UNITED STATES OF AMERIC

NATIONAL TRANSPORTATION SAFETY BOARD //: 07

Investigation of:

PACIFIC GAS & ELECTRIC COMPANY SEPTEMBER 9, 2010 ACCIDENT

SAN BRUNO, CALIFORNIA

Interview of: JOHN C. GROPPETTI

Docket No. CA-10-MP-008

Anaheim Room Marriott Hotel San Francisco Airport 1800 Bayshore Highway Burlingame, California 94010

Thursday, September 16, 2010

The above-captioned matter convened, pursuant to notice, at 8:17 a.m.

> BEFORE: KARL GUNTHER

> > Accident Investigator

APPEARANCES:

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1	INTERVIEW
2	(9:12 a.m.)
3	MR. GUNTHER: Hi. I'm Carl Gunther from the National
4	Transportation Safety Board. We're investigating an accident that
5	occurred on September 9th, 2010, in San Bruno, California. It's
6	our identification number: DCA-10-MP-008.
7	First person, delegate your name, address, and phone
8	number for the record.
9	MR. GROPPETTI: John Groppetti,
10	Comocia, Cultification,
11	MR. GUNTHER: Okay. And are you represented by counsel
12	today?
13	MR. GROPPETTI: Yes, I am.
14	MR. GUNTHER: And would you please?
15	MR. JAQUES: Dane Jaques on behalf of the witness.
16	INTERVIEW OF JOHN GROPPETTI
17	BY MR. GUNTHER:
18	Q. Okay. What I'd like you to do is start back the
19	investigation before the accident, September 9th, just give me a
20	narrative of what you did and what you saw.
21	A. Okay. We had a project going on in Milpitas Terminals
22	to replace the UPS system, which had failed a few months earlier.
23	So as part of the project, we had to shut down one of the UPS
24	distribution panels, because we had to replace the panel. And so

on Thursday, whatever the date was -- I'm sorry --

25

- 1 Q. That's fine.
- 2 A. We were scheduled to disable all of the circuits off of
- 3 that distribution panel so we could open the breakers, pull the
- 4 panel out, and replace the panel. We weren't going to replace the
- 5 panel that day. That was scheduled for another date. That day
- 6 was just to clear the panel.
- 7 The construction crew was prepping the site and I showed
- 8 up on site about 1:30, to start the switchover. We had a number
- 9 of circuits we had to install temporary, little mini-UPSs on so we
- 10 could keep those circuits alive while we were doing the work in
- 11 the next -- over the next few days.
- 12 We basically -- I went through with the construction
- 13 people what systems we were going to do and what order we were
- 14 going to do them in. And so about a little after 2:00 -- maybe
- 15 2:15 -- we started the work.
- 16 The local tech there -- Oscar -- called Gas Control and
- 17 got a clearance to let them know we were going to be disabling
- 18 circuits off and on, and so that Gas Control, at times, would lose
- 19 data because of the work we had to do. And so -- and we
- 20 had -- and so they would call him if they needed pressure readings
- 21 or whatever during the day.
- 22 So we got the clearance started and we started working.
- 23 The first system we took down, we have a cabinet in the control
- 24 room that houses our chromatograph controllers and an ton that's
 - 25 tied to the PLC system there. So that's the first cabinet we took

- 1 down.
- We opened the circuit breaker. We have our little UPS.
- 3 We pulled out the AC wires. We put a little pigtail onto the
- 4 terminal block, plugged it into the UPS, and brought the system
- 5 back up. They verified the data was good and moved on to the next
- 6 system.
- 7 The next system we did was the PLC has a power supply in
- 8 the back that powers genius blocks, which is remote I/O tied off
- 9 the PLC. Those genius blocks have both DC power and AC power. So
- 10 we were doing two separate circuits, the power supply circuit and
- 11 the AC circuit.
- 12 So we opened the breaker, killed the circuit, tied the
- 13 two circuits into a second little UPS we had there, plugged it in,
- 14 brought the UPS up, brought the circuits up. Everything came back
- 15 to life. We verified that, yeah, everything looks good, and so we
- 16 moved on to the next system.
- The next system was the power supplies that provide
- 18 power for all of our transmitter loops. Okay, this is probably
- 19 the most critical of the bunch, because this is a lot of data.
- 20 So the first step we did in that process was the local
- 21 tech put all of the controllers into manual, to make -- so that if
- 22 anyone tried to open valves, they would just hold the valves
- 23 wherever they were at.
- 24 WE you put all of the controllers in the manual, the
- 25 station looked good, and we then opened the breaker, killed the

power-to-power supply, tied it into our UPS system, and brought

- 2 the system up. All of the data came back, so, okay, everything
- 3 looked good. So we're moving on to the next one.
- 4 The next one was the communication room. We have a
- 5 couple of banks in the comm room that basically have the equipment
- 6 that interfaces the local equipment to the SCADA system in San
- 7 Francisco. Some routers, data devices, and as such.
- 8 So we put another little UPS in that room and in that
- 9 room, we actually put a plug strip off of the UPS, powered the UPS
- 10 and

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- 11 they just basically unplugged one device at a time from its
- 12 existing outlet into this temporary plug strip.
- Got that done and brought that system up. Verified back
 - with staff control that they had their data back, everything
- 15 looked good.
- We then had one more circuit breaker to go -- well, let
- 17 me backtrack.
- At that point, we figured we pretty much had everything
- 19 back in that we needed to have in. We found one circuit breaker
- 20 that could not be identified. I thought it was a plug strip in
- 21 one of the control cabinets that had been abandoned, because the
- 22 drawings showed no other power supplies that I could find.
- When we opened the breaker, we lost the mimic panel in
- 24 the Milpitas terminal. There used to be a 24/7 operation there,
- 25 where they actually had operators working that -- actually

- 1 monitored the whole pipeline going south. And we had consolidated that a number of years.
 - Well, we kept the mimic panel there. It's a nice
 - 4 display and when people are trying to explain how the gas is
 - 5 flowing, it's a good visual for kind of showing what's going on.
 - 6 Well, when I flipped that circuit breaker, the mimic
 - 7 panel went dead. And I said, "Okay. There's something else going
 - 8 on here." So we started looking into it, and
 - 9 found -- finally found a drawing that referenced that circuit
 - 10 breaker. Unfortunately, the drawings that show that circuit
 - 11 breaker going to a terminal block with no explanation of what that
 - 12 terminal block was.
 - I found out, subsequently, these drawings were actually
 - 14 supplied by the manufacturer of the mimic panel and that's just
 - 15 how they came.
 - Well, we kept looking and we finally found another power
 - 17 supply that turned out to be the power supply that provides power
 - 18 for the mimic panel. It's got no control. It just drives relays
 - 19 to indicators and such.
 - 20 So we -- I talked to the local tech and said, "Do we
 - 21 need to temporarily put this on or can we just leave it off until
 - 22 we're done with our work?" And he kind of indicated, "It would be
 - 23 nice to have it, because they use it off and on." And so I said,
 - 24 "Okay, fine."
 - 25 So we decided to -- to put that into emergency power.

- 1 One note, all of these little UPSs we've put in, we put them all
- 2 into circuits that are surprised -- that are supplied, what we
- 3 call our emergency power, which is our generator power. We have
- 4 two generators on site, and the UPSs, we figured, would carry us
- 5 through until the generators come up, which is usually about 20 to
- 6 30 seconds. So everything was plugged into our emergency -- what
- 7 we call our emergency power.
- 8 We decided, eh, probably don't need to put the mimic
- 9 panel on our UPS. So we just wired it into the emergency circuit,
- 10 plugged it into -- we have wall sockets in there that are tied to
- 11 the emergency power. So we plugged it in there.
- The mimic panel came back to life and pretty much this
- 13 took us to about 4:30, somewhere in that -- maybe 4:45, somewhere
- 14 in that timeframe.
- So we were basically done. Everything was running.
- 16 Everything was fine. The construction people said, "Okay. We're
- 17 going to stop for today." And the plan was for the next day, we'd
- 18 come back and physically remove the panel and replace it with the
- 19 new one.
- They were cleaning up. I was sitting in the room where
- 21 the mimic panel was, just making some notes and I had a phone
- 22 call. Like, talking to my wife, actually.
- 23 So I'm sitting there talking to her on the phone and
- 24 about -- well, I know exactly, it's 5:23, because I called her
- 25 last night and I said, "What time is on your cell phone?" Because

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- 1 I called her on her cell phone. So I verified that was 5:23.
- I was sitting there talking to her and Oscar, the tech,
- 3 was standing in front of the controllers and said, "Oh, shit."
- 4 And I said, "What's wrong?" And he said, "I've got three
- 5 controllers that have failed."
- 6 So I said -- I just told her, "I've got an emergency."
- 7 And I hung up the phone. And I walked up to the panel and I
- 8 noticed that -- on the two controllers I looked at, the pressure
- 9 indicator on those controllers was down. And I said, "Something
- 10 is wrong here."
- 11 So, the tech immediately went out into the backyard to
- 12 check his monitor valves, to verify the monitor valves had picked
- 13 up the pressure.
- He came back a little while later -- a few minutes later
- 15 and said, "Okay. The monitor valves are functioning and we're
- 16 holding 385 pounds." And I said, "Okay, fine. We need to
- 17 troubleshoot what's going on, what happened."
- What happened with the controllers, I have no idea why
- 19 three controllers failed, because they were all -- they had been
- 20 put on a little, mini-UPS back in March, when we had our first UPS
- 21 failure. And a local electrical engineer from Walnut Creek had
- 22 come out, installed temporary plug strips, plugged in the mini-
- 23 UPSs, which were plugged into the emergency power. So those
- \mathcal{W}_4 were -- had been off this ridge panel for -- since March. March
 - 25 31st, actually.

- 1 At that same time, I had come out two days later and
- 2 installed a UPS on the two PLCs, because they were worried about
- 3 them riding through a power glitch until the generators come up.
- 4 So we had done both that work back in March or the first part of
- 5 April.
- 6 So I said, "We have to figure what's going on here." So
- 7 we -- I got the local GC guy and we just started looking for why
- 8 did we lose the controllers. We had actually no idea, because
- 9 they were plugged into plug strips that had been done months ago.
- 10 So we were concentrating on the power supply, trying to figure out
- 11 why we lost our -- our transmitters.
- 12 That -- we probably started that work somewhere between
- 13 a guarter of 6:00 and 6:00, because it took us time -- two or
- 14 three minutes to figure out what's going on here, before we
- 15 started taking our bolt meter and probing around what was going
 - 16 on.
 - The power supplies, indeed, had a problem. They
- 18 had -- they normally run at 24 volts DC, and we were -- they were
- 19 fluctuating between five to seven volts. And it wasn't a
- 20 constant, it was kind of just bouncing between that. Which, to
- 21 me, indicated we had some kind of a partial short or something
- 22 was -- was dragging down the power supplies.
- 23 So we just started poking around. We pulled drawings,
- 24 trying to figure out what's going on here, measuring voltages all
- 25 over the place, trying to see if we could narrow it down.

- At the same time, the tech was worried about his 1 controllers, so I was trying to, you know, just keep my eye on 2 everything, but concentrating on the power supplies. 3 And remembering, we had tied those things in about 4:30 4 to 4:45 and they were solid. We had -- all of the data was good. 5 So, we were working on that and it took us to about, I'm 6 going to say, 8:30, quarter to 9:00. We traced the power supply 7 to a little terminal block in the back of the cabinet that the 8 power supply has a single feed to this terminal block and this 9 terminal block then has six circuits coming out of it. They're 10 all jumpered on the terminal block. Six terminals coming out of 11 it that feed six little fuse panels. And the little fuse panels, 12 then, feed up to -- I believe there's 20 fuses on a panel, but 13 they're maybe not all being used. But those, then, feed all of 1.4 the individual circuits to all of the transmitters we -- the first ¶¥5 transmitters and the flow transmitters we have in the yard. 16
 - So we are trying to figure out which circuit was causing the problem. So we tried pulling the wire, putting the wire back
 - 19 in, to try to isolate it. And we're getting sporadic results.
 - 20 Eventually, we pulled all of the wires out and then just
 - 21 started putting them back in one at a time. And whatever we did,
 - 22 we cleared the fault, because we got all six circuits back in and
 - 23 our power supplies were back to a solid 24 volts.
 - 24 So whether there was something partially shorting in
 - 25 that terminal block, you know, these are all twisted, standard

- 1 wire. There could have been a wire that didn't quite -- in the
- 2 termination block and had been there for a while. But in doing
- 3 our work, we had jostled it just enough -- I don't know, because
- 4 once we cleared the fault, we had no more clues about where the
- 5 problem was.
- So, around 9:00, the power supplies were back up, a
- 7 solid 24 volts, the station was back on line. We then made sure
- 8 everything stayed good for a few minutes and then we started
- 9 putting the controllers back to automatic again, to make
- 10 sure -- well, to put the station back into automatic.
- One step I took during that two-and-a-half hours of
- 12 troubleshooting is because I was concerned that maybe the little,
- 13 mini-UPS we had put in might be causing the issue with the power
- 14 supplies, I pulled those power supplies off of the UPS and wired
- 15 them back to the breaker in our distribution panel. Just to make
- 16 sure I had a good, solid voltage behind that.
- When we -- when we stabilized the system at about 9:00,
- 18 quarter to 9:00, we then said, "Okay. We're going to have to get
- 19 those power supplies off of the circuit breaker again." But we
- 20 decided -- we were trying to decide do we do it tonight or wait
- 21 until tomorrow morning?
- Well, in the meantime, we had heard some -- something
- 23 about a fire in San Bruno. I don't know if somebody called or
- 24 whatever. Subsequently, we had people come out to the site. The
- 25 foreman for the station was called back. There was a gentleman

- 1 that, actually, the GC crew worked for -- Jody Garcia -- was
- 2 called to the site, basically to take a duty incident report about
- 3 what happened.
- When he showed up at the site, he said, "Don't touch
- 5 anything." So we backed off of trying to reconnect the loop power
- 6 supplies to the UPS. We just stopped work.
- 7 He took the incident report. Eventually -- our plan was
- 8 we'd come back the next morning and do the -- do the cutover. We
- 9 stayed at the site while -- well, a whole bunch of us stayed at
- 10 the site while he took the report.
- 11 The supervisor for the station engineering
- 12 group -- controls group -- came out to see what was going on and
- 13 to offer any help. He, then, also called one of the engineers out
- 14 of Walnut Creek to come out and help reprogram the three
- 15 controllers that have failed.
- The power was still on and they just lost their program.
- 17 So that engineer showed up -- I don't know it could have
- 18 been 10:00, it could have been 10:30 -- I really don't remember.
- 19 And he got the three controllers reprogrammed so they were back
- 20 functioning. And we put them into automatic. And so the station
- 21 was basically operating like it had before that.
- We were then told to stay on site, because there was
- 23 going to be a lawyer coming out later that night to talk to us,
- 24 and then we also -- everybody on site had to do a drug and alcohol
- 25 test. They were going to bring somebody out to do that.

- The lawyer came out -- it could have been 1:00. Time
- 2 has kind of escaped me at that point. We sent somebody -- one of au^o Buck the general construction foremen sent his apprentice.
- 4 get us some food, because we hadn't eaten since the day
- 5 before -- that morning. So that was about -- I don't know, 12:00,
- 6 1:00.

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- 7 The lady from the drug/alcohol -- that did the
- 8 drug/alcohol testing showed up about 2:00, 2:30. It could have
- 9 been 3:00. I was -- lucky me, I was the last one to do the test,
- 10 so I got out of there about 5:30 in the morning.
- 11 While we were sitting around waiting, we -- we had the
- 12 capability there, with our computers or our desk PCs that are in
- 13 station, we can call up gas control screens and see -- you know,
- 14 look at the same screens gas control looks at.
- So being that we were trying to figure out what -- did
- we cause something? Because we had no idea what was going on. We

you know, an airplane crashed into the site? We heard all

- 18 kinds of stories and we didn't know what was going on.
- We went to the computer and called up the SCADA screens,
- 20 just to see what was going on, on the pipeline. We knew it was
- 21 Line 132, so we just started at Milpitas and looked at the next
- 22 station down the line, which was Sierra Vista Crossover. We
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 123 listened to pressures in and out of that station and saw that they
 - 24 were -- the screen is kind of small, so you kind of read between
- $\sqrt{25}$ lines. It looked like the pressure was between 385 and $\frac{286}{7}$ which

- 1 was basically what our monitor valves were controlling out at that
- 2 time.
- 3 We looked at Lomita Park, which is further up the
- 4 Peninsula, the same thing, three -- maybe a little bit higher.
- 5 You know, we have -- transmitters have got margins of error. It
- 6 was sitting like maybe in the 388 -- somewhere in that ballpark.
- 7 Then we looked at Martin Station, which is the station
- 8 directly downstream of the break over in Daly City, and we
- 9 saw -- I think the pressure we saw there was just a touch under
- 10 390 or close to that, like -- as close as we can kind of squint at
- 11 the screen.
- So we said, "Okay. The pressure is going towards the
- 13 break and leaving the break, "you know, indicative that, yeah, our
- V_{14} monitor value took over like it's designed to and everything was
- 15 fine. So we didn't think much of it.
- And pretty much that was the end of it. The last word I
- 17 got was all of the work on the UPS system was put on hold. We
- 18 weren't going to do anything until we were given the go-ahead.
- 19 And then it was just a series of meetings with lawyers and PG&E,
- 20 and we're trying -- we're trying to figure out exactly what
- 21 happened, which is very hard. Once that fault cleared, you can't
- 22 find it any more. Trying to figure out why the controllers failed
- 23 and whether we got a power glitch or something on that strip.
- 24 I -- it's hard to tell.
- We saw some crazy pressures when we started looking a

- 1 little deeper, but they were all inside the yard and -- and all
- 2 suspect, because we had a power supply problem going on. So, any radiance -- they're always going to be suspect.
 - 4 REMINES The only readings we had for sure that indicated, you
 - 5 know, that the system worked, was looking at stations downstream,
 - 6 on 132. That's the end.
 - 7 Q. Okay. So, let's see, let's define a couple of terms.
 - 8 "UPS"?
 - 9 A. Uninterruptable power system.
- 10 MR. GUNTHER: Okay. So, I'll turn it over to Rick.
- MR. NARVELL: Since I've got a different line of
- 12 questioning for witnesses, can we just go ahead and let the other
- 13 parties? And then I'll come back, because I've got a totally
- 14 different line of questioning.
- MR. GUNTHER: Okay. Then, Pete -- oh, Sunil from
- 16 California PUC?
- 17 BY MR. SHORI:
- 18 O. The kind of work that you folks were doing that you just
- 19 described for us --
- 20 A. Pardon me?
- Q. The kind of work -- the type of work that you folks were
- 22 doing that we just -- you just described -- first of all, let me
- 23 back up.
- 24 Is there a procedure -- was there an original procedure
- 25 that you folks were following in regard to the work that you were

- 1 doing?
- 2 A. Yes. We a tailboard before we started the work and
- 3 I -- we didn't have a detailed procedure, but I just pretty much
- 4 scratched out, "This is the systems we're going to do and the
- 5 order we're going to do them." Pretty much.
- 6 Q. Now, two parts. In general -- and in general and
- 7 specially at this location, how often is this type of work done as
- 8 a common type of work versus not common type of work?
- 9 A. It's not common. We were doing the work because we had
- 10 a UPS -- our station UPS had failed and it was 20 years old. So
- 11 this was a project to replace that UPS, so.
- 12 Q. And you talked about a local tech. Is there -- what do
- 13 you mean by that? Is there a local tech and is there like a
- 14 company-wide -- some sort of specialized representative? So are
- 15 there different kinds of --
- 16 A. There were three people on site -- not people, three
- 17 groups on site. There was the construction people who work
- 18 system-wide, who were in specifically to work on this project.
- 19 Okay? There was myself, who was kind of -- for lack of a better
- 20 word -- watching over their work while we did this work and kind
- 21 of directing it. And then the local tech is the gentleman who
- 22 works at the station during normal working hours. That's his kind
- 23 of headquarters. He takes care of the equipment there, as part of
- 24 the maintenance department -- M&O department -- and as well as
- 25 other stations that belong to that district.

- 1 Q. Now, the clearance that you had pulled for his --
- 2 A. Yes.
- 3 Q. -- how far in advance do you have to pull that kind of
- 4 clearance?
- 5 A. Ten days. That's the standard.
- 6 Q. And how detailed -- what kind of information do you have
- 7 to provide?
- 8 A. You know, I didn't do the clearance. That's the
- 9 District's responsibility. That was left in their hands. I
- 10 really didn't get involved with that portion of it, other
- 11 than -- other than defining the times that we were going to be
- 12 there working.
- Q. So you don't -- so you're not the local tech and -- you
- 14 go around. Where are you based out of or where do you go
- 15 around --
- 16 A. I'm a contract -- excuse me.
- MR. JAQUES: Let him finish his question before you
- 18 start to answer. You've been doing that. Let him finish,
- 19 otherwise the record won't be clear.
- MR. GROPPETTI: Okay. Sorry.
- 21 BY MR. SHORI:
- Q. As far as where you're based out of and based -- do you
- 23 go to, I guess, different facilities as your work requires, in
- 24 terms of -- you know, the type of work that you do, do you do it
- 25 at different locations, so you kind of move around?

- A. Yes. I'm a contractor, contracted with PG&E for
- 2 specific projects.
- 3 Q. You referred to a mimic panel. Can you describe a
- 4 little more in terms of what that is and what it used to be used
- 5 for and what is the interface of that now? In other words, what
- 6 is it used for now, if anything, at Milpitas?
- 7 MR. JAQUES: I'm going to object. I'm not sure he would
- 8 have that information, since he's not normally based there.
- 9 You can answer if you're able to, but just make sure
- 10 that you know the answer.
- 11 MR. GROPPETTI: I -- yes, I -- the mimic panel was
- 12 installed when the terminal was rebuilt back in the late '80s.
- 13 It's nothing more than a graphical display of the piping in the
- 14 yard. It's -- with some indicators on there that just show
- 15 various valve positions within the yard. It's got no control
- 16 functionality. It's just strictly a visual display, so somebody
- 17 sitting back can kind of just see a graphic representation of the
- 18 whole yard.
- 19 BY MR. SHORI:
- Q. And I guess the purpose of that, is that now replaced
- 21 with something else? The kind of information, I guess, the mimic
- 22 panel -- at some point, I would imagine it was used for visual.
- 23 Now, is there something else in addition to that or that replaced
- 24 that for that purpose?
- A. Right now, it's more or less just used just when people

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 ${\cal M}$ want to discuss how the pipes are flown through the yard. It's

- 2 just a big picture. They do have SCADA screens that they can
- 3 refer to to get specific data within the yard. And they typically
- 4 will go to the SCADA screens to get the data.
- 5 Q. And is there any -- I guess, then, any interface with
- 6 that? So I understand that it gives you a visual indication of
- 7 conditions that are in things at different places -- different
- 8 points throughout the station. Is it -- does it feed anything
- 9 back to anything else that that data is also used for something
- 10 else, besides display?
- 11 A. Do you mean SCADA or the mimic panel?
- 12 Q. The mimic panel. Basically, we've got a signal coming
- in to the panel, that's what you see as a visual if someone looks
- 14 at it. What I want to know is if that same kind of signal or data
- 15 that's going to the mimic panel also then goes on to something
- 16 else.
- 17 A. The information that shows up on the mimic panel is
- 18 stand-alone information. The device that feeds the signal to the
- 19 mimic panel -- let's say, for example, a limit switch on a valve,
- 20 feeds relay which turns the light off -- on and off on the mimic
- 21 panel that shows the position of that valve. That same limit
- 22 switch also fees the station's PLC, but they're separate circuits.

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- MR. GUNTHER: Okay. Bob?
- MR. FASSETT: I just want to -- Bob Fassett of PG&E.

- So, Sunil, just to clarify, so I understand what you're
- 2 asking. Are you asking is that mimic panel used to operate the
- 3 field in any way?
- 4 MR. SUNIL: Well, yes, that's part of the question.
- 5 So, basically, it's -- I just want to know if it's a through-and-
- 6 through signal to something else?
- 7 BY MR. SUNIL:
- Q. So, based on the way I hear you describing this, it's a
- 9 signal coming from a device to this, but from that device, signals
- 10 are going somewhere else. But there's no series signal that goes
- 11 through the mimic panel downstream to something else?
- 12 A. That's correct.
- Q. You also talked about a power strip. Can you
- 14 refer -- can you describe again what that power strip is?
- 15 A. Which one? I talked about three different power strips.
- 16 Q. Okay. Let's -- describe all of the three different
- 17 power strips that you used, in order.
- 18 A. There are two power strips that were put in -- in March
- 19 or April 1st, when we had our initial UPS failure there. At
- 20 that --
- 21 when that UPS failed, we also -- there were some controller
- 22 issues, because we lost a lot of power to the controllers. They
- 23 installed -- those controllers were initially plugged into the
- 24 power strips within the control cabinet. They were concerned
- 25 about those strips, so they installed two new power strips hooked

- 1 to little, mini-UPSs plugged into the emergency panel. And they
- 2 transferred the controllers one at a time from the old power strip
- 3 to the new power strip. The UPS -- the mini-UPS power strips.
- 4 That was done in April.
- 5 The other power strip, we put in last Thursday night was
- 6 in the communication area. We installed a power strip so that we
- 7 had some place to transfer the communication equipment, which is
- 8 all plugged-in equipment.
- 9 Q. Is this any specialized power strip? Does it have
- 10 any -- let's go -- is it basically an AC power strip?
- 11 A. Yes.
- 12 Q. And the power strips that you said you installed on
- 13 April 1st in the UPS that failed, are they, again, a specialized
- 14 component that was built into the device or is this a similar
- 15 power strip that one would buy at a Home Depot, you plug in and
- 16 plug things into it?
- 17 A. Probably a little bit bigger than the one you'd buy at
- 18 Home Depot, because this has like maybe 15 circuits on it. It's a
- 19 little big larger than the little ones you purchase. You get them
- 20 at a specialty electronics store, most likely.
- Q. Is there any testing requirements for that prior to its
- 22 use, so that -- prior to it be at work?
- A. No. You plug it in. You make sure you've got AC on it.
- 24 That's it.
- Q. So after your control -- can you tell me one more time

- 1 when you noticed that the pressure on the controllers was
- 2 down -- on the controllers was down after the three controllers
- 3 had failed?
- 4 A. About 5:25.
- 5 Q. You also talked about leaving the valves on manual
- 6 or -- what was it that you placed on manual?
- 7 A. Before we started the work on the power supplies or
- 8 anything that was part of the control system, we took the
- 9 controllers. We have a bank of controllers that are actually the
- 10 controllers for the valves. We took all of those controllers and
- 11 put the controllers to come out of automatic and put them into
- 12 manual. So that if we had any problem or -- we knew we were going
- 13 to shut down the power supply, which means we were going to lose
- 14 the pressures. If the controllers were still in manual, they'd
- 15 try to operate the valves and open them up.
- By putting them into manual, it held the controllers at
- 17 their current valve position, and then gentleman could manually
- 18 position the valves.
- 19 Q. Did you want to correct that?
- MR. JAQUES: You said "manual" twice.
- 21 THE WITNESS: I'm sorry.
- MR. JAQUES: Why don't you just start over and say it
- 23 again?
- MR. GROPPETTI: Initially, when we started the project,
- 25 all of the controllers were in automatic, running controllers

- 1 controlled the valves. They were in automatic.
- 2 Before we started the work on the power supplies, we put
- 3 all of the controllers into manual. That made sure the values
- 4 would not move if we lost any signals.
- 5 BY MR. SHORI:
- Q. Was there anybody monitoring downstream pressure after
- 7 those failed? So, in essence, at 5:25 is when you noticed that
- 8 those controllers failed?
- 9 A. Yes, 5:23. And then I noticed the pressures at 5:25.
- I can't tell you what time Oscar noticed them, when it
- 11 happened. I just know when Oscar said what he said.
- MR. GUNTHER: Are we talking a.m. or p.m.?
- MR. GROPPETTI: I'm sorry, I should have said that.
- 14 This is all p.m. All p.m.
- 15 BY MR. SHORI:
- 16 Q. Back up for just one minute.
- You were troubleshooting, you said. Why did this happen
- 18 for two hours? So you started doing that after this point, so
- 19 after the 5:25?
- 20 A. Yes.
- Q. And in order -- I've kind of lost track of how many
- 22 controllers we have. I know you've got the two power supplies.
- 23 But do all of the controllers or all of the connections that
- 24 you're going to make after -- prior to putting the valves on the
- 25 controllers back onto automatic -- so as part of this work, do you

- 1 have to have all of your connections and controllers done in sync
- 2 before you go back, or is this -- is there partial control that
- 3 comes back as you're progressing on this work? Do you do this in
- 4 any kind of steps or is it all of the work that you're going to do
- 5 is replaced, then you go back in and put the valve in automatic?
- 6 A. I believe I understand your question.
- 7 MR. JAQUES: Make sure you understand.
- 8 MR. GROPPETTI: Yeah, I'm not 100 percent sure I
- 9 understand what you're asking.
- 10 BY MR. SHORI:
- 11 Q. Okay. After you placed the valve on manual, you're
- 12 going to go back and start with your work. And, again, you talked
- 13 about a lot of things in there, PLC, controllers, and such.
- 14 Is this the kind of work where you have to have all of
- 15 your connections back in, all of the controllers -- all of the
- 16 PLCs, anything you're going to replace, it has to be back in, and
- 17 then you go back in, after all of that's completed, to put it back
- 18 in auto, or is this in any kind of steps, that once you're done
- 19 with these controllers, then you can go back and put the valves in
- 20 automatic?
- A. We waited until everything was done. Then we went back
- 22 and started putting the controls into automatic. After we had
- 23 watched the pressures, to make sure everything was good -- we
- 24 checked the pressures, made sure everything looked good, then we
- 25 put the controllers back into automatic.

- 1 Q. And so at what time did you say you were trying to move
- 2 some of the connections around, and you said at some time you
- 3 retained -- you regained the 24 volt --
- 4 A. Yes.
- Q. -- on the power supply. What time was that?
- A. Approximately -- sometime 8:30, 8:45.
- 7 MR. JAQUES: When you completed that?
- MR. GROPPETTI: Yeah, I'd say probably closer to 8:45,
- 9 when we cleared the -- whatever fault we had and the power
- 10 supplies came back to a solid 24 volt. Right about 8:45. It may
- 11 have been 9:00. It's just right in that time frame.
- MR. SHORI:
- Q. What was the communication at this point? So,
- 14 basically, let's go back to the 5:25, when you -- when you saw
- 15 that the
- 16 controllers had basically gone and then I think you indicated
- 17 that you had taken over -- the monitors had taken over 3-,
- 18 whatever 386, or their setting.
- What kind of communication did you have with anybody
- 20 outside of that particular work group at that stage?
- 21 A. I had no communication. If the tech was talking to gas
- 22 control, that would have been his thing. We -- we were just
- 23 concentrating on the work in the station.
- Q. And who contacted the engineer out of Walnut Creek?
- 25 A. I don't know.

- 1 Q. And do you know the name of who came out?
- 2 A. Which engineer? There were two people that came out
- 3 from Walnut Creek.
- Q. Okay. Let's get both names, if you know them.
- 5 A. Okay. Mark Kazimirsky (ph.) showed up at the site at
- 6 about 9:00. And who told him to come out to the site, I don't
- 7 know. We didn't talk about that.
- 8 He's the supervisor for the controls group in Walnut
- 9 Creek.
- 10 He then contacted an engineer in his group to come out
- 11 to help reprogram the three controllers that had failed.
- 12 Q. I want to go back one more time, as far as the question
- 13 I asked earlier related to what procedure you folks were operating
- 14 under, and you said you had -- you tailboarded --
- 15 A. Um-hum.
- 16 Q. -- what you were going to do. Was there anything
- 17 written out -- if there's no established procedure that you're
- 18 working on, so as part of that tailboard was there anything
- 19 written out as to how you were going to proceed going forward?
- 20 A. I had just the real brief note I wrote out while I was
- 21 tailboarding on just the systems we were going to take out, and
- 22 what order we were going to take them out in and restore them.
- 23 Q. The replacement for UPCs -- excuse me, UPS -- is this
- 24 done as part of your -- as part of your work? Are these kind of
- 25 units in many, many places through the company as far as the UPC

- 1 and the same kind of devices? Are they at different locations,
- 2 many different locations throughout the company?
- MR. JAQUES: That's ambiguous. I think you need to
- 4 clarify what you mean. If you're just asking if there are other
- 5 UPSs in the system, ask that. But now you're asking if it's
- 6 similar equipment, et cetera. I think that needs to be clarified.
- 7 MR. SHORI:
- Q. Okay. I guess this is kind of in line with the question
- 9 I had asked earlier in terms of how common is this type of work
- 10 that you were doing. So, similar UPSs, similar controllers, is
- 11 that part of your normal work at other facilities?
- 12 A. Part of my normal work or are they similar systems or
- 13 similar systems at other facilities? I'm not sure what the
- 14 question is.
- 15 Q. Well, I want to know what kind of work do you do or
- 16 what -- or that you were working on in regard to here. So the
- 17 type of work that you do, is this -- is this the kind of facility
- 18 that you work on throughout the company and other places?
- 19 A. I have worked on other UPS systems within the company,
- 20 yes. And they would be similar, because we try to keep similar
- 21 equipment from station to station.
- MR. SHORI: Okay. I think that's all that I have for
- 23 now, Karl.
- MR. GUNTHER: Okay. Pete?
- 25 BY MR. KATCHMAR:

- Q. Hello. My name is Peter Katchmar. I'm with the United
- 2 States Department of Transportation and PHMSA means Pipeline and
- 3 Hazardous Materials Safety Administration. We used to be PHSFA
- 4 (ph.), we used to be OPS -- you guys call us DOT. You know, we're
- 5 going to go DOT and those valves today, or whatever. So, that's
- 6 me.
- 7 Anyway. Thank you for coming in, I appreciate it. I
- 8 just have a couple of questions.
- 9 We forgot to ask before we started, whenever you use
- 10 acronyms, you know, we might now know them. So you used "OIT."
- 11 A. Okay.
- 12 Q. So what's that?
- 13 A. OIT is an acronym for operator interface terminal.
- 14 Q. Okay.
- 15 A. It's basically a display panel.
- 16 Q. Great. And you have a good recollection of what you did
- 17 that day. When you got to the fourth -- was it a communications
- 18 room? And then you said that you verified with gas control that
- 19 they could see again -- you know, see the station again. What
- 20 method of communication did you use for that?
- 21 A. That would be the local tech, Oscar, who is the holder
- 22 of the clearance, calling them on the phone.
- Q. Telephone? Cell phone?
- A. Telephone. I can't tell you whether he used the cell
- 25 phone or telephone, I don't know.

- 1 Q. Okay. All righty.
- Okay. You said that 4:30, 4:45, everything was back on.
- 3 You were sitting in the room with the mimic panel and at 5:23
- 4 Oscar said, "Oh, no." Or --
- 5 A. An expletive, yeah.
- Q. "I have three controllers that failed." Are you
- 7 familiar with back-up systems for controlling net pressure, if
- 8 any?
- 9 A. I know how we back up regulation systems.
- 10 Q. Okay. Can you explain that?
- 11 A. There's -- PG&E typically uses two methods, either they
- 12 put a relief valve in, so that if the regulator fails, the relief
- 13 valve when the pressure gets to whatever pressure it's set at, the
- 14 relief value will blow. Or, we put monitor valves in, which is
- 15 basically another control valve in series with the regulator. The
- 16 main difference being the monitor valve is usually a self-
- 17 contained pneumatically-operated system. So that if we have
- 18 electrical issues -- and most of our regulators nowadays are
- 19 electrically controlled -- so if we have a regulator issue, the
- 20 monitor -- which is all in pneumatic -- is not affected by any
- 21 potential -- a single point of failure is not going to take both
- 22 valves out.
- Q. Great. Thank you.
- You said at some point you heard of a fire in San Bruno,
- 25 but it was after like 9:00. You said, "At 9:00, Milpitas back in

- 1 nominal." And then, I guess, the next statement was you heard of
- 2 a fire in San Bruno.
- 3 A. I can't tell you exactly when I heard about the fire.
- 4 It could have been while I was troubleshooting. It could have
- 5 been while Oscar was talking to gas control.
- 6 Q. How did you hear, do you remember?
- 7 A. Somebody just said there was a fire. Nobody even knew
- 8 it was San Bruno. They just said there was a fire somewhere in
- 9 the peninsula.
- 10 Q. Okay.
- 11 A. That's really all I knew until people came out and they
- 12 gave us more information.
- 13 Q. Got you.
- 14 When you said you saw -- you went in and looked at the
- 15 control screens and -- to look for pressures and things and you
- 16 saw up to 390 at Martin, were those historical screens or real
- 17 time
- 18 screens?
- 19 A. No, those were historical trends.
- 20 Q. Okay. Can you get -- on whatever you did, can you get
- 21 in to real time? Could you have gotten into real time with SCADA?
- 22 A. Yeah. Yes, sir?
- MR. FASSETT: I think you said "390." Did you mean 386?
- 24 MR. KATCHMAR: No, he said "390." He said he saw
- 25 approximately 390 at Martin.

- MR. FASSETT: I think he said "almost 390."
- 2 MR. KATCHMAR: Well, I put "approximately." You know,
- 3 close.
- 4 MR. FASSETT: Okay.
- MR. KATCHMAR: "Approximately," "almost" -- whatever.
- 6 BY MR. KATCHMAR:
- 7 Q. So, okay. But you can get in and see real time?
- 8 A. I can't.
- 9 Q. You can't.
- 10 A. The local people have to. I don't have the access.
- 11 Q. Okay.
- 12 A. Because I'm not a PG&E employee.
- Q. Oh, okay. Okay. But, anyway, whatever was going on
- 14 there, could that computer control anything?
- 15 A. No.
- 16 Q. Okay.
- 17 A. Absolutely not. It's a read-only.
- 18 Q. Read-only. Okay.
- 19 And this is a historical question, how -- and you may
- 20 not even be the one to ask it, but how did they know the UPS went
- 21 out originally, back in March or before that -- at Milpitas?
- 22 A. The UPS went out and they lost some controllers, because
- 23 the power died.
- Q. Okay. Let me ask it a different way.
- 25 A. Okay. When the UPS had its problem at Milpitas, I

- 1 really --
- 2 I was not involved, so I'm not exactly -- so I shouldn't answer
- 3 that, because I wasn't there. I didn't subsequently go out there.
- 4 So
- 5 I'm not sure exactly what happened.
- Q. Well, let me ask it another way. Right now or just
- 7 nominally it's on power -- graded power, right? The station is on
- 8 graded power, is that correct?
- ORID
 - A. It's always on graded power. That doesn't mean feed.
 - 10 Q. Right, the main feed is grid power. So in my
 - 11 understanding of UPS is that it sits over there waiting for this
 - 12 to go off, this grid power to go off, and then it picks up the
 - 13 load in between the time you're -- this -- the grid goes out and
 - 14 your generators can
 - 15 kick off, right? So it fills that gap.
 - So I guess my question is: If it's just sitting over
 - 17 there, how do you know -- if the grid doesn't go out, how do you
 - 18 know that it's not going to kick on or is going to kick on? Do
 - 19 you know what I'm saying? I mean, is it checked monthly or daily
 - 20 or?
 - 21 A. The UPS that is at Milpitas -- the big UPS is called an
 - 22 on-line UPS. The power goes through the UPS continuously. And
 - 23 the AC gets transformed to DC, which is used to charge the
- 24 batteries and then goes through an inverter back to AC. It's an
- on-line UPS. All power blows through the UPS.

- 1 So when the UPS fails, it's got an internal switch that
- 2 bypasses the inverter and alarms go off.
- 3 Q. Thank you. That answers that question.
- 4 MR. KATCHMAR: Thank you very much. I don't think I
- 5 have any more questions for you.
- 6 MR. GUNTHER: Mr. Fassett, PG&E?
- 7 MR. FASSETT: I have no questions. Thank you.
- 8 MR. GUNTHER: City of San Bruno?
- 9 MR. CALDWELL: Yeah, Geoff Caldwell, City of San Bruno.
- BY MR. CALDWELL:
- 11 Q. Who do you work for? What's the name of the company?
- 12 A. I have my own company.
- Q. Called?
- 14 A. Groppetti Technical Services, Inc.
- Q. Can you spell Groppetti for me?
- 16 A. G-r-o-p-p-e-t-t-i.
- 17 Q. And it's --
- 18 A. Technical Services, Inc.
- 19 Q. Thank you.
- 20 BY MR. GUNTHER:
- Q. Okay. Now, I want to go through a little bit more
- 22 definitions.
- 23 A. Um-hum.
- Q. "Genius block," can you define "genius block"?
- 25 A. Yes. With PLCs -- which is programmable logic

- 1 controller, is what a PLC is -- it's just basically a device you
- 2 program to
- 3 control systems. It's to control systems.

You can breathe IO into the -- into the PLC a couple of
different ways. You can hardwire directly to the IO blocks that
are direct connected to the PLC.

- 7 The other way that's used quite often is called remote
- 8 IO. And, basically, there are separate IO blocks that you can put
- 9 anywhere. you can put them out in the yard. You can put them
- 10 within a reasonable proximity of the PLC. They go anywhere and
- 11 then the PLC communicates serially with them.
- The advantage of using a remote IO is they have
- 13 diagnostics with the blocks. So if you have an issue with the IO,
- 14 they do some diagnostics and they're very easy to configure and if
- one block goes out, you don't lose the rest of the system, as you
- 16 would with
- 17 hardwire.
- 18 So they're just a way of interfacing field devices to
- 19 the PLC. Genius because they've got diagnostics within them, so
- 20 they're reasonably smart. They're not geniuses, but they're
- 21 smart. But Genius is a trade name for GE.
- 22 Q. Oh, okay.
- 23 A. Yeah, I'm sorry.
- Q. So, anyway, you also talked about a regulator or monitor
- 25 valve. And, again, I believe at Milpitas, you don't have what is

- 1 like a regulator on a house or something. It's actually a set of
- 2 valves that open and close and regulate pressure? So can we
- 3 define that and get that on the record?
- A. Yeah. Regulator or monitor valves are basically valves
- 5 that will throttle to maintain a specific pressure.
- 6 Q. Right.
- 7 MR. FASSETT: Bob Fassett from PG&E. A point of
- 8 clarification: Are you asking him to clarify the difference
- 9 between a spring-operated regulator valve, like on a house, or in
- 10 a distribution, as opposed to a controller-operated regulator
- 11 monitor valve?
- MR. GUNTHER: Yeah, that's a point. In other words,
- 13 that we don't want to confuse what's out there with like a Fisher
- 14 regulator or something.
- 15 So I just want to get that clear and get that on the
- 16 record.
- 17 BY MR. GUNTHER:
- 18 Q. I also want to talk about the tailboard. Can you
- 19 explain what a tailboard is?
- 20 A. A tailboard is just basically a discussion -- when
- 21 you're going to do some work, whether it's the start of a work day
- 22 and you're talking to the whole crew or you've got a specific job
- 23 that you're working, a discussion with all of the parties that are
- 24 going to be involved with the work. In this case, with the
- 25 general construction people, the local tech, and myself -- to just

- 1 go through what we're going to do today and we've got to, you
- 2 know, consider any safety issues we've got to consider and,
- 3 basically, just line out the work so that everybody that's on site
- 4 is pretty much on the same page.
- 5 Q. So that each man knows what the other person is supposed
- 6 to do and what he's not supposed to do?
- 7 A. Right.
- Q. Okay. Also, do you all do any drills? You know,
- 9 like -- you know, I don't want to say disaster. But, say, drills
- 10 if things go down? Have you done any of that?
- 11 A. No.
- 12 Q. Okay.
- MR. GUNTHER: Rick Narvell?
- MR. NARVELL: Can we go off the record for a minute,
- 15 please?
- 16 (Off the record.)
- 17 (On the record.)
- BY MR. NARVELL:
- 19 Q. This is Rick Narvell from the Human Performance Group.
- 20 Mr. Groppetti, would you be able to -- subsequent to
- 21 this interview -- be able to provide me with a work history of
- 22 your activities in a general sense from approximately the 5th of
- 23 September -- which is Sunday -- up to and including the accident?
- 24 A. That -- to the best of my recollection, yes.
- Q. Very good. And we'll get that on the record subsequent

- 1 to this.
- Could you tell us a little bit, just in general terms,
- 3 about your health? Can you characterize your overall health?
- A. I would say my health is generally good. I could stand
- 5 to lose 20 pounds, but other than that, I would call it good.
- 6 Q. Okay, great.
- 7 A. Maybe -- no, I'd say good.
- Q. All right, very good.
- 9 And do you happen to recall the date of your last
- 10 physical?
- 11 A. It was either early this year or late last year. I
- 12 can't -- I know it's been within a year. I just -- it was late
- 13 last year or early this year, that, I remember. It was within the
- 14 year.
- 15 Q. Okay. And your physician, did he have any notes of
- 16 concern with your health? Did he say anything that was a concern
- 17 or was everything fine?
- 18 A. No, everything was good.
- Q. Great. Any medication -- do you take any medications --
- 20 A. No.
- 21 Q. -- prescription or over the counter?
- A. No, none.
- Q. And this would also include things like dietary
- 24 supplements?
- 25 A. No.

- 1 Q. Can you talk to us a little bit about your hearing? How
- 2 would you characterize your hearing?
- 3 A. It's -- sometimes I have to strain a little bit to hear.
- 4 It's not that I don't hear.
- 5 Q. Okay.
- 6 A. I can hear fine. It's just probably not optimal.
- 7 Q. Okay. And your age, sir, is how old?
- 8 A. I'm 63.
- 9 Q. Age 63, okay. And the same question as it relates to
- 10 your vision, do you know what your vision rating is?
- 11 A. You know, I -- I can't tell you that off the hand. I
- 12 did have about three years ago. I seem to see fine.
- 13 I don't --
- Q. Okay. And do you wear any type of reading -- do you
- 15 require reading glasses?
- 16 A. No.
- Q. Okay. Okay, good.
- Can you give us a sense on the day of the incident last
- 19 Thursday, the 9th, just a general sense of your workload up to
- 20 that day when you came on duty and throughout the evening?
- 21 A. Nothing out of the ordinary. It was a pretty typical
- 22 day when I'm out in the field, and so there's nothing -- I wasn't
- 23 tired or I wasn't -- it was just a regular day, a regular workday.
- Q. And can you comment on or provide information about the
- 25 workload from your -- the other fellows that were there that day?

- 1 A. You know, I really don't know, because I was just on
- 2 site that day. And what had happened before that or what their
- 3 normal workload -- I really don't have a sense for that.
- 4 Q. Okay. Very good.
- 5 Again, while you were on site at Milpitas that day, were
- 6 there any -- you have gone to great length about the problems with
- 7 the UPS that went off line and back on March 31st, and you were
- 8 working on it while you were there. Anything else that
- 9 came -- that comes to mind with respect to problems, failures with
- 10 any equipment that you were working with that day?
- 11 A. No, nothing out of the ordinary.
- 12 Q. It could be electrical equipment, mechanical
- 13 equipment --
- A. Everything seemed to be working fine.
- 15 Q. Okay. Very good.
- One last area of questioning here and then we'll have
- 17 just a couple questions on follow-up for the operational aspects.
- Was there anything that day that may have been a basis
- 19 for a distraction with you and while you were at Milpitas? And
- 20 let me give you a few examples, but not limited to these.
- 21 Something, for example, like a recent death in the family, may
- 22 have financial news, may have medical news -- something that
- 23 perhaps may have played on your mind while you were working?
- A. Not that I can think about.
- 25 Q. Okay.

- A. There's nothing that dramatic going on. Just everyday
- 2 stuff.
- 3 Q. I got you. And then I'll ask with respect to
- 4 your -- again, your fellows that work with you, were you aware of
- 5 anything that might apply to them in terms of this context here?
- 6 A. Not that I noticed here.
- 7 Q. Okay. Very good. Great.
- 8 MR. GUNTHER: All right. Sunil --
- 9 MR. NARVELL: Just a couple of operational things and
- 10 then I'll be done.
- 11 BY MR. NARVELL:
- 12 Q. One of the things you had mentioned previous today here
- 13 was we -- you talked or mentioned about three groups that were on
- 14 site that day, and maybe I missed that -- or, if so, I apologize.
- The first was a construction group. The next person or
- 16 group that you alluded to was the local tech. And I didn't hear,
- 17 was there a third group on site that day?
- 18 A. Me.
- 19 Q. Ah, as the contractor.
- 20 Oh, toxicological drug and alcohol testing. A couple of
- 21 things about that. Do you know what time that you provided
- 22 specimens?
- A. Oh, boy. I want to say it was probably around 4:30 a.m.
- 24 on -- it would have been the 10th.
- 25 Q. The 10th?

- 1 A. Yeah, somewhere around -- I can't say that -- it was
- 2 early in the morning.
- 3 Q. Okay. And what specimens did you provide?
- 4 A. I did a breathalyzer and then a urine sample.
- 5 Q. All right. And have you been informed of the results of
- 6 those tests?
- 7 A. Yes, I have.
- 8 O. And when and by whom?
- 9 A. On -- when I -- the breathalyzer, she gave me
- 10 instantaneous and it was 0.00.
- 11 Q. Okay.
- 12 A. On Monday morning, I got a call that I had passed the
- 13 drug test. They didn't give me any numbers, they just said I
- 14 passed it.
- 15 Q. Okay. Was that from someone from PG&E or someone else?
- 16 A. Yes, it was Jody Garcia.
- 17 Q. Okay. Very good.
- 18 MR. NARVELL: I think that's all I have right now.
- 19 Okay. That's all I have for right now.
- 20 MR. GUNTHER: Okay. Sunil, from California PUC?
- MR. SHORI: What, as a follow-up or?
- MR. GUNTHER: Yes. We do a round of follow-up.
- MR. CHHATRE: Okay.
- 24 BY MR. CHHATRE:
- Q. My name is Ravinda Chhatre. I'm an investigator of this

- 1 accident and I work for NTSB.
- I came in a little late of the other activities, but I
- 3 just want to check with you. All that you previously answered,
- 4 you don't have to repeat your answer again. Just simply say you
- 5 answered it.
- 6 Have you given your educational and experience
- 7 background before?
- 8 A. I haven't yet.
- 9 Q. Could you do that, what your educational and experience
- 10 background is?
- 11 A. Sure. I've got a BS in electrical engineering from Cal
- 12 Poly in 1968. I got an MS in electrical engineering from Santa
- 13 Clara University, and all I can tell you it was sometime in the
- 14 mid-'80s. I don't remember the year. I'm a registered
- 15 professional engineer, electrical engineering, in California.
- I worked for PG&E for 35 years, predominantly -- the
- 17 first 15 years in the construction -- general construction
- 18 department and then the last 20 years in the gas-engineering
- 19 department. Is that sufficient?
- Q. Yes. Yes, sir.
- 21 And have you worked on -- have you worked on the
- 22 standards of UPS configurations while you were -- during your
- 23 tenure at PG&E?
- 24 A. Yes.
- Q. And which locations are those? If you recall.

- \mathcal{V}_1
- SCADA A. Antioch Terminal. When we initially put the gas gator
- 2 system in at all of the control centers, we put UPS systems in.
- 3 I'm trying to remember, it's been a lot of years. Milpitas
- 4 Terminal --
- 5 no, excuse me. Brentwood Terminal. Those would have been some of
- 6 the larger-size units. A lot of little ones, that -- you know,
- 7 small to medium. But those are the bigger ones.
- Q. And during the course of your activities for PG&E, did
- 9 you do trouble shooting at the UPSs or just installation or both?
- 10 A. I've done both over my career.
- 11 Q. And based on your experience, if you can, tell you the
- 12 typical life or does this particular UPS activity apart or
- 13 different than the previous months? Can you compare or --
- 14 A. It's very hard to compare, because every station is
- 15 different, just the way the power is configured. We try to
- 16 maintain the same type of equipment, but the configuration of the
- 17 stations is all different. So it's similar, but it's different,
- 18 if you know what I mean.
- 19 Q. During your tenure with PG&E, did you have any standard
- 20 procedure for doing standards on UPS?
- 21 A. No, there were no standards on UPSs.
- 22 They're -- basically, it was a project-by-project and the
- 23 troubleshooting is just when you have a problem.
- Q. And did you -- did you ever think about what the cause
- 25 for the loss of power was?

- A. Are you talking about -- which loss of power?
- Q. The one UPS. You said it dropped from 54 to four or
- 3 five volts, the UPS. That would notify you of replacing or
- 4 repairing it or troubleshooting it, was it not?
- 5 A. That's correct. Yeah, I thought a lot about what caused
- 6 it, and the only thing that comes to mind is that we had a partial
- 7 short somewhere on the load side of the DC that was pulling down
- 8 the power supply. But I can't prove it, that's just what my -- my
- 9 reaction to what I saw going on.
- 10 MR. GUNTHER: All right. Bob?
- 11 MR. FASSETT: Just a point of clarification.
- 12 The -- when you were asking about the four or five volts, you
- 13 said, "And that's why you were replacing the UPS."
- MR. CHHATRE: Well, that's the impression I got. That
- 15 is not something to clarify.
- MR. GROPPETTI: No, I'm sorry. I misunderstood your
- 17 question.
- MR. CHHATRE: That's okay.
- MR. GROPPETTI: We were replacing the UPS because the
- 20 UPS failed back in March. It had nothing to do with the four or
- 21 five volts.
- 22 BY MR. CHHATRE:
- Q. I'm trying to find a way that the UPS power supply. For
- 24 this particular UPS -- maybe you'd better go back and explain
- 25 that.

- A. Okay. The -- one of the systems -- in order to replace
- 2 the failed UPS, we have to -- we had to replace the distribution
- 3 panel, the uninterruptible supply distribution panel -- the
- 4 breaker panel.
- 5 Q. Uh-huh.
- A. So in order to do that, we had to clear all of the
- 7 circuits that were on that distribution panel. And what we were
- 8 doing on Thursday was clearing those circuits, putting them on
- 9 little, mini-UPSs, temporarily, so that we could get that panel
- 10 replaced.
- And the power supply was one of those sub-systems we had
- 12 to take off of the breaker panel and put on a mini-UPS.
- We did that. When we powered it back up, it worked
- 14 until the problem occurred at 5:23, whatever caused that.
- 15 Q. And I guess my last question is: If it needed some
- 16 thought that you couldn't figure it out, how do we know that it
- 17 may not happen? I mean -- I'm just trying to find out what your
- 18 thoughts are on that one.
- 19 A. We are looking at trying to figure that out right now.
- 20 But right now, I can't go to the site. We are -- we have been
- 21 looking and trying to figure out what may have caused the glitch
- 22 and that's just going to take some looking at. Because once it
- 23 clears, it's very hard to find.
- Q. I understand. I guess where I was heading was, it is
- 25 flagged in the future or is it something that you are planning to

- 1 do?
- 2 A. I -- I'm not the person to ask. That's up to PG&E.
- Q. No, I understand. But did anybody ask you if you could
- 4 figure it out what caused that, come back and diagnostic -- or has
- 5 PG&E told you anything on that aspect?
- A. They could ask, but there's no guarantees that we'll
- 7 find anything.
- 8 Q. But have they asked you yet?
- 9 A. No.
- 10 Q. Okay.
- 11 A. I'm sorry, I didn't understand that.
- 12 Q. That's okay.
- MR. CHHATRE: I'm done. Thank you very much for your
- 14 time.
- MR. GUNTHER: Okay. Sunil?
- MR. SHORI: I appreciate that we want to speed this
- 17 through, and I'll keep the follow-ups very brief.
- 18 BY MR. SHORI:
- 19 Q. Just the process of -- you were asked earlier in terms
- 20 of how did they know in March that the UPS had failed, and you
- 21 talked about power going from the AC through the UPS and then
- 22 through and through. So, I guess, do the batteries just go dead
- 23 or does power stop going through the UPS and that's how they
- 24 become aware that it's not working?
- So, in other words, I'm not sure if it got answered in

- 1 terms of how does one become aware that it's actually dead?
- 2 A. Okay. The UPS has probably about 15 alarm points coming
- 3 out of it. It tells you if you're on battery power, if your
- 4 inverter's failed and just a whole bunch of other things. They've
- 5 got alarms on the UPS that they had -- I'm not sure if they saw an
- 6 inverter failure or that the -- I don't want to guess.
- 7 They got alarms from the UPS that said there was a
- 8 failure. I don't know which alarms they got, because I wasn't
- 9 there.
- 10 Q. Okay.
- 11 A. But that's the indicator that something happened to the
- 12 UPS.
- Q. Okay. As far as operator qualification, are you
- 14 qualified for any -- are you covered by PG&E's OQ plan for any
- 15 cover tests?
- 16 A. No.
- Q. And as far as the number of folks in your company, are
- 18 you it? Are there other employees? Or how big is the company?
- 19 A. It's just me.
- Q. And as part of your troubleshooting process, you said
- 21 you kind of moved around the power supply connections and that's
- 22 what --
- 23 A. Say that again?
- Q. As part of your troubleshooting process, you talked
- 25 about you kind of moved around some connections and then finally

- 1 something took?
- 2 A. Correct.
- 3 Q. What was that again? If you could clarify.
- A. The power supply has a feed coming out of it, a single
- 5 feed coming out of it, and that goes through a terminal block -- a
- 6 set of terminal blocks which are all jumpered together. And then
- 7 out of the other side of that terminal block are six more feeds.
- 8 So
- 9 we've got one feed feeding six feeds. And then those six feeds
- 10 feed fuse panels, six fuse panels, which then further distributes
- 11 the power out. So with that terminal block, where the initial
- 12 feed comes in and the six feeds go out.
- 13 Q. Okay.
- 14 A. Those are the wires we were trying to find out.
- 15 Q. Okay. And there were three failed controllers, I think,
- 16 that had been in place since March. Were you referring to the
- 17 temporary -- the temporary UPSs or what were you referring from
- 18 March that were in place?
- 19 A. I'm sorry, I don't quite . . .
- Q. I think you had said there were three -- okay. Three
- 21 failed controllers in place -- the failure in March.
- A. No, that's not what I said.
- 23 Q. Okay.
- A. I said that night three controllers failed. I did say
- 25 that back in March when the UPS failed, they lost some controllers

- 1 that time. But that was a separate incident and they came out and
- 2 fixed them. But the three controllers that I'm referring to
- 3 failed that night.
- Q. Okay. And there were some temporary UPSs put in place
- 5 at that time?
- A. No, those UPSs -- when they had the initial UPS failure
- 7 in March -- March 31st -- at that time, the next day, April 1st,
- 8 they came out and put two temporary UPSs on the two controller
- 9 banks. I didn't do that work, somebody else did. And that was
- 10 because they were worried about the UPS and they wanted -- the
- 11 controllers are supposed to fail and come back with their program.
- 12 Some of them didn't come back and they were worried about that.
- 13 So they put little temporary UPSs on until we could get
- 14 the -- this project rolling.
- Q. And so -- and my last question, so by the time that you
- 16 had finished and you saw the voltage drop, those temporaries had
- 17 been replaced by the work you folks were doing?
- 18 A. No, we never touched those.
- 19 Q. Okay. All right.
- MR. GUNTHER: Okay. Bob? Bob Fassett, PG&E?
- 21 BY MR. FASSETT:
- Q. Thank you, a point of clarification.
- Did you mean to say that if the controller fails,
- 24 they're supposed to come back up with their program?
- 25 A. Yeah.

- 1 MR. FASSETT: Thank you.
- 2 MR. GUNTHER: Pete?
- 3 BY MR. KATCHMAR:
- Q. Peter Katchmar from PSP again.
- I don't have any other follow-up questions, but I always
- 6 ask, is there anything that you think we ought to know that you
- 7 haven't told us?
- A. No, that's how I remember the evening.
- 9 Q. Right. And he's going to explain to you that you're
- 10 going to get a copy of this before it goes into the record and all
- 11 of that, so you can review it or fix it or whatever.
- But if there is -- and you will have our contact list --
- 13 and your attorney there knows how to get in touch with us -- if
- 14 you think of something that you think we need to know, please get
- 15 in touch with the NTSB and let them know.
- 16 A. Okay.
- 17 Q. Thank you.
- MR. GUNTHER: Okay. PG&E?
- MR. FASSETT: No further questions.
- 20 MR. GUNTHER: City of San Bruno?
- BY MR. CALDWELL:
- Q. A quick question: So you worked as an employee of PG&E
- 23 for --
- A. Thirty-five years.
- Q. -- 35 years. And then started your own company -- to

1	contract. And that was when?
2	A. 2004.
3	Q. Okay. Thank you.
4	MR. GUNTHER: All right. Does anyone else have any
5	follow-up questions? All right.
6	Is there any statement that you would like to make for
7	the record?
8	MR. GROPPETTI: No.
9	MR. GUNTHER: Okay. Thank you for your cooperation. We
10	are off the record.
11	(Whereupon, the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:

PACIFIC GAS & ELECTRIC COMPANY

SEPTEMBER 9, 2010 ACCIDENT

SAN BRUNO, CALIFORNIA

Interview of John Groppetti

DOCKET NUMBER:

DCA-10-MP-008

PLACE:

Burlingame, California

DATE:

September 16, 2010

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

Richard Friant /m/L Official Reporter