IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF SONOMA

HON. MARK A. URIOSTE COURTROOM THREE

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THE PEOPLE OF THE STATE OF CALIFORNIA, Plaintiff, vs. PACIFIC GAS AND ELECTRIC COMPANY, aka PG&E, PACIFIC GAS AND ELECTRIC, Defendant.) No. SCR-745228-1

REPORTER'S TRANSCRIPT OF PROCEEDINGS

HAD AT TIME OF PRELIMINARY HEARING

FEBRUARY 8, 2022

- - -

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I N D E X

WITNESSES

EXHIBITS

NO.	DESCRIPTION	MKD.	REC'D.
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6 - 9	Photographs		55
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P R O C E E D I N G S

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THE COURT: Let's go on the record in People versus Pacific Gas and Electric.

MR. HENNING: Good morning. Matthew Henning for the People.

MR. CHEEVER: Good morning, your Honor. Matthew Cheever for the People.

MR. BROCKLEY: Bill Brockley for the People.

MR. KRAVIS: Good morning, your Honor. Jonathan Kravis for Pacific Gas and Electric.

MR. BRIAN: Good morning, your Honor. Brad Brian for PG&E.

MS. KIM: Miriam Kim for PG&E.

MR. MILLER: Good morning, your Honor. Roy Miller making a general appearance as Marsy's counsel on behalf of approximately one-third of the Kincade victims.

THE COURT: Good morning to a number of other people here in the box. Just for the record, if you could identify yourselves.

MR. LUCEY: Yes. Good morning, your Honor. Tim Lucey on behalf of the company.

MS. CONTRERAS: Janna Contreras on behalf of the company.

THE COURT: What was your first name?

MS. CONTRERAS: Janna.

THE COURT: Go ahead.

MS. McCREADIE: Megan McCreadie on behalf of Pacific Gas and Electric.

MS. GASKELL: Good morning, your Honor. Jane Gaskell on behalf of PG&E.

THE COURT: All right. We're here today for preliminary hearing. There's a couple of motions outstanding that the Court would like to address first.

Two motions pending before the Court are the Motion to Exclude Evidence of Other Or Prior Fires, filed by PG&E, as well as PG&E's motion to exclude testimony of certain PG&E employees and to compel real witness lists.

I'll hear argument from either side on either of the two motions, or both of them. I would ask you keep your comments brief. I have reviewed the pleadings. The Court is familiar with the positions of the relative parties. So any argument you'd like to make in addition to what's already contained in the brief I'll hear.

MS. KIM: Good morning, your Honor. Miriam Kim. I will address the motion to Exclude Evidence of Other Fires. I'll keep it brief, as your Honor requested.

We know that this case is about the Kincade Fire. In their papers the People have indicated that they intend to introduce evidence of at least three other fires. Three have been identified, but they

reserved the right to introduce additional ones.

These other fires started at different locations and involved different equipment, different configurations and different circumstances than the Kincade Fire.

Your Honor is well aware that in order to be admissible, prior acts that are being used, as the People indicate, to establish the defendant's knowledge of the risk there must be a sufficiently similar circumstance. The California Supreme Court, for instance, in People vs. Thompson, has said you must look at the precise elements of similarity that is alleged and ensure that the similarity between the prior act and the charged crime make sure the link is reasonably strong.

In People vs. Thompson, which is 27 Cal.3d 303, you had two acts involving guns, demand for car keys, demand for the car, but yet the California Supreme Court looked beyond the labels to see whether there was dissimilarities that weakened that link.

Here, if you look at what the People have alleged, they have alleged that the Kincade Fire was caused by an idle line and an over jumper configuration. And here the fires that they have cited do not involve the same equipment, configuration or similar failure points.

As a result, the evidence is inadmissible, prior acts evidence, substantially more prejudicial than

probative. It's distracting and it's a poor use of the Court's time during what is already expected to be an extraordinarily lengthy and complicated preliminary hearing that will require PG&E to introduce evidence about the causes of those fires and why they are different, resulting in multiple mini trials.

We learned today from the DA that if this motion is granted, the scope of the first witness's testimony is expected to be much longer than it would otherwise. And that is just the beginning of what we will see of how this will result in a waste of the Court's time and the introduction of evidence that will ultimately be inadmissible at trial.

So with that, your Honor, if you have any questions I'm happy to answer them, but otherwise I would like to respond to any comments by the People.

THE COURT: Okay. And thank you, Ms. Kim.

What I would add to the record is that the rulings that the Court intends to make today on any motions are rulings that pertain only to the preliminary hearing. I think everyone is aware of the fact that the motions that are pending relate to evidence received at the preliminary hearing. In no way is the Court making any type of a ruling with regard to admissibility at trial. I just wanted to put that on the record.

So no questions. Thank you, Ms. Kim.

For the People?

MR. CHEEVER: Yes, your Honor. I'll be

addressing the motion.

THE COURT: Okay. Go ahead.

MR. CHEEVER: Your Honor, there's no reason for the Court to hear and consider evidence about this fire and other fires in the way there are similarities or differences now. The Court should do that during the preliminary hearing. Hearing from law enforcement officers and experts will be far more informative than selections from counsel for respective parties.

Cal Fire Investigator Gary Uboldi is standing outside. He was the lead investigator in the Kincade Fire. He's going to be testifying all about the Kincade Fire today. He also happened to be the lead investigator of the Saw Mill Fire, so he will be telling you about the similarities between the two fires.

There's no risk of prejudice or confusing a jury here, obviously, because this is a preliminary hearing. The Court is more than capable of hearing the evidence as it comes in, determining its relevancy, determining its admissibility and assigning the appropriate weight.

The evidence is admissible under 1101(b) because it's material, it goes towards knowledge and state of mind, which tends to prove recklessness and negligence, which are elements of all the crimes.

It's probative, your Honor. The evidence doesn't have to be identical. It only has to be similar. And the level of identicalness that defendant

is suggesting is just not what the cases say, your Honor.

People v. Hendrix, which is 214 Cal.App.4th 216, at 241 to 242, says the evidence may be admissible even although similar only in a general way.

I also point out the Genrich case that the defendant cites repeatedly in their brief and sort of highlights in the reply brief. The concern there was whether the jury had heard the evidence. And that was a civil case involving a traffic accident, your Honor, and whether evidence of all the other accidents that ever had occurred in that area should be admissible or not. The trial court let it in, and the issue on appeal was whether the jury was angered or inflamed by that evidence, which is clearly not an issue here.

Also in that case the Court distinguished between evidence offered to prove a dangerous condition existed, which requires much more similarity, versus evidence that's offered for knowledge or notice.

I mentioned Officer Uboldi is ready to testify. Testified on the Saw Mill Fire. If your Honor is interested, I can go into the many similarities between the Kincade Fire and that fire now. Same thing with the Camp Fire and the Murphy Fire. But I'm not going to go into those at this point, your Honor. We're prepared to put that on at the preliminary hearing.

Under 352 it's probative, it's not prejudicial, there's no risk of confusing the Court. Those are

issues for juries.

The only remaining issue is undue consumption of time. And again, your Honor is certainly more than capable of hearing the evidence, and if your Honor decides it's taking too long or it's cumulative, we're quite sure your Honor will let us know.

And with that, I'll submit.

THE COURT: Okay. Thank you, Mr. Cheever.

Ms. Kim, any further argument?

MS. KIM: Yes. I'd like to respond to three points, your Honor.

In terms of the relevant standard, I urge the Court again to look at People vs. Thompson. There the Court said in determining relevance the trial Court must look behind the label describing the kind of similarity or relation between the offense and the charged offense. You must examine the precise element of similarity between the offenses. And, again, the link of the chain of inference between the former and the latter must be reasonably strong.

The second thing I will say in terms of Genrich, it was a civil case that's correct. Counsel is incorrect, there was an issue there about knowledge or notice of the dangerous condition, and the case is based on well-settled principles under 1101. And the Court there, 202 Cal.App.3d. 221, indicates that when you're looking at the relevance of prior accidents they must be similar enough to actually impart notice of some

particular condition requiring correction.

Here again, what the People have alleged is there was a dangerous open jumper configuration and a line that was not being used. That is not the situation in the fires they have identified.

For instance, based on the exhibits they have shown us for Captain Uboldi, it appears he may be testifying about the Saw Mill Fire. That fire did not even involve the same type of tower at issue in the Kincade Fire, which was an electrical transmission tower. The Saw Mill Fire did not even involve that kind of tower. It did not involve an open jumper. It involved the grounding wires, the grounding wire stapled to the side of a wooden pole.

That's just one example, your Honor. Hearing that type of evidence, your Honor has the experience, the case authority and, you know, the relevant judgment to make a judgment now, that the Court may not take up its time to listen to that evidence today or in future days because it's not sufficiently similar to the circumstances alleged in the Kincade Fire.

THE COURT: Okay. Thank you, Ms. Kim.

With regard to the motion to Exclude the Testimony of Current and Former PG&E Employees and Compel a Real Witness List, Ms. Kim, is that you as well?

MR. BRIAN: I'm going to address that. Brad Brian, your Honor. I think the parties have largely

solved the problem. Your Honor need not worry about this motion. Mr. Cheever gave us a revised and shortened witness list this morning. We appreciate that very much. So the second part of the motion I think is moot.

And I think the first part, what I would suggest to your Honor, is they have eliminated a number of witnesses whom they have not interviewed, which was our concern. What I would suggest to the Court is the Court not take up the motion now. We would reserve our right to object on a witness-by-witness basis if appropriate.

The only other thing I would mention is Investigator Stapleton is going to testify as a Prop 115 witness on a -- summarizing a number of people he interviewed. Counsel has asked if we would agree that they can call Investigator Stapleton more than once, just so it shows logically. We're fine with that.

The only request I would make, your Honor, is when -- they give us at least a day or two notice as to which Proposition 115 witnesses are going to be summarized during the first time he testifies.

With that, your Honor, I don't think there's a need for your Honor to rule on this motion at all.

THE COURT: So are you asking to withdraw the motion?

MR. BRIAN: I would withdraw without prejudice to renew it on a witness-by-witness basis if necessary.

THE COURT: Any objection to that?

MR. CHEEVER: No, your Honor.

THE COURT: All right. So the defendant's motion to Exclude Testimony and Compel a Witness List will be withdrawn without prejudice, subject to further objections as the witnesses testify.

All right. Then with regard to the ruling on the motion to exclude evidence of other fires, the Court does find the evidence of prior fires resulting in the failure of PG&E power lines or the associated tower equipment during a high wind event, the maintenance of that equipment or the lack thereof, would be probative evidence of the knowledge and awareness the defendant had regarding the risks of failing to properly maintain their power line equipment. Both as the potential cause of a catastrophic wildfire as well as the consequences flowing therefrom. The disregard of which may amount to either criminal recklessness or criminal negligence, an element of the various crimes charged in the Complaint and a material issue of fact in this case.

Evidence of the prior fires would potentially support the inference the defendant was aware of the dangers created by failing to maintain the same or similar equipment in a high wind area or during a high wind event. The, quote, "substantially same circumstances," end quote, and, quote, "sufficiently similar circumstances," end quote, tests cited to in the briefing does recognize that the degree of similarity

required may vary in strictness depending on the purpose for which the evidence is sought.

The defendant would have the Court apply too strict a degree of similarity and focus on very specific distinctions between the current incident and the prior events.

The Court finds the distinctions argued in the briefing between the causes of the prior fires and the cause of the October 23rd, 2019 fire are not so great that one could not properly conclude that the prior fires, which resulted from improperly maintained equipment during a wind event, would have put the defendant on notice that failure to properly maintain all of the various hardware on its power lines and towers would very likely result in another wildfire when faced with another high wind event.

Accordingly, the Court will permit the People to present their evidence during the course of the preliminary hearing; however, I will entertain further argument about admissibility and should it be deemed admissible for persuasiveness of that evidence at the conclusion of the evidentiary portion of the hearing.

The defense's motion to Exclude Evidence of Other Fires At the Preliminary Hearing is denied with regard to the testimony or evidence the People seek to present related to fires occurring prior to October 23, 2019.

The motion is granted with regard to any

testimony or evidence the People seek to present related to fires occurring after October 23rd, 2019, as the People have not established what if any probative value such evidence would have on any material issue in this case.

With the ruling on the motion, are we prepared to go forward to the taking of evidence?

MR. CHEEVER: Your Honor, there's one preliminary matter. We have entered into some joint stipulations with the defendant on various issues, and I have that to present to your Honor today. I've provided a copy to defense counsel. I'll provide another copy.

MS. KIM: Your Honor, if I may just clarify one thing on the motion. Based on your Honor's ruling, it sounds like you're not precluding the possibility that we may raise objections about specific other fires that may be raised that do not the bear the similarities your Honor noted, such as the inadequate equipment or maintenance of the equipment in a high wind area. Is that correct? Would you consider --

THE COURT: So what I'm saying is I'm going to allow the People to present their evidence. At the conclusion of the evidence you can argue why the Court should not consider it, and we'll go from there.

MS. KIM: Understood. Thank you, your Honor.

THE COURT: Just a housekeeping issue, I wanted to make sure the parties both understood there's only one attorney per side speaking to a particular witness,

or argument or objection to the Court from any one witness. I won't hear argument or examination from a second attorney from either side, so just be sure you know who's going to be talking for any one witness.

Are we having this marked as a Court exhibit?

MR. HENNING: That's fine. As a stipulation.

THE COURT: I think it should be marked for the purposes of any potential 995 review. I'm in receipt of a joint stipulation for purposes of preliminary hearing.

Madam Clerk, if you would please mark this -- I think Court exhibit makes the most sense. Court Exhibit number 1.

THE CLERK: Marking Court Exhibit number 1.

(Whereupon, Court Exhibit 1 marked for identification)

THE COURT: Do the parties intend to offer opening statements or are we going straight to the evidence?

MR. HENNING: Straight to the evidence.

THE COURT: I'm not asking for an opening statement.

MR. BRIAN: I think we at least implicitly agreed at a readiness conference we were not going to offer an opening statement.

THE COURT: Very good.

MR. HENNING: Your Honor, I would ask for purposes of this preliminary hearing to have Matthew Stapleton designated as our investigating officer. And

I would make, on behalf of the People, a motion to exclude witnesses.

THE COURT: So let's do this first. Before I take up that ruling -- and I typically would ask the parties at the start of any preliminary hearing for a declaration of witnesses, and I would confirm we're all working off the same charging document. I don't see any reason why this case would be any different.

I have a First Amended Felony Complaint that was file stamped January the 28th of this year. Is that the charging instrument we're working on?

MR. HENNING: Yes.

MR. CHEEVER: Yes, your Honor.

THE COURT: Okay. Mr. Brian, on behalf of PG&E, you and your client waive further arraignment with regard to that charging document?

MR. BRIAN: We do, your Honor.

THE COURT: I'll have a declaration of witnesses, please. First for the People.

MR. HENNING: Your Honor, I have a list that's been provided to counsel with 40 names. Does your Honor want me to read all 40, approximately? It's actually like 55 names.

THE COURT: Just so I'm clear, you intend to call 55 people at prelim?

MR. HENNING: So we have identified on this list about 15 of them, and that could grow, that are Prop 115. Or excuse me, 25 witnesses on this list are

Prop 115. We just want to reserve the right, in case something happens and we need to bring them in specifically. So I can read this list. I can provide a copy to the Court.

THE COURT: I don't know that it needs to be read into the record. If you have provided a copy to counsel, then I'll receive a copy of that list. Do you have a copy for the Court?

MR. HENNING: No objection, I assume?

MR. KRAVIS: No objection.

MR. HENNING: Thank you.

And I'm happy, if the Court wants, on a daily basis make a declaration who we anticipate calling. But today it's only Gary Uboldi.

THE COURT: Okay. Given this number of witnesses, my intention would be at the time that you call any witness to ask you for an offer of proof as to what that witness intends to testify to, so that I can ascertain whether or not we're getting into cumulative territory.

MR. HENNING: That makes sense.

THE COURT: All right. Did PG&E intend to call any witnesses?

MR. BRIAN: We have not made a final decision on that, your Honor. I think it's very possible that we may call some witnesses, including perhaps an expert on the air contaminate charges. I don't have a witness list. I can do that and get something to you this

afternoon. Would that be satisfactory, your Honor?

THE COURT: That would be fine.

MR. BRIAN: It would be very preliminary, because we may not call anybody.

THE COURT: My biggest concern is the People just asked the Court to make an order excluding witnesses.

MR. BRIAN: I can represent to the Court, there is nobody we anticipate calling that's in the courtroom right now, or will be today or tomorrow.

THE COURT: Okay. Any further comment?

MR. HENNING: On that motion, no.

THE COURT: All right. Then what I'll do is I'll designate Matthew Stapleton as the People's investigating officer. He may remain in the courtroom during the pendency of the hearing.

Any further witnesses that either party intends or remotely anticipates they may call is excluded from the court during the course of the hearing. With that --

MR. HENNING: May I have one brief moment with madam clerk?

THE COURT: Sure.

MR. HENNING: The People would call Gary Uboldi at this time.

THE COURT: Good morning. Just remain standing behind the chair, and the clerk will swear you in in just a moment.

GARY UBOLDI,

Called as a witness herein, who having been first duly sworn, was examined and interrogated as is hereinafter set forth:

THE CLERK: Please have a seat. And state and spell your name for the record.

THE WITNESS: Gary Uboldi. U-B-O-L-D-I.

THE COURT: Mr. Henning.

MR. HENNING: Thank you, your Honor.

DIRECT EXAMINATION

BY MR. HENNING:

Q. Good morning Mr. Uboldi.

I struggle to hear you say your name, so at some point I might ask you to try to use the microphone or sit closer. We're all going to work through this together.

Could you tell us how you are currently employed.

A. I'm currently employed as a public safety officer for the City of Rohnert Park.

Q. And where were you previously employed before working for the City of Rohnert Park?

A. I was a fire captain specialist peace officer with the California Department of Forestry and Fire Protection.

Q. Is that commonly known as Cal Fire?

A. Yes, commonly known as Cal Fire.

Q. Okay. And when did you move from Cal Fire to the City of Rohnert Park?

A. 2001. In 2001.
Q. Did you say 2001?
A. Yes. Or 2021. Excuse me.
Q. Okay. So just off by 20 years.
And can you tell us, how long did you work at Cal Fire?
A. Twenty years in total. Six years as a peace officer.
Q. Could you just briefly, could you walk us through your career at Cal Fire in terms of the assignments that you held?
A. I was a seasonal firefighter for several years until promoting to a fire apparatus engineer. And then promoted to a fire captain, and then became fire captain specialist peace officer with the department.
Q. So describe for us, what is a fire apparatus engineer's job duties?
A. We operate the engine, we provide preliminary fire investigation, management of the station, supervision of the personnel.
Q. And at some point you were promoted from fire apparatus engineer to fire captain?
A. Yes.
Q. Approximately when did that happen?
A. It was -- I believe it was '15, '17, right around there. 2015, 2017.
Q. Okay. So you're fire captain. At some point, though, you said you became?

A. A peace officer.
Q. A peace officer?
A. Yes.
Q. When did that happen?
A. Approximately six years ago. So that would be 2001.
Q. I'm struggling with your math. Are you nervous this morning?
A. Yes, I am.
Q. So for me, six years ago would have been about 2016?
A. Yes. That would be correct.
Q. And so that's the time when you became a peace officer?
A. Yes, sir.
Q. Prior to that was when you became a fire captain?
A. Yes, sir.
Q. Now, having in mind that it was around 2016 that you became a peace officer, could you tell us when you became a fire captain?
A. It was -- I believe 2017. I believe around there.
Q. So I'm still struggling with your math.
A. Excuse me. 2014.
Q. So you became a fire captain before becoming a peace officer?
A. Yes, sir.
Q. And before -- let's just talk about being a fire

captain. So before you became a peace officer, describe for us what your job duties were.

A. My job duties were to oversee fire suppression with my crews, being engine or hand crews, on the fire ground and the station. Additionally we provided fire investigation services. Without an investigator we did the initial investigations on the fires.

Q. Is that a supervisory role?

A. Yes, it is.

Q. And from that role you became a peace officer?

A. Yes.

Q. Describe for us -- is that a promotion, is that a completely different assignment? Describe it in that regard.

A. It's a completely different assignment. Our sole duties are to provide law enforcement for the State of California, and our primary duty is fire investigation for the department.

Q. And is there any specific training or certification that you had to receive to become this peace officer position?

A. Yes, there was.

Q. Could you describe that for us?

A. Basic POST, Peace Officer Standardized Training, academy. We have to attend that. Then we have a field training that we go through after our academy. Additionally we go through what's called FI 210, which is field fire investigator. 210 is the first course for

fire investigation. Recognized by the national wildfire group. That outlines how we will conduct fire investigations.

Q. How long is that course?

A. It's about a week long. Takes approximately several months to get your task book signed off and go to fires.

Q. I'm sorry, go to what?

A. It takes several months to get -- as a trainee to go through fires and get your task book signed off.

Q. Thank you.

And so you mentioned that you're POST certified?

A. Yes, sir.

Q. Have you been POST certified more than five years?

A. Yes.

Q. Were there any other trainings that you received that qualified you for this specialist position in fire investigation?

A. Yes. I have my advanced POST certificate, and I also have gone through FI 310, which is the next course to study for fire investigation. That's major fires, predominantly arson investigation, major incidents of that nature.

Q. Approximately how long is that further training course?

A. It's also a week long.

Q. And when you were in this position, were you

geographically assigned a particular area?

A. Yes, I was.

Q. What was your geographical assignment?

A. I had the Sonoma, Lake, Napa, Colusa, Yolo and Solano counties.

Q. And how many other investigators in the same position as you were also responsible for those areas?

A. I believe at the time it fluctuated between three to four.

Q. And did you remain in this same geographical assignment the entire time you were in this position?

A. Yes, I was.

Q. Can you estimate the number of wildfires that you investigated in this position?

A. A minimum of 400.

Q. Minimum of 400?

A. Yes.

Q. And can you distinguish for us your role when you're the lead investigator versus assisting on an investigation?

A. The role as the lead investigator, solely responsible for the origin and cause investigation, interviewing witnesses, documentation, photographs, collection of evidence, securing the evidence, securing the scene, calling for outside subject matter experts to help us out when we're -- when we need help. Versus if I was assisting, I would be filling those roles for the lead investigator, possibly taking photos, interviewing

witnesses.

Q. And so of those more than 400 fires that you investigated, is that as a lead investigator or is that all inclusive, including assisting?

A. All inclusive.

Q. Can you approximate for us how many fires you were the lead investigator on?

A. A minimum of at least 100.

Q. And you mentioned earlier major incidents. When you're at Cal Fire, is there certain rubric to determine what a major wildfire would be?

A. Yes. A fire that burns over a 24-hour period that remains uncontrolled, that is impacting and/or can impact public safety infrastructure, major infrastructure to the community, injuries to civilians and/or firefighters and death. High publicity fires, something that's making the news, typically we'll handle that as a major.

Q. So would it be fair to say that there's a number of factors considered by Cal Fire when defining whether a particular fire is major or not?

A. Yes.

Q. And of those -- I can't remember if you said more than or approximately. We'll just say approximately 100 fires where you were the lead investigator, can you estimate how many of those would be classified as major?

A. I would say approximately 40.

Q. I'm sorry, I didn't hear you.

A. Approximately 40.
Q. 40?
A. Four zero.
Q. Thank you.
How many fires that you investigated were caused by electrical lines?
A. I would say approximately 15 to 20.
Q. And is that as lead investigator or is that also including assisting?
A. I would say as a lead investigator, yes.
Q. And can you explain for us or define for us what a wildland fire is?
A. A wildland fire will be a fire that is burning predominantly in vegetation in the rural and/or urban areas of California, threatening our watershed. That could be timber, that could be brush. Marketable timber, it's impacting the watershed of the state of California.
Q. Thank you.
Moving back, you said you investigated approximately 15 to 20 electrical-caused fires. In any of those trainings that you described for us, did you receive training in how to investigate an electrical-caused fire?
A. Yes, I did.
MR. HENNING: Your Honor, at this time I would ask to have Mr. Uboldi qualified as an expert in the investigation of fire investigations.

MR. KRAVIS: Your Honor, we would like the opportunity to voir dire on this. We could do it now or defer to cross examination, since this is preliminary hearing.

THE COURT: Why don't you go ahead and voir dire now.

MR. KRAVIS: Very well.

VOIR DIRE EXAMINATION

BY MR. KRAVIS:

Q. Sir, I want to just ask you some questions about those trainings that you mentioned a moment ago.

I think I heard you say that you are POST certified? And that's P-O-S-T?

A. P-O-S-T, the acronym.

Q. Does the POST certification have anything to do with fire investigation?

A. Not in regards to the actual fire investigation, but to investigation generally, yes.

Q. So it's a general investigation training?

And you also said you did a training called FI 210, is that right?

A. Yes, I did.

Q. And that was approximately one week long?

A. Yes, I did.

Q. When did you do that?

A. Several years ago. I've taken it several times over and over to refresh myself and stay updated. I couldn't tell you the exact date I did it, but I've

taken it at least twice, if not three times.

Q. Do you remember -- I don't need the exact date, but the year that you most recently did the FI 210 training?

A. I believe the last time we did FI 210 I was a cadre instructor for it, and we got taught that in -- I believe it was in '19 I was the cadre instructor for that class.

Q. And you were the instructor in 2019?

A. Yes, I was.

Q. You also mentioned a training called FI 310. Do I have that right?

A. Yes, sir.

Q. And that was also about a week long?

A. Yes, sir.

Q. What year did you do FI 310?

A. I believe it was '19, 2019.

Q. That was also 2019?

A. Yes.

Q. For these FI 210 and FI 310 trainings, did you get any kind of certification or license for that?

A. We got certification for it.

Q. What is the certification you get?

A. It's field investigator FI 210 and then FI 310 for field investigator.

Q. Other than those two certifications, the FI 210 field investigator and the FI 310 field investigator, do you hold any other certifications in the area of fire

investigation?

A. I do have a State of California Fire Marshals -- or Investigator 1A and 1B.

Q. I'm sorry. Say that again?

A. State of California Fire Investigator 1A and 1B.

Q. And when did you get those?

A. I believe that was 2001.

Q. 2001?

A. Yeah.

Q. Since 2019, have you done any other trainings related to fire investigation?

A. Several informal classes. Nothing where I got a certificate out of it.

Q. Other than the certifications you mentioned, do you hold any licenses in the field of fire investigation?

A. I do not.

Q. Do you know what the NFPA is?

A. Yes, I do.

Q. What is the NFPA?

A. National Fire Protection Association.

Q. Do you hold any certification or license from the NFPA?

A. I do not.

Q. Have you ever done any training on the NFPA standards?

A. Just informally.

Q. Have you ever previously been qualified as an

expert on fire investigation?

A. Yes, I have.

Q. How many times?

A. At least three.

Q. When was the last time?

A. The last time would be I believe 2017.

Q. 2017, you said?

A. Yes.

Q. Do you remember what case that was?

A. The Anthony Paschal trial.

Q. I'm sorry?

A. The Anthony Paschal trial in Lake County for an arson series.

Q. To your knowledge, have you ever been offered but not qualified by the Court as an expert?

A. I don't understand. Offered?

Q. Was there ever a time when you were going to be an expert but the Court said no?

A. No.

Q. Okay. May I just have one moment, please, your Honor?

THE COURT: You may, of course.

MR. KRAVIS: We'll submit, your Honor.

THE COURT: All right.

The Court is satisfied that the witness has the requisite training and experience and will therefore be designated an expert in the area of wildfire investigation.

Go ahead, Mr. Henning.

MR. HENNING: Thank you, your Honor.

DIRECT EXAMINATION (RESUMED)

BY MR. HENNING:

Q. Mr. Uboldi, you described for us these 15 to 20 fires that you investigated that were caused by electrical lines. Do you know, were any of those, or are you able to approximate how many of those were caused by PG&E equipment?

A. With the exception of approximately three to five, the remainder were PG&E.

Q. Okay. And have you ever been the investigator of a major fire where you ruled out PG&E as the cause of that fire?

MR. KRAVIS: Objection. Relevance.

THE COURT: Overruled.

THE WITNESS: Yes.

BY MR. HENNING:

Q. And so you haven't always found PG&E to cause a wildfire that you were investigating?

A. That's correct.

Q. I want to shift gears now and talk about the Geysers as an area. Are you familiar -- when I say the Geysers, are you familiar with that?

A. Yes, sir.

Q. And can you just describe for the Court approximately where the Geysers are located?

A. The geographical location of the Geysers is east

of Geyserville, in the Mayacamas mountain range. Situated between -- it encompasses Lake -- portions of Lake County, Napa County and Sonoma County.

Q. Are you familiar with the area known as the Geysers?

A. Yes, I am.

Q. Can you describe how it is that you're familiar with this area?

A. The area is -- has frequent fires. At least over my career, and prior to me, the department's -- we've gone up there for several vegetation fires.

Q. Okay. Can you approximate how many fires you've worked on up in the Geysers?

A. A minimum of 20 to 30.

Q. And is that just in your last position as a peace officer, where you were responsible for investigating fires, or is that your entire career?

A. My entire career.

Q. So that goes back to when you were a fire apparatus engineer?

A. Yes, sir.

Q. Okay. And do you know, are there any power plants up in the Geysers?

A. Yes.

Q. And do you know -- if you were asked, would you be able to approximate how many power plants are up in the Geysers?

A. I believe there's approximately 18.

Q. And so you've been up in the area approximately 20 to 30 times fighting fires. Are you familiar with whether it's -- access into the area is controlled or not?

A. Access is controlled.

Q. Can you describe that?

A. Access to the Geysers is -- the best way to describe it is high security. The average person cannot come and go as they would like within the Geysers proper. There's approximately five major access ways into the Geysers, all of which are controlled by manned and guarded gates, which it's very difficult to get through.

Q. Are you aware of any public access?

A. Negative.

Q. Now, you talked to us earlier about how you received some training on electrical-caused fires, you investigated about 15 to 20. Can I ask you some questions, some basic question about electrical lines?

A. Yes.

Q. Are you able to explain the difference between a transmission line and a distribution line?

A. Yes.

Q. What is the difference?

A. Transmission lines bring electricity from the power generator to a distribution center, and then distribution lines distribute electricity outward from there to where they're stepped down to the end user.

Q. And are you familiar whether there's a difference in voltage between the two?

A. I believe so, yeah. With distribution, they're about 230 KB.

Q. I'm sorry. A distribution is 230 KB?

A. Yes. Excuse me. A transmission. Transmission. My apologies.

Q. Well, let me just ask. I don't want to go beyond your comfort zone. Would it be fair to say that transmission lines are generally higher voltage than a distribution line?

A. Yes.

Q. Is that yes?

A. Yes.

Q. Okay. And I'm going to say something before we get yelled at by the court reporter. I know you're anticipating some of my questions. Please wait until I'm done before you answer.

So based upon the number of power plants up in the Geysers, are you able to say or is it fair to say that there's higher concentration of transmission lines than where you would find, for example, if you were in Santa Rosa?

A. Yes.

Q. Do you generally see, is there a difference between the type of pole or tower that carries a transmission line versus a distribution line?

A. Yes.

Q. Can you describe that difference?

A. Typically they're a metal structure several hundred feet tall, spanning long instances. Not always, but they'll typically have three sets of wires that are on each side of the tower. They usually have the arms that come off of that. There's several different types of transmission lines. They may vary throughout the United States and throughout California, depending on the scenario that they're using.

Q. And I just want to be clear, because you used the term "they" and "they're" a few times. What you just described, the higher towers, the higher span differences, is that with respect to transmission lines?

A. Yes.

Q. Okay. Are you familiar with the term jumper cable?

A. Yes.

Q. In the context -- so we're not talking about a car battery, but in the context of an electrical system, can you describe your understanding of a jumper cable?

A. A jumper cable connects two different wires. It connects the span between two different wires in two spans. So on a pole you would have two wires coming into it, a jumper goes between those and connects those.

Q. Okay. And are you familiar enough, if you're looking at a transmission tower and there's a line running through, are you able to describe what's the conductor wire versus the jumper cable?

A. Yes.

Q. I want to -- let's talk about October 23rd, 2019. Before we do so, I want to get some clarification on something.

When you were being cross-examined by Mr. Kravis, you indicated that you took the F 310 training sometime in 2019. Using October 23rd, 2019 as a reference point, do you know whether you took that F 310 training before or after that date?

A. Before.

Q. Before?

A. Before.

Q. Thank you. So let's talk about October 23rd, 2019.

Were you aware that there was a red flag warning issued that day?

A. Yes, I was.

Q. And can you describe for us your understanding of what a red flag warning is?

A. A red flag warning is above average temperatures. There's a multitude of criteria for a red flag warning. It's not just hot weather or high winds. It's usually an accumulation of several different. It's low humidity, high winds. Typically low humidity, high winds. High temperature, above average than what we typically experience here.

Q. And the way I asked the question probably wasn't the best way, because there could be a red flag warning

for anywhere in California, but specifically what was the area that you were aware of that had a red flag warning applying to it on October 23rd, 2019?

A. It was the North Bay area, encompassing Sonoma, Lake and Napa counties.

Q. That evening of October 23rd, 2019, were you notified of a fire?

A. Yes, I was.

Q. Can you describe, how did you first receive notification of a fire that evening?

A. My first notification that there was a fire in the Geysers area was around 9:27 at night. I received a text message -- computer text message that was automated from our CAD system. It sends me notifications whenever we have vegetation fires or structure fires in our area.

Q. So this isn't a text that you're receiving from a co-worker?

A. Negative.

Q. You referred to the CAD system. Just briefly can you describe what that is?

A. When our dispatch center enters in a reported fire, you get a fire wherever it may be, they'll type that in. As soon as the address range, the address is plugged in and the type of incident being a vegetation fire is put in, that information is automatically sent to our cell phones in the form of a text message giving us the information, the address range, any notes that

were put in there by the dispatcher, tactical frequencies, so on and so forth.

Q. So you received this alert, you said approximately 9:27 p.m. Was there any other information provided in terms of approximate location?

A. Yes.

Q. What was that?

A. In the notes of the text message it said fire is in the area of 9-10 Fumarole plant.

Q. And so what did you do? What did that prompt you to do at that point, upon receiving this text message?

A. After receiving that text message I got dressed and started my way to the fire.

Q. And you know I'm not trying to identify where you live, but were you north, south, east, west of the fire?

A. Southern Sonoma County.

Q. Southern Sonoma County?

A. Yes.

Q. And to get to the Geysers did you use Highway 101?

A. Yes.

Q. While driving -- so I'm assuming you're driving north?

A. (Nods head)

Q. That's a yes?

A. Yes.

Q. While driving north on Highway 101, were you able to make any -- did you observe anything with respect to

the fire?

A. While in route to the fire I got -- I made several stops, because we were having other fire-related issues in the area. People reporting a fire that I was checking up on. The majority of these reports that we were getting were people looking northward towards the Geysers and they were seeing the fire at the Geysers, and they were reporting that as a fire locally in the area.

Once I got on 101 I was able to visually myself see the flames up on the ridge line.

Q. So I want to talk about -- you said you were diverted, or you -- how were you going to these other locations? Is someone from dispatch telling you to? Describe that process.

A. On my way there -- the incidents were actually occurring between me and the fire, so as I was going I wasn't getting per se diverted. It was on my route to go there, on my route to the Geysers. So it was just checking, making sure that it wasn't a new fire. Since I cleared it I just kept on going. It wasn't a major diversion, it was on my way to the Geysers.

Q. Okay. And you got up to the Geysers, the general vicinity of the Geysers. Do you remember approximately what time that was?

A. It was 10 o'clock.

Q. And you had earlier said you got this alert that told you that it was a fire. I think you said -- I

don't know if you said at or near. I'm not trying to put words in your mouth, but you mentioned 9 and 10 Fumarole. And that's F-U-M-A-R-O-L-E. You're saying you're in the Geysers at about 10 o'clock. Can you describe for us your proximity to 9 and 10 Fumarole at that point?

A. Without the fire conditions, if I was just to normally drive there, it would probably be another hour.

Q. So you're in the general area, it's about 10 o'clock. Were you able to proceed up at that point to Fumarole 9 and 10?

A. No.

Q. Can you describe why not?

A. When I -- at 9 o'clock I was in the area of Red Winery Road, and the fire had already progressed down, and I was -- I couldn't progress any farther to 9-10 Fumarole because there was active fire blocking my way.

Q. I'm sorry. Did you say that was at 9 o'clock or 10 o'clock?

A. 10 o'clock.

Q. So the fire's in your immediate vicinity?

A. Yes.

Q. What did you do?

A. Due to the fire behavior being -- I couldn't pass through the fire to get to it. I decided to assist with evacuations in the area.

Q. About how long were you assisting with evacuations?

A. I believe it was about two -- about two hours.
Q. And while -- and maybe it's at this time, maybe it's before you're going up there. Are you in communication with any other fire investigators?
A. Yes.
Q. Could you identify who else you were in communication with?
A. I spoke with Fire Captain Laird, who's a Cal Fire employee, by phone.
Q. And that's L-A-I-R-D.
While speaking to him, were you able to determine where he was in relation to you?
A. Yes.
Q. Where was he in relation to you, approximately?
A. He was in the Healdsburg area, and he had just talked to our partner Fire Captain Steis.
Q. That's S-T-E-I-S.
And at the time you were speaking to Laird, who's in the Healdsburg area, approximately where were you in relation to that?
A. At northbound 101 and Highway 12.
Q. Okay. So fair to say that you were 20 to 30 minutes south of Laird at that time?
A. Yes.
Q. And while speaking to him, did you get the impression that he was responding to a location?
A. Yes.
Q. Did you get the impression that Steis was also

responding to the location?

A. Yes. Laird told me Steis was already in route.

Q. Okay. And so we're back, you're in the general area. You said you spent some time, I think you said approximately a couple hours helping with the evacuations. At some point were you able to get through up to 9 and 10?

A. Yes, I was.

Q. Describe why that was. What happened with the fire that enabled you to get up there?

A. The fire behavior subsided in the area of Geysers Road, where I was trying to pass. So once that flank of the fire had progressed farther south I was able to make my way into the burn and continue into the Geysers. The general area of the Geysers.

Q. As you're driving up to meet Laird and Steis, are you able to estimate anything about the size of the fire?

A. Yes. Just by my estimations of where I was at and where I had seen the fire, it was at least over 2,000 -- I'd say 2,000 acres.

Q. 2,000 acres?

A. Yes.

Q. Given the fact that you were first alerted at about 9:27 p.m., when you're making these observations sometime later in the evening, did that seem large to you?

A. Yes.

Q. And as you're driving up -- ultimately did you meet Steis and Laird?

A. Yes, I did.

Q. Did you meet them at 9 and 10?

A. Yes, I did.

Q. Before we get to that, let's talk about as you're driving up there, what if anything were you able to observe regarding the wind conditions?

A. I would describe the wind conditions as extreme. Not just blowing the branchs on trees. It was making the trees sway back and forth significantly. Power lines in the area were swaying back and forth. Wind conditions were much stronger than I had seen in a long while.

Q. And did I hear you earlier mention indicators with the fire?

A. Yes.

Q. Can you describe for us, what are you talking about when you say fire indicators?

A. A fire indicator is a visual -- something visual I see post fire, after the fire has burned through. As I'm driving through I can see what we call damage differential. How the fire actually hits an object, that's a fire indicator. Without the fire being there, I knew to look at that indicator and determine which way the fire burnt, burned from. Did it burn from north to south, east to west. However it may be, I could look at this indicator and get within 180 degree accuracy of the

direction of the fire. And it's the totality of all the indicators in the area. We're not basing it off of one. I'm looking at several different ones in the area.

Q. Okay. And can you -- I'm going to show you an enlarged photo in just one moment, but can you just describe for us the general area where you ultimately met Steis and Laird?

A. Yes.

Q. Just describe it for us.

A. Oh. So the area that I ended up finding Steis and Laird at was just outside Fumarole 9-10 power plant. Outside gate. There's a perimeter fence that goes around it. John Kincade Road comes up along the uphill eastern side of the plant and the property. I located him right at the front gate.

MR. HENNING: Your Honor, we pre-marked a number of exhibits. I'm holding a blown-up aerial photo that is marked People's 58. May I approach?

THE COURT: You may.

MR. HENNING: Your Honor, I'm going to -- we reached the point where I need to ask to approach a number of times. Can I have standing permission to approach or do you want me to ask each time?

THE COURT: You have permission to approach.

MR. HENNING: Thank you.

BY MR. HENNING:

Q. First off, before I put this up for the Court to see, do you recognize what we're looking at here?

A. Yes.
Q. Could you describe what we're looking at?
A. This is the Fumarole 9-10 power plant.
Q. And this is -- is this an aerial photo?
A. Yes, it is.
Q. What we're looking at in People's 58, does this accurately depict the layout of the terrain and Fumarole 9 and 10 as it was when you were there on October 23rd, 2019?
A. Yes, it does.
Q. I'm going to put this -- let's put it up here.
Your Honor, can you see this?
THE COURT: I can.
MR. HENNING: If I use your television as an easel.
THE COURT: Yes, that's fine.
BY MR. HENNING:
Q. We're going to use a laser pointer. Well, can you show us --
THE COURT: Wait a minute. Before you do that, are you seeking to admit it?
MR. HENNING: One moment.
I'll move to admit it at this point. I don't have a problem, though, if later if for example Mr. Kravis wants a witness to mark it up.
MR. KRAVIS: No objection.
THE COURT: And it will be received with the understanding that if it needs to be marked up in the

future it can happen.

MR. HENNING: Yes.

(Whereupon, People's Exhibit 58 received in evidence)

THE COURT: Go ahead.

BY MR. HENNING:

Q. Does People's 58, does this depict where you actually met with Mr. Steis and Mr. Laird?

A. Yes.

Q. Can you point that out for us? And stand in a way so that the judge can see?

A. (Indicating)

Q. And is that -- is there a fence there?

A. There's a fence that goes down through here, and then there's -- it continues and kind of breaks up after a while. It's intermittent. But there's a gate right here.

Q. And does People's 58 depict the road that you took to get up to meet them?

A. Yes.

Q. Can you point that out to us?

A. (Indicating)

Q. And they weren't together, they were in separate vehicles?

A. Correct.

Q. You can take a seat for now.

Did you get out of your vehicle to have a conversation with them?

A. Yes.

Q. As you got out of your vehicle, can you describe the wind conditions?

A. I would describe the wind conditions as extremely strong. Stronger than normal, I would say. To the point where it was difficult to shut your door. Open or shut your door in your vehicle.

Q. Thank you.

And did it affect you in any way as you were walking or standing up?

A. Yes. Difficulty standing up in some areas, to the point where it was also rocking the vehicle back and forth as if someone was jumping on the bumper of my truck.

Q. I want to ask you some questions about wind generally in the Geysers.

On any of those other occurrences when you were up there, up in the Geysers, did you experience winds?

A. Yes.

Q. And how atypical was it to be up at the Geysers and experiencing high winds?

A. We have experienced strong winds up there, but these ones were stronger than usual.

Q. Okay. I guess what I'm asking, was it unusual to you that there would be strong winds up in the Geysers?

A. No.

Q. Why not?

A. Due to its elevation and its location,

historically we've always had strong winds up in that area. Yeah, it's just always been strong. We've always had really strong winds up there.

Q. So when you're getting out of your car on October 23rd, 2019, how unusual was this wind, based upon your prior experience in the Geysers?

A. The strength was significantly stronger than usual. Typically it's a strong wind that -- it will make a flag stay straight. This caused us difficulty walking and standing up straight.

Q. And let's talk about the buildings that are there. Can you -- do you see that one building with the white roof? Does it have the numbers 9-10 on it?

A. Yes, it does.

Q. Would it be fair to say that's in the bottom left-hand quadrant of People's 58?

A. Yes, it is.

Q. When you got up there on October 23rd, were there any lights on in that building?

A. No.

Q. Was there anybody else up there?

A. No.

Q. So it's just you, Steis and Laird?

A. Yes.

Q. Can you describe when you got up there, where was the fire after it was burning in relation to where you were?

A. The fire in relation to 360 degrees, all the way

around us there was fire. The activity of the fire varied. The most active part of the fire was to the south of us.

There was very low intensity fire burning around the north side of us. Nothing of significance that would really cause us concern. It was backing fire with no threat to infrastructure or any other property.

Q. Okay. And when you got out of your vehicle, did anyone take any weather readings?

A. Captain Steis did.

Q. And did he relay to you the results of those readings?

A. Yes. I believe it was 35 miles per hour.

Q. And that's the wind speed?

A. This was wind speed.

Q. Can you point out for us on people's 58 approximately where you were standing when Captain Steis took the weather readings?

A. Here in this turnout (indicating).

Q. And that's a turnout next to the front gate to 9 and 10?

A. Yes.

Q. And what you just pointed at would it be fair to say is in the lower right-hand quadrant of People's 58?

A. Yes.

Q. He tells you that the weather instrument is reading as 35 miles per hour. In your experience as a firefighter, did that seem to be accurate or inaccurate?

A. For the location that he was taking the weather at, yes, it was accurate.

Q. Okay. So you contacted Steis and Laird. Describe for us what happened next.

A. At that point, due to the possibility of power lines being down in darkness, we made a decision not to -- just hold tight there for the time being until we kind of figured out some more or got more information. And then I believe Steis went and interviewed some other individuals, and I remained at scene.

I ended up putting my night vision on and further investigated the area of 9-10 with my night vision, because I felt it was safe enough to do so with my equipment.

Q. Okay. And did you walk around the facility at 9 and 10?

A. Yes, I did.

Q. And I didn't ask this. Approximately what time was it that you actually got up there to meet Steis and Laird?

A. I believe it was around 12:30.

Q. Okay. I assume that's a.m.?

A. Yes.

Q. I'm going to show you some photos. Five photos marked People's 1 through 5. Take a moment to review all these.

Now, I know each photo depicts something a little different, but can you describe generally what is

depicted in these photos?

A. It is the 9-10 Fumarole plant site. The property and buildings. Remaining buildings on it.

Q. And all of these photos, People's 1 through 5, do these accurately depict 9 and 10 as it was, as it appeared to you when you arrived on October 23rd -- I guess we're talking about October 24th, 2019.

A. Yes, it does.

MR. HENNING: I would ask to move People's 1 through 5 into evidence.

MR. KRAVIS: No objection.

THE COURT: They'll be received.

(Whereupon, People's Exhibits 1 through 5 received in evidence)

MR. HENNING: Now I'm going to venture to use this. Hopefully successfully.

BY MR. HENNING:

Q. Okay. Can you describe for us what we're looking at here in People's 1?

A. The photo was taken from John Kincade Road, looking west at Fumarole 9-10 powerhouse and the adjacent tower to its left.

Q. And there's the building that we talked about in People's 58 with the white roof that said 9-10 on top. Is that building depicted in People's 1?

A. Yes, it is. It's that main building.

Q. Is it that building that's right in the center?

A. Yes, it is.

Q. And the area where you -- the turnout, as you described it, where you met Steis and Laird, is that also depicted in People's 1?

A. Yes, it is.

Q. Can you just get up and show us the approximate location?

A. (Indicating)

Q. And did you point to that white vehicle?

A. Where the white vehicle is right there.

Q. So the white vehicle that's on the right-hand side of People's 1, that's the approximate location where you, Steis and Laird all met up?

A. Yes, it is.

Q. Is that the same location where Captain Steis took those weather readings?

A. Approximately, yes.

Q. Okay. Now, you mentioned -- I think\you mentioned you used some night vision goggles?

A. Yes.

Q. Did you walk around the entire plant -- or excuse me -- the facility?

A. Yes, I did.

Q. Showing you People's 2. Can you orient us? Can you describe what we're looking at here?

A. So this location would be just southwest of where our vehicles were parked, where the gate was. This is approximately maybe 100 feet in into the facility where the cooling towers would have been looking down the east

side of the 9-10 power plant.

Q. You said where the cooling towers would have been. Did you see any cooling towers there?

A. No, I did not.

Q. Showing you People's 3. Can you describe for us what we're looking at here?

A. This is looking back at -- where I took that last photo, looking back down the same side of the power plant along the foundation of the cooling towers, the roadway between where the cooling towers would have been and the power plant.

Q. And does People's 3 depict where you met up with Steis and Laird?

A. Yes, it does.

Q. Can you just briefly show us where that was?

A. (Indicating)

Q. Pointing to the left side, near the middle of People's 3. Thank you.

Now we're just moving over a little bit. Can you describe for us where People's 4 is in relation to the one we just looked at, People's 3.

A. Approximately the same location, except for I turned to my right, or to the southwest, capturing the -- it would be the west end of the power plant and the tower that was adjacent to the power plant.

Q. And finally People's 5. Can you describe what we're looking at in People's 5?

A. This would be the southwest side of the power

plant, on the opposite side that we were looking at, where the distribution lines would have come down into the power plant.

Q. On People's 58, can you show us the approximate location where what's depicted in People's 5 would be?

A. This location would be right here.

Q. Okay. Thank you.

And he's circling an area in the bottom left-hand quadrant of People's 58.

So you're walking around, you're wearing your night vision goggles. What if anything is capturing your attention?

A. My primary concern was the power lines for my personal safety. So to start ruling that out, I started at this adjacent structure. The tower with power lines on it.

What caught my attention right off the bat was the isolators that were hanging in a vertical fashion off the tower. They were swinging back and forth significantly. I would say seven to eight feet back and forth, which was something I had never seen before.

Q. So I'm going to stop you right there. I'm going to show you five more photos.

Madam Clerk, I think we forgot to mark one.

BY MR. HENNING:

Q. So I'm going to show you what's been marked People's 6, 7, 8, 9 and 59. Take a moment to look at these photos.

THE COURT: Mr. Henning, while he's looking at those photos, am I safe in assuming you've shown all those exhibits to counsel here?

MR. HENNING: Yes. That's a very good point. Thank you, your Honor.

MR. KRAVIS: And we have no objection to the admission of any of them.

THE COURT: Thank you.

MR. HENNING: There's no objection?

MR. KRAVIS: No.

MR. HENNING: I would ask to move People's 6, 7, 8, 9 and 59 into evidence, to save time.

THE COURT: Without objection they'll be received. Thank you for that.

(Whereupon, People's Exhibits 6 through 9 and 59 received in evidence)

MR. HENNING: Thank you.

BY MR. HENNING:

Q. So rather than do this twice, can you describe -- so you just talked about a tower, a transmission line and some swinging back and forth.

Let's just focus on this photo. Can you describe what we're looking at in People's 6?

A. This photo was taken on the south end of the Fumarole 9-10 facility, between the road's edge and the hillside, looking west, back at the tower, and the very edge of the Fumarole 9-10 point.

Q. Is this -- now showing you People's 59. Can you

just briefly describe the difference?

A. I had walked a little bit farther to the west to get a closer photo of it.

Q. Okay.

A. Along the slope.

Q. And People's 7. Are we looking at the same tower here?

A. We are looking at the same tower, but now I'm standing almost at the base of it.

Q. Okay. And does People's 7 depict the swinging that you were describing?

A. Yes.

Q. Now describe for us -- now I'm seeing, for lack of a better term, a top, a middle, bottom, and there's these three vertical hanging things. Do you know what those are?

A. Insulators.

Q. And are those commonly referred to as an insulator stream?

A. Yes.

Q. And you talked earlier about -- much earlier about what a jumper cable is.

A. Yes.

Q. Do you see jumper cables depicted in People's 7?

A. I do.

Q. Can you stand up and point out the jumper cables that you see on People's 7?

A. (Indicating) right here. Right here. And

there's also another set on the other side, but it's confusing because of how the photo is taken.

Q. So that tower, are there lines on either side of it?

A. Yes, there is.

Q. And in terms of the movement that you observed, was that happening on the side of the tower that's depicted on People's 7 or was it on the other side?

A. It was on this side (indicating).

Q. So the side we're looking at?

A. The side we're looking at.

Q. Describe for us what you observed.

A. May I?

Q. Sure.

A. So these three insulators were swinging back and forth in this fashion.

Q. And you're using your hand and you're swinging it back and forth like a pendulum. Was that -- we talked about those vertical insulator strings. Did you see those vertical insulator strings actually moving?

A. Yes.

Q. If we just -- ignoring the jumper cables, if we just focus on those vertical insulator strings, did those move to the point where they were perpendicular to their current position?

A. Yes.

Q. They got all the way to perpendicular?

A. They almost all the way to perpendicular. It was

violently going out.

Q. And was it -- when it was almost getting to perpendicular, is that just on one side or back and forth?

A. It was like a pendulum. It was going back and forth. Predominantly blowing more with the wind to the southwest, but they were rocking back and forth like a pendulum.

Q. So one side was moving a little more than the other because that was the direction the wind was blowing?

A. Yes.

Q. Okay. I just want to make sure I understand you.

And that movement that you observed, was that on just one of those three vertical insulator strings?

A. On all three.

Q. Was there any difference between -- for example, was the bottom one moving more than the other or were they all approximately the same type of move?

A. I believe the top had possibly a little more swing to it just because of the elevation.

Q. And was there anything about the way that they moved that led you to believe that the wind was influencing it?

A. Yes, because while checking out, making sure to account for all the power lines that were there, I could also see down, looking south down the lines to the south, I could see all of them swinging in unison too.

Q. And when you say south, you're saying just the conductor wire?

A. Yes, I would be looking at the left of the photo, looking down the lines to the next tower. And I could see them all swinging in unison, and the insulators were swinging in unison with the wind.

Q. So on top, middle and bottom, on this side of the tower, they were all moving in unison, is that correct?

A. Yeah. Yeah.

Q. Can you describe for us just the general topography on which this tower is situated?

A. This tower is situated on the edge or spine of spur ridge. Where the facility sits, there is a little ridge that comes off, that runs to the west. It sits right on the top, exposed to the elements.

Q. Now, I'm going to show you People's 8, and I'm going to show you People's 9 in a moment.

Does this is depict the spur ridge that you're talking about?

A. Yes.

Q. Can you stand up and identify the spur ridge?

A. (Indicating)

MR. HENNING: Okay. And he's drawn a line on a -- using his fingers to draw a line from the base of the tower that's situated in the center of People's 8 to the left.

BY MR. HENNING:

Q. Showing you People's 9, does this also depict the

spur ridge?

A. Yes, it does.

Q. And is the tower -- it is the same tower that we're looking at?

A. Okay.

Q. And is that the spur ridge depicted in People's 9, moving I guess to the right, away from the tower?

A. Yes, it is.

Q. Okay. And you describe what a spur ridge is. What if any significance would a spur ridge hold to you when you're doing a fire investigation?

A. In regards to the spur ridge, we're going to have erratic winds that blow down and around the spur ridge causing eddy effects in there. Being that the wind is swirling around in that area, it may increase speed and intensity of the wind, make the direction of the fire behavior erratic and shift all over the place.

Q. In some of these last photos, you described a vertical insulator string. On the other side of the tower, did you also see those similarly vertical insulator strings?

A. Yes.

Q. On the other side of the tower we were looking at, there were vertical insulator strings?

A. There was insulator strings, but they were situated with the continuance. The line continued beyond there.

Q. Okay. And so I guess my question is, was the

other side of the tower configured in the same way that the side was that you were looking at?

A. No.

Q. Okay. And these are all observations that you're making during the early morning hours of October 24th?

A. It is.

Q. Were you able to discern anything else using the night vision goggles?

A. I was able to discern that it wasn't -- that the wires terminated at that pole. They didn't continue to the north. That only the other side, the far side continued to the north, and that these wires were terminated here at this location. They did not continue on.

Q. So when you say that the wires terminated, can you use People's 7 to point out what you're talking about?

A. The termination points. They were cut here. They were cut or stopped here, here, and here. They didn't continue on, as the other sets.

Q. So this side of the tower, the lines on this side of the tower ended at those three points that you just identified for us?

A. Yes.

Q. But describe what you saw on the other side of the tower.

A. The other side of the tower, there's three electrical lines continuing to the north to the next

plant, which was plant 12.

Q. Okay. And approximately how far away is plant 12 from 9 and 10?

A. Approximately a mile.

Q. Is it visible from 9 and 10? Were you able to see it that night?

A. Not that night. I wasn't able to see it that night because there was snow.

Q. So take us back to the early evening of October 24th. You described this movement that you observed. You were also able to see that this one side of the tower, the lines ended right there, whereas the other one continued to the north.

What else did you do at that point?

Just focus on the early morning hours of darkness.

A. I believe for life safety at that point we determined there was nothing more we could do. Now that we had established that there wasn't any power lines physically on the ground, so we retreated back to our vehicles. I kept on scouting outside the location to make sure there wasn't any other life safety hazards. Predominantly the sight: There wasn't any open holes, pits, anything like that.

And we ended up securing the area that night, making sure no one could come and go.

Q. One question I forgot to ask you, you talked about the wind measurements where Steis took the

readings. Did the strength of the wind feel any different as you got closer to this tower?

A. Yes, it did.

Q. Describe that for us.

A. It increased in intensity as I approached the tower, and becoming more and more exposed to the wind as I made my way out to the tower's location.

Q. Okay. And does this -- I'm going to put People's 8 back up there.

Does this photo in any way assist you in describing how the wind felt more intense as you got closer to the power?

A. Yes.

Q. Please.

A. So as I progressed on foot along this building, there's a chain link fence here, and it was to keep us from falling off the hill. It was that strong. We had to hold onto the fence to keep from getting swept off the hill. And we didn't get right underneath the tower, but we got fairly close to it to get a better idea to determine if there was lines down.

Q. What direction is this hillside we're looking at in People's 8 facing?

A. A southern-facing aspect.

Q. Does that southern-facing aspect hold any significance to you as a firefighter in terms of thinking about wind strength?

A. Yes. For -- the current wind at the time was

north, predominantly north, so we were having wind alignment with topography, which they were both working together in conjunction. So a fire will typically want to run through a chimney or a canyon. And we also had wind that was kind of exacerbating it and assisting with it. Usually they're perpendicular, but we had alignment. We had wind and topography alignment here.

Q. Okay. And I think you said -- I can't remember your words, but essentially you and Laird stayed there through the night?

A. Yes, we did.

Q. And did you stay in your vehicle?

A. I got in and out of my vehicle several times.

Q. And at some point did the wind ever die down on October 24th?

A. No.

Q. Did the wind change, though, in any way when the sun came up?

A. It decreased.

Q. It decreased.

So before the sun comes out, lets focus on the early morning hours. Did we -- describe for us, did the intensity of the wind that you experienced when you were out of your vehicle, did that intensity appear to change in any way before the sun came up?

A. It remained constant, blowing our trucks around, rocking our trucks back and forth.

Q. And after you went to your vehicle, did you ever

take another look at this tower and the insulator strings that you had seen moving?

A. Yes, I did.

Q. Approximately -- describe for us -- describe that for us. How many times did you do that?

A. At least 10 or 12 times I got out to check to make sure they were still there and still in one piece.

Q. And what did you see during those 10 or 12 times?

A. They remained static.

Q. Okay. And when you say remained static, I think of static as maybe not moving.

A. Unchanged. The conditions didn't change. They were still blowing back and forth. Nothing had changed since we checked up on them again.

Q. And in terms of still blowing back and forth, was it blowing back and forth the same amount with the same intensity or did that change?

A. It remained the same intensity, going back and forth to and fro on the tower.

Q. Now you said in the morning when the sun came up that the wind decreased. When the wind decreased when the sun came up were you able to observe any difference with respect to the movement on the tower?

A. Yes.

Q. Describe that for us, please.

A. We were able to -- once the wind decreased and the equipment stopped moving on the tower we were able to see an abnormality on the tower, which we found a

wire hanging from the tower, which was -- it appeared to be out of place.

MR. HENNING: Your Honor, at this time I'm going to show these to counsel. I would ask to move People's 10 and 11 into evidence.

MR. KRAVIS: No objection.

THE COURT: They will be received.

(Whereupon, People's Exhibits 10 and 11 received in evidence)

BY MR. HENNING:

Q. Showing you first People's 10. Can you describe for us what we're looking at here?

A. That was the piece or wire that we saw that was out of place on the upper box arm of the tower. It's one of two wires that was hanging down.

Q. Okay. And showing you People's 11. Can you describe what we're looking at here?

A. It's the end of a transmission jumper wire with swage connection on it.

Q. Can you compare for us what we're looking at in People's 11 versus People's 10?

A. It's a zoomed-in, a tighter zoom on the wire itself.

Q. Okay. And when you're looking at it during the morning daylight hours of October 24th, this is catching your attention?

A. Yes, it was.

Q. Had you been able to observe that during the dark

hours when you're using night vision goggles?

A. It was difficult. With the night vision goggles we weren't able to really fully identify it. We knew something was up there but we couldn't -- it looked like a spaghetti of old wires when you're in the dark. During the daytime we were able to -- when the wind calmed down we were able to get a better, precise view of it.

MR. HENNING: I'm going to have a couple of these poster boards marked, if that's okay.

THE COURT: Sure.

(Whereupon, People's Exhibits 60 and 61 marked for identification)

MR. HENNING: I would ask to move People's 60 and 61 into evidence.

MR. KRAVIS: No objection.

THE COURT: Thank you. They'll be received.

(Whereupon, People's Exhibits 60 and 61 received in evidence)

BY MR. HENNING:

Q. Starting with People's 60. I think this is similar if not identical to a photo we talked about earlier. Can you use this exhibit to show us, to orient us approximate location of that broken wire that we were looking at in People's 11?

A. Broken wire would be right in here.

Q. And was it --you're pointing to the wire that is connected to the topmost of the vertical insulator

strings?

A. Yes.

Q. And showing you People's 61. This might be a little easier. Does this depict the broken wire we were looking at in People's 10 and 11?

A. Yes. That zoomed-in version is right there.

Q. Okay. And that arrow that appears on People's 61, can you just describe for us for the record, what is that arrow pointing at?

A. The arrow is pointing at the bottom of the insulator string, where the wire originated from. Came off of here and then ran down. And there's a piece of metal that holds the two, like a spreader bar, and it drops down. The wire ends up going in a vertical fashion point towards the ground.

Q. Thank you. And using People's 61, does People's 61, is that the other side of the lines that are on the other side of the tower, on the right side of People's 61?

A. Yes.

Q. And you talked about earlier that there were insulator strings on that other side of the tower. Can you just briefly point out those insulator strings?

A. On the other side, it was one here, there's one here, and then two sets here, two sets here. Another set, two sets and another set.

Q. So going from top to bottom, are there three sets of insulator strings on that side of the tower?

A. There is.
Q. And the two that are parallel, with respect to each of those, top, middle and bottom, can you tell us, are those on the lines that are coming into the tower in the south?
A. These are coming into the tower from the south.
Q. Okay. And then the other insulator, which is approximately perpendicular to each of those two parallel sets, what side of the tower is that on?
A. That's going north. This is the wire going north, away, to plant 12.
Q. So in other words, with respect to each of those three segments, top, middle and bottom, the parallel sides are on one side of the tower and the lone insulator string is on the other side, is that correct?
A. Yes.
Q. Okay. Thank you.
So I just want to try to use People's 61. You told us in great detail about the swinging that you saw on the left side of that tower. Can you describe for us, what if any swinging did you observe on the right side of the tower as we are looking at People's 60?
A. Minimal. Minimal compared to the left-hand side.
Q. And is that -- when you say minimal, is that applicable to the hours of darkness when the wind was at its strongest?
A. At it strongest it wasn't swinging any more than I've seen in the past, normally.

Q. In normal winds?

A. Yeah. It didn't cause me any concern.

Q. Okay. So it's the early morning hours of daylight, you've observed this broken wire that we were looking at in People's 10, and 11, and at 60 and 61. Describe for us what you did at this stage of your investigation.

A. At this stage in our investigation, once it became light, we secured the area. Based off of the macro indicators that were leading into the fire, we established that we believed that the fire had originated from that area, and that's when we secured it.

We believed the fire was coming from that area. We hadn't gotten into there, but we wanted to secure it, take photos and start further investigating.

Q. So you secured the area that encompassed the tower, but was that the only area you focused on that morning?

A. No, we looked -- we worked our way back into it, back to this location based on our macro fire spread indicators. They were bringing us back there. So we went out, looked at the adjacent areas, and those indicators kept pointing us back to that location.

Q. So let's talk about that. One of them was macro fire indicators. You started outward. How large of an area did you go outward from this tower?

A. Initially when I drove into that area I was

observing the macro, the large scale fire indicators as I drove in. So I was aware of what I had seen coming in from the west. So we proceeded farther to the south. I believe I went to the next ridge over and began evaluating the macro fire spread indicators on that side, which were directing me back towards the tower. And we looked at the macro fire spread indicators above us on the hill, and they also were directing us back towards the tower.

Q. When you say macro fire indicators, can you give us some examples? What are you looking for?

A. With macro fire spread indicators we're looking at the totality of a bunch of different indicators. And often it's the pattern the fire had burned in a vegetation, in a field or in a hillside. So we're looking at V patterns, angle of char, protection. Is a plant burned on one side versus the other side, or is it fully scorched on one side and not the other side. And we're not just looking at that one plant or that one indicator. We are looking at the totality of all the indicators in that area.

So we're looking at -- typically for me I'll go for between eight to ten, as long as they're all supporting themselves, directing me back that direction. And then that's -- I get to my totality. I'm like, okay, it's going to the left, it's going left to right, right to left. However it may be going. There's going to be abnormalities within that, but that's why we go

for the totality of the direction.

Q. So there's no magic number indicators that you need.

A. No.

Q. But you just told us that personally you like to see eight to ten indicators.

A. More than. More is preferable for me.

Q. So what do you do hypothetically, if you have eight to ten indicators pointing you in one direction, but you have two to three indicators pointing in another?

A. We often look at the location, geographical slope. Like I said before, this location there's going to be swirling winds, erratic winds, and we're going to get eddies. So we're going to get abnormalities in the fire indicator. A fire may burn in one direction for two minutes, it might shift directions to the right and burn that direction for 30 seconds and continue. So we're ruling out that 30-second shift that it ran to the left or to the right. And we're able to rule those out.

By ruling those out we walk ourselves back to the fire progression. I start from -- I start from -- typically I'll go a couple hundred yards out and I'll stark walking myself back through it. And I can see those changes in topography. There might be a large rock there that caused it to swirl around. So I'm ruling those things out. Going, okay, that's why it did this.

But when we go macro we're looking at a much larger-scale view of the fire of that area, and that's -- we're just looking for the general direction it was advancing out of, or backing laterally out of.

Q. So is there a size of a general area that you're trying to narrow your investigation down to at this stage?

A. We like to get -- at this point the macro size I'm wanting to get down to, under an acre is workable.

Q. And is this -- are you familiar with the term general origin area investigation?

A. Yes.

Q. Is that another term that could be applied to what you were doing at this stage?

A. Yes.

Q. And how many times prior to October 23rd, 2019 -- or I guess now we're talking about October 24th -- had you conducted a general origin area investigation?

A. On every fire I've investigated.

Q. And when you did the general origin investigation on this particular fire, did anyone assist you?

A. Yes. Fire Captain Laird.

Q. And how were you guys working together, or how did you work together with respect to this investigation?

A. Typically how we organize ourselves when we do this, we work independent of each other. I'll usually take one section. We'll pick quadrants of the area

we're working in. We'll split it up in quadrants. So we work independently. I'm not swayed by something that he's found, although we also -- we'll put our flags out to mark our fire indicators, and then after we're done doing that, if we have any -- anything that was maybe in question, we'll ask for assistance from my partner. We'll come back and forth and kind of consult back and forth and usually try to work through it.

If there's a weird area that I suddenly got backing fire, we'll usually consult with each other and try to figure out what happened. Was there a rock there, was there a disturbance. Usually a fire engine drove over it, a dozer drove over it, an air tanker dropped retardant. But that wasn't the case.

Q. So you mentioned flags. Describe for us, how do you use flags when you're doing this investigation?

A. To help us keep track of the progression of the fire we work from the outside in. As we work our way back in, we're identifying advancing fire, which is the most predominant fire that's advancing away from the origin area. And we use red flags for that, to identify advancing.

On the outside edges, if you think of it as like a big V pattern, on the outside flanks, those typically will be yellow. Those will be yellow, because they're flanking fire. They're lower intensity than the head fire or advancing fire.

And then on the back side, the lowest intensity

of the fire is -- we'll put blue flags in there to identify that. And by looking at the fire pattern indicators we'll determine out of those three classifications what they fit into.

MR. HENNING: Your Honor, at this point I would show him a series of photos, I'm happy to do that, but I'm mindful of the hour.

THE COURT: It's 11:59. We'll take our noon recess until 1:30. We're in recess.

MR. BROCKLEY: May we approach just briefly?

THE COURT: Sure.

(Noon recess)

THE COURT: Back on the record in People versus Pacific Gas and Electric. Mr. Uboldi, you are still under oath. Mr. Henning.

MR. HENNING: Thank you, your Honor.

BY MR. HENNING:

Q. Mr. Uboldi, before the lunch break you were describing for us the general origin area of the investigation that you conducted in this case. I want to show you some photos at this point.

MR. KRAVIS: We have no objection to the admission of these exhibits.

MR. HENNING: Specifically, this is People's 12 through 19.

THE COURT: People's 12 through 19 will be received without objection.

(Whereupon, People's Exhibits 12 through 19

received in evidence)

MR. HENNING: Thank you, your Honor.

Thank you, Counsel.

BY MR. CHEEVER:

Q. Showing you what's been marked as People's 12. You talked about the use of flags. Can you describe for us if you can -- I know it's not the biggest image, but describe what we're looking at in People's 12.

A. What we see here is looking south downslope from the tower, and the flag pattern depicts the fire progressing a downslope, and we can tell that because we see the blue flags that are --

THE BAILIFF: That pointer won't work on the screen.

THE WITNESS: The blue flags that are on the top here, those are depicting a backing fire, the lowest intensity fire. It's slowly creeping back up against the hill, against the wind, against slope, against the slope and wind. And then as it progress downslope we can see more red flags, and then on either side of it flanking the red flags we see the yellow flags, which are lateral -- indicate lateral fire pattern behavior. So the fire slowly progressing downslope, and it's widening its swath as it's going down. And the yellow flags are depicting the widening swath.

BY MR. HENNING:

Q. So first off you mention backfire. What is a backfire?

A. Backing fire.

Q. Excuse me. Backing fire.

A. Backing fire is the lowest intensity fire that we're going to see on the fire. It's opposite the prominent direction the fire is spreading. So this fire was spreading to the south down the canyon, and then slowly was backing itself back up the hill. It's going to be the lowest intensity that we're going to see. Lowest degree of damage, lowest heat, very low intensity fire.

Q. If you're talking about a specific location where you know that a fire began, where would you expect to see backing fire? What kind of proximity would you expect to see backing fire in relation to the actual origin of the fire?

A. The backing fire is going to be adjacent to or right around the -- where the general origin, where the fire originated from. Because it's the slowest to move. The rest of the fire is going to spread out rapidly, and that fire is going to have -- it's going to be fairly tight, and you should have big red flags like we have here.

So on this, that area is going to be just below the blue flags, right around the general vicinity of the blue flags.

Q. Okay. So the yellow flags you said indicates lateral indicators?

A. Yes.

Q. And then the red flags are advancing indicators?
A. Yes.
Q. And does each individual flag that is depicted on People's 12 -- explain what each individual flag signifies.
A. Each individual flag indicates a fire pattern -- a fire indicator we saw in that area. It may actually be representing three or four indicators of that area that we identified, but they're all consistent with a lateral advancing or backing.
So where I drop that flag, I might have sooting staining, I might have three or four different indicators within that, say, 24 inches, that general area there. So we're not going to put a bunch of flags. We're just going to put one representing that for the totality of that area.
Q. Were you the only person planting these flags or was Laird also planting flags?
A. No. Laird was -- he was not putting out flags. He was walking that grid with us, taking a look, making sure we were on the same page.
Q. Was there someone else assisting you who was also planting flags?
A. Yes, Battalion Chief Ryan Smith from the Mendocino unit.
Q. He was assisting you?
A. He was assisting.
Q. Showing you People's 13. Somewhat similar, but

could you describe what we're looking at here in People's 13?

A. In People's 13 we're looking -- where the field of view on that last photo on 12 was, we're looking just to the right of that photo, looking southwest down the spur ridge. The spur ridge is on the upper right-hand side of the photo.

We're actually looking downslope. It looks fairly flat but it's downslope, and what I can see, we have several clumps of grass. And judging by what's left of the clumps of grass and by the indicator flags, I can tell the fire was backing and then had runs and advancing with some laterals progressing out to the distance.

Actually the far ground, there's some red flagging that's up on the tree. That's also advancing too. It's the color, not the flag that we're looking at.

Q. I want to go back quickly to People's 12. Does People's 12 show any part of the tower?

A. Yes.

Q. Okay. Can you just point it out so that --

A. Center of the photo on the left edge is one tower footing.

Q. Is that tower footing from the same tower that you've been describing that's been depicted for example in People's 61, which is against the jury box?

A. Yes.

Q. And I never asked you this. Is that tower located in Sonoma County?

A. Yes, it is.

Q. Same question as to Fumarole 9 and 10. Is that whole area in Sonoma County?

A. Yes.

Q. Thank you. I want to move forward to People's 14.

Now looking at this photo, describe what we're looking at. Is that a piece of wire?

A. That is a section of conductor wire.

Q. Were you ever -- did you ever link up this section of conductor wire with what actually caused the ignition of the fire?

MR. KRAVIS: Objection. Lack of foundation.

THE COURT: Sustained. You can lay some foundation.

BY MR. HENNING:

Q. Where did you find this conductor wire?

A. This was at the base of the tower.

Q. Okay. And there's a yellow flag. Explain why there's a yellow flag for this item.

A. For this item, it wasn't necessarily the item in general that it was wire. It was that it was the fire pattern indicator that were exposed to the wire.

The wire around the tower had numerous pieces of debris, which is good for us, because this alluminum wire actually shows a lot of fire pattern indicators.

We know that the wire was down for a while because due to oxidization and weathering. But what we're looking at here is what did the fire do to that piece of wire when it encountered it on the ground. We know what it is. It's wire. We're more interested in what the fire did to it when it contacted it.

Q. Okay. So just so I understand you, it was your belief that this piece of wire had been on the ground for some time?

A. Yes.

Q. Just so I understand you, can you explain why that is?

A. Due to weathering. And weathering, oxidization, when we did pick it up there was nesting where it had been laying in the mud, and there was like a form built in the mud. So it had been there for a significant time, at least through several rains. It had been there for a significant time.

Q. Okay. But it was still significant to you in that you observed indications of lateral fire?

A. Yes.

Q. Showing you People's 15. Can you describe what we're looking at here?

A. We're looking from west to east, along the south side of the tower mid slope at our general area of origin.

Q. And is part of the tower depicted in People's 15?

A. It is.

Q. And is -- can you just point out where it is?
A. It's in the upper left-hand corner.
Q. Thank you.
And as you're investigating this as the potential origin area of the fire, I want to ask you about it. It looks like there's some untouched Manzanita bushes depicted in People's 15. Is that unusual to you that you would see vegetation so close to the start of the fire that was untouched?
A. It's not unusual because it has been touched by fire, and we were able the look at it, but it's the degree of damage that was sustained from the fire when it originally caused. We call it degree of damage. Once we zoom in on those plants, you'll actually see they have leaf curl to them. So they were exposed to heat, so when the heat exposed to them they curled up just enough so we could tell.
And we compare this exposed site -- and you can see the discoloration on that lower -- on this lower, in front of the plant. We compare and contrast it from one side to another. And we also compare and contrast it to adjoining plants that were not affected by the fire that were a significant distance away to see the difference between the two. And from that we can tell that there was fire on this side, on the cameraman's side, versus not on the other side, and it originated and progressed in a downward fashion.
Q. So if you look -- I would call it the top

right-hand corner quadrant of People's 15, for lack of a better term, the land appears to be moonscaped. It appears to be in contrast to the land that is in the foreground. Can you explain why that is?

A. We believe once the fire progressed to the bottom of the canyon it then had the ability -- it turned and progressed upward, upslope with slope and made a hard run to the ridge line. And this was because it was shielded by the north wind. North wind would have been coming up over the top of that mountain and would be doing an eddy effect and pulling and drafting that fire all the way across. There's that mid slope road. It would have pulled it up over the top of that mid slope road and continued to the ridge line. When it stopped at that ridge line there was no fire suppression activity that was conducted to stop it where that green section is up here. Would you like me to show you?

THE COURT: Please.

MR. HENNING: Yes, please.

THE WITNESS: In question. This area right here, and the fire progressed up, it stopped, it didn't have the ability to push up over this ridge because the wind was blowing against it, its progression. So it ran up, hit hard and stopped, and hung up on -- on top of that ridge line. Didn't progress any further.

If the wind had not been there it would have progressed up and over and spotted, thrown embers on the other side and that whole thing would have been

moonscaped.
BY MR. HENNING:
Q. So when you're talking about the actual origin area of the fire, is there a difference between the heat that's generated in that origin area versus when the fire has an opportunity to grow?
A. Yes. Typically in the origin area you could have a very low intensity fire. The fire, for all intents and purposes, it's small, it's a baby fire. Once it gets up and gets a good heat conduction column built up it starts getting alignment with slope, topography features and fuels. It then increases intensity and it burns off the available fuels quicker.
Additionally, that's also a south-facing slope. So the fuel model on that side, the fuels on that side of the slope are going to have a lower water content or fuel moisture content then the fuels on the back side of that slope because the sun never touches it. So the plants on the back side of the slope are going to have a higher moisture content than the ones on the front side. They have also been preheated all day.
Q. I'm going to show you People's 16. Can you describe what we're looking at here?
A. We are looking northwest at the base of the tower, below the general origin area.
Q. Okay. And is that -- as you look at the flags, is that consistent with what your understanding is of how a fire would move from a specific origin area, with

respect to the blue flags farther up and the red flags farther down?

A. Yes.

Q. Can you explain why that is?

A. In the fire's infancy, when it first starts we're going to have very low intensity fire burning back up the hillside. And then we're going to have a progression, advancing progression coming downslope.

Additionally, with this type of fire, and it was ignited by sparks, we're not going to have one singular ignition point. We're going to have multiples.

I use an example that if you took a grinder to metal you get a shower of sparks. It's going to be similar in nature. It's going to be multiple ignition sources versus one pinpoint source.

So we never expected to find just one pinpoint source. We expect to find in this scenario multiple ignition sources within a cluster. And that's what we ended up finding, was more cluster than just one pinpoint.

Q. This might be similar, but briefly can you tell us what we're looking at in People's 17?

A. Similar photo. I believe it steps to the -- maybe a step to the right, approximately probably 10 or 15 steps, to capture more the left side of the general origin area.

Q. Then finally People's 18. Can you describe what we're looking at?

A. Opposite of that. I then went to move farther to the left and took a picture to capture the orientation of the tower to general origin area. Kind of in comparison.

Q. And in the background there appears to be a building. Is that this building that you've talked about earlier that has the white roof and is marked 9 and 10?

A. Yes, it is.

Q. And in People's 18, there doesn't appear to be any flags that are directly underneath the tower itself. And you talked about there being sparks, and you also talked to us about how your attention has been drawn to this jumper cable that was up above at the top of the tower. Was this unusual to you? Did you expect to see signs of fire indicators that were immediately underneath the tower?

A. No.

Q. Can you explain why that is?

A. Because the lack of fuel arrangement underneath the tower wasn't susceptible to fire. It wasn't support ignition. There was lack of available vegetation underneath the tower.

Additionally, with the predominant wind coming out of the north and the height of the tower, when the embers were emitted from the top of the tower they were going to drift. They're extremely light, so they're going to want to carry in the wind. They're not going

to drop directly to the ground underneath.

Q. So in other words these blue flags which you've explained are indicators of backing fire, where they are under the tower is consistent with the way the wind was blowing? The direction of the wind?

A. Not the direction of the wind. It was backing against the wind. So it was backing slowly, progressing away from the general origin area, creeping itself up and over the top of the hill. Consistent with the wind, just not the direction.

Q. When you were doing your investigation to determine the origin area, did you ever use Lidar to assist you?

A. Yes, I did.

Q. Can you just briefly explain to the Court what Lidar is or how you used it?

A. For Cal Fire they utilize an inhouse Lidar team. They come out and they set up -- it's our survey team, and they set up toll stations, which is a tripod station that has a camera on it. And if we were to set it up in this room, the camera spins around super fast, and what it does is it measures every item that's in the courtroom, and give a distance. From the total station, from the eye, it would then look at the clock, shoot back. It would take a full picture of that clock and be able to tell you exactly what the distance and what the positions of that clock was.

And then it goes around and does another pass,

and then it captures color in that too, to help us identify the objects. So when we use it we're able to create a 3D model. Regardless of what happens to the site afterwards, we're able to go back and we can recreate an electronic model, 3D image of that site.

Q. Did you in fact do that in this case?

A. Yes, we did.

Q. Showing you People's 19. Can you describe what we're looking at here?

A. This is a survey plot map of our fire pattern indicators which was created by our Lidar team.

Q. And the colored circles on this map, please explain what those correspond to.

A. Those color circles correspond to our flagging. So red dots are red flags, or red flagging on tree, blue dots are blue flagging, and yellow, so on and so forth.

Q. So all those flags that we just looked at that were depicted in People's 12 through 18 are on this Lidar image?

A. Yes.

Q. And does this Lidar image depict the tower you've been talking about?

A. Yes, it does.

Q. Can you just point that out?

A. This would be the tower right here.

Q. And I see, it looks like it says tower 1 above that?

A. Yes.

Q. Okay. And that's Cal Fire's labelling?
A. Yes. It was the surveyor's labelling.
Q. And I notice that -- do you see where there's tower 2 labelled?
A. Yes.
Q. Do you know what that is depicting?
A. That is depicting the -- where the wires would have ran down into -- we believe we have a photo of it too. It's the structure that's the swage structure that's just outside the building of 9-10.
Q. Is the structure that is indicated as tower 2 on the Lidar image depicted here on People's 6?
A. Yes, it is.
Q. Can you just point it out for the Court?
A. That's this, is what they're referring to as tower 2.
Q. Pointing to the right-hand side of People's 6. Thank you.
While you were doing this investigation did you ever notice whether there were any identifying markings on this tower that you've been talking about?
A. Yes.
Q. What were those markings?
A. There were spray painted -- there were several markings on it. One was a spray paint black background with white writing on it. Another one was I believe a plate with straps strapping net plate to that had markings on it.

Q. And just to be clear, we're talking about what's been labelled as tower 1 on the Lidar image, right?

A. Yes.

Q. Okay. And was there any -- I'm sorry. You said there was a number 1. Or what was the marking again?

A. The marking was the actual tower identification markings. Basically we record all and any markings that we can locate on the ground, that we can visually see from the ground on that tower.

Q. Do you recall what that was? What the actual identifying marking was?

A. I could not.

Q. Was there anything to indicate, you know, ownership of that tower?

A. I believe there was, yes.

Q. Okay. What was that?

A. I believe there was PG&E markings on it.

Q. And so you spent a lot of time talking about your general origin investigation, origin area investigation. Were you able to form a conclusion?

A. Yes.

Q. And what was the result of your general origin area investigation?

A. That sparks were emitted from the tower and landed into that general origin area causing the Kincade Fire to spread southward down in the canyon, and then laterally basically in three different directions; upslope to the east, predominantly to the south, and

then to the west also.

Q. And as you're doing your investigation, are you also taking into account arson, for example?

A. We take into account, yes.

Q. Are you taking into account any other potential causes of this fire?

A. Yes.

Q. And were you able to rule out the other potential causes?

A. Yes.

Q. I mean, I should have asked this first. Are there, in your experience as a fire investigator, are there common causes of fires that you investigate?

A. Yes.

Q. What are they?

A. When we start looking during fire investigation, we look at, once we've identified the general origin area, we located it, we know the fire came out of that area. It's only at that point that we can start to rule out different causes for the fire.

For example, on this one, vehicle use was ruled out because we were able to determine a vehicle couldn't get out there. We would have seen tracks. Equipment use was ruled out because we didn't see any recent equipment use.

When it comes to arson, we ruled that out because due to the high security of the area and unpredictable patrols around there, it wasn't conducive to arson.

Additionally, we didn't have any prior arson fires in the area. You don't typically just get one arson fire. It's usually varying in clusters.

Q. So these are the other examples of common fire cause that you were able to rule out?

A. Yes.

Q. How long did it take you approximately to conduct your general origin area investigation?

A. Say about eight hours. Seven or eight hours.

Q. And after you completed it, could you describe for us what you did next in your investigation?

A. We contacted our subject matter experts in the field of electrical engineering, our Lidar teams, contacted PG&E for tear down, the actual disassembly, because we can't disassemble it, so we made some contacts to start taking a look at it.

Q. So let's talk about that in a moment.

There's some, I think you called it subject matter expert. Was that someone who came out at a later date?

A. Yes.

Q. And then at any later date did PG&E come to help with evidence collection?

A. Yes, they did.

Q. So before we talk about that, I want to ask you about -- are you familiar with the term an SOA, or specific origin area?

A. Yes.

Q. And is that a separate investigation, separate and apart from the GOA, general origin area investigation?

A. No, it's a continuance of it.

Q. Okay. And so when you talk about the eight hours that you spent doing the investigation, did that also encompass the specific origin area investigation?

A. Yes.

Q. Okay. So when you're up there -- and we're talking about the early days, October 24th or October 25th, 2019 -- you've talked about these jumper cables that caught your attention initially. Describe what it was about their configuration that caught your attention.

A. What was out of the ordinary for them for me looking at them is that typically we see power lines -- power lines are connected at two secure points.

MR. KRAVIS: Objection. This is lack of foundation, beyond the scope of the witness's qualifications as an expert.

THE COURT: So with regard to the lack of foundation I'll sustain it. If you want to lay some further foundation regarding experience with electrical fires.

MR. HENNING: Sure.

BY MR. HENNING:

Q. So you've talked about the fact that you've investigated, I believe you said, 15 to 20

investigations of electrical fires. And you also talked about your familiarity with jumper cable. And I can't remember if you said this earlier. Did you receive some training specific to investigating electrical fires?

A. Yes.

Q. Can you describe that training?

A. Basically identification. We go through training about identification of hardware, conductors and insulators, on how they're mounted to the pole. And we go through training on whether or not, for our vegetation management in regards to distance from energized power lines, able to identify them, able to identify distances from the energized power lines to vegetation. And primarily we have to identify that they're either conductor or identify the equipment that is on the pole.

Q. Okay. So you have experience in identifying equipment that's on the pole?

A. Yes.

Q. What about -- when you say the pole, there's also towers. Do you have separate experience or does the same experience apply equally?

A. Same experience. It's the same training is applied to both of them.

Q. Okay. And have you utilized this experience in the 15 to 20 electrical-caused fires you've investigated?

A. Yes, I have.

Q. Okay. And describe for us -- I know you did it earlier, but I just want to hear it again. Describe what is a jumper cable, in the context of an electrical system.

A. A jumper cable would be where two lines come together and either terminate the link between the two wires. The wire connecting the conductor wire connecting the two wires together that would be the jumper cable in there.

Q. Are you able to put a number? Are you able to estimate how many times you've seen a jumper cable?

A. I'm unable to put a number how many times I've seen a jumper cable. I see them all the time driving down the road. I mean --

Q. Okay. So it's difficult to put a number because you've seen so many?

A. Yes. I'm constantly looking up at power lines when I'm driving around.

Q. Okay. So now I'm going to ask you, with respect to this tower, you told us that you saw -- you've seen jumper cables on this tower, you identified it in some previous exhibits. Was there anything different about the appearance of these jumper cables compared to other jumper cables you've seen?

MR. KRAVIS: Same objection. This is a question about configuration, not about fire investigation or identifying equipment, which is what the witness said he had experience.

THE COURT: So the question was was there anything different about the appearance of the jumper cables compared to other jumper cables he's seen. That does seem to be about the appearance of the configuration of the cable. Based on the witness's history in viewing jumper cables, I'm going to overrule the objection. There's sufficient foundation for him to answer that question.

Go ahead.

THE WITNESS: There was something abnormal about it.

BY MR. HENNING:

Q. What looked different to you? I'm going to put up -- this might not be the best one, but I'll put up People's 7.

A. Okay.

Q. Yes, use the pointer.

A. What was odd about this configuration was that these ends were loose and there's nothing securing them, allowing them to have a substantial amount of movement back and forth. I had never seen that before.

Q. Okay.

A. Mainly because they were typically -- they're typically tied to something else. They're secured to something else. There's a point A and point B, they're both secured, and they're not allowed to flap in the wind.

Q. Okay. And let's use -- I think this is 61.

Let's look at People's 61. And I think you can actually use -- and let's talk about the other side. And this probably isn't the best photo, but describe what you were able to observe with respect to the jumper cables on that other side of the tower.

A. So with these jumper cables, they were connected to something on this end. They were secured here, and they were secured to the adjoining tower on the other end. Not allowing them to have excessive movement back and forth.

Where these ones were only secured by the insulator string, and back to the line that was coming from the other tower. These sections were just allowed to -- these have swivels on them. And there's swivels on either end of them and allows them to swing back and forth on either end.

THE COURT: Can I interrupt? I was making a note and I missed the portion where he showed he was connected on the other side. That's my fault. Could you please have him demonstrate that again?

THE WITNESS: In regards to these?

THE COURT: Yes, please.

THE WITNESS: So this mark heads to the next pole and is secured there. These wires run down and they go to the pole on the opposite side. They're both secured on either ends, so they can't flop back and forth like, for all intents and purposes, like a dog's tail. They're not loose. They're secure. Versus these

ones have -- they're not secured on the end. There's nothing holding them in place. Right now they're just dangling. Gravity is just holding them in that position. If the wind blows, they swivel, so allows this to swing back and forth.

BY MR. HENNING:

Q. So focused on -- well, first off, you're saying pole. You use pole and tower interchangeably?

A. My apologies.

Q. I'm sorry. You spoke over me. You use those interchangeably?

A. No, I try not to.

Q. But when you were just saying pole, were you referring to the tower?

A. Yes, I was.

Q. Focused on the right, People's 61, had you ever seen a jumper configuration like that?

A. In regards to this side?

Q. Yes.

A. Yes.

Q. And but on the ones on the left, I think you said you have never seen that before?

A. That is correct.

Q. So you talked about the fact -- so the fact that you've never seen this before, and I think you said earlier you could see that -- did you see any way in which that tower was conducted by an electrical line to 9 and 10?

A. No.
Q. And can you just describe for us the appearance of this power plant 9 and 10?
MR. KRAVIS: Objection. Vague as to when.
THE COURT: Sustained.
MR. HENNING: Vague as to time, your Honor?
THE COURT: It's vague all around.
MR. HENNING: Okay. Fair enough.
BY MR. HENNING:
Q. When you were there -- well, let me ask you this: Have you had an opportunity to see other power plants up in the Geysers?
A. Yes.
Q. Are you able to approximate how many times you've seen other power plants up in the Geysers?
A. 40, 50, times.
Q. Was there anything about the appearance of 9 and 10 that looked either similar or dissimilar from the other power plants you've seen up in the Geysers?
A. Dissimilar.
Q. Can you explain what was dissimilar about 9 and 10?
A. 9 and 10 was missing its cooling towers, which for the power plant to operate it needed cooling towers, which were large tubes that cool down the steam as it comes down, and then it has water that runs over redwood flats and basically reconstitutes the steam. That tower or that section of the building was missing, with the

exception of the foundation.

Around the area it was in various stages of what appeared to me someone was in there recycling the metal. Very organized. It was steel, aluminum, I believe there was some copper, but there appeared to me they were recycling everything in there. All the metal off the facility. Piping, catwalks, stuff of that nature.

Additionally, there was also vegetation that was growing up within the site, which being at other power plants, vegetation is a primary concern of fire spread to the power plants. Because the power plants are also very flammable in themselves, so when a facility is up and running they're usually very tidy with their upkeep, or they're making sure the weeds aren't encroaching on the facility. Its pallets, general refuse that's around, that is very clean and tidy.

Q. I want to show you a picture.

And your Honor, I'd ask to move People's 31 into evidence.

MR. KRAVIS: No objection.

THE COURT: Thank you. It will be received.

(Whereupon, People's Exhibit 31 received in evidence)

BY MR. HENNING:

Q. Now you've talked about you've had opportunity to see other power plants up in the Geysers, I think you said at least 50 times. People's 31, does this -- what appears to be depicted to you in People's 31?

A. It appears to be an operational power plant.
Q. And specifically is there anything about the appearance of People's 31 that tells you where?
A. It appears to be the Geysers by topography, fuel type. Like I say, topography is a huge one. Fuel type is another one. Looks like springtime this photo was taken. Looks like a very functional power plant. Very clean and tidy.
Q. You mentioned the absence of cooling towers at 9 and 10. Is what's depicted in People's 31, does that power plant have cooling towers?
A. Yes, it does.
Q. Could you point those out?
A. In structure from here over here, this whole wall of steam coming out, that's all cooling towers.
Q. Okay. Do you see when you were at 9 and 10, I mean, did you see any location where there could even be room for cooling towers?
A. Yes, I did.
Q. Could you describe what you saw in that location?
A. What I saw was a foundation, approximate size to the one that's shown here. About three- to four-foot stem wall that would be in the similar footprint as the cooling towers. Additionally it has a vat underneath it to collect water at various plumbing, coming and going in and out of it.
Q. Showing you People's 58, which you previously talked about, can you just point out the area that you

described where you expected to see where there was space for a cooling tower?

A. So I believe the space for the cooling tower would have been in this general area.

Q. Okay. And you're circling a rectangular area in the center of the photo.

I don't know how better to describe that, your Honor.

And so having made these observations about 9 and 10, and having made these observations of these jumper cables on this tower, what if anything did you do to determine -- did you try to find out where that line might be connected?

A. To 9 and 10?

Q. Yeah. The line that's in the vicinity that's ending right there, for example, in People's 61, which is down there with the jumpers that you described as being abnormal, did you investigate, did you go down the line? Did you go south?

A. Yes, we did.

Q. Okay. Describe what investigation you did in that regard.

A. We continued from tower 1/6. As we progressed down the spans, I did it once and my partners also did it, but we drove down the span, keeping visual. Basically look all the way to the next tower, we would drive to the next tower, check that tower, to the next tower, and so on and so forth, to give a visual

inspection of the towers heading south.

We were doing that predominantly to make sure there wasn't any other type of malfunctions that possibly caused the fire. There could have been wildlife, turkey vultures. I've seen airplanes, helicopters crash into them. We were trying to rule that out to make sure there wasn't something else that existed that caused this.

Q. So were you able to rule out all those other issues that you just described?

A. Yes, I was.

Q. And while driving south or progressing south along this line, can you describe what you observed? Describe what you observed while moving south on this line.

A. That the conductor wires were connected all the way through to the SMUD tap, where the SMUD line intersected or connected on.

Q. What's SMUD?

A. Sacramento Utility District, Municipal Utility District.

Q. Sacramento Municipal Utility District?

What does that mean? Tap?

A. It's a separate line that goes off. It's a T and an intersection that sends electricity back up or would send it from another power plant.

Q. And describe where that tap was in relation to this tower that's adjacent to 9 and 10?

A. The four towers south of tower 1/6.
Q. Okay.
A. It would be tower 1/9.
Q. 1/9?
A. 1/9 is where we found the tap at.
Q. So coming back to your map, how many towers south from 1/6 would 1/9 be?
A. So this was 6, we had 7, 8, and 9 was the tower where the tap was at.
Q. Okay. And so at this tower south, so you said a few things, and I don't think we've necessarily established. What's 1/6?
A. 1/6 is our tower next to Fumarole 9-10.
Q. So during the course of your investigation, did you have an opportunity to review some records that were produced by PG&E?
A. Yes, I was.
Q. Did some of those records identify the -- some of the tower -- the towers that were in the vicinity that were PG&E operated?
A. Yes, there were.
Q. And so was 1/6 the name that PG&E had assigned to this tower?
A. Yes, it was.
Q. So when we say 1/6, we're talking about this tower that's just adjacent to power plant 9 and 10?
A. Yes.
Q. And then just building off of that, what were the

names of the towers where -- the identifications of the towers as we move south along the line?

A. 7 -- or 1/7, 1/8, and 1/9.

Q. And is there, just to be clear, the way that PG&E names it, is there a slash between those numbers?

A. Yes, it's a slash. It's 001/009.

Q. And so for 1/6, it would be 001/006?

A. Yes.

Q. Yes?

A. Yes.

Q. So what does that mean, that there was a tap down at 001/009? What did you actually -- just tell me what you observed.

A. What I saw was the line ran all the way to Fumarole 9-10, and then there was another connecting wire that extended off of that to the north, to the Sonoma power plant.

Q. Okay. And the Sonoma power plant, is that different power plants from 9 and 10?

A. Yes, it is.

Q. And did you follow -- so this is a separate line that goes off of tower 1/9?

A. Yes.

Q. And you're calling it a SMUD line. Why is that?

A. That is how it's identified in the PG&E mapping.

Q. Okay.

A. As provided to us.

Q. So this is what you're doing in the field. Did

you have an opportunity to later review some maps that were produced by PG&E?

A. Yes, I did.

Q. And did these maps identify certain transmission lines and towers that were in the area of the Geysers where you were investigating the Kincade Fire?

A. Yes.

MR. HENNING: Your Honor, I'd ask to move People's 32, 33 and 34 into evidence.

MR. KRAVIS: No objection.

THE COURT: Thank you. They will be received.

(Whereupon, People's Exhibits 32, 33 and 34 received in evidence)

MR. HENNING: And I would also ask to move -- one second. Let me bring this to madam clerk.

THE CLERK: Marking People's Exhibit 62.

(Whereupon, People's Exhibit 62 marked for identification)

MR. HENNING: I would ask to move People's 62 into evidence.

MR. KRAVIS: No objection.

THE COURT: It will be received.

(Whereupon, People's Exhibit 62 received in evidence)

BY MR. HENNING:

Q. Do you recognize -- it's kind of hard to read, but do you recognize what's depicted in People's 32?

A. Yes, I do.

Q. And could you describe for us what we're looking at in this map?

A. Transmission lines that extend from the Geysers area south into Fulton and Lakeville.

Q. I'm going to show you two more maps that you had an opportunity to review. Do you recall whether these maps built upon themselves in any way?

A. They did.

Q. Can you describe how that was?

A. This is a larger scale, and then as it implodes on itself it will give us like a Geysers area overview, and then it just keeps imploding on itself for an overview.

Q. So as the maps get more focused in, is the manner in which that they're focused, is that depicted on this map?

A. It is.

Q. And is it in those square boxes? Can you point out those squares?

A. Yes. This is the second map, the next step, and then the final step is this little box right here.

Q. Thank you.

Now I'm going to show you People's 33. Is this the second or the third map?

A. This will be the second map.

Q. And does this -- do you see on this map 9 and 10, the power plant, depicted?

A. Yes.

Q. Can you point it out?
A. (Indicating)
Q. And you talked about that SMUD tap point occurring at tower 1/9. Is that depicted in this map?
A. (Indicating)
Q. And it looks like for both of those indicators 9 and 10 and the SMUD tap line you pointed inside that box that's in the center of People's 33.
A. Yes.
Q. Okay. And now I'm going to show you People's 34. Can you describe what this depicts, if you can.
A. This is a zoomed up -- the final map of the areas 9-10 Fumarole. Also depicting the SMUD tap line coming off of the Lakeville line.
Q. So I'm going to show you now, I'm going to bring up People's 62. Can you just describe how this corresponds with People's 34 that we just looked at?
A. With these two?
Q. Yeah.
A. They are the same map.
Q. Okay. And you used another term that we haven't heard yet, which is the Lakeville line. During your investigation where you had access to certain documents provided by PG&E, did you learn the name of the transmission lines that were connected to the tower you were investigating?
A. Yes, I did.
Q. And what were -- were there two transmission

lines or one?
A. There was two.
Q. Describe what those names were.
A. Geysers 12 Fulton and then Geysers 9 Lakeville.
Q. And I'm going to go back, before we look at this one. Going back to People's 61. Can you point out which one is Lakeville?
A. Lakeville is on this side. On the left-hand side.
Q. Which one is Fulton?
A. Fulton is on the right.
Q. Those are two separate transmission lines?
A. Yes.
Q. So now we're looking back at People's 62. And you've already pointed out on some other exhibits, but the tap line, the SMUD tap line at tower 1/9, can you point that out on this exhibit?
A. Right here.
Q. Okay. And is that line a blue and black checkered line on this map?
A. Yes, it is.
Q. And can you -- is there a certain -- do you see the legend on the left?
Does it indicate that the blue -- solid blue lines are PG&E transmission lines?
A. Yes.
Q. And do you see the Lakeville and Fulton lines depicted on People's 62?

A. Yes, I do.
Q. Okay. And can you just point out where you see the Lakeville and Fulton lines depicted?
A. Lakeville, Fulton, up all the way to the power plant as well.
Q. Okay. And do both of them go all the way up to that power plant?
A. No.
Q. Or just one?
A. Just one.
Q. Which one goes all the way up to that power plant?
A. The one that runs all the way is Geysers Fulton.
Q. Okay. Did you personally -- did you have an opportunity to see that, that that's where that line connected and terminated?
A. Yes.
Q. And was there -- did you see, was there a physical connection from the last tower, with wires going down to that power plant?
A. Yes.
Q. And the Lakeville line, as you described using People's 61, did it end at those jumpers?
A. Yes.
Q. Okay. And so I'm not trying to ask a trick question. For all points that's depicted on this map south of 1 and 6, were those two lines, Fulton and Lakeville, running parallel to each other?

A. Yes.
Q. Okay. At least as far as what's depicted on this map.
A. Yes.
Q. Okay. But then at 1/9, you saw another line break off, and that's the SMUD tap line that you described?
A. Yes.
Q. Did you follow it all the way to what you called, I believe, the Sonoma power plant?
A. Yes.
Q. Did you see it actually physically connected there?
A. Yes.
Q. Focused on the segment of the Lakeville line from tower 1/6 south to 1/9, did you have an opportunity to see all of that line?
A. Yes.
Q. Did you see that line connected anywhere in that segment from 1/6 to 1/9?
A. It was all continuous.
Q. But did you see it connected to anything?
A. No.
Q. So there was no other buildings, no other tap lines?
A. No.
Q. So you told us you're also investigating in the area looking for other potential issues on the lines. I

guess my question would be in a high wind event such as the one that we were all experiencing on October 23rd, 2019, is it uncommon for there to be multiple points of origin for a fire?

A. It's not uncommon.

Q. And did you investigate whether there might be multiple points of origin with respect to this fire?

A. Yes.

Q. What was the result of that investigation?

A. We determined that there was a cluster at the base of 1/6, but that was the extent. There was no other origins along the Fulton Lakeville line.

Q. Okay. And --

A. Or surrounding area.

Q. And is that true for -- I guess my question would be, when was this fire fully contained? Or approximately when?

A. I believe it burned about 15 days uncontrolled.

Q. Okay. So approximately a little -- about 15 days.

And when you're investigating whether there might be another source of origin, were you just looking at the night of October 23rd or were you looking at that entire approximate 15-day period?

A. We only look at where we visualized in and saw it when we initially got to the scene. So anything beyond that, we know that didn't cause the fire, because we arrived there. Typically we'll try to mark it. If it's

a small enough fire we'll actually mark it, and after that point we know if it progresses beyond that, we know that this was the fire when we found it. And sometimes we might do that with spray paint. We have different options of delineating that, but in this scenario, it was topography, I was able to delineate that.

Q. And I'm going to show you -- let me first show it to counsel.

Your Honor, I would ask to move People's 63 into evidence.

MR. KRAVIS: No objection.

THE COURT: Thank you. It will be received.

(Whereupon, People's Exhibit 63 received in evidence)

BY MR. HENNING:

Q. Can you describe what we're looking at in People's 63?

A. We are looking at the footprint of the Kincade incident.

Q. When you say the footprint, at what point in time is that footprint taken? A final footprint, in the middle?

A. Yes, it is actually the final footprint of the fire.

Q. So taking, you know, taking an overhead view of the final footprint of this fire, was there anything unusual about the way this fire spread and the way it developed that would point to another origin source

other than -- underneath this transmission tower 1/6?
A. No.
Q. Do you see the -- I mean, can you approximate for us the location of tower 1/6?
A. Yes.
Q. Please do so.
A. (Indicating)
Q. Okay. Looks like he's circling an area in the upper portion of the footprint on People's 63.
So you mentioned a couple other events that happened. One of them was bringing out what you called a subject matter expert, and the other involved some evidence collection. Which one happened first sequentially?
A. I believe we had subject matter experts Mr. Nolt come out, and then we had Sonoma County sheriff's office bring a metal detecter out also.
Q. And so let's talk about Mr. Nolt. Who is he?
A. He's an electrical engineer.
THE COURT: Can you spell Nolt for me?
MR. HENNING: N-O-L-T?
THE WITNESS: Yes, it is.
THE COURT: Thank you.
BY MR. HENNING:
Q. Do you recall when you brought him out to the location?
A. I believe it was on the 25th.
Q. Okay. Is it possible it was the 26th?

A. Yes.
Q. Were you personally present when he was there?
A. Yes.
Q. And when we say there, specifically where did you bring Mr. Nolt?
A. I escorted Mr. Nolt in, because due to security issues we can't just let anyone in through the gates into the Geyser property. So we actually went down, picked him up and brought him into the facility, and then escorted him, once we were there, personally in the facility.
Q. Approximately how long was Mr. Nolt out at the location?
A. I believe two or three hours.
Q. Two or three hours. Okay. And do you recall whether he took any pictures?
A. Yes, he did.
Q. And do you know what his background is?
MR. KRAVIS: Objection. This is cumulative. Nolt's being called as a witness.
THE COURT: I'll overrule it. Go ahead.
BY MR. HENNING:
Q. Do you know what his background is, occupation?
A. Metallurgy and electrical engineering.
Q. And briefly did he look at this jumper cable that was broken?
A. Initially, yeah. We just turned -- we kind of let him just go and look at the tower without giving any

bias.

Q. Did he offer an opinion as to how that jumper cable broke?

MR. KRAVIS: Objection. Now this is hearsay, and it's expert testimony on another expert's opinion.

THE COURT: Are you offering him under Prop 115?

MR. HENNING: It will be Prop 115.

THE COURT: Overruled. Go ahead.

THE WITNESS: Mr. Nolt believed it was, from what he could see, there was a possibility of low cycle fatigue.

BY MR. HENNING:

Q. Had you ever heard that term before, low cycle fatigue?

A. Yes.

Q. In your words can you describe your understanding of low cycle fatigue?

A. My understanding of low cycle fatigue, I use the analogy of a paper clip. We can bend the paperclip so many times, and that's considered a cycle. At some point that material is going to fail. If it fails at a high amount of twists, that's high cycle. If it fails at low cycle, it's low cycle, but it's the failure of like bob wire or bailing wire or any type of metal, when you bend it it's pliable, but then at some point it finally fails, so that's what's low cycle fatigue.

Q. So did Mr. Nolt make any recommendations for

further analysis?
A. Yes, he did.
Q. What was his recommendation?
A. Removal of the item off the tower.
Q. And did he recommend that you submit it to some other lab?
A. Yes.
Q. What was his recommendation in that regard?
A. To submit it to a metallurgist laboratory for further analysis.
Q. So we've obviously talked at length about this broken jumper cable that you saw. Other than the cable itself, when you're on the ground looking up at the tower did you see any other evidence that led you to believe that that cable or that tower is what caused the ignition of the fire?
A. Yes.
Q. Describe what you saw.
A. There was a black sooty mark on the steel frame on the side of the tower, on the box frame.
Q. Okay. And where was that black -- or was that black sooty mark -- describe where it was in proximity to the broken jumper.
A. Adjacent to the jumper.
Q. And so you talked about the fact that PG&E assisted with the evidence collection?
A. Yes.
Q. Can you describe that process for us?

A. Due to our inability to -- we can't climb the tower. It required us to bring PG&E in to dismantle the tower, being it was theirs and they have the training and experience to do it, and equipment. They dismantled -- they disassembled the tower under our supervision.

Q. And were you there that entire time?

A. Yes, I was.

Q. Did you watch them actually go up on the tower?

A. Yes.

Q. And what exactly -- what equipment did they bring down off the tower?

A. They brought down insulator strings, the jumpers, and the box frame.

Q. The insulator strings that were brought down, were those from the Lakeville side of the tower or the Fulton side?

A. They were from the Lakeville side.

Q. Okay. And you said part of the box spring was brought down?

A. Box frame.

Q. The box frame.

And why was that box frame brought down?

A. We brought the box frame down because of that black arc mark, the sooty black arc mark that was on there. We wanted to further investigate it because due to the height of it being up on the tower we were unable to visually inspect it to the best of my ability, so we had to bring it down to inspect it.

Q. Did there appear to be any stoppages or issues while the PG&E workers were bringing down this equipment?

A. No.

Q. Once it was brought down off the tower, where was it -- where was it put?

A. Each item as it was removed off the tower was then lowered to me by a crane to an area that I predesignated to receive all the items. Separate of the items going up. So the PG&E crew had the new equipment going up, I had my area where I was receiving everything. As each item came down, I marked everything and packaged it and secured it.

Q. Okay. There's an area that you chose. Can you just describe generally, where was that area?

A. It was on the north end of building 9-10, Fumarole 9-10. Between the tower, there's a little access road right there. I believe there's two tanks right there too.

MR. HENNING: Your Honor, I would ask to move People's 20 through 28 into evidence.

MR. KRAVIS: No objection.

THE COURT: Thank you. They'll be received.

(Whereupon, People's Exhibits 20 through 28 received in evidence)

BY MR. HENNING:

Q. Showing you People's 20. Could you describe what we're looking at here?

A. We are looking at the removed portion of the box frame from tower 1/6.

Q. In using People's 61 again as a reference, can you use the pointer to identify what part of the tower this box frame came from?

A. This section right here.

Q. Pointing at the middle arm of the left side of the tower as depicted in People's 61.

Did you have an opportunity to inspect this box frame when it was on the ground?

A. Yes, I did.

Q. What if anything did you observe that caught your attention?

A. Multiple fresh arc marks to the frame of that box frame.

Q. I'm going to show you People's 21. What are we looking at in People's 21?

A. Several locations of arc marks on the box frame itself.

Q. Could you use the old fashioned pointer to point those out?

A. Arc marks here, second arc mark, another arc mark, a continuous one along this edge. And here and here.

Q. Okay. First arc mark that you pointed at is on a metal bar that comes from the top center of the photo and extends diagonally down to the left. All the other arc marks that he indicated are on the bar that runs

right down the center of People's 21.

Showing you People's 22. What are we looking at here?

A. Inside portion of the box frame, with arc marks.

Q. And I want to walk up and show you this.

What's depicted in 21 and 22, are the arc marks in 21 also depicted in 22, it's just a different vantage point, or was this a completely different part of the tower?

A. If I turn this photo like this, those are the same ones. I can see it by the paint or white markings on the metal frame itself.

Q. Okay. So to a certain extent would it be fair to say that everything in People's 21 in terms of the arc marks are also depicted in 22?

A. With the exemption of there's some arc marking on the underside, which you wouldn't see in 21.

Q. Right. So everything that's in 21 is depicted in 22, but 22 also depicts further arcing?

A. Yes.

Q. Showing you People's 23. Are you -- is this a different part of the tower box frame that we're looking at?

A. I believe so.

Q. And can you point out any arc marks, if any, that you see on People's 23?

A. You have arc marks on this edge of the beam, arc marks in the flat section, the middle of the flat

section, and then down here on the bottom, with some very light arc markings across it.

Q. Thank you. Now I'm going to show you People's 24. Can you describe the equipment that's depicted in People's 24?

A. This is what captures the shoe of the wire. So as the wire comes up from -- the wire runs up through here, conductor wire runs up through here, and it runs through -- it's a shoe that gets bolted together and holds the weight of the wire together, and this arm holds it to the tower. There's some arc marking right in the eye-bolt fold.

Q. And I'm sorry, did you point out the wire in the top right-hand corner?

A. Yes. And there is wire up in the top right-hand corner. This is coiled in a horseshoe fashion, and that wire -- that's the end that you see, that I initially saw.

Q. Okay. And I'm going to put People's 7 back up here because you're talking about the shoe that's depicted in People's 24. Can you point out on People's 7 where that shoe from People's 24 is?

A. Right in there, because it runs up, runs through it.

MR. HENNING: And he's pointing on the top phase, just to the left of the parallel insulator strings.

BY MR. HENNING:

Q. Showing you People's 25. What's depicted here?
A. It's the end of the conductor wire.
Q. Okay.
A. Missing some strands of wires.
Q. Where are you pointing at?
A. The wire comes this way, and we're missing some strands in here. It looks like it's what we called bird caging.
Q. Okay. And then People's 26, is this a close-up of the same wire?
A. Yes, but on the other side.
Q. Okay. People's 27, can you describe what we're looking at here?
A. The swage connectors to the wire, basically connecting the jumpers together.
Q. What are the swage connectors?
A. This is actually two pieces of wire that were brought together, and this is a collar that's put over the two ends, and then they compress it with a hydraulic press. Connect the two wires together, similar to an automotive butt connector.
Q. And finally, have you ever heard the term sleeve also used?
A. Yes, sleeve.
Q. Swage, sleeve, used interchangeably?
A. Yes.
Q. Finally People's 28. Just describe what we're looking at here.

A. That is the overall jumper laid out on the ground after we -- after it was lowered to the ground by PG&E, we're now packaging it.

Q. Did you ever have an opportunity to measure the length of these jumper cables?

A. Yes.

Q. What was the length approximately?

A. About 15 feet.

Q. As all this evidence is staged and you're examining it, did you have PG&E workers do anything to manipulate or alter in any way that evidence?

A. No, not without my approval.

Q. Well, was there something that they did with your approval?

A. Yes.

Q. Okay. What was that?

A. Due to the size of the box frame, we found it not feasible to take the whole box frame in its entirety, so we identified a section of the box spring and we determined we were going to be able to remove that section and not take the whole box frame.

Q. So I just put People's 20 back up there. You're talking about this part of the tower. And so how did you -- describe that process. How did you choose an area of the box frame to take as evidence?

A. So prior to the box frame coming to rest in this position, we have the crane dangle it, kind of keep it at five feet so I could inspect the full underside of

it, give a full visual inspection from one end to the other. And additionally see the upper edge of the metal. So I wanted to get a 360 view of this chunk of box frame.

So once we did the visual inspection underneath it, I had it lowered down and we placed it on a 4-by-4 cribbing, so none of it was actually touching the ground. It came to rest on top of blocks. And then we continued a full visual inspection of the box frame, and we were able to identify additional arc marks that were on that box frame.

And then at that point we realized that it was only -- the arc marks were only to an isolated area on the actual box frame itself.

Q. Okay. And so you ultimately had PG&E workers cut out a section of the box frame?

A. Yes. So once we got to that point and realized we were only going to take a section of it, I went back in with blue painter's tape and identified those areas. And I wrote on the painter's tape either cut or unbolt, with an arrow. So if I had them unbolt a joint, it said unbolt. If I was to have them cut it, it said cut. Very rudimentary. Additionally, we did all this work well beyond where the arc marks were at, to give us a good buffer on it. I believe the cut marks were almost probably 20 inches away from each cut.

Additionally, when PG&E did go and do the cutting we put padding underneath it to make sure if it did fall

it's going to land on the padding. And I personally stood in between where we believe there's items of evidentiary value and PG&E workers, so there's no way that saw could skip, jump, there to be a malfunction, or anything touch the section that we wanted to save.

Q. And were there any issues when they did the cuts?

A. None.

Q. Did you take custody of all this evidence?

A. Yes, I did.

Q. Did you package it in any way before taking it?

A. Yes, I did.

Q. Could you just describe that briefly?

A. On any of the arc marks, which I consider fragile items being the ends of the wire, the arc marks, everything was bubble wrapped, wrapped then with clear tape and then again wrapped with evidence tape to secure the item in that manner.

It wasn't feasible to wrap the whole box frame in bubble wrap. We couldn't transport it that way. So those fragile areas where the arc marks were at where we made the cuts, those were all wrapped in bubble wrap and secured with clear tape and again with evidence tape, and signature, date, and then identified with a tag.

Q. Where did you take the evidence?

A. We took it to Santa Rosa Cal Fire station.

Q. What if anything did you do with the evidence once you got to Cal Fire Santa Rosa?

A. When we arrived at Cal Fire Santa Rosa station we

secured it into a steel Conex box.

Q. You're saying "we," but you're a part of this process?

A. I was overseeing every bit of it.

Q. Was it secure in that Conex box?

A. Yes, it was.

Q. You mentioned earlier how Jim Nolt offered his opinion about low cycle fatigue, but recommended you send the evidence to a metallurgist. Did you in fact do that?

A. Yes, I did.

Q. Can you identify the lab where you sent this evidence?

A. Anamet Laboratory out of Fremont.

Q. Is that A-N-A-M-E-T?

A. Yes.

Q. Did you retain the services of Sam McFadden, M-C-F-A-D-D-E-N, a metallurgist?

A. Yes, I did.

Q. Did you personally bring the evidence to Anamet?

A. Yes, I did.

Q. When you delivered the evidence to Anamet lab, did it appear to be in the same condition as when it was taken down off the tower?

A. Yes, it was.

Q. Did you authorize Sam McFadden to conduct destructive testing?

A. Yes, I did.

Q. Did he confirm for you that there was low cycle fatigue that caused the break of the jumper?

A. Yes, he did.

Q. And when you picked up the evidence, did you then later pick up the evidence back from Anamet?

A. Yes, personally.

Q. Can you describe what if any alterations were made by Sam McFadden to the evidence?

A. Mr. McFadden, while conducting destructive testing, he made a cut to the end of the conductor, approximately -- I want to say about an inch to two inches long, which was returned to us.

And then he also unbolted the shoe. That portion that I talked about that had a bunch of bolts on that clamped the wire together, he unbolted that and took the wire apart.

Q. So to be clear, looking at People's 24, does this show the shoe that was unbolted?

A. Yes.

Q. Can you just point that out on People's 24?

A. (Indicating) He took apart these bolts right here. That went up, and this inserted part comes off.

Q. I got too eager. I didn't mean to be moving it while you were pointing.

Assuming no objection, I would ask to move People's 29 and 30 into evidence?

MR. KRAVIS: No objection.

THE COURT: They'll be received. Thank you.

(Whereupon, People's Exhibits 29 and 30 received in evidence)

BY MR. HENNING:

Q. We're showing People's 29. Describe what we're looking at here.

A. This is what I received back from Mr. McFadden when picking it up from Anamet.

Q. And you described a couple of ways in which the evidence was altered between when you gave it to Mr. McFadden and got it back.

Can you describe what is depicted in People's 29 in that respect?

A. So this is the original section of wire that ran into the shoe. The shoe is not shown here, but these caps were on top of this, and they were secured by u-bolts, with nuts on those u-bolts that clamp this together. So this section was not exposed when I picked it back up.

Here are the remaining hardware right here. Here are the caps, and here's the cut section, the severed section they took from it. And I believe this is some other hardware that came off of it.

Q. Showing you People's 30. What's depicted here?

A. It's a severed section of the conductor.

Q. Okay. And the severed section, is this the incision that was made sometime between when you dropped off the evidence to Sam McFadden and you picked it back up?

A. Yes.
Q. Other than those changes that you just described, did you observe any other alterations to the evidence?
A. No.
MR. HENNING: Your Honor, I ask to move People's 65 into evidence.
MR. KRAVIS: No objection.
THE COURT: Thank you. It will be received.
(Whereupon, People's Exhibit 65 received in evidence)
BY MR. HENNING:
Q. I probably could have shown you this when we were looking at all the evidence that was laid out in the yard. Do you recognize what is depicted here?
A. Yes.
Q. Can you describe what we're looking at?
A. The section of the jumper that was removed off the tower, with the shoe that was disconnected.
Q. And you described how you saw a break on the jumper wire, or the jumper cable. We've seen it in other exhibits. I believe People's 10 and 11. Is that portion of the jumper cable, can you identify where that is on this exhibit?
A. Right here (indicating).
Q. And you're pointing to an area, the left-hand -- bottom left-hand quadrant, is it wrapped in what appears to be bubble wrap?
A. It's wrapped in bubble wrap. There's a bad

contrast against the board.

Q. I want to go back to the earlier investigation where you didn't see the Lakeville line connected to anything between towers 1/6 and then south to tower 1/9. During that segment of the line.

Could you describe for us what in the investigation did you do to that aspect? What did you do in that aspect of your investigation, I should say.

A. In regards to the line running from 1/6 south?

Q. From 1/6 to 1/9, there's no connection points?

A. Yes.

Q. What if anything did you do to investigate whether that was problematic?

A. We were trying to determine the use of that section of line, running from 9 to 6, and we ended up determining with our generals, CPUC generals 95 that it was a possibility that it was an abandoned power line.

Q. What is the CPUC?

A. California Public Utilities Commission.

Q. Did the CPUC have an independent investigator named Matthew Yunge, Y-U-N-G-E?

A. Yes.

Q. Describe for us the extent, if any, with your interactions with Matthew Yunge in this case?

A. In this case, pleasantries when he got there. I was not assigned to chaperone him to make sure he remained safe. Whenever we brought a non-Cal Fire employee or a non-PG&E employee on the property, that

was under our control and care, we'll remain with them to make sure A, they don't talk to any other people, and B, for their safety.

Q. And what if any information sharing occurred between the two of you?

A. Nothing.

Q. So was he conducting his own independent investigation?

A. Yes.

Q. Now, you described the general orders. What are the general orders? What's your understanding of it?

A. My understanding of it is they're the big construction manual, how power lines, public utilities, how everything is supposed to be built, constructed, operated. It's a very, very large document. Expansive.

Q. And you mentioned something about abandoned lines. Just describe what was your investigation in that regard?

A. I was unable to determine, being that the power lines were not connected to anything. And given the current condition of the power plant, I was unable to determine a use for those power lines. At that point we, without a use, to me they were --

MR. KRAVIS: I object. I think we're now getting into legal conclusion, and again is beyond the scope of the expert's qualification.

THE COURT: So is this based on your own personal observations, just there appeared to be an

abandoned power line -- power plant, or are you talking about doing your investigation?

THE WITNESS: During our investigation.

THE COURT: Do you want to be heard?

MR. HENNING: I think he can testify to his personal observation. I think the Court can assign whatever weight to it.

THE COURT: So I'm going to overrule the objection. We are a bit afield of expertise in wildfire investigation. The Court will hear the observations were made, and I'll apply the appropriate weight. Counsel, you can argue that.

MR. KRAVIS: Thank you, your Honor.

THE COURT: You're welcome. Go ahead.

THE WITNESS: We couldn't figure out what the functionality of those was, of the power lines being there.

BY MR. HENNING:

Q. Let's leave it at this. Were you able to determine what company owned 9 and 10?

A. Yes.

Q. Who was that company?

A. Cal Fire.

Q. I can't remember if you said this. You talked about the fence line. You know the gate of 9 and 10. Could you just -- does that fence line, does it go all the way around 9 and 10?

A. It is broken up in different segments. There's

holes in the fence in varies areas. Appeared to be from various stages of construction or demolition going on.

Q. And let's just focus on the area of where the tower, tower 1/6 is in proximity to this power plant 9 and 10. Is there a fence line there?

A. Yes, there is.

Q. So are these two facilities, for lack of a better term, the tower and the power plant on opposite sides of the fence?

A. Yes, they are.

Q. During the course of your investigation, at some point in May of 2020 did you have an opportunity to go back up to this location?

A. Yes, I did.

Q. Did you have an opportunity to observe tower 1/6 when you went back up in May of 2020?

MR. KRAVIS: Objection. I think the testimony that's about to be elicited is not admissible under Evidence Code section 1151. I believe we're getting into subsequent remedial measures.

MR. HENNING: I think one of the issues in this case is whether it's an abandoned line, and I anticipate PG&E is going to argue that it's not an abandoned line because there is a foreseeable use as determined by the utility. And I think any changes that PG&E makes to the line is direct evidence that could contradict -- direct evidence to show that it was abandoned.

THE COURT: Do you want to be heard any

further? Here's what I intend to do. It's now five minutes later than I should have taken the afternoon recess. So I'll take the objection under submission, but if you want to make any further record you're welcome to.

MR. KRAVIS: Your Honor, the only other thing I would note here is that the issue of foreseeable future use and abandoned line would have been as of October of 2019, at the time of the fire. The witness is now being asked questions about May of 2020, which is almost six months later. The relevance -- the only possible relevance of what's going on at this tower six months later I think would be for any improper purpose under section 1151.

THE COURT: Okay. I'll take the matter under submission and then make a ruling. 15 minute recess.

(Recess)

THE COURT: All right. Back on the record. Parties are present and in their places.

When we left, there was an objection under 1151 regarding what the witness was about to say. The problem is I don't know what the witness is going to say, so it's very difficult for the Court to rule on the objection. I understand why you jumped in and made the objection, but we're not in front of a jury, it's just the Court.

You can make an offer of proof or the witness can answer and then you can renew your objection if you

like, but without knowing more I'm not in a position to rule.

So why don't you go ahead.

MR. HENNING: I'm happy to make an offer of proof, but my concern -- I would rather proceed subject to the motion, because I feel like if I make an offer of proof --

THE COURT: Go ahead and ask the question again.

BY MR. HENNING:

Q. So you went out there in May of 2020 and you had an opportunity to observe tower 1/6?

A. Yes.

Q. And when you observed it in May of 2020, was there anything different about the configuration on tower 1 -- the Lakeville side of tower 1/6 compared to when you were there in October of 2019?

A. Yes.

Q. Can you describe the difference?

A. The jumpers, the length of the jumpers, they had been effectively removed and trimmed up, the lines to shoes.

MR. HENNING: May I show -- I'm not going to ask they be received.

THE COURT: This is all subject to the objection I know you're intending to make.

BY MR. HENNING:

Q. I'm going to start with a zoomed-out photo. Just

briefly can you describe what we're looking at here in what's been marked as People's 35?

A. Tower 1/6 at Fumarole.

Q. And does People's 35 depict Fumarole 9-10 when you went out there in May of 2020?

A. Yes. I misspoke. It's different than what it was in October.

Q. So what we're looking at in People's 35 depicts what you saw in May of 2020 when you went back up there?

A. Yes.

Q. Okay. Now I'm going to show a close-up -- or excuse me.

Showing you what's been marked as People's 36. Can you describe what we're looking at in People's 36?

A. May I?

Q. Yes.

A. What I noticed was that these lines were cut right here, here, and here, effectively removing the jumpers. And additionally the insulators had been removed. So there should have been a jumper running down, hanging down with an insulator.

All three insulators were removed and the jumpers were trimmed back to approximately about a foot from the shoe. This being the shoe right here.

Q. Okay. And when you say there should have been the vertical insulator are you comparing that to what was there?

A. Compare and contrast from when I left in October

to May.

Q. And to be clear, what's depicted in People's 36, are we looking at tower 1/6?

A. Yes, we are.

MR. HENNING: Okay. I can present more evidence. I don't know.

THE COURT: At this point, I'm going to readdress the objection. The objection is under 1151. What the People are demonstrating is a subsequent remedial measure of some type. It appears to the Court that's exactly what it is. If you want to make any kind of a record as to why it's not and why it's not being offered to show some type of measures, I'll hear it.

MR. HENNING: Beyond what I argued before the break, I have nothing further.

THE COURT: Maybe I didn't understand the argument. I recognize that there is going to be some testimony or evidence regarding abandonment of the line?

MR. HENNING: Correct.

THE COURT: You're offering this evidence in what way?

MR. HENNING: So the way general order 95, rule 31.6 governs abandoned lines, and I anticipate PG&E will argue that based upon the way that statute is written, whether a line is abandoned or not is based upon whether there is a foreseeable use as determined by PG&E, the utility.

And so the People's position is that the

actions that they took sometime between October of 2019 and May of 2020 is evidence to show that there was no foreseeable use, based upon the actions that they took.

October -- I understand the arguments that the defense is making, but I would also point out that the occurrence or the commission of a crime does not in and of itself invalidate evidence that happens after the fact. That would preclude us from ever hearing evidence of any confession or any flight evidence or anything of that sort. And because this is so specific to that one charge involving the abandoned line issue, I think it is relevant. And I think it overcomes the defense objection.

MR. CHEEVER: May we have one moment, please?

THE COURT: Sure.

MR. HENNING: And I would also argue -- or what I anticipate is they're going to argue what caused the actual Kincade Fire, this jumper cable that broke inside the shoe, was a completely unforeseeable mistake and that they did everything that they possibly could that was foreseeable to prevent this from happening. And I would say that what they did after the fact is evidence that they didn't do everything that they could have done before the fire.

THE COURT: Okay. Thank you, Mr. Henning.

Would you like to make any record.

MR. KRAVIS: I would just note that is a textbook statement of what section 1151 forbids. The

use of evidence of actions taken by a party after the fact as evidence of the negligence of what they did before the fact. That is exactly the impermissible.

THE COURT: I agree. So the objection will be sustained. The portion of the testimony describing the witness's observations when he returned to the property in May of 2020 will be stricken from the record.

Go ahead, Mr. Henning.

MR. HENNING: Thank you.

BY MR. HENNING:

Q. During the course of your investigation, were you present at Cal Fire Santa Rosa in January of 2021 when Scott Hylton, H-Y-L-T-O-N, and Edward LaBranch, L-A-B-R-A-N-C-H, came to inspect evidence?

A. Yes, I was.

Q. And specifically did they inspect the evidence that you collected related to the Kincade Fire?

A. Yes.

Q. And did the evidence that they inspected, other than the alterations that you've described that were made by Sam McFadden, the metallurgist, did the evidence otherwise appear to be in the same condition from when it was originally collected off the tower?

A. Yes.

Q. During the course of your investigation, did you learn how many homes and structures had been destroyed by the Kincade Fire?

A. Yes.

Q. How many?
A. May I refresh my memory with --
Q. Would referring to your report refresh your recollection?
A. Yes. To give exact numbers.
Q. Do you have a copy of your report with you?
A. Yes, I do.
Q. I would suggest looking at the bottom of page 47 of your report to see if that refreshes your recollection.
A. 374 structures.
Q. Were there additional structures that were damaged?
A. Yes.
Q. How many?
A. I believe --
Q. Are you going to refer to your report to refresh your recollection?
A. Yes. May I?
Q. Let us know when you're done referring to your report.
A. 60 other structures.
Q. Were you ever able -- are you able to differentiate between residential versus commercial structures?
A. Not off -- no, due to the size.
Q. And would you be able to say whether multiple residential structures were destroyed?

A. Yes.
Q. Would you also be able to say whether multiple residential structures were damaged?
A. Yes.
Q. Could you just -- in summation could you state what your conclusion was with respect to the cause and origin of the Kincade Fire?
A. My conclusion was, after ruling out all other causes, possible causes for the fire, that there was the wire on the tower of 1/6 came loose and contacted a grounded frame and caused a shower of sparks, which fell to the ground, igniting multiple origins in that area and causing the Kincade Fire.
Q. Now, was the Kincade Fire the first wildfire that you had investigated in the Geysers?
A. No.
Q. And specifically back on September 25 of 2016, did you respond to a vegetation fire in the vicinity of Geysers unit 5 and 6?
A. Yes, I did.
Q. And did that fire later become known as the Saw Mill Fire?
A. Yes, it did.
Q. What was your role with respect to the investigation of the Saw Mill Fire?
A. I was the lead investigator.
Q. And do you recall how large of a fire the Saw Mill Fire was in terms of acreage?

A. I believe it was over a thousand acres.
Q. And did you -- how did you get dispatched to that fire? Was it a similar manner that you described for the Kincade Fire?
A. Yes.
Q. And do you recall where you were when you were dispatched to the Saw Mill Fire?
A. Yes, I do.
Q. Where were you?
A. Santa Rosa station.
Q. And approximately what time on September 25, 2016 did you leave Cal Fire Santa Rosa?
A. I believe it was around 10:00.
Q. A.m. or p.m.?
A. A.m.
Q. While -- so you're driving north again to get up to the Geysers. While driving north, what if anything did you observe?
A. I observed a smoke column rising up from the Geysers area.
Q. And what if anything did you observe when you arrived in the vicinity of power plant 5 and 6?
A. I observed fire. It was on mid slope on the southern slope of the canyon and the Geysers. Fire was progressing to the east. On the east slope would be above me, as I was situated mid slope, away from a spur ridge.
Q. We heard about a spur ridge earlier this morning

with respect to the Kincade. Could you describe again for us what a spur ridge is?

A. So the Geysers is situated in a very large canyon, which to have a canyon you have to have two ridges. Spur ridge is like an ancillary ridge that comes off of the main ridge.

Q. And you talked earlier about indicators. Macro indicators. Were you able to observe any fire indicators or macro indicators when you got to the vicinity of power plant 5 and 6?

A. Yes. When I came up Geysers Road, as I crested the top of the ridge, working my way into the canyon, I got a really good view of basically the overall footprint of the fire as it currently was when I got there.

From that I could see macro fire indicators, a large V pattern coming from a spur ridge in the Saw Mill flats area. It crest up with the open end of the V on the uphill side, and it came back down to a point. It had a little bit of what we call rollout material, burning material roll out the hill, and it will cause a little bit of a pocket.

But in all entirety it was a V pattern coming back down the hillside, which was a big indicator to me that's where it was coming from.

Q. You mentioned a V pattern earlier with respect to the Kincade. What is the significance of a V pattern to your investigations?

A. With a V pattern, if I was to take a slope and light a fire at the bottom of the slope, as it progresses it's going to want to burn uphill. As it burns uphill, it will start forming a V as it crests up the slope.

If I was to take a fire and light it in the middle of a grassy hayfield with no wind and no slope, theoretically it would burn perfectly round and spread out in all directions equally. But when we put it on a slope it creates a V as it progresses up the hill and spreads.

So this is why V patterns are important to us. It helps us determine where the fire originated from.

Q. And you were able to see a V-shape pattern with respect to Saw Mill?

A. Yes.

Q. Were you also able to see a V-shape pattern with Kincade?

A. Yes.

Q. When you arrived in the vicinity of power plant 5 and 6, did you meet up with anyone?

A. Yes.

Q. Who was that?

A. At that time Chief Joseph Baldwin.

Q. You call him chief. He also works for Cal Fire?

A. Yes, he does.

Q. And what did you do when you encountered Joseph Baldwin?

A. Baldwin had arrived prior to me and he was currently taking weather down at the bottom of the hill. He was situated mid slope. We were looking at the fire farther to the north, down canyon. The fire was progressing up the hill around the side of us, going south.

Q. Describe the weather as you recall it on September 25, 2016 in the Geysers.

A. It was windy, out of the north.

Q. How windy was it compared to the early morning hours of October 24th, 2019?

A. Not as windy, but still significant enough to create fire spread.

Q. Are you familiar with the term surface wind?

A. Yes.

Q. What is that?

A. Surface wind, what we experience on the ground versus 20 feet up in the air, versus 100 feet up in the air. Significantly -- we're shaded. We're protected by vegetation, topography, buildings, structures. It could be a rocky outcropping. Surface winds are going to be much lower than what we experience at the top of a telephone pole versus the top of a transmission tower. For example, on the top of the Empire State Building the wind is going to be significantly higher than you're going to experience on the sidewalk.

Q. So in your experience as a firefighter, when you're getting a wind reading, is that a surface level

wind reading?
A. Yes.
Q. And in your experience, does that indicate anything to you about whether that wind would be stronger than the surface level wind up above?
A. Yes.
Q. And on that day, it was windy conditions?
A. Yes, it was.
MR. HENNING: Your Honor, I have a series of photos that I've shown to Mr. Kravis. I don't think there's any objection. I would ask to move People's 42 through 50 into evidence.
MR. KRAVIS: No objection.
THE COURT: Thank you. Those will be received.
(Whereupon, People's Exhibits 42 through 50 received in evidence)
MR. HENNING: Just one moment. I think I misspoke.
Excuse me, that's 42 through 57.
THE COURT: With that clarification, Mr. Kravis, any objection to those additional seven?
MR. KRAVIS: No objection.
THE COURT: Thank you, they'll be received.
(Whereupon, People's Exhibits 51 through 57 received in evidence)
BY MR. HENNING:
Q. So you met up with Chief Baldwin. What did the two of you do next?

A. I believe Chief Baldwin, when I met up with him, he briefed me on what he had found and what he had seen. He had spoken with Fire Captain Doyle Head, and Doyle Head was -- he was the fire captain on the helitack crew, and they ordered the fire prior -- prior to landing, so they also had an aerial view of the fire.

Doyle also mentioned the V pattern coming out of the canyon and communicated that to Baldwin. Baldwin came in from a different access point, so he didn't have that visual of it.

Q. Well, so would it be fair to say that when you spoke to Chief Baldwin he had some information about the possible location that he wanted to investigate?

A. Yes. And it was...

Q. Did the two of you proceed in that direction?

A. Yes, we did.

Q. Okay. Could you just describe for us where you went?

A. So we parked our vehicles where I met with him, kind of below a spur ridge, and we progressed -- we ended up walking or hiking into the location. We were unaware of another road that came up to the top of it. We walked out to where we located three wooden power poles on a spur ridge.

Q. I'm going to start backwards. I'm going to show you People's 57. Do you recognize what's depicted here?

A. Yes.

Q. Now, we talked about, we mentioned the power

plant 5 and 6 a few times. Is that depicted here in People's 57?

A. Yes.

Q. Could you point -- use the pointer to identify 5 and 6?

A. (Indicating)

MR. HENNING: He's pointing it at the building on the right side of People's 57.

BY MR. HENNING:

Q. And you described that you saw three power poles. Were they all next to each other?

A. Yes.

Q. And I believe you said they were on a spur ridge. Can you -- is the approximate location of where those power poles were, is that depicted here in People's 57?

A. Yes.

Q. Can you show us that?

A. Down here in the lower right-hand corner.

Q. Okay.

A. Right here (indicating).

Q. And where was the area where you and Chief Baldwin parked your vehicles?

A. Made access down here, and we ended up parking down in this location.

Q. Where was the fire actively burning at that time when you arrived, when you parked your vehicles there?

A. The majority of it was up on this slope in this area, burning in kind of this fashion. It went up to

the east and started progressing to the south.

Q. Were there fire crews there actively fighting this fire?

A. Yes.

Q. Do you remember approximately how many there were?

A. A minimum of 20 engines. I could say minimum of 20 engines there when we were there.

Q. Okay. And each engine is equipped with multiple firefighters?

A. Yes.

Q. So the two of you, you parked your vehicles there, you see these three power poles on the spur ridge. Describe for us what you did next.

A. We secured our vehicles and then loaded up with some of our investigation equipment and cameras, and we started on foot and we hiked from our parked vehicles up through the burned area up to the three power poles that we located.

Q. Are there sharpies or pens up there?

A. I got red, black and blue.

MR. HENNING: I'm going to have him mark this exhibit. I don't think there's any objection.

BY MR. HENNING:

Q. Could you just in the approximate location where the power poles are, can you put a star and the number 3, so that we remember that?

Just to be clear, the star and the number 3 you

put on People's 57, that is the location of these three power poles?

A. Yes.

Q. Now showing you People's 42. Can you describe what we're looking at?

A. We're looking towards the southeast at the three power poles in question.

Q. Okay. And can you just use the pointer to identify those three power poles?

A. (Indicating)

Q. And it looks like you pointed out three poles that are near the center of People's 42.

How long did it take you to -- did you ultimately get to the immediate area of those three poles?

A. Yes.

Q. About how long did it take you to get there after parking your vehicles?

A. Approximately 20 minutes.

Q. While you were walking, hiking, whatever you want to call it, was there any -- were there any fire indicators that you observed?

A. Yes. We had split up. We weren't hiking together, but as we were progressing into it I was following the fire pattern indicators as we walked up there.

Following them back to where they were leading me to, I could see the fire was -- had gone downhill away from me, so I knew the origin of the fire was ahead of

me, so we kept following the indicators until following the break comes back to where we believed it was.

Q. And you were able to observe the direction that the fire was advancing?

A. Yes.

Q. Can you describe whether the direction of the fire was advancing, whether that was consistent with the direction the wind was blowing?

A. It was consistent.

Q. What did you observe when you arrived at the location where these three poles are?

A. When we arrived at these three poles the fire indicators collapsed in on that location. We didn't flag it as yet.

We also found a long copper wire, bare copper wire laying on the ground. And I could see one of the anchors to the pole, when I came down, it had some damage done to it that was abnormal.

Q. So let's walk through this. I've got a few photos to show you.

Starting with People's 43, can you just point out where the three poles, if they're depicted in 43?

A. (Indicating) right here.

Q. Pointing in the center near the top of People's 43.

And on the left-hand side, to the left of the three poles there appears to be some reddish or orangish vegetation?

A. Yes.
Q. Can you describe why it is that color?
A. From the initial tech aircraft that came out of Sonoma County Airport, when they went to make the initial drop on the fire, that was their -- one of their first initial drops they had made.
Q. So is that fire retardant?
A. Yeah, that's all fire retardant in the trees.
Q. Now showing you People's 44. Is this a different view of the three poles?
A. Yes.
Q. And finally, finally for now, showing you People's 45. Does this -- I think you talked about spot fires. Describe what you meant by that.
A. Spot fires in regard to?
Q. What did you observe that was significant to your investigation when you actually arrived at these three poles? We heard about the wire. We're going to come to that in a moment. But what else did you observe?
A. Down below the poles we were seeing multiple small fires that had fire indicators emitting out of that.
Q. Okay. And showing you 46. What are those little red things that you can see in the vicinity -- on the ground in the vicinity of the three poles?
A. Advancing fire indicator flags.
Q. Okay. Similar to the flags that you described earlier that you used in Kincade?

A. Yes.
Q. We'll come back to that.
You mentioned finding a wire. What is depicted here in People's 47?
A. Yes.
Q. What is depicted?
A. There's a copper wire that runs down on the ground and curves down. We located, it was on top of the rocks and vegetation.
Q. I'm going to show you another photo. What are we looking at in People's 48?
A. The same copper wire that we located.
Q. Is it a close-up?
A. It is a closer view and different aspect.
Q. You mentioned the wire was on top of the vegetation. Why is that significant to you?
A. It's significant to me because it showed to me that the wire had landed, and then on top of vegetation. If it had landed there and was covered by leaf litter, limbs, pieces of grass, that would indicate to me that it had been there for a significant amount of time prior to the fire. But being that it was on top of the vegetation with nothing on top of it, with the exception there's one rock that's on top of it, it indicated to me it recently was -- fell to the ground there.
Q. Can you point out the one rock that you see on top of it?
A. (Indicating)

Q. Pointing to a rock on the left side of the photo, near the middle.

Why -- well, can you describe for us --you're making these observations based upon the absence of vegetation on top of the wire. Why are you not making the same observation if there's a rock on top of the wire?

A. Due to the drain and soil composition of that area, it was extremely loose rocks, about the size of your fist. Everything is just -- it was like shale. So we had a difficult time just getting there ourselves. Our footing was horrible. So as I'm standing there, I could see as if fire was burning, little rocks were falling out, rolling down the hill. So it wasn't uncommon for us to see a rock get knocked loose and roll down the hill a little bit.

It happened, and as we progressed up to it, because we didn't want to -- we don't want to just dive into the actual -- around the base of the pole. To protect evidence we walked up and around it, so there's a possibility we may have knocked a rock loose when we tried to protect the scene.

Q. Understood.

Describe where this wire was found in relation to the three poles.

A. At the base, to the south side, the downhill side of the poles.

Q. Approximately how close?

A. I believe 20 feet.

Q. And I'm going to show you another photo of the wire, People's 49. Is this the same wire that we were looking at in People's 47 and 48?

A. Yes, it is.

Q. And is that -- is it positioned on an open truck tailgate just to give a little perspective?

A. Yes.

Q. So we saw the red flags. Describe for us what investigation you did with respect to determining the origin of the Saw Mill Fire.

THE COURT: We were going to break at 4:00, were we not?

MR. HENNING: This is probably, in terms of the next five minutes, probably a good breaking point.

THE COURT: Right here?

MR. HENNING: Yes.

THE COURT: What we'll do is take our afternoon recess and resume tomorrow morning at 9:30.

(Whereupon, proceedings concluded)

STATE OF CALIFORNIA)
) ss:
COUNTY OF SONOMA)

CERTIFICATE OF SHORTHAND REPORTER

I, BECKI PETERSON, CSR No. 8973, a duly appointed, qualified and acting shorthand reporter for the County of Sonoma, do hereby certify:

That on February 8, 2022, I reported in shorthand writing the proceedings had in the case of THE PEOPLE OF THE STATE OF CALIFORNIA versus PACIFIC GAS AND ELECTRIC, aka PG&E.

That I thereafter caused my said shorthand writing to be transcribed into longhand typewriting.

That the foregoing pages 1 through 156 constitute and are a full, true, correct and accurate transcription of my said shorthand writing and a correct and verbatim record of the proceedings so had and taken, as aforesaid.

Dated this 9th day of February, 2022.

_____
BECKI PETERSON, CSR 8973