention of electrical facilities. Another eyewitness—potentially the first to observe the Mountain View Fire—described hearing a noise, and turning to see sparks coming down from the West Pole and flames and sparks around the base of the pole. Additionally, four witnesses inside the nearby Mountain View Barbeque all reported seeing a small fire near the West Pole. Each of the witnesses stated that they identified the fire shortly after the Mountain View Barbeque lost power and they observed vehicles stop on Highway 395. One of those eyewitnesses also reported seeing a power line moving chaotically in the air while sparking and arcing.

Despite consistency in certain aspects of these witness observations, there also are inconsistencies in other respects. The eyewitness who observed sparks falling from the West Pole, for example, stated that all the power lines remained suspended in the air and reported first seeing the fire at about 11:30 a.m., though phone records produced later in the litigation suggest the time was likely around noon. Likewise, the witness who saw the power line chaotically moving also described seeing the conductor come down into the field, which could suggest the fire started before the conductor separation. Thus, some eyewitness accounts appear to suggest that the fire may have started before nearby Liberty facilities were damaged. Notwithstanding these inconsistencies, the eyewitness accounts of the incipient phase of the Mountain View Fire are broadly consistent with an ignition located adjacent to and possibly caused by Liberty facilities.

2. The Metallurgical Evidence Is Consistent with Conductor Contact and Separation

I was retained by Liberty to perform a metallurgical analysis of material related to the Mountain View Fire. Following the fire, the field and center phase conductors between the West Pole and East Pole near the origin area of the fire, as well as the triplex between the West Pole and Service Pole, were removed for preservation, including both the conductors and splices that were present on lines. I performed a site inspection of the origin area on December 5, 2023, and attended an evidence examination of the preserved conductors at EAG Labs on December 7, 2023. I also understand that these conductors were the subject of earlier examinations at the Bureau of Land Management in September 2021 and January 2022, as well as destructive testing at EAG Labs in June 2023, and I reviewed photographs from these earlier examinations and testing. From my review of the metallurgical evidence, I conclude that it is consistent with the

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field and center phase conductors coming into contact and arcing on the day of the Mountain View Fire, with the field phase subsequently separating and falling to the ground. The separation of the field phase conductor was caused by melting due to arcing.

The center and field phase conductors show evidence of recent arcing consistent with phase-to-phase contact on November 17, 2020. The area of contact was approximately mid-span between the West and East Poles, including at the location where the field phase conductor ultimately separated and fell to the ground. The field phase conductor exhibited arcing and melting on each end of the separation point. In particular, there was melting on every aluminum strand at all points of separation, including the steel core strand. The lack of oxidation and overall appearance of this evidence indicates that the damage is fresh and occurred shortly before the conductor was removed from the field. The center phase conductor also exhibited areas of arcing. The most pronounced area aligns with the location of the field phase conductor separation, indicating that the two conductors came into contact. Unlike the field phase conductor, however, the steel core of the center phase conductor remained intact and the conductor did not separate or fall to the ground, though some of the individual aluminum strands separated due to arcing and melting. The center and field phases did not exhibit evidence of old arcing.

The west end of the field phase conductor also exhibited discoloration, likely due to the ground fire. The evidence indicates the west side of the field phase conductor contacted another metal wire—likely the bare neutral wire associated with the triplex conductor between the West Pole and a service pole to its north and a guy wire supporting the West Pole. The east end of the field phase conductor exhibited mechanical damage. The conductor east of the separation point was de-energized due to the separation and apparently fell to the ground in a gravel parking area, where I understand it was driven over by multiple vehicles.

⁸ The conductor's point of separation was approximately 135 feet, 8 inches from the West Pole.

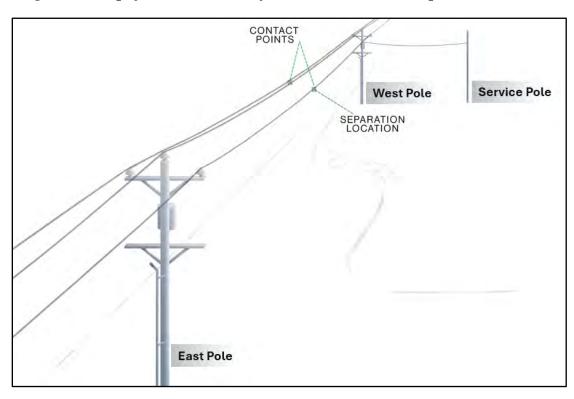


Figure 4: Simplified Illustration of Contact Points and Separation Location

Although a metallurgist retained by plaintiffs in the civil litigation suggested the field phase conductor separated due to fatigue, that conclusion is not supported by the metallurgical evidence. In particular, fatigue results in striations and beachmarks that are clearly identifiable on the fracture surface. Yet no striations or beachmarks were present on the ends of the strands of the field phase conductor, and my review of the evidence showed no sign of separation due to fatigue. A fatigue separation also is unlikely in light of the strength of the materials comprising the ACSR and forces on the conductor between the East and West Poles. The strength of the ACSR conductor far exceeded the applied forces, and the strength of the steel core alone is more than sufficient to support the conductor for a span between the West and East Poles, even during windy conditions such as on November 17, 2020.

² Fatigue is a progressive mode of crack growth that occurs in small increments due to cyclic stresses of sufficient magnitude and duration.

Russell A. Lund & Shahram Sheybany, "Fatigue Fracture Appearances" ASM Handbook, Vol. 11 (Metals Handbook article).

My metallurgical review of the evidence is consistent with the center and field phase conductors coming into contact and arcing, resulting in separation of the field phase conductor.

3. <u>Electrical Events Indicate that Liberty's Conductor Separated and Fell to the</u> <u>Ground Around the Time the Mountain View Fire Was First Reported</u>

As detailed more fully below in Section C, post-incident analysis of Liberty's electrical event records from the 1261 R2 Recloser—the closest upstream protective device to the facilities near the area of origin—indicates that at approximately 11:55 a.m. on November 17, 2020, the 1261 R2 Recloser recorded a phase-to-phase fault followed by a series of ground faults. These electrical events recorded on the Topaz 1261 Circuit are consistent with the center and field phase (B phase and C phase) conductors between the West and East Poles coming into contact and arcing, with the field phase (C phase) then separating and falling to the ground. These events occurred three minutes before the Mountain View Fire was first reported by a 911 caller from across Highway 395. I understand the 911 caller indicated that the fire looked like it had just started and was moving fast, but did not make any reference to power lines or a cause.

C. <u>Liberty's System Protection Scheme Operated as Expected in Response to the Electrical</u> Events on the Day of the Ignition

Review of electrical event records indicates that Liberty's system protection scheme operated as expected in response to faults on the Topaz 1261 Circuit on November 17, 2020. As described in more detail in *Liberty-03: Prudence of Operations*, the Topaz 1261 Circuit originates at an NV Energy substation in Nevada and Liberty's facilities begin at the California-Nevada border. Liberty's portion of the Topaz 1261 Circuit was protected by two line reclosers, referred to as the 1261 R1 and 1261 R2 Reclosers. The 1261 R1 Recloser was located near the border and the beginning of Liberty's facilities on the Topaz 1261 Circuit. The 1261 R2 Recloser was the nearest upstream line recloser between the 1261 R1 Recloser and the West and East Poles. Following the fire, electrical event records were downloaded from the reclosers and analyzed by Liberty.

Liberty's protection system functioned properly to interrupt the fault current and de-energize the portion of the circuit past the 1261 R2 Recloser once the field phase (C phase) conductor separated and fell to the ground between the East and West Poles, as noted in Section II.B.3 above. At approximately 11:55:08 a.m., the 1261 R2 Recloser recorded a 295-amp phase-to-phase fault between the center and field phases (B phase and C phase). This fault cleared without exceeding time-current curve settings and therefore did not prompt operation of the 1261 R2 Recloser. Approximately two seconds later, the

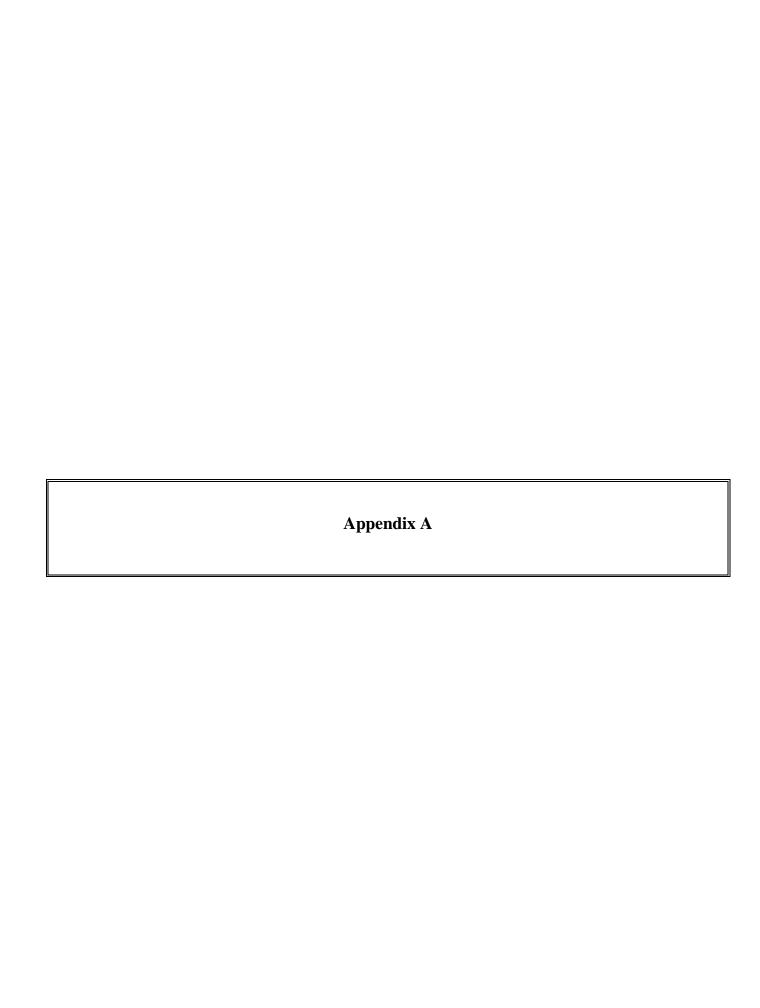
1261 R2 Recloser began detecting a series of phase-to-ground faults on the field phase (C phase) as the broken conductor contacted the ground in the field. Ground faults are by nature chaotic with respect to their fault currents, due to the fact that the energized conductors are moving and the earth is a poor conductor. The 1261 R2 Recloser was in normal operating mode at the time, which provides for three relay operations before locking out, as described further in *Liberty-03*. At approximately 11:55:43 a.m., thirty-two seconds after the initial ground fault, the 1261 R2 Recloser operated and locked out, deenergizing the Topaz 1261 Circuit downstream of the 1261 R2 Recloser.

Liberty's system protection also quickly responded to activity on the circuit earlier in the day on November 17, 2020. Specifically, the 1261 R2 Recloser recorded a B phase to C phase fault around 9:48 a.m.¹¹ Because work was being performed on the circuit at that time, the 1261 R2 Recloser operated in response to that fault to de-energize the line downstream of that location and did not attempt to reclose and re-energize the line.¹² In response, field personnel patrolled the Topaz 1261 Circuit downstream of the 1261 R2 Recloser to the end of the line, including the subject span between the East Pole and West Pole. As a precaution, field personnel removed slack from a stretch of the Topaz 1261 Circuit located northwest of the West and East Pole. These fifteen spans were in "hot arms" due to the ongoing reconductoring work. At approximately 10:41 a.m., the 1261 R2 Recloser was closed to restore power to Liberty customers.¹³

A limited earlier outage occurred at 8:35 a.m. upstream of the 1261 R2 Recloser. No fault was recorded, but a cutout was found open.

The 1261 R2 Recloser did not attempt to reclose following this fault because "hotline tag" settings were active at the time due to the reconductoring work being performed on the circuit that morning.

In coordination with field personnel performing the reconductoring work, the "auto" or normal setting was selected when the 1261 R2 Recloser was closed. See *Liberty-03: Prudence of Operations* for a more detailed discussion of Liberty's system protection and operating procedures. Subsequent review of recloser records following the fire also identified a transient phase-to-phase fault recorded by the 1261 R2 Recloser at approximately 10:53 a.m. on November 17, 2020. The fault current was of insufficient magnitude and duration for the recloser to operate and the fault self-cleared.



CAL FIRE





CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION SAN BERNARDINO-INYO-MONO UNIT

3800 N. Sierra Way San Bernardino, California 92405 (909) 881-6900

INVESTIGATION REPORT

CASE NUMBER:

20CAOVD030860

CASE NAME:

MOUNTAIN VIEW

DATE:

November 17, 2020

INCIDENT TYPE:

Wildland

INCIDENT INVESTIGATORS:

Joseph PIDGEON, Battalion Chief, BDU

Mathew KIRKHART, Fire Captain, BDU

1 - VIOLATIONS:

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- 3 Penal Code § 452 A person is guilty of unlawfully causing a fire when he recklessly sets
- 4 fire to or burns or causes to be burned, any structure, forest land or property.
- 5 (a) Unlawfully causing a fire that causes great bodily injury is a felony punishable by
- 6 imprisonment in the state prison for two, four or six years, or by imprisonment in the
- 7 county jail for not more than one year, or by a fine, or by both such imprisonment and
- 8 fine.
- 9 (b) Unlawfully causing a fire that causes an inhabited structure or inhabited property to
- 10 burn is a felony punishable by imprisonment in the state prison for two, three or four
- 11 years, or by imprisonment in the county jail for not more than one year, or by a fine, or
- 12 by both such imprisonment and fine.
- 13 (c) Unlawfully causing a fire of a structure or forest land is a felony punishable by
- 14 imprisonment in the state prison for 16 months, two or three years, or by imprisonment
- 15 in the county jail for not more than six months, or by a fine, or by both such
- 16 imprisonment and fine.
- 17 (d) Unlawfully causing a fire of property is a misdemeanor. For purposes of this
- 18 paragraph, unlawfully causing a fire of property does not include one burning or causing
- 19 to be burned his own personal property unless there is injury to another person or to
- 20 another person's structure, forest land or property.

21

- 22 Penal Code § 454 (a)(2) Every person who violates Section 451 or 452 during and
- 23 within an area of any of the following, when proclaimed by the Governor, shall be
- 24 punished by imprisonment in the state prison, as specified in subdivision (b):
- 25 (2) A state of emergency pursuant to Section 8625 of the Government Code.

26

- 27 Penal Code § 192 Manslaughter is the unlawful killing of a human being without malice.
- 28 (b) Involuntary—in the commission of an unlawful act, not amounting to a felony; or in
- 29 the commission of a lawful act which might produce death, in an unlawful manner, or
- 30 without due caution and circumspection. This subdivision shall not apply to acts
- 31 committed in the driving of a vehicle.

- 1 Public Resources Code § 4421 A person shall not set fire or cause fire to be set to any
- 2 forest, brush, or other flammable material which is on any land that is not his own, or
- 3 under his legal control, without the permission of the owner, lessee, or agent of the
- 4 owner or lessee of the land.

- 6 Public Resources Code § 4422(b) A person shall not do any of the following:
- 7 (b) Allow any fire kindled or attended by him to escape from his control or to spread to
- 8 the land of any person other than from the land from which the fire originated.

9

- 10 Public Utilities Code § 8386(a) Each electrical corporation shall construct, maintain,
- 11 and operate its electrical lines and equipment in a manner that will minimize the risk of
- 12 catastrophic wildfire posed by those electrical lines and equipment.

13

- 14 Public Utilities Commission, General Order 95; Rule 31.1 Design, Construction and
- 15 Maintenance Electrical supply and communication systems shall be designed.
- 16 constructed, and maintained for their intended use, regard being given to the conditions
- 17 under which they are to be operated, to enable the furnishing of safe, proper, and
- 18 adequate service. For all particulars not specified in these rules, design, construction,
- 19 and maintenance should be done in accordance with accepted good practice for the
- 20 given local conditions known at the time by those responsible for the design.
- 21 construction, or maintenance of communication or supply lines and equipment. A supply
- 22 or communications company is in compliance with this rule if it designs, constructs, and
- 23 maintains a facility in accordance with the particulars specified in General Order 95,
- 24 except that if an intended use or known local conditions require a higher standard than
- 25 the particulars specified in General Order 95 to enable the furnishing of safe, proper,
- 26 and adequate service, the company shall follow the higher standard. For all particulars
- 27 not specified in General Order 95, a supply or communications company is in
- 28 compliance with this rule if it designs, constructs and maintains a facility in accordance
- 29 with accepted good practice for the intended use and known local conditions. III-6
- 30 January 2015 Rule 31.1 All work performed on public streets and highways shall be
- done in such a manner that the operations of other utilities and the convenience of the LE80 (Rev. 7/2011)

 Officer Initials

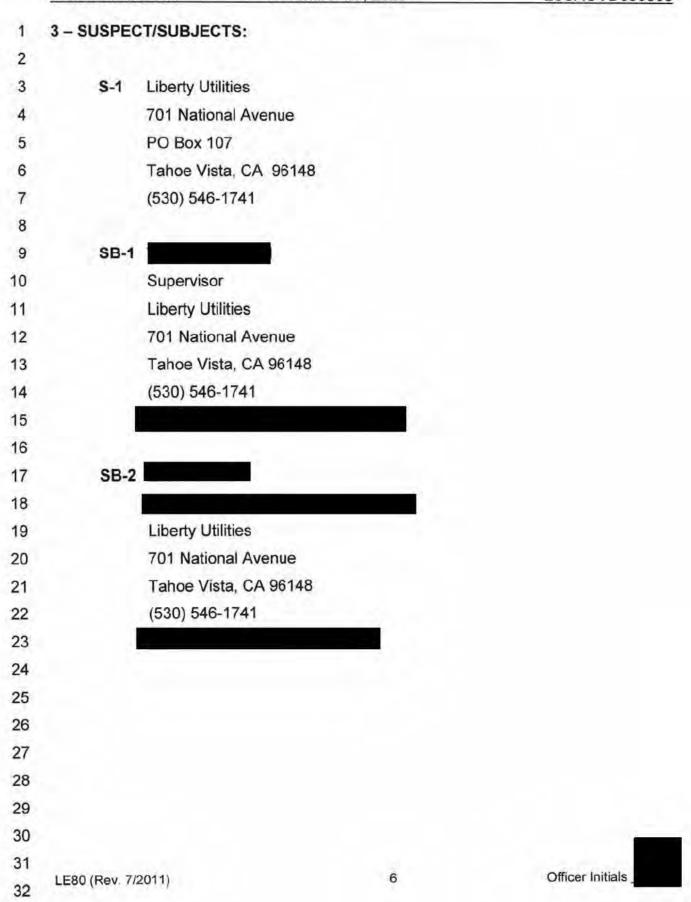
| 1 | public will be interfered with as little as possible and no conditions unusually dangerous | s |
|----|---|----|
| 2 | to workmen, pedestrians or others shall be established at any time. | |
| 3 | | |
| 4 | Health and Safety Code § 13001 Every person is guilty of a misdemeanor who, through | h |
| 5 | careless or negligent action, throws or places any lighted cigarette, cigar, ashes, or | |
| 6 | other flaming or glowing substance, or any substance or thing which may cause a fire, | |
| 7 | in any place where it may directly or indirectly start a fire, or who uses or operates a | |
| 8 | welding torch, tar pot or any other device which may cause a fire, who does not clear | |
| 9 | the inflammable material surrounding the operation or take such other reasonable | |
| 10 | precautions necessary to insure against the starting and spreading of fire. | |
| 11 | | |
| 12 | Health and Safety Code § 13007 Any person who personally or through another wilfull | y, |
| 13 | negligently, or in violation of law, sets fire to, allows fire to be set to, or allows a fire | |
| 14 | kindled or attended by him to escape to, the property of another, whether privately or | |
| 15 | publicly owned, is liable to the owner of such property for any damages to the property | |
| 16 | caused by the fire. | |
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| 32 | LE80 (Rev. 7/2011) 4 Officer Initials _ | |

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On Tuesday, November 17, 2020, at approximately 12:09 PM, resources from the Bureau of Land Management, Owens Valley District (OVD), the United States Forest Service, Humbolt-Toyaibe National Forest (HTF), and the Antelope Valley Fire Protection District responded to a reported vegetation fire in the 100000 block of Highway 395, in the community of Coleville, located in Mono County California.

The wildland fire consumed 20,835 acres of vegetation and watershed, as well as 96 residential structures and one commercial building. One civilian fatality occurred during the fire. The fire was ignited by energized conductor separating, and arcing while in contact with the ground; igniting dead annual grasses.

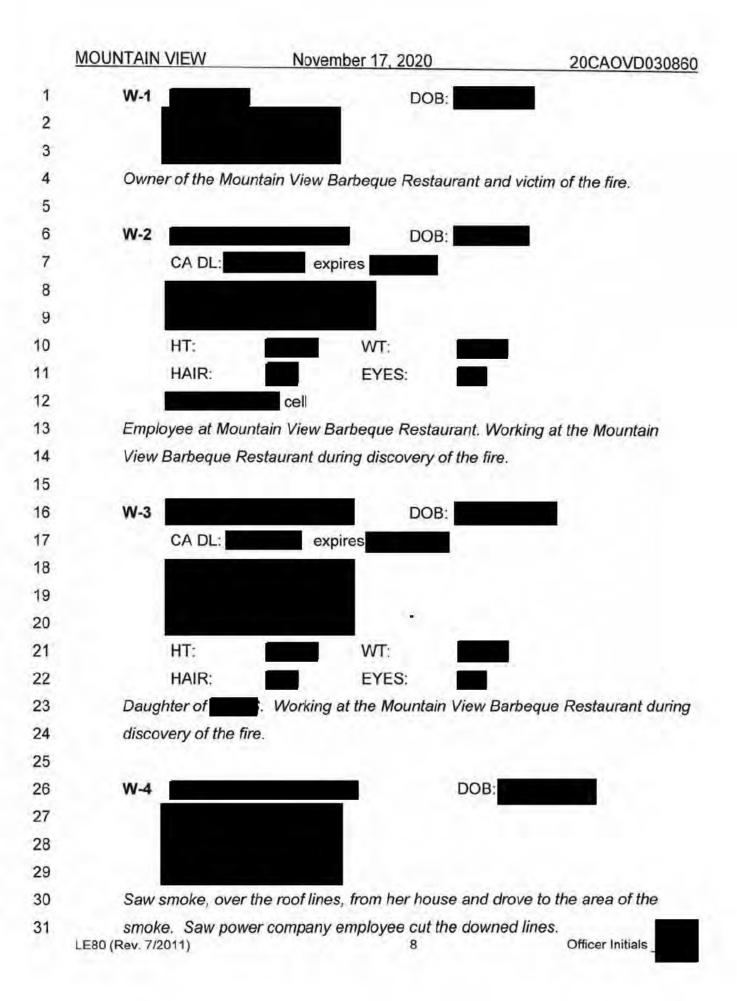
LE80 (Rev. 7/2011)



4 - VICTIMS & WITNESSES: V-1 See Mono County Sheriff report for further information. V-2 thru V-132 (see attachment 8 for complete list from Mono County)

LE80 (Rev. 7/2011)

Officer Initials



LE80 (Rev. 7/2011)

1 6 - CONDITIONS:

2

3 Remote Automated Weather Station (RAWS) data collected from the Walker

4 RAWS. See attachment 6 for complete Walker RAWS data.

5

6 DATE: Tuesday, November 17, 2020

7 STATION ID: WALC1

8 STATION NAME: WALKER

9 LATITUDE: 38.565278

10 LONGITUDE: -119.459167

11 ELEVATION: 5,440 feet above sea level

12 STATE: CA

13

14 TIME: 11:48 AM Pacific Standard Time

15 AIR TEMPERATURE: 67 degrees Fahrenheit

16 RELATIVE HUMIDITY: 11 percent

17 WIND SPEED: 25 miles per hour

18 WIND GUST: 43 miles per hour

19 WIND DIRECTION: SSW

20

21 TIME: 12:48 PM Pacific Standard Time

22 AIR TEMPERATURE: 66 degrees Fahrenheit

23 RELATIVE HUMIDITY: 13 percent

24 WIND SPEED: 32 miles per hour

25 WIND GUST: 55 miles per hour

26 WIND DIRECTION: SSW

27

Weather conditions were not collected at the origin area on November 18, 2020,

29 due to inclement weather conditions present that were not reflective of the weather

30 conditions at the start of the Mountain View fire.

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Peak wind speeds on Tuesday, November 17, 2020, as recorded by the Walker
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     (WALC1) RAWS included wind speeds of 38 miles per hour, with gusts of 73 miles per
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     hour.
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| 1 | 8 - PROPERTY: |
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| 2 | State, local, and federal lands were affected. Multiple parcels in the Walker and |
| 3 | Coleville communities of Mono County. See attachment 8 for parcel list from Mono |
| 4 | County Assessor's office. |
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| 6 | See attachment 7 for overall land ownership map (State, Local, Federal). |
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| 8 | See attachment 8 for Assessor Parcel Number list and owner information. |
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9 - NARRATIVE:

On Tuesday, November 17, 2020, at approximately 12:09 PM, resources from the Bureau of Land Management, Owens Valley District (OVD), The United States Forest Service, Humbolt-Toyaibe National Forest (HTF), and the Antelope Valley Fire Protection District responded to a reported vegetation fire in the 100000 block of

I was requested, via telephone, from the California Department of Forestry and Fire Protection (CAL FIRE) Emergency Command Center in San Bernardino, California, to respond as a fire investigator at approximately 5:00 PM. I arrived at the fire scene Wednesday, November 18, 2020, at approximately 1:45 AM. I contacted the incident Night Operations Chief and confirmed the morning briefing time and location before finding lodging for the night.

Highway 395, in the community of Walker/Coleville, located in Mono County, California.

Wednesday, November 18, 2020, I attended the 7:00 AM incident briefing at the Antelope Valley Fire Protection District fire station on Larson Road. The Incident Commander (IC) advised the fire was approximately 20,000 acres in size; had damaged or destroyed an estimated 80 homes; and one civilian fatality had occurred.

I contacted Lieutenant Mark HANSON of the Mono County Sheriff Department at the briefing location. HANSON was coordinating the law enforcement resources. I confirmed that the civilian fatality had been recovered and my origin and cause investigation would not interfere with the death investigation. HANSON confirmed the body had been recovered and I would not interfere with any death investigation scene. I checked in with the Incident Commander (IC) Erik NEWELL, incident Public Information Officer (PIO) Jennifer DIAMOND, and Fire Chief Rich NALDER of the Antelope Valley Fire Protection District before traveling to the dispatched location of the fire.

restaurant. I walked the perimeter of the restaurant and did not observe any indicators of a fire. I drove north, to the intersection of East Mill Creek Lane and Meadow Drive. I observed foliage freeze on trees indicating the fire had advanced from southeast of my location. I moved again to the east side of the Mountain View Barbeque restaurant

located at 106834 Highway 395. As I traveled to the Mountain View Barbeque LE80 (Rev. 7/2011)

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1 restaurant, I observed burned vegetation adjacent to the highway. I parked my vehicle,

2 in an unburned area, east of the Mountain View Barbeque restaurant. I began an

3 observation of the area to establish my General Origin Area (GOA). I began walking in

4 a counterclockwise direction observing macro fire indicators. I walked north to an

5 access road and continued north until reaching Meadow Drive. I traveled west along

Meadow Drive to the property fence line at Springer Court. I walked south along fence

line to Highway 395 and then east along Highway 395 until returning to my vehicle. I

then walked in a counterclockwise direction around the burned area adjacent to

Highway 395. I determined this area to be my General Origin Area (GOA).

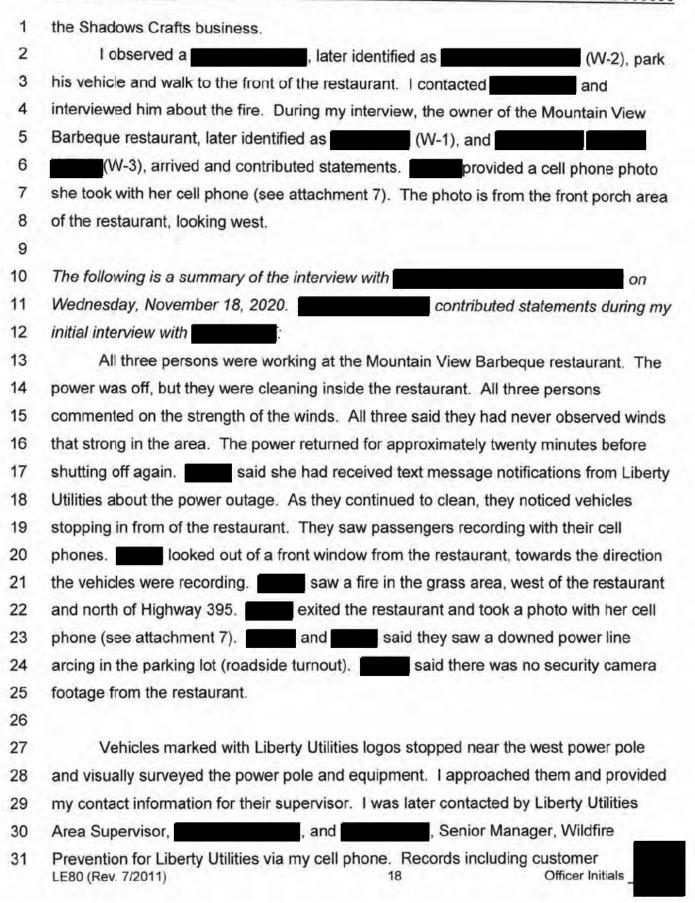
Extremely high winds on Tuesday, November 17, 2020, and prolonged rainfall overnight had eliminated any fire ash indicators in the fire areas I observed.

I observed power poles and power distribution equipment along the southern edge of the general origin area (see photos P-JP-004 thru P-JP-013 and P-JP-016 thru P-JP-023). Both power poles were in compliance with California Public Resource Code (PRC) Section 4292 and PRC Section 4993 requirements. Segments of cable, later identified as conductor segments from the adjacent power poles, were observed in the roadside turnout and inside the burn area north of Highway 395 (see photos P-JP-010 thru P-JP-013). I observed staining on large rocks (see photos P-JP-013 thru P-JP-015). An additional piece of cable, later identified as a conductor segment, was observed in the burned area between the power poles adjacent to Highway 395 and the burned area (see photos P-JP-018 thru P-JP-023). I observed "U" shaped burn patterns in the cured annual grasses located in the open field (see photos P-JP-038 thru P-JP-040, P-JP-043 thru P-JP-044), and burned brush within the perimeter of the burn area.

During my observation of the GOA, random private vehicle traffic began to increase in the roadside turnout and the access road. I moved my vehicle adjacent to mailboxes in front of the Mountain View Barbeque restaurant and placed surveyors flagging along Highway 395 to prevent further traffic through the area and resume observations.

While walking the perimeter of my GOA, I did not observe security cameras on the exterior of the Mountain View Barbeque restaurant, the Walker Burger restaurant, or LE80 (Rev. 7/2011)

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- 1 notifications, and notification methods utilized, as well as company records for any
- 2 faults, and/or power disruption notifications were requested for a time period of
- 3 approximately four hours prior to the 911 report of the Mountain View fire on Tuesday,
- 4 November, 17, 2020 (see attachment 21 for documents produced). When asked,
- said Liberty Utilities had not conducted a Public Safety Power Shutdown
 (PSPS) prior to the fire.

Fire Captain Specialist Matt KIRKHART arrived at the GOA and assisted with the survey of the GOA. KIRKHART and I walked approximately 30 yards north of the roadside turnout, on the access road, on the east side of the open field. We entered the fire area where advancing fire spread indicators were present, and began walking west and east, in a zig-zag pattern observing macro and micro fire spread indicators. We utilized colored flags to indicate fire spread indicators. We utilized red for advancing fire spread indicators, yellow for lateral fire spread indicators, blue for backing fire spread indicators, lime-green for items of interest, and white for evidence items in accordance with NWCG FI-210 standards.

I observed advancing fire spread indicators within the open field north of Highway 395, and west of the Mountain View Barbeque restaurant. I observed angle of char, an advancing fire spread indicator, on brush (see photo P-JP-032). I observed additional angle of char, advancing fire spread indicators, on grass clumps north of Highway 395, indicating the fire burned from south to north. I observed staining on the large rocks west of the roadside turnout (see photo P-JP-013 thru P-JP-015), an advancing fire spread indicator. We walked west, past the large rocks with staining, and observed white marks on the ground. The rocks appeared to be bleached (see photos P-MK-003, P-MK-004, and P-MK-006). The group of bleached rocks were indicated with white green flags. The rocks surrounding the bleached rocks appear to be crushed lava rocks. The bleached rocks appeared to be the same type, but discolored due to contact with high heat. We observed a section of conductor cable in the area of the bleached rocks. We observed a section with "bird caging" (see photos P-MK-019 and P-MK-020). I observed beading and melted areas consistent with arcing and high heat on the section of conductor cable identified as evidence #2. The conductor segment appeared to have been cut on the west end (see photo P-JP-018 thru P-JP-020). The

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- 1 continuation segment had been secured to the power pole (see photo P-JP-021 thru P-
- 2 JP-023). The east end of the conductor appeared to have melted and separated from
- 3 the east conductor segment (see photo P-JP-049) collected as evidence item # 1. I
- 4 determined my Specific Origin Area (SOA) to be approximately six feet across (south to
- 5 north) and approximately twelve feet wide (west to east). The SOA was located north of
- 6 the Highway 395 easement within the cured annual grass area, east of power pole
- 7 #266731, and west of the roadside turnout.

Visual observation of the overhead power lines, we observed a damaged spot on the conductor cable. The damage appeared to be melted and charring was visible from the ground. The damage appeared to be located on the lateral side of the conductor

- 11 cable, on the north side of the conductor cable. KIRKHART photographed colored flags
- 12 within the GOA, and other items of interest. Utilizing a magnet in a zig-zag pattern,
- 13 KIRKHART gridded the SOA. No items were collected by the magnet. No molten metal
- 14 items were observed in the SOA, or GOA. A segment of the center phase conductor
- 15 approximately twenty feet long was collected with the assistance of Liberty Utilities and
- 16 their contractors as evidence item #3. I collected evidence items #1 thru #3 and
- 17 secured them in my CAL FIRE vehicle. Surveyors flagging was removed, colored flags
- 18 collected and the origin area was released back to the incident.

20 The following is a summary of the telephone interview with

Tuesday, December 29, 2020. provided a written statement of her

22 observations (see attachment 11).

23 was outside at her business, located at 106979 Highway 395 in

24 Coleville, California. heard a loud noise and looked in the direction of the

noise and saw glowing items falling to the ground. The glowing items appeared to be

falling from power lines located across the highway from her business. The glowing

27 items fell into the cured annual grasses. Saw flames as the cured annual

28 grasses began to burn. said the wind spread the fire very rapidly in the field of

29 cured annual grasses. said the two video clips from her "Ring" camera cut out

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30 at the time power was lost and the wifi connection to her cameras was lost.

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CONCLUSION

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No cigarette butts, or other smoking materials were observed in the general or specific origin areas (Note: Temperature must be above 80 degrees Fahrenheit and the Relative Humidity must be below 22 for a cigarette to be considered.). While the Relative Humidity was below 22%, the temperature recorded at the Walker RAWS was 66 degrees Fahrenheit. I did not observe railroad tracks, or other indicators of tractors, or heavy motorized equipment operating in the area. No reports of lightning occurred in the area. I did not observe evidence of pile burning or rock rings for campfires. I did not observe piled organic materials consistent for spontaneous combustion, nor did I observe materials, such as broken glass, consistent with light refraction in the SOA.

Arson and a malfunctioning highway vehicle are possible causes, due to the proximity of Highway 395 and easy access from the roadway, however fire spread indicators, evidence collected, and witness statements support the most probable conclusion of an energized conductor contacting the ground as the most probable cause of the Mountain View fire.

I believe based on my training and experience the most probable cause of the Mountain View fire was ignition of cured annual grasses, due to a spark from a down, energized, conductor contacting the ground. Extremely high winds and low relative humidity contributed to the rapid spread of the fire.

I reserve the right to amend this report as necessary upon discovery of additional information and/or additional evidence.

Joe Pidgeon, Battalion Chief
CAL FIRE - BDU
3800 North Sierra Way
San Bernardino, CA 92405

Officer Initials

| 1 | | 10 - ATTACHMENTS: | |
|----|----------|--|----------------------------------|
| 2 | | | |
| 3 | 1. | Wild CAD Log from Sierra Front Interagen | ncy Dispatch Center (NV-HTF) |
| 4 | 2. | Photographs P-JP-001 thru P-JP-049 take | n by Joe PIDGEON |
| 5 | 3. | Photographs P-MK-001 thru P-MK-024 tak | en by Matt KIRKHART |
| 6 | 4. | Remote Area Weather Station (RAWS) - V | Valker RAWS |
| 7 | 5. | Google maps of origin area | |
| 8 | 6. | Fire perimeter map | |
| 9 | 7. | Fire perimeter map with land ownership (| State, Local, Federal) |
| 10 | 8. | Damage inspection notes from Mono Cou | inty |
| 11 | 9. | Matt KIRKHART sketch | |
| 12 | 10. |). Matt KIRKHART Supplemental (LE-71 for | m) |
| 13 | 11. | I. Witness Statement LE78 from | |
| 14 | 12. | 2. Cell phone photograph from | |
| 15 | 13. | 3. Cell phone photographs from | |
| 16 | 14. | 1. Ring camera footage | |
| 17 | 15. | 5. Emergency Proclamations – State of Cali | fornia |
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| 23 | 21. | 1. Liberty Utilities documents | |
| 24 | 22. | 2. Property Receipt (CAL FIRE LE-92 form) | for power line cables collected. |
| 25 | 23. | 3. California Public Utilities Commission (C | PUC) Evidence Inspection |
| 26 | | Agreement | |
| 27 | 24 | 4. KIRKHART thumbnails | |
| 28 | 25 | 5. Thumbnails | |
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