Docket No. SA-534

Exhibit No. 2-BH

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

INTERVIEW OF RICHARD C. BROWN, PG&E
(JAN-5-2011)

(31 Pages)

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	
PACIFIC GAS & ELECTRIC COMPANY	
SEPTEMBER 9, 2010, ACCIDENT	Docket No.: DCA-10-MP-008
SAN BRUNO, CALIFORNIA	

Interview of: RICHARD C. BROWN

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

Wednesday,
January 5, 2011

The above-captioned matter convened, pursuant to notice.

BEFORE: RAVINDRA CHHATRE
Investigator-in-Charge

APPEARANCES:

RAVINDRA M. CHHATRE, Investigator-in-Charge
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594
202-314-6644
ravindra.chhatre@ntsb.gov

MATTHEW R. NICHOLSON, Accident Investigator
Office of Railroad, Pipeline and Hazardous Materials Investigations
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594
202-314-6468
matthew.nicholson@ntsb.gov

LAWSON F. NARVELL, JR., Investigator
Human Performance Group
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594
202-314-6422
narvelr@ntsb.gov

KARL GUNTHER, Pipeline Accident Investigator
National Transportation Safety Board
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594
202-314-6578
karl.gunther@ntsb.gov

GEOFFREY J. CALDWELL, Police Sergeant
City of San Bruno Police Department
Police Plaza
1177 Huntington Avenue
San Bruno, CA 94066
650-616-7100
gcaldwell@sanbruno.ca.gov

APPEARANCES (Cont.):

BRIAN DAUBIN, Manager
GT&D Gas Engineering
Pacific Gas & Electric Company
375 North Wiget Lane
Walnut Creek, CA 94598
925-974-4210
bmd5@pge.com

ROBERT FASSETT, Director
Integrity Management and Technical Services
Pacific Gas & Electric Company
375 North Wiget Lane
Walnut Creek, CA 94598
925-974-4210
rpf2@pge.com

CONNIE JACKSON, City Manager
City of San Bruno
567 El Camino Real
San Bruno, CA 94066-4299
650-616-7056
cjackson@ci.sanbruno.ca.us

KLARA FABRY, Public Services Director
City of San Bruno
567 El Camino Real
San Bruno, CA 94066-424
650-616-7065

SUNIL K. SHORI, Utilities Engineer
State of California Public Utilities Commission
505 Van Ness Avenue, 2nd Floor
San Francisco, CA 94102-3298
415-703-2407
sks@cpuc.ca.gov

PETER J. KATCHMAR, Accident Coordinator
Pipeline Safety Program
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation
12300 West Dakota Avenue, Suite 110
Lakewood, CO 80228
303-807-8458
peter.katchmar@dot.gov

APPEARANCES (Cont.):

DEBBIE MAZZANTI, Business Representative
International Brotherhood of Electrical Workers
Local 1245
30 Orange Tree Circle
Vacaville, CA 95687
415-517-0317
djmg@ibew1245.com

JOSHUA SPERRY, Senior Union Representative
Engineers and Scientists of California
Local 20, IFPTE AFL-CIO & CLC
835 Howard Street, 2nd floor
San Francisco, CA 94103
415-543-8320
jsperry@ifpte20.org

DANE B. JAQUES, Esq.
Dombroff, Gilmore, Jaques & French
1676 International Drive, Penthouse
McLean, Virginia 22102
703-336-8709
djaques@dglitigators.com

I N D E X

I N T E R V I E W

MR. CHHATRE: Good afternoon, everyone. Today is Wednesday, January 5th, 2011. We are currently in Burlingame, California, at the San Francisco Airport Marriott. We are meeting in regards to the investigation of a pipeline rupture in San Bruno, California that occurred on September 9th, 2010. The NTSB accident number for this investigation is DCA-10-MP-008.

My name is Ravindra Chhatre. I'm with National Transportation Safety Board in Washington, D.C., and I am Investigator-in-Charge of this accident.

I would like to start by notifying everyone present in this room that we are recording this interview for transcription at a later date. All parties will have a chance to review the transcripts when they are completed.

Also, I'd like to inform Mr. Rick Brown that you are permitted to have one more person with you during this interview. This is a person is of your choice, your supervisor, a friend, family member, or if you choose, nobody at all. So for the record, please state your full name, spelling of your name, your contact information, like telephone number, email, postal address, and whom you have chosen to be with you during today's interview.

MR. BROWN: Full name is Richard C. Brown. I work at 375 North Wigit Lane, Walnut Creek, California. Phone number is (925) 974-4248. And I wish Dane to be my representative, please.

MR. CHHATRE: Thank you for that. Now I'd like to go

around the room and have each person introduce themselves, their names, spelling, title, organization, contact information, and phone number, starting with the City.

MR. CALDWELL: City of San Bruno. My name is Geoff Caldwell. My information is on the card provided.

MR. DAUBIN: Brian Daubin, PG&E. My information is on the card provided.

MR. FASSETT: Bob Fassett, PG&E. Information is on the card provided.

MS. JACKSON: Connie Jackson, City of San Bruno. My information is on the card.

MR. FABRY: Klara Fabry, City of San Bruno. Information is on the card.

MR. SHORI: Sunil Shori, California Public Utilities Commission. My information is on the card provided.

Mr. KATCHMAR: Peter Katchmar, U.S. DOT, Pipeline Hazardous Materials Safety Administration, PHMSA, and my information is on the card.

MR. GUNTHER: Karl Gunther, NTSB, Operations Group Chairman, karl.gunther@ntsb.gov. Phone (202) 314-6478.

MS. MAZZANTI: Debbie Mazzanti, IBEW Local 1245. My information is on the card.

MR. SPERRY: Joshua Sperry, Engineers and Scientists of California, Local 20, IFPTE. My information has been provided.

Mr. NICHOLSON: Matthew Nicholson, NTSB. It's spelled

Matthew, M-a-t-t-h-e-w, Nicholson, N-i-c-h-o-l-s-o-n. I can be reached at matthew.nicholson@ntsb.gov.

MR. CHHATRE: Ravindra Chhatre. I'm with NTSB. My email is ravindra.chhatre@ntsb.gov. Phone number (202) 314-6644.

Mr. NARVELL: Rick Narvell with Human Performance Investigator with NTSB. Phone is (202) 314-6422, email is narvelr@ntsb.gov.

Mr. JAQUES: Dane Jaques on behalf of the witness and my information is on the card.

MR. GUNTHER: Carl Gunther, NTSB.

INTERVIEW OF RICHARD C. BROWN

BY MR. GUNTHER:

Q. Would you please give me your job title and your affiliation?

A. I'm Manager, Transmission System Planning and Gas Planning Support. I work for Pacific Gas & Electric Company.

Q. And what are your credentials or degrees or anything?

A. I have a bachelor of science degree in mechanical engineering.

Q. And what are your duties?

A. I manage a group of 15 engineers and we perform hydraulic analysis on the gas transmission system.

Q. Were you involved in anything with the accident or what did you do, let's say, on the day of the accident?

A. I was called in the evening and I was told there was a

line break, and I contacted the planning engineer that's responsible for the area, and he had already been, I think, contacted by Gas Control. I responded to Walnut Creek and went in to the Walnut Creek Gas Restoration Center.

MR. GUNTHER: Okay.

MR. CALDWELL: Chip Caldwell, City of San Bruno. No questions at this time.

MR. DAUBIN: No questions.

MR. FASSETT: No questions.

MS. JACKSON: Connie Jackson, City of San Bruno.

BY MS. JACKSON:

Q. Do you recall an approximate time of that telephone call?

A. I'm sorry, time of --

Q. Time of the telephone call.

A. I'll have to think about that. It was probably around 6:30, something like that. I was at my son's hockey practice and I got the call. I think it was around 6:30.

MS. JACKSON: Thank you.

MS. FABRY: No questions.

MR. SHORI: Sunil Shori with the California Public Utilities Commission.

BY MR. SHORI:

Q. Who is the Planning Engineer for the area, the peninsula area involving Line 132?

A. Jason Reider.

Q. Can we get a spelling?

A. J-a-s-o-n, R-e-i-d-e-r.

Q. In terms of flow modeling on the system, do you oversee that as far as whatever Mr. Reider would be doing in terms of flow modeling on the peninsula system, and would he also be assigned 132? Is he basically assigned the entire peninsula area then as far as his planning?

A. To answer your second question, yes, he is assigned the peninsula system. Can you repeat the first part of your question, please?

Q. Yeah, flow modeling. In terms of pressure modeling, flow modeling on either of the lines, on basically let's just talk about Lines 109, 101 and 132. Is there a particular flow model that the company uses for flow modeling purposes?

A. The flow model that we use at the peninsula, local transmission system model.

Q. Is there a software that can basically plan out flows and pressures. What is that?

A. Cinergy.

Q. Has any flow modeling been done since the incident in regard to perhaps trying to determine pressures throughout the system during the event?

A. Yes.

Q. And who performed them?

A. During the event I had another engineer do that work, Darin Jones.

Q. And what did that flow modeling reveal in terms of was there a report generated for that? What was the outcome of that modeling and how was that modeled? Let's talk about that for a minute. What kind of modeling was performed?

A. I'm not sure I understand. Can you be a little more specific on what you mean by that?

Q. Yeah. In terms of as far as what transpired throughout the event in terms of flow conditions throughout the event, has that been modeled?

A. Yes, the system was modeled, basically to determine the amount of gas that was lost in the air. That was one of the requests we had.

Q. What are the capabilities of that Cinergy, you said?

A. Cinergy.

Q. Okay. Basically if one wanted to model various characteristics of the system in terms of to determine pressures, are all the inputs, all the features of that peninsula system already modeled out as part of that process?

A. The physical system is in the model, along with the customer demands and the pipe and equipment, and all that can be modeled, pressures and flows can be modeled.

Q. And all that can be done basically changing whatever conditions, cross ties, valves, and basically contains the model.

How long does that take basically to basically model different varying conditions to simulate flow conditions and pressures?

A. Well, that depends very much what you're trying to look at. It just depends on the scenario you're trying to model.

Q. As far as the physical model for the system prior to the incident and based on whatever condition changes, whatever facility changes have taken place, is that kind of two distinct snapshots? Are those available as two distinct snapshots within the modeling process? Would you like me clarify the question a little bit.

A. Yeah, please. I'm not sure I --

Q. If any new facilities have been added onto the system, we've got certain valves that are now closed, so the system is different facility-wise than what existed prior to the incident. So if one wanted to model what the conditions are today versus what they were prior to the event, and also to perhaps model different flow conditions with changes, that could be done?

A. Yes.

Q. And so essentially has there been any effort to model based on the pressures that were observed during the event, what the pressures might have been at the incident location to better define what the pressures were at the incident location, or flow, flow rates at the incident location? At the incident location?

A. Yes.

Q. Based on that modeling, what pressure has been

determined that existed at -- potentially based on the model that existed at the incident location?

A. I don't recall the exact number. It was done, as I said, as part of a gas loss calculation. So I don't recall the exact number.

MR. FASSETT: Bob Fassett, PG&E. The NTSB has that information. It was provided in one of the earliest requests.

BY MR. SHORI:

Q. Was there a report generated for that modeling besides just having that number provided?

A. I'm not sure if we saved the actual output of the file, because we did a lot of modeling. What I do know is the gas loss calculation was provided and there was a data request that we answered regarding what the pressure at the event location was.

Q. As far as flow conditions or flow rates at that line, was that also part of that model, part of the results of that modeling?

A. Yes.

Q. And I'm not sure if that was provided as part of the response.

A. I recall we provided some flow rates at the location, right at the time of the event and prior to the event.

MR. SHORI: I think I'll go ahead and wrap it up. I'll pass for now. I may come back. Thank you.

MS. FABRY: Klara Fabry. Just one follow-up question to

your question.

BY MS. FABRY:

Q. Cinergy is a planning model, a prospective model, or you can use for operation of solutions for alternative also?

A. I'm sorry, I didn't quite hear the last part.

Q. How you can use this model? You can use prospectively, developing planning alternative, or if you see let's say in the control center, the transmission coordinator sees some problem in the system, you can quickly develop some alternative solution, what you could do or what they can do to address the problem? This is an operational model or a planning model?

A. You can do some support for emergencies. You have some limitations how quickly you can do that, because you have to get all the input values into the model quickly, and that can take a fair amount of time, depending on the situation. Generally we use it for more alternative analysis, after-the-fact analysis.

Q. You don't have -- the system doesn't have the capability to input the existing data in a very -- with a connection between the systems to input that data and you can come up with an alternative in a very short time?

A. No, it doesn't have that functionality.

MS. FABRY: Okay.

MR. SHORI: No questions.

MR. KATCHMAR: No questions.

MS. MAZZANTI: No questions.

MR. SPERRY: Joshua Sperry, Engineers and Scientists of California, Local 20. One or two questions.

BY MR. SPERRY:

Q. In the Cinergy model, where did the characteristics for the pipes and equipment come from, the values for those characteristics?

A. Well, I think we have -- I'd have to check to be sure, but most of the information is going to come from GIS.

Q. The gas map records?

A. It can come from gas map records, those kinds of -- basically both written records and electronic records, and we use both of those.

Q. Okay. And if the information that was -- the input was incorrect, the model, you would have no way of detecting that?

A. No, that's not correct.

Q. How so?

A. Well, because when we run our models, we actually calibrate them against actual conditions. In particular, cold days, which is when the demand on the system is highest. We check our models against the cold days, to make sure that they're reasonably accurate. And if we had a gross error in there, that would show up and we'd be able to find it and remedy it.

MR. SPERRY: Okay, thank you. That's all.

MR. NICHOLSON: Matt Nicholson, NTSB. Got some questions for you, and I'll follow up with that one.

BY MR. NICHOLSON:

Q. So when you're comparing your model to actuals, what tolerance are you looking for in acceptance on flow or pressure?

A. Well, it depends on what you're trying to solve, but generally we try to get pressures within about five percent at low pressure locations.

Q. Is that typically what you're calibrating against is pressures, not flows?

A. Both.

Q. Both. Flows, is it also five percent?

A. Approximately five percent, yeah.

Q. So you said this is a Cinergy system and I just want to clarify, because I think Klara was trying to get to this. It's not a real-time system that runs in parallel with SCADA and imports SCADA data to it?

A. That's correct, it's not a real-time system.

Q. You have to manually take off line.

A. Yes, it's off line.

Q. So is it capable of transient models?

A. Yes.

Q. Okay. I believe that Cinergy does offer the ability to run at real time, do they not?

A. Yes. Well, the company offers a product, an Alan product, that has a capability, but --

Q. PG&E has decided not to use that because why?

A. I'm not sure why we have not done that.
Q. I was curious about modeling the rupture. How exactly -- did you model the rupture, is that what you did?
A. Yeah, we modeled. We were asked to model the amount of gas that was lost to the atmosphere.
Q. And how did you go about doing that?
A. We basically modeled the rupture with a valve, so we put a valve in. We used actual SCADA data from the event, and we adjust the valve parameters, and essentially the valve constant and the valve size, so that the pressures and flows in the model match up with the actual pressures and flows in SCADA.
Q. So is this a valve open to atmosphere or just a valve on a closed line?
A. It's a valve opened to atmosphere. It's acting like a demand on the system.
Q. So you put in a CV value for that valve?
A. Yes, we adjust the CV and the size until we get it to match actual data.
Q. What actual data were you then comparing it to?
A. The pressures and flows from our SCADA system.
Q. At Milpitas?
A. At various -- the system has pressures and flows across the entire system, so we looked at all of the pressures and flows, in particular the pressures and flows, you know, upstream and downstream of the rupture were the most important ones to watch.

Q. And the information provided to the NTSB includes all of those parameters, CV's and -- what was --

A. I don't know that we provided that information. I think we provided the gas loss calculation and what the volume was as far as I know.

Q. I want to go back to the time line. Maybe this was the end of it, I'm not sure, but the last thing I heard was, "I responded to Walnut Creek and went into the Walnut Creek Restoration Center." What is that and what did you do from there?

A. Well, I was just helping with the general response of the event, any of the issues that were coming up.

Q. What is the Walnut Creek Restoration -- I'm not familiar.

A. Well, it's actually our Walnut Creek offices. We use that location as a place to come together as a team to deal with emergencies like this.

Q. A war room, is that what it was?

MR. FASSETT: Well, we don't -- Bob Fassett, PG&E. When the incident happened, the company went into Incident Command Structure. The Pipeline Restoration System is an element of the Incident Command Structure.

MR. NICHOLSON: Okay, thank you. That's all I have for now.

MR. CHHATRE: Ravindra Chhatre. You probably said it or maybe I wasn't here or maybe I didn't hear you right. What --

Ravi Chhatre, NTSB.

BY MR. CHHATRE:

Q. What are your typical daily responsibilities?

A. I manage a group of 15 engineers, as I mentioned.

Q. Can you elaborate more, what?

A. Set work priorities, set job priorities, deal with questions that come from my supervisors or my supervisors' supervisors, oversee some of the work to a certain level, manage performance, get feedback. I manage the work that comes into the group, determine who to assign the work to.

Q. In this process do you review any documentation or report or so many reports, for accuracy, that comes from your staff? Is that part of your job function or not?

A. Yes, I review at generally a higher level, provide oversight of the work, and look at the results.

Q. Okay. Does somebody to you -- check the accuracy of the product that comes out of your department?

A. I have one supervising engineer that reports to me, and he will review some of the work. We also have multiple locations, so we do a lot of peer review, so we have, you know, a series of three engineers in two different locations, and we generally do some peer review work also.

Q. So this particular analysis that was performed to check the volume lost, who checked that for accuracy?

A. Which particular analysis are you referring to?

Q. I guess you performed hydraulic analysis, fuel analysis of the rupture, who estimated gas lost. Question one is who did that and who reviewed the calculation for accuracy?

A. The engineer who performed it was Darin Jones. There was no review of his work.

Q. Was that reviewed afterwards, as we speak today, between when the report was done, sometime in September? Question is has anybody gone back from when the report was prepared until today to just double check and make sure the numbers on these are accurate?

A. It was reviewed by Darin himself.

Q. Right, but --

A. Nobody else has gone through it and double checked his work.

Q. Is that the process, the person who does the work reviews his work and issues the report? The typical process is to have a peer review of the product that comes out of --

A. Well, it depends. It depends what the work product is. It depends on the workload we have and other questions that are coming in. We don't review -- peer review every bit of information and every analysis comes out of my group.

Q. I guess you assign the priority as to the products should be reviewed or should not be reviewed; is that correct, supervise it?

A. Yes, within the constraints of available resources, yes.

Q. In your opinion, this particular product, did or did not

require some type of cross check, if you would, and peer review to make sure the numbers are correct? And I'm not saying they're not accurate.

A. I understand. No, I didn't feel it needed to be done, based on the engineer that I had do the work.

Q. At your level are you involved in Integrity Management program, either by input or by committee member or any other capacity?

A. No.

Q. Does Integrity Management seek your input on certain items on occasion?

A. Yes.

Q. Can you elaborate on what I guess types of input they seek and you give?

A. Mainly to do clearances in order to perform integrity work, so we'll take -- they'll need to do some operations or changes in operations to the pipeline system in order to do integrity work, whether it be direct assessment, IOI, and we run models of the system to determine -- to meet their needs for the clearances.

Q. Do you have any input as to where they do the ILI inspections or digs?

A. No.

Q. Do you have any feedback going to you -- CIS, I guess, the mapping department? Do you guys have any feedback or

interaction with the mapping department?

A. We use their information for computer models.

Q. But that's all -- so you use it for them, other than giving any input to them , if your modeling don't match what they are seeing or something like that?

A. Well, if we saw a discrepancy and are aware of it, we'd raise it, but generally we're a customer of their product.

Q. Have you ever noticed any inaccuracies that you get in the data from your vendor, if you would, like mapping department, information and it's not accurate?

A. I'm not close enough to the details really to know that. I'm not aware of any issues like that, but --

Q. I understand. I guess person reporting to you is working on some project and he or she -- would that come to you to report mapping or they can just directly go ahead and call mapping?

A. They have latitude to call mapping and raise an issue like that.

Q. So even if they call you, you would not know?

A. That's correct.

Q. Besides hydraulic modeling, what other assignments your staff does, thinking in general lines of --

A. Well, yeah. I mean, basically it's anything involved with the system's operations and flows and pressures, they're going to get involved in, which is really hydraulic analysis,

understanding the gas systems that are responsible for it, how they operate.

Q. Do you get involved in determining MOP, MAOP?

A. Not directly as to what the MOP should be, given the physical characteristics of the pipeline, no.

Q. Do you get involved in any operation and maintenance work about replacement by the system, if they needed replacement?

A. We wouldn't be involved in the replacement itself.

Q. No, I -- do you have any input as to what diameter or wall thickness?

A. No.

Q. Did you look at the ground locations, which type of ground should be used, how far apart they should be?

A. With new valves being installed, we would possibly be consulted on that. Again, mainly from the perspective of operating flexibility, flow capacity, those kinds of things.

Q. But they don't necessarily have to get your blessing; is that correct? I don't want to put words in your mouth. I'm just trying to find out what the answer means.

A. Direct replacement of a valve incline, no, they don't need our blessing for that.

Q. So who are your clients typically?

A. We support basically on the financial end, we develop investment plans for the gas system, so anyone with a financial interest in the company. I think our clients are our customers,

making sure we have adequate capacity of the system to serve all of our customers, so they don't run out of gas during cold weather. Customers are also the large customers that want to connect to our system that we do analysis for. We provide support to gas control, because we develop operating plans for the cold weather, and explain to them how the system will operate, because we don't see a lot of cold weather days, so it's kind of unique. And so we provide information to them around how the system pressures and flows will look, and what the winter plan will look like.

Q. And what does investment plan -- I guess you said investment plan, gas systems, what does that mean? What is that?

A. Well, if the system has had a lot of new demand put on it due to growth, housing growth, large customer growth, and the system capacity is being expanded, we'll look at various alternatives of how to meet that added demand and do it in a way that's most efficient and least cost.

Q. Through your normal operation, you really wouldn't get involved in this -- you are not officials going to be you need to put a lining there or new lining, something; is that correct, assessment then from the investment plan?

A. Yeah, we'd look at options to be able to increase capacity, including putting in new pipe or other options too.

Q. And that's only upon the request. You wouldn't go on your own, trying to look for the different capacities and

different lines; is that correct?

A. No, we're responsible for monitoring the demand on the system and determining when the need exists.

Q. And the last question is what does the demand look like peninsula, 101, 109 and 132? Do you think -- I guess if I understand you correctly, you're looking at the modeling and deciding what the demand looking like, and the question is from the planning point of view, have you done any analysis on these two lines, very simple? Or after --

A. I heard a few questions there, so break them down maybe.

Q. No problem. I thought you said your analysis involves gas control and what demand there may be in winter or some other order -- I'm missing something there.

A. Generally gas control is concerned about how the gas is going to flow and what kind of minimum pressures we're going to see, so those are generally what we'll provide them as opposed to the actual demand, you know, so in a particular system we'll say, well, the pressure, your day will be about this.

Q. Would you get involved in the new line being put in, the replacement line being put in for the diameters, depending upon your flow model or any of that --

A. Yes.

MR. CHHATRE: No more questions. Thank you much.

UNIDENTIFIED SPEAKER: No questions.

UNIDENTIFIED SPEAKER: No questions.

MS. FABRY: Klara Fabry for the City of San Bruno.

BY MS. FABRY:

Q. You had any requested, any support from you for approval of the cleaners?

A. No.

Q. Usually you have any involvement in any clearances, approval as part of your procedure, any system clearances or any unusual more unique type of clearances? What specifically is your involvement in those issues?

A. Clearances will affect the operations, the flow of the systems, the pressures in the systems. My group will be involved in to review.

MS. FABRY: Thank you.

MR. SHORI: Sunil Shori, California PUC.

BY MR. SHORI:

Q. Did you say that the files that you used in this modeling are still retained?

A. That I'm not sure of. The files get very, very large and so we do not retain every single file, so I'm not sure if that particular one has been retained or not.

MR. GUNTHER: Karl Gunther, NTSB.

BY MR. GUNTHER:

Q. I would assume that you did your modeling when the California Commission dropped your pressure 20 percent on these lines. What is your demand look like? Are you guys going to make

it and are you going to have to add supplemental or --

A. Well, different site criteria, but bottom line is, yeah, we're going to make it through the winter.

Q. And again, I made an assumption but did you do an analysis once the pressure order was given to see how the effects would be?

A. Yes.

Q. Assumed that. Don't want to assume.

MR. GUNTHER: No more questions.

UNIDENTIFIED SPEAKER: No questions.

UNIDENTIFIED SPEAKER: No questions.

UNIDENTIFIED SPEAKER: I've got a question but I think you've already answered it. I'll ask anyways.

BY UNIDENTIFIED SPEAKER:

Q. It's not typical for your team to get involved with the gas operators in troubleshooting a real-time event; right?

A. We'll provide support, so I believe after the event --

Q. No, I'm saying during an event, not after an event. If they've got a question about something they're seeing, abnormal pressures, can they call your group and have a model run?

A. Yes.

Q. Okay. But your group is only available first shift, Monday through Friday; right? Or 8:00 to 5:00 or --

A. Well, we carry cell phones so we try to make ourselves available off hours.

Q. Is someone designated an off-hour --

A. No. Each system is unique, and so you can't have one person kind of covering for all of the different systems, because there's specific knowledge for each system.

Q. System means line? What do you mean?

A. Each gas system, the peninsula system, a system in Sacramento, has different characteristics that each planning engineer has expertise for.

Q. Okay.

A. So you can't have one person do all of them.

Q. Okay. So they would have to call that specific engineer that has that system?

A. Yes.

Q. That gas controller.

A. Yeah. They have to call an engineer that has knowledge of the system.

Q. And those numbers, they've got a printout of all of the numbers of the gas modeling groups, so they just pick up the phone. How would they get in touch with one of your people --

A. You mean phone numbers?

Q. Phone numbers.

A. I'm sorry. Yes, they have a contact list for us.

MR. GUNTHER: Okay. Thank you.

MR. CHHATRE: Ravindra Chhatre, NTSB. One follow-up question to Matt.

BY MR. CHHATRE:

Q. How long did it take you to run the model, if the controller would call you and say, hey, I'm seeing some pressure drop?

A. Well, that really depends on the situation. It depends on what's going on as far as the operations, what amount of data we have to put in, how much of the system is affected, which affects how much data we have to put in. So it's really hard to answer that without knowing the specific situation that occurs. The running of the model itself isn't difficult. It's getting the data input into it that takes time, and it depends on the event.

Q. And since you have no access to the ideal model, real-time data or had access to real-time data, you -- my question is that data or you have access from one office to real-time data?

A. We have access to SCADA data.

Q. You do?

A. Yes.

Q. So the SCADA operator call you and say look, I'm seeing certain pressure drop on my Line 132, can you run your model and tell me what's happening? Can you do that?

A. Yes, we can run the model.

Q. And would the model give some kind of a leak or rupture or not that well?

A. The models, I mean, unless you put a leak in the model to try to -- you could try that. I mean --

Q. You haven't tried it in the past?

A. We've modeled leaks, as I mentioned earlier. I think the need to use the model, when you seek pressure dropping, like it would during a large leak, is kind of -- I'm not sure I see the need for that.

MR. CHHATRE: Okay. That's all for me. Thank you so much. I just want to go back and make sure nobody has any questions. No? Thank you so much for coming. Off the record.

(Whereupon, the interview was concluded.)

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 Richard C. Brown
DOCKET NUMBER:	DCA-10-MP-008
PLACE:	Burlingame, California
DATE:	January 5, 2011

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.

_____

Sandra K. Ledford
Transcriber