UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

In the matter of:	*	
	*	
PUBLIC HEARING ON NATURAL GAS	*	
PIPELINE EXPLOSION AND FIRE	*	Docket No. DCA-10-MP-008
SAN BRUNO, CALIFORNIA	*	
SEPTEMBER 9, 2010	*	
	*	

Board Room and Conference Center
NTSB Board Room and Conference Center
490 L'Enfant Plaza
Washington, D.C. 20024

Wednesday,
March 2, 2011

The above-entitled matter came on for hearing, pursuant to notice, at 9:00 a.m.

BEFORE: BOARD OF INQUIRY
National Transportation Safety Board

APPEARANCES:

NTSB Board of Inquiry

DEBORAH A.P. HERSMAN, Chairman
CHRISTOPHER A. HART, Vice Chairman
MARK R. ROSEKIND, Ph.D., Member
ROBERT L. SUMWALT, Member
EARL F. WEENER, Ph.D., Member

NTSB Technical Panel:

RAVINDRA CHHATRE, Investigator-in-Charge
MIKE BROWN, Transportation Safety Specialist
MIKE BUDINSKI, Chief, Material Labs
KARL GUNTHER, Chairman, Operations Group
MATT NICHOLSON, P.E., Pipeline Investigator
DANA SANZO, Chairman, Survival Factors Group
CARL SCHULTHEISZ, Ph.D., Materials Investigator
BOB TRAINOR, P.E., Chief, Pipeline and Hazardous Materials Division
FRANK ZAKAR, Materials Investigator
LORENDA WARD, Hearing Officer
MARK JONES, Audio/Visual

Interested Parties:

PAUL CLANON, Executive Director, California Public Utilities Commission (CPUC)
CONNIE JACKSON, City Manager, City of San Bruno, California
KIRK JOHNSON, Vice President, Gas Engineering Operations, Pacific Gas and Electric Company (PG&E)
DEBBIE MAZZANTI, Business Representative, International Brotherhood of Electrical Workers (IBEW), Local 1245
JEFF WIESE, Associate Administrator for Public Safety, U.S. Department of Transportation, Pipeline and Hazardous Materials Administration (PHMSA)

Witness Panel 3:

DENNIS HAAG, Chief, City of San Bruno Fire Department
JAMES NARVA, Executive Director, National Association of State Fire Marshals (NASFM)
PETER LIDIAK, Pipeline Director, American Petroleum Institute (API)

APPEARANCES (Cont.):

Witness Panel 3 (Cont.):

TERRY BOSS, Senior Vice President, Environment, Safety and Operations, Interstate Natural Gas Association of America (INGAA)
CARL WEIMER, Executive Director, Pipeline Safety Trust
AARON REZENDEZ, Senior Program Manager for Public Safety, PG&E
ANNMARIE ROBERTSON, Program Manager, PHMSA

Witness Panel 4:

DENNIS LEE, Senior Utilities Engineer, Supervisor, CPUC
RICHARD CLARK, Director, Consumer Protection and Safety Division, CPUC
JULIE HALLIGAN, Deputy Director, Consumer Protection and Safety Division, CPUC
LINDA DAUGHERTY, Deputy Associate Administrator for Policy and Program, PHMSA
ZACH BARRETT, Director, State Programs, PHMSA
PAUL METRO, Vice-Chair, National Association of Pipeline Safety Representatives (NAPSR)

Other Witnesses:

BOB FASSETT, Director, Integrity Management and Technical Support, PG&E

Also Present:

PETER KNUDSON, Press Contact, NTSB
ELIAS KONTANIS, Office of Transportation Disaster Assistance, NTSB
DENISE WHITFIELD, Administration Support, NTSB
NANCY MASON, Administration Support, NTSB
ANTION DOWNS, Audio/Visuals Operator, NTSB

I N D E X

I N D E X (Cont.)

I N D E X (Cont.)

I N D E X (Cont.)

P R O C E E D I N G S

(9:00 a.m.)

CHAIRMAN HERSMAN: Good morning and welcome back for Day 2 of our Public Hearing on San Bruno. We'll begin with our third panel on Public Awareness. Ms. Ward, will you please swear in the witnesses?

HEARING OFFICER WARD: Thank you, Madam Chairman.

For the record, we have Chief Haag, Mr. Jim Narva, Mr. Peter Lidiak, Mr. Terry Boss, Mr. Carl Weimer, Mr. Aaron Rezendez and Ms. Annmarie Robertson already seated.

If I can have the witnesses please rise to be sworn in? Raise your right hand.

(Witnesses sworn.)

HEARING OFFICER WARD: Thank you.

And starting with Chief Haag, if you could please state your full name, title and a brief description of your duties and responsibilities?

CHIEF HAAG: My name's Dennis Haag, fire chief in the City of San Bruno, over 30 years of experience in the fire service. Became fire chief in the City of Millbrae, a city just south of San Bruno, in 2000 and was -- through a services agreement, became chief of San Bruno in 2008. Have a fire chief certification in the state of California and a bachelor's degree in economics from San Francisco State. Thank you.

HEARING OFFICER WARD: And Mr. Narva.

MR. NARVA: Yes. Good morning. Jim Narva. I'm the executive director for the National Association of State Fire Marshals. Previous to that, I was a Wyoming State fire marshal, have been involved in the fire service for about 25 years.

HEARING OFFICER WARD: Thank you.

Mr. Lidiak.

MR. LIDIAK: Hi. I am Peter Lidiak, Pipeline Director for the American Petroleum Institute. I've been with API a little over 10 years, working in refining fuels and pipeline-related issues and represent our member companies on pipeline safety operations and environmental issues.

HEARING OFFICER WARD: Mr. Boss.

MR. BOSS: Yes. I'm Terry Boss, Senior Vice President of Environment Safety and Operations at the Interstate Natural Gas Association of America, which represents the interstate natural gas transmission pipelines in the northern 48 here. And I've been with INGAA for around 18 years, working in various areas. Before that, I had had 19 years with a pipeline company and then 1 year with a research group on that.

HEARING OFFICER WARD: And Mr. Weimer.

MR. WEIMER: Yes. I'm Carl Weimer. I'm the executive director of the Pipeline Safety Trust. The Trust is the only national nonprofit public interest group that focuses on pipeline safety. I'm also an elected member of the Whatcom County Council, so I'm an elected public official for the public awareness

efforts.

HEARING OFFICER WARD: Mr. Rezendez?

MR. REZENDEZ: Hello. I'm Aaron Rezendez. I'm the senior program manager for public safety at Pacific Gas and Electric Company. I've been in this position for 5 years. I've worked in a variety of capacities within communications here at PG&E for the past 9 years. I have a bachelor's of science in geology from the University of Missouri. I have a master's in civil environmental engineering from Stanford University.

HEARING OFFICER WARD: And, Ms. Robertson?

MS. ROBERTSON: I'm Annmarie Robertson. I'm a program manager for PHMSA's Office of Program Development. Prior to coming to PHMSA, I worked for the state of Indiana where I managed the gas pipeline safety program for the several years. I also served as chair of the National Association of Pipeline Safety Representatives until I transitioned over to PHMSA. My work at PHMSA, I focus on damage prevention, public awareness, and working with various stakeholder groups throughout the country to advance those initiatives.

HEARING OFFICER WARD: Thank you.

Madam Chairman, the witnesses have been sworn in and qualified and they're ready to be questioned by Ms. Sanzo.

CHAIRMAN HERSMAN: Thank you, Ms. Ward.

Ms. Sanzo, please begin the questioning of the technical panel.

MS. SANZO: Chief Haag, prior to September 9th, what natural gas pipelines were you aware of within San Bruno?

CHIEF HAAG: The fire department was only aware -- we thought the gas distribution system was what serviced the City of San Bruno. We did not know that there was a transmission line through the city until after the incident.

MS. SANZO: Were you aware of the two other transmission pipelines that run parallel to Line 132?

CHIEF HAAG: During orientation, PG&E had run -- during our regular orientation, it was mentioned that there are two pipelines that run the peninsula, transmission pipelines that go, essentially, through the freeway corridors of 101 and 280.

MS. SANZO: What information do you believe is critical for firefighters for responding safely to natural gas incidents?

CHIEF HAAG: Well, on a routine basis, we work with PG&E on typical gas leak calls, electrical lines down, pole fires, transformer fires and so forth and so on, so that, we are very familiar with. In the event of a pipeline, we really don't have any direct training on pipeline training, so --

MS. SANZO: What other sources of training are there available to the fire department that include natural gas safety?

CHIEF HAAG: As part of our rookie academy training curriculum, we do get electric and gas safety presentations. For a long time, PG&E presented those classes to us. And so that's the basis for our things. We still do scenario-based, pre-plan

type of activities to address any kind of incident that we may face for a transmission position.

MS. SANZO: You had described that PG&E had provided training. Could you please describe the training?

CHIEF HAAG: The initial training, the orientation training is really meant to just give you an idea of both the electrical side and the gas side, you know, kind of their -- they do go through transmission lines, through the distribution system, you know, what to do with meters, so forth and so on. So it's really a basic course of -- and the procedures to take in case of a gas leak or electrical failure of deny entry, cordon off the area, look for any potential ignition sources and so forth, and obviously contact PG&E.

MS. SANZO: What methods can organizations use to effectively provide outreach to the fire service?

CHIEF HAAG: I'm sorry. I missed that first part.

MS. SANZO: What methods do you think would be effective to provide information to the fire service?

CHIEF HAAG: Well, there's obviously some sources and some here today that's here with me. You know, we do use a public pipeline awareness video DVD that we provide. We have sent two of our training officers to the PG&E class on gas emergency response, which we've provided to all our line personnel in our training division. So I mean, those are the type things we look for, and as a matter of fact, post-incident, I did pick up the National

Association of Fire Marshals video and incorporated that in our training curriculum.

MS. SANZO: And is this prior to September 9th or post-September 9th?

CHIEF HAAG: That was post-September 9th.

MS. SANZO: And could you provide an overview of the San Bruno Fire Department?

CHIEF HAAG: The San Bruno Fire Department has 29 line personnel. We run two first-line engines, one aerial, and we cover 6.1 miles.

MS. SANZO: And what knowledge should firefighters have about the location of natural gas lines?

CHIEF HAAG: Well, obviously, I think the benefit of having a knowledge of the location of the pipelines because it gives the fire service the ability to pre-plan, to do scenario-based training. Obviously, you know, the situation on September 9th wasn't something that we could ever imagine, but it does give us some opportunity to draw up scenarios, look at evacuation zones and so forth and so on.

MS. SANZO: Thank you. Prior to September 9th, how did the fire department communicate or coordinate with PG&E, for example, perhaps drills?

CHIEF HAAG: I have no training documentation of drills directly with PG&E. As I mentioned earlier, is -- you know, our line personnel routinely work with PG&E line personnel, you know,

on these type of calls and I'm sure there's exchange of information at those points.

MS. SANZO: Thank you, Chief Haag.

MR. TRAINOR: Good morning, Chief. How are you?

CHIEF HAAG: Good morning.

MR. TRAINOR: With respect to your jurisdiction, how many people in the San Bruno community do you serve?

CHIEF HAAG: San Bruno community is about 41,000.

MR. TRAINOR: And what's the approximate square area?

CHIEF HAAG: I should have said that earlier, 6.1 square miles.

MR. TRAINOR: Okay. I didn't quite hear that. Thank you.

Is San Bruno primarily a residential area?

CHIEF HAAG: Yes, it is. Yeah. There is some, obviously, commercial and light industry.

MR. TRAINOR: You mentioned that you were not aware of Line 132, the transmission line running through San Bruno, but you had been told by PG&E of two pipelines through the freeway corridor of the peninsula. What information, specific information about those pipelines were you provided?

CHIEF HAAG: That was pretty much the early introduction, kind of the orientation training information that we had that they ran up the corridors. Obviously, I'm from Millbrae and there's a 101 close to -- in Millbrae, the 101 Millbrae Avenue

junction there that, I think, in the 1980s, that we had an incident where PG&E was servicing the line and we went down as a fire unit and they were doing some maintenance work and he just happened to mention that this line went up kind of much -- up 101.

MR. TRAINOR: So if I understand you correctly, the comment was made in the context of responding to an incident as opposed to a specific focused effort to exchange information?

CHIEF HAAG: You are correct. Yes.

MR. TRAINOR: Were these two pipelines described as transmission lines or otherwise identified?

CHIEF HAAG: Just as transmission lines.

MR. TRAINOR: Okay. And did you know what a transmission line was at the time?

CHIEF HAAG: At the time I was a firefighter, so I went back and looked it up, found out.

MR. TRAINOR: We're talking about sources of information. Has your department ever consulted with the National Pipeline Mapping System?

CHIEF HAAG: As a matter of fact, no, we have not.

MR. TRAINOR: Would you care to expand on that, please, as to why you did not or why it hasn't been done?

CHIEF HAAG: Well, we don't have maps of the pipeline system, any agency on the peninsula. And so what we have tried to do is -- it was kind of a -- whether it was a transmission line or not, was there a need to know, and until we kind of determined

that there was the need to know, we didn't do that.

MR. TRAINOR: I'm not quite sure I understand that last response. The need to know, is this something that you've determined is important since the accident or was --

CHIEF HAAG: Well, there's no question. Yes.

MR. TRAINOR: What about before the accident?

CHIEF HAAG: Well, we assumed that the transmission line was a line providing -- we didn't recognize the pressure besides what we read, that it was 60 pound psi or greater.

MR. TRAINOR: But did you recognize or consider there was a need to consult the National Pipeline Mapping System prior to the accident?

CHIEF HAAG: Well, we definitely could have done that, but we did not.

MR. TRAINOR: Okay. I would like to ask you if you can describe in a little bit more detail the training materials that you have received from PG&E. Would you provide a brief summary of those?

CHIEF HAAG: In 2007, again, we had our responder utility emergencies that was presented by PG&E personnel in 2007. We rolled that out to our line staff right after that -- of them being approved for the class. And then, later in 2007, we actually went to the San Mateo substation for electro orientation on substation emergencies, and those are the two documented trainings I have from PG&E.

MR. TRAINOR: You mentioned that -- about the electrical side of the house, materials you got with regard to electrical utilities. Can you describe the pipeline training materials in a little bit more detail? And what I'm specifically interested in is how specific were these training materials to the PG&E system as opposed to being more generic materials?

CHIEF HAAG: It is generic material. It was not specific to PG&E's system, per se. It dealt with, you know, the procedures in the event -- in typically distribution type emergencies. There was no direct pipeline training.

MR. TRAINOR: Prior to the accident, what type of communications or coordination had your department had with PG&E with respect to emergency response coordination and communication?

CHIEF HAAG: Primarily, the communication was with line personnel. There was no direct training with any of our command staff officers and so forth and so on.

MR. TRAINOR: Did you or any of your senior officers have any communication with your counterparts at PG&E?

CHIEF HAAG: No.

MR. TRAINOR: Since the accident have you had any communications with PG&E?

CHIEF HAAG: Yes, we have. After the accident, PG&E contacted us and provided us with updated maps. We had discussions about enhancing the training curriculum between the fire service and PG&E. Soon after that, I was contacted by

another PG&E representative regarding a GIS program that would be compatible with the fire service CAD dispatch center and possibility of rolling out some enhanced training communication with PG&E.

MR. TRAINOR: And what progress has been made on those initiatives?

CHIEF HAAG: Right now, the last e-mail I received was a desire to meet with myself and several other interested agencies.

MR. TRAINOR: Okay. One last question. Were there any markings on the street -- I guess it would be Glendale Drive --

CHIEF HAAG: Glenview. Glenview.

MR. TRAINOR: -- Glenview Drive for Line 132?

CHIEF HAAG: The markings we found on Glenview were small sticker type, plastic stickers on sidewalks. Some were there. Some were missing and some were hard to identify.

MR. TRAINOR: Had you ever seen these types of markings before?

CHIEF HAAG: No, I hadn't.

MR. TRAINOR: That's all I had. I guess we'll proceed with Mr. Narva. Dana?

MS. SANZO: Mr. Narva, could you please describe your organization's involvement with pipeline safety?

MR. NARVA: We have been involved with pipeline safety for about 7 years, going on 8. We have a program that's entitled Pipeline Emergencies and it's a joint project between the United

States Department of Transportation and the National Association of State Fire Marshals. It is a curriculum that is specific to transmission pipelines for the most part, both gas and liquid, and the curriculum involves a -- or includes a textbook, training scenarios, a DVD, an instructor's guide, and so a complete package for emergency responders.

Over the years, we have conducted Train the Trainer sessions, where we'll go out to each state. And we've gone to each of the 50 states and trained a number of fire service trainers with the expectation then that they go back to their department and train their members. So that's been the approach that we have taken in the past. We are now in a process of making all of that electronic so that it can be delivered over the web and we can really measure that training. So we've been very involved with having a program there for first responders.

MS. SANZO: About how many sets of materials have you distributed?

MR. NARVA: We've distributed approximately 45,000 copies of the curriculum.

MS. SANZO: And about how many sets of the materials of the Train the Trainer materials?

MR. NARVA: Well, it's the same material --

MS. SANZO: Okay.

MR. NARVA: -- that goes out to the fire departments. So if a fire department requests it, we will send them a package.

If the industry requests it, we can send a package. When we go out and do the Train the Trainer sessions, we give them all a package, so it's the same material.

MS. SANZO: What specific information in training do emergency responders need to safely respond to pipeline incidents?

MR. NARVA: In a general sense, they need to have an awareness, first of all, that there are pipelines underground. I don't know that -- that's something that we all take for granted, but it's an awareness, a recognition of that. Need to understand how a pipeline operates; understand the different characteristics between a gas and a liquid pipeline, as an example; understand and literally go through some scenarios that take them through different experiences that might occur. So those are the key components. And then another part, while it's not necessarily training, is the contact with the operators, to know who to contact, have those relationships in place before an incident happens.

MS. SANZO: Do you believe that the information in training, as of today, are meeting the needs of the fire service?

MR. NARVA: Yes. I would say the information that's available will meet the needs of the fire service. That's not saying that they're always getting into the hands of the fire service.

MS. SANZO: And what degree of communication and coordination exists between pipeline operators and the emergency

response community? Do you --

MR. NARVA: Go ahead. I'm not sure I got the first part of the question.

MS. SANZO: What do you think the communication level is between pipeline operators and fire service, in general? Do you think it's at an acceptable level today or would you like to see increased?

MR. NARVA: Well, certainly, I would like to see an increased level. I don't think you can have too much communication between those two parties. As I said, it ought to occur before an incident, but -- that face-to-face dialogue and information and awareness is vital ahead of time. So it ought to be increased.

MS. SANZO: And what methods do you think would be effective to deliver this information to the fire service?

MR. NARVA: There isn't one particular method that works. Its multiple sources and mediums, I think. Face-to-face is always good, but that's not always possible. We need to be cognizant of that. I think an electronic format certainly helps. We're in a technology -- a time where technology allows that, where there can be communications. You can find out, the e-mail was opened, what part did they read, and then be able to fine tune your messages to approach that. So we need to move beyond just mailing things out.

And I think probably the biggest thing from a response

perspective is we need to know that there's more than just checking a box off, that there was an effort to communicate, but there truly is communication. And that's two-way street. There's also responsibility of the fire service or responders to seek out that information and to be aware, so it's important.

MS. SANZO: Thank you.

MR. TRAINOR: Mr. Narva, just a couple of clarifications. Your organization, could you describe the membership, what interests or organizations they represent?

MR. NARVA: The National Association of State Fire Marshals is primarily an organization that consists of the 50 state fire marshals.

MR. TRAINOR: Okay. Do you have any pipeline operators that participate as ad hoc members or observers to your organization?

MR. NARVA: We have over the past. I couldn't tell you right now whether there is or is not one. They participate in our annual conference. It's something that we try and do each year, is have a session that deals with pipelines, pipeline emergencies. So there is some communication there and participation.

MR. TRAINOR: You mentioned the need for better face-to-face communication between the two groups. What is your organization doing to facilitate that?

MR. NARVA: Currently, we aren't doing anything between our organization and individual fire departments or the fire

service in general. It goes through our members.

MR. TRAINOR: Okay. And just to tie this up, do you see any measures that you could take at this point?

MR. NARVA: Certainly could and we are developing this electronic portal that I talked about. I think the face-to-face is something that needs to come, not necessarily always from an operator's perspective, but there needs to be kind of a neutral, credible source that goes with it and can partner with those organizations. Within the fire service, probably law enforcement, other emergency responders, there's a natural trust for organizations that they understand and know. And that's not to say a distrust for those that they don't; it's just a hesitancy maybe. We need to facilitate that.

MR. TRAINOR: Okay. Is there any active program encouraging the fire departments throughout the country to reach out to pipeline operators?

MR. NARVA: Not that I'm aware of through our association.

MR. TRAINOR: Thank you.

I would like to go to Mr. Rezendez from PG&E, please. Good morning.

MR. REZENDEZ: Good morning.

MR. TRAINOR: Mr. Rezendez, we've heard the perspective of the firefighters as far as public awareness about pipeline systems. Now we would like to get your perspective on this.

Would you summarize the outreach efforts that PG&E made to the City of San Bruno prior to the September 9th accident?

MR. REZENDEZ: Surely. We do a couple of things, and a few of those were mentioned here. One of the baseline programs that we participate in is through the Pipeline Association for Public Awareness, and that is a materials-based program which provides emergency response professionals, whether they be fire or police, and it provides them information, as was discussed. It contains various baseline emergency response information. It also contains a DVD that has various scenario-based exercises that individuals can go through at a laptop.

We also conduct various liaison meetings and those were referred to as well. These are annual meetings. The local maintenance and construction superintendent, along with our governmental relations organization puts together a discussion, if you may, as he described, which provides both gas and electric related safety. It gives them an overview of our emergency plan, tours of the facilities, the kinds of systems and software, for example, that we use to manage emergencies.

MR. TRAINOR: Okay. That's a good summary. Thank you.

With respect to the materials you give out, does it include any specific information to PG&E pipeline systems and, if so, what information is included?

MR. REZENDEZ: We do not mail like maps or other types of information relevant to our pipeline. What we do do is provide

information around the National Pipeline System or Mapping System, which allows them to have access to that kind of information, as well as a contact directory.

MR. TRAINOR: And the national mapping system would do what for the firefighter?

MR. REZENDEZ: Well, it would allow them -- there is a secure portion of that website that allows them to access GIS based data sets that can be either used online or downloaded to their own systems.

MR. TRAINOR: And if one did that, would they get maps showing the location of Line 132 and your other transmission pipelines?

MR. REZENDEZ: For all the systems and operators that have data in that system, that's my understanding.

MR. TRAINOR: Does PG&E have data in the National Mapping System?

MR. REZENDEZ: Yes, we do.

MR. TRAINOR: So again, if one accessed that mapping system and queried for the San Bruno area, would they come up with a map showing the location of Line 132?

MR. REZENDEZ: Yes.

MR. TRAINOR: With respect to the liaison meetings, about how often are these held?

MR. REZENDEZ: These are annual events, usually held in the spring.

MR. TRAINOR: And what is the degree of participation of emergency response agencies within your operating area?

MR. REZENDEZ: This is focused on the peninsula, that is to say the general area around San Bruno, and they'll have about, anywhere from you know, 13, 14 attendees up to 20.

MR. TRAINOR: And that represents 13 or 14 people from how many separate jurisdictions?

MR. REZENDEZ: I don't know the exact breakdown, but it does include multiple jurisdictions.

MR. TRAINOR: I want to discuss a little bit about the Public Awareness Program, the program to educate the public about the pipeline facilities that may be running through their community.

We understand that you do have a mailing program and, again, the frequency of the mailing program depends upon the particular location of residents and businesses, the -- and I know that there are mailings made to municipal officials, including the fire department. Each of these have different frequencies and so forth. Informing the citizens of a community, such as those affected by the September 9th accident, what specific actions do you take to inform these people of the hazards or risks from pipelines?

MR. REZENDEZ: Sure. You mentioned the communication pieces that we send out as a part of our bill to the community and that contains information, safety-related information, not only

hazard recognition, but response. And we also provide contacts around pipeline markers and where they can find additional information, including contacting a utility directly. We also participate in various community-based events for which we provide safety information as well.

MR. TRAINOR: All right. Let's talk about the mailing program for a minute. You mentioned material that comes with the bills. I think those are commonly referred to as bill stuffers?

MR. REZENDEZ: That is correct.

MR. TRAINOR: What has PG&E done to assess the effectiveness of these bill stuffers?

MR. REZENDEZ: We participate in the paper survey. It's API and INGAA sponsored survey and that's a survey that we use for assessing the effectiveness of our program as it relates to the affected public.

MR. TRAINOR: Does this survey involve going around and knocking on doors and asking people if they know that there's a pipeline traversing their community?

MR. REZENDEZ: No.

MR. TRAINOR: Well, who do you survey?

MR. REZENDEZ: It's a process by which the survey company employs its -- I believe it's a mailer-based survey and response that is used for that particular survey.

MR. TRAINOR: And what's the response level to these mailed surveys?

MR. REZENDEZ: I'm sorry, what?

MR. TRAINOR: How many -- what's the response rate to the mailed surveys?

MR. REZENDEZ: I think the response rate, it's kind of mathematical. It gets into kind of statistics of it all, but I believe the response rate is somewhere in the ballpark of 150 as a sample representing a scalable reference to the entire population.

MR. TRAINOR: No, no. If you send out 100 surveys, what do you typically get back in the way of responses? How many people respond?

MR. REZENDEZ: Based on the way the survey is designed -- I apologize, I'm not a survey expert, but the way the survey itself is designed is such that it would receive 150 or so responses, which would give you a 95 percent confidence.

MR. TRAINOR: All right. Now, I understand too, that with respect to the public awareness program you employ a couple of contractors to conduct these mailings and surveys for you; is that correct?

MR. REZENDEZ: That's correct.

MR. TRAINOR: What procedures or policies do you have within PG&E to make sure that these contractors are, in fact, doing what they should be doing and -- all right, if you would answer that question first, then --

MR. REZENDEZ: Sure.

MR. TRAINOR: -- I have a second part to it.

MR. REZENDEZ: There's no specific policy or procedure on how we manage those relationships, but I would like to add that we are fully engaged in those processes from cradle to grave.

MR. TRAINOR: Well, that's where I'm going with this. How do you know that what they're doing, one, is being conducted; and, secondly, how do you know that what they are doing is having the desired effect?

MR. REZENDEZ: Sure. You know, we're involved in every level of the development of the content, the language to be used. If it be, for example, with emergency responders, we use various surveys that give us feedback, for example, that maybe they want more information about pipelines in the general area, where they would go to get that information and how to reach the utility. We would enhance those programs based on the cycles in which we mail them out, in this case, maybe annually, to provide kind of that continuous improvement along a program.

We do use, obviously, vendors with specialized expertise in these areas of producing these mailers and distributing them, but we certainly are involved in the content development.

MR. TRAINOR: Can you give me an example of where this process has led to a change or a revision to the public awareness efforts?

MR. REZENDEZ: Yes. Some of the feedback that was received by PAPA, for example, and as well as industry input, we ultimately changed the emergency responder program to enhance it

by adding information around what 911 dispatchers need to know. And we actually developed a module which is now included within that disc and available online exclusively for that particular population.

MR. TRAINOR: What lessons have you learned since September 9th?

MR. REZENDEZ: Do you have a specific?

MR. TRAINOR: With respect to your public awareness program?

MR. REZENDEZ: I think what we learned first and foremost is that, within the emergency response community there clearly needs to be a greater level of engagement between the preparedness and the prevention aspects within the company. That is to say, you have a prevention program which is sending material; you have a preparedness program that actually sits down, meets with and provides kind of exercises as were described a little bit earlier, and we're actively working on that right now.

MR. TRAINOR: We're very interested in your continued efforts on that front and the reason our concern is high on this is there have been a number of comments made to us since the investigation started that the community, and then we heard from Chief Haag, largely being unaware of the presence of Line 132.

Going back to the emergency responder program, again, how do you assess the effectiveness of that program?

MR. REZENDEZ: The paper survey that's sponsored by API

surveys all four of the major stakeholder audiences. We did a baseline survey in 2007 and will be participating in that survey once again. It's slated to be executed this spring.

But we also, if I may add, as part of our responding to utility emergencies classes, we actively solicit feedback during the course of the class and we've had 700 attendees to those 22 classes. And they have provided us really solid feedback that, one, the class is meeting the need; but, two, that I think that there is greater emphasis and a need to deliver through various medium information specific to pipelines.

MR. TRAINOR: Okay. What specific outreach have you made to the City of San Bruno with respect to communicating with their emergency management officials about the pipeline facilities within their community?

MR. REZENDEZ: Well, I know at each and every contact, as the Chief had talked about, some of the liaison meetings, you know, there is an overview given of the actual transmission system whereby additional information can be provided. And as he discussed as well, there have been efforts in a post-San Bruno reality to, you know, further engage that community.

MR. TRAINOR: But the Chief just said a few moments ago that prior to September 9th, he really wasn't aware of Line 132. So how do you explain that?

MR. REZENDEZ: I can't.

MR. TRAINOR: Okay. Has there been any consideration

within PG&E on the need to provide specific information to emergency responders about the location of the transmission pipelines?

MR. REZENDEZ: Yes, and we've provided emergency response personnel across our service territory with maps of the local area to give them that information.

MR. TRAINOR: Okay. And has that been since the accident or was that prior?

MR. REZENDEZ: It has.

MR. TRAINOR: Okay. Thank you.

Dana, I'll let you take over.

MS. SANZO: Mr. Lidiak, can you provide an overview of the mission and membership of API, please?

MR. LIDIAK: Yes. API is a national trade association with approximately 450 corporate members representing all aspects of the oil and gas industry.

MS. SANZO: And could you please provide an overview of the pipeline public awareness requirements that are specified in API Recommended Practice 1162?

MR. LIDIAK: Yeah. The requirements are -- they're relatively new. I'll point out, they were put into place in 2005 under PHMSA regulation. The actual RP was released in 2003 and has been industry practice since then. It gives operators a framework for developing, implementing and evaluating their public awareness programs.

MS. SANZO: And who are the stakeholders involved in the development and implementation of RP 1162?

MR. LIDIAK: The workgroup that developed the initial document was primarily made of industry personnel, state regulators and the Office of Pipeline Safety. The state and federal participants were observers in the process. The federal and state agencies often will take that role rather than being direct members of the workgroup. We also engaged in a number of workshops, comment periods, et cetera, to gather input during the development of the document.

MS. SANZO: Were there any fire service organizations involved in the development of RP 1162?

MR. LIDIAK: I don't know the answer to that.

MS. SANZO: What guidance does the standard provide for operators for assessing their awareness programs?

MR. LIDIAK: Well, in general, it does require an assessment element and it is not a very specific and, shall I say, you know, standards-driven process. It requires that they evaluate their effectiveness on, you know, a statistical basis and demonstrate the effectiveness.

MS. SANZO: Mr. Boss, could you provide an overview of the membership and mission of INGAA, please?

MR. BOSS: Yes. INGAA is an association of interstate natural gas transmission companies, approximately 28 members that reflect around 186,000 miles of natural gas transmission

pipelines.

MS. SANZO: Are the public and emergency responders awareness methods used by PG&E common to other gas pipeline operators?

MR. BOSS: There is a commonality because of the pipeline safety regulations. PG&E has participated in the past in the implementation of those practices, specifically on API 1162. And ever since that has been adopted through PHMSA -- we previously had an education program rather than an awareness program, so the change has been trying to measure the awareness rather than the amount of education out there. And it is a continuing program, as Peter mentioned. I think the new API 1162 was just published in December of this year.

MS. SANZO: What challenges do gas pipeline operators encounter with the recommended practice and regulations for public awareness?

MR. BOSS: I think one of the big challenges is that it is a two-way street and there can be a lot education that is put out there, but being sure that you're educating the correct people and the messages that you're giving to those groups do fit into their communication patterns, the jargon that those particular groups work with. For example, there's different messages that you may give to a public official versus an emergency official versus a homeowner. And crafting those messages and being able to catch their attention so that they do pay attention to this

information and understand.

Unfortunately, pipelines are buried below the ground and a lot of folks don't have a visual indication of what's there so it's hard to catch their attention on a lot of these things.

MS. SANZO: Mr. Lidiak, I would also like to ask the same question. What challenges is your membership encountering with the recommended practice for public awareness?

MR. LIDIAK: Much the same answer that Mr. Boss just gave and that is that, you know, you have messages that are going out to, literally, hundreds of thousands of people and getting their attention, getting them to listen to that and ensuring that they're getting the message is the challenge here.

MS. SANZO: Thank you. Mr. Weimer --

MR. TRAINOR: She thought she was going to get away without letting me throw a few questions your way.

Mr. Lidiak, you mentioned that the self-assessment efforts at this point are statistically driven as opposed to -- well, statistically driven, I guess, versus standards or prescribed techniques. Looking at PG&E's Integrity Management Program, which does address public awareness issues, their measurement seems to be on the number of mailings made, the number of contacts made. What are the pipeline operators doing beyond measuring those types of parameters as opposed to looking at parameters that give you a, let's say, a more complete sense of effectiveness?

(Alarm interruption.)

CHAIRMAN HERSMAN: Mr. Trainor, if you wouldn't mind just holding on a minute, that's actually a door sometimes gets opened and it's a security alarm, so it's not an emergency, but it will take a few minutes to -- a few seconds or minutes to shut it down.

If we do have a fire alarm, I will let you know and there are three exits, one behind you that you came in and two up here on the side. So if everyone will just hold tight, they'll shut it down in just a minute. Thank you.

(Pause.)

CHAIRMAN HERSMAN: Sorry about the interruptions and, Mr. Trainor, please continue on with your questioning.

MR. TRAINOR: Yes. We were with Mr. Lidiak and I had asked you -- this was in response to your comment about the self-assessment efforts being statistically driven. And my question was, what statistics are being sought to ensure that the effectiveness of these self-assessment programs are, in fact, effective? And, for example, I had cited as an example that PG&E includes the number of stuffers, bill stuffers, for example, that they mail out and the frequency in that type of thing. What I'm concerned about are whether the statistics being tracked are, in fact, going to provide a true measure of effectiveness and that's what I would like to ask you to respond to.

MR. LIDIAK: And I think it's good to make the

distinction between what's required by the program. The programs do require that they mail out a certain number of pieces of information or provide that information in other means through meetings. The effectiveness requirements require that they evaluate the effectiveness of those materials. And so I'll give you an example of what our industry program does. There are many other programs that are meant to evaluate effectiveness that are offered to operators, but I can tell you what ours looks at.

The kinds of questions that we're looking at are, you know, pipeline awareness in the community, the level of being informed about pipelines in the community, recall of receipt of the information about pipelines, questions about what are the most effective methods for the recipients. And so those types of questions are being polled, and the process, as was alluded to before is, we set a confidence limit for what we would like to see for responses that will give us surety about the answers. And we simply continue to poll until we reach the right sampling limit to get that level of confidence.

MR. TRAINOR: Okay. Thank you.

I would address this question to both Mr. Boss and Mr. Lidiak -- or to Mr. Boss. In representing an association of gas transmission operators and gas pipeline operators, one thing I've noticed from the PG&E Public Awareness Program is that there doesn't seem to be a distinction between the hazards and risks of a distribution system versus the hazards and risks from a

transmission pipeline. Do you think that that distinction needs to be made and how would you go about doing that?

MR. BOSS: I think that's a very important point, Bob. The companies that are our members are usually integrated companies that just operate natural gas transmission pipelines. When you're in a situation and have a corporate environment where you are providing natural gas transmission, distribution and possibly electrical service, there may be some paradigms in the folks on what they think a pipeline is.

And even though you may consider that there may be more problems in the distribution systems so the messages need to get out on the distribution system, there's still a message on the transmission system. And you may have some folks arbitrarily thinking that you're talking about a distribution line going to a house and they get a different paradigm in their mind. So it's how do you distinguish that sort of thing?

I think PIPA was trying to accomplish that in some of their material to distinguish that, but honestly, distribution and transmission is a jargon term that we use within the industry and it is not well-known outside of this industry. So it's removing those jargon terms and trying to communicate that there is something different between the lines.

MR. TRAINOR: Okay. I would like also to direct this question to Mr. Boss, and we mentioned challenges facing the pipeline operators with respect to public education or public

awareness programs. You mentioned it's a two-way street, the need to educate the correct people and in a manner that fits their particular communication pattern. What's being done through your organization and in other industry organizations to address that need, that challenge?

MR. BOSS: I think what we've tried to do is have a cooperative environment. We have progressed from, say, the late 90s where we worked together with PHMSA on the National Pipeline Mapping System, making that available. We went to the Common Ground Alliance because a key group to talk to is the excavators out there. A realization that public officials, besides the emergency officials maybe were not getting the information, API 1162 addressed some of those kinds of techniques.

And then a realization that, like I said, some of the jargon or how we were describing it or how we talk to people in this busy environment where people tend not to maybe read mail and understanding, you know, are we really getting the message? So PIPA was the latest effort that we were involved with -- Pipeline Informed Planning Alliance; that was just published in December -- to talk to other people in the stakeholder game. So it's constant improvement.

As Peter mentioned, we do have the new API 1162, so as we find things, we're constantly trying to improve it and PHMSA adjusts their regulations as they move forward too.

MR. TRAINOR: Thank you.

I'll give it back to Ms. Sanzo.

MS. SANZO: Mr. Weimer, could you please describe the organization, the mission of Pipeline Safety Trust?

MR. WEIMER: Yes. The Pipeline Safety Trust is the only national, nonprofit public interest group that really focuses on pipeline safety. We came about after the 1990 Bellingham pipeline tragedy where a quarter million gallons of gasoline was dumped into a creek through the middle of Bellingham, Washington when it ignited to 2 miles downstream and killed three kids playing in a park.

After that event, through the U.S. Justice Department's investigation of that, they were kind of so aghast at the way the company had maintained their pipeline and the way the federal regulators had regulated it that they went to bat for the parents who lost those children to set aside $4 million of the criminal settlement to set up the Pipeline Safety Trust to be a watchdog on both the industry and the regulators.

MS. SANZO: What are the important messages that the general public should know about natural gas safety?

MR. WEIMER: Well, I think the important message is they have to know that there's a pipeline in their neighborhood for them to have any real concern about that, and that seems to be a message that often is missing in these mass communication efforts that we kind of beat around the bush around that and don't come outright and tell people that there is a pipeline in their

neighborhood and what the potential impacts of that pipeline would be in the small chance that it failed.

MS. SANZO: What do you think are effective methods at reaching out to the general public to provide this information?

MR. WEIMER: Well, certainly, the more specific, targeted and personalized the message is, the more likely the people are to listen to it, and you also have to have something that catches their attention. I think sometimes these mass efforts that the industry has tried to put forward, and certainly, this has been a huge effort on the industry's part to get this message out in these first few years, but a lot of it has kind of been mass mailings.

And there's, to some degree, a conflict of interest in the message coming from the industry because the industry very much wants to portray themselves as having safe pipelines. And certainly, that's true, but if the message on all of your mailers is that everything is safe and reliable and you have to wade through that for a couple of pages before you get to the safety messages, it's hard to get people to get to the safety messages and read those. And that's what we see in a lot of these kind of generic efforts across the country.

MS. SANZO: What should be the goals of public awareness programs and outreach to the general public?

MR. WEIMER: Well, I think there's multiple goals and I think API 1162 has most of those messages identified pretty well.

People need to know where pipelines are, be able to locate them, know what to do if something goes wrong with a pipeline, who to contact. They certainly need to know about damage prevention because that's one of the major causes of these problems and if you're communicating with the public, that's something they need to know about. But you really need to provide those messages in a way that we don't hear after every one of these tragedies that the communities had no idea there was pipelines running through their neighborhoods.

MS. SANZO: What can be done to increase public awareness about pipelines?

MR. WEIMER: Well, I think there's a number of things. One is I think we just need to really target the message better. I talked a little bit about the conflicting messages. I even was looking at PG&E's mailer that went out, and while you want people to get to the public safety messages of damage prevention and what to do and if you smell gas, what to do, you have to wade through a couple of pages.

And when I was in school and in education, there was always a rule. It was the seven word rule. Most people only read the first seven words of something. That's why newspapers hire headline writers.

Well, if you look through the PG&E brochure, the first things you run into is safe, efficient, reliable, the popular choice, the safest choice, the safety commitment. So you go

through all kinds of things telling you everything's good before you ever get to the safety messages. We need to really try to come up with a different lead-in so people will pay attention to what's inside of those brochures.

We need to get the message out more often. Everybody realizes you need different types of communications and you need multiple communications. If people are only getting a mailer once every 2 years, the chance of them picking up and taking those messages to heart is much slimmer than if they were hearing the message from different sources, different directions. And I think the lead-in messages has to be something that will get people's attention.

We've testified to Congress a couple of times that most of these messages -- one of the generic messages we see around the country is a quote from the NTSB stating that pipelines are the safest way to transport fuel. That's totally true. We don't disagree with that at all. But if that's your lead-in message on a public awareness piece to try to get safety messages out to people, why would anybody read the rest of the brochure? You've just told them everything is safe.

If the message on the cover was more to the tune of, there's a significant incident in this country every other day and a half where someone ends up dead or seriously injured every 4 or 5 days from a pipeline incident, maybe they would open the brochure up and take those safety messages to heart.

MS. SANZO: Thank you, Mr. Weimer.

MR. TRAINOR: Mr. Weimer, just a couple of questions. Your message about better targeting of the message to the citizens, could you describe the, perhaps, research and information that you have collected or your agency has collected to support that particular idea?

MR. WEIMER: Well, we haven't done a lot of research. We did just do a project this past year as part of the Pipelines and Informed Planning Alliance where we're trying to look at ways to get local public officials to adopt, use their permitting and zoning regulations to protect people that are -- you know, new development near pipelines. So we did a project trying to figure out how do you get a local elected official or a mayor or a city council or the planning officials to start looking at those types of messages. And what we found out is you really need to drill down and look at the message and find out what the incentives are for them to pay attention, what the barriers are for them paying attention. And as we did that, we learned that who the messenger is, is very important, and that's one of the things we don't see in these mass marketing efforts by the industry, really drilling in to find out who the messenger ought to be, what the message ought to be, what the barriers and incentives are for people to pay attention.

MR. TRAINOR: Thank you. Is there a written report that your agency has produced summarizing this information?

MR. WEIMER: Yes, there is. We have it on our website. I can't remember the address, but I would be glad to get that.

MR. TRAINOR: All right. We would like to obtain a copy of that if you could, please?

MR. WEIMER: Glad to do that.

MR. TRAINOR: I think now, we're ready to move to Ms. Robertson from PHMSA. Good morning.

MS. ROBERTSON: Good morning.

MR. TRAINOR: You've heard the testimony from your fellow panelists and we wanted to address PHMSA last because your agency is involved in all of these matters and -- I am trying to find my place here. Bear with me.

MS. ROBERTSON: Okay.

MR. TRAINOR: We know that PHMSA was deeply involved in the development of 1162 and worked with the participants of that effort to develop the recommended standard that's now in place. One of the problems that seems to be arising in different pipeline accidents we've seen recently is people didn't know they had a pipeline within their community. And there's been some discussion of the National Pipeline Mapping System. How do you ensure that people are aware of this resource and are using it? Has PHMSA made any effort to determine whether these public awareness programs, people in these communities generally know what's there?

MS. ROBERTSON: Well, our inspection program includes a review, not only of the written program, the program requirements,

the implementation of the program, but also a review of the operator's evaluation of effectiveness. That is on a 4-year cycle, which means we are just at the beginning stages of our review of the operators' effectiveness evaluations. We expect to learn a lot as we go through the inspection process to determine what's working and what's not working.

MR. TRAINOR: Have you developed a list of criteria that you would use when you go in and look at an operator's program?

MS. ROBERTSON: Yes. A state and federal ad hoc team has been working on this issue for several months.

MR. TRAINOR: And --

MS. ROBERTSON: We have -- go ahead.

MR. TRAINOR: I was just going to say, are these criteria in a written format, written --

MS. ROBERTSON: Yes. We have an inspection form, inspection guidance. We are developing frequently asked questions and we're developing inspector training. All of that is under way right now. The ad hoc team is meeting this week to go over lessons learned.

MR. TRAINOR: We would be interested in receiving that guidance and those check-off lists, please.

MS. ROBERTSON: Certainly.

MR. TRAINOR: One of the things that, again, we've been focusing on in this hearing is operator self-assessment, but we're also interested in regulator self-assessment. And I think our

concern is you at PHMSA as a regulator, federal regulator, has two responsibilities. And the first one is how you assess the effectiveness of the operators' local -- or public awareness program. Could you elaborate on that, please?

MS. ROBERTSON: Well, what we do is when we do our inspections, we go out and look at their records, look at their results of the surveys that they've done, both to implement the program in accordance with what their written program says -- so do their records indicate that they have sent the mailings, how did they develop the mailing list, what were their data sources. And then, as we go through the evaluations of the effectiveness, we will also look at those surveys and how they -- the methodology they use for each stakeholder group and each measurement.

There are measurement requirements for if the audience actually received the message, did they understand the message, have they taken any action, is there any change in behavior based on that and bottom line results. So operators are required to review all of those and we will review their measurements.

MR. TRAINOR: Well, how would your auditors, for example, if they looked at the customer survey results, what would they look for in those results to assure them that the program has been effective?

MS. ROBERTSON: Well, we'll be looking for response rates, we'll be looking for feedback from the various stakeholder groups, and we're in a learning process ourselves as to what's

working and what's not working, what kind of thresholds can we expect to see as far as response rates. And once we have conducted more inspections, we'll have a better understanding of what we can expect to see and whether our regulations are working, need to be revised.

MR. TRAINOR: Has PHMSA established threshold rates for, say, for example, responses to surveys? Have you got any criteria of that nature?

MS. ROBERTSON: No, we haven't. The operators are required to use statistically valid sampling, but as far as response rates, we have not yet determined what should be expected.

MR. TRAINOR: Would you describe the Community Assistance and Technical Services Program?

MS. ROBERTSON: Certainly. The Community Assistance and Technical Support Program -- we call it the CATS Program -- is a program that involves inspectors, PHMSA inspectors in each region. And their role is not only to -- they're qualified to do inspections and certainly are capable of that, but they also reach out to the communities. They assist in permitting for repairs, if pipeline operators need repairs. They assist in working with communities. They answer questions from individuals. They represent PHMSA at various meetings, giving presentations. So, they do a lot of outreach in addition to being fully trained as inspectors and understanding the regulations.

MR. TRAINOR: I'm not quite clear. So is the CATS Program a training program for your inspectors or is it an outreach activity directly to operators and communities?

MS. ROBERTSON: It's more of the latter. More of the latter.

MR. TRAINOR: Okay. With respect to that outreach activity, about what percentage of the time is devoted to the operators versus the community?

MS. ROBERTSON: Within the CATS Program?

MR. TRAINOR: Yes.

MS. ROBERTSON: I don't believe I can answer that. It varies from region to region, depending on the issues in that region and the activities that are going on as far as construction work, other efforts that they may need to devote their attention to.

MR. TRAINOR: Has there been any outreach activity through the CATS Program to the City of San Bruno or the Bay area as a whole?

MS. ROBERTSON: I am unaware of any, but I can find out and let you know.

MR. TRAINOR: You just don't know or --

MS. ROBERTSON: I don't know.

MR. TRAINOR: Okay. We would appreciate getting information about the CATS Program activity that has been done nationwide. I would ask if you could provide that to us.

MS. ROBERTSON: Certainly.

MR. TRAINOR: I don't have any more specific questions, but I would like to very quickly ask each panel member to take a moment and based on the discussion we've had this morning, offer their comments as far as what they think can be done to elevate the level of public awareness of pipeline systems. And we'll start with Chief Haag.

CHIEF HAAG: Well, I agree. I think it's imperative that the awareness elements, even in the fire service, is certainly heightened by the event of September 9, but I also think, you know, my experience on the re-entry program in San Bruno when the city elected to move our residents to view their losses and their damaged homes, and you know, my conversations with the residents, they had no idea they were on a pipeline. And there is something that has to be done to make that right. So I agree with all the panel members, that the outreach has to continue and become enhanced and make those contacts real.

MR. TRAINOR: Thank you.

Mr. Narva?

MR. NARVA: Mine would deal with, from an emergency responder perspective, not the public in general. But I think you have to have a credible message, multiple means of delivering that message, valued for the time that you're going to do. There's something that has to catch them and an incentive, so to speak. Again, multiple methods and then to look at new technologies, new

ways of doing things to communicate and then have a real evaluation.

MR. TRAINOR: Thank you.

Mr. Lidiak?

MR. LIDIAK: Yeah. I think that public awareness programs is going to be a matter of continual improvement. As I mentioned earlier, it's a relatively new program. 1162 has been updated recently to reflect the learnings that we've had in the first few years of operation. And I just want to mention in passing, of course, that in that revision, we also addressed a recommendation from the Board to recognize emergency response call centers as a part of the target audience for the public awareness programs. And so, that directly addresses that recommendation.

I think the other side of this too, though, is as far as the awareness goes, the PIPA document was mentioned. This process of population growth and encroachment on pipeline right of ways is a pretty big issue and, you know, I believe that this San Bruno incident is somewhat impacted by the fact that we have an existing pipeline that had a great deal of development occur around it. And so it was preexisting. The PIPA document, hopefully, will help communities to avoid that sort of situation because it informs the planning officials in the communities.

MR. TRAINOR: Thank you.

Mr. Boss?

MR. BOSS: I would pretty much echo Peter's response on

that. It's a process of continuous improvement, both from the pipeline operators and regulators and also the community on those things. And unfortunately, we do learn things as these events happen. We don't want these events to happen, but we've got to continuously improve on these sort of things.

MR. TRAINOR: Mr. Weimer?

MR. WEIMER: Yes. I think that one of the keys is to make this information more specific-targeted and personalized to people so they'll pay attention to it when they receive it. I also think that we need to really focus on the evaluation and improvement of the programs over time and at least, in our minds, that evaluation should be keyed towards whether we're really changing behaviors, just not counting how many brochures are getting mailed out, because there are measurable behaviors here that we could key on. Are the numbers of calls coming into the One Call Centers going up after these mass mailings? After we're talking to public officials, are they adopting ordinances about pipelines near -- planning near pipelines? Those types of things can be measured and that should be what the evaluations are based on to some degree.

MR. TRAINOR: Thank you.

Mr. Rezendez?

MR. REZENDEZ: I, too, could kind of chime in on a lot of the things that have already been mentioned. I think the use of new technologies, recognizing, for example, that a volunteer

firefighter located in a remote area might not be able to make it to a training center, being able to provide them online content may be a solution, e-mails, new technologies like Twitter and Facebook, as we compete against all of the other messaging, for example, in our society. Tone, as it's been clearly stated, is huge. I think, in a post-San Bruno reality, we have to kind of peel back on our prior thoughts and methodologies and ask ourselves are we speaking to, really, this audience from the perspective in which they would expect us to speak?

MR. TRAINOR: Thank you.

Ms. Robertson?

MS. ROBERTSON: I would say, in addition to analyzing our regulatory program and inspection and enforcement program, we recognize that there are roles for everyone as far as public awareness.

We have a number of outreach efforts that we've been doing at PHMSA. Our stakeholder communications website contains a lot of information about damage prevention, about the CATS Program, about public awareness. We are trying to not only get a better understanding of what works and what doesn't work, but also, facilitate sharing that information. We take the NTSB recommendations very seriously. We responded to the Lively incident, the Carmichael incident, and we are continuing to work to address the recommendations in the Carmichael incident.

MR. TRAINOR: Thank you.

MR. CHHATRE: Madam Chairman, the Technical Panel has concluded its questions.

CHAIRMAN HERSMAN: Thank you very much to the Technical Panel and also to the witnesses.

We're going to take a short break and then we'll come back and the Parties and the Board of Inquiry will ask questions. We will adjourn and resume at 10:40.

(Off the record.)

(On the record.)

CHAIRMAN HERSMAN: If everyone could take their seats, we're about to resume.

And we'll begin with the Parties asking questions of the witnesses. IBEW.

MS. MAZZANTI: Thank you, Madam Chairman. I actually do have questions today.

My question is for Chief Haag. The first question is there is a water line and a sewer line that run parallel to Line 132? There was work done to enlarge a sewer line, which also included pipe bursting in '08. So was the city not aware that that gas line ran there when they were doing that pipe -- the pipe bursting and the sewer enlarging?

CHIEF HAAG: The excavation of it, from what my understanding was, and I probably should defer that question. I don't have any knowledge, but that excavation didn't impact anything, as far as I know.

MS. MAZZANTI: But it did include work done around that transmission line, correct?

CHIEF HAAG: And I can't answer that as far as my knowledge, as far as if they saw the pipe or not saw the pipe.

MS. MAZZANTI: So then my next question would be, what's the relationship in regards to communications between the public works department and the fire department?

CHIEF HAAG: Well, the two departments have great communication. I just don't have -- if there wasn't a reason to contact the fire department is my assumption.

MS. MAZZANTI: All right. My next question is, was the fire department invited to the trainings that were held in '09 and 2010?

CHIEF HAAG: Which trainings are you referring to?

MS. MAZZANTI: In Exhibit 40, there's an invitation list.

CHIEF HAAG: The public liaison meetings?

MS. MAZZANTI: Correct.

CHIEF HAAG: Yes, we did receive an invitation.

MS. MAZZANTI: And did you attend at that time?

CHIEF HAAG: I believe my fire marshal attended the 2010 session.

MS. MAZZANTI: Okay. And my last question is, the hydrants were dry at the time because there was no water supply after the explosion, correct?

CHIEF HAAG: Correct.

MS. MAZZANTI: How long was it before you were able to get water to the scene?

CHIEF HAAG: Not giving an exact time, it probably took us 30 to 40 minutes to reroute some water. In the meantime, we ordered up water tenders to provide assistance for that.

MS. MAZZANTI: Thank you. No further questions.

CHAIRMAN HERSMAN: We'll move to CPUC.

MR. CLANON: Thank you. I'm Paul Clanon. I'll be representing the Public Utilities Commission. A couple of questions for Chief Haag.

Chief, you were there the night of the incident. You arrived just a few minutes after the explosion and took command at the incident command center; is that right?

CHIEF HAAG: Correct.

MR. CLANON: And you were there over the course of the evening and you saw -- and, in fact, you ordered many of the events that happened?

CHIEF HAAG: Correct.

MR. CLANON: What was it like?

CHIEF HAAG: Well, in my 30 years, I've never seen anything like that. Obviously, you know, San Mateo County has -- and the State of California uses their mutual aid system probably as frequent as anyone. But in our county, we have drop boundaries. In our response plan we have a central dispatch for

fire. So ordering up resources, I think we had over 68 firefighters on scene within 22 minutes. So the response from both law, fire, public services was probably the most amazing thing I've seen.

MR. CLANON: And I want to get to the discussion that we had this morning about what you knew about the pipeline in advance and, in general, you didn't know much about the pipeline in the fire department. Does that also mean you didn't know where the valves were?

CHIEF HAAG: No, we didn't know.

MR. CLANON: Had you known that there was a gas pipeline there or had your dispatchers known and your immediate first responders, what would have been different? The way I understand is that some of the early reports were that people believed that there had been a plane crash, for example. Had you known or had your dispatchers known in advance that there was a gas transmission line through there, what might have gone down differently?

CHIEF HAAG: The initial reports on the incident was a plane down and those reports continued for the first 45 minutes. You know, with the airport being as close as it is to this site, you know, initial -- we thought that that was a possibility, obviously.

Our response to the incident would not have changed, whether it was an airliner down or the explosion itself. I mean,

our tactical dispatch and strategy would be the same, fighting what we saw and then we're trying to adapt and control. I mean, that's the same mission it would be for anything.

MR. CLANON: If I could ask for an exhibit to come up? It's Exhibit 2BC. This is just a map of the subdivision that shows the fire damage. And I want to talk about what might have gone down differently had the gas been able to be shut off earlier.

So we heard yesterday that there was a period of about an hour or so -- that it took about an hour or so longer to cut off the gas that was coming in through both directions to the ruptured pipe in San Bruno on September 9th than it might have had there been remote controlled valves, for example. So roughly an hour or so, and not to hold you to that number. What I'm curious to know is what the impact of that hour was? You were nearby -- I'm not sure where your incident command center was. I think it was just off this map; is that right?

CHIEF HAAG: Actually, it's at the top of San Bruno Avenue and Glenview, which --

MR. CLANON: Or just below this map?

CHIEF HAAG: It's going to be at the lower end --

MR. CLANON: Yeah.

CHIEF HAAG: -- above State Drive.

MR. CLANON: Yeah. So very close by here. And just to situate the folks here, so the purple shows fire-destroyed

properties; the yellow shows damage; and then the green undamaged, I think. Do you happen to know what those black bars mean? I don't know.

CHIEF HAAG: On this map, I believe they're security gates.

MR. CLANON: Security gates. Okay. And the valves that --

MR. JOHNSON: Madam Chair, this is a little off topic and we're talking about a lot of speculation.

MR. CLANON: Let me ask the question, Chair, and then, you know, please just tell me if it's off topic. My basic question is, in terms of public awareness, since the fire department didn't know about the valves and didn't know and didn't have the capability of closing the valves, what impact that had and whether advanced knowledge might have changed the situation on the ground that night. And I'm perfectly happy to take that offline if that's not appropriate here.

CHAIRMAN HERSMAN: Mr. Clanon, its fine. We think we're on topic. If you could just speak up a little bit and ask a specific question to the Chief?

MR. CLANON: If the gas had been turned off an hour earlier, what effect would that have had that night?

CHIEF HAAG: Again, we've been instructed by Madam Chair not to speculate and in my honest opinion, I would be speculating. Obviously, we had the initial explosion. Without the fuel supply,

there's a possibility we could have been, instead of in a defensive mode, an offensive mode, but I couldn't tell you what impact that would have --

MR. CLANON: So it might have been beneficial, yeah. And I certainly don't want you to speculate. Thank you.

CHIEF HAAG: Okay.

MR. CLANON: And my time is up. Thank you.

CHAIRMAN HERSMAN: Okay. Just so the Parties and the witnesses are clear, it's perfectly fine to ask questions that are factual in nature. The witnesses are experts in their certain areas and that's why they're here and so we do want to ask questions where your qualifications can actually shed light on them. We just want to keep the questions factual in nature and so perhaps, if you word something like, what damage might have been done in the 30 seconds or first 15 minutes after the response, given your experience as a fire official, that might be something that's in your purview rather than speculation. So just if we can help the Parties, if you have any questions, we can get through that again.

I note PHMSA, PG&E and San Bruno all have witnesses on this panel, so we'll go to PHMSA first.

MR. WIESE: Great. Thank you very much.

A question for Chief Haag. First of all, I would like to applaud the efforts of you and the rest of your team out there in helping protect the community, but would like to just solicit

your ideas on how can we collectively, whether it be the emergency response community represented by Mr. Narva and others, or whether it's the industry or the regulators, get the attention of local officials, including emergency responders prior to a failure?

We will see a lot of efforts that will be going out, but as a couple of people have said, the communication has to go two ways. It's not meant, by any means, as a criticism. I know you have your hands full on a daily basis. And if you don't have a history of failures, how do we get your attention prior to a failure? Welcome any ideas.

CHIEF HAAG: Well, if the awareness isn't any higher right now, then I would be very disappointed -- and on the fire side. So I think the opportunity to jump on that awareness opportunity, I'm sure the fire service would collaborate, hopefully, in a much greater effort than have been, but I'm in. Put it that way.

MR. WIESE: My next question then hopefully leading off to that, would be to Mr. Narva. I would just like to ask Mr. Narva, have you gotten much feedback or recognition for the Pipeline Emergencies Program? And again, maybe just to connect to the Chief's thoughts, your ideas on how we can get the information that's already been developed more rapidly into the hands of emergency responders.

MR. NARVA: Sure. The Pipeline Emergencies, as I mentioned in the earlier session, is a program that's been around

for about 7 years. It's continually evolving. We are now just finishing up the second edition and part of that second edition is to make it electronic. I alluded to that briefly. We're going to deploy it in an electronic portal so that it is available to any emergency responder at their convenience, their time and also do it in a way that's measurable and trackable so that we know how far they've gone in the curriculum. We can measure learning. We can measure the communication, the awareness. And then to couple that with a communication piece, so that -- whether it's the National Association of State Fire Marshals or a pipeline operator, has the ability to electronically communicate with emergency responders and also to track that. So technology will get us a long way, I think.

MR. WIESE: Great. Thank you very much. I think I still have a couple of minutes. I will open it up to anyone's comments on this one, but it's -- having myself been involved in public awareness for a number of years, one of the things we're constantly struggling with is the difference between awareness and behavioral change. You know, awareness is the first step, you know, and I just welcome any thoughts.

You know, and Carl, we've had this conversation ourselves about once you gain awareness, how do you get people to change behavior. 811 is a perfect example. People know you need to call before you dig. They will be aware of it and still not do it. So I -- just to anyone who wants to swing at that one.

You know, not having the opportunity to sit across from Carl that often, maybe we could point to Carl and ask for his thoughts?

MR. WEIMER: Well, I think the key to building upon awareness to actually get to actual behavior change really results from really drilling down and looking at the incentives and barriers for people to make those types of behavior changes and addressing those. And that's something that I think that we all need to work on harder.

Some of it even goes to the previous questions about just who's doing the communication. You know, we have Chief Haag now who could be a great communicator with other people in the fire industry, more so than receiving that communication from PG&E, they might be more receptive to hearing from him. The mayor from San Bruno could communicate with other local public officials, and I think that would be one way to help open the door up to move things towards behavior change.

MR. BOSS: I might want to add, Jeff, that -- I mean, Carl had a good description on how you emotionally communicate to people and if they're receiving messages or not and, basically, what kind of mood they're in, first, when they see it; they tend to have a different mood and all of a sudden you get into that section where they're actually hearing the message. And trying to identify how we can get to that event where they're actually hearing it rather than having dread or ignoring the messages is

really key.

CHAIRMAN HERSMAN: Thank you.

PG&E?

MR. JOHNSON: Yes. Thank you.

My questions are directed to Mr. Rezendez. Earlier this morning during the Technical Panel discussion, you had started to discuss what is covered at the public liaison meeting and the responding to gas and electric emergency seminars that PG&E puts on. Do you care to complete your thoughts?

MR. REZENDEZ: Sure. Let me just make sure this is in the right place.

Yeah. The public liaison meeting is intended to increase partnership and coordination among the local group and the local emergency response community, whether that be the fire or police chiefs or the Office of Emergency Services located in that local area.

The kinds of things that they cover are reviewing and looking upon those various incidents which have occurred to understand what might have been learned, as well as go over various aspects of gas and electric infrastructure as it is high tech, if you may, at its basis and is very complicated. And there is certainly a level of understanding that we want to convey around that infrastructure.

But I think, most importantly, is the communication, the two-person communication that occurs, as well as providing them

contact information, for example, our designated 911 number for the emergency response community exclusively and allowing them and letting them understand how that looks and feel when they make that phone call into our dispatch.

MR. JOHNSON: Do you care to cover what is -- what you handle on your gas and electric emergency seminar information?

MR. REZENDEZ: In general, we've had 22 classes so far across our service territory. We've had in excess of 700 attendees: police, fire, 911 dispatchers, Homeland Security, safety professionals. We've had other operators come to these, as well as public works departments. Feedback has been extremely positive.

What we cover are, you know, the foundational issues: what does the infrastructure look like, both gas and electric; what kind of hazards might be encountered, step and touch potential; why pinching off the line or stopping the flow of gas could be a potential issue. We talk about transmission level issues. We actually hand a handout out that includes the evacuation distances for various pipe sizes and pressures. And then, in follow-up, we even provide them all of the resources that were used to build the class. Most of these are free and available for them to go and access online or actually order the books and materials that are being provided.

MR. JOHNSON: Thank you. One further question. Earlier today, we talked about new technologies and new opportunities to

educate the public on the location of gas transmission pipelines. Can you talk a little bit about what PG&E has done in that regard?

MR. REZENDEZ: Sure. I also mentioned that we had had a lot of meetings with public officials. I would like to call up a slide, Exhibit 4Y. And while that's going up, just a couple of comments.

It was mentioned a little bit earlier, the National Pipeline Mapping System has been, usually, the go-to point in a variety of communications, whether it be the affected public, public officials, or emergency responders. What we did is actually incorporated a map within our website that allows the user to type in any address, whether it be their home, their business or a family member.

What you're seeing right now is actually a localized map that's available through their My Account feature, that being, you know, the feature you go in and log into to pay your bill, manage your energy, but it also includes a map just like this one. It gives about a 2-mile radius around the home, so it actually gets down to the street level so the individual in that spot, if you may, would be able to know specifically where these pipelines are located.

Beyond that, we've also designated an 888 number if people are wanting additional information for which they can get that information as well.

MR. JOHNSON: Thank you. I have no further questions.

CHAIRMAN HERSMAN: And we'll finish with the City of San Bruno.

MS. JACKSON: Thank you.

With that exhibit still up, I have a quick follow-up question. Is that the scale, Mr. --

MR. REZENDEZ: Rezendez.

MS. JACKSON: -- Rezendez, is that the scale at which that map is currently available to members of the public?

MR. REZENDEZ: Yes, it is. If you were to go and log in today into you're My Account, you would see that map as it exists just for your --

MS. JACKSON: At the scale that it's showed?

MR. REZENDEZ: That's correct.

MS. JACKSON: Okay. Ms. Robertson, in your opinion, is the federal map system, the online tool that's available both to the public as well as to emergency responders, in your opinion, does that provide an adequate level of information for preparedness to first responders?

MS. ROBERTSON: I believe the information that is there is adequate, especially when it's coupled with the other information that is available by working directly with the pipeline operators. We are continually working on our NPMS and revising it and issuing upgrades to it. So yes, I believe it is adequate, especially if you couple it with the other outreach efforts.

MS. JACKSON: Question for Mr. Lidiak, Mr. Boss, Mr. Weimer and Ms. Robertson. Have any of you specifically evaluated the effectiveness of PG&E's Public Awareness Program relative to regulation API #1162?

MS. ROBERTSON: I can talk to that. The inspection enforcement authority for PG&E is the California Public Utilities Commission, so the inspection would be done by that agency. Originally, when the pipeline operators first completed their public awareness written programs, there was a clearinghouse and the clearinghouse reviewed all of the requirements that are in 1162 to see how the written programs aligned. The feedback from that clearinghouse review was sent to the California Public Utilities Commission and any additional inspection activity that would have occurred between that time and now would have been done by the California Public Utilities Commission.

MR. LIDIAK: I just mention, because PG&E does participate in our PAPERS program, they were part of the surveys done for that region and that data would be available to the company.

CHAIRMAN HERSMAN: I'm sorry. I don't think you're mic's picking up.

MR. LIDIAK: There we go. Because PG&E does participate in our PAPERS program, they were part of the surveys done in that region and that information would have been presented back to them as part of their records for their program. We would not have

looked at the individual data. We would look at aggregate data for the industry.

MR. BOSS: I would add that one of the purposes of a trade association is to share information among their members --

CHAIRMAN HERSMAN: Please pull the microphone just a little closer.

MR. BOSS: One of the functions of the trade association is sharing information among members, be they regulatory efforts or workshops. So there would be an informal feedback mechanism as lessons learned from individual companies back and forth, depending on the trade organization they belong to, and in some cases, will invite outside parties to help in those discussions.

MR. WEIMER: Yes. And just quickly, we haven't done any specific evaluation. Those public awareness programs are not available to groups like ourselves or to the public, so it would be hard to evaluate them. Although, I think the ultimate evaluation is what we heard after the San Bruno tragedy, that people had no idea.

MS. JACKSON: Thank you.

Mr. Narva, you mentioned earlier that more pre-event communication is desirable and I'm wondering if you could expand a little bit about how you believe pipeline operators can improve their public awareness programs, particularly as it relates to information available to local emergency responders about the location, operating characteristics, and hazards posed by

pipelines in their communities.

MR. NARVA: The importance of having that communication before the incident can't be understated. We, in past years, have focused on a state-by-state approach of bringing together the emergency responders, pipeline operators, state and federal regulators, all of the stakeholders, so to speak, and trying to facilitate those communications and understanding what one another does, what their role is and what resources they have. That's something that we need to replicate far more frequently and on a state-by-state approach, as well as at the local level. You just can't replace that face-to-face communication and understanding what the other party has, how they can help.

MS. JACKSON: Great. If I might just take another couple of seconds for a question to Chief Haag, a two-part question. First, if you could clarify the situation that was raised earlier regarding the dry hydrants, I believe was the word; and then, secondly, I am sure that even in your 30-year career with the fire service, that you might not have imagined being before the NTSB in a proceeding such as we are here today. What are you looking for as a result?

CHIEF HAAG: I'm sorry. Was there a question regarding the hydrants?

MS. JACKSON: If you could just clarify the statement that was made earlier about dry hydrants?

CHIEF HAAG: About the water main being blown out in the

explosion?

MS. JACKSON: Correct. That was the answer.

CHIEF HAAG: And that was the reason for the --

MS. JACKSON: Okay.

CHIEF HAAG: Correct. Responding to your second question, I do want to thank the NTSB and the technical staff for giving us the opportunity to be here and participate. My belief is there is players in this room that has the ability to see that something like this doesn't occur again, whether it's through legislation, regulatory training, safety measures, technology, so that no other community has to suffer the consequences that we did in San Bruno. Thank you.

MS. JACKSON: Thank you.

CHAIRMAN HERSMAN: Member Sumwalt?

MR. SUMWALT: Thank you.

Yeah. I think this has been a very informative panel and I want to thank all of the panelists, witnesses for being here. The only other pipeline accident that I've been involved with was one in Carmichael, Mississippi about 2-1/2 -- actually, about 3-1/2 years ago and I was on scene there. And then, of course, it came to the Board about a year later.

I noticed there, and I just went through the report this morning, that in that particular case, in Carmichael, Mississippi, which is really an extremely rural community, we had difficulty even finding the place, one of the callers to 911 immediately

knew that it was a gas explosion. So here's a very rural community where the residents knew that it was a pipeline explosion; they knew there was a pipeline going through the community. The sheriff immediately knew that there was a pipeline. He even knew that it was a liquid propane pipeline going through the area, as did the assistant chief of the county volunteer fire department.

So, Chief, this question will be directed to you. I noticed that Mr. Narva said that pipeline information was available to meet the needs of fire departments on the pipeline disasters, but of course, he represents the National Association of State Fire Marshals. I suspect that you interact -- do you interact with that organization or do you more interact with the National Association of Fire Chiefs or both?

CHIEF HAAG: Our immediate division is the California State Fire Marshals' office. In California, the CPUC has regulatory on gas line transmissions and our state fire marshal office typically deals with liquid transmission lines. But I think, as you indicated, that I said earlier, I have been on the National Association of State Fire Marshals' website and actually have downloaded some of the scenarios and programs from that.

MR. SUMWALT: I want you to speak up a little bit.

CHIEF HAAG: I'm sorry.

MR. SUMWALT: We're having people coughing and pictures taken and all that and I'm an old jet pilot and I can't hear, so

grab that mic and speak loudly for me.

CHIEF HAAG: Got you. I had mentioned earlier that I had been on the website with the National Association of State Fire Marshals and actually have downloaded material from that program and actually put it on our training curriculum.

MR. SUMWALT: Okay. Thank you. Mr. Narva said that it's the responsibility of fire departments to seek out information about pipelines in their areas. And do you agree with that statement?

CHIEF HAAG: Yes, I do.

MR. SUMWALT: I'm curious then, what is the particular reason why San Bruno Fire Department was not aware that there was a transmission pipeline going through the middle of San Bruno?

CHIEF HAAG: We didn't have the information. We didn't have maps of a pipeline going through. Obviously, you know, we've heard today that there is a system that we can access and I just didn't know about it, to be honest with you.

MR. SUMWALT: And I appreciate your candor, but the statement that you agreed with was the one that said that fire departments should seek out that information. And so I just wanted to understand better, why that information wasn't sought. Are you personally a PG&E customer?

CHIEF HAAG: Yes, I am.

MR. SUMWALT: So is what I'm understanding is that they do mail out public information material in their monthly bills?

CHIEF HAAG: I have seen it in the billings.

MR. SUMWALT: What exactly does that material say if they're mailing it to you and you don't -- and you're not aware of it? What is it they're sending out? Is it saying there's a pipeline going through your area? What exactly is it saying?

CHIEF HAAG: I don't live in San Bruno. I live in another community.

MR. SUMWALT: Yeah. Okay. Okay. Thanks.

Mr. Weimer, so whose responsibility is it to find out if there are pipelines in your community? Is it if you're a citizen, should you be aware? If you're a first responder, should you be aware? If you're the gas provider, should you make people aware? All the above? What's the answer to that?

MR. WEIMER: Well, I think it's a shared responsibility and you can't really expect people to go out and look for something if they don't know it's there. So I think the industry has a real responsibility to try to get that information into people's hands, but it's certainly a shared responsibility on everybody's part. I think as the locations become known and as the emergency response plans get shared with fire departments and local emergency planning committees, that type of information will flow out from both ways.

MR. SUMWALT: Thank you. So shared responsibility. So when I was on an airport commission years ago, we talked about people that would complain about airport noise and we said, well,

they should be aware of what they're getting when they buy the property. I don't think that ever went anywhere with the state legislature, but I'm wondering, has there ever been any thought to a disclosure on a real estate contract or something to make people aware?

I don't know if there is a pipeline going through my neighborhood. I don't know that. That's my own lack of information there. I do know there's a railroad track going there because I can see it. But has there ever been any thought to disclosing information like this on a real estate contract?

MR. WEIMER: There certainly has been thought to that and the Pipelines and Informed Planning Alliance report that just came out a little over a month ago has a recommendation in there to move forward from state to state, because I think it has to be a state-by-state thing, to put that type of disclosure so at least people that are buying property in proximity to pipelines would have that awareness when they purchase homes.

MR. SUMWALT: Thank you very much. And as you said earlier, awareness -- or someone said earlier, awareness is the key to this.

Madam Chairman, thank you.

CHAIRMAN HERSMAN: Member Weener?

DR. WEENER: I have a question for Mr. Rezendez. Is PG&E an interstate or an intrastate carrier?

MR. REZENDEZ: It's an intrastate, our facility is --

DR. WEENER: Intrastate. So where do the requirements for public awareness come from for an intrastate carrier?

MR. REZENDEZ: They are also inside the RP 1162 document.

DR. WEENER: Pardon?

MR. REZENDEZ: The RP 1162.

DR. WEENER: 1162 is based on federal standards?

MR. REZENDEZ: It was the recommendation, yes. It references back to 49 C.F.R. 192.616.

DR. WEENER: So is the onus then entirely on the carrier for public awareness or are there other stakeholders?

MR. REZENDEZ: It actually allows for and we do look for opportunities to partner with other operators in our service territory for which we may have mutual interests in reaching out to communities.

DR. WEENER: Um-hum. So then, to follow up on Member Sumwalt's question, in a sense, are the emergency responders also responsible for public awareness, in a sense, for their own public awareness?

MR. REZENDEZ: I think so. We've had firefighters in my class for my children, so I know to some extent they're reaching out in the local community. Does that answer your questions?

DR. WEENER: Yeah. That --

MR. REZENDEZ: Okay.

DR. WEENER: Okay. Thank you.

CHAIRMAN HERSMAN: Member Rosekind?

DR. ROSEKIND: I just want to begin, Chief Haag, I know you're joined at the hearing with Sergeant Caldwell from the San Bruno Police Department. The two of you are representing all the first responders and I want to make sure that we get a chance to acknowledge and thank you for your response on September 9th. It's after these tragedies that we're always reminded that there are people that run toward them on our behalf, so we thank you for that.

This is a test for the whole panel. I think there's been an interesting conceptual discussion about public and first responder awareness and I'm going to make this very concrete. So this is a test. No grade, but it's a test. All of you, point to the fire exits, please. That's good. There's multiple ones. Thank you.

Mr. Weimer, if the fire alarm actually goes off, what would you do?

MR. WEIMER: I would head towards the closest exit right there.

DR. ROSEKIND: Walk or run?

MR. WEIMER: I would probably walk because I don't want to trip over the four people in front of me.

DR. ROSEKIND: Thank you.

This whole conceptual discussion about awareness really gets down -- and I think the Technical Panel and PHMSA, the

questions try to go to this. Really, the objective is knowledge, action. And all the surveys, response rates, et cetera, don't get at any of that.

So I'm sure all of you are familiar that before the meeting started, those exits were on the screens up here and then the Chairman gave you specific directions so you could point to multiple ones. The challenge is, do you have the knowledge? You all seemed to have passed that. The next is, do we know the action? Walk, don't run. The third part, of course, is what happens when the alarm actually goes off and that we can only test either through a scenario, practice, or during an actual disaster.

And I bring this up because my question really is, on the public side, as well as first responder, is there any program or activity that has been demonstrated to actually address knowledge and appropriate action? And you get extra credit if anyone's actually shown that that translates into people knowing what they're doing. On the public side, that means, I smell gas, do I know where to call? I'm excavating, do I know what to do about that? First responders, where's that information coming from; what do I do? It's knowledge and it's appropriate action. Do we have any information, any data, anything that shows there's something effective going on now on the public or first responder side that we're dealing with this effectively?

MR. BOSS: I think on various parts of the program there are measurements out there. The Common Ground Alliance has a

reporting system called DIRT and it tries to look at the accidents, analyze the accidents and ask those kinds of questions, if the people knew what was going on. There's an attempt on this program for public awareness, first, to understand if there is an awareness, but during accident investigations, that is some information that's gathered on how effective it is.

DR. ROSEKIND: More? We've still got a couple minutes here. More?

MR. WEIMER: Yes. In Washington State, because of the Pipelines Informed Planning Alliance document that recently came out, we've had an effort for the past year in Washington State to try to engage local public officials about planning near pipelines. And through some of those very targeted efforts, we've got, I think, four jurisdictions now that have passed ordinances that use their zoning and permitting processes to help people stay safer near pipelines and a couple other jurisdictions that are moving that direction.

MS. ROBERTSON: I think with respect to damage prevention, it's a little bit easier to measure because we can measure calls to 811 after a campaign. In many cases, we can measure damages per thousand locate tickets. It's more difficult to measure behavior after an event, what to do if you smell gas, but I do know of some operator programs who have campaigns where they measure understanding and intended behavior if a customer would smell gas; then they run the campaign and take the same

measurement. So there is some effort going on out there.

DR. ROSEKIND: So I guess my emphasis is on trying to focus on that objective because, while you're measuring survey rates and the people got mailings and you can count on the fact that, after this hearing, I'm going to poll all my colleague Board members to find out what they've gotten in the mail and if they read them or not, right? So just because we don't know something's there, after a tragedy, it's easy for all of us to say we should have paid attention. So I think we really need to focus on the knowledge and do they have the action.

I think there's a lot of examples with responses -- and San Francisco Airport, you do this all the time. Let's see if people really do walk or run. We can measure that kind of stuff. But that really has to be where the focus is.

And I just want to raise a concern that if we're just focusing on the mailing and did they get it or not and did they read it, et cetera, what we really want to know is did they have the right knowledge -- do they have the knowledge to take the right action. Whether they do that or not is another thing, but we've got to make sure that's the part that's getting -- so I think there's almost a misnomer about awareness because we're all aware it's not good.

And the final comment I would just make is, this is hard to do, but there are models. You know, we work in transportation safety. Work on getting people to click it, fasten their

seatbelt, not drink and drive, and prevention's even harder, right? So there are models though, on -- I think this industry could take from other places to make sure that you're at least using the most effective mechanisms possible to get the best outcomes that you want, because we don't want these tragedies and then just wondering whether people got the mailing or not. We want to know that the first responders and public had the information they needed to take the right action. Thank you.

CHAIRMAN HERSMAN: Vice Chairman?

VICE CHAIRMAN HART: Thank you.

I would like to second Member Rosekind and, certainly, what the Chairman has already said about the amazing response of the first responders. I was there on the scene and so I witnessed it and I heard the story of the truck turning the corner and the heat cracked the windshield. I mean that in itself tells what kind of environment these people were subjected to and they did an amazing job, so I would like to second what Member Rosekind and the Chairman have said.

My question relates to 1162, and excuse me if I missed this in the course of the proceedings, but it's not clear to me. Maybe it should be address for Mr. Lidiak for API and Ms. Robertson from PHMSA, but it's not clear to me whether this is a recommended practice from API or whether it's also a requirement that was made a requirement by PHMSA. So what is the status of 1162 in the industry?

MS. ROBERTSON: In 2005, PHMSA incorporated, by reference, the API 1162 recommended practice and operators are directed to develop and implement programs that align with the baseline and supplemental requirements or recommendations of 1162.

VICE CHAIRMAN HART: So the regulation elevated it from a recommended practice to a requirement, I take it?

MS. ROBERTSON: In -- yes. In many ways, yes.

VICE CHAIRMAN HART: Are there any metrics to determine whether this requirement is being met and, you know, what kind of follow-up has PHMSA had?

MS. ROBERTSON: We have an inspection program underway.

VICE CHAIRMAN HART: Okay. Thank you very much.

CHAIRMAN HERSMAN: Thank you.

Chief, I'm going to start with you. Did you have any delay in accessing any of the victims or the survivors or protecting public or private property?

CHIEF HAAG: Madam Chair, did you say delay?

CHAIRMAN HERSMAN: Yes.

CHIEF HAAG: No. There was no delay in our emergency medical response or -- yeah, conservation.

CHAIRMAN HERSMAN: Okay. How long did it take you to get to the victims or survivors?

CHIEF HAAG: I'm trying to count. I believe five of the victims were deceased and we had one self-transport, two self-transports, but there was no delay in getting to them, as far as

they were out of the residences so we had access to those transports.

CHAIRMAN HERSMAN: Okay. So the fire didn't prevent you from getting to anyone?

CHIEF HAAG: No.

CHAIRMAN HERSMAN: Okay. How about public or private property?

CHIEF HAAG: Well, obviously, the fire prevented us to get to some of the properties. You mean undamaged properties? In this scenario, I guess I'm having a little hard understanding is -- the size of the explosion and the ensuing ball of fuel pretty much established its own perimeter. And from the heat, we could access only so close to any point in that perimeter. So that was essentially our limitations of gaining access there.

CHAIRMAN HERSMAN: And once the gas flow was stopped, were you able to access inside that perimeter?

CHIEF HAAG: Once the flow was stopped, yes, we were able to get in there. We were still fighting structure fires and obviously, we were still waiting for the residual pressure to be shut down also.

CHAIRMAN HERSMAN: And how long did that take once your folks arrived on scene?

CHIEF HAAG: I believe it was another 20 to -- 20 minutes, I think, for the residual to be shut down. Now, some of those areas had to be done manually, so there was probably certain

areas they could have accessed a little easier if that wasn't impacting the operation.

CHAIRMAN HERSMAN: When you say 20 minutes, are you saying 20 minutes from the first 911 call or --

CHIEF HAAG: No.

CHAIRMAN HERSMAN: -- or 20 minutes from --

CHIEF HAAG: No. I'm sorry. I thought you were referring to the residual.

CHAIRMAN HERSMAN: Okay. No, I'm talking about the initial fire and your arrival on scene. How long did it take you to access inside the perimeter? Were your teams watching for an hour or what was going on?

CHIEF HAAG: The valves were shut off about an hour and 20 minutes after.

CHAIRMAN HERSMAN: So your teams arrived on site?

CHIEF HAAG: Yes. We set up --

CHAIRMAN HERSMAN: How long after the original --

CHIEF HAAG: Set up our perimeter, did what we could with what we had, essentially, contain that parameter. We did have firefighting activity being done on structures who caught due to exposures and radiant heat, and then it was probably an hour and 20 minutes before the main valves were shut down and the main fuel source went down and we were able to advance on the perimeter.

CHAIRMAN HERSMAN: Okay. Mr. Jones, can you please pull

up Exhibit 4A?

I would like to follow up on Mr. Trainor's question to Mr. Rezendez having to do with public awareness. And RP 1162 establishes guidance for operators to develop, manage and evaluate public awareness programs. And Mr. Trainor asked you a question about evaluating the effectiveness of your public awareness programs and I understand that you contract out the evaluation portion of that. And there was a little bit of discussion about the response rate and that they had mathematical models. Do you remember that?

MR. REZENDEZ: I do.

CHAIRMAN HERSMAN: Did you feel like you got a good response rate on your evaluation?

MR. REZENDEZ: I do. You know, again, we're participating in the API-sponsored PAPER Survey, which is the Public Awareness Program Effectiveness Research Survey. We participated in 2007. Now, again, I'm not a statistician, but it's my understanding that that particular survey, as executed, was designed to get a representative sample such that you would be able to scale that to that population.

CHAIRMAN HERSMAN: Okay. Mr. Jones, if you could pull the exhibit up and this is the exhibit for the group responsible for this, the Survival Factors Group Chairman Report, and go to page 18, please.

And right here at the bottom, it talks about your

effectiveness review. Paradigm Alliance conducted a program effectiveness review in June, 2010. They mailed public awareness brochures with business reply mail survey postcards to over 15,000 addresses. Eight weeks later, 20 survey postcards were returned. So if you could go to the next page please, Mr. Jones, and here's a summary of some of the responses that they received on your behalf. And these were all mailed to people who actually are located near a pipeline.

And so, "Do you or someone you know work or live near a pipeline?" More people said no than said yes. "Have you seen information about pipeline safety within the last two years?" And earlier in the document, we talk about all of the mailings that are done twice a year through the bills and things like that. Fourteen of them said no, that they had not seen information and only three had. The great news is everyone would call 911.

And, unfortunately, I think this kind of shows what we have problems with excavation, "Have you or anyone you know ever discovered a buried pipeline while digging?" And 17 people said yes. And so maybe these people who were responding to this postcard self-selected because maybe they actually had had a problem.

And "Have you ever heard of the One Call system before reading this brochure?" And only 2 people said yes and 14 said no.

And so, I think 20 responses out of over 15,000, to me,

does not say that you had a good hit on your evaluation program. I'm not sure if Mr. Weimer or Ms. Robertson want to comment with respect to what the expectation is for evaluation and effectiveness, but I think even the 20 people who did respond demonstrate you've got serious problems with people being aware of what's going on around them.

MR. REZENDEZ: And you're right, Madam Chairman. I will not disagree that there was a real learning opportunity in the responses that we received. I think what's important here is what was mentioned a little bit earlier, that one of the things that utilities are encouraged to do is to actually develop materials that are compelling and informative and that have a tone and a language for which the audience speaks, as opposed to utilities speak.

And in those responses, and just so we're clear as to what we did, the business reply card that was used there was to test the actual content, not an effectiveness survey such as the paper survey, but an effectiveness survey, if you may, of the actual effectiveness of just that individual piece. And getting 20 responses when you have 15,000 recipients was unacceptable to us and it caused us to step back and really ask the question, you know, what are we doing wrong with respect to notifying and informing and raising awareness?

Clearly, the language needs to change and so we will be engaging our corporate communications group who has particular

expertise in these kinds of areas to completely reformulate, if you may, the information in there. And I think, too, when you look at the business reply card, and this is kind of an industry technique is, you know, what are you really offering in return?

One of the things that I think we really missed in that particular piece is we didn't give the customer some benefit of letting us know that information. We said their opinion was important, but maybe they had additional questions. Maybe they wanted to get additional information. So we're looking at opportunities to improve, if you may, the techniques that we use to be able to kind of entice, and that was mentioned a little bit earlier, or prompt that kind of response.

CHAIRMAN HERSMAN: Thank you.

We'll turn back to the Technical Panel if you have some additional questions.

MR. TRAINOR: I have one question for Mr. Rezendez. During the session where the parties were posing questions to the panel, you brought up Exhibit 4Y, which was a Google map showing the location of pipelines in the San Bruno area. When was that diagram or map placed on your website or on the Internet?

MR. REZENDEZ: Shortly after the San Bruno incident.

MR. TRAINOR: All right. What type of comparable information was available through the Internet or other public sources prior to the accident?

MR. REZENDEZ: The National Pipeline Mapping System.

MR. TRAINOR: Thank you.

MR. CHHATRE: Madam Chairman, Technical Panel has no more questions.

CHAIRMAN HERSMAN: Thank you, Mr. Chhatre.

How about the parties? Are there any parties who wish to ask additional questions? Okay. We'll go to CPUC first.

MR. CLANON: Thank you. And this is for Mr. Rezendez. Is there information -- speaking just about first responders now and not about the general public yet. Is there information about the pipelines through an area that PG&E would choose not to give to first responders, either on your own or if asked?

MR. REZENDEZ: I'm sorry. Could you repeat the question again?

MR. CLANON: Yeah. Is there information about a transmission line, for example, through a neighborhood that PG&E would choose not to give to first responders for any reason?

MR. REZENDEZ: Not that I'm aware of.

MR. CLANON: And similarly, for the general public, is there information about pipelines through my neighborhood that PG&E has that PG&E would not feel comfortable giving me?

MR. REZENDEZ: Not that I'm aware of.

MR. CLANON: And the reason I ask this, and I'll just ask you if you want to expand on that answer, is that particularly since the San Bruno accident, of course, people in Northern California are concerned now, just not about whether a

transmission line comes through their neighborhood, but whether it might be an old one or one that is similar to the one that ruptured. So PG&E would feel comfortable providing local people with specific information about the pipelines?

MR. REZENDEZ: Yeah. In fact, we have an 888 number that was set up because we were receiving a lot of inquiries. Customers wanted to know and we wanted to provide information. And so we set up an 888 number. We received thousands of calls on that individual line and for those more complicated questions, maybe kind of the ones you're inferring, those actually go through a process whereby experts, if you may, who have particular specialty in the ability of being able to get those answers will send in writing to those customers those various responses.

MR. CLANON: Thank you. And that's all I had.

CHAIRMAN HERSMAN: Thank you, Mr. Clanon.

PHMSA.

MR. WIESE: Thank you very much.

Ms. Robertson, I wonder if you could talk to us a little bit about what the federal regulations require in regards to liaison with emergency responders, emergency response plans and maybe a recent advisory on that subject.

MS. ROBERTSON: Yeah. Our regulations have long required pipeline operators to liaison with emergency responders, not only in our public awareness requirements, but 192.615 has to do with emergency response plans. They have a responsibility to

reach out to the emergency responders to explain, you know, that the pipeline is in the area, the characteristics of release, how to respond, how to get more information, to have contact information.

Recently, I believe it was in November of 2010, we issued an advisory bulletin reminding operators of their responsibility, their liaison responsibilities for emergency responders.

MR. WIESE: Great. Thank you very much.

Chief, I just want to make, forgive me, minor rhetorical comment. In part, you know, we all look to learn from tragedies like San Bruno. Our administrator, following that, directed us to reinforce the message with the industry that they have a positive requirement to maintain liaison with emergency responders. I think we all believe that's crucial.

Just a real quick question because I think it needs to be in the dialogue as we talk about maps. I don't know if there's anyone who wants to comment about the National Pipeline Mapping System. There was a compromise reached after a number of years of talking about what level of accuracy, who can access what. I don't know. I mean, Carl, you were as involved in that as anyone. Would you care to address that?

MR. WEIMER: Certainly. The availability -- NPMS system is one of the few ways that people can really find whether there is a pipeline in their neighborhood or not and we just need to get

the word out more that that is available. There may be some user-friendly issues with that still because I get calls all the time from people that have tried to access that and can't quite figure out how to get in there or they get to the first page where you have to have a password and they can't figure out how to get past that. But it's a wonderful system once you do figure it out. And I know, after the San Bruno tragedy, I think the NPMS got so many hits that it was overwhelmed and we put a link on our website and our website went down too because there was so many people looking for that information.

MR. WIESE: Well, thank you. We think it's a crucial tool too. What I was trying to get to, there are security considerations. So the compromise that was reached after 3 years of negotiation with Homeland Security and everyone was to get it at a county level or lower and not to allow people to zoom in and out, that it could be used for other purposes. I know there are a million opinions on that. I just wanted to get it on the record.

And then, lastly, for Ms. Robertson, during your inspections of public awareness, obviously, effectiveness is what everyone's after. It was really part of the original recommendation from the NTSB, as you noted from Lively and I think also an accident in -- pardon? Well, in Carmichael, but in Kansas as well. And they ask us and we built that into that standard which is now incorporated, but how do we look to see if a company is actually learning?

MS. ROBERTSON: That's what the inspection process is all about. What we want to find out when we go out and meet with these operators and conduct our inspections is, number one, what does their program say; is it aligned with 1162? Number two, do they implement it in accordance with what they've written, what they said they were going to do? Have they taken the measurements that are required? How did they go about each of the different audiences and each of the messages, how did they measure it; what was their methodology and what did they learn from it? You know, you can have the measurements, but you need to evaluate what have you learned from it and what have you done or what are you planning to do to make changes to your program.

Public awareness is a continual improvement type regulation. There's a 12-step process within the regulation that outlines to operators what they should do to improve their programs. And as we continue to do these inspections, we'll learn what's working, what's not working with respect to the regulation and the standard and we can make changes accordingly.

MR. WIESE: Great. Thank you. Just rhetorically exiting, I'll say if I had a response rate as you did in PG&E, Mr. Rezendez, I would be thinking about whether that tool was effective, you know, or maybe there's another way of implementing that tool to see whether that's effective. Clearly, that sort of a response rate is not helping. So thank you.

CHAIRMAN HERSMAN: Do we have other requests? PG&E?

MR. JOHNSON: Yeah. Mr. Rezendez, could you please clarify what the 2007 PAPER Survey was?

MR. REZENDEZ: The 2007 PAPER Survey was an opportunity for us to gain a baseline understanding and awareness level for the various populations, be it the affected public, excavators, as well as emergency response professionals and public officials.

MR. JOHNSON: Can you clarify what the 2010 tear-off mailing was all about?

MR. REZENDEZ: It was to assess the effectiveness of that individual piece; was the language, the tone, the messaging, being understood by the individuals who physically were receiving that material.

MR. JOHNSON: And that is the survey, the 2010 and tear-off response is what you're responding to in terms of the number of responses we received?

MR. REZENDEZ: That is correct. That's the 20 responses we got is part of that business response card.

MR. JOHNSON: Thank you.

CHAIRMAN HERSMAN: City of San Bruno?

MS. JACKSON: Yes. I just have a follow-up question regarding the questions a moment ago from PHMSA having to do with the National Pipeline Mapping System and I believe I'll ask those both to -- the question to Mr. Rezendez and Ms. Robertson.

Given that the scale of that map is -- and the security considerations in the previous discussion that was referenced

earlier suggested that the scale of that map should be at a fairly high level. I'm told that it is a 1:24,000. What tools are available to a member of the public who might wish to drill down, if you will, a little bit farther, somebody who's actually very anxious to get more information, where would they go? Either within PG&E or from Ms. Robertson, where might they go, in general?

MS. ROBERTSON: With respect to specific location information about pipelines, the NPMS is the source. On our stakeholder communications website there is a lot of information about the Pipeline Safety Program, about the regulations, about specific operator pages, from mileage to enforcement actions. We have a wealth of information about damage prevention, public awareness, the PIPA Program that just came out. So although there may not be more definitive information about the location of the pipelines, there is a lot of information about the Pipeline Safety Program available on our website.

We also do a lot of outreach. Our CATS program, certainly, is key to getting out to the public and any other opportunities that we have to reach out to the public, we try to take advantage of that.

MR. REZENDEZ: The map that's located within My Account function, I believe, is at a much closer view and gives a 2-mile radius. Also, PG&E is participating in a new program that was developed by the Pipeline Association for Public Awareness. It's

an online module that allows people to identify pipes near them. I think what's really -- we're trying to take advantage of technology, so it will also have kind of an iPhone or a Google-based phone application that will allow you to access that through your browser and be able to find major pipelines that are located near you. It'll tell you the direction, the distance. It will tell you what product is inside, the various hazards associated with that, response needs if there's a leak and contact information for the operator. So we are looking at additional opportunities to be able to meet that need.

MS. JACKSON: Thank you.

CHAIRMAN HERSMAN: Member Weener?

DR. WEENER: Well, just a comment. I just pulled up the National Pipeline Mapping System and the public map viewer doesn't work.

CHAIRMAN HERSMAN: Actually, I just pulled it up a few minutes ago and it did work, so PHMSA, don't have a heart attack. I actually was able to use it.

I know that there are some confusion -- some places that look confusing, almost like you need a password for it. There is a public way to get in. So I'll show you how to find the pipeline in your neighborhood.

MR. WIESE: We'd like to commit to fix that page, so --

CHAIRMAN HERSMAN: Member Rosekind?

DR. ROSEKIND: Operator error, obviously.

Just a quick question. I'm curious, in terms of first responder knowledge, prior to September 9th, what information was available between PG&E and San Bruno, both police and fire, regarding any information that would have helped facilitate coordination of a response?

CHIEF HAAG: Well, my understanding -- am I on? Thank you. No?

CHAIRMAN HERSMAN: Sometimes you have to get pretty close to the mic.

CHIEF HAAG: Am I on? Okay. There.

Yeah. My understanding is we know that PG&E uses the incident command system and the fire service has used this command system for a long time. And my hope is we progress into the next phase, and our outreach program is to look at those response plans and merge our plans between the two agencies so there's a point of contact that, you know, in an event like this, we can make a one-step call to make that contact and have someone in authority who can make decisions quickly and speed up the entire process for the emergency response.

DR. ROSEKIND: And so just to be clear, does that point of contact -- before September 9th, was that point of contact clear and had those communication lines for a coordinated response been worked out?

CHIEF HAAG: No. No, not at this time, but I do want to say that on the September 9th, PG&E's response was great. We had

liaisons established and it worked out. I think there was an opportunity to enhance that and that's my goal.

DR. ROSEKIND: Thank you.

CHAIRMAN HERSMAN: Vice Chairman?

VICE CHAIRMAN HART: Thank you. I already spoke to the amazing job that the first responders did as first responders, but I would also like to take this opportunity to thank the City of San Bruno and all of the agencies of San Bruno fire and police and the others for facilitating the investigation as well as they did, for preserving the site, for accompanying us wherever we had to go to do what we needed to do as investigators, for feeding us, for providing us places to meet, for facilitating the media interviews, all of the things that you did to help this investigation go as well as it did. I wanted to thank all of you and congratulate you for a job well done.

CHAIRMAN HERSMAN: You know, yesterday, we had an opportunity to discuss some of the SCADA activities and the 911 calls and things like that. I just wanted to ask Mr. Rezendez if there's any post-September 9th collaboration between you and kind of what goes on in the SCADA center. If they're relying on someone from PG&E to go on scene to kind of give them feedback for what happens, and they're -- yesterday, we were told they don't call 911 if they see something, an anomaly at the SCADA center. Has there been any changes to that post-accident?

MR. REZENDEZ: That is actually an active conversation,

a very timely question indeed. Thank you.

Yeah. We're actually -- you know, one of the things that I think kind of typifies, you know, an incident that occurs, you know, whether it be on the distribution side or a much larger scale accident like happened in San Bruno, is that oftentimes, because of awareness among the public that when something occurs, their first call is usually 911. So it's typically the situation where they're the first responder of all the first responders.

Going forward, yes, they're actually -- they're looking at our policies and our procedures at exactly that very issue to, you know, assess when is the appropriate time to make that phone call, who should be making that phone call. Because obviously, we have first responders out there who go and make an initial assessment, whereby the need of having the fire or the police department present there in order to secure the area is essential. So we are absolutely looking at that.

CHAIRMAN HERSMAN: Okay. Thank you.

And, Ms. Robertson, can you please talk about some of the improvements that we saw before and then after three-digit dialing was instituted as far as public awareness for One Call?

MS. ROBERTSON: For 811? Yes. The Common Ground Alliance does a survey -- I believe it's every 2 years -- to get an understanding of the awareness level for 811. And although it's not where we would like it to be, we are seeing constant improvement in the awareness of the responsibility to call 811 and

the availability of the number.

CHAIRMAN HERSMAN: Okay. So what we know though is before we had three-digit dialing, we had more excavation events than we did after we did three-digit dialing, 811 and community awareness campaigns. So what I'm trying to understand is we had a success in that area where we were actually able to change behavior and get information out and people actually acted on it and so those excavation damage accidents have been going down. What created the catalyst or the success in seeing that be effective and that communication be effective and can we translate any of those lessons learned to the general public awareness side?

MS. ROBERTSON: The 811 campaign is largely a grassroots campaign. The materials of it are available through the Common Ground Alliance, but they're distributed at the grassroots level through various organizations. So it's about getting the right message to the right people from the right source. I think Carl talked a little bit about that.

As far as overall awareness, there are many other messages besides damage prevention and calling 811 that we need to convey and that can be a bit of a challenge when you're trying to convey so many different messages to a given stakeholder audience.

CHAIRMAN HERSMAN: Okay. Great.

Mr. Rezendez, I wanted to ask you if after the accident -- and I don't know how much -- you know, what the cover and the reach is for PG&E. Is it reasonable to expect a PG&E employee to

make personal contact with each and every fire chief in your service area? Is that realistic?

MR. REZENDEZ: Well, I think at a local level where our, say, our maintenance construction operation that would be, you know, the other first responder on the scene, that those are two-way communication channels that should be maintained and encouraged at the local level. Absolutely.

CHAIRMAN HERSMAN: Okay. And I did want to follow up. I did use the mapping tool that's on PHMSA's website. And I think this is one of the challenges because I think for people, if they don't know that they need to look for something or that they should look for something or how to look for something, they're not going to look for it. And so these pipelines are buried. And I think I'm a little bit unique and I'm probably hypersensitive to these issues more than your average consumer, but there is a transmission pipeline that runs through my neighborhood at the top of our street in our community. And really, the primary reason why I knew that is because I saw the yellow poles sticking out of the ground with a disc on them and I know what those are because I've worked in the transportation field for almost 20 years and I have worked on pipeline issues in particular. But most people don't know what those are. Most people don't even know what they're looking at.

And so I know that along that right-of-way, there are those markers, but I have to tell you, there's been a lot of

acquisitions and mergers over the years and so when I went to the PHMSA website just now, I didn't even know who the name of that transmission line operator is because it's not the distribution line that provides the gas to my home. Washington Gas provides gas to my home, but the transmission that runs through our neighborhood, the transmission line is actually Dominion, and I didn't know if it was Dominion or another name when I went to look. And so I did have the opportunity to go to the map and look at it, but I have to tell you, your average consumer isn't going to go do that. They are not going to know, in particular, that it runs through.

But, Member Sumwalt, I do think that if you have a right-of-way running through your property, you are going to have that disclosure when you go to settle on purchasing property, but that doesn't mean that I will. I live in that neighborhood and I don't have, necessarily, the pipeline located on my right-of-way, but it's near me and I wouldn't necessarily know that. And so I think it's a real challenge.

If I got a mailing from a company called Dominion and I didn't know what pipelines were, I probably would throw it in the trash before I even opened it because I would think it was junk mail. I mean, I do open my Washington Gas bill because I know that they should be mailing something to me, but I think it's a real difficulty, and this goes to the issue that Member Rosekind was saying. There's information presented, but do people get it?

Is it coming in? Are they internalizing it? Do they understand?

And so, I know our team is very interested in this issue. We've had a great response from our panelists and we thank you very much for your participation and we look forward to continuing to work with you as this investigation proceeds to draw on your expertise.

I think we will have some specific comments or questions for the record and particularly, for Mr. Rezendez, but given that our time is short and we want to keep on schedule, we will potentially file those in writing for you.

Okay. Thank you very much. The second panel is excused. Thank you for your service and we'll take a break for lunch and we'll come back at 1:00.

(Whereupon, at 12:00 p.m., a lunch recess was taken.)

A F T E R N O O N S E S S I O N

(1:00 p.m.)

CHAIRMAN HERSMAN: Welcome back and we will begin with our fourth panel on Federal and State Oversight.

Ms. Ward, if you could please, swear in the witnesses.

HEARING OFFICER WARD: Thank you, Madam Chairman.

For the record, the witnesses are seated right now and they're standing up on their own. Okay. So please raise your right hand.

(Witnesses sworn.)

HEARING OFFICER WARD: Thank you. Please be seated.

For the record, I will state the name of the witnesses at the table. We have Mr. Dennis Lee, Mr. Richard Clark, Ms. Julie Halligan, Ms. Linda Daugherty, Mr. Zack Barrett and Mr. Paul Metro.

We'll start with you, Mr. Lee. If you could please state your full name, title and a brief description of your duties and responsibilities?

MR. LEE: Good afternoon. My name is Dennis Lee. I'm a senior utilities engineer at the CPUC. I've been with the CPUC since December of 1999 and my duties and responsibilities at the CPUC is to supervise the gas engineers in the gas safety section at the CPUC.

HEARING OFFICER WARD: And Mr. Clark.

MR. CLARK: Good afternoon. My name is Richard Clark.

I'm the director of the Consumer Protection and Safety Division at the California Public Utilities Commission. My job is to influence and implement policy within the Commission with respect to natural gas, electricity, communications, freight railroads, passenger railroads, rail transit and rail crossings. I have a bachelor's degree from San Diego State University in history, political science and sociology. I've been with the Commission since the energy crisis in 2000.

HEARING OFFICER WARD: And Ms. Halligan.

MS. HALLIGAN: My name is Julie Halligan. I'm the deputy director for Consumer Protection and Safety Division at the California Public Utilities Commission. I have all the non-rail programs in CPSD. That includes utilities safety, gas and electric, as well as electric generation performance, transportation enforcement and consumer fraud. I've been at the Commission for about 19 years. I've been in this position for 4 years. I have a bachelor's of science degree in finance.

HEARING OFFICER WARD: Thank you.

And Ms. Daugherty.

MS. DAUGHERTY: Good afternoon. My name is Linda Daugherty. I am the deputy associate administrator for the Pipeline and Hazardous Material Safety Administration's Office of Pipeline Safety. My group includes the program development, engineering, regulatory development, enforcement, state programs, and training and qualification. I started in the regulatory

business about 20 years ago. I'm a chemical engineer and I started as an inspector and accident investigator for our Central Region, so I've been in a while.

HEARING OFFICER WARD: And Mr. Barrett.

MR. BARRETT: Good afternoon. My name is Zack Barrett. I am the director of state programs. I have the responsibility of the performance evaluations of state programs and distributing the associated grant funding with that. I've been with the organization for 23 years, working on 24 years. I've been an inspector. I've been a senior project engineer leading our gas integrity management regulation development. I have been an enforcement officer, and I appreciate the opportunity to participate in the hearings today that you guys are giving us.

HEARING OFFICER WARD: And Mr. Metro.

MR. METRO: Good afternoon. My name is Paul Metro. I'm chief engineer of the Pennsylvania Public Utility Commission's Gas Safety Office. I've been with the Pennsylvania Public Utility Commission for about 26 years. Today, I'm representing the National Association of Pipeline Safety Representatives as the Vice Chairman.

HEARING OFFICER WARD: Thank you.

And, Madam Chairman, the witnesses have been sworn in and qualified and they're ready for Mr. Nicholson to question them.

CHAIRMAN HERSMAN: Thank you very much, Ms. Ward.

And welcome back to Mr. Clark. We had a hearing on the Metro Link accident in Southern California a few years ago and I understand how the breadth of your responsibilities goes across many activities and areas. And thank you for coming back after having participated in a hearing in the past. Oh, and Ramada.

MR. CLARK: Right.

CHAIRMAN HERSMAN: That's right.

MR. CLARK: It's my pleasure. Thank you very much.

CHAIRMAN HERSMAN: Okay. So, Mr. Nicholson, please proceed.

MR. NICHOLSON: Thank you, Madam Chairman.

Mr. Lee, I'd like to start with you and discuss the state and the integrity management audits that were performed on PG&E. If you would, could you tell us just overall, how an integrity management audit is performed for a natural gas operator?

MR. LEE: Basically, we would use PHMSA's gas protocol forms, their IM protocol checklists. Basically, it's about 168 pages long and it covers about 14 areas, which basically covers the entire IM program. And we would conduct these audits using that protocol, going through the checklists and reviewing related procedures, records, project files pertaining to their program. And throughout -- usually it's about a 2-week audit with about four engineers. And once we complete the audit, the report goes out, as in two of those exhibits, and we wait for a response from

the utility company and we review their response and we close out the file if we agree with their response.

MR. NICHOLSON: Okay. What are the 14 areas that you discussed?

MR. LEE: Okay. Pardon me. I'm going to just -- the 14 areas are: identifying high consequence areas, baseline assessment plan, identify threats, data integration and risk assessment, direct assessment plan, remediation, continual evaluation and assessment, confirmatory direct assessment, preventive and mitigative measures, performance measures, record keeping, management of change, quality assurance, communication plan, and submittal of program documents. And those are the 14 areas.

MR. NICHOLSON: Okay. And during those interviews, are you -- or those audits, are you actually interviewing persons?

MR. LEE: Yes. Yes, we are. We interview individuals or groups.

MR. NICHOLSON: And what sort of things do you go over with those individuals?

MR. LEE: Basically, we go through the checklist that covers these different areas.

MR. NICHOLSON: So while you're filling out the checklist, you're actually interviewing the person --

MR. LEE: Exactly.

MR. NICHOLSON: -- responsible for that?

MR. LEE: Exactly. Yes.

MR. NICHOLSON: Okay.

MR. LEE: And if I may add, we also interview the individuals or groups and we review their programs and procedures pertaining to the areas.

MR. NICHOLSON: Okay. You say four groups?

MR. LEE: Or groups.

MR. NICHOLSON: Or groups.

MR. LEE: Yes.

MR. NICHOLSON: Got you.

MR. LEE: Sorry about that.

MR. NICHOLSON: Now, how exactly does the CPUC evaluate the operator's self-assessment of their Integrity Management Plan? Is that a checklist process? Can you elaborate a little bit on how you look at the operator's ability to assess their Integrity Management Program for effectiveness? What do you look at in that area?

MR. LEE: One of the requirement is they have a -- they go through a continual evaluation of their program and they have their own -- there's certain rules requiring them to have effectiveness, either digs or other things, and we review that to make sure they are doing what they are required to do.

MR. NICHOLSON: Were there any findings related to the self-assessment of the Integrity Management Program for PG&E in 2010?

MR. LEE: Well, we had an area of concern where a contractor -- they hired a third-party contractor to review their risk management plan, to review their ILI process and their EC data process and the consultant found some areas of concern. So PG&E went ahead and remediated those issues and we left it at that.

MR. NICHOLSON: Okay. So their self-assessment was hiring a third-party consultant?

MR. LEE: One of many ways for them to do that.

MR. NICHOLSON: Okay. And in what years were those?

MR. LEE: It was 2007 for one of them and then 2009 was another one.

MR. NICHOLSON: And the finding was then that PG&E was not responsive to those?

MR. LEE: Yes. They weren't as responsive. However, they did send a response and we're still currently reviewing their response to -- their response of the third-party findings.

MR. NICHOLSON: And how long do they have to respond to a finding from a third-party consultant?

MR. LEE: There's no written rule. It's just a timely -- doing it in a timely fashion, basically.

MR. NICHOLSON: So also in this audit, you looked at risk management. I believe that was one of the 14 areas.

MR. LEE: Yes, it was.

MR. NICHOLSON: Can you discuss the findings from 2010

in the area of risk management for PG&E?

MR. LEE: PG&E. There was just maybe minor procedural issues where they had to maybe incorporate more into the procedures, strengthening certain parts of their procedures. I don't have the exact details.

MR. NICHOLSON: I understand. Were annual reviews looked at of their program?

MR. LEE: By PG&E or --

MR. NICHOLSON: Yes. Yeah. Is that something you would audit?

MR. LEE: Yes. We will look at that.

MR. NICHOLSON: Was there any finding in the area of whether they were reviewing their plans on an annual basis?

MR. LEE: No, there wasn't, I don't believe.

MR. NICHOLSON: I want to go back a little bit now to the 2005 audit. If you can tell me, on the 2005 audit, were there any findings against PG&E for their integrity management?

MR. LEE: Yes. There were some issues found.

MR. NICHOLSON: And that was a -- was that a joint audit between yourself --

MR. LEE: Yes. It was four individuals from the CPUC and one individual from PHMSA.

MR. NICHOLSON: And what were the findings?

MR. LEE: Again, same thing, procedural issues. There was one issue where 80 percent wall loss; they had classified

it -- they didn't classify that as an immediate, however, by the end of the audit, they actually revised their plans and procedures that they would state that if it was 80 percent wall loss, they'll consider that as an immediate finding.

MR. NICHOLSON: Okay. And so they corrected that when you were on site?

MR. LEE: Yes.

MR. NICHOLSON: Do you know where the wall loss was on the findings in 2005; what areas, what segments?

MR. LEE: I don't know.

MR. NICHOLSON: Whether it was this Line 132?

MR. LEE: It wasn't.

MR. NICHOLSON: So when going through the threat assessment or the risk management, RMP1, did CPUC have any views with regards to their selecting the top 10 threats?

MR. LEE: No, we didn't have any comment on that.

MR. NICHOLSON: Is that typical? Have you seen that with other operators that their risks are categorized or sequentially listed and then just taken as the top 10 for action or is that something where there's a fixed threshold for risk?

MR. LEE: Sorry. I'm not really familiar with that part.

MR. NICHOLSON: There's no notations, no findings as far as how they're ranking their riskiest pipe segments in their system?

MR. LEE: No, there was no issue with that.

MR. NICHOLSON: Okay. So you talked about the check sheet. Is there anything else that the CPUC does in evaluating the adequacy of the threat assessments identified in the risk management plans?

MR. LEE: No. We basically rely on the PHMSA check-off lists and there's also guidance material that's part of that too.

MR. NICHOLSON: But now, you get into the plan itself, right? I mean, you're looking at the actual weightings and categories?

MR. LEE: Yes.

MR. NICHOLSON: Okay. And there was no findings, no concerns in 2005 or 2010 on the weightings used?

MR. LEE: I don't believe so.

MR. NICHOLSON: Okay. Can you talk a little bit about exception reports and how those are used by PG&E?

MR. LEE: Yes. In the 2010 audit, we found issues where PG&E had used exception reports more frequently than needed. The exception reports should basically be used when they can't meet a certain time frame or certain things that they can't do. However, they were actually using some of these exception reports to basically from -- keeping from them to do certain procedural things that they were required to do.

MR. NICHOLSON: What sort of procedural things?

MR. LEE: Things like -- let me just look at my notes

real quick. Things like using an exception report for a basis of not excavating or examining certain indications found, which are required to do.

MR. NICHOLSON: Okay. So if they found an indication that it should have been a dig, they would take exception to that?

MR. LEE: Yeah.

MR. NICHOLSON: Okay.

MR. LEE: Because of certain reasons they couldn't get to it.

MR. NICHOLSON: They could not get to it? So that was a reason to take exception to actually digging to confirm?

MR. LEE: Well, they actually delayed the response. They delayed examining the dig for beyond the 90 days.

MR. NICHOLSON: Okay.

MR. LEE: So, but they did --

MR. NICHOLSON: So the exception report was for a delay?

MR. LEE: For a delay. Yes, for a delay.

MR. NICHOLSON: Okay. So it was not an immediate --

MR. LEE: No, it wasn't immediate. No.

MR. NICHOLSON: Okay. Now, you said they were also using exception reports for some other procedural matters. Can you elaborate or is that the extent?

MR. LEE: That was pretty much it. A lot of delaying certain things like excavating all the scheduled anomalies within 365 days; instead, they took 27 months.

MR. NICHOLSON: Okay. Almost -- over 2 years?
MR. LEE: Yeah.
MR. NICHOLSON: Can you speak up a little bit, too?
MR. LEE: Oh, sure. Sorry about that.
MR. NICHOLSON: Speak into the mic. Thank you.
So as part of the audit in 2010, did the PG&E Integrity Management Plan review include a review and documentation of their pre-1970 pipe and how it was established within the maximum allowable operating pressure?
MR. LEE: They may have. I'm not sure.
MR. NICHOLSON: You did not specifically review sections of the pipeline that was pre-1970?
MR. LEE: No, we didn't.
MR. NICHOLSON: Okay. And that's not typical of an audit, that you go in and actually look for pipe that may have been grandfathered?
MR. LEE: Not for this audit in particular because basically, the data that's in PG&E's GIS is populated through their pipeline survey sheets and we didn't get in depth as looking into their purchase orders or their vouchers for the different pipeline information to verify that the information in their pipeline survey sheets were accurate.
MR. NICHOLSON: Right. Now I'm speaking more, not so much about their survey sheets or their GIS, necessarily, more so pipe that would not have been hydro tested. You don't go back --

pipe that falls into 192.619(a)(3), you don't look for verification or documentation as to how that pipe was categorized?

MR. LEE: No, not for this audit.

MR. NICHOLSON: Okay. And then you were just talking about the GIS database. Would it be typical for your audit to go in and look at where they had assumed values?

MR. LEE: Yes, we do.

MR. NICHOLSON: You do? And was there any finding, either in 2005 or '10?

MR. LEE: No, there wasn't because if they didn't have the data, they would use conservative values for those data.

MR. NICHOLSON: And they were using the correct conservative values?

MR. LEE: Yes.

MR. NICHOLSON: Okay. Is that a spot check or do you actually --

MR. LEE: A spot check. Basically, these audits -- all our audits are randomly sampling of records. We just don't have the resources and the time to look over every single record.

MR. NICHOLSON: Okay. And you said there were four of you on that audit, right?

MR. LEE: Yes, there was.

MR. NICHOLSON: So is it four of you reviewing that same documentation or you split up?

MR. LEE: Different -- we split. We look at different

projects, different lines.

MR. NICHOLSON: So you did look at the GIS data, at least on survey sheet.

MR. LEE: Some of it, yes.

MR. NICHOLSON: Did you audit their process or procedure for populating the GIS system?

MR. LEE: We may have. I'm not sure.

MR. NICHOLSON: Can you speak a little bit about how much training a CPUC auditor might receive?

MR. LEE: Usually, for us to be qualified integrity management inspectors, we go through two courses that are offered by PHMSA and they are Gas Integrity Management Protocol course and also -- the other course is called Safety Evaluation of Inline Inspection, which is ILI, or Pigging Programs courses. So that's two courses we take and also, we take -- there's seven web-based training that we do for the IM course. That's also offered by PHMSA.

MR. NICHOLSON: Okay. And the gas integrity management program training, what does that cover?

MR. LEE: That's exactly what it was for. The previous one that I had mentioned, those are for the IM training.

MR. NICHOLSON: For auditing or --

MR. LEE: Auditing of IM programs?

MR. NICHOLSON: Yes.

MR. LEE: Yes.

MR. NICHOLSON: Okay.

MR. LEE: Those are the four things.

MR. NICHOLSON: That's not how it's executed. Can you tell me what kind of formal training? Is there a degree requirement for auditors?

MR. LEE: Yes. Engineering degree.

MR. NICHOLSON: Okay. That's all I have at this time. I'll pass this on to Mr. Chhatre. Thank you.

MR. CHHATRE: I have a couple of questions for Mr. Clark and what I would like to do is, maybe if you can tell me what factors are considered in determining the audit frequency for operators? Not just PG&E, but California utility that you are regulator of.

MR. CLARK: Excuse me. At my level, I'm not really involved in the planning of the auditing. However, what I do know about it -- the two folks on both sides of me probably know more about that than I do.

But I do know that we do more than just integrity management audits. We do GO112E audits. That's the general order that the State of California instituted back in 1960 with regard to gas safety. We audit mobile home parks. We audit propane facilities. We audit the distribution facilities. We audit the transmission facilities via the integrity management audits and we basically -- our approach in the past has been to be able to touch every aspect of a utilities operations as frequently as we can and

it in as much depth as we can.

We have a statutory requirement on the mobile home parks that we inspect all 2,800 of them at least once every 5 years. The rest, there are no statutory requirements for the inspections of the other facilities. We do that as our resources allow.

MR. CHHATRE: Okay. Can -- Mr. Lee or maybe Ms. Halligan can answer that?

MS. HALLIGAN: In terms of the audit frequency? Can you hear me?

MR. CHHATRE: Yes.

MS. HALLIGAN: Basically, we decide how frequently to audit --

CHAIRMAN HERSMAN: Actually, I don't think everyone can hear you too well. If there's any other mics that are live up there, just make sure they're turned off. I heard a little bit of feedback, but maybe we can get your mic turned up a little bit. Try again.

MS. HALLIGAN: Okay.

MR. CHHATRE: This is better.

MS. HALLIGAN: Better? We have in -- for the PG&E system, they have about 17 distribution -- I forget districts or division -- in about 11 of the transmission units and we audit each of them. Depending on whether it's distribution or transmission, we'll audit distribution every two or three years. Transmission, we'll try to do it, again, every two or three years.

We'll audit a unit more frequently if we're finding -- if we're having significant findings or a higher number of findings in previous audits.

So we'll be looking at areas of the operators that might require more frequent inspections for Sempra Utilities in the South, SoCal Gas in San Diego. They each have one distribution and one transmission unit and we'll audit those once every year, typically. That's our goal, but again, we do it as frequently as we can, given our resources, and we try to increase it when we see something that necessitates increasing the frequency of the audit.

MR. CHHATRE: Thank you. I was really focusing more on integrity audits, not all the other audits, but you answered them all.

MS. HALLIGAN: Okay. On the integrity audits, we've only done -- we've done the two for PG&E and the -- I believe the same number for the Sempra companies. We would like to do them more frequently, but we haven't been able to at this point.

MR. CHHATRE: Ms. Daugherty, can you tell us, has PHMSA found any inconsistencies between the state audit programs and the Integrity Management Plans on their own?

MS. DAUGHERTY: Can you hear me? Okay.

MR. CHHATRE: I think you're okay.

MS. DAUGHERTY: I understood your question as asking if the federal inspections are revealing differences -- different findings than the state inspections, is that correct?

MR. CHHATRE: That is correct.

MS. DAUGHERTY: Okay. I would say that, universally, we are finding similar issues across the country. We are finding, during our integrity management reviews, that operators, perhaps, are not doing as robust an assessment, risk assessment. We're finding that there are areas that are requiring changes in improvement and that we are going to be partnering later this summer for a workshop to address those very issues. There are changes that need to be made and improvements that need to occur.

MR. CHHATRE: And does PHMSA require the state auditors to conduct the audits with a certain minimum frequency?

MS. DAUGHERTY: We do not determine the specific frequency. That would be based on the state's allocation of resources and priorities and risks. One thing that was mentioned was that there are a variety of different types of inspections and integrity management is one of many. So in a state where you have a lot of construction, you might be doing more construction. It varies.

MR. CHHATRE: And again, for the clarity of all the witnesses, I'm not going to specify, but all my questions are really directed towards integrity management audits. So if I don't mention it, just assume it's for integrity management.

Now how do you -- how to word? To what extent PHMSA reviews the findings of the state auditors?

MS. DAUGHERTY: We review them at a very high level.

State and federal inspection results are loaded into a database and so we look at those results by allocating them into buckets so we can do some trend analysis to analyze the type of things I just reported, that risk assessment is an area of more work. So we do some aggregate. It's not detailed review at the state level, except during our annual reviews, we may go into it in more depth.

MR. CHHATRE: Thank you.

Mr. Metro, can you, very briefly, discuss the purpose of National Association of Pipeline Safety Representatives?

MR. METRO: Yes. The purpose of the National Association of Pipeline Safety Representatives, sometimes referred to as NAPSR, is to have a group. We represent all the lower 48 states, the District of Columbia and Puerto Rico. Our purpose, our mission is to provide information on pipeline safety, to represent the states on pipeline safety issues with PHMSA and basically, to promote pipeline safety throughout the country.

MR. CHHATRE: As our Chairman described in her opening statement, there was a rash of accidents this last year, both in liquid and natural gas. Does -- what are the NAPSR's views in terms of integrity management regulation? Does the NAPSR believe that it should be more prescriptive than performance based?

MR. METRO: NAPSR's position on whether the performance base approach is working is that we need to see some studies that PHMSA needs to prepare from the data that they are collecting. IMP has been in the works for about nine years and we haven't seen

any studies as to whether performance based measures are working or if we need more prescriptive regulations maybe in some areas. We need to see that study. We need to start monitoring the data that we're gathering for IMP and take a look at that. Maybe we need to make some adjustments.

We believe, as a group, the NAPSR group, that the IMP document, the IMP regulations need to be a breathing, dynamic, adaptable set of regulations and we need to make some changes to make that happen.

MR. CHHATRE: My time is almost up. I'll just ask you a last question. Does NAPSR believe, do we have time to conduct a study?

MR. METRO: Yes, I believe we have time. We need to do it now though. We need to gather the data and start investigating where we need to make changes if we need to make changes.

MR. CHHATRE: I'll pass it on to Mr. Bob Trainor.

MR. TRAINOR: Mr. Clark, you indicated you're not specifically involved in the assessment of the Integrity Management Program. Did I understand you correctly on that? What exactly -- what functions do you fulfill within CPUC? I just want to make sure the questions I ask you are appropriate.

MR. CLARK: Sure. Pardon me. Again, my job is to influence and implement the policies of the commission, so I interact with the executive director, the chief council, the chief administrative law judge and the commissioners in terms of

influencing policy. In terms of implementing policy, my job is to guide the organization in the direction of the vision and the culture that we have developed for the organization. With respect to Integrity Management Program itself, I rely upon my deputy director and the program manager to take care of the details of that and to report to me, any issues that they have with regard to the implementation or the findings that we're finding in that program.

MR. TRAINOR: And if your staff did come to you with some kind of report of issues, what would your role be then?

MR. CLARK: My role would be to go to the executive director and to the commissioners and to other folks and to try to change the policy or to institute either a rulemaking or an enforcement action. I have the enforcement staff within the Commission also.

MR. TRAINOR: Does the Commission receive any federal funding?

MR. CLARK: It does. Yes.

MR. TRAINOR: Are you involved with that process?

MR. CLARK: I review the documentation of the audits that are done each year by PHMSA and sign off on them and kick them up to the executive director.

MR. TRAINOR: Are there any conditions on the funding with respect to the Commission's performance or their own self evaluation?

MR. CLARK: Certainly. There are numerous categories of performance that PHMSA looks for with us, one of which is our staffing levels. The other is a number of inspections that we're doing and I'm sorry, I can't recall all of them at this point.

MR. TRAINOR: And I assume the funding is determined by how well you do or how much you need to improve?

MR. CLARK: It's how well we do.

MR. TRAINOR: Okay. And how has the Commission fared in recent years?

MR. CLARK: Well, for the last four to five years, we have received 100 percent, I believe, as our score.

MR. TRAINOR: One of the things that we wanted to explore with the Commission was, we know that it has multiple responsibilities, one of which is rate setting for utilities within the state, including natural gas operations. And secondly, the Pipeline Safety Program for state operators. How many people are employed by the Commission?

MR. CLARK: The Commission has about 1,000 employees.

MR. TRAINOR: And what number or percentage of these employees would be dedicated to the Pipeline Safety Program?

MR. CLARK: All told, currently, we have 13 inspectors, 2 supervisors, so that's 15, probably 20 PYs directly, PYs being personnel years. About 20 PYs directly involved and then there would be involvement across the commission in terms of administrative law judges and attorneys for enforcement actions

and rulemakings and commissioners and commission staff. So I'm sorry, I'm not including the folks in the Division of Rate Payer Advocates. I'm also not including the folks in the Energy Division who work on gas. So I'm going to say somewhere around 35 people maybe, 30, 35 people.

MR. TRAINOR: The -- let's try to put a box around the Pipeline Safety Division. The enforcement and oversight of Pipeline Safety Programs, would that be just the 13 inspectors and 2 supervisors?

MR. CLARK: Two supervisors, a program project supervisor and a half of a program manager, a third of a deputy director.

MR. TRAINOR: Okay. So are we dealing with 15, 20 people? Is that --

MR. CLARK: About 20 people.

MR. TRAINOR: Okay. Now what percentage of the funding for the Commission is directed to the Pipeline Safety Program, Enforcement Program?

MR. CLARK: I don't know the answer to that. All of the federal funding that we get is definitely dedicated to the Pipeline Safety Program.

MR. TRAINOR: Would you confirm that number for us, please?

MR. CLARK: Certainly.

MR. TRAINOR: I would like to explore with you for a

minute, how the rate setting responsibilities of the Commission work with the pipeline safety responsibilities of the Commission. On the surface, there would appear to be some inherent conflicts there. Would you expand on that please?

MR. CLARK: Inherent conflicts? I'm not sure what you mean.

MR. TRAINOR: Well, for example, would a pipeline operator approach the Commission for a rate increase in order to fund a capital improvement project?

MR. CLARK: The -- Ms. Halligan is much more of an expert in this regard than I am, but the -- generally speaking, the utilities come forward to the Commission in a gas accord case or in a general rate case and they ask for a certain amount of money with regard to their gas operations and the Commission approves it or denies it or modifies the request, issues a decision on it and the expenditures are then not tracked.

MR. TRAINOR: All right. Well, maybe I should redirect that question to Ms. Halligan then.

MS. HALLIGAN: And what was your question?

MR. TRAINOR: Your mic please.

MS. HALLIGAN: The question again?

MR. TRAINOR: Your mic.

MS. HALLIGAN: Try again. Can you hear me now?

MR. TRAINOR: Yes. The question was the rate setting responsibilities of the Commission seem to be, at least on the

surface, at odds with the pipeline safety responsibilities. The Commission on the one hand, I think, I would guess that there's pressure to keep rates as low as possible because of consumer or public desire for low energy and on the other hand, there's got to be enough money to fund the Pipeline Safety Program. So if the Commission is the sole body with those responsibilities, how do you resolve any conflicts between those two needs?

MS. HALLIGAN: Well, when the operators come in and file for their gas revenue requirement and rates, there are several interveners that those cases are assigned to an administrative law judge and other parties can intervene. One of the interveners is the Commission's Division of Rate Payer Advocates and their primary responsibility is to make sure that rates are just and reasonable and to look closely at the utilities application for revenues and rates to review that.

The Utilities Safety and Reliability Branch, we don't participate directly in the rate cases. We'll provide advisory support to the ALJ or to the energy division that's reviewing the rate case. We'll also provide technical support to the Division of Rate Payer Advocates if they're previewing a particular part of a utilities application that has to do with maintenance and operation expenditures or capital projects and they want to know what we think of it or whether it's reasonable.

Staff from DRA has, periodically in the past, come to the Utilities Safety Group to ask for an opinion on what we think

of particular projects, but in general, there are any number of interveners that can participate in the utilities rate case. CPSD isn't -- usually isn't one and those --

MR. TRAINOR: Excuse me for a moment. Your acronyms, you're going to have to explain them for me. What's --

MS. HALLIGAN: I'm sorry.

MR. TRAINOR: -- DRA?

MS. HALLIGAN: DRA is the Commission's Division of Rate Payer Advocates.

MR. TRAINOR: And the second acronym you just used a moment ago?

MS. HALLIGAN: Consumer Protection and Safety Division. I'm sorry. I refer to them as CPSD.

MR. TRAINOR: Okay. Have you ever had any instance where an operator has come to the Commission for a rate increase for the sole purpose of improving the integrity or the condition of its system and was denied a rate increase?

MS. HALLIGAN: Well, when the operators come to the Commission for rate increase, they're either coming on the -- for the distribution revenues, they're going into a general rate case application. For the transmission costs, they file those currently as part of a gas transmission and storage application. Those applications cover backbone transmission, local transmission, storage operations and customer access charges for those groups. So when the utilities file rate cases for those

costs, they're covering all the cost to provide those services to their customers. They are forecasting the rates for all of those areas and --

MR. TRAINOR: Okay.

MS. HALLIGAN: -- they're --

MR. TRAINOR: I'm sorry. My time's running out and I do have --

MS. HALLIGAN: Sorry.

MR. TRAINOR: -- one question to ask Mr. Metro. It sounds like a very involved process. Perhaps the Commission could provide us with a more detailed explanation as how the setting of rates is done in the context with --

MS. HALLIGAN: We would be happy to.

MR. TRAINOR: -- pipeline safety.

MS. HALLIGAN: The point I was going to make is that there's a lot of costs that are covered in that one application and safety reliability projects, those type of projects are only one part of a much broader application.

MR. TRAINOR: Okay. I would like to address the last question to Mr. Metro. Mr. Metro, do you see these types of problems occurring in other state utility commissions in the country?

MR. METRO: Specifically, what type of problems?

MR. TRAINOR: Well, the rate setting responsibilities conflicting with pipeline safety programs.

MR. METRO: There has been a tremendous pressure across the nation to keep rates low. I can specifically speak to Pennsylvania, that we went through a restructuring process in the year 2000 and essentially came out of the gas restructuring process with rate freezes for anywhere from seven to ten years. And during those rate freezes, there was a lot of pressure on the gas utilities to save whatever revenues they could and at times, pipeline replacement was one of the areas in which they decreased.

MR. TRAINOR: Okay. So there is a little bit of a conflict there, at least from your experience?

MR. METRO: Yes.

MR. TRAINOR: I wish we could have more time to explore this further, but we do have other topics we wish to address, so I'm going to give this back to Mr. Nicholson.

MR. NICHOLSON: I want to talk a little bit about MAOP grandfather clause. I'll start with you, Mr. Clark. I'm curious. Does the CPUC trend what percent of intrastate natural gas transmission lines have maximum allowable operating pressures established without conducting a hydro test?

MR. CLARK: We have not in the past. We certainly are now.

MR. NICHOLSON: Right. So there was no trends up until this point. And I'll ask Mr. Metro as well, if NAPSR has a position on non-hydro tested pipe pre-1970 pipeline and what kind of risks you think those might pose?

MR. METRO: Yes. We do have a position on that. After a lengthy discussion with the NAPSR group, part of the issue with the pre-1971 pipes, especially the pipes that are non-hydro test capable, is the lack of information that we have on those, the lack of records the -- and even when we have records, if we can trust the findings that we find with the records. So we would look at it and say this is an area in which we would like PHMSA to review and take a look at reducing the MAOP for lines that are pre-1971 that cannot be hydro tested and that the records are suspect. So we would look at a 20 percent reduction at the MAOP level.

MR. NICHOLSON: And you said that's been communicated to PHMSA?

MR. METRO: Not yet. We're working on that.

MR. NICHOLSON: I see. You know where my next question was going to go?

MS. DAUGHERTY: Yeah.

MR. NICHOLSON: And in fact, it is going there. We do have an exhibit. It's 2CT, Ms. Daugherty, and it shows that 60 percent of the nation's natural gas transmission lines were installed prior to 1970. And I'll ask similar question to you that I asked CPUC that, does PHMSA track what percentage of this pre-1970 pipeline had an MAOP established under 192.619(a)(3).

MS. DAUGHERTY: No, it does not. That's something we may revisit.

MR. NICHOLSON: Mr. Metro, when do you expect to get back to PHMSA with that information?

MR. METRO: We'll speak to them in the near future about it.

CHAIRMAN HERSMAN: Would it be possible to get a copy of any documentation that you provide to them?

MR. METRO: Yes, ma'am.

CHAIRMAN HERSMAN: Thank you.

MR. NICHOLSON: Now, Ms. Daugherty, yesterday, there was discussion from PG&E's Integrity Management Team suggesting, during Panel 2, that they might have a pre-1961 DSAW weld problem on Line 132 and I just wonder, that was the first time I had heard of anything like that. Is PHMSA exploring this or is this a matter that PHMSA is going to take up?

MS. DAUGHERTY: Well, definitely. Any seam issue is obviously of concern to us and when we find information that could tell us that there's a problem out there could be systematic or widespread, we're going to research it and see if we have data to support it. We also -- I mentioned a risk management -- a risk assessment workshop. We are also having a workshop on seam issues to explore that very kind of issue and find out what is out there and what we need to learn more and then we'll take some action.

MR. NICHOLSON: When is that workshop?

MS. DAUGHERTY: Right now, I believe it's targeted for July.

MR. NICHOLSON: And has PHMSA seen any data that would indicate there was a seam issue?

MS. DAUGHERTY: On DSAW, I am not aware of any.

MR. NICHOLSON: Okay. Mr. Clark, I'll ask you the same question. The DSAW issue that was mentioned yesterday, is that something that CPUC feels needs further research?

MR. CLARK: Yes, it is.

MR. NICHOLSON: And has CPUC seen any evidence of that sort of problem in the past on other lines?

MR. CLARK: We have not, not that I know of, that we've seen any issues with regard to DSAW pipe. However, one of our first actions following the incident was to have all of the utilities find -- locate all of the 30-inch DSAW pipe that they had in their systems and that had not been hydro tested and reduce the pressure by 20 percent.

MR. NICHOLSON: Okay. And, Mr. Lee, I'll ask you also. Yesterday, there was an explanation by PG&E's Integrity Management Team regarding the practice of running their MAOP -- or running up to MAOP every five years. I think that was the frequency. Can you tell me, was that explanation accurate as to why they do that? Did you hear that discussion?

MR. LEE: Yes, I did.

MR. NICHOLSON: Okay.

MR. LEE: Yeah.

MR. NICHOLSON: Is that an accurate --

MR. LEE: Yeah, that was accurate --

MR. NICHOLSON: -- explanation? It was?

MR. LEE: -- what they were saying. Yes.

MR. NICHOLSON: Okay. So it sounded to me as if, by not running it, their line up to MAOP, that they would suffer a decreased operating pressure every five years, was that how I understood that? Is that correct?

MR. LEE: Yes, if it goes -- if they bring the pressure up every five years to that -- let's say for example, they have a maximum operating pressure of 300 and they've been -- and they have an MAOP on that line at 375. And in the five years preceding an ACA or the preceding five years, if they don't get up to the 375 value, then they -- if they do -- let's say, in the last five years, the highest pressure that they ran on that line was 300 and they've been operating at 250 for the rest of the next few years and if that pressure goes above the 300 pressure, then they'll have to do some sort of assessment if it meets 192.917 --

MR. NICHOLSON: So by running --

MR. LEE: -- (indiscernible).

MR. NICHOLSON: -- up to their MAOP, they're not having to do that type of assessment?

MR. LEE: If they don't go above the -- because they just reset their pressure at that highest point again.

MR. NICHOLSON: Now we're speaking of 192.917?

MR. LEE: 917. Yes.

MR. NICHOLSON: Okay. And I think 917 talks about design and manufacturing threats; is that correct?

MR. LEE: Yes.

MR. NICHOLSON: Okay.

MR. LEE: And also, the ERW.

MR. NICHOLSON: And ERW.

MR. LEE: Yeah.

MR. NICHOLSON: Mr. Clark, do you have something to add?

MR. CLARK: Yes, Mr. Nicholson. Thank you very much.

I want to stress that that's PG&E's interpretation of that statute. They did not come to us and ask us our opinion about that and we're not in accord with that interpretation.

CHAIRMAN HERSMAN: What is your interpretation?

MR. NICHOLSON: Can you explain the differences in opinion between yourself and PG&E? I'm sorry.

MR. CLARK: Well, our interpretation is essentially, that the five year period started at the time that the high consequence area was designated, but having said that, the -- artificially raising the pressure in a pipe that has identified integrity seam issues seems to be a wrong-headed approach to safety. As to whether or not it would cause stresses on the pipe that would result in a fracture of the pipe, raising it incrementally once every five years is a matter for metallurgists to decide.

MR. NICHOLSON: And I'll ask PHMSA to weigh in on this

too. Ms. Daugherty, could you speak to that?

MS. DAUGHERTY: I can respond or perhaps Zack. He's --

MR. BARRETT: Yeah. The 619 sets the maximal level operating pressure and there's nothing in the regulations that prevents the company from raising their pressure up to the maximum allowable operating pressure every five years. Integrity Management Rule under 917 just sets triggers for when the seams would be considered unstable and it would trigger assessment through an Integrity Management Plan.

So the -- raising the pressure to the five year high MOP is about setting that trigger that, if you go over that, that triggers assessments for any seams on that pipeline that have not been pressure tested. If there has been a pressure test on the seams, be it DSAW seams or be it ERW seams, we consider those stable. If there's a pipe that has not had a pressure test, then those seams, if you exceed the high five year prior to the identification of the HCA pressure, then that makes those seams unstable and you have assess those steams either by pressure test or by inline inspection tool, depending on which would be the best technology to address those seams at the time.

MR. NICHOLSON: So again, by running up to MAOP, they don't have to assess those threats? If they run their line up to that highest pressure every five years and they are sure they'll never exceed that -

MR. BARRETT: If that's the highest pressure that they

saw in the five years prior to the identification of HCA, that would be correct.

MR. NICHOLSON: Okay. I continue with yesterday's discussions. Ms. Daugherty, PG&E Management Team mentioned some joiners that may have made up the short section of pups in the 1956 Line 132 relocation. I was just wondering, does PHMSA have a concern over joiners or the use of joiners?

MS. DAUGHERTY: I am not aware of any data we have on joiners. I think that's an area that we do need to do some further exploration. It has not come up before, to my knowledge, so we'll need to find out if it, indeed, is an issue and how it can be identified and addressed.

MR. NICHOLSON: Mr. Clark, do you have anything to add?

MR. CLARK: No, thank you.

MR. NICHOLSON: Mr. Barrett, going back to the five year MAOP or the five year pressure increase, can you tell me how long the pressure has to be held?

MR. BARRETT: The regulation doesn't specify a time frame for holding the pressure. It just says the operating pressure experienced in the previous five years of the identification of the HCA.

MR. NICHOLSON: Ms. Daugherty, does PHMSA track number of miles of pipeline that are capable of being pigged?

MS. DAUGHERTY: We have some information to that. I'm trying to recall whether it is submitted. I don't think we have

any specific data. We have more voluntary submitted information and I don't know what those numbers are. I suspect that's your next question. I can check and see what we do have available and supply it to you later for the record.

MR. NICHOLSON: Is that a concern of PHMSA, how many miles of pipe cannot be inspected internally?

MS. DAUGHERTY: You know, I think that yes, we would like to know that. I think that we need to acknowledge there are various ways that pipelines can be assessed. Hydrostatic testing, internal inspection, there are different risks and different tools and assessment methods may best suite the type of threats and risks, but definitely, we would like to see more lines pig-able.

MR. NICHOLSON: And you mentioned pressure tests is one of those options. Can you tell us the rationale behind the PHMSA requirement for pressure and duration under hydro tests versus what is called the grandfather clause which, essentially, requires no pressure testing of a line?

MS. DAUGHERTY: In general. I can tell you that when the rules were promulgated back in 1968 and 1970 -- well, let me back up for a second. If you look at pipe mile statistics, you'll note that about 50 percent or so of pipelines were constructed post war in the 1950s and 1960s. So when the regulations, the federal pipeline safety regulations were developed in 1968 and 1970, those lines were fairly new.

And so when they looked at whether they would require

operators to have those records before they could use -- you know, they could rely on those records to establish MAOP or whether they had to go out and hydrostatically test, they were looking at most -- for the most regard, newer lines. And so I think, at that time, the decision was made to accept the five year interval prior to the implementation of the rule rather than requiring fairly new lines to be hydrostatically tested.

MR. NICHOLSON: And does PHMSA have a position as to whether this is still a valid practice that should be allowed?

MS. DAUGHERTY: We believe it's a very good question. We are now a ways down the road and we need to revisit whether the grandfathering clause is still appropriate or whether additional means need to be taken.

MR. NICHOLSON: And, Mr. Clark, I'll ask you. General Order 112 came out in 1961. Did that require hydro tests of lines?

MR. CLARK: Yes, it did.

MR. NICHOLSON: Okay. And with that, I'll conclude and pass this on to Mr. Trainor. Thank you.

MR. TRAINOR: Good afternoon everyone. Mr. Lee, I would like to go back to a question posed to you at the beginning of the panel. You were describing for Mr. Nicholson, how CPUC conducted its integrity management audits. Pardon me. And you mentioned the PHMSA protocol and checking -- going through checklists, files and records and you also commented that you review program

procedures and that's what I would like you to expound upon. How do you exactly review program procedures? Do you simply look at the written procedure? Do you make an effort to see them in action or something else? Would explain, please?

MR. LEE: We look at the -- basically, what's provided is a matrix that PG&E would provide to us or any utility company would provide to us. This matrix would include the protocol in one column and then the next column would include where in the procedures that they meet this protocol. And so we go through their procedures to make sure everything that's written in their procedures are what's in the protocol. And we look at the procedures and then, after that, we look at the project files to make sure that they are following those procedures.

MR. TRAINOR: Okay. I guess I still am concerned that reviewing records and files and protocols is -- whether that's going to give you the entire picture. Do you talk to employees about the implementation of these protocols? Do you talk to managers about their review and assessment process of these protocols?

MR. LEE: Yes. We interview the folks that are in charge of certain parts of their plans.

MR. TRAINOR: And are these -- the requirement to do interviews and this type of thing, are those specified in the PHMSA protocols for conducting an audit?

MR. LEE: No, it's not in the plan, but for them to tell

us what's in the procedures, they can clearly explain who is in charge of the plan, who does the revisions, where records are at.

MR. TRAINOR: Do you ask -- interview people and question them about how they execute these protocols?

MR. LEE: Yes.

MR. TRAINOR: Okay. I've got a lot of ground to cover here. I would really like to spend more time on it, but we are limited.

You had also mentioned problems with the 2010 audit involving a third party contractor and you said there were concerns about that, using that contractor. Could you be more specific? What were your specific concerns?

MR. LEE: Basically, PG&E hired a third party contractor in 2007 to look over their ILI or inline inspection process and their program and look at their ECDA process and program. And the third party consultant found some deficiencies, either in their plans or the way they ran their process. And we didn't have a -- the CPUC, we didn't have a clear picture of when they actually implemented these deficiencies that were found by the third party contractor.

MR. TRAINOR: Can you identify the specific deficiencies they noted?

MR. LEE: Basically, it's strengthening their procedures, including certain things that should have been in the procedures. I don't recall exactly what it was.

MR. TRAINOR: All right. We may ask the Commission to send us any correspondence that relates to that audit.

MR. LEE: Sure. I can send you the two internal audits that were conducted.

MR. TRAINOR: Ms. Halligan, you had -- you were talking about the frequency of conducting audits on transmission pipeline systems. You stated that you would like to do them more frequently, but haven't been able to. Would you explain that remark please?

MS. HALLIGAN: Well, certainly, since the incident in San Bruno, we would like to be able to audit the transmission Integrity Management Program much more frequently, every year if we could. As you know, we did an initial audit along with PHMSA in 2005 and then we got back to PG&E's Integrity Management Program in 2010. Those are the only two we have done. We haven't yet concluded our 2010 audit in the sense that we've given PG&E our findings, but because of the intervening -- the situation in San Bruno and this investigation, we haven't yet been able to dedicate staff to working with PG&E to resolve those findings to our satisfaction.

So while we would like to be able to do more audits, we haven't been able to.

MR. TRAINOR: Are there any discrepancies from previous audits that are more than two years old that remain outstanding?

MS. HALLIGAN: Not that I'm aware of.

MR. TRAINOR: Are there --

MS. HALLIGAN: No. We typically -- you know, the staff works very hard when they do an audit to close out any findings and make sure that any violations in particular are resolved before they close out that audit.

MR. TRAINOR: Okay. Mr. Barrett, your work at PHMSA involves dealing with state programs. Would you explain the process that PHMSA has, whatever process you have, towards evaluating the effectiveness of state programs? Can you run through that process for us?

MR. BARRETT: Sure. Can you hear me? Yeah. Thanks.

We have an evaluation form, an evaluation program that we have developed through the years from working with stakeholders, such as the NAPSR members through the years. There's a (indiscernible) Committee that helps populate the questions on what a pipeline safety, a good pipeline -- state pipeline safety program or a pipeline safety program should have. We also -- there on that evaluation form, there's actually four recommendations from NTSB, you know, dealing with cast iron and dealing with emergency response. So we take into consideration from all of our stakeholders, what should be in that form.

Annually, my staff goes out to each state and does an on site -- an evaluation, running through that form to check inspection procedures, inspector training, investigation procedures, damage prevention efforts, their alignment with

PHMSA's inspection programs and initiatives, enforcement, follow-up on enforcement issues and actions. And also, they do an on-site field investigation where they actually go out with a pipeline safety inspector and review that pipeline safety inspector performing a portion of an audit of a pipeline during that -- during their program evaluation.

We also review information that is provided to us by states, dealing with their safety authority, the amount of jurisdiction they have, the amount of recommended person days that they're able to accomplish during inspections, their ability to adopt our pipeline safety regulations and several other factors that we include in that scoring. Based on that score and the availability of the funding that we have, we basically distribute the pipeline safety grant to states, you know, based on those scores and those performance evaluations of how well that they're doing.

MR. TRAINOR: Okay. And I believe the PUC responded that they had received scores of 100 from PHMSA in past years?

MR. BARRETT: I think Richard was responding to the program evaluation piece of the score. I think they were like 99.5 in the last evaluation that we did in '99 and the year before and prior years, they were at 100.

The certification piece is tied in with the score so there's a combined score. They don't have full jurisdiction authority over municipals, some master meters, some private

operators so they lose points for that. Also, their inspection person years have not met the minimum recommended standard for a year or so and so they've lost points for that also. So I believe their combined score is somewhere around 90 in that.

MR. TRAINOR: And how does that compare to other state programs? Is it better than average, below average?

MR. BARRETT: It's -- I would say that the California PUC has a good inspection program. They have good qualified engineers that are quite capable of doing inspections, investigations, you know, with most programs. Where they're taking the hits is because of their jurisdictional status. The legislation hasn't given them authority over all pipelines that are there and for not also hitting the -- so that's putting them below average in that 90 score, their total aggregate score, but that's reflective of not being able to get legislation.

MR. TRAINOR: All right. What was their total aggregate score?

MR. BARRETT: I believe it's 90.

MR. TRAINOR: And what is the maximum total aggregate score one can get?

MR. BARRETT: One hundred.

MR. TRAINOR: One hundred. Your assessment of the commissions program, is that just the -- for the authority delegated to them to enforce federal pipelines safety standards for distribution systems, for example? Does your assessment cover

intrastate pipeline systems, the program for intrastate pipeline systems?

MR. BARRETT: Interstate pipeline systems?

MR. TRAINOR: Intra.

MR. BARRETT: Intrastate. Yes, sir. Our program reviews their inspection and enforcement over intrastate pipelines which are included in distribution systems often.

MR. TRAINOR: Okay. Thank you. Gong back to the scoring system again, what's been the lowest score ever given to any state program?

MR. BARRETT: I would have to do some research for you on that, get back for the record. I'm --

MR. TRAINOR: All right.

MR. BARRETT: I'm not sure.

MR. TRAINOR: Would it be below 50, for example, or above that?

MR. BARRETT: I haven't seen anything --

MR. TRAINOR: Okay.

MR. BARRETT: -- below 50. To kind of expand upon that, you know, we've been evaluating states in the pipeline safety since 1971, so we've been trying to -- obviously, you know, our goal is to get states to score as high as possible because that means that they're meeting -- they're aligning their programs with ours and they're meeting the mandates that we have out there. So most pipeline safety programs score in the high 90s.

MR. TRAINOR: What challenges do you see as, in your position, facing the state utility commissions in terms of their being able to develop and implement effective pipeline safety programs?

MR. BARRETT: I think resources are always an issue, especially with the economic conditions that we're dealing with right now. You know, many states had to undergo furloughs of state inspectors. Some states are having trouble holding onto their staff, their current staff. We suspended a management effort, a clause that allowed us to give states more pipeline safety funding to help shore up states, hopefully too, that governors would recognize that these are positions that we're paying for through the grant and if they would not furlough those employees or keep those furloughed employees, you know, on the clock. So I believe that's a challenge.

Also, in some of our states where they're producing states, where the industry's doing well and where our engineers are getting up to speed and they have, you know, good backgrounds and good talents that the industry is robbing, basically, cultivating that good talent to go to work for them because their salaries are higher. So that's also a challenge, I think, to hold good state pipeline safety employees who are well trained that have experience -- years of experience.

I think those are two of the main challenges that we face. Obviously, we're continuing to learn, we're continuing to

try to improve state programs. Feedback from sessions like this will help us go back and take things to look at for our evaluation form.

MR. TRAINOR: Mr. Metro, I would ask you the same question. What are the greatest challenges in your mind facing the state public utility commissions?

MR. METRO: I would echo Mr. -- I don't think this is working. Is it working? Okay.

I would echo Mr. Barrett's comments about the state programs, that funding is a considerable concern for the states. Consistent funding over the years is a problem because each state has had economic downturns. The funding levels have been, over the last five years, anywhere from 40 percent to 64 percent. It's hard for state programs to budget and go out and say okay, over the next three years, I know I'm going to get a certain amount of grant from PHMSA. I'm going to be able to go out and hire two or three additional engineers. Because the funding levels are bouncing up and down, it's very difficult for the states to plan how they're going to spend this money in the long run. So that's a difficulty that the states are looking at.

MR. TRAINOR: Okay. Mr. Clark, I would ask you that same question relative to the conditions in California. What are your greatest challenges with respect to your pipeline safety program?

MR. CLARK: Again, resources. It's a resource issue in

an industry that's -- whose history has been relatively safe, very safe, actually. And to be able to convince folks that -- in competition for positions across state government, at this point in time and in the past in terms of the economic conditions that folks are suffering, that it's, you know, important to have inspectors be sure that the utilities know what's in the ground and look very deeply and broadly at what it is that they're doing with their systems. When those systems are first buried under the ground so no one sees them, they don't even know that they're running through their neighborhoods and number two, they have a very high safety record, it's very difficult to convince folks that we need resources sometimes.

MR. TRAINOR: In light of this environment, I mean, where states, as well as the federal government are all in a very severe budget predicament, obviously, I would pose the question to Mr. Metro, Mr. Barrett, Ms. Daugherty and Mr. Clark again. What types of things could operators and regulators do to make the best of the situation? And I'll give you one example. Accepting the fact that increased funding is probably a remote possibility, are you examining more effective uses of your resources? And if you are, explain how that might be done. Mr. Metro?

MR. METRO: Yes. In Pennsylvania, about five years ago, we realized that we were going to have funding issues and we didn't have the resources that we needed to do the job the way we wanted to do it. So we implemented a risk assessment program

where we went out and mined our data that we had and said okay, where can we put the resources that's going to give us the biggest bang for the buck and reduce reportable incidents, reduce noncompliance. And we implemented that and we've seen some very good results with that.

We've seen the number of reportable incidents decrease. We've seen the number of noncompliance issues initially increase and some have decreased and that number is going back and forth. But we believe that a risk assessment program for inspections is the way to go at this point.

MR. BARRETT: I would agree with Mr. Metro. In our evaluation form, we've actually been trying to drive states towards risk assessment, risk prioritization of their inspection units, their operators to inspect. We are also working to share data better amongst ourselves in the states and to learn more from the data that we have. It's as Paul said earlier, we're trying to, you know, run the data to try to, you know, look for trends, look for information that could be helpful to target inspection efforts.

MS. DAUGHERTY: I would agree with everything that has been said. I would also mention, I was surprised it didn't come up. When we were talking about constraints and challenges, we have rolled out an incredible number of new regulations over the last decade, control room management, distribution integrity management. We have operator qualifications. States with small

staffs have to absorb these new regulations so it takes an intense amount of training, so it's a burden.

So bringing all the states up to speed is also a challenge. One of the ways that we are trying to mitigate that is to leverage each other's resources and skills. You had asked, you know, ways we can overcome without more money funding the states, without growing those programs, how can we achieve good safety results. And one of the ways that we can do that is utilizing our data, identifying the highest risks, helping each other out, identifying where we -- what the feds do and inspection of an operator that a state may also have regulatory authority over. Maybe they can use our results. There are ways that we can enhance and improve safety, but it is a challenge.

MR. TRAINOR: Has any of that work commenced at this point?

MS. DAUGHERTY: Yes. I mean, we have -- we recognize we had these issues years ago and we have made an effort to share information, to improve our information exchange and we're not there yet. We have a lot of work to do, but we are trying to help each other as partners. We are -- we serve the public. We work together to protect the public as best as we can and by helping each other, we reach that goal.

MR. TRAINOR: Thank you.

And, Mr. Clark?

MR. CLARK: We're taking a multifaceted approach. First

of all, we're not giving up on the conversation of what the adequate resources are in order to ensure higher level of safety in the gas systems. We're having robust discussions across the state in that regard, but we're also -- we've undertaken a rulemaking at the Commission where we're taking a look, essentially, at the rate making aspects. We're taking a look at the prescriptive rules and we're also taking a look at performance-based rate -- performance-based safety approach so that we can have a comprehensive system, if you will, that will more adequately ensure a higher level of safety amongst the gas operators in the State of California.

Another aspect of what we're doing is we've undertaken a rulemaking to determine whether or not the mobile home parks where we spend a considerable amount of time doing inspections, whether or not those master metered mobile home parks should be, in fact, absorbed by the utilities instead so the utilities are responsible for the safety of those systems rather than each owner of each particular master metered mobile home park having to have a trained and qualified operator and having to know how the system works and the whole nine yards.

It is a huge challenge for us, however, to implement the distribution integrity management, the transmission integrity management and all that sort of thing, but we are taking a comprehensive approach. We're also, in terms of sharing data, we have very good information in our databases, databases built by

our engineers who also do the inspective work and we're looking at ways that we can bring that data together to be able to trend going out, looking into the future. Recently, we've begun trending, going out into the future so we can more target our investigative inspective efforts.

MR. TRAINOR: Thank you, Mr. Clark.

We have about five minutes left. I'll give the balance of time back to Mr. Chhatre and Mr. Nicholson.

MR. CHHATRE: Thanks. I have a question both for Ms. Daugherty and Mr. Lee. Yesterday, PG&E told us that when the information is not available they are -- or is unknown, they are taking "most conservative values." My question to both of you as regulators here is, if the (indiscernible) itself is unknown, what is the most conservative value? I'll start with you, Mr. Lee.

MR. LEE: So can you restate that please?

MR. CHHATRE: Okay. Yesterday, during the interviews, PG&E told us that on their sheets, when the information is not available or is unknown, they take "most conservative value." And my question is if an operator does not know what kind of pipe they have in the ground, what is the most conservative value?

MR. LEE: Yes. That was -- yeah. That was actually before the San Bruno incident and after the fact or in light of the San Bruno event, it's different now. It's -- that would change.

MR. CHHATRE: I don't believe you answered my question,

but I'll go to Ms. Daugherty if PHMSA has any --

MS. DAUGHERTY: In a situation where a pipeline operator does not know what they're dealing with, the general premise that you need to be conservative is kind of obvious. If you don't know what you have, you must choose the most conservative value.

Now having said that, identifying what that actually means would be challenging. You might look at what available information is out there, what it might likely mean, but as was mentioned yesterday, you would need to add in another safety factor. There's nothing in the regulations that I'm aware of that would specifically state how you would get to that. We would expect an operator to provide a technical engineering justification on how they arrived at that decision. So it's not a simple thing of saying well, we're just going to assume we have this value. No. You must provide why you arrived at that value.

MR. CHHATRE: I want to still go to (indiscernible) because I don't believe I got answers from either of you. And my question is if a person does not know what material they have in the ground -- again, I'll repeat my question again -- what is the most conservative value and how long they can keep doing that?

MS. DAUGHERTY: I'm not really sure how to answer that question. If someone does not know what they have in the ground, then they have to figure out a way of either determining what they have in the ground based on good, technical engineering justification. Maybe they dig it up and examine it. Maybe they

have other information that would allow them to apply a safety factor. But if you're looking for a value, I can't provide what a minimum value might be.

MR. CHHATRE: As the regulation states right now?

MS. DAUGHERTY: Correct.

MR. CHHATRE: Correct? And how long the regulation allows the operator to continue doing this. I mean, the way I look at PG&E, Line 132, almost seven years passed by and you still have unknown values in seven or eight years.

MS. DAUGHERTY: I don't want to -- what I would --

MR. CHHATRE: Mr. Lee --

MS. DAUGHERTY: -- say is, on the federal lines, we would expect the operator to provide a technical justification. I can't speak to seven years or however long. I would say if there is an unknown, they must be able to justify how they got to it.

MR. CHHATRE: So if I have a 30-inch pipe, I do not know I have (indiscernible) in them, I do not know I have pups in them and I do not know what material I have, to me, the most conservative value is probably the lowest grade steel that comes in with the lowest steal grade factor that comes in and with all the lowest values, has that been done, Mr. Lee, in Line 132's case?

MR. LEE: No, I don't believe so.

MR. CHHATRE: That's all for me. Thank you much.

Madam Chairman, the Technical Panel is done.

CHAIRMAN HERSMAN: Thank you very much, Mr. Chhatre. We're going to take a 15 minute break and we'll come back at 2:45.

(Off the record.)

(On the record.)

CHAIRMAN HERSMAN: If everybody could take their seats, we're about to resume.

And we'll begin with the parties questioning the fourth panel and we'll begin with the City of San Bruno.

MS. JACKSON: Thank you, Madam Chair.

This question is directed to PHMSA, whoever is best situated to answer. Yesterday, a member of the PG&E witness panel acknowledged that, in essence, age does matter when it comes to pipelines. How do you determine if a pipeline operator adequately addressed in its Integrity Management Program, characteristics that may be associated with age of a pipeline? And obviously, we have a particular interest in the situation that occurred in San Bruno where the age of the pipeline suggested that perhaps the records were not correct and/or that the inspections programs did not adequately identify the situation.

MS. DAUGHERTY: You know, when an operator looks at its records, it has the responsibility of assuring that those records are as good as they can be. When it is conducting its Integrity Management Plan assessment, it had the responsibility of assuring that it has the best information possible. And when it makes its decisions on the threats to assess, it must base that on the best

information available and put in safety precautions.

The whole part of integrity management, the whole philosophy is to identify the risks and the threats and to assess for them. And then once you know what you're dealing with, you address those. You must have good information and your plan must be based on the best information of best integration of data that you can get and you apply good safety factors into that.

When you assess your pipeline and you find issues, you must repair them, then you must apply that to the rest of your line. So -- and it's about learning, taking the information you learn and putting it back into your plan. You apply mitigative and preventive measures, but one of the big issues that we are looking at right now is whether operators are doing a good job on risk assessment, whether they understand what they have.

You asked specifically about age. There are some things we know about age. We do know that pipeline age is not necessarily the only factor to look at. You may have an older pipeline that is in very good shape, but on the other hand, if there are unknowns, if there is -- there's a type of pipe called a pre-70 low frequency ERW pipe that we know can be problematical. If you have that type of pipe, then we would expect you to do some really hard thinking about how you're going to assess that pipe. So you do have to factor that into your integrity management.

MS. JACKSON: I'm assuming by your answer that PHMSA does look then, in terms of the audit or the overview or rather,

the CPUC should be looking for indication in the Integrity Management Program that those issues are adequately addressed?

MS. DAUGHERTY: Yes. Every operator is expected to thoroughly understand their system. Every pipeline system is unique. One of the benefits of the Integrity Management Program is that it is not a cookie cutter regulation. It does not have a one-size-fits-all answer to integrity issues. It says you must know your pipe and you must assess for the threats to that pipe, whether they be very unique or not, and then you must address them.

MS. JACKSON: Thank you. Again, for the PHMSA panel member best able to answer the question, there was discussion yesterday regarding control room operational procedures and other factors associated with controls and maintenance that may have had an impact or an effect with regard to this accident. How do you determine if these -- if the operator's operational procedures and procedural factors are adequately addressed within an operator's Integrity Management Program?

MS. DAUGHERTY: Could you please restate that? I think I got lost.

MS. JACKSON: So how do you determine if operational procedures such as control room operations and/or maintenance procedures are adequately addressed within an operator's Integrity Management Program?

MS. DAUGHERTY: Okay. Would you like to --

MR. BARRETT: I can try. The -- we have a control room management regulation that's coming out that's specifically designed to look at control room issues. The Integrity Management Program really looks towards threats to a pipeline. If there was problems with the control equipment or something like that that could come under an equipment threat under the Integrity Management Plan, if there was training where there had been issues for that type of thing. So that's where we would look at it.

MS. JACKSON: Thank you. And this question is for the PUC. Considering the population density in the area, the intensity of the fire and the length of time that it took to isolate the ruptured section, will the PUC be considering the requirement or encouragement of automatic shutoff valves, remote control valves and/or improved pressure monitoring systems in the pipeline?

MR. CLARK: The answer is yes. We have already begun that. The Commission ordered out a rulemaking on February 24th, sets two phases to it, a Phase A and a Phase B. And in Phase A, we talk about rules for construction, especially with respect to remotely controlled valves and automatic shutoff valves.

MS. JACKSON: Okay. Thank you.

MR. CLARK: You're welcome.

CHAIRMAN HERSMAN: PG&E?

MR. JOHNSON: We have no questions.

CHAIRMAN HERSMAN: IBEW?

MS. MAZZANTI: We have no questions.

CHAIRMAN HERSMAN: PHMSA?

MR. WIESE: Thank you very much. Just have three questions in five minutes. Hopefully we'll be short. To Ms. Daugherty, I would like to ask a question about integrity management. As you and the CPUC know and said, it's one of many different types of inspections, but I would like to ask you to talk a little bit about the regulatory approach and why -- I mean, what's the value of that particular approach?

MS. DAUGHERTY: Integrity management is a performance-based regulation. It is not prescriptive. It is not a cookie cutter regulation. It requires an understanding of pipeline facilities. It requires a comprehensive assessment of the facility. It also incorporates the ideas of risk management where you apply your greatest resources to your greatest risks. It provides additional protections where the greatest risks are to people and to the environment.

As a performance-based regulation, it requires us to -- well, let me back up. Performance-based regulations are very difficult. They are not easy, but sometimes the easy solutions are not the best solutions. It is a difficult regulation, both to implement by operators and to inspect by regulators, but we believe it is worth the outcome and we believe our safety trends are showing that it is effective.

MR. WIESE: Okay. Thank you.

For Mr. Barrett, I would like to ask you just to talk a little bit about the development of the gas integrity management oversight process, your approach, how you prepared and just describe quickly for us, if you will, what a gas integrity management audit might look like.

MR. BARRETT: Okay. Quickly. The Integrity Management Program, once we had a rule out, we gather our senior engineering staff and we partnered with our state, our closest business (indiscernible) state pipeline safety program partners and we developed frequently asked questions, protocols to run through to develop out an implementation plan and program for integrity management.

Integrity management inspections are certainly, as I think our operators would share with you, are not short-lived inspections. They are not a checklist. Their investigative approach to looking at issues and threats and assessments of threats and methodologies that pipeline companies implore to address those threats, they may -- there be inspection team that consists maybe four to five to eight senior inspectors there that are running through a list of the protocols and looking at records and verifying records and looking at methodologies that are applied to the threats and preventing the mitigative measures and follow ups.

So they're not just a quick checklist approach. They're not just looking at procedures. They look at procedures. They

look at the implementation of those procedures and then they actually check the activities in the field on occasion when we have the opportunity, when there's a dig going on or something like that that we can verify what's done there.

So the Integrity Management Program, again, was a joint effort between PHMSA and its state pipeline safety partners. We had several workshops. We also included the industry and review of the FAQs and any of our guidance material that we were pulling together, trying to address issues for the implementation of this rule. It's a very extensive integrity rule that we have. I think it's probably one of the most significant rulemakings that we have with PHMSA.

MR. WIESE: Great. Thanks.

And then lastly, a question for Mr. Metro. In terms of -- I'm anticipating then, your recommendation coming to us shortly, but would like to just ask if you would, we've had a long association between the states and PHMSA, the federal government. I wonder if you would talk just a little bit about how that plays out during the course of the year. Next year, you get to be the chairman, if you're not already, and maybe you could enlighten us on that.

MR. METRO: First, let me address your first point in that, the process of NAPSR in proposing something to PHMSA works through the resolution process for all 48 states and we only meet once a year. And we'll try to accelerate that process. They've

got a resolution to PHMSA addressing the MAOP for grandfathered pipes.

On the communication portion of it, as with all partnerships, there's been rocky periods in which there has been strained relationships. Over the last five years, both parties, both partners have worked very hard to develop a very good communication between each other and worked very hard to meet quite frequently. For example, we meet with PHMSA in all the regional meetings, which, there are five. We meet at the annual meeting. We have monthly calls with Jeff with the Executive Board and NAPSR and we meet in various ways with Zack and Linda and through different committees that we have. So I think the communication right now is at an all time high and the partnership is as strong as ever.

CHAIRMAN HERSMAN: CPUC?

MR. CLANON: Thank you. A quick one for Mr. Metro. I'll let the microphone catch up. A quick one for Mr. Metro there. We talked a couple of times and also, just in the last exchange about prescriptive rules versus performance-based measures and regulation. Can you flesh out what those two terms mean and then I'll have a follow-up?

MR. METRO: Well, performance-based measures are more measures that we look at. We study and analyze how the utility performs under certain thresholds. Prescriptive measures are more of a checklist of, you must do this, this, this and this. Now

when we talk in terms of integrity management, they are performance-based and from the NAPSR point of view, we believe that the performance-based measures are working.

We need to study whether there's -- further enhancements are needed, but if you look at the number of anomalies that have been detected through performance-based measures, if you look at the number of repairs made to pipeline, there would be a very strong argument that performance-based measures are working. However, if you look at recordkeeping, that might be one area in which we need to get away from performance-based measures and look at prescriptive measures that you must keep this, this, this and this record.

MR. CLANON: Thank you. And same question for Ms. Daugherty and I wonder whether you agree with that and in particular, the notion of finding the right balance between prescriptive and performance-based in this area?

MS. DAUGHERTY: Yes. I agree. I believe that Paul stated it very well, that there is a balance and we have found that performance-based regulations do have good outcomes if they are properly applied and the oversight is strong and effective. There are gaps that we're looking at. There are weaknesses and we are addressing those. So yes, I thought it was very well said. I do believe that the recordkeeping issue, as identified in the advisory, that's something we need to look at.

MR. CLANON: Anything else, other than recordkeeping

that pops in your -- up to the top of your list on things where the balance might tilt towards prescriptive?

MS. DAUGHERTY: I would have to think about that.

MR. CLANON: Anyone else on the panel want to suggest anything else? Yeah. How's the performance of the microphone doing now?

CHAIRMAN HERSMAN: Perhaps prescriptive rule for microphones rather than performance-based would be better.

MS. HALLIGAN: And of course, in the process, I think I've forgotten what I was going to add.

MS. DAUGHERTY: Do you want a minute? Because I have something to add.

MS. HALLIGAN: Yeah.

CHAIRMAN HERSMAN: Okay. We were talking about areas where you thought prescriptive might be better than performance-based.

MS. DAUGHERTY: One of the items -- I'll jump in because I though -- while she's recollecting her thoughts. One of the items that we do want to have --

MR. CLANON: We can't hear you. I'm sorry.

MS. DAUGHERTY: She did it. Okay. One of the items that we do believe we need to have more prescriptive requirements is on data reporting. You know, we collect a lot of data. Are we collecting the right data is the question. Can we use more? We need to know more about the infrastructure. I am sure that there

will be people that will say we collect plenty, that we collect too much and we aren't using what we have. I believe that that is probably not correct, that we do have data. We need to collect maybe different data. We need to have better understanding of our infrastructure. The infrastructure is changing and in order to assess the risks, we need to understand it very well.

MS. HALLIGAN: Thank you. The one thing I was going to add was that the rules, whether it is additional prescriptive rules or additional performance rules is that I think they need to look more at making sure that there's continuous improvement included within the rule. And so there's not the opportunity to just sit with grandfathered pipes and not make an effort to either make them pig-able or go and look at whether they need to be replaced. I think that element of continuous improvement needs to be really strongly included in any performance-based rule and if it needs to be included by adding a few other prescriptive rules, that's one way of doing it, or just make sure that it's strengthened in a performance-based role.

MR. CLANON: And thank you, that's all I have.

CHAIRMAN HERSMAN: Member Sumwalt?

MR. SUMWALT: Thank you.

Ms. Daugherty, I know we're talking about integrity management systems in the global sense. Let me come in and focus on the San Bruno event.

You mentioned before the break that if someone doesn't

know what's in the ground, they need to find out what's in the ground and certainly, that sounds reasonable. And I think one of the things you mentioned was they dig it up and look at it. In the case of the San Bruno pipe, if they would have dug it up and looked at it, they wouldn't have seen anything abnormal because, as I understand it, it was a -- we're looking at an internal seam weld that was defective. And so, in this case, your Integrity Management Program is only as good as the data in which you populate it with, right?

MS. DAUGHERTY: That is correct.

MR. SUMWALT: So if they -- so explain to me -- bring it down to San Bruno and explain how -- I mean, like I said, the Integrity Management Program is only as good as the information in it, so how could a different integrity management system have made any difference in this -- in the outcome of this event?

MS. DAUGHERTY: That's a good question. It basically goes to what -- how do you know what you don't know? I've heard that stated earlier and it's a very good question.

With the San Bruno situation, if they had known and they excavated, perhaps they would have seen the multiple -- we call them pups or the different -- they would have seen that the pipe was constructed somewhat in an unusual manner and they may have done further research. To get to the internal seam, it's a very good question. I don't know how you would do it, other than observing the external characteristics of the pipe that might

cause you to say look, this is unusual, it's not -- it doesn't match what our records say and we need to figure out what we've got here. So the question is valid.

MR. SUMWALT: And thank you. And so tomorrow, we will be talking about industry-wide technology which may be some of the answer.

MS. DAUGHERTY: Yes.

MR. SUMWALT: So thank you very much for your answer.

MS. DAUGHERTY: Thanks.

CHAIRMAN HERSMAN: Member Weener.

DR. WEENER: My background, of course, is not in pipelines. It's in aviation engineering, so if you'll pardon a naive question, and this is probably for Ms. Daugherty, there's been some references to the notion of bringing a pipeline up to a certain high pressure at least once every five years. What's the reason for that?

MS. DAUGHERTY: Under the federal regulations, there is no requirement for an operator to raise the pressure to MAOP to maintain that MAOP. My understanding, in short, is that PG&E may have raised the pressure in order to establish an MOP level such that if a new HCA was identified, they would not have to do a seam assessment.

DR. WEENER: So in a sense then, this is a pressure test?

MS. DAUGHERTY: I would not consider it a pressure test.

A pressure test, under the federal regulations, has very specific parameters. It requires that you bring the pipe to a certain level of stress and a certain duration.

DR. WEENER: So if this is not a pressure test, then it's kind of the aeronautical equivalent of seeing if I can get an old airplane up to max never exceed speed and see if it still stays together?

MS. DAUGHERTY: I would hope not. The -- like I said, the pipeline itself is not -- or the operator is not required to pressure the pipe to the MAOP to maintain the MAOP. For example, I'll use an analogy. If the speed limit is 65, you can drive your car at 55, but you may go up to 65. You cannot exceed 65, but you may go up to it. You are not required to occasionally drive your car to 65 to show that it can go 65.

DR. WEENER: Okay. Then the requirement is there just to avoid having to do another test in case you have the environment around the pipeline changed to a high consequence area? Is that what I -- did I understand that right?

MS. DAUGHERTY: My understanding is that the company chose to raise the pressure to establish the high MOP pressure at MAOP so that if a new HCA was identified, that it could use that pressure as the MAOP without doing a seam assessment.

Let me see if I can help. The regulation says that when a new HCA is identified, you must look back five years to determine the highest MOP that that line segment has seen. If

you've exceeded that, then you must do a seam assessment. The trigger date is the date of when you identify an HCA. So as I understand the materials presented, PG&E said we may have an HCA identified next year or two years down the road. Therefore, we want to establish our MOP, we want to bring it up so that -- to the MAOP level such that that is the benchmark.

DR. WEENER: Okay. Thank you.

CHAIRMAN HERSMAN: Member Rosekind?

DR. ROSEKIND: So we're going to go from the pipeline up to the country. We'll start on the fed side because I have one question I would like to do from a federal perspective, as well as state.

One of the advantages of performance-based programs, of course, is that intrinsically, you should be able to measure them. And so Mr. Barrett started by talking about sort of the 100 percent in California, PUC being at 90 percent. Is there a scorecard or report card based on audits or other evaluations of the state PUCs that you maintain to have a sense? Because I'm working toward, I hope, a sense of what is sort of the state of the country's PUCs.

MR. BARRETT: Sure. We do a scoring document each year where we aggregate the score based on the information that they have sent us or jurisdictions, their minimum training and those sorts of things with the program evaluation. We use that score to distribute the grant funding each year. So yes, we do have scores

for each individual state. You'll find that those scores are in the 90s to the high 90s.

DR. ROSEKIND: So give a sense of -- and I heard what you just said, but is there an average, a standard deviation? Where are these state PUCs, basically, and sort of how we're doing as a country?

MR. BARRETT: As a country, I say that we're doing well. Your state pipeline safety programs are certainly meeting, you know, the scores, I think, or primarily, probably from 97 to 100 unless there's some problem with legislation like the PUC's experiencing, where they don't have full safety authority like PHMSA would have over their operators. So we hit them pretty hard for that.

But the -- as the nation goes, our state pipeline safety programs are dedicated. The folks are -- they take the same training that our federal inspectors take at our Training Qualifications Center in Oklahoma City at TNQ. And they work with us, you know, hand in glove. You know, we try to support them in any questions or issues or investigations that they have underway.

DR. ROSEKIND: So I mean, based on that, do you have cutoffs for when somebody's not doing sort of up to --

MR. BARRETT: We have.

DR. ROSEKIND: -- (indiscernible) --

MR. BARRETT: You know, the only states that are not in the Pipeline Safety Program are Alaska and Hawaii. Hawaii was in

the Pipeline Safety Program back in the 90s -- 80s into early 90s and in '95, we decertified that state for failure to continue to do inspections. We worked with them. We try to support their staff. We -- you know, it's kind of a last resort for us. We would rather work with the state and help develop the state and improve the state's program's performance, but in the case where, you know, they're not doing inspections and we're not seeing, you know, a safety enhanced or results, we can decertify a state.

DR. ROSEKIND: So that's a great answer because basically, there's a cutoff where you're not certified any more, so my concerns of great inflation, having everybody of 97 percent is an accurate portrayal. So you have cutoffs, not that you have to decertify, but if there are areas that people aren't performing, the state PUCs, that's --

MR. BARRETT: It's typically not based upon the scores. I mean, the scores would be indicative of that. They would go down if you fail to -- if you stop doing inspections and stop going to training and stop doing the things, obviously, you would score very low. So we don't have an established score that's a cutoff, but we do look at the criteria in the form, we look at what our total program goals are and if, you know, you're not meeting those, then we would decertify a state.

It's only happened once in many, many years. Like I said, the program's been in since 1971. Our pipeline safety state programs perform well. As NTSB recognized earlier in the opening,

that they accept their investigative reports when they're strapped for staff to do those sort of things. So I think that speaks well.

DR. ROSEKIND: So besides the overall score, there are flags for you though, to basically intervene when needed --

MR. BARRETT: Yes.

DR. ROSEKIND: -- to make sure they bring them up

On the other side, because there's an interesting, if not articulate discussion about performance-based versus prescriptive, one of the challenge, of course, with prescriptive is the check the list sort of version of rules. And since I've been holding this from the last panel, you know, we're hearing about public awareness and there are 12 items of what's effective. And then we had an example here of, you know, yeah, we sent out surveys and had 20 people of 15,000 respond, that's the kind of thing that could end up on a checklist that just says we did surveys.

So, you know, performance-based means have an effective evaluation of whether or no your program works right, not just that you sent things out. Are those, again, performance-based quantified in how you evaluate these programs?

MS. DAUGHERTY: Definitely. We would agree with you that public awareness is a performance-based regulation. You must be effective. That's the simple answer. There are many ways that you can be effective. You just have to figure out what those are

for your designated audience.

We heard earlier from the panel that they were using a survey technique that it doesn't appear was effective. We would have expected them to identify that as ineffective and to determine what would be more effective.

DR. ROSEKIND: And --

MS. DAUGHERTY: There are many options.

DR. ROSEKIND: And since we're out of time and maybe, on the whip around here, I'll get the state part. But in that realm, you know, waiting for them to say it wasn't effective, that's why I was asking about the scorecard. Because, you know, on one hand, it's on your list, demonstrate an effective awareness program and I think this gets to some of the concern about the self assessment part, which is, you know, the way we heard it earlier, we were doing a good job with that survey, doing a bunch of things. When we look at it from another perspective, maybe it wasn't. So I mean, their assessment may be different than your taking a look at it and saying that doesn't meet our criteria of what effective should be.

MS. DAUGHERTY: That is part of our job as regulators, to look at what the company is achieving and to make a judgment on whether that, in fact, does meet the requirements of the regulation and whether it is having an impact. Unfortunately, as regulators, sometimes the performance measures and the metrics we use to measure effectiveness are long distance. They look down

the road. So if you were to ask us today to measure the effectiveness of a rule that went into effect a short time before, it would be difficult to do.

DR. ROSEKIND: And that -- which, again, is -- I'm sorry. But I think it's not -- that's why I say it's not so much the rule part, but performance-based programs give you another avenue to quantify those and in a more short-term basis, determine if they're meeting the objectives that you've set.

MS. DAUGHERTY: Definitely.

DR. ROSEKIND: Thank you.

CHAIRMAN HERSMAN: Vice Chairman?

VICE CHAIRMAN HART: Thank you.

Yesterday, we asked PG&E if they were exchanging notes with other industries regarding safety management and risk management processes. I would have the same question for the regulators and overseers.

And I would start with the PUC and ask, are you -- do you exchange notes with either other regulatory oversight agencies in California or with other utilities commissions in other states regarding what are effective means of oversight, what's not working so well and those kinds of things? Just because I know, in these tight times, you're looking for the most effective and efficient way to do it. Do you exchange notes with others in order to help do that?

MR. CLARK: Yes, absolutely. We're very active. Okay.

Now mine's not working.

We're very active with NAPSR, National Association of Pipeline Safety Representatives. We talked with the state fire marshal. We're very active. We talk with all the different states. Our program manager, Mr. Raffy Stepnian, spends a lot of time talking with the other states about what they're experiencing and interfacing with PHMSA also.

VICE CHAIRMAN HART: And do you find that helps you do it better?

MR. CLARK: Absolutely. Yes. Best practices.

VICE CHAIRMAN HART: Same question for PHMSA except I'm only going to ask half the question because I know about the exchanging notes with other industries because I see Jeff Wiese at these multi industry programs all the time, so I know you're doing that. But I would ask the same question about are -- do you exchange notes with other federal regulators overseers regarding most effective way and what's working, what's not working.

MS. DAUGHERTY: Yes, we do. As a matter of fact, we recently have met with some of our other counterparts. We met with EPA and Coast Guard to look at certain provisions of our regulations to see if we could benefit from each other, the knowledge. We have also looked in our enforcement programs. We've looked across at other federal agencies to determine how effective our programs are compared to other agency programs. We look across the Department of Transportation and see what other

modes have used and how we can learn from them.

I would also say that, in some cases where we have crossed functional jurisdictional lines, for example FERC. FERC inspects LNG facilities. We do as well. And so in those cases, I myself have participated on a joint inspection with FERC to learn from them and to see what they brought to the table that we could benefit and what we could share with them that they would benefit by.

VICE CHAIRMAN HART: So are you finding that exchange to be helpful?

MS. DAUGHERTY: It is useful. I do believe we could probably benefits from doing even more.

VICE CHAIRMAN HART: Thank you.

CHAIRMAN HERSMAN: Can we go back to basics a little bit and how an operator establishes an MAOP and how that's approved?

MR. BARRETT: Under 619 -- 192.619 of regulations and you know, I'm going to have to try to do this from memory hopefully. There are four options under 619(a) that you can -- you have to have the pipe materials and pipe specs. You have to have a pressure test. You have to have the five-year window and the fourth option is the most appropriate pressure based on the performance history that you have available.

If you don't have all four of those things, basically, you have to opt down to 619(c), which is the grandfather clause, which is the five-year window from 1965 to 1970. That also

invokes the class location factors that you have to consider in that, so that throws you back up to having to have design factors to know what your pipe is or to address the earlier question, you can assume the most restrictive design factors on your pipes. So if you didn't know what the grade was of your pipe, you could assume 24,000 for the lowest grade that was available. And that's -- you know, the lowest of those is your maximum allowable operating pressure.

CHAIRMAN HERSMAN: So does that indicate that this line for PG&E can't have a higher operating pressure than it did in the 60s? It has to be at least that low or lower based on other factors that are considered here?

MR. BARRETT: The maximum allowable operating pressure is locked in, is it. That's as high as you can go with that unless you go through an up-rating to increase that maximum allowable operating pressure and that usually involves a pressure test.

CHAIRMAN HERSMAN: Okay. So their operating pressure is as it has been for some 40 plus years and it can go no higher unless they do additional measures, but it can go lower if they identify weaknesses or defects or the CPUC requires them to lower it for a regulatory reason?

MR. BARRETT: That's correct.

CHAIRMAN HERSMAN: Okay. So let's go back to this issue because Member Weener was probing it a little bit and I just want

to follow up because I think it's important. It seemed to me that CPUC and PHMSA both had kind of a different position than PG&E had on that five-year test with the HCA identification issues and I want to understand why. When they did this to establish what the MAOP MOP could be for newly identified HCAs and we started looking at this, is this something that you had seen before? CPUC?

MR. CLARK: No. We had not seen it before.

CHAIRMAN HERSMAN: PHMSA?

MS. DAUGHERTY: No, we had not seen that before. We had definitely not seen -- it is the first time we had heard of operators doing this.

CHAIRMAN HERSMAN: Okay. And, Mr. Metro, maybe if I can ask you because you have some awareness of some -- potentially, some other operators, is this something that other pipeline operators have done traditionally? Is PG&E, you know, in the middle of the pack or are they an anomaly here?

MR. METRO: As far as NAPSR's concerned, it's an anomaly. We haven't seen other states report anything similar to this.

CHAIRMAN HERSMAN: Okay. And if we can go back to hydro testing, and I know I don't have a lot of time here, but I just want to talk about the whole issue of doing hydrostatic testing from the regulator perspective.

This is something that obviously was a requirement for new lines back in the early 1970s, so it's been around for a long

time, but there are definitely pros and cons associated with hydrostatic testing and we understand, particularly on a distribution system like PG&E. So can you just give us, from the regulator's perspective, some pros and cons? And I know we'll get a little bit more tomorrow with the panel tomorrow. Please, CPUC and then PHMSA.

MR. CLARK: Well, the pros, of course, are that you know beyond the typical operating pressure and the maximum allowable operating pressure of the pipeline, that it's not going to fail. The downside is the possibility of, and I'm not a metallurgist by any stretch of the imagination, but I have discussed it with some folks who are quite expert in this regard. There's a small possibility that you might create an anomaly in the pipe by raising the pressure as high as you do and then bringing it back down.

Of course the other part, the other downside is that the line has to be taken out of service and that has consequences in terms of being able to deliver gas to peoples homes and to hospitals and that sort of thing, where there's the other public -- the other aspect of public safety.

And then the final concern, as I understand it, is trying to get the water out of the pipe. There's a lot of time and effort spent to keep water from getting into pipes because it creates internal corrosion and so you want to make sure that you get all of that out of there. Again, these -- the people who

actually operate these systems have much more expertise than I have, but I've talked to a number of people and I think those are, in sum, the issues that we face.

CHAIRMAN HERSMAN: And, PHMSA, if you have anything different to add on that?

MS. DAUGHERTY: I would suggest that we have found hydrostatic testing to be of great value on the interstate long lines. When we have found defects, specifically seam defects, we have often ordered operators to conduct hydrostatic testing.

As Richard mentioned, there are pros and cons. Depending on the type of anomaly that you have in your line, you may be able to remove defects, but at the same time, if you are not using a specific protocol in how you conduct the testing, you may grow defects until right before their failure stage such that it can create issues. So hydrostatic testing has definite benefits, but it has definite cons and you need to consider that. You do not want to eliminate one problem and create another one that you have a harder time detecting.

CHAIRMAN HERSMAN: Okay. And from a regulatory perspective, is there any other alternative to hydrostatic testing to be able to provide confidence in a line?

MS. DAUGHERTY: There are various types of assessments you can do depending on the defect. They are successful to differing degrees. You'll hear tomorrow in the panel, some of the challenges that we have and I think they've come out in some of

the discussion. Hydrostatic testing, pressure testing is one of the old forms of destructive testing a pipe. You pressure it such that if there are any anomalies, they blow out, okay, and it's water coming out, so it's relatively safe. It's destructive. What that does not tell you is what is left in the line.

So you may have removed all of the harmful anomalies or you may have grown some harmful anomalies that, if you had not pressure tested them, may have been stable, so there's your balance. You ask for alternatives. Internal inspection tools, there are certain tools that will detect cracks in seams, but they can only be used under certain circumstances in certain lines. If you have lines with varying diameters, those tools may not function effectively.

So you have to weigh the benefits of each type of assessment and figure out what your overall risk is and the overall benefit of the tool. And I would not -- this may be stretching a little bit, but I think people need to keep in mind, in addition to re-qualifying pipe through these types of tools, through repair or rehabilitation, there is always an alternative of replacement.

CHAIRMAN HERSMAN: And maybe, unless you want to add something to that, CPUC, I think, Ms. Halligan, you were really focused on this comment earlier and I know your mic hasn't worked for you. But have we seen proactive action on any of these alternatives to hydrostatic testing in California.

MS. HALLIGAN: Well, I think what we have found in PG&E's service territory at least, is that we haven't see an aggressive effort to make their pipes pig-able, if you will, and we haven't seen a program to take the grandfathered pipe and either make it -- either hydro test it or replace it. We haven't seen, in the Integrity Management Program, thus far, any aggressive efforts in those areas.

CHAIRMAN HERSMAN: Okay. So there's definitely pros and cons to all of the tools that are at our disposal, but do you see cons with just leaving status quo and not doing any of the above?

MS. HALLIGAN: Yes, clearly. I mean, the Commission is at a point now where we've ordered PG&E to reduce pressure by 20 percent on several of its lines and they're undergoing an MAOP validation effort that you've recommended that we have ordered them to do. And depending on what the results of that are, we'll be looking at taking additional actions, either requiring pressure testing or requiring a replacement program or perhaps other methods, but --

CHAIRMAN HERSMAN: Okay. Thank you very much.

We actually are doing really good. We're ahead of schedule. So I'll turn back to the Tech Panel for a follow-up round of questions and then we'll go through the parties and the Board of Inquiry.

MR. TRAINOR: I have a question for Ms. Daugherty. A few minutes ago, you mentioned the need for prescriptive data. I

think it was in response to Member Rosekind's question. And you mentioned data recording as an example of where more prescriptive standards might be necessary. My question to you is, when you're talking about the need for changing our posted data collection, are you thinking specifically of data collected by the operator or are you also addressing data collected by the regulator?

MS. DAUGHERTY: I think we're good. I would say that we need to look at both areas. We found, through your investigation, through our own investigation of various accidents and incidents, that perhaps operators do not have access to the data that they should have. That's why we issued the advisory, based on your recommendation. It is an important issue. If you found a risk assessment based on data, then you need to have the best data available. Now having said that, you can't create data that you -- from the past. You can't create records of something you -- that are gone. Yes?

MR. TRAINOR: I understand. But what I'm trying to get to is you mentioned that, as a regulator, you need to determine whether the operators are doing a good job. And it seems to me that what we've discussed has been looking at what the operators are collecting. And we found, through earlier today, with the mailing of the survey, for example, this did not appear to be a very productive effort based on the number of responses received. It seems to me that the regulator can also collect data that --

MS. DAUGHERTY: I would agree --

MR. TRAINOR: -- would indicate whether the operators are doing an effective job.

MS. DAUGHERTY: There are two aspects to that. There is the one -- the aspect that the operator collects data that we review during an inspection for very specific programs, perhaps a public awareness program. The other aspect is PHMSA and our state partners need to have data in order to accurately assess the risks on the national infrastructure and look at trends.

MR. TRAINOR: Can you give me an example of --

MS. DAUGHERTY: Yes.

MR. TRAINOR: -- such data?

MS. DAUGHERTY: Actually, there was one that was brought up. I was asked the question, if we had specific data on the number of miles that had been hydrostatically pressure tested and I said I did not know. I've later been told that we don't have that information. So that is a piece of information that might be useful. It might help us better assess the nation's infrastructure.

MR. TRAINOR: Thank you.

MR. CHHATRE: I have a question, both for CPUC and Ms. Daugherty from PHMSA. And this refers to Mr. Salas's statement yesterday regarding RCVs and ASV and one comment was regarding the technical hurdles using these valves. Does CPUC or PHMSA have any comments on them? Have you used -- any other operators used those successfully or unsuccessfully?

MS. DAUGHERTY: I would like to comment on that. I would mention that we have recently issued an ANPRM on our liquid side and will likely be issuing an ANPRM on the gas side that asks that very question; should ASVs or RCVs have broader use and should the government require the installation of those and where should those be installed. Our integrity management rules led the way with the rulemaking that said operators should consider those valves and the placement of those to protect HCAs. Now we are coming back to the broader stakeholder audience and saying we need to revisit this and determine if we need to require those in a larger setting. So yes, we believe those are very important.

MR. CLARK: And at the PUC, this is very much, as I indicated in my answer to the city, this is very much a high priority item for us in our rulemaking to consider whether or not we should require the installations of automatic shutoff valves or remotely controlled valves. As a matter of fact, one of the first issues that we addressed in this regard was to order PG&E to undertake a study of where they might place automatic or remotely controlled valves. And we did that very early on, soon after the pipeline failure in San Bruno.

MR. CHHATRE: I guess we are running out of time. We are okay? Good.

Does PHMSA or CPUC see any technical problems with these valves that makes their use questionable?

MR. CLARK: That's an unknown for us at this point.

That's why we're putting it through a rulemaking to examine it thoroughly.

MR. CHHATRE: Thank you. I'll pass on to Mr. Nicholson at this time.

MR. NICHOLSON: I would like to follow up on the same subject, really, and get Mr. Metro's input maybe on ASVs and RCV use. Are other states exceeding the federal code right now and mandating the use of these valves?

MR. METRO: I don't know the data on that. I can't tell you off the top of my head. I know just looking at the issue from the 30,000 foot level is that the valves, while they are a very good idea and are needed, there's appropriate places to install these valves and appropriate conditions. And we need a feasibility study done to determine those thresholds, where the proper places are and what the appropriate places are for these valves to be installed.

MR. NICHOLSON: And, Ms. Daugherty, I think you answered my question. The last report I saw was 1999 from DOT on ASVs, RCVs. Is there something more recent or is it -- you're just going straight into the rulemaking?

MS. DAUGHERTY: To my recollection, there is not anything more recent, other than internal reviews and discussion and perhaps discussion with some of our stakeholders. I don't think there's a formal report.

I would say that when we go into the ANPRM process, we

do trigger the full rulemaking process, which is, as those of you that have dealt with it know, it's quite a system. You have to go through -- you propose the idea. Sometimes the best solutions do not make it through simply because of the cost benefit. We can look at, ideally, it would be wonderful if we could replace all older pipe and we could put valves at very, very frequent intervals.

The fact of the matter is, there's a cost to that and whether the American economy can bear it or not, I don't know. That's an issue that will be discussed. When you go through the rulemaking process, we are required to do a cost benefit. That's part of the rulemaking process. So we don't know where that will end up.

MR. NICHOLSON: And actually, a cost benefit was done, I think, in the 1999 report. Is that correct? Okay.

MS. DAUGHERTY: I believe so. I have seen estimates that replacing 50 percent of valves would be very much in the millions, like 600 million. It would be very, very costly. So it's something that we have to consider.

MR. NICHOLSON: Okay. To Mr. Lee, I would ask also, was part of your audit in either 2005 or 2010 a review of the policy memo regarding ASVs and RCVs within PG&E?

MR. LEE: Yes. I believe we looked at it.

MR. NICHOLSON: And was there a finding or penalty?

MR. LEE: No, there wasn't.

MR. NICHOLSON: No, there wasn't. Okay. All right. That's all I have. Anything else?

MR. CHHATRE: Madam Chairman, the Technical Panel has no more questions for the witnesses.

CHAIRMAN HERSMAN: Thank you, Mr. Chhatre.

Do we have parties who have questions? City of San Bruno.

MS. JACKSON: Just a quick follow up on the discussion you were just having regarding replacement of valves. And clearly understanding and recognizing the enormous potential cost, have either of your agencies considered the potential value of rules that might consider system replacement, pipeline replacement as part of a best practice and/or a regulation?

MR. CLARK: Thank you. Certainly, we are looking at that, absolutely. I mean that's part of bringing the ratemaking into more closely aligning the ratemaking with the safety work that's going on, the maintenance and that sort of thing is to take a look at pipeline replacement in particular situations and encourage it when we feel it is necessary.

MS. DAUGHERTY: On the federal side, the regulations do not require full scale replacement of pipelines. However, I will say that we are considering how some of these infrastructure issues can be addressed in the long-term. I would also mention that we have suggested to certain pipeline operators that segments of line that have shown to have been problematical be replaced and

some of those lines are being replaced. So it may not always require a rulemaking solution to obtain good results for the public.

MS. JACKSON: Thank you.

CHAIRMAN HERSMAN: Any other parties requesting another round? PHMSA?

MR. WIESE: Sorry about that. If you allow me --

CHAIRMAN HERSMAN: No need to apologize, Mr. Weise.

MR. WIESE: I always have questions. I would like to follow the line of questioning that the city began there because I think we're very much interested, clearly, as safety regulators, as CPUC and PHMSA would like nothing more and the rest of our state payers -- state partners than have brand new pipeline systems out there. So just interested more in exploring some of the impediments.

And I know the states have been thinking about this a lot, but they have different impediments at a federal level. You know, it goes to, how does a company recover those costs. So I didn't know if Mr. Metro wanted to comment on any kind of innovative approaches he may have seen in different states or work that may be going on at the state level on that?

MR. METRO: Many states have pipeline replacement programs. Now when you talk about putting in valves, there's a limited source of dollars that the states have, so it's -- if they have a lot of cast iron and unprotected bare steal to remove, it's

going to be one or the other. It's going to be very difficult to balance the two and from a risk assessment strategy, I would look at replacing the bare steal and the cast iron first.

MR. WIESE: Great. Thank you.

And then lastly, for Ms. Daugherty -- first of all, I appreciate Vice Chairman Hart's comments that he and Member Sumwalt and I have been in a number of interagency committees together which I always find very fascinating. And NTSB has led the way on a lot of the safety culture initiatives. So I appreciate that, but are there any other forums, Ms. Daugherty, you might want to comment on?

MS. DAUGHERTY: Yes. Thank you for the opportunity to correct my oversight. One of the areas that we are doing -- we're reaching out to is international. There are a lot of countries that have pipeline infrastructure. Some of it's older than ours and so we are reaching out to them. We also hope to have an international forum this summer to pull some of our counterparts from around the world to sit down and talk about how we address some of these infrastructure issues. Thank you.

CHAIRMAN HERSMAN: Thank you. No additional questions from the parties. Member Weener?

DR. WEENER: Yeah. I would like to address this to CPUC. We've talked a lot about the regulations and the operations at the PHMSA level, so I would like to understand how that flows down to the state level. How does -- what regulations -- or what

are the state's regulations relative to PHMSA's regulations in terms of, at the state level? In other words, do you just flow down a copy of them? Do you write your own regulations? What's the relationship?

MR. CLARK: Well, we -- in our general order 112, which was first adopted in 1961, I believe, we set the standards at our level for pressure testing in a number of other areas. When the Department of Transportation first wrote rules with regard to pipeline safety, we changed our general order so that it incorporated those rules and any modifications and updates to those rules. We have the authority at the state level to expand upon those rules and that's what we're doing. We've done it in the past in terms of some recordkeeping issues. We're doing it now much more. We're taking a look at how we can broaden and deepen that effort.

DR. WEENER: Does PHMSA, in any way then, certify the state or are you completely independent?

MR. CLARK: They review our programs and I've forgotten whether we actually have a certification in this program or not. We do, right? Right. I'm sorry. I have so many programs, it's sometimes hard to recall. We do have a certification. Yes.

DR. WEENER: Is this an annual certification?

MR. CLARK: Yes.

DR. WEENER: Okay. Now then, CPUC has an inspector cadre, I presume?

MR. CLARK: Yes.

DR. WEENER: Are these full-time inspectors?

MR. CLARK: Yes.

DR. WEENER: They don't do anything else, other than pipelines?

MR. CLARK: That's the current situation. Yes. We used to have our entire utility safety and reliability branch do electric safety, communication safety and gas safety, but about a year prior to, I think, San Bruno, we decided that we needed to have people specialize in pipeline safety and the other side does electric safety and communication safety.

DR. WEENER: Okay. So these folks then conduct audits and inspections?

MR. CLARK: Yes. And investigations of accidents.

DR. WEENER: And investigations. The audits and inspections, are they a paperwork exercise or are they really, go out and kick the tires?

MR. CLARK: They're both. They're primarily paperwork exercises, however, but we, a number of years ago, across all of our safety programs, said that we need to test what we find. We need to go out and look over the shoulder of the person who's doing the inspection for the utility or the maintenance work for the utility. And if they're an inspector, we need to, one, make sure that they're finding what they're supposed to find. Secondly, that they're doing what they're supposed to do with what

it is that they're finding. So we don't simply rely upon the records that we see. We go out and we verify that that's -- that which we see in the records is that which is happening on the ground.

DR. WEENER: Okay. And then what sort of enforcement capabilities do you have when you see something that you didn't want to see?

MR. CLARK: We have the ability to open an order instituting investigation -- well, we have a -- I should back up a little bit. We have a progressive enforcement scheme that we use or a staged enforcement scheme that we use which begins with telling the operator, and this applies to the electric side as well as the gas side. All of our programs have an escalated enforcement program where we tell them to fix it within a particular time frame and give us a corrective action plan and adhere to that corrective action plan.

If we see that -- either that they're not responding in a timely manner and taking care of their responsibilities or we're seeing a pattern of egregious behavior, then we have the ability to take an enforcement action against them through an order instituting investigation at the commission. We're exploring now, the Pennsylvania model and the Oregon model where they have statutory authority to impose just upon natural gas pipeline operators, specific penalties. It's an issue for us of delegation from the commission to be able to issue a citation.

DR. WEENER: All right. Thank you for clarifying that.

MR. CLARK: You're very welcome.

CHAIRMAN HERSMAN: Member Rosekind?

DR. ROSEKIND: So I thank PHMSA for taking us through auditing evaluation and it's nice to hear the state of the industries of 97 percent. So just to keep this balanced, California PUC, you do these audits. Is there a scorecard, report card? How do they get sort of collated up into some overall look at how an organization is doing and then, can you benchmark that against others in California?

MR. CLARK: Well, in reality, we only have two operators in California. So it's Pacific Gas and Electric and then it's the Sempra Utilities, which are two Southern California Gas and San Diego Gas and Electric. So it's more of a qualitative assessment than it is a quantitative assessment of how each one of the utilities are performing.

And then, in terms of looking out at what other -- the other utilities across the nation are doing, that's an area of improvement for us that PHMSA has requested that we undertake and that was an opportunity for improvement that they pointed out to us in their last audit. And they've agreed to work with us in terms of defining what those criterion are by which we can judge the performance.

DR. ROSEKIND: So you'll be able to take those audits and put them up into a report, again, benchmark within the state

pretty small, but being able even to look at trends in a company over time or to set thresholds of where some kind of intervention or enforcement is required that helps you to quantify those and then, gives you a sense across the country. But right now, that's not really the approach. It's more qualitative.

MR. CLARK: That's with respect to the Integrity Management Program. Now, as I talked about with the other member, we have general order 112 where we do inspections of many, many aspects of the utilities operation and we capture that data in our databases and we do use that to help target our inspective activities. Because, before we go out and do a GO112 audit, we look at what the problems were that we had in the past. We look at any sorts of trends that are developing and then we go out and we do our audit. And again, in our audit, we look at the paperwork and then we test that on the ground as much as we can.

DR. ROSEKIND: So you may have example approaches and models that you're using in other areas that you can transfer over here and quantify that a little bit more --

MR. CLARK: Yes. Absolutely.

DR. ROSEKIND: -- in some way? The last question, and I was curious about this and the Chairman helped sort of clarify it for me, actually. I was wondering what happens when there's sort of a difference between a federal and state perspective on an issue. And what the Chairman helped clarify was, you know, PG&E came with something that nobody had really -- what we're hearing

is, nobody had done before. How does that get addressed and resolved?

MR. CLARK: Well, it's first resolved via good communications with our friends at PHMSA. And we talk about it and then, if we decide that we want to take a different approach at the state level, as long as it doesn't interfere with interstate commerce, we're free to do so.

MS. DAUGHERTY: I would agree. When the state always has the prerogative of implementing regulations that are more stringent than the federal regulations. In fact, that's a great thing. They know the circumstances. So many states adopt the federal regulations directly. Some have more robust and more stringent regulations, which they are entitled to do.

DR. ROSEKIND: Great. Thank you.

CHAIRMAN HERSMAN: That's great because that's exactly the direction I wanted to go in. Can -- states can have more stringent regulations than the federal regulations, but can they have less stringent regulations than the federal regulations?

MS. DAUGHERTY: No.

CHAIRMAN HERSMAN: Okay. So they must at least meet or incorporate those regulations?

MS. DAUGHERTY: That is correct.

CHAIRMAN HERSMAN: Okay. Mr. Metro, how many states actually go beyond the federal regulations in certain areas?

MR. METRO: I don't have that information. That might

be something that PHMSA collects in their certification process.

CHAIRMAN HERSMAN: Okay. PHMSA, any ideas?

MR. BARRETT: We actually do not collect that information, how many states have more stringent, but there has been some surveys that we conducted with the National Association of Pipeline Safety Representatives where I think quite a few or the majority of states have some regulations, usually in the reporting area that's more restrictive than what PHMSA's is.

CHAIRMAN HERSMAN: Okay. And so, for a lot of people watching this, this is an intrastate pipeline and the feds don't really have any jurisdiction here; is that right?

MR. BARRETT: Well, that's not completely true.

CHAIRMAN HERSMAN: Okay.

MR. BARRETT: We certify the states for the safety authority over the intrastate pipeline system. We support their program with grant funding. We evaluate the program. We support them in their inspections, but you know, I think PHMSA could, on a -- for a given incident, for a given isolated thing, that we could take additional action if deemed necessary.

At the current stage, we're working with California PUC. We're working well together. We're going to do some joint work in looking at the risk assessment documents with PG&E. We're going in together. We're not leading that. We're going in as partners in that. So there is -- it's a partnership is what I would leave you with.

CHAIRMAN HERSMAN: Okay. But you all have limited resources. Mr. Clark, you had a conversation with the Technical Panel and we have FTEs, full-time equivalents. You have PYs --

MR. CLARK: Right.

CHAIRMAN HERSMAN: -- you know, person years and so, you have less than 20 PYs that work on pipeline safety.

MR. CLARK: That's correct.

CHAIRMAN HERSMAN: How many FTEs do you have on the federal side with respect to safety inspectors and investigators?

MS. DAUGHERTY: We're currently authorized a little over 200. I think the number is like 206. With, you know, turnover, we're probably just at 200 as far as the entire organization. Roughly half of that or a little over half of that, like 126 are inspectors. Now that is spread throughout our five region offices and -- the inspectors, that is, five region offices and district offices.

I would point out that, according to our statistics, the state programs regulate, roughly, 80 percent of the pipeline mileage simply because of the intrastate facilities and they roughly augment the federal workforce of 200 people by an additional 300.

CHAIRMAN HERSMAN: Okay. So we have about 500 assets nationwide to do oversight of pipelines and pipeline safety activities. And so how much of CPUC's program is supported by federal dollars, Mr. Barrett?

MR. BARRETT: For the calendar year 2009 activities, approximately 63 percent of the total program costs for the program that year was federal dollars. We project -- we're in the middle of looking at the -- and it's a reimbursable grant. The state's calendar year 2010 activities that have currently taken place, they're now putting -- they're sending to us, their end of year program cost. We're reviewing those costs and then we're refunding them. I estimate the California PUC's estimated program of cost reimbursement for calendar year 2010 would be about 63 percent.

CHAIRMAN HERSMAN: Okay. So there's kind of a symbiotic relationship here between the states and the feds. We provide -- the federal government provides resources for the states to conduct their programs. The states are providing data to the federal government for their data collection, recordkeeping, risk assessment type programs. But when we look at what kind of the scope of the regulatory activity is over the years, when you all went to performance-based regulations, you didn't take away any of the prescriptive regulations. You built on what was there before. What you had been doing in the past, this was another layer on that, correct?

What do you all think are the biggest challenges for safety regulators when it comes to oversight of performance-based programs? Where do you all fall down?

MS. DAUGHERTY: I will speak very directly on that.

Performance regulations are not easy to oversee. They're very difficult. They require a judgment call. For decades, our inspectors, mostly engineers, very technically oriented people, were able to go out and evaluate a prescriptive regulation by determining if the operator had checked the number of valves they were supposed to in the time frame.

Now they are required to think in a totally different manner. They have to evaluate the adequacy of an operator's technical justification. It is difficult. It's a difficult way of evaluating a program, but it's effective. And we believe it's effective and we believe the results are showing that. We have had challenges in convincing our own workforce that it's the right way to go. We have, right now, both prescriptive inspections and the performance-based, the integrity management inspections. And as our regulations develop, we will continue to maintain that simply because, as you pointed out, we have a baseline of prescriptive regulations and then we added on the performance on top of that.

So we will always need people that can focus on prescriptive compliance and also, performance base. I hope I answered your question.

CHAIRMAN HERSMAN: Well, maybe what I can do is share with you, a couple of accidents that we've investigated and errors in performance-based oversight where we have seen that there are problems. Maybe you can help me understand how you address these.

We've looked at accidents in which there is a segment of pipeline that should have been identified as an HCA, but it wasn't, by the operator. And so this is, kind of, to me, a little bit similar with the situation that we have with the records here. You're relying on the operator to provide you information and you, at some point, have to accept that information as valid. This goes back to Mr. Clark with the trust but verify. You know, take the information that they give you, but go out and make sure that what they're telling you is the right thing.

It's very difficult, I think, on first instance, a review for you all to identify that, you know, whether its that their underlying documentation isn't there to support the description of the pipe for this segment or whether an area should be an HCA or not. If we get into even more detail, look at the Kingman accident and in that accident, you all identified, in their Integrity Management Program, some things that were not included that were -- that should have been.

You inspected their program for their hydrous ammonia pipe and the inspection revealed that they didn't have a number of things with respect to their baseline assessments. And the risk factors required by regulations that were not addressed by Enterprise, who is the operator, noted the following risk factors were not addressed; seam type, results of previous assessments, defect time and size that the assessment method can detect and defect growth rate. Those were not present.

So you identified. You gave us this plan and all of these required pieces of it were missing. Okay. So that was great. Somebody actually looked at it, they gave them feedback, but they missed one thing. They missed leak history and that wasn't part of their plan. And so then, when we come back, and we have 20/20, hindsight. We're coming in after the fact. Something's already happened. We have plenty of time to take a look at it, but we identify that, here, we missed another one.

And so, with performance-based, it's almost incumbent upon you all to have to find the needle in the haystack, where you've been tripped, where you can't find something and the operator has a lot of ability to put forward information. And you all might not have the resource. Five hundred people for the whole country, that's not very many. That's ten people per state.

MS. DAUGHERTY: Yes.

CHAIRMAN HERSMAN: How can you look at all of those plans and how can you look over everyone's shoulders and how can you verify that everything that they give you, you go and check that that's right?

MS. DAUGHERTY: You raise very good points and we are definitely well aware that it is a challenge to get out to those facilities and find problems.

I would go back and mention that it is not the regulator's responsibility to assure that operators comply. It is the operator's responsibility to assure that they comply. We know

that when we go out and do inspections, we're going to do the most thorough job we can and we're going to look at every issue, but we are limited on resources and we can only spend four or six weeks on an integrity management review.

We may take a team of people and we may scour through records, but there are some familiarity we will not have because we look at, you know, dozens, hundreds of company plans. We will not know them as detailed and in depth as the company personnel, but we do bring a couple of things. We learn from national review or in the case of the states, the state's review of plans. We learn for triggers and flags and we're trained to find those areas. We don't catch them all. I wish we would. We do miss some, but I think the important point is that we have to train our personnel to look for those flags. We have to work side by side with our states and share that information of how to look for -- now, you mentioned performance regulations and I would point to a recent study done on Deepwater Horizon.

And that study looked at what could have been done a little bit better and I believe that the results of that study said look, performance-based regulations are a way we may want to go. They validated the approach that we are taking. I sound repetitive and I apologize, but it's not easy. It's hard, but it's worth the effort. If we can get the job done right, then we'll be focusing our resources on the risks. We'll be addressing threats to the infrastructure and therefore, making the public

safer.

CHAIRMAN HERSMAN: And I see Mr. Clark wants to comment, but can I ask you both to comment on the sanctions when you actually identify through performance-based plans, when you identify deficiencies or defects? What tools do you have to get to a point where you incentivize the operator to not have those defects so that you don't have to take the comb through and find them? Is it the cost of doing business or they -- you know, is there a real disincentive for them to have an error in their plan?

MS. DAUGHERTY: I'll speak to that first and simply because my mic is on. On the federal side, we have a variety of enforcement mechanisms. When we find that an operator has not complied with our rule, we can issue a warning to them, depending on the degree. We can issue a notice of amendment or we can issue a civil penalty. The civil penalties can be quite large and depending on the severity of the violation, we will use those and we have shown that we will do those. We've -- we're in the multi millions of civil penalties. That is not the preferable way.

The preferable way is for an industry to stay in compliance, but we will take action if we find an operator is endangering the public by not complying with rules. Now I would suggest also that in the administration's proposal, we have looked at raising our civil penalty limits such that we can have an even stronger bite if somebody does something wrong.

Now I will also mention something else. You referred to

whether an operator's incentive is to comply or not to comply. That isn't a choice and if we ever find an operator that is deliberately or intentionally not complying with the regulations, we will turn them over to the Inspector General or Department of Justice for criminal enforcement.

MR. CLARK: One of the benefits of participating in an NTSB hearing is the quality of the questions that are asked of us, I must say.

Being a regulator, it's difficult to stand on the outside and look inside, what's going on in an operation. So our first -- my first direction to my people is that I don't want them to be on the outside looking in. I want them to be on the inside looking around, but even being on the inside looking around, you can't know everything that the operator knows. And if there is an expectation that we achieve that, then that's an unrealistic expectation.

As far as performance-based regulation, it's not only difficult to judge whether performance has been achieved in the manner that you want it to be achieved, but it's also very difficult to enforce performance-based regulations because the case that you have to bring to bear becomes quite complex. It's nuanced in terms of whether or not there has been a violation of one order or another and whether that order of magnitude of that violation requires a penalty to be assessed. It does not mean that it cannot be done by any stretch of the imagination. It's

just easier when you have a linear violation of a prescriptive statute.

So what we do in terms of attempting to address these sorts of issues is that we take a systems approach to safety, just as PHMSA does. And we look at -- so here's the vision for my organization and -- our organization, I should say, not my organization, and the culture that we try to develop within our organization. And that is, first of all, we have to be experts in our field.

We have to know the rules. We have to know the laws. We have to know as much as we can about those that we are regulating and what their incentives are. Where it is they're trying to go, all the different elements of a system that you have to understand in order to know where an organization is headed and how they're trying to get there.

The second thing is we have to be objective. We can't bring emotion and personal perspective. We have to be critical in our thinking. When we see something, we have to go beyond if it's written down on the piece of paper whether or not we then look and verify trust, but verify as you aptly said. And then we have to continuously improve the system and that means improving the rules and it also means taking enforcement action when the time has come, that you take enforcement action.

And so part of my role is, essentially, to act as a district attorney in terms of trying to figure out when it is that

it's time to bring an enforcement action. And you know, you make mistakes in that regard sometimes, but for the most part, when we get to the point where we're not getting compliance with the corrective action plans that have been given to us by the utilities and we have said okay, this is a fine corrective action plan and we're not getting it or we feel that the utilities are misrepresenting the facts, then we will absolutely take enforcement actions in that regard.

It's important to have a just safety culture also, which is important in terms of being a regulator, a just regulator. One of the problems with prescriptive -- the enforcement of prescriptive regulations is that, many times, it becomes a gotcha game. We don't want to have a gotcha conversation when it comes to the safety of the natural gas system in the State of California. We want to have a conversation about where are you going, how do you plan to get there, do we agree with where you're going and how you plan to get there and are you making good progress in that regard?

The Commission, I believe, is moving in a direction of taking a broader and deeper look at that regulatory scheme and the balance between prescriptive regulation and performance-based regulation and ratemaking, which gives us just another insight into -- actually, a deep insight into what's going on, on the inside. Because, when you start looking at the money and where it's going and what the priorities are, then you're there.

CHAIRMAN HERSMAN: Did anybody else want to add anything? Mr. Metro?

MR. METRO: Yes. Your assessment is accurate about the 500 inspectors across the nation. For every new state inspector, we would add 100 inspection days, which is a tremendous statistic that would add additional safety measures for the states. Congress has authorized the states to receive up to 80 percent funding, but they've never appropriated that amount. We've been looking at around 60 percent appropriation. Could be less, could be more. We don't know this coming year.

The other point that you brought up is training. We only have one training facility in the United States. It's in Oklahoma City, Oklahoma and that's for all 500 engineers, inspectors. We need more training facilities across the nation and more trainers.

CHAIRMAN HERSMAN: Thank you all very much. This has been a great panel. We've got a lot of good information to think about as we go forward with our analysis and our report preparation. We very much appreciate your service and your frank and candor -- candid answers to our questions.

I understand we do have one witness that the Tech Panel would like to recall from yesterday. Ms. Ward, we'll excuse this fourth panel and recall a witness.

HEARING OFFICER WARD: Yes, Madam Chairman. We would like to recall Mr. Bob Fassett.

(Off the record.)

(On the record.)

CHAIRMAN HERSMAN: Ms. Ward, he was already sworn yesterday, so you don't need to do it again, correct? Okay.

Mr. Budinski, did you have some questions for Mr. Fassett?

MR. BUDINSKI: Yes. I have a short series of questions.

Good afternoon, Mr. Fassett. I want to revisit our integrity management discussion from yesterday's Session 2.

CHAIRMAN HERSMAN: Mr. Budinski, can you pull the microphone a little closer?

MR. BUDINSKI: I wanted to revisit our integrity management discussion from yesterday's Session 2. Just looking for a little more clarity and also, I think it might set the stage for Session 5 tomorrow.

I would like to know a little bit more about, if you could indicate the specific threats identified for Line 132, Section 180 as you knew them before the accidents.

MR. FASSETT: I don't recall. Specifically, I believe though, Ms. Peralta mentioned that in the morning and I referenced it in a response to Mr. Wiese yesterday afternoon. But there was an interacting threat between corrosion and the outside force associated with the fact that it's crossing -- that it's in a seismic area and it's an older line.

MR. BUDINSKI: So those -- so mainly, that's two threats

really, that you were inspecting for? That's correct?

MR. FASSETT: That's correct.

MR. BUDINSKI: And how did you arrive at this list? You know, what was the criteria that you used to establish those threats?

MR. FASSETT: It's through -- well, it's through our risk assessment procedures established in RMP6 that we discussed yesterday.

MR. BUDINSKI: Yeah. Okay. And how were they inspected specifically?

MR. FASSETT: Through -- you mean the actual inspection --

MR. BUDINSKI: Yeah.

MR. FASSETT: -- associated with the line?

MR. BUDINSKI: Yeah. For those particular threats --

MR. FASSETT: External corrosion, direct assessment was used to evaluate the corrosion aspect of it and we monitored to determine if there was any outside force, any land movement. I believe we have records. I don't recall if they were provided as an exhibit through a DR or not, but we have records to show that that -- there was no outside force on that pipe.

MR. BUDINSKI: Okay. Thank you. That's all for my questions.

CHAIRMAN HERSMAN: Just to make sure everyone else has an opportunity, did anyone else want to follow up? Seeing no

requests, any of the members of the Board of Inquiry? No?

Thank you very much, Mr. Fassett, for being available to come back.

And this concludes our deliberations for the day and we will reconvene tomorrow morning at 9:00 to consider the testimony from the final panel. We're adjourned.

(Whereupon, at 4:40 p.m., the hearing was adjourned to reconvene on Thursday, March 3, 2011, at 9:00 a.m.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	PUBLIC HEARING ON NATURAL GAS PIPELINE EXPLOSION AND FIRE SAN BRUNO, CALIFORNIA SEPTEMBER 9, 2010
PLACE:	Washington, D.C.
DATE:	March 2, 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.

_____

Timothy Atkinson
Official Reporter