

'lh1@cpuc.ca.gov'; 'tyf@cpuc.ca.gov'; 'gcn@cpuc.ca.gov'; 'mm2@cpuc.ca.gov';
'ciw@cpuc.ca.gov'0001

1 -----x

2
3
4
5
6
7
8
9
10

Order instituting Investigation of the
California Public Utilities Commission's
Own Motion Into the Operations and
Practices of Pacific Gas and Electric
Company with Respect to Facilities
Records for its Natural Gas Transmission
System Pipelines.

11
12
13

(I. 11-02-016 Files February 24, 2011)
LS 1 of 1

14 -----x

15
16
17
18
19
20
21
22
23

[START TAPE LS100007]

24 MR. ROBERT KINOSIAN: Robert Kinonian

0002

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

[phonetic], I'm with CPUC.
MALE VOICE: All right, over here?
MR. [REDACTED], program
manager of gas transmission.
MS. LAURA HOMECK: I'm Laura Homeck,
I'm with Martin Homeck [phonetic].
MR. JOHN SEAMAN: I'm John Seaman
[phonetic], I a consultant for CPUC.
MR. [REDACTED]: I'm [REDACTED],
superintendent gas transmission.
MR. [REDACTED]: [REDACTED], I'm
a regulatory relations - -.

13
14
15

MR. BRIAN DAUBIN: Brian Daubin
[phonetic], I'm director the continuous
improvement group, PG&E.

16 MALE VOICE: Okay, so we're going to do
17 the safety - -.

18 MALE VOICE: Yeah. Good morning,
19 everybody, I'm glad you made it here nice
20 and safe. I heard the singing on the bus
21 when it was going by, and it was good. So
22 everybody signed the visitors' log-in, and
23 also there was another form right next to it
24 for the safety. Um, while we're in the yard
25 here we'll all wear our PBE, which is our

0003

1
2
3

hardhat; there's safety glasses, our best
[phonetic], when we're in the building you
don't have to wear your hardhat but when we

4 go out in the yard you have to wear all your
5 PBE.

6 Also we have first aid kits over here
7 on this table, along with right on the wall
8 right here the AED. Is anybody certified to
9 operate the AED? Okay, these are your
10 friends; these are who you want to know.
11 Fire extinguishers, there's one by the front
12 door, they're by all the doors, and if
13 you're out in the yard you'll see some
14 either stainless steel or red boxes that
15 have fire extinguishers in it as well.

16 Medical treatment: can I have somebody
17 volunteer to dial 9, 911? Jason? Thank you.
18 The closest hospital is the John Muir
19 Medical Center, and it's down on 2400
20 Balford [phonetic] Avenue, or Road.
21 Anybody gets injured please report it to
22 somebody immediately please.

23 This is a no smoking facility,
24 obviously. Restricted areas, well we're
25 just going to mainly stay in this room; we

0004

1 may walk a little bit of the yard but you
2 want to stay clear of the substation behind
3 here. We do have two projects that are
4 going on right now: we have line 114
5 hydrotest going on right now, and we also
6 are installing a receiver for line 57A for a
7 PG&E [phonetic] project that's coming up in
8 the beginning of October. So there's a lot
9 of open trenches, equipment and hydrotesting
10 going on out there so just be aware of your
11 surroundings please.

12 Let's see. In the case of emergency if
13 we have to evacuate I'm going to grab the
14 sign-in sheet, I'll do a head count, but
15 we're going to go right when you came in the
16 gate right behind your bus we're going to
17 exit and all gather outside the gate. And
18 at that time I'll do a roll call or a head
19 count and we'll go from there.

20 As [REDACTED] was saying there's some
21 restrooms down this hallway on the right
22 hand side. If you keep going all the way
23 down to the end of the hallway it dumps into
24 a kitchen area where there's some water; I
25 don't know if there's any coffee made but

0005

1 there's water and there's a refrigerator
2 that has bottled water as well, so please
3 feel free if you need to grab it, do so.

4 And I think that's it. Does anybody
5 have any questions?

6 MALE VOICE: Yeah. Well I'm sure
7 you're going to get to that but what is this
8 room?

9 MALE VOICE: Okay. [Crosstalk].
10 MALE VOICE: Thank you everybody.
11 MALE VOICE: So we are passing around a
12 sheet of paper; it's a documentation of the
13 tail board [phonetic] that just happens.
14 It's just part of our process when we do a
15 safety tail board we document who is in
16 present [phonetic] so that's what's going on
17 with that.

18 I wanted to cover, I think, three
19 things here this morning. Clearly we're
20 going to go talk about the purpose of this
21 control room. I wanted to have [REDACTED] just
22 tell you what's going on with the hydrotest
23 because [phonetic] hydrotest has been an
24 important element of our response to the San
25 Bruno [phonetic] incident. So tell you what

0006

1 is going on out in the yard.
2 When we're done with the overview in
3 here then we'll have the maintenance person;
4 I'll just kind of give you an idea what kind
5 of equipment we have here [phonetic]. Sound
6 okay?
7 If that's all right then what I'd like
8 to do is start with [REDACTED] he'll [phonetic]
9 give us an overview, and if there aren't any
10 questions then we can let him go back to his
11 [crossta

12 [REDACTED]: Okay actually the project I
13 have responsibility for is the [phonetic]
14 upgrade. And what it is is we're going to
15 be performing inline inspection of line 57A,
16 from mile point 9.68 to 16.86 something,
17 about seven-and-a-half miles.

18 What we're doing here is we're
19 installing a receiver, and at the other end
20 of the pipeline over [phonetic] in discovery
21 bay, outside of a housing development we're
22 installing the launcher. So what we do is--
23 involved with that is piping configurations
24 so that they can install this piece of pipe
25 into 57A so that we can insert the MFL

0007

1 [phonetic] tool, the cleaning tools at the
2 other end and push those through the
3 pipeline to this location. It cleans the
4 pipeline and it also then runs a--called an
5 MFL tool, and that's for magnetic flux
6 leakage.

7 And so then that reads the integrity of
8 the pipeline and it identifies any anomalies
9 that we may see on that. And then from
10 there, excuse me, then from there what we'll
11 do is analyze the data and identify spots we
12 may need to inspect.

13 MALE VOICE: Does that include bad

14 wells?

15 [REDACTED] Yes it would.

16 MALE VOICE: What's the age of the
17 pipelines that go through here and can they
18 all be inspected?

19 [REDACTED] I don't know if all of them
20 can; I don't know if I can answer to that
21 and 57A, I'm not too sure.

22 MALE VOICE: 57B is piggable [phonetic]
23 - - through that. 57A we're going to pig
24 [phonetic]. The other ones I do believe
25 we're hybrid [phonetic] testing. Where's

0008

1 Dave at? Dave McGregg [phonetic]?

2 MALE VOICE: We--the other line setup,
3 the date for 114 or--?

4 MR. DAVE MCGREGG: We just--I think
5 last year we did line 114. Line two that
6 starts here at the yard is piggable; that's
7 been pigged. We pigged 303 from Antioch
8 [phonetic] terminal all the way to Irvington
9 Station. So--and 57B is also piggable. So
10 basically I think the last line that needs
11 to be pigged - - yard 57A and that's what
12 we're going to--we're working on and we're
13 going to pig it in October.

14 MALE VOICE: So that's all the lines?

15 MALE VOICE: That's correct.

16 MALE VOICE: [Inaudible].

17 MALE VOICE: Okay, so why don't we then
18 move into the overview of the Brentwood
19 alternate gas proposal.

20 MALE VOICE: So good morning all. This
21 room serves as a control room. It's the
22 alternate gas control room. There is a
23 facility just like this, if you have not
24 been to San Francisco; that is our primary
25 control room for operating that pipeline and

0009

1 system remotely through our status
2 [phonetic] system.

3 [REDACTED] om is essentially a hot,
4 [REDACTED], meaning that at all times
5 it's capable of--you add people and we can
6 actually control out of this room.

7 It's very secure. We have video camera
8 up there that is on at all times so we
9 basically have security to make sure that no
10 one is in this room, operating from these
11 consoles that's not supposed to be. There's
12 password protection on all of the computer
13 systems for the actual SCADA system. Is
14 everyone familiar with what "SCADA" is?
15 Okay, as well as there's perimeter security
16 on this particular building at all doors,
17 that is a very limited access into this
18 building.

19 This is not a maintenance headquarters,
20 so there is not generally [REDACTED]. And
21 when the maintenance folks are here doing
22 work in the yard, because they do service
23 this yard they are not in this building.

24 There is a com [phonetic] room right
25 behind that wall right there which houses

0010

1 the computer system. It's redundant
2 computer systems that manage our SCADA
3 system. So essentially there is an FEP, a
4 front-end processor, one of six pairs, so
5 it's a pair, so they're redundant: if one
6 comes down the other one comes up. For the
7 Brentwood central area, and then there are
8 five more spread geographically across the
9 state to collect data from the field devices
10 to bring it into our computer systems.

11 There's also redundant servers in there
12 that actually work in tandem with two
13 redundant servers in San Francisco that
14 provide the keyboard consoles, so the
15 screens and ability to operate the system.
16 There's also a flow calculation computer in
17 there as well as redundant flow calculation
18 in San Francisco. It all works over our
19 mountaintop and our telecom [phonetic]
20 system so we have a very robust and
21 redundant SCADA system in the event that any
22 portion of it were to go down. So that's
23 why it's a hot backup is because at all
24 times, whether San Francisco's up and
25 running or not this room can be up and

0011

1 running and vice versa.

2 So the purpose of the room is for the
3 remote operation of the pipeline system and
4 the monitoring of the pipeline system. So
5 gas control is in their [phonetic] primary
6 [phonetic] site, 24 by 7 at all times.
7 There are five operators on shift during the
8 weekday shifts and then we move to four
9 operators on nights and weekends. So they
10 operate around the clock. They work 12-hour
11 shifts, basically split the day at 6 o'clock,
12 so there's a group from 6:00 a.m. to 6:00
13 p.m. and another group that comes in and
14 relieves them and works from 6:00 p.m. to
15 6:00 a.m. And then we just continually run
16 that cycle throughout the seven-day week.

17 I'm willing to take questions as you
18 have them.

19 MALE VOICE: Yeah, I was wondering, you
20 were talking about the shift changes and
21 people but I thought you'd said earlier it's
22 an [REDACTED].

23 MALE VOICE: It is an [REDACTED].

24 MALE VOICE: So--
25 MALE VOICE: So I'm talking about
0012
1 what's in San Francisco and here, so you get
2 some sense of the room. The room that's in
3 San Francisco is right now the active
4 control room.
5 MALE VOICE: So that's what you were
6 talking about on the shifts was San
7 Francisco, not here?
8 MALE VOICE: That's correct. And it's
9 identical. If they're in this room it's
10 identical. What happens in San Francisco
11 happens here when they happen to be here.
12 FEMALE VOICE: How often is that?
13 MALE VOICE: Well we test it every
14 quarter, and then it's here for emergency
15 purposes. So we open in an emergency if
16 needed.
17 MALE VOICE: How does it [REDACTED]
18 when there is an emergency? What's your
19 procedure and where do you get the people
20 and all that?
21 MALE VOICE: Right. We have what we
22 call a relocation plan which actually we
23 have folks on call if they're not on shift
24 that there's a on-call schedule, and those
25 folks can either be called in to come here
0013
1 or in the event of a large emergency if they
2 understand to be such as a large earthquake
3 in the Bay area their on-call
4 responsibilities bring them to this room.
5 So many of them live in the area; this
6 was an active control room several years ago
7 so many people are still located physically
8 with their residence in the area. So they
9 can be here anywhere within, you know, 10,
10 30 minutes to maybe two hours.
11 So what we do is we have a transition
12 plan, so if for some reason San Francisco
13 was not able to be used there is a small,
14 combined gas and electric control, little
15 control room that they can go to in the
16 other building. San Francisco's comprised
17 of the 77 Beale [phonetic] Tower as well as
18 the 245 Historic [phonetic] Building. In
19 the 245 Historic Building there is a way for
20 them to move to that building and two of
21 them can actually operate SCADA, have phones
22 and communication out to the field as needed
23 until this room can be up and running. And
24 we estimate it could be up and running in 30
25 minutes to two hours. It could be shorter
0014
1 than 30 minutes.
2 MALE VOICE: Do you know if anybody was

3 here before the San Bruno incident?
4 MALE VOICE: There were people in this
5 room in the San Bruno incident.
6 MALE VOICE: Were they called for that
7 purpose?
8 MALE VOICE: No they were here because
9 it happened to be the night we were going to
10 start a quarterly exercise in this room.
11 MALE VOICE: I see.
12 MALE VOICE: So they were in this room
13 at approximately 5 o'clock that evening.
14 MALE VOICE: And how many people need
15 to be here for it to be operational when you
16 say like--is it two people, can it be one
17 person?
18 MALE VOICE: It can be one; ideally
19 we'd like to have a complement of all of my
20 folks here but you have one operator. One
21 operator can log on and can start operating
22 the system.
23 MALE VOICE: Okay and what's the
24 maximum? What's the full complement?
25 MALE VOICE: It's a myriad so I'm

0015

1 trying to set the stage here. There are
2 five operators on shift during weekday
3 shifts and there are four on nights and
4 weekends. So one would expect on a day like
5 today, and it's true: in San Francisco
6 there's at least five operators, one at each
7 one of these consoles. And we divide the
8 room into essentially two management
9 employees, a senior transmission coordinator
10 - - shift supervisor that's at this console
11 here, a transmission coordinator, management
12 employee that sits at that console there,
13 and three gas system operators that sit at
14 these consoles on weekday shifts. At night
15 or weekends we drop the middle console and
16 we only have two gas system operators. And
17 primarily that has to do with the fact that
18 the maintenance folks go home, hopefully if
19 they're lucky their work will allow them to
20 go home, somewhere in the area of 5 or 6
21 o'clock at night, and that the activity on
22 the phones and the work going on around the
23 system drops significantly, thus reducing
24 the sort of work beyond the normal
25 monitoring controls. So work going on that

0016

1 they have to track and phone activity. So
2 we drop to two phones.
3 So ideally you'd want all those folks
4 here, but any operator has the ability, any
5 of these five have the ability to log on and
6 operate this by phone [phonetic] system.
7 And then at that point they would still be

8 working with the two that are left in San
9 Francisco and there would then be a
10 transition.

11 So there's a relocation plan, has been.
12 We've had actually a backup alternate gas
13 control site since about 1991 or '92. It's
14 moved from Antioch, from a couple locations
15 in Antioch to Brentwood, and it was across
16 the way in an older building and then when
17 this building became available to be an
18 alternate site we put it in here as a backup.

19 And I'm kind of keep on reinforcing the
20 mirror image look. So when an operator
21 walks in, an operator or a transmission
22 coordinator it's identical to the way the
23 room is set up in San Francisco. So I kind
24 of was going to build [phonetic] this
25 console here. So this is a typical console;

0017

1 they're all set up the same. So you have on
2 this side you have three monitors
3 [inaudible].

4 Our data system works on a secure
5 operational data network only shared by the
6 [inaudible].

7 [END TAPE LS100007]

8 [START TAPE LS100008]

9 MALE VOICE: Sure. Works on redundant
10 servers that are in the com rooms, and like
11 I said it's a distributed system so it picks
12 up--SCADA works like this: out here in this
13 yard, - - this is actually the Brentwood
14 yard. This is physically what the world
15 looks like to an operator of what that out
16 there represents. So this is what it looks
17 like to him, this menagerie of pipes that's
18 buried under the ground, and out there you
19 see the little things that stick up out of
20 the ground are the valves, or the actuators
21 or valve handles for the valves that are
22 buried in - - pipe is.

23 So operator can actually tell if a
24 valve is open or closed, green represents a
25 valve is closed, red is open. This

0018

1 particular point right here is at zero
2 pressure right now and that's because they
3 have the pipeline shut in [phonetic] here to
4 do the work that [REDACTED] talked about a few
5 minutes ago.

6 So I'm sorry, I lost my train of
7 thought.

8 MALE VOICE: Is that PG&E's own
9 developed software?

10 MALE VOICE: No CITECT [phonetic] is a
11 third party vendor.

12 MALE VOICE: A third party vendor?

13 MALE VOICE: Yeah.
14 MALE VOICE: Okay.
15 MALE VOICE: I mean it's adapted for
16 PG&E's graphics and look because our
17 pipeline system is different than somebody
18 else's but it has--every SCADA system you
19 ever go out and visit pretty much has the
20 high-level maps, so I kind of as I sort of
21 dropped down here a minute ago, very high
22 level view, this way, and you can drop down
23 and I can see actually on this next screen
24 all the way from the Arizona border to
25 Mojave [phonetic], so the San Francisco Bay
0019
1 and this represents all of my 300 - - two
2 parallel pipes that run from the Arizona
3 border all the way to the Bay area.
4 MALE VOICE: What's the vendor?
5 MALE VOICE: Citect?
6 MALE VOICE: Citect?
7 MALE VOICE: Citect, C-I-T-E-C-T.
8 MALE VOICE: And have you had them for
9 a while?
10 MALE VOICE: We put in the system, we
11 started putting in the system in late 2005
12 and we rolled over our control system in
13 late 2007. So we've been working with them
14 for a little over five or six years now.
15 MALE VOICE: Okay.
16 MALE VOICE: What about sensors? I
17 mean--
18 MALE VOICE: That's what I was going to
19 tell you - -. So out here in the yard you
20 have what are called transducers that are
21 connected to the pipe. So say you want to
22 read a pressure. The maintenance folks go
23 out and they attach to the pipe a little
24 transducer that will then measure the
25 pressure in the pipe, transmit it up through
0020
1 an RTU, so it's a larger computer system
2 that will collect all the data, send it up
3 to a mountaintop, send it over the
4 mountaintop and drop it back down into the
5 servers in the backroom so it'll appear on
6 these screens right here. And that's true
7 of pressure, flow, gas quality and in the
8 case of equipment statuses, the way I know
9 that these valves are open or closed is
10 because that's being essentially transmitted
11 from the valve to that network path - - here.
12 So on the valve if you look at the top
13 right on the bonnet there are limit switches
14 that will represent open or closed. And
15 when the valve moves and it hits that closed
16 that signal will come to us and appear on
17 the screen. If it's in mid-position it'll

18 be yellow, which is a valve in transition
19 and it's throttling: it's somewhere between
20 open and closed.

21 MALE VOICE: Is this room entirely
22 dedicated to gas or is there an electricity
23 component?

24 MALE VOICE: No this room is entirely--
25 this room is entirely dedicated to gas

0021

1 control and is secured in such a manner that
2 it can only be accessed by authorized folks
3 to support the operation of this room when
4 it's in service.

5 FEMALE VOICE: Can you explain the
6 responsibilities in normal operation of that
7 person, this person and these people, how
8 they divide their work?

9 MALE VOICE: I will. Great question.
10 So I mentioned earlier this is the senior
11 transmission coordinator. He is essentially
12 the shift supervisor. He's the senior
13 management person on shift - -. So he
14 actually does--a large part of his daily job
15 is making sure that there is enough supply
16 to support all the connected - - system.

17 So throughout his day he receives a
18 weather report from meteorology; we have a
19 meteorology group in San Francisco. He
20 takes that and he drives out a load for the
21 core residential market, your houses, how
22 you're using your heaters or your hot water
23 heater or your cooking devices. He derives
24 a load for that market.

25 He then drives another load for the

0022

1 industrial market; that's primarily based on
2 what they used yesterday with known patterns
3 for how it changes as you go through the
4 weekend periods.

5 And then the other market segment is
6 electric generation. And then he'll
7 forecast electric generation; we work
8 closely with the California ISO with
9 forecasts coming from them as well. So he
10 essentially forecasts those three market
11 segments; that actually comprises the on
12 system demand the people who are burning gas,
13 end-users off of our pipeline system.

14 He also works to understand what the
15 off system deliveries will be because we do
16 actually deliver gas occasionally off to
17 third party storage providers such as [REDACTED]
18 [REDACTED], [REDACTED] [phonetic] and [REDACTED]
19 [phonetic] Storage, and a new one, [REDACTED]
20 [REDACTED] Gas Storage, which just started up
21 here in the last month. We also
22 occasionally deliver gas to [REDACTED]

23 [phonetic], so - - gas on behalf of their
24 customers, you know, scheduled gas to our
25 system.

0023

1 So that is how he actually tells what
2 the demand is going to be on the system, the
3 demand on the pipeline system, on average,
4 is about 2.5 BCF a day, billion cubic feet.
5 To put that in some sort of relationship to
6 what the pipeline does, the pipeline system
7 can hold between 4 to 4.5 BCF of inventory:
8 gas stored in the pipeline system itself.
9 So on every day essentially half of that gas
10 is consumed and burned by the customers and
11 obviously needs to be replaced.

12 On a very cold, what we call abnormal
13 peak day, this is the coldest winter that we
14 plan for, it's a 1 in 90-year occurrence; it
15 last happened in 1989-90 winter, December of
16 1989. You can see demand; we now have
17 forecasted our APD load to be as high as
18 potentially 4.5 to 4.7 BCF. So that
19 particular day every molecule in the
20 pipeline system would be consumed and burned
21 by the customers and would have to be
22 replenished.

23 FEMALE VOICE: And that doesn't include
24 what's in underground storage?

25 MALE VOICE: No I'm talking just the

0024

1 pipeline system.
2 So on the other side--so we talked
3 demand here, so this person forecasted
4 demand; he also then works with our
5 scheduling folks; these are people who have
6 a system that allows our transportation
7 customers to nominate and schedule gas into
8 our system, so from the [REDACTED]
9 [REDACTED] pipeline systems
10 customers, transportation customers are
11 moving gas down these pipelines. And we do
12 that through our scheduling system so our
13 senior will understand how much supply is
14 scheduled to come to his system every day.

15 FEMALE VOICE: Now where is the
16 scheduler?

17 MALE VOICE: The scheduler's in San
18 Francisco, sits right next to the primary
19 facility in San Francisco. And they also
20 have alternate sites; it doesn't happen to
21 be here; it's through the company business
22 continuity processing. Ultimately it's in
23 [REDACTED] [phonetic].

24 MALE VOICE: What's the senior's
25 responsibilities during an emergency?

0025

1 MALE VOICE: Yeah, he leads the

2 emergency. He leads the emergency from the
3 first response perspective of this room. So
4 he essentially makes sure that the alarms as
5 they come in, which will show up here and
6 these are green so they're clearing
7 [phonetic] alarms at the bottom screen right
8 now and then there's a page that shows all
9 of them.

10 He will actually make sure that they're
11 being worked in the priority that's most
12 important and making sure response is taking
13 place, also making sure that callouts are
14 being made to the local, you know, sort of
15 Tracy [phonetic] crew in this case the
16 people standing here to make sure we're
17 getting folks out to whatever needs to be
18 done. He also will be working with this
19 person over here to direct orders, maybe
20 remote control activity that needs to take
21 place so that they develop orders that are
22 then transmitted to these three over here.

23 So we'll come back to that and I'll try
24 to explain it as we go around the room.

25 So the senior now, what he's done is

0026

1 he's forecasted demand, he's understanding
2 what his supply situation is. The
3 difference between supply and demand--and
4 frankly they never balance perfectly every
5 day; they're always different--is the system
6 packing or drafting? So if customers are
7 supplying less than we're consuming we're
8 packing--the system and pressures are going
9 up. And conversely, if they're consuming
10 more than they're actually supplying.

11 So his primary role is inventory
12 management. He's trying to make sure all
13 tie-ins, that the system is operating
14 between the parameters of high and low, high
15 being let's say 4 BCF, I mean sorry low
16 being 4 BCF and high being approximately 4.5.
17 So he's trying to keep it within those
18 boundaries. And if for some reason he needs
19 additional storage he has some ability to go
20 call on storage, back to your point, as a
21 supply he can actually ask for more supply
22 to come into his system from say McDonald
23 Island [phonetic].

24 Customers also schedule storage, so we
25 expect them to do that as well on behalf

0027

1 [phonetic] of transportation. If he's
2 beyond his boundaries of his capability of
3 min and max, he's utilized his storage, at
4 least to the extent of what's in our G-valve
5 [phonetic] tariff, our gas-balancing tariff.
6 He will then predict and then call an

7 operational flow order.
8 And operational flow order is a message
9 out to our transportation community that
10 you're either running long or short on our
11 system; we no longer can manage within our
12 safe boundaries of operating the system, and
13 there will now be financial penalties
14 assessed if at the end of the day you don't
15 get within the tolerances that we've set to
16 bring the system back into control. So
17 that's his tool; that's kind of his most
18 significant tool to make sure this system
19 balances because, you know, on the high
20 pressure side or the high inventory side
21 there's a lot of automatic equipment in the
22 system that will actually protect the
23 pipeline, but on the low side, I mean low
24 supply always, or low inventory always
25 concerns me a lot because low pressure is

0028

1 something when you're operating gas systems
2 you don't want to see because it impacts the
3 customer very quickly and it can be very
4 unsafe.

5 So that's the role of the senior:
6 develop that plan. He's managing the
7 inventory in the pipeline system through
8 this planning process. He does that five
9 times a day, and he does it for four days
10 out. So his window is very wide as far as
11 what he's looking for.

12 That inventory range, so say on this
13 particular day he's decided the system is
14 going to end up tomorrow morning at 4.2 BCF.
15 He works with his crew here but primarily
16 this person here who's the transmission
17 coordinator, and that person takes that
18 information and he develops system orders.

19 Through the remote control capability
20 on the SCADA system we have the ability to
21 shuffle around inventory, and inventory, if
22 it's - - inventory it's the stored gas in
23 the pipe, but it's pressure in the pipe. So
24 this person develops orders, basically, to
25 move the inventory to where he needs it in

0029

1 the system to make sure he's meeting all
2 minimum pressure requirements.

3 So number one rule of gas control:
4 always meet your minimum pressure
5 requirements because you don't want to be in
6 a low pressure situation.

7 You will then also develop orders to
8 make rate. And make rate essentially is if
9 all of a sudden the supply coming in at the
10 Oregon border goes from 1.3 BCF up to 1.8
11 BCF today, and that can happen, he will need

12 to put on more compression. So he'll
13 develop orders for bringing on more
14 compression and we have models that tell him
15 which compressors are ideally the best to
16 use and how many he will need.

17 He will develop those orders, he'll
18 send them across the room over here to these
19 operators, and this is what's going on in
20 San Francisco right now. And these guys
21 then--these guys and gals--will actually
22 take those orders and they will actually be
23 able to type them into the computer system,
24 SCADA system and send signals out to turn
25 on-off compressors, raise-lower pressures on

0030

1 the pipeline system. And that process just
2 goes on and on and on every day, and
3 sometimes five times a day because we're
4 always planning.

5 So back to the emergency response. So
6 emergency response, it's kind of, it's very
7 similar, right? I mean this is their normal,
8 sort of their normal state of operation.
9 And as you begin to see maybe alarms, or
10 something happened that's abnormal--now an
11 abnormal state isn't always--it often isn't
12 an emergency; an abnormal state is something
13 that is not operating the way you had
14 expected it to. Their role becomes to move
15 the abnormal state back to the normal state.

16 Beyond the abnormal state is the
17 emergency state. And that's where--

18 MALE VOICE: [Interposing] How do you
19 distinguish between the two?

20 MALE VOICE: Well emergency state is
21 you maybe have essentially--well we know San
22 Bruno was an extreme emergency in our system,
23 right? So that's one where you have a
24 release of gas that's uncontrolled. And
25 frankly even a relief valve operating is

0031

1 really--borders on abnormal to emergency
2 because you don't--that's not supposed to
3 happen.

4 MALE VOICE: Say that again.

5 MALE VOICE: A relief valve, I mean
6 overpressure protection valve that closes or
7 relieves gas off the pipeline system, it
8 borders between abnormal and emergency,
9 meaning it's abnormal but you have to
10 quickly react to it and take control of it,
11 otherwise you could move into an emergency
12 state. And you don't want that.

13 Because you have a valve that closes
14 and you have a lot of demand on the
15 downstream side of that valve. Also you're
16 losing pressure. So unless you have a way

17 remotely to mitigate that abnormal and bring
18 it back to normal, I mean open other valves
19 that actually bring back the pressure in our
20 pipeline, then very likely your emergency
21 state and you're moving very quickly into
22 crew callouts.

23 MALE VOICE: Let me ask you this: you
24 know, we're particularly interested in
25 documentation and record-keeping and all

0032

1 that; if you have either an abnormal
2 situation or a, or an emergency, what are
3 the documents and where are they that you
4 would consult? And maybe you could show us.

5 MALE VOICE: Well primarily your
6 biggest documentation is going to be the
7 SCADA system, right? Because everything
8 that happens on the SCADA system--

9 MALE VOICE: [Interposing] On the
10 computer itself?

11 MALE VOICE: --is recorded, right? I
12 mean every event, every valve status change,
13 every alarm, every pressure change is
14 recorded on the SCADA system. And the
15 operator can actually sit here and they can
16 call up a point, and I know this isn't very
17 large, sorry, this is a pressure trend, so
18 it's going to show what that point has been
19 doing [phonetic].

20 And in this case it's for the last hour,
21 and this looks very significant but it's
22 only a one-pound change; it's a very small
23 scale at this point. And he can actually
24 drive back and he can actually go back one
25 week; he can see what's been going on for

0033

1 the last week. He can actually go back--he
2 or she, sorry--he can move back actually to
3 2008 [phonetic] on this SCADA system.
4 Beyond that we have a gas historian, and the
5 gas historian will collect all this data say
6 before 2008 and will archive it off onto a
7 gas historian. And we have data backup
8 possibly ten years from the SCADA system.

9 MALE VOICE: So if you got an emergency
10 how far back can you go to see whether that
11 pipe has ever had an emergency in the last,
12 you know--

13 MALE VOICE: [Interposing] Well from
14 SCADA data what we have in gas control is we
15 have access to data, a backup of
16 approximately ten years.

17 MALE VOICE: So yeah I just remember
18 reading that some pipes have anomalies that
19 you found, you know, going through the
20 record review and it wasn't available to the
21 operator. So we wondered if the operators

22 had that data would they be able to make a
23 better choice. If they knew 22 years ago
24 you had a leak, would that have enabled them
25 to address the emergency better?

0034

1 MALE VOICE: When you say the operator
2 do you mean PG&E as the pipeline operator or
3 the operators on - -?

4 MALE VOICE: The operators in the
5 control room.

6 MALE VOICE: Well if it was on SCADA
7 even all those years--well SCADA only goes
8 back to--

9 MALE VOICE: [Interposing] Yeah I mean
10 let's say--

11 MALE VOICE: [Interposing] If they saw
12 it I mean their response is governed by what
13 we call our alarm policy [phonetic].

14 Essentially actually if they get a pressure
15 point, this pressure point here goes into an
16 alarm; their routine is, and their analysis
17 is to first look at it and say, "Is that a
18 real pressure transgression?" And the way
19 you can actually determine that is by
20 looking up and downstream. So if this
21 pressure point were to go to 900 pounds and
22 you didn't see a pressure upstream or
23 downstream that correlated to that then it's
24 highly unlikely that happened and it's
25 probably a radio sort of problem. I mean

0035

1 similar to your cell phone dropping a call;
2 our radio telecom system occasionally can
3 have wobbles in its mechanism to record
4 pressures.

5 MALE VOICE: I just wondered if they
6 had like a history of any problem that
7 happened 15 years ago; would that change
8 their response to the anomaly they notice on
9 the screen.

10 MALE VOICE: What's on your history?

11 MALE VOICE: Yeah, well it's all
12 pressure reads. So essentially it would be
13 available to them, but--

14 MALE VOICE: [Interposing] They
15 wouldn't look back ten years and say, "Gee,
16 there was a leak there ten years ago"?

17 MALE VOICE: We would leave that to
18 actually the responsible engineer to do that.
19 I mean they can only move to quickly; I mean
20 you can only move to quickly with the data
21 you have in front of you. So if they're
22 dealing with an emergency they're looking at
23 the instantaneous read. So in this case
24 since you've got an anomaly here you're
25 looking up and downstream because those are

0036

1 going to tell you the most information as
2 quickly as you can readily use it.

3 They can trend back over a week, let's
4 say, or even longer; it can back like all
5 the way to 2008 but it would take them a
6 while to do that.

7 MALE VOICE: I wonder if that's
8 something they would do if there was an
9 emergency.

10 MALE VOICE: Well they would look back;
11 I'm not going to say they're going to look
12 all the way back to 2008 and to get to the
13 gas historian you'd have to move to a whole
14 other computer application to do that.

15 But what they really do is you want
16 them to response.

17 MALE VOICE: Right. We were just
18 trying to figure out whether the data, the
19 records you have are adequate or do you need
20 more records that go back 15 years for that
21 at each point. I mean would you use those
22 or would you have a w [redacted] using them.

23 MALE VOICE: [redacted] [phonetic], do you
24 mind if I jump in here?

25 MALE VOICE: Yeah, sure.

0037

1 MALE VOICE: I think one important
2 piece to understand is that because the
3 transmission system is an extremely dynamic
4 system when we talk about the scenario in
5 regards to a leak it would mean--that's why
6 we do leak patrol, that's why we have those
7 types of things. We're talking about
8 dynamic systems here - - taking pressure
9 readings along our line.

10 And so the fluctuation in small
11 variations in pressure are typically due to
12 demand or gas coming on to the system, so to
13 the ability that this system is looking for
14 a specific leak is not - - conceptual
15 [phonetic]. So this system here is used for
16 demand on the system and operating system;
17 it is not a leak detection.

18 MALE VOICE: Okay. Yeah I was just
19 wondering, you know, if--our whole
20 [phonetic] OAI is about documentation
21 adequacy and we were wondering if you had
22 available to the operator ten years or
23 twenty years or however long you had it on a
24 little computer thing would that be
25 something that would affect the operations

0038

1 or the decision that the operator is making
2 during an emergency.

3 MALE VOICE: Well I think through our--
4 hindsight 20/20 - - safety - - we are
5 looking at essentially, exploring and

6 evaluating online analysis tools. So I
7 think we are hoping to look at that more and
8 see if there is - -. What I know is I don't
9 know of any pipeline - - that are using that
10 in a serious way right now.

11 I'm not discounting it; I think what
12 you've got to understand though is an
13 operator only has so much time and that
14 operator is going to be able to use his most
15 resources to make the best decision.

16 Let me [phonetic] kind of expand a
17 little on the emergency response piece. So
18 if we did an excursion and it turns out not
19 to be just a telecom error, right? Then
20 he's going to be looking to do his own
21 remote control capability to control the
22 situation [phonetic] but he's also going to
23 be calling out a crewman [inaudible].

24 [END TAPE LS100008]

25 [START TAPE LS100009]

0039

1 MALE VOICE: --for the last ten years.
2 I mean can you look up, for example, the
3 highest pressure that a segment or pipeline
4 was under in a quick way on that thing or do
5 you have to scroll through?

6 MALE VOICE: You have to scroll.

7 MALE VOICE: And what does it show, the
8 highest pressure obtained in--

9 MALE VOICE: [Interposing] No it shows
10 the trend, so I mean--

11 MALE VOICE: --or trends of pressure or
12 what?

13 MALE VOICE: At the fingertips of that
14 operator is 13 weeks' worth of data right
15 there. And then he can go into--all the way
16 back to 2008.

17 MALE VOICE: How long would it take to--
18 -

19 MALE VOICE: [Interposing] Or he could
20 type in a time-specific time, you know,
21 January 1 st , 2008, 1500 hours and it'll move
22 back.

23 MALE VOICE: How long would it take to
24 get a real good pressure view of ten years
25 of pressure?

0040

1 MALE VOICE: It would take a while.
2 And also the data quality as you move beyond
3 2008 drops to hourly average data, so it's
4 not--it's very useful for planning purposes
5 but it's not as useful for an operations
6 purposes.

7 MALE VOICE: And for an emergency
8 purpose you'd be looking at the last day or
9 something like that; is that fair to say?

10 MALE VOICE: Oh yeah, or the week.

11 Essentially you're really looking back hours
12 because you're really looking back to see
13 what's been happening. An operator is real
14 time. Somebody in this room is controlling,
15 is doing something in very real time, right?
16 And if there's an emergency the analysis is
17 to determine does it look like it's a true
18 situation, and if so, or if there's any
19 question about whether it's so, then you're
20 working with getting your response out in
21 the field as well as, you know, your
22 engineering and your planning response and
23 even if it doesn't seem like the emergency -
24 - in case it does grow.

25 MALE VOICE: All right, what other doc
0041

1 [crosstalk] mainly [crosstalk] mainly they
2 look at the computer?

3 MALE VOICE: [Crosstalk]. That's our
4 primary tool. I have up here what we call
5 our gas logging system; this is a little
6 instant messaging system that we build back
7 in the early Nineties, and it actually is a
8 place for them to log all of their actions.

9 So anything that happens over here is
10 logged as well. I mean the answer alarm,
11 it's all sort of time and date stamped and
12 all that sort of stuff. So here, even in
13 this room in San Francisco right now if that
14 person gives an order he puts it on that
15 logging system and that person over there
16 will answer it and type affirmative, will do.
17 So it's always logging what they do and when
18 they did it. So that becomes a very
19 valuable tool.

20 We also talk to manned systems - - down
21 in the desert, our 24 by 7 manned stations
22 because of the vintage of the equipment;
23 it's not remote-control capable, as well as
24 McDonald Island and - - also manned. So
25 we'll send orders and converse with them

0042
1 over this as well. So that becomes a
2 valuable tool and we have those records back
3 a little over ten years as well. We have
4 them in hard copy as well as electronically
5 saved as well on shared drives. You can
6 search; you can search back through the date
7 for activities as well that happened on this
8 system or that is recorded. So if you come
9 in on the night shift and for some reason
10 something takes place that wasn't relevant
11 to a shift transfer but then now you need to
12 actually know about it you can actually
13 scroll back and see what's happened in your
14 log to the day or even days before.

15 MALE VOICE: Is your GIS system--

16 MALE VOICE: [Interposing] GIS not--
17 this is GLS; I don't want to get confused,
18 this is gas logging system.

19 MALE VOICE: Yeah, but is it--

20 MALE VOICE: [Interposing] GIS.

21 MALE VOICE: --is GIS available here?

22 MALE VOICE: It is available on the
23 utility data network and we primarily use it
24 to do drill downs to locations if we get
25 enough information from the field about an

0043

1 actual at-risk. The operators can drill
2 down and see what's near it.

3 MALE VOICE: Okay.

4 MALE VOICE: It's not a primary tool
5 that we use in gas control.

6 MALE VOICE: Or in an emergency or
7 abnormal situation?

8 MALE VOICE: Well quite often we do
9 because it can help us get more centered too.

10 Like I said, these folks are on the [REDACTED]
11 [REDACTED] in San Francisco and
12 oftentimes they're dealing with something
13 that's happening in the Town of [REDACTED],
14 which--does anybody know where [REDACTED] is,
15 right? It's way down in the desert, up in
16 the mountains outside of Barstow [phonetic]
17 - -.

18 So they've never been there, so they
19 will actually use GIS and, you know, to
20 actually sort of give them a pinpoint of
21 what potential facilities are in the area.

22 MALE VOICE: Can I interrupt ju [REDACTED] r a
23 second. We're happy to continue here; [REDACTED]
24 is a wealth of information, obviously, but
25 we're already past 10:30 which I think was

0044

1 our departure time. So - - decide how we
2 want to use our time best.

3 MALE VOICE: Well for one thing I'd
4 like--maybe if you could point out what
5 other documents you have here and how you
6 would, if at all, use them in an emergency.
7 Then as far as I'm concerned we could take
8 off afterwards. But, you know, that's--

9 FEMALE VOICE: [Interposing] And I have
10 a question regarding - -.

11 MALE VOICE: Okay, so once again
12 primarily SCADA, GLS, we have voice loggers
13 as well that actually log information that
14 happened on the telephone, so we have those
15 electronic get captured as well. And we do
16 a lot of electronic: we have a SharePoint
17 site which houses all of our clearance
18 information. So for all system clearances
19 that are managed by gas control they're
20 actually logged electronically and then

21 there are hard copies saved for seven years
22 as well.

23 Then when you have the stuff [phonetic]
24 in the room, all these binders over here was
25 when you go back 15 years we had a very

0045

1 manual hard copy driven process for locating
2 processes and procedures, and they were in
3 these complement of binders you see around
4 the room. We've taken that and we've put it
5 on electronic version. But as of August 1 st ,
6 2010 we moved to the new control room manual
7 or control room process required by DOT
8 THMSA [phonetic] and we've consolidated it
9 all into a control room manual and we have a
10 hard copy version of that with processes and
11 procedures as well and it's hard copy as
12 well as it's actually electronically on a
13 utility data network. So they primarily use
14 their SharePoint site to go in and drive - -
15 want to find the AGC relocation plan you can
16 find a hard copy but primarily they're going
17 to use the SharePoint site to drive down to
18 the electronic version of it. So that's
19 what a lot of the binders are.

20 Operating maps and diagrams are a large
21 part of what we use. Now we aren't
22 responsible for these documents as far as
23 record-keeping for them but we are given--
24 they're distributed to us. As they change
25 we update our hard copies; they are all

0046

1 available on electronic version through the
2 engineering technical library. So there are
3 two ways to get at them. So if we don't
4 have electronic capability we can get to
5 them hard copy and there's a map and diagram
6 - - and a line map of the pipeline
7 traversing the state as well as individual
8 station drawings such as that Brentwood
9 drawing right there would be in this binder
10 right here.

11 So those are responsible [phonetic] and
12 then let's see there should be emergency
13 plans, our [phonetic] emergency plan is also
14 over here.

15 MALE VOICE: Let me ask, do you have
16 any as-built drawings?

17 MALE VOICE: No.

18 MALE VOICE: Okay there's none in this
19 area; is that--

20 MALE VOICE: [Interposing] It's not
21 something gas control would rely on.

22 MALE VOICE: Okay.

23 MALE VOICE: Gas control feeds into the
24 process of design criteria and is actually
25 heavily involved in the design of a new

0047

1 station, a new facility or a remodel of the
2 station and we can go through a whole
3 process of design criteria in establishing
4 that with engineering and then engineering
5 takes the responsibility of driving out the
6 design and building the project, working
7 with maintenance folks and construction - -
8 and then as-built--
9 MALE VOICE: [Interposing] But you have
10 the math and [crosstalk].
11 MALE VOICE: [Interposing] Yeah, so
12 here you have an operating map so if I want
13 to see line 300 I mean you go here and you
14 find a map and basically it says here, you
15 know, the pipeline system.
16 MALE VOICE: That'll show you where it
17 is and does it have some specs on it?
18 MALE VOICE: Yeah, well it tells you
19 the size of the pipe, it'll tell you the
20 valve numbers, it'll tell you the customer
21 taps, the district rates that come off of
22 that piece of pipe. So yeah.
23 MALE VOICE: Do you ever use those kind
24 of things in an emergency?
25 MALE VOICE: Oh absolutely. In an

0048

1 emergency response you're dealing with - -
2 your system and then the operator, most
3 likely one of these folks will go and pull
4 out the maps and diagrams of that particular
5 area so you have a better view of everything
6 that's going on.
7 We did build, in this version of SCADA
8 that map, that schematic, we built them with
9 the exception of maybe three of the largest
10 stations which just geographically were too
11 big to put on one screen; they are identical
12 to the maps, or the diagrams in the book.
13 Now maps are different; you can't put
14 every feature on a map on the SCADA system
15 because there's just--there's thousands of
16 them.
17 MALE VOICE: Are you trying to say that
18 those are all of your reference materials?
19 MALE VOICE: Yes.
20 MALE VOICE: They're not the actual
21 document of record but they are reference
22 materials engineering provides you?
23 MALE VOICE: That's right. And we just
24 have them--that's my point: we aren't the
25 record-keeper for those documents; they are

0049

1 reference materials we use to respond.
2 MALE VOICE: Who provides it, your
3 engineering--
4 MALE VOICE: [Interposing] Gas

5 engineering.
6 MALE VOICE: And does that come out of
7 San Francisco or some other place, do you
8 know?
9 MALE VOICE: Well it comes out of
10 Walnut Creek. I think you're--
11 MALE VOICE: [Interposing] Walnut
12 Creek? Okay.
13 MALE VOICE: [Crosstalk].
14 MALE VOICE: Okay that's the integrity
15 management--
16 MALE VOICE: [Interposing] It's not out
17 of the - - management department it's
18 actually out of the engineering department
19 where [phonetic] that is house; integrity
20 management is [crosstalk] a piece of that
21 [phonetic]. That actually comes out of the
22 drafting groups will modify those and the
23 mapping group is the keeper of those records.
24 MALE VOICE: All right.
25 MALE VOICE: And then they will

0050

1 disseminate them out to all the operating
2 and maintenance groups so that we all have
3 a--
4 MALE VOICE: [Interposing] How often do
5 you--
6 MALE VOICE: [Interposing] Oh they come
7 out all the time.
8 MALE VOICE: --get changes [crosstalk]?
9 MALE VOICE: They come all the time.
10 So they don't do it on a schedule; they do
11 it as [crosstalk].
12 MALE VOICE: [Interposing] As it
13 happens?
14 MALE VOICE: Yeah, right.
15 FEMALE VOICE: And I have a question
16 regarding--
17 MALE VOICE: [Interposing] Yes, maps.
18 These are--which part, the diagram?
19 FEMALE VOICE: All of it.
20 MALE VOICE: Yeah, well you see pin
21 [phonetic] maps up there, so the pin maps
22 are essentially status of those yards out
23 there as well as what you have here. What
24 we only represent on SCADA is the valves
25 that actually send a signal to us. So we

0051

1 only know open/close if that valve was
2 equipped with a signal. Those maps will
3 actually we'll work the maintenance to
4 actually update to understand the
5 configuration of all the valves within the
6 yard [phonetic].
7 FEMALE VOICE: Okay, so you plan to
8 change that system or that - - important for
9 you?

10 MALE VOICE: Yes, I'm planning to
11 change it.

12 FEMALE VOICE: To what?

13 MALE VOICE: We're looking at
14 electronic pin mapping. We're--that's part
15 of also the pipeline--I'm sorry, I can't get
16 it right, but the - - safety enhancement
17 program, yeah, is essentially looking at
18 electronic pin map [phonetic]. So it's to
19 actually allow us to go grab a signal to
20 understand what the valve status is which is
21 gray. A gray valve is one that doesn't have
22 any sort of device to tell us. Either we're
23 going to put a device on it to tell us, or
24 we're going to work out a process with
25 maintenance to then verify and tell us, and
0052
1 then we can change the color.

2 FEMALE VOICE: So it's the same as the
3 SCADA but it's just in more detail?

4 MALE VOICE: Yes. Right now in SCADA
5 only thing that shows color is when a signal
6 is actually bringing it to us, right? So
7 the gray valve is manual, I mean there's no
8 signal on it to send it to us so we'd have
9 to call up the Tracy crew and have them come
10 out here and read it for us.

11 FEMALE VOICE: And so who works the
12 pins on the map over there?

13 MALE VOICE: The operators.

14 FEMALE VOICE: So when there's [REDACTED]
15 here is - -?

16 MALE VOICE: It's not being updated at
17 that point; there's [REDACTED] here.

18 FEMALE VOICE: But the one in San
19 Francisco, they have a similar system?

20 MALE VOICE: In San Francisco we use
21 more of a binder sort of version where we
22 actually have major stations so we color
23 code them - -. So we actually have the
24 drawing like that and we take a pin and we
25 draw it and if it changes we redraw it and
0053
1 recolor it.

2 FEMALE VOICE: And how long have you -
3 - that system?

4 MALE VOICE: Well that actually goes
5 back way before I ever got here.

6 FEMALE VOICE: The color - -?

7 MALE VOICE: Yeah, those systems - -
8 the color - -. So with electronic pin map
9 we're hoping to bring that a little bit
10 forward, but you can imagine it's a pretty
11 difficult process to figure out. I mean in
12 the respect of adding all that electronics
13 out in the field.

14 MALE VOICE: And key point there:

15 those are manual valves that don't typically
16 get operated. So the gas control's
17 operating the automated valves. So they're
18 manual valves used for - - purposes. So
19 it's not like they change every day.

20 MALE VOICE: Well they hardly ever
21 change. In most cases they're blow off
22 valves, so essentially nobody would turn
23 that valve unless they were intending to
24 blow down the pipeline. So that valve is in
25 a closed position until somebody in

0054

1 maintenance physically goes out and turns it.

2 MALE VOICE: About how often would you
3 say you have abnormal or emergency situation
4 per year?

5 MALE VOICE: I don't have a precise
6 number; in our abnormal process we actually
7 sort of--we score ourselves on how well we
8 do in gas control and doing analysis to
9 response [phonetic] - - communication of the
10 logging; that's kind of the way I talk to
11 our response piece.

12 We actually sort of record about, I
13 would say between 50 and 70 in a year, and
14 most of them turn out not to be--I mean they
15 turn out to be, you know, a regulator that
16 failed and went into high pressure and
17 essentially the response is calling out a
18 crew, the crew comes out and repairs
19 [crosstalk].

20 MALE VOICE: [Interposing] The 50 to 70
21 per year is that through this control room
22 or is that the company?

23 MALE VOICE: Is that gas control season,
24 gas control responds to. So it's only the
25 gas control response.

0055

1 MALE VOICE: That's system-wide, by the
2 way [phonetic].

3 MALE VOICE: System-wide? Okay and is
4 there any manual or manuals that you go to
5 or that people will go to right away for
6 such situations? I mean like emergency
7 procedures, abnormal procedures--

8 MALE VOICE: [Interposing] Yeah, well
9 these things are really your--this and your
10 SCADA system are really the heart of--this
11 is the heart of it, right? But there are
12 manual procedures so say we wanted to - -,
13 we have a high BTU event. There's
14 occasionally a stripping plant that strips
15 the higher ends out of the gas in Canada,
16 and when it goes offline occasionally we get
17 higher BTU than normal, so we actually have
18 a process called a high BTU event on line
19 400 and that explains essentially what we

20 need to do in the way of physical response
21 to valve something. But primarily it's
22 communication and they pull it out and
23 they'll review it so they make sure they do
24 all the right communications to all the
25 right groups about--

0056

1 MALE VOICE: [Interposing] But is that
2 in one of the--

3 MALE VOICE: [Interposing] Yeah, of
4 it's in the control room management manual
5 and it's a process and we actually primarily
6 we did a SharePoint site. So we would
7 actually call it up through our--[pause]--
8 this one happens to be our SharePoint site
9 [phonetic]. So we go to our control room
10 management process. And we can go there and
11 we can pull up that particular procedure
12 that we wanted to actually do [phonetic].

13 MALE VOICE: All right.

14 MALE VOICE: Can I ask a quick question
15 about SCADA? Have you ever had any
16 inaccuracies with the SCADA system?

17 MALE VOICE: Well I guess I'd have to
18 ask you to define inaccuracies. I mean yeah,
19 I mean--

20 MALE VOICE: [Interposing] Something on
21 the screen showing something different than
22 what's out in the field.

23 MALE VOICE: Well we do calibrations of
24 the equipment at all times, so if we saw--
25 say we saw--and you can get this--you can

0057

1 have three pressures right in a row and
2 they're all supposed to read the right thing
3 and they read one pound different. Or
4 occasionally you might get one that maybe
5 will show something even more significant
6 than [phonetic]. And then we'd--that would
7 be an inaccuracy and we would call the
8 maintenance crew and say, "You know, we need
9 to have this point calibrated," because it's
10 highly unlikely and probably not true that
11 that point in the middle is ten pounds
12 higher than the one on either side of it.
13 So that sort of stuff happens.

14 MALE VOICE: And that answers my next--
15 part of my next question which is how would
16 you know if you had an inaccuracy? So that--
17 -

18 MALE VOICE: [Interposing] Well I mean
19 through that analysis piece the operator
20 would look and say up and downstream and say
21 does that make sense, right? So that's--
22 yeah, that's how we do it. We also have
23 point-to-point calibrations that are
24 required as well.

25 MALE VOICE: Is it possible the other
0058
1 way, too, where you've got--where you don't
2 have an anomaly but in fact there is one out
3 in the field?
4 MALE VOICE: That I can't see you mean?
5 MALE VOICE: Yeah, that you can't see
6 on the SCADA system.
7 MALE VOICE: I supposed it's always
8 possible, yeah.
9 MALE VOICE: Do you ever [crosstalk]?
10 MALE VOICE: [Interposing] Oh do I have
11 any experience of that?
12 MALE VOICE: The other part of that too,
13 that [REDACTED] doesn't have expertise about is
14 really the maintenance piece. You have
15 periodic maintenance on those - -
16 calibration associated with those
17 transducers and those pressure points. So
18 that periodic maintenance that's scheduled
19 is specifically for that reason, to
20 recalibrate and associate those pressures
21 with actual event [phonetic], actual
22 pressures on the line.
23 MALE VOICE: And where do you keep
24 records to show that stuff?
25 MALE VOICE: Those are in the
0059
1 maintenance offices; we will see that at
2 Tracy.
3 MALE VOICE: Okay.
4 MALE VOICE: [REDACTED] does the operator
5 know whether or not, if he drills down to a
6 particular segment whether or not--or what
7 class location he's in? Or does it matter?
8 And also, do these books show class
9 locations?
10 MALE VOICE: That would not be
11 something an operator would be aware of, no.
12 MALE VOICE: Okay so in terms of
13 prioritizing that class location does not
14 factor into [crosstalk]? You said that
15 there are senior operator factors
16 [phonetic]--?
17 MALE VOICE: [Interposing] Yeah, our
18 prioritization currently is that the level
19 of alarms can be set [phonetic] and I
20 [phonetic] basically have four
21 configurations: high-high, high, low, low-
22 low. So the high-high and the low-low,
23 because those are - - you're either at or
24 transgressing an engineering limit on the
25 high side or essentially a planning limit on
0060
1 the low side. So those would be the highest
2 priority.
3 MALE VOICE: Okay.

4 MALE VOICE: Now we are in alarm
5 management for control room management,
6 which essentially, I don't know how much
7 history we have with it here but August 1 st
8 we put plans in plans, October 1 st , 2011 - -
9 two weeks we have a certain amount of
10 implementation takes place, and then in
11 August 2012 the alarm management component
12 of control management needs to be in place.
13 And we are looking at redesigning that and
14 essentially trying to designate alarms not
15 only by that level of four [phonetic] alarm
16 conditions but prioritization of the
17 emergency high, medium [phonetic] and low.

18 MALE VOICE: So a high-high in a class
19 three currently is no different than a high-
20 high in a class two.

21 MALE VOICE: [Crosstalk] That's correct.

22 MALE VOICE: But it may--

23 MALE VOICE: [Interposing] That, that's
24 a true statement but keep in mind that the
25 pressures associated with the pipeline in

0061

1 those class one, two, three or four
2 locations are based on safety factors
3 associated with that class. So the
4 pressures that [crosstalk]--

5 MALE VOICE: [Interposing] That's
6 correct, assuming the class is correct.

7 MALE VOICE: That's correct. So
8 assuming that those pressures are what
9 they're managing too, they're managing based
10 on also that the safety factor's related to
11 class location.

12 MALE VOICE: Right. Okay.

13 MALE VOICE: So yeah, so we MAOP
14 [phonetic] and MOP [phonetic] is actually
15 taken into account for our alarm limits. So
16 that's I think how [crosstalk].

17 MALE VOICE: [Interposing] But there is
18 no indication that if you drill down to a
19 particular segment whether or not you're in
20 a class three or a class one other than just
21 kind of--like there's no field that shows
22 where you're at?

23 MALE VOICE: That's correct. Now what
24 we did, we did do on the higher level maps
25 is we actually used sort of a GIS look to

0062

1 the map.

2 MALE VOICE: Okay.

3 MALE VOICE: So the operator could at
4 least get a sense of whether the pipeline
5 was running through, you know, communities
6 or towns or was out in essentially in the
7 mountains or - - somewhat of a visual cue
8 for the operator to understand - -. So the

9 Fresno system runs through cotton fields;
10 half of its distance, and then it gets into
11 the - -.

12 MALE VOICE: Okay. So I guess I'd like
13 to suggest that we get ready to depart
14 [phonetic] for Tracy [phonetic]. Perhaps on
15 the way out we can have Jim and [REDACTED]
16 [phonetic] maybe just - - out to the valve
17 field here; you can get a feel for what that
18 looks like if that's of interest to you.
19 Take a couple minutes there and just see--
20 you just saw valves on the map - - this is
21 what it looks like on the ground, and then
22 we'll go back to the bus and head for the
23 next facility.

24 MALE VOICE: I'd suggest--this is
25 probably your last best opportunity for the
0063

1 restrooms before we hit the bus and load up
2 for another half hour run.

3 [END TAPE LS100009]

4 [START TAPE LS100010]

5 MALE VOICE: --leave here at a
6 reasonable time. I think he did say - -.
7 So this is considered the Tracy [phonetic]
8 maintenance station, I think it is
9 [phonetic] called. And--where'd Jim go? Oh
10 there you are. I'll let you take over.

11 JIM: Yeah. So just want to reiterate
12 on the safety items because our place
13 [phonetic] has changed. Jason, you're still
14 going to call 911 in case of emergency. The
15 people that are CPR qualified; you want to
16 get to know them.

17 We have an AED on this wall right by
18 Jason, along with some first aid kits. Okay.
19 I have the role [phonetic] so I'm going to
20 clear the building. Our meeting place is--
21 we're going go out the door. One of us is
22 going to put a--hit the red button by the
23 door or by this post here, will
24 automatically open the gate and that's going
25 to be our meeting place is right outside the
0064

1 gate where you pulled in and I'm going to
2 take role. So is everybody comfortable with
3 that?

4 MALE VOICE: Yeah.

5 MALE VOICE: All right, thank you.

6 MR. [REDACTED]: All right, so I'll
7 kind of kick this off. Just to let you know
8 who I am again, I'm [REDACTED] [phonetic],
9 I'm a central area [phonetic] superintendent.
10 So take care of like Tracy, Milpitas Foster
11 [phonetic], Los Maedanos [phonetic], McDonald
12 Island and some general construction folks
13 [phonetic]. So Jim is the supervisor of

14 this facility and he's one person that
15 reports to me as well.

16 Jason is a senior program manager that
17 helps us with a number of issues but also
18 helps us in relieving as a supervisor. So
19 he's a big support to us as well.

20 So just to kind of--and I know we're on
21 a tight--where'd [REDACTED] [phonetic] go?
22 We're on a tight schedule so we'll kind of
23 give you the Reader's Digest version. But I
24 do want to kind of tie it from gas control,
25 which operates our facility to us, which we

0065

1 maintain the facilities.

2 So the makeup here, we have a
3 supervisor; we also have clerical support,
4 then we have our maintenance staff. So we
5 have what we call technical maintenance
6 people which are gas control technicians and
7 then we have transmission maintenance which
8 takes care of our pipeline portion of it,
9 USAs [phonetic], standbys, valve maintenance,
10 leak survey, patrol, those type of issues.
11 And there's five of them.

12 So the total of ten people are staffed
13 at Tracy. This is a main headquarters and
14 then we venture out from here. So they
15 cover pipeline all the way down towards--I
16 don't know if you're familiar with the whole
17 area but down [REDACTED] towards [REDACTED] (??AHH)
18 [phonetic], a little bit past that to a
19 little town called [REDACTED]. We also go
20 over to the [REDACTED] [phonetic], which is
21 there through [REDACTED] [phonetic] then
22 off [REDACTED] through Livermore; we take care of
23 the pipeline there.

24 [REDACTED] (??AHH) [phonetic] Terminal is another
25 one where we were at earlier, and then we

0066

1 also take care of some gas gathering towards
2 Stockton [phonetic] or Lathrop [phonetic]
3 area, more towards that direction.

4 So we maintain all those type of
5 facilities, both from a preventive
6 maintenance and a corrective maintenance.
7 So now [REDACTED] was talking about some of the
8 pressure type indications if they see
9 something that's a discrepancy and I think
10 it was a question that you asked is well how
11 do you know? So the evaluate that.

12 So now what they do when they find
13 something like that, they create a work
14 request, a corrective maintenance order. So
15 what they'll do is they'll put that in the
16 computer, it shows up on Jim's computer as
17 well, which we check those work requests
18 daily, and then depending on their priority

19 we go out and work those. So if there's an
20 error or problem we get on that very quickly.

21 MALE VOICE: Do we [phonetic] have the
22 maintenance orders files somewhere?

23 MALE VOICE: We do that electronically,
24 so we'll be able to show you that here in a
25 minute on the preventive maintenance program.

0067

1 We do use what we call PLM to manage
2 that work, both from a corrective
3 maintenance as well as a preventive
4 maintenance. So everything is scheduled
5 from depending on what task it is, anywhere
6 from a weekly to a monthly to, you know,
7 semi-annual, annual maintenance that's
8 required, depending on the device, like
9 pressure transmitters that we were talking
10 about, they're an annual device. So we use
11 a program to manage that. We set
12 anniversary dates of when those things are
13 due, so we put together schedules and we're
14 going to kind of go through that a little
15 bit; I'm going to have Jim and Jason kind of
16 show you a little bit of that.

17 And then we go out and perform that
18 work and then we document that work. We
19 document it two different ways: we document
20 it electronically inside our PLM that it was
21 completed, and then we have a hard copy
22 which are the binders that we can show you
23 if you'd like. But where it's a hard copy
24 document where the person that performed the
25 task comes in, fills out the document at the

0068

1 end of the day: "This is what happened;
2 this is what we did," signs it off. And we
3 do that for all our compliance work.

4 Okay? So why don't we show a little
5 bit about the preventive maintenance
6 schedule and what you're seeing here, in
7 essence, kind of hard to read so we're going
8 to kind of talk through some of this. But
9 what's nice about our PLM, like for myself
10 or even Jason, I can look at any of the
11 districts throughout the whole system. So
12 it's a comprehensive program when it comes
13 to scheduling work.

14 So we were just at Brentwood, so we're
15 going to kind of tie it to Brentwood so you
16 can kind of see that. So if we go up and
17 look at our maintenance that's due at
18 Brentwood station you can go up here and
19 limit it by group, which is Brentwood, and
20 pull up and run, and basically what we can
21 see if everything that's due for the whole
22 year in the Brentwood area. This isn't just
23 Brentwood station; it's also some the

24 pressure limiting [phonetic] stations that
25 are feeding Brentwood like [REDACTED] [phonetic]
0069

1 and few other ones.

2 Jason will be able to scroll down to
3 show Brentwood Terminal itself.

4 MALE VOICE: These all come from work
5 requests?

6 MR. [REDACTED]: These do not. This is
7 part of our preventive maintenance. So
8 these are what is required from regulatory
9 requirements to do work, as well as
10 reliability. So we have two types of work,
11 basically: we have regulatory work and then
12 we have reliability work we do. All of that
13 is in this program.

14 So Jim, maybe you might want to just
15 kind of walk through a little bit about that,
16 how that thing's [phonetic] set up.

17 JIM: Well thank you, [REDACTED]. So first
18 of all, every piece of equipment we have
19 here has a bar ID number. Everything that
20 you've seen out at Brentwood Terminal has an
21 ID number, and that's the first thing that's
22 listed.

23 Now there's also a tag number like
24 valve 44--that's the ID number, that's valve
25 44. You go out in the yard; if you look at

0070
1 the operating diagram that I have on the
2 table right here you can see valve 44's got
3 a tag on it and it tells you what it is.
4 Valve 44's a monitor valve, it's off line
5 114, kind of over there where they were
6 digging, where the hole is dug for--they're
7 doing the hydrotesting. That's one of the
8 valves right there.

9 It gives you indication of what the job
10 description is. That one for valve 44 has
11 to be a class A extension [phonetic]. Okay?
12 It's given us the time that we have to
13 maintenance it; this one happens to be 0.7,
14 so it's under an hour. And it's to be, have
15 a class A extension every 12 months. So
16 once a year.

17 It tells you the last day it was
18 serviced, which--August 31 st , 2001. So it
19 was just done. Now it's going to tell you
20 the next service date is going to be July 1 st .
21 So probably the anniversary date that it has
22 set for it. And it also tells you who the
23 person that last serviced it.

24 If you double-click on that it'll--I
25 think you double-click on it--okay. Then it

0071
1 takes you to--well, no we don't want to do
2 that; we want to go in the bar ID part. Try

3 to double--okay. But there's a section that
4 you can actually go to and it gives you all
5 the description of the serial number, what
6 kind of--what is it a, a ball valve? Is it
7 a plug valve? The last one to service it--
8 it'll give you the history of it as well.

9 So once--now and that's also is our
10 time management too, keeps our guys that
11 come in, that's our timesheet as well, and
12 they log that down. And then at the end of
13 the day when they come down, and after
14 they've serviced it then they come and we
15 have our valve cards which are all in the
16 binders or on that wall right there. And
17 they'll physically sign in, moved it,
18 operated it, the day they did it, who did it,
19 and then as a supervisor I check it that
20 they did that. So that's the process of
21 working it [phonetic]. Yes?

22 MALE VOICE: Let me ask: are these the
23 same as job files or are they related to job
24 files?

25 MR. [REDACTED]: No this is just the
0072

1 maintenance part of our job. This is the
2 timekeeping and the maintenance part of our
3 work.

4 MALE VOICE: All right and so job files,
5 Margaret says that it's construction?

6 MR. [REDACTED]: Right, job projects are
7 construction. So for example, if we have
8 new construction, which we do get involved
9 with because we handle the clearances for
10 those. And say there's new equipment added;
11 when the new equipment's added then what we
12 do is we update that database with that
13 information so we do the maintenance that's
14 required as new construction is completed.

15 MALE VOICE: All right, but Bob it's
16 tough to answer the question the way you
17 asked it because you asked is it related?
18 And in some essence yes, it is related
19 because for instance that valve there, valve
20 14, was put in on a job, let's say Job 123.

21 So there's a project folder with, for
22 Job 123 that shows the installation of that
23 valve, has the bill of materials for that
24 valve; that job is contained somewhere. But
25 from a maintenance perspective there's no

0073
1 direct correlation.

2 MALE VOICE: - - you have job files
3 here?

4 MALE VOICE: Yes we do. We have--

5 MALE VOICE: [Interposing] For what,
6 the area that you cover?

7 MALE VOICE: Right. Yeah, we have

8 reference drawings that we use for reference
9 for maintenance purposes, then we also have
10 active jobs. Like we have information on
11 the projects that are going on over there
12 right now because we're involved with
13 righting the clearances.

14 So any time that you have a project
15 that affects the district we're the
16 clearance holder, so we have to clear it to
17 make that thing safe. So we're involved
18 with that project actually from when it
19 starts 'til they complete it. And then we
20 keep that job here, job package at this
21 location. But our central location for all
22 our projects is Walnut Creek.

23 MALE VOICE: All right.

24 MR. [REDACTED]: Keep in mind when a
25 construction projects comes in and district

0074

1 is working on it or has a direct relation to
2 something going on in that district the
3 drawings would be centralized here typically
4 with the project manager or a project
5 engineer. But the district has the ability
6 to redline on those drawings based on any
7 changes from a construction field
8 perspective. So they would have those
9 project folders available to them here, at
10 which point after construction they would go
11 back to engineering to be integrated into
12 the systems.

13 MALE VOICE: Copies may remain here as
14 well?

15 MALE VOICE: Yes.

16 MALE VOICE: Copies may remain here.

17 MALE VOICE: Copies may remain here
18 [phonetic].

19 MALE VOICE: There's locations where
20 you can see them [phonetic].

21 MR. [REDACTED]: Yeah. And also on the
22 construction front too, we do that as well.
23 I have the charge of the measurement
24 [phonetic] and control construction people
25 as well. So if they're involved with the

0075

1 project and there's as-builts, you mentioned
2 to us [phonetic] about as-builts before:
3 when they turn in their as-built they make
4 us a copy of those, make a color copy so we
5 keep them here until drafting completes and
6 makes the final copies. So we have that
7 information available to us, yeah, for those
8 changes.

9 Now a couple things with the--oh, do
10 you have a question?

11 MALE VOICE: Yeah, just real quick
12 about the point about the SCADA.

13 MR. [REDACTED]: Yes?

14 MALE VOICE: How would these records
15 show you that they're--if they're indicating
16 an inaccuracy in the [phonetic] SCADA
17 system?

18 MR. [REDACTED]: When we go to do our
19 calibration on those we could determine if
20 there's an inaccuracy and they calibrate it
21 at that point. If it's any time in between
22 the maintenance interval that's handled
23 through corrective maintenance, which would
24 be an operator going, "Hey, this thing looks,
25 appears that it's off." Should be reading

0076

1 500 pounds; it's reading 490 or it's reading
2 510. Since [phonetic] it's a corrective
3 maintenance tag we go out and fix it,
4 correct it, fill out the tag, "Here's what
5 we found, here's how we left it, here's the
6 pressure - -."

7 MALE VOICE: You said right now we're
8 looking to preventive maintenance.

9 MR. [REDACTED]: You're looking at
10 preventive maintenance. Yeah, and we have--
11 so if there's any tags that are filled, and
12 we could kind of go to corrective
13 maintenance to kind of see there, and just
14 hit like the inert [phonetic] section.
15 That's completed. Let's go to inert--he's
16 probably already cleared it out. You got to
17 hit the little binoculars. [Off mic
18 conversation].

19 See, so we've got some inert status
20 that have come in. It looks like--yeah, so
21 here's a typical one: "rectifier at
22 Livermore Junction." So what ends up
23 happening if they go out and they make a
24 read and they input the read and the reads
25 are not within the parameters it auto-

0077

1 generates a work request to send somebody
2 out there to evaluate that rectifier, figure
3 out what's wrong with it and get it fixed.

4 MALE VOICE: Do valves need routine or
5 regular maintenance?

6 MR. [REDACTED]: Valves? Yes.

7 MALE VOICE: And what is--I mean is
8 there a schedule for that--

9 MR. [REDACTED]: [Interposing] Yes.

10 MALE VOICE: --or different kinds of
11 valves, different schedules or how does that
12 work?

13 MR. [REDACTED]: Yeah, they range anywhere
14 from doing them monthly and even some we
15 have that are bi-monthly, all the way up to
16 annual maintenance, depending--all the way
17 up to annually. We don't have any valves

18 that are further than annual. So every
19 valve gets maintained at least once a year,
20 but depending on what it is, an example
21 there is like a regulating valve compared to
22 like a block valve; we looked at one with
23 the hand wheel. Those typically are annual
24 maintenance; you go out there, you lube,
25 inspect and operate that valve.

0078

1 So the mechanic, which we've got a
2 couple of them in the back; they're actually
3 mechanic welders but they do that work as
4 well--Greg [phonetic] for example, it'd be
5 on his schedule, it could be on a sheet,
6 he'd go out there, he would basically
7 inspect that valve looking for abnormal
8 operating conditions. He would then lube
9 and operate that valve, and then he'd come
10 back and fill out the document associated
11 with that.

12 MALE VOICE: Before you go on could you
13 clear up one point which is to say at one
14 point you said that every valve is at least
15 maintained annually, but we have some valves
16 that are not compliance-related.

17 MR. [REDACTED]: Yes, that is correct. And
18 that's for compliance valves. And then we
19 have reliability valves that could be
20 extended outside of that. But all
21 compliance valves are maintained at least
22 annually, not to exceed 15 months.

23 MALE VOICE: And do you keep the
24 records here for all the maintenance and for
25 how long do you do that?

0079

1 MR. [REDACTED]: Yes. We are not good at
2 throwing things away. So we keep
3 maintenance records, those type of
4 compliance records for long periods of time.

5 MALE VOICE: For years?

6 MR. [REDACTED]: For years, yeah. And we
7 are audited from--the CPC audits us anywhere
8 from a frequency from one year to three
9 years over at least my history, and so we--
10 they go back and look at those records. So
11 we keep those records. And they could
12 always request to go back further, so we
13 keep those records on all of our items
14 [phonetic].

15 MALE VOICE: Well what is your
16 understanding of what the requirement is?

17 MR. [REDACTED]: The requirement of those
18 records is we don't throw them away; we keep
19 them.

20 MALE VOICE: Okay.

21 MR. [REDACTED]: Compliance records, we
22 keep those pretty tight and hang onto them

23 for long periods of time.

24 MALE VOICE: But the standard that
25 governs that work [phonetic] likely

0080

1 [phonetic] specifies it's supposed to be
2 maintained five years, or two inspection
3 cycles. There's various retention
4 requirements - - called [phonetic] out in
5 the standard.

6 MR. [REDACTED]: Yeah, we typically hang
7 onto them for long periods of time.

8 MALE VOICE: Are they hard copy or--?

9 MR. [REDACTED]: [Interposing] Yeah,
10 they're hard copy. We went to this PLM
11 program, like I said, we keep track of it
12 now electronically that the job's been
13 completed as well. But we went to this
14 program I would say in about--somewhere in
15 the late Nineties is when we started our PLM
16 program. And we've had the hard copy
17 process--we've never gotten away from the
18 hard copy. But the forms may change or get
19 updated, but we've had hard copies for a
20 very long time.

21 MALE VOICE: Can you explain that,
22 [REDACTED]? In other words, the hard copies are
23 the ones that the commission reviews, and
24 PLM is electronic version of the same
25 information.

0081

1 MR. [REDACTED]: Yes, that's exactly right.
2 And the electronic software program is for
3 us to manage the work. And it's a very good
4 tool for us because it helps us not miss
5 anything, right? Because it's putting it up
6 in front of your face saying, "This needs to
7 be done." So it's a very good tool for that.

8 MALE VOICE: What about the accuracy of
9 the records? Because the problem with San
10 Bruno was the records were not accurate, not
11 that you didn't keep them. So I mean does
12 anybody, like when you fill out a form that
13 goes on here is there someone else who looks
14 at it to make sure that it's proper?

15 MR. [REDACTED]: Yeah, and I don't know--I
16 can't really speak to the San Bruno record
17 issue because I wasn't involved with that.

18 MALE VOICE: Well basically it had no
19 weld [phonetic] that was seamless and had a
20 weld [phonetic].

21 MR. [REDACTED]: Yeah, well I read that in
22 the report.

23 MALE VOICE: I know, I didn't see - -
24 either, I just wondered who makes sure the
25 records that you're keeping forever are

0082

1 accurate.

2 MR. [REDACTED]: Yeah. Well what we do for
3 the process that Jim was kind of alluding to
4 that process is so what comes out is there's
5 a schedule for the maintenance personnel to
6 do the work. At the end of that day they
7 bring in their schedule because it's also
8 their timecard. They will out the related
9 documents associated with that. Jim, the
10 supervisor, comes back and reviews those
11 documents to insure that they're correct and
12 accurate.

13 MALE VOICE: So the guy who does the
14 work fills out the documents, not some other
15 person who's standing next--

16 MR. [REDACTED]: That is correct--the
17 person who fills them out.

18 We also then have a maintenance
19 assistant, which is our clerical support,
20 that inputs it into this software program.

21 MALE VOICE: What about repairs? If
22 there's repair done to a pipeline--'cause,
23 you know, you found a leak, there was an
24 emergency; does the guy who does the repairs,
25 is he the one who fills out the form?

0083

1 MR. [REDACTED]: Yes. Anytime any of our
2 maintenance staff performs the work they're
3 the ones that fill out the document.

4 MALE VOICE: Okay.

5 FEMALE VOICE: So do you find that you
6 refer back to the history that you retained
7 for any reason?

8 MR. [REDACTED]: Where we would probably do
9 that is on a corrective maintenance type
10 standpoint. So we may look at if we have a
11 valve or a regulator that's maybe continuing
12 to have problems we'll use that to go back
13 and look at it and say--and we'll work with
14 our engineering department on that, saying,
15 "Hey, you know what? This regulator seems
16 to be having problems and we need to get
17 that fixed." That's where we'd use the
18 historical information.

19 Now one thing about PG&E and how it's
20 structured and Tracy is not--Tracy district
21 is not unique to any of the gas transmission
22 facilities--we have people that don't really
23 leave here too often. So we've got, from
24 years of service with PG&E, it ranges
25 anywhere from about 5 to 10 years to like 40

0084

1 years. So we have people that have worked
2 here for a long time so which is very good
3 in a tail board setting to talk about any
4 type of issues around, you know, hazards or
5 whatever the case might be. So we have
6 historians on every one of our district

7 sites.

8 MALE VOICE: So like let's say if
9 someone finds a leak in one of the leak
10 surveys; does that--that gets put into the
11 corrective action file and then you guys see
12 that. And then is that how it works?

13 MR. [REDACTED]: Well leak survey is
14 managed a little bit differently. Yeah,
15 leak survey we use AEGIS [phonetic] to
16 manage that process. So when we go out and
17 perform leak survey and a leak is found we
18 report that leak to the supervisor
19 immediately and then we have a process and
20 we track it in AEGIS, which is a larger
21 database just focused on leaks.

22 MALE VOICE: Okay. I see. And that's
23 separate from this corrective and
24 preventative maintenance?

25 MR. [REDACTED]: And that is separate from
0085

1 that, correct.

2 MALE VOICE: And depending on the rate
3 of leak, if it's a grade [phonetic] one leak
4 we'll stand by until crews come to repair
5 that leak.

6 MALE VOICE: To take a look, sure.

7 MALE VOICE: If it's another grade of
8 leak, lesser grade of leak, then we'll go
9 through the reporting structure of doing
10 items [phonetic].

11 MALE VOICE: We will physically stand
12 by and confirm; if need be we will rope off
13 the area, depending on the grade of leak.
14 Again, grade one requires someone to stay on
15 spot until a crew arrives.

16 MALE VOICE: So would you fill out the
17 forms, then, that get recorded or would the
18 guy that did the welding?

19 MALE VOICE: Depends what forms you're
20 talking about. So when we dig the form, the
21 individual who is doing the leak survey
22 fills out an A form, fills out portions of
23 the A form. And upon repair to that leak
24 other sections of the A form would then be
25 completed.

0086

1 MALE VOICE: So the repair guy who does
2 the actual binding [phonetic] of the--
3 however they--I guess they don't weld them,
4 huh? But you know, maybe they do.

5 MALE VOICE: It depends on the repairs.
6 So there's a couple documents that could
7 potentially come out of that repair. For
8 instance, if it's--let's say it is graded at
9 grade one but by the time we go down to the
10 leak we realize it's, it's a landfill,
11 right? A lot of times it gives us the same

12 indications.

13 MALE VOICE: Right.

14 MALE VOICE: Really nothing's generated,
15 other than just the A form because once we
16 unearth the pipe we fill out an A form and
17 we submit that in, the leak is cleared.

18 If it's a grade one leak and there's
19 actually some repair associated with that,
20 if we put in a new piece of pipe we're
21 creating an A form but we're also creating a
22 strength test pressure report for that new
23 section of pipe. The pipe has to be tested,
24 it's typically pre-tested pipe, but we still
25 have to associate a strength test pressure

0087

1 report for that. So that's another type of
2 document that would go in. So it varies on
3 levels of repair.

4 MALE VOICE: So the welder himself
5 wouldn't fill out the form; you guys would
6 fill it out?

7 MALE VOICE: Correct, welder being PG&E
8 welder.

9 MALE VOICE: Well yeah, I mean whoever
10 you hire to put in the new piece of pipe;
11 would that person fill out the form?

12 MALE VOICE: Typically in that case the
13 PG&E welder, or there would be, if it's an
14 outside contractor then we would have a PG&E
15 inspector on-site who would take the
16 responsibility of filling out those forms.

17 MALE VOICE: Okay yeah, I just wondered
18 how we made sure that the forms you're
19 citing are accurate, that's all.

20 MALE VOICE: Just can I quick - -
21 question. So let's say you guys find the
22 leak at the valve. Is there a way for you
23 guys, and then you have to take some
24 corrective action. So would that, then go
25 into the corrective action database?

0088

1 MR. [REDACTED]: Well leaks, like I said,
2 are a little bit different. And Brian was
3 trying to explain that too with the grading
4 a leak. So when you have a leak survey crew
5 that goes out and they measure a leak,
6 depending on what they find and where
7 they're at, you know, if we're in the middle
8 of a housing district and we have gas that's
9 leaking in the LALs [phonetic] at that
10 certain level, we would consider that a
11 grade one. And that's what Brian's talking
12 about. We physically have somebody stand
13 there and we would stay there until it was
14 repaired and fill out that--

15 So it matters what the grading of the
16 leak is.

17 MALE VOICE: Sure. Okay, I guess I'm
18 trying to figure out how you guys plan your
19 response. Like let's just say it is a big
20 leak; are you looking back at other prior
21 correction actions in the neighborhood, or
22 similar stuff for your maintenance, your
23 preventative maintenance that you've
24 performed to know what's been done, what was
25 the last thing we did, who was the last

0089

1 person who was here?

2 MALE VOICE: Are you talking about
3 trending?

4 MALE VOICE: Not necessarily trending
5 but kind of just taking--I'm just wondering
6 if when you hear of an incident are you able
7 to look back and kind of see what's happened
8 on the pipe, or in the neighborhood or on
9 that valve where you might see a leak. So
10 you have a sense when you go in there of
11 what to expect?

12 MR. [REDACTED]: Well one of the critical
13 support groups we use anytime we find a leak
14 is our pipeline engineering group. They're
15 involved immediately. So when we find a
16 leak it's not just a supervisor that's
17 notified; we get a hold of our pipeline
18 engineering group. And they provide that
19 service for us.

20 MALE VOICE: Okay. So that's a
21 separate group, the pipeline engineering
22 group?

23 MR. [REDACTED]: That's a separate group
24 that supports gas transmission.

25 MALE VOICE: Okay.

0090

1 MALE VOICE: But also I think it's a
2 great question: if you get away from kind
3 of the leak question it's a great question.

4 MALE VOICE: Yeah, yeah, I think I
5 might have framed it poorly by saying it was
6 a leak.

7 MALE VOICE: That's okay. Because PLM
8 has that historical perspective to it, as a-
9 -maybe a better example is a regulator fails,
10 okay? Regulator fails and the monitor has
11 to take over and we're made aware of that.
12 We have the capability of seeing what issues
13 have happened with that valve regulator in
14 the past.

15 When we go through PLM we can see that
16 history and then we can provide, you know,
17 any type of measures to insure that, you
18 know, maybe there's some reason that goes on
19 about maybe some failure loads. We're
20 seeing the history here, looks like there's
21 a failure mode.

22 The one reason I asked you about
23 trending is because we have--in gas
24 engineering we have what's called process
25 owners. And those process owners are within

0091

1 the integrity management group and they look
2 at trends associated with failures on
3 different assets. And so we have
4 individuals who are looking at the trending
5 of failure to let's say regulators. And
6 then we can narrow that down to a particular
7 regulator, let's say Mooney [phonetic]
8 regulators, a certain size Mooney regulator;
9 we see a higher rate of failure on those.

10 We then either work with our sourcing
11 group to say, "Hey, Mooney better pick up
12 the ball on what these failures are or we
13 move to a different type of regulator
14 altogether." So those types of activities
15 are happening too. And PLM is an integral
16 part of that.

17 MALE VOICE: And PLM lets you see
18 corrective action on the regulator as well
19 as the preventative maintenance that was
20 performed?

21 MALE VOICE: Because it's tied to that.

22 MR. [REDACTED]: That is correct.

23 MALE VOICE: As Jim referenced earlier,
24 it's tied to that bar ID.

25 MR. [REDACTED]: So [phonetic] you click on

0092

1 that so ask it to [phonetic] bring up all
2 the history with that.

3 MALE VOICE: Okay.

4 MR. [REDACTED]: And we use, depending, and
5 I had mentioned pipeline engineering
6 [phonetic] but we also have station
7 engineering department that helps us on the
8 other part of that, like regulators and
9 controllers. So we have disciplines
10 associated with those support groups.

11 MALE VOICE: And how do you guys
12 coordinate with the pipeline engineer and
13 the station engineer people when you get a
14 situation?

15 MALE VOICE: Each one, each district is
16 assigned a pipeline engineer and a facility
17 engineer. So we have people that we know
18 directly who to do through, like for this
19 area it's [REDACTED] [phonetic] is our
20 pipeline engineer. Any pipeline issues we
21 involve Tim.

22 And then if it needs to go past that
23 with Tim, Tim takes it from there; he takes
24 the lead on any pipeline issue.

25 MALE VOICE: Okay.

0093

1 MR. [REDACTED]: So if they need to develop
2 a project, put a project together,
3 corrective actions, whatever the case might
4 be, they make all the recommendations on how
5 we repair it; we don't make those
6 recommendations here; we don't make those
7 determinations, the engineering department
8 [phonetic] does.

9 MALE VOICE: So do AEGIS and the
10 corrective maintenance database work
11 together? I mean AEGIS is used to identify
12 the leaks and corrective maintenance is used
13 to show how--

14 MR. [REDACTED]: Well AEGIS is where we
15 track the leaks. So we actually physically
16 walk the pipeline with a device; we
17 determine the--we find a leak, then we
18 report it into AEGIS.

19 MALE VOICE: But if there is a--if
20 there's action required, typically there is,
21 there would be a corrective work
22 notification that is sent; PLM would have
23 that corrective notification in it. PLM
24 calls it a work order, right?

25 MR. [REDACTED]: Yeah, work request. Okay.

0094

1 MALE VOICE: Sorry, work request. And
2 so that notification would be sent to the
3 district and they would have that and it
4 would be scheduled.

5 MALE VOICE: In the corrective - -
6 preventive maintenance portion?

7 MALE VOICE: It would be a corrective--

8 MR. [REDACTED]: [Interposing] It would be
9 a corrective maintenance, right. Yeah, the
10 actual task of walking the pipeline for leak
11 survey is preventive, and then the actions
12 if required would be corrective.

13 MALE VOICE: Corrective is anything
14 that's not absolutely scheduled. We
15 schedule corrective work, don't get me wrong,
16 but it's not on a periodic maintenance basis.
17 It's things that come up that require some
18 sort of repair or replacement.

19 FEMALE VOICE: I have a question. So
20 the PLM is your electronic system for your
21 preventive and your corrective maintenance,
22 and you've used that since--?

23 MR. [REDACTED]: We've used that since, I
24 want to say it was like the late Nineties is
25 when we developed that; I want to say around

0095

1 '97, '97.

2 FEMALE VOICE: Okay. And then I
3 noticed - - on the bottom it's GIS and Field
4 [phonetic] Data Services.

5 MR. [REDACTED]: Oh yeah, that's just other

6 tabs we have open because we want to show
7 you a couple other things.
8 FEMALE VOICE: And is that a different
9 system or is that part of PLM?
10 MR. [REDACTED]: Yeah, different system.
11 Yeah.
12 MALE VOICE: That's the task bar.
13 MR. [REDACTED]: Right. Yeah, that's just
14 a task bar on the bottom because there was a
15 few other questions you asked over at
16 Brentwood so we wanted to make sure you tie
17 how they apply to us in the district.
18 MALE VOICE: Do you divide your work
19 personnel into maintenance for transmission
20 and other tasks?
21 MR. [REDACTED]: Yes. Our primary focus
22 here is gas transmission.
23 MALE VOICE: All right, so you don't do
24 distribution?
25 MR. [REDACTED]: So distribution--we don't

0096

1 do distribution. Distribution has their own
2 maintenance group that takes care of that.
3 We just take care--
4 MALE VOICE: That's in a different
5 location?
6 MR. [REDACTED]: That is at a different
7 location, yes.
8 MALE VOICE: Is there someone in this
9 group responsible for continuing
10 surveillance of the facility, like the gas
11 transportation?
12 MR. [REDACTED]: I don't know if I
13 understand; you're talking about--
14 MALE VOICE: [Interposing] Well you
15 said you do patrol, like your area's
16 patrolled; what about continuing
17 surveillance of the facility?
18 MR. [REDACTED]: Well we have area patrol;
19 so we fly the [crosstalk].
20 MALE VOICE: [Interposing] So the area
21 patrol is dispatched through your area?
22 MR. [REDACTED]: Yeah, well we actually
23 have a schedule for our whole system; every
24 one of our pipelines are flown once a month.
25 MALE VOICE: No but I mean for this

0097

1 facility, from [REDACTED] to Livermore, when
2 a patrol goes out, aerial patrol, you guys--
3 that's only your section, right?
4 MR. [REDACTED]: Yes. And if there's
5 anything that they find, say they see
6 somebody working along the pipeline, they
7 immediately call the district.
8 MALE VOICE: Okay what about continuing
9 surveillance? That's not done through air
10 patrol, right?

11 MR. [REDACTED]: No, and I don't know if
12 you mean by camera or--?

13 MALE VOICE: It's just a term that we
14 use, and one I'm not familiar with. Give me
15 a better example of the type of activity
16 you'd be talking about.

17 MALE VOICE: It's defined in 49 CFR 192,
18 Continuing Surveillance, that you will
19 conduct not only patrols, aerial patrols but
20 continuing surveillance. One of the things
21 is to determine if there's been an upgrade
22 in class [crosstalk]. That's kind of what
23 I'm getting at.

24 MR. [REDACTED]: Oh, so density surveys.

25 MALE VOICE: It sounds like--because
0098

1 patrols is--you consider that a preventative
2 or a scheduled type thing.

3 MR. [REDACTED]: Right.

4 MALE VOICE: Continuing surveillance
5 also is a scheduled type program. So is
6 that, is that not a familiar term?

7 MR. [REDACTED]: Well yeah, that's why I
8 asked if that's better to say continuing.
9 Actually all the people are dispatched. So
10 we're out on the pipeline all different
11 times during the week. So we're out looking
12 at the pipeline as we're driving through
13 there. All our work is on the pipeline, so
14 that's part of our surveillance. So when
15 they're out there they're looking for
16 activity, you know, that especially third
17 party because that's always a big concern
18 for us.

19 MALE VOICE: Right.

20 MR. [REDACTED]: We have our USA program,
21 so when they submit USAs we have people
22 dedicated to do USAs, to make contact, go to
23 locations, provide stand-by. And then I
24 think what you were talking about is what we
25 consider density surveys to determine what

0099
1 class locations.

2 MALE VOICE: Right.

3 MR. [REDACTED]: Yeah, and those are taken,
4 those are done as well; a lot now what
5 they're using is, you know, thermal imaging
6 from satellites, right? They do and they're
7 looking to see where the housings are to
8 determine what class location's required.
9 That's determined not by us what class
10 location it is; that is out of the
11 engineering department determines if a class
12 location changed or whatever.

13 MALE VOICE: Okay. So if one of your
14 crew is out on a scheduled maintenance and
15 they don't really know if there are any

16 class one or class three--
17 MR. [REDACTED]: [Interposing] No they do.
18 MALE VOICE: They do?
19 MR. [REDACTED]: Yeah, absolutely.
20 MALE VOICE: So if they're in something
21 that they know is a class one but it's in a
22 densely populated - - is it something that's
23 intuitive for them to say, "You know what?
24 This needs to be relooked at."
25 MR. [REDACTED]: Absolutely.

0100

1 MALE VOICE: So that's something they
2 should be looking at?
3 MR. [REDACTED]: Yeah. The people that--
4 and that's mostly our transmission
5 maintenance group that deal with the
6 pipeline. Our techs typically deal with the
7 controls, like the actuators; they're very
8 familiar with that class location they're in,
9 the requirements around those class
10 locations, absolutely.
11 MALE VOICE: So they're trained to look
12 for that?
13 MR. [REDACTED]: Absolutely.
14 MALE VOICE: Great. Thank you.
15 MALE VOICE: So what are they looking
16 for, housing complexes where they're going
17 in?
18 MR. [REDACTED]: Yeah, absolutely. We're
19 looking for that. And we're also involved
20 with any type of planning from any of the
21 cities or county, especially if it's
22 anywhere near our pipeline. We're involved
23 with that even upfront with the developers.
24 So we're aware of that even ahead of time,
25 but what we typically will find is people

0101

1 decide they're going to build a shed, right?
2 And they don't go get a permit, or a barn.
3 And they say, "Okay, well here's the best
4 spot for our barn," and these will pick that
5 up and then we take actions accordingly on
6 that.
7 Or if somebody decides they're going to
8 put in a swimming pool. That's why we're
9 out looking for those, and those are
10 typically what we're going to find. We
11 don't typically obviously encounter in
12 California the--you know, the development of
13 housings went down a lot. So we haven't
14 seen a lot of changes in that. But we're
15 usually involved with that because it
16 typically requires them to either put our
17 gas facilities in there to feed them or
18 they're taking at tap off one of our lines,
19 or it very well could be close to our lines.
20 So we're involved with the city planning

21 portion of that as well.

22 MALE VOICE: Okay. Do you have manuals
23 or written standards on how you're to go
24 about determining whether classification or
25 high consequence area or one of those has

0102

1 changed?

2 MR. [REDACTED]: Yeah, we--good lead.
3 Thank you. We have the technical library,
4 right? So one of the things that we use in
5 the technical library, and that includes our
6 maintenance personnel, is to look at
7 standards and procedures. So everything has
8 a standard or a procedure on how to look at
9 that. So we could actually pull it up on
10 there by number or looking through what is
11 required, depending on what work they're
12 doing.

13 We also have hard copies of that.
14 That's one of the binders that you see in
15 our binder collection back there. And one
16 thing nice that the company has done, I
17 don't know, it's now been probably going on
18 a few years, and right by Brian up on there
19 on the very top shelf is there's CDs--to
20 your left, Brian.

21 And those get updated about every six
22 months. So those are available for our
23 technicians and our mechanics, so when they
24 have laptops they've got the standards with
25 them at all times. It's actually pretty

0103

1 nice because you know, one thing about--is
2 keeping our binders updated from them
3 [phonetic].

4 So we always recommend to our personnel
5 go to here for the latest version, and if
6 you're out in the field use your CD.
7 Because you can see one of the standard
8 binders are pretty thick.

9 MALE VOICE: So while we're on that,
10 the topic of standards, we've also been
11 working with CPS [phonetic] need for about
12 two-and-a-half years now in regards to the
13 change of how our gas system standards and
14 specifications are. They are originally in
15 a binder about this size. Those are being
16 transitioned to more asset-based or
17 workflow-based manuals. And we have a
18 corrosion manual that has been issued.

19 So the corrosion standards and
20 specifications that used to be in this big
21 book have been removed and placed
22 specifically in that manual. The manual
23 contains standards, but also it contains all
24 the forms associated with their job that
25 they'll need, all the job aids that they

0104

1 would need, and procedures associated with
2 such.

3 We've also created a big survey manual
4 and there's one more: there's corrosion
5 control, there's leak survey, and one more--
6 I'm sorry, it escapes me right now. But
7 we're going to continue to revise these gas
8 standards and specifications until all of
9 those manuals are built out, that they're
10 more job-specific.

11 MALE VOICE: Damage prevention?

12 MALE VOICE: Damage prevention, thank
13 you.

14 MR. [REDACTED]: Yeah, and one of the other
15 things that we also have that's in there is
16 our forms book because that's always a
17 concern that--like when we're documenting
18 our maintenance is making sure we're using
19 the latest forms. So we have a forms book
20 that's down there on the very end with the
21 latest forms. They're online.

22 We have somebody that audits those
23 every two months to make sure all the
24 updated form is. Because depending on
25 people's--you know, what's convenient for

0105

1 the tech or the mechanic is we want that
2 form right there. So they're checking to
3 see if they've got the latest form getting
4 the document so it's not difficult for them
5 to find.

6 And all this is on the technical
7 library. And then--yes?

8 FEMALE VOICE: So the A forms that they
9 actually fill out--where are those kept?

10 MR. [REDACTED]: We keep them here. And
11 then we also send them in as well.

12 FEMALE VOICE: So each--send them in
13 to?

14 MR. [REDACTED]: We send them in to our
15 Walnut Creek office that manages all the A
16 forms.

17 FEMALE VOICE: And then is the A form
18 information also put into an electronic
19 database somewhere?

20 MR. [REDACTED]: It is--it's not part of
21 PLM; it goes into AEGIS system, that is
22 correct.

23 MALE VOICE: Where are those A forms?

24 MR. [REDACTED]: They're right back here in
25 a binder. Yeah, we could quick--

0106

1 MALE VOICE: [Interposing] If you could
2 show us what the binder looks like?

3 MR. [REDACTED]: Yeah, Greg, you got the A
4 form binder back there?

5 MALE VOICE: Actually the binder is in
6 my office because I was reviewing
7 [crosstalk].

8 [REDACTED]: [Crosstalk].

9 MR. GARCIA: Very good point, [REDACTED]
10 [phonetic] thank you. It's--they take the
11 data off our form and put it into AEGIS, so
12 it's not like we scan that. So this is the
13 written documentation from the guys in the
14 field; we send them a copy, they take that
15 data and then they input it into AEGIS, so
16 it makes it electronic.

17 MALE VOICE: All right, so it then--do
18 you still have the A forms in the office - -
19 ?

20 MR. [REDACTED]: Mhm, right - -.

21 MALE VOICE: We'll get on AEGIS and
22 we'll print out a report, and it'll be our
23 first page. And then we keep [phonetic] the
24 A forms to whatever line they're on, line
25 401, line 2, whatever, and it goes in this

0107

1 report right here. Anytime we--say we put
2 the A form in here, we do a repair, we'll
3 fill it out and then we'll go ahead and scan
4 it and send it to Walnut Creek again, and
5 then we'll keep a copy of the main one here.

6 MR. [REDACTED]: Go ahead.

7 FEMALE VOICE: You mentioned that the
8 crew doing the maintenance, they'll look at
9 the library to--

10 MR. [REDACTED]: [Interposing] Yeah, say
11 they're doing something that they need to
12 reference a procedure or standard, that's
13 what they'll go to the technical library for.
14 Most procedures and standards around
15 maintenance don't change very frequently.
16 So we also have a process in place, matter
17 of fact it's something that Jason helps out
18 with is for our whole system is managing
19 changes and standards. So if we have a gas
20 transmission change to a standard we
21 actually have a process to track that that
22 it's been tail boarded to the crew. So
23 that's how we manage any changes to those -
24 -.

25 FEMALE VOICE: And the CD?

0108

1 MR. [REDACTED]: Yeah, the CD is the
2 update; basically it's the same thing as
3 this, right.

4 FEMALE VOICE: So they can use it out
5 in the field?

6 MR. [REDACTED]: They can use it out in the
7 field--

8 FEMALE VOICE: [Interposing] Currently
9 [phonetic] have laptops or some kind of

10 equipment out in the field right now?

11 MR. [REDACTED]: Yes, they have laptops.

12 FEMALE VOICE: And how long have they
13 had those?

14 MR. [REDACTED]: We have had laptops,
15 especially on the technical side, for quite
16 a while. We're getting more laptops on the
17 transmission mechanic side, so they have
18 them as well.

19 FEMALE VOICE: And so they're able to
20 tap into the PLM as well?

21 MR. [REDACTED]: Yeah, you can look at, if
22 you have an air [phonetic] card you can look
23 at just about anything that's on our system.
24 But they typically aren't going to get too
25 much involved with the PLM; anything to do

0109

1 with the software program would probably
2 happen in the office before they go out
3 because they have a hard copy sheet that
4 says, "Here's what is required for you to do
5 today."

6 FEMALE VOICE: Okay so what about - -
7 stuff on the laptop? What all--?

8 MR. [REDACTED]: Another good lead-in. So-
9 -

10 MALE VOICE: [Interposing] I just want
11 to give everybody a five-minute warning

12 MR. [REDACTED]: Okay. So that's a good
13 lead-in, though, because that was one of the
14 questions I think came up over there was the
15 maps and drawings. And again, we're not the
16 owners of those; we use them as reference
17 material. So we have a program where you
18 can print out the latest map; matter of fact
19 that map that's sitting right there is one
20 that Jim went in there and printed out for
21 Brentwood.

22 So again, that same map that [REDACTED] was
23 talking about about Brentwood, we could go
24 on there, pull up any map that we have
25 that's electronic on our system; we have a

0110

1 plotter here. You can print it out; they
2 can take a copy with them.

3 FEMALE VOICE: And so what system is
4 the map - -, the PLM or--

5 MR. [REDACTED]: [Interposing] GIS.

6 FEMALE VOICE: - - use GIS - - then;
7 you've used that one for a while?

8 MR. [REDACTED]: Yes, GIS has been in place
9 for a while; I can't remember when it got
10 implemented; it's been a while. But we use
11 that quite a bit, especially on the
12 transmission mechanic side for USAs and
13 stand-bys.

14 So when a USA comes on you can go on

15 GIS, pinpoint exactly where they're digging.
16 We know what pipes are running through there,
17 if we've got any taps, customers, whatever
18 the case might be. So the mechanics use
19 this quite a bit.
20 And then, again, they can pull up a map
21 or drawing if they need to take that out
22 there with them, click print, away you go.
23 And what if really does, which is
24 really nice is it gets you the latest
25 version of the map that's there. Yeah.

0111

1 Yes?
2 MALE VOICE: Just going back to that
3 class location question, I was wondering, so
4 you said the employees kind of have
5 intuitive understanding, they're trained to
6 know what class - - pipe is in or certain
7 facility is in. So when they're going out
8 to do either corrective action or
9 preventative maintenance what sort of
10 documents do they have access to that will
11 actually say, "This is class location one,
12 two, three or four"?
13 MR. [REDACTED]: It's on the drawings; it's
14 on--
15 MALE VOICE: [Interposing] They're all
16 - - these binders here.
17 MR. [REDACTED]: And also--yeah.
18 MALE VOICE: - - binder - - [crosstalk]
19 class one, class two, class three, - -.
20 MALE VOICE: [Inaudible] if they have
21 to repair a leak or if they have - -?
22 MALE VOICE: Actually I'm not sure what
23 your question is.
24 MALE VOICE: Just because of the
25 continuing surveillance, if they're going to

0112

1 be out there doing some preventative
2 maintenance how are they going to know,
3 "Well this is in the records this says it's
4 - - two but from my observations it should
5 be three"? How can they compare the two if
6 they don't have - - initial recorded - -?
7 MALE VOICE: We have maps in the back;
8 we also have that information is all on GIS.
9 MALE VOICE: Right. I'm just trying
10 to--you were saying how - -. Is that part
11 of their procedure to check it before they
12 go out?
13 MALE VOICE: The class locations are
14 broken down into mile points and the
15 maintenance frequencies are different in the
16 class three, the class two and the class
17 ones. So basically--
18 MALE VOICE: You can infer it from the
19 maintenance schedule?

20 MALE VOICE: Right.
21 MALE VOICE: And I don't think it's
22 maintenance that responsibility is
23 [phonetic] to determine that; their
24 responsibility is to be alert to changes in
25 addition of housing, to changes with
0113
1 facilities in the vicinity of the pipeline
2 and report that to the engineering
3 department for their evaluation. - - patrol
4 [phonetic] survey, but there's a form for
5 reporting - - impacts of class locations - -.
6 MALE VOICE: It's in both leak survey
7 and patrol?
8 MR. [REDACTED]: Yes.
9 MALE VOICE: I don't know if that helps
10 you.
11 MALE VOICE: Time's up.
12 MR. [REDACTED]: Other burning questions
13 before we close. Yes, go ahead?
14 FEMALE VOICE: What's in all the file
15 cabinets?
16 MR. [REDACTED]: What's in all the file
17 cabinets?
18 FEMALE VOICE: Yeah.
19 MR. [REDACTED]: We keep old technicians in
20 there. No we have different project files
21 in here from the active projects that are
22 going on. There's a lot of PPE that we keep
23 over in certain areas of it. As you can see
24 we love binders, so we've got environmental
25 binders, the environmental requirements from
0114
1 the HMBP requirements. We've got a lot of
2 vendor documents; we've got a lot of
3 compliance documents over there.
4 And then we have a lot of historical
5 stuff that we keep. So we've got old
6 records from a project standpoint, even CPUC
7 records--that's basically what's in all
8 these binders, or in these drawers.
9 Now one of the things that we did is
10 we've moved over here about four or five
11 years ago and we've kind of got some of them
12 aren't exactly in groups the way we'd like
13 them to be. So you'll have some CPUC
14 archived over here and we have some on that
15 side. But that's what all those - -.
16 FEMALE VOICE: And do you--are there
17 historical files that, for this office, that
18 are kept in long-term storage somewhere else,
19 or is everything here?
20 MR. [REDACTED]: We typically have copies
21 of stuff. So if we have a project we're
22 getting a copy of it. So they keep those
23 records--like I said, we're not the primary
24 holder of drawings and records.

25 MALE VOICE: Margaret, just a little
0115
1 clarity, the way you asked the question you
2 asked it about this facility in particular,
3 and remember they're responsible for the
4 entire district. So there are old archived
5 drawings that the original drawing or what
6 we consider the as-built drawing from
7 pipeline installation several years ago that
8 could be in our [REDACTED] facility or even
9 now in [REDACTED] [phonetic] those types of
10 things. And they probably have access to
11 those; I would be certain that they have
12 access to those in ELS [phonetic].
13 FEMALE VOICE: Maintenance records? -
14 - always be here or what - - they be in
15 long-term storage also?
16 MALE VOICE: Maintenance records will
17 be here.
18 FEMALE VOICE: They'll be here?
19 MALE VOICE: Yes.
20 MALE VOICE: Does this facility and the
21 personnel in it ever get involved in
22 emergency situations or abnormal situations?
23 MR. [REDACTED]: Yeah, we train every year
24 on emergency exercises. And we are on the
25 emergency call list to respond and anywhere
0116
1 from a minor type issue, if they have a
2 problem with a regulator in the middle of
3 the night we have an on-call list; they call
4 the supervisor, the supervisor dispatches
5 somebody to go out and get it fixed. And we
6 are part of the overall gas transmission
7 response team, if there is a major emergency.
8 MALE VOICE: About how often does that
9 kind of thing happen?
10 MR. [REDACTED]: Are you talking about the
11 minor issues?
12 MALE VOICE: Well no.
13 MR. [REDACTED]: Major issues--we don't
14 have a lot of major issues. I've been doing
15 this for quite a while myself, for about 28
16 years and we typically don't have a lot of
17 major issues where we have to respond.
18 MALE VOICE: The most likely thing
19 about be like a dig in in an ag area where
20 somebody hit a transmission line.
21 MR. [REDACTED]: Right. Yeah, third party
22 is always one of our biggest concerns. We
23 do a lot of prevention around that and we
24 still have dig-ins.
25 MALE VOICE: So what happens when you
0117
1 have somebody with a piece of equipment that
2 runs into a transmission line? What is your,
3 your group do? Do they go out and shut

4 valves off?
5 MR. [REDACTED]: Yeah, depending on the
6 severity of it, because it could either be
7 did they puncture it or did they just hit
8 it? Regardless of what happens we respond
9 immediately. We take that pretty seriously.
10 If we get a call that somebody hit our
11 pipeline people like Greg and Dave that you
12 met earlier, those are some of the people
13 that would respond to that immediately and
14 then if say we had gas blowing, then we'd
15 get people to operate. We get all of that
16 direction from gas control.
17 MALE VOICE: Gas control?
18 MR. [REDACTED]: So gas control becomes a
19 lead of, "Hey, you need to shut this valve,
20 you need to shut this valve, isolate it in
21 this area."
22 MALE VOICE: And that's the control
23 group?
24 MR. [REDACTED]: That's the control group,
25 correct. But yeah, our responsibility here
0118
1 it to respond. And we are like the field
2 personnel, the SWAT team to go out there and
3 take care of that issue. And that's with
4 all our districts; all our districts respond
5 the same way.
6 MALE VOICE: From the gas control?
7 MR. [REDACTED]: From the gas transmission
8 districts--we all respond that same way.
9 MALE VOICE: And the as-builts are out
10 here as well?
11 MR. [REDACTED]: The as-built drawings,
12 there'd be copies of them, but they do to
13 their drafting group in Walnut Creek. And I
14 think you guys are going to see those later
15 today.
16 MALE VOICE: You guys ready?
17 [Crosstalk].
18 MR. [REDACTED]: Yeah, if they were active
19 jobs--
20 MALE VOICE: [Interposing] You would
21 have them here.
22 MR. [REDACTED]: Right. That is correct.
23 [END TAPE LS10010]
24 [START LS100011]
25 MR. [REDACTED]: We do have a
0119
1 couple other facilities within, uh, within a
2 couple of blocks. Um. So that--pretty much
3 [phonetic] we're going to talk about
4 Engineering Records, uh, an overview of that.
5 Same thing with, uh, Integrity Management.
6 And then we had planned doing tours of, uh,
7 the library. And then the Engineering
8 Records Facility. And since we--we kind of

9 have a change in some of the P G & E's
10 personnel that are participating in this
11 portion, so this morning we have Operations,
12 Maintenance, and now we're going to be
13 talking with Engineering. So I thought we
14 could do another round of intros. Um. So
15 that new participants and you know who's--
16 who's here. And I'm [REDACTED]
17 [phonetic], your facilitator for today. Huh.
18 And why don't we start, uh, with Brian.

19 MR. BRIAN DAUBIN: I'm Brian DAUBIN
20 [phonetic], Director of Continuous
21 Improvement here in Gas Engineering. My
22 office is in this location so.

23 MR. JED HARRIS: Jed Harris with the
24 Public Utilities Commission.

25 MS. CATHERINE JOHNSON: Catherine

0120

1 Johnson, PUC.

2 MS. MARGARET FELTS: Margaret FELTS
3 [phonetic], Consultant to the PUC.

4 MR. DARYL GRUEN [phonetic]: Uh, Daryl
5 Gruan with the PUC.

6 MS. CAMERON GOSSEN: Cameron Gossen,
7 PUC.

8 MR. [REDACTED]: [REDACTED] I'm a
9 Maintenance Superintendent with P G & E.

10 MS. SARAH PERALTA: Sarah PERALTA
11 [phonetic], P G & E's, uh, Manager of - -
12 for Transition and Distribution.

13 MR. [REDACTED] [REDACTED], I'm the
14 Manager at P G & E of Engine

15 MR. [REDACTED] [REDACTED], P
16 G & E law firm.

17 MR. [REDACTED] [REDACTED]
18 [phonetic], P G & E Regulatory Relations.

19 MR. [REDACTED] [REDACTED], P
20 G & E Integrity Management.

21 MR. AUSTIN YANG: Uh, Austin Yang, uh,
22 City of San Francisco.

23 MR. ISAH LARSON: Isah Larson, uh,
24 engineer with the PUC.

25 MR. ROBERT KINOSIAN: Robert KINOSIAN

0121

1 [phonetic], with the PUC.

2 MR. BOB CAGEN: Bob CAGEN [phonetic]
3 with the PUC

4 MS. [REDACTED]: [REDACTED] [phonetic],
5 Supervising Engineer with San Fran.

6 MR. TOM BRUCE: Uh, Tom Bruce - - .

7 MR. [REDACTED]: [REDACTED],
8 Design, Drafting Supervisor, Regular
9 Supervisor.

10 MR. JOHN SEAMAN: Uh, John Seaman
11 [phonetic], consultant with CPC.

12 MR. [REDACTED] [REDACTED]
13 [phonetic], Supervising Engineer with

14 Integrity Management.

15 MR. BRIAN WINGER: Uh, Brian Winger
16 with, uh, Corrosion Engineering.

17 MR. [REDACTED]: [REDACTED], Supervisor,
18 uh, in Target Management Growth Department.

19 MR. [REDACTED]: Okay and then, um, we've
20 only done, what, two safety teleports
21 [phonetic] today, should we do one more on
22 this facility? Who works here? Bill.

23 BILL: Okay, so if we have to evacuate
24 you can go out either that door or that door,
25 go out to the end of the hallway, circle

0122

1 around and there's parking lot over here
2 with kind of a grassy knoll. Everybody in
3 the building will be out over there. Um.
4 We have, uh, an AED here in case somebody
5 needs one of those but--first aid trained?
6 Anybody here in the room? Brian, Charles.
7 Okay. And then I'll be responsible for
8 calling 911. And just as you're leaving
9 this building, be aware that this corner of
10 the street out here, there's a lot of high
11 school kids that park there because they
12 can't get permission to park in the high
13 school. So if you're leaving, just be
14 careful as you drive out, because they're
15 just new drivers. So just watch yourselves.

16 MR. [REDACTED]: Okay. And then you
17 probably found on the way in but the
18 restrooms are out this door and down the
19 hall. Okay. Brian.

20 MR. DAUBIN: Um, [REDACTED]'s asked me to
21 take you folks over a little bit about the
22 schedule today and what we're going to see
23 here. Uh, this facility is, uh, the
24 headquarters of Gas Transmission Engineering,
25 Gas Engineering Oper--uh, Operations in San

0123

1 Francisco. Gas Engineering is located out
2 of this facility here. Uh, today you are
3 going to see, uh, one, the what we call the
4 Integrity Management Library. And it,
5 essentially it is, uh, a--a library of
6 documentation associated with integrity
7 management, uh, uh, field assessments,
8 whether it be, uh, ILI runs or ECDA, ICDA,
9 all of those types of documents are housed,
10 uh, both electronically but the hard copies
11 are stored upstairs in the what we call the
12 Kettleman [phonetic] Conference Room. So we
13 will see that today. The other thing we
14 will see is at--at--uh, your request is to
15 look at and see the engineering records,
16 what we call the Engineering Records Unit.
17 Now, got to warn you, it's not what it was
18 on September 9 th . And the reason for that is

19 due to the MAOP validation effort, those
20 records have been--a majority of those
21 records, uh, almost all but not all, have
22 been moved from that facility, uh, to
23 [REDACTED]. Okay? Uh, but we do have, I
24 believe Bill you came up with a photograph
25 that showed kind of what it looked like, um-

0124

1 -

2 BILL: [Interposing] Right.

3 MR. DAUBIN: --and a floor plan as
4 well--

5 BILL: [Interposing] Right.

6 MR. DAUBIN: --so we'll go over that as
7 well. We will visit and we will go through
8 the process of how, uh, records, uh, were
9 stored there, how records may have been
10 retrieved there, um, the controls that were
11 put in place associated with, uh, check-in,
12 check-out of project folders. Um. Also
13 wanted to run--so are there questions on
14 what we will see? Those are just the two
15 major activities that we'll take part in
16 this afternoon. Questions on that.

17 [No questions]

18 MR. DAUBIN: Okay. You'll hear a few
19 terms that we talk about when we talk about,
20 uh, viewing, retrieving, editing, check-in,
21 check-out of either, uh, drawings or, uh,
22 job folders, okay? And the terms that
23 you'll hear are, uh, terms, uh, such as ELS.
24 That's our Engineering Library Search. ELS
25 is our front-end viewer essentially of the--

0125

1 of the drawing documents, uh, in our system.
2 It is very analogous to those who took part
3 of the training, uh, ECTS. So very similar
4 with the exception of ECTS houses everything
5 that was in job folders, ELS does not, ELS
6 only contains the drawings, the construction
7 drawings associated with either station or
8 pipeline. Okay? Uh, you'll hear GIS,
9 Geographical Information System. I believe
10 we are prepared to see a demonstration for
11 those who did not take part in that, um,
12 with [REDACTED], uh, the other day, we're
13 going to see a bit of GIS, get some
14 questions around that and be able to answer
15 some of the questions or concerns you guys
16 might have of that. Uh, other terms that
17 you'll hear are, uh, a system called Docu-
18 Track. Docu-Track is a homegrown database
19 which was our, uh, librarian system, if you
20 will. So within Engineering Records, we had,
21 uh, records personnel use Docu-Track to
22 identify exactly what location, what shelf a
23 job folder that was contained in Walnut

24 Creek records was located, who was it
25 checked out to, when was it checked out, and
0126

1 when was it checked back in. Docu-Track
2 also had some, uh, uh, controls associated
3 with it in--in regards to time durations.
4 So, uh, as a project folder was checked out
5 for a period of time, it would send
6 reminders to say, hey, this file is checked
7 out, do you still need it, yes or no. And
8 they would have to respond back to records,
9 uh, that, yes, I'm still using it.

10 MS. FELTS: Do you still use that?

11 MR. DAUBIN: Uh, we do still use that
12 but in limited fashion because we have taken
13 those project folders out from, uh, Walnut
14 Creek to Emeryville. And they use a new
15 system in Emeryville to ensure the integrity
16 of--and a bar coding system to ensure, uh,
17 the, uh, the controls around those job files.

18 MR. CAGEN: What has been moved to
19 Emeryville and what has been kept here?

20 MR. DAUBIN: So what has been moved to
21 Emeryville is, uh, all of the project
22 folders, um, that we've been talking about.
23 So project folders are no longer contained
24 in, uh, in--in Walnut Creek engineering
25 records. Those have been moved to

0127
1 Emeryville. And the reason for that is,
2 again, associated with the MAOP validation,
3 um, we wanted to be able to have those
4 located in a central location so that as
5 they needed a project folder, we can ensure
6 that it was scanned, uploaded to ECTS and
7 available to the MAO build--MAOP build team.

8 MR. CAGEN: Were all project folders,
9 um, moved to Emeryville or just for the
10 pipelines, uh, that--that you were looking,
11 uh, uh, for validation for?

12 MR. DAUBIN: It's a great question.
13 All of the pipeline records that were in
14 Walnut Creek were moved to Emeryville 'cause
15 they were in a central location and we can
16 keep them centralized with all the other
17 ones that we brought in. The ones that were
18 brought in from divisions, um, those were--
19 those--the MAOP Build Team that went out--
20 they're called the Retrieval Team, that went
21 out to get those job folders were looking
22 specifically for the, uh, Class 1 and 2 HCA
23 and all Class 3 and 4 job folders. So
24 there's a second and third phase to that
25 MAOP validation effort that will go and

0128
1 collect those folders.

2 MR. CAGEN: When were the files moved?

3 MR. DAUBIN: I would look to Charles
4 for that, uh, and the question is when were
5 the files moved from Walnut Creek?
6 MR. CAGEN: Yes.
7 MR. DAUBIN: To Emeryville?
8 MR. CAGEN: Yes.
9 MR. [REDACTED]: I do believe around March.
10 MR. [REDACTED]: All right.
11 MR. [REDACTED]: Or March.
12 MR. DAUBIN: Late--late February or
13 early March?
14 MR. [REDACTED]: Yes.
15 MR. DAUBIN: Okay. Uh, another term
16 you--you will hear is, uh, a--a program
17 called IBM DB-2. Uh, IBM DB-2 is our, uh,
18 whereas--so ELS, Engineering Library Search,
19 is our, uh, viewable front-end to all, uh,
20 drawings. Uh... it is a, uh, it is a web-
21 based viewer so our field folks have access
22 to that. We can--we can gain access to
23 drawings in the field. The, uh, IBM DB-2 is
24 the actual repository of the editable files.
25 So whether that be a CAD file a--a--what we
0129
1 call a DGN, um, used Micro--[REDACTED] Micro
2 Station to do our vectorized drawings or
3 whether it be an Excel file, uh, a Word
4 document file, those files, uh, because they
5 are the editable file are in a program
6 called IBM DB-2.
7 MALE VOICE 1: Okay, if I may, really
8 quick, could you clarify the--the--does ELS
9 have all--I thought I heard you say all
10 drawings but my understanding, it doesn't
11 necessarily have all drawings. It has, um,
12 mostly station drawings or my mistake?
13 MR. DAUBIN: Uh, the--the majority of--
14 the majority of drawings... I can't
15 necessarily classify that. What I will say
16 is, is the--all station drawings are in, uh,
17 ELS. The, the pipeline drawings that were
18 created from--all the pipeline drawings that
19 we had at the time that ELS was brought
20 online, up to the time we stopped doing plat
21 sheets in--in the late 90's, um, all of
22 those are in ELS.
23 MALE VOICE 1: Okay.
24 MR. DAUBIN: When we stopped doing plat
25 sheets, that geographical, uh, uh,
0130
1 representation of the pipeline, those were
2 put into GIS 'cause that's when we converted
3 to GIS.
4 MS. FELTS: And so when did you convert
5 to GIS and when did the ELS go online?
6 MR. DAUBIN: ELS came online in late
7 '98, early '99. And I need help with GIS,

8 when GIS when online. 2?
9 MR. [REDACTED] Early 90's?
10 MS. FELTS: Early 90's?
11 MR. [REDACTED]: Yeah.
12 MR. DAUBIN: Early '90s.
13 MR. [REDACTED]: Yeah.
14 MR. DAUBIN: Early 90;s, uh, GIS went
15 online. Um, during that timeframe that GIS
16 was online there as a, uh, there as a
17 conversion from the plat sheets to the
18 electronic, uh, geographical representation
19 of that line into GIS and they took the
20 tabular information, material pipe specs off
21 of the plat sheets and built GIS. So there
22 was a duration there that that--that took
23 place. It was several years. Does that
24 answer your question?
25 MALE VOICE 1: Yes.

0131

1 MR. DAUBIN: Okay. Um, IBM DB-2 is the
2 repository for those--those editable
3 documents. IBM DB-2 has a, uh, a series of
4 project controls on it as well. Uh, there
5 is a check-out--check-in, check-out.
6 There's an audit trail to each of the
7 documents. There's an archiving of the
8 documents as they're checked in, checked out.
9 There is, uh, revision control. Uh. It is,
10 uh, it is, as the name states, the program,
11 uh, that is supported by IBM. And it is our,
12 uh, internal database for our design
13 drafters who, uh, do the construction
14 drawings, uh, and estimators who also do a--
15 a subset of construction drawings.
16 [Pause]
17 MR. DAUBIN: Questions on acronyms and?
18 We use a lot of acronyms here. I want to
19 make sure that we're all speaking the same
20 language and have an understanding.
21 MS. JOHNSON: What is DGM?
22 MR. DAUBIN: I'm sorry?
23 MS. JOHNSON: DGM.
24 MR. DAUBIN: Uh, DGN, uh--
25 MS. JOHNSON: [Interposing] DGN?

0132

1 MR. DAUBIN: DGN is the extension, uh,
2 nomenclature for a micro station, a [REDACTED]
3 micro station file. It's a vectorized file
4 much like a, uh, a, uh, an AutoCAD file.
5 For instance a DXF or a DWG.
6 [Pause]
7 MR. DAUBIN: Okay. I think now,
8 [REDACTED], we wanted to turn it over and do
9 [someone coughing] a DLS demo?
10 MR. [REDACTED]: Go ahead.
11 MR. DAUBIN: Okay. [REDACTED] is
12 one of our GIS specialists. He's going to,

13 uh, go through a very similar, uh,
14 demonstration that we did with Jim Robertson,
15 one of the CPC consultants, uh, brought on
16 board to investigate some SCATA and other
17 types of stuff. Uh, so he's going to kind
18 of go over a demonstration of, uh, what
19 system are you going to use?

20 MR. ROBERTSON: Uh, this is Citrix.
21 This is Gas Map 2.0--

22 MR. DAUBIN: [Interposing] Gas Map.
23 Okay.

24 MR. [REDACTED]: We use Citrix.

25 MR. DAUBIN: Okay. So you'll have--

0133

1 you'll be able to see, uh, the different
2 layers associated with GIS and the
3 information that's contained within.

4 MR. [REDACTED]: Mm-hmm. So--so those
5 of you who--who may be locals you might
6 recognize here we are. Here we have [REDACTED]
7 [REDACTED] we're kind of in our
8 neighborhood. You can see a lot of pipeline
9 symbolized by type of pipe, local
10 transmission, EFM, um, and we have a lot of,
11 uh, groups of data over here on the left.
12 They're kind of grouped thematically. You
13 can see here we have pipe. Well we have
14 pipes and maintenance. Maintenance is
15 another large group. And pipe is a
16 transmission main which is really our, our
17 main source of data, broken out by all the
18 different types. Um. To kind of see the
19 relationship between, uh, what was before
20 GIS, uh, we have plat, the plat boundaries
21 of what used to be our--well they still are,
22 our distribution plats, but these are plat
23 sheets that, uh, we can call one up, you
24 know, kind of relative to this being about
25 records, we can see that we have some tools

0134

1 that bring up a TIF via hyperlink. So now
2 we're looking at the TIF of the plat that
3 represents the geographic area we saw in
4 that rectangle. We still have distribution
5 in here. And we still have transmission in
6 here but the transmission has made--the
7 transmission has made the transition from
8 the plat to a GIS layer--layer represented
9 here.

10 MR. DAUBIN: And--and so those plat
11 sheets are the very same plat sheets that
12 you will see within the divisions, uh,
13 contained in their files.

14 MR. [REDACTED]: Mm-hmm. And so to go a
15 little bit deeper with the pipe, we can then
16 info on the--the arc itself and see a lot of
17 properties about the pipe, diameter, uh,

18 year installed, um, you name it, there's a
19 lot of information in there. We have some
20 related tables that show if it's HCA. We
21 have job number. We can relate that data to
22 other data that uses the same job number.
23 Uh. That's pipe specs. So really we have a
24 wealth of information about the pipe right
25 there in the arc itself. Um. Any questions

0135

1 so far?

2 MS. JOHNSON: I think you said the
3 transmission made the transition--

4 MR. [REDACTED]: [Interposing] Mm-hmm.

5 MS. JOHNSON: --on--would it--I didn't
6 understand what you meant by that.

7 MR. [REDACTED]: Yeah, so, so I--Brian
8 maybe you could help me out but I think
9 this--

10 MR. DAUBIN: [Interposing] Yep.

11 MR. [REDACTED]: --primarily was our--
12 our source document for the transmission we
13 see running through here and here, like that.
14 Now it's represented as this arc. And it's
15 no longer maintained in this TIF file. Well
16 maybe it's--it's maintained in parallel but.

17 MR. DAUBIN: So there's really two
18 periods that are key when we're talking
19 about data associated with GIS. One is pre-
20 GIS rollout. Pre-GIS rollout, all the
21 information was contained on plat sheets.
22 Okay? Those plat sheets were updated in
23 both the division as well as Gas Engineering
24 when we talk about larger transmission
25 backbone pipe. Those plat sheets were

0136

1 updated in control documents that were then
2 used when GIS came online and that
3 information associated with those plat
4 sheets was used from a geographical survey,
5 all the geographical survey information
6 associated with the location of the pipeline,
7 these were done to scale. All of that was
8 transferred to GIS. So that--that--that's
9 how we marked the location, the geographical
10 information associated with the pipeline,
11 based on those plat sheets. Um. The
12 pipeline survey sheets were a--a transition
13 from the plat sheet and it listed the
14 pipeline in a geographical plan view and had
15 tabular information associated with each
16 segment along the pipe. That tabular
17 information was also input into GIS when GIS
18 rolled out. Okay? The two significant
19 periods, uh, the reason it's significant is
20 because once GIS was rolled out, they were--
21 and--and a plat sheet was--made that
22 transition into GIS, that--any job

23 associated with that pipeline was no longer
24 being updated into a plat and then being
25 moved to GIS. It was a direct, uh, it was a
0137

1 direct input from that construction job and
2 that construction as-built into GIS. Okay?
3 So the--the procedure for getting the
4 information into GIS changed after GIS
5 rolled out. To populate GIS, they used the
6 plat sheets, they used the pipeline survey
7 sheets, to pull in all that information
8 associated with the system and the--and the,
9 uh, information that was contained within
10 those documents was moved to GIS. After
11 such time, project folders and project as-
12 builds came directly to Mapping to be input
13 into GIS.

14 MS. FELTS: Well.

15 MR. DAUBIN: Margaret.

16 MS. FELTS: Well once you have a final
17 whatever in the GIS, do you then, do not
18 retain anything in hard copy? Or is it all
19 maintained only electronically?

20 MR. DAUBIN: We still have all of the
21 plat sheets. We still have a large
22 population of plat sheets although they're
23 not being updated, um, archived, in our
24 system, uh, so we--we haven't destroyed
25 those or gotten rid of those. Um, and so I
0138

1 guess I need more clarity on your--

2 MS. FELTS: [Interposing] What I'm
3 wondering is, okay, so we have that bunch of
4 historic documents.

5 MR. DAUBIN: Uh-huh.

6 MS. FELTS: And then there's a time at
7 which this transition occurred and from
8 there forward until present, you've been
9 doing upgrades to your system--

10 MR. DAUBIN: [Interposing] Correct.

11 MS. FELTS: --and you've been inputting
12 that into GIS.

13 MR. DAUBIN: Correct.

14 MS. FELTS: Is there a paper record of
15 that?

16 MR. DAUBIN: I see your question. The
17 answer is yes. And--and the reason why that
18 is, is because we do not consider GIS as the
19 document of record for, uh, the information
20 contained--associated with the pipeline.
21 It's the--it's the information contained in
22 the project folder. So the answer is yes,
23 because we keep all of the information
24 associated with that job in that project
25 folder. The job estimate, the bill of
0139

1 materials, the, uh, the drawings, the

2 redline as-builts, all of that is contained
3 within the project folder. And therefore
4 that's the document of record. The GIS is a
5 redundant summary of that information which
6 allows us to quickly query large system-like,
7 uh, queries. Uh, how many miles of 30-inch
8 do we have? How many miles of 24-inch do we
9 have? How many miles of pipe do we have
10 above a certain, uh, MAOP or, uh, Maximum
11 Allowable Operating Pressure? So GIS is
12 very, uh, an integral part of our business
13 when we do large-scale planning. When we do,
14 uh, you know, widespread pre-engineering.
15 But when we get down to relocating a--a 500-
16 foot section of pipe, we'll go into GIS and
17 get that summary information but we'll
18 verify that with all the project
19 documentation and hard copy as--as-built
20 drawings associated with a project folder
21 for that section of line to ensure that we
22 understand all the specifications of what's
23 in that job, um, all the pipe--pipe specs,
24 pipe material, how it was constructed. And
25 then we'll engineer the job based on those

0140

1 facts.

2 MS. FELTS: Okay. And when you just
3 said as-built drawing, what did you mean by
4 that?

5 MR. DAUBIN: Great question. Uh, our
6 term, uh, is probably more a term of art, is
7 as-built drawing, essentially is a redline,
8 a hard copy redline of the construction
9 drawing. So as the drawing, uh, gets
10 created, it shows the--the means and method
11 by which a pipeline will be constructed. Um.
12 And therefore when that goes out to the
13 field, um, we don't always have a pipeline
14 built the way that we designed it. And we
15 have field changes. And there's--there's a
16 protocol associated with those field changes.
17 Uh, It--it--it requires the engineer to be
18 involved in that to okay those but, um, to
19 the extent that that's--there's no issue
20 with making those changes, we require the
21 field to document those changes via redline,
22 um, on the--on a master set of construction
23 documents. And oftentimes we set--we send
24 more than one set. But they've got to
25 provide us with one master as-built copy, uh.

0141

1 Those redlines will then be completed in the
2 field, signed off by either the foreman or,
3 uh, project engineer on site, uh, or a field
4 engineer, a GC field engineer. Those will
5 be sent back to mapping and then we will
6 incorporate those into, uh, GIS.

7 MS. FELTS: And--and do you retain the
8 as-builts, those drawings with the redlines?

9 MR. DAUBIN: We absolutely do. Those
10 are in the project folder and get filed with
11 the job, with the job folder.

12 MR. CAGEN: Is there any other
13 information that goes into GIS besides, uh,
14 information from job folders?

15 MR. DAUBIN: The answer is yes. And to
16 be more specific, Jeff's the person to
17 answer that.

18 MR. [REDACTED]: As far as, um, linkable
19 documents or just, uh, attributes in the
20 data?

21 MR. DAUBIN: Well think--uh--so project
22 folder contains your, your job estimate,
23 your pipe, uh, characteristics associated
24 with size, wall thickness, uh, yield
25 strength, those types of things.

0142

1 MR. [REDACTED]: Mm-hmm.

2 MR. DAUBIN: So what other than that is
3 really conta [REDACTED] IS?

4 MR. [REDACTED]: Um, the--the primary
5 thing would be, uh, our energy management
6 program high consequence areas, uh, which--
7 which parts of the pipe are HCA, uh, when we
8 plan to assess them, when they've been
9 assessed, what stage are they at in that
10 assessment. We can do a lot of powerful
11 queries on that kind of information.

12 MR. DAUBIN: The other item would be
13 operating diagrams?

14 MR. [REDACTED]: Right. Uh, yeah, and
15 the--and station drawings. So we have a
16 couple of ways to collect that. There's a
17 couple of buttons here that take us to a
18 complete listing. This is Operating Maps,
19 and you can sort them by line number, by
20 drawing number, title, uh, city, whatever
21 information you happen to know when you're
22 hunting for it. And you can just click on
23 that, oh, and I haven't done this on this
24 machine yet. I'll accept. That was good.

25 MR. [REDACTED]: You've just committed us

0143

1 to an end license of Adobe Acrobat--

2 [Laughter]

3 MR. [REDACTED]: And so... so here's an
4 operating map that shows more of a
5 schematic--

6 MR. DAUBIN: [Interposing] So--

7 MR. [REDACTED]: --of the system.

8 MR. DAUBIN: --here's a good
9 distinction 'case Margaret and I, we've had
10 this discussion in the past. So for
11 everybody's benefit, this is an operating

12 map. Okay. And typically within an
13 operating map there'll be several of these
14 boxes that would represent an operating
15 diagram. So an operating diagram is a very
16 specific station by station symbolic
17 representation of what's in that station or
18 what's in that yard. An operating map will
19 typically combine for ease of use when we
20 operate the system, will combine several
21 operating diagrams to show how that system
22 is laid out symbolically. Okay? Now we try
23 to get it to a kind of a real world
24 representation but it is not a scaled
25 drawing by any means. Okay? So operating

0144

1 map, operating diagram. That's how those
2 work.
3 MR. [REDACTED]: And then, uh, you see
4 here--
5 MR. DAUBIN: [Interposing] And--and the
6 field--the field as well as any of the users
7 of GIS have access to both.
8 MR. [REDACTED]: So we see here as Brian
9 pointed out, here's Tracy Station that's
10 demarked within this operating map. We can
11 then go to the operating diagram list. And...
12 uh... I believe we can sort on Title. Go to
13 Tracy. A lot of hits for Tracy Station,
14 next station.
15 MR. DAUBIN: So notice here within our
16 system, I'm sorry Jeff--
17 MR. [REDACTED]: [Interposing] Mm-hmm.
18 MR. DAUBIN: --can you go back to that?
19 MR. [REDACTED]: To the, uh, to the map?
20 MR. DAUBIN: Yeah--no to the, uh, to
21 the Op list.
22 MR. [REDACTED]: Mm-hmm.
23 MR. DAUBIN: Perfect. So when we went
24 down to Tracy Station, what you'll--you'll
25 notice is that there was several listings of

0145

1 the same drawing. The reason for that is--
2 it's redundant because we have different
3 lines going into Tracy. Okay? So when you
4 list them out by line number, if you're
5 searching by line number, there's, I think,
6 three or four, uh, pipelines that go through
7 Tracy Station. That's why there--there was
8 a redundant list. But it allows you to get
9 there by line number, if you're seeking the
10 information for that line, or--or it allows
11 you to get there by the station name.
12 MR. [REDACTED]: Mm-hmm.
13 MR. CAGEN: So what you--what you've
14 done is pick a particular geographical area.
15 I mean, um, how many... um, geographical areas
16 are in GIS? Does--

17 MR. [REDACTED]: [Interposing] Yeah.
18 MR. CAGEN: --does that make sense to
19 you--?
20 MR. [REDACTED]: [Interposing] As far as
21 stations, um, I think it's 3,000 or 4,000.
22 And, um, and we--we did it from a list
23 assuming we knew the name but if you were in
24 a geographic area and you didn't know the
25 name, you were just--you just stumbled
0146
1 across this station, you could also click on
2 the station itself and get, uh, in this case
3 we got--oop, we didn't get a station diagram
4 but we got, let me hit that again.
5 MR. CAGEN: Can you, uh, access the
6 same information in the system or the same
7 subheadings, uh, for a particular pipeline?
8 Like, uh, uh, number 132.
9 MR. [REDACTED]: Yeah. I believe you
10 would just, uh, let me close a few of these,
11 you would go back to the--
12 MR. DAUBIN: [Interposing] So--it
13 depends on what the question is Bob, so if
14 the question the question is can I get to
15 132 in GIS, the answer is yes, you can--
16 MR. [REDACTED]: [Interposing] Yeah.
17 MR. DAUBIN: --you can run a query for
18 show me line 132. If you're looking to get
19 to these operating diagrams though, the
20 operating--
21 MR. CAGEN: [Interposing] - - might
22 not.
23 MR. DAUBIN: --the operating diagram is
24 based on a station. But you would be able
25 to get to the operating map--
0147
1 MR. CAGEN: [Interposing] I--
2 MR. DAUBIN: --does that make sense?
3 MR. CAGEN: All right, sure.
4 MALE VOICE 1: Can I ask a--ask a
5 question.
6 MR. DAUBIN: Please.
7 MALE VOICE 1: If you wanted to find
8 out what the MAOP was for the section of
9 101-109, which is [REDACTED] [phonetic] [REDACTED] and,
10 uh, the gas load center in San Francisco,
11 could that be easily pulled up on here?
12 MR. DAUBIN: It could. It could--it
13 could be, uh, it could be, uh, looked at on
14 the operating map.
15 MALE VOICE 1: Mm-hmm.
16 MR. DAUBIN: It should list out your
17 MAOP associated with that line. But you
18 could also go to the operating diagram
19 specifically for that station--
20 MALE VOICE 1: [Interposing] Mm-hmm.
21 MR. DAUBIN: --and it will show you the

22 incoming MAOP and the outgoing MAOP.

23 MR. SEAMAN: Okay. Can I ask you a
24 question for--earlier you mentioned that, um,
25 the documents of records are in the files.

0148

1 And that GIS is basically used for a full
2 audit picture.

3 MR. DAUBIN: Yeah.

4 MR. SEAMAN: So it--I--I'm trying to
5 assess the accuracy of the information
6 that's in GIS.

7 MR. DAUBIN: Okay.

8 MR. SEAMAN: Whether we can rely on
9 that when we look at it or do we need to go
10 to the information in the file folders to
11 confirm the accuracy of the information
12 we're working with--

13 MR. DAUBIN: [Interposing] It depends
14 on the level of accuracy we require. And
15 the reason I say that is because if we're
16 doing a very specific engineering job on a
17 pipeline, we will look at the information in
18 GIS but we will always confirm that with the
19 project folder set of information so that we
20 can engineer that job properly. If there's
21 any discrepancies, we would note that to
22 Mapping. We'd fill out a mapping request
23 form. They would update GIS as necessary to
24 any specifications that we found that were
25 different.

0149

1 MR. SEAMAN: Okay so if we see any
2 discrepancies, then--

3 MR. DAUBIN: [Interposing] You'd be--

4 MR. SEAMAN: --the trumping [phonetic]
5 if--if--if we at the Commission--

6 MR. DAUBIN: [Interposing] Uh-huh.

7 MR. SEAMAN: --see any discrepancies,
8 or any other parties for that matter--

9 MR. DAUBIN: [Interposing] Understood.

10 MR. SEAMAN: --in this proceeding, see
11 any discrepancies, the trumping information
12 is in the file? Is that right?

13 MR. DAUBIN: The project folder which
14 would be--

15 MR. SEAMAN: [Interposing] The project
16 folder.

17 MR. DAUBIN: --considered the document
18 of record.

19 MR. SEAMAN: Okay. And the other
20 caveat that--when you were talking about
21 plats, since plats on paper, on hard copy--

22 MR. DAUBIN: [Interposing] Yes.

23 MR. SEAMAN: --were discontinued. And
24 they were continued in GIS.

25 MR. DAUBIN: Yes.

0150

1 MR. SEAMAN: Early '90s. So then where
2 are we to look for precise plat maps? Are
3 we looking at GIS or where--where should we
4 be looking for that?
5 MR. DAUBIN: Precise plat maps, um,
6 again, the plat maps were originally based
7 on survey data so to the degree that they
8 were absolutely accurate--
9 MR. SEAMAN: [Interposing] Yeah.
10 MR. DAUBIN: --and yet, I'm, you know,
11 I'm an engineer so it's all about, you know,
12 sub-meter, nano-meter, I mean it--
13 MR. SEAMAN: [Interposing] Right.
14 MR. DAUBIN: --depends on to what level
15 of accuracy you're talking about. Um, those
16 were based on survey-grade data. That
17 information got uploaded into GIS. As far
18 as the location of pipeline--
19 MR. SEAMAN: [Interposing] Yeah.
20 MR. DAUBIN: --is what you're really
21 asking, um, we would base that off of GIS,
22 uh, primarily, um. We would also look at
23 the as-built records that showed--
24 MR. SEAMAN: [Interposing] Okay.
25 MR. DAUBIN: --dimensionally the
0151
1 locations--
2 MR. SEAMAN: [Interposing] Okay.
3 MR. DAUBIN: --but--
4 MR. SEAMAN: [Interposing] I understand.
5 MR. DAUBIN: --I want to be clear, our
6 procedures require us, when we go out and we
7 look at GIS and we say, okay, it's three
8 feet off the fog line--
9 MR. SEAMAN: [Interposing] Yeah.
10 MR. DAUBIN: --on [REDACTED] and [REDACTED]. We don't
11 just go dig three feet off the fog line on
12 [REDACTED] and [REDACTED].
13 MR. SEAMAN: Yeah.
14 MR. DAUBIN: Our procedures require us
15 to mark and locate that pipeline in the
16 ground and ensure that it's there with a
17 marking locator and then we will start the
18 excavation.
19 MR. SEAMAN: Okay. And so the--the
20 plats, the plats insofar as they reflect
21 survey data, we're going to look at GIS to
22 see the--the--the way the survey is--the
23 accurate survey data.
24 MR. DAUBIN: Uh, you're talking about
25 surveys of the location--
0152
1 MR. SEAMAN: [Interposing] Yeah.
2 MR. DAUBIN: --'cause we--'cause we
3 call--you know, we talk about leaks,--leaks
4 survey. We talk about we use survey in
5 broader terms--

6 MR. SEAMAN: [Interposing] Well plats--
7 plats are reflecting survey locations aren't
8 they?

9 MR. DAUBIN: They're location, yes,
10 dimensional location--

11 MR. SEAMAN: [Interposing] Yeah, that's
12 what I'm after.

13 MR. DAUBIN: --of where that pipeline
14 lies, yes.

15 MR. SEAMAN: Yeah, okay.

16 MS. PERALTA: Brian, just a point of
17 clarification regarding the plat maps. Um,
18 even though we do have a--a gas transmission
19 GIS, we do still update the plat maps at the
20 local level so there's a parallel effort
21 with--with Gas Transmission GIS as well as
22 the plat maps. All those plat maps are
23 essentially available online. They're
24 updated and refreshed on the [door closing]
25 site according to the local mapping

0153

1 practices.

2 MR. SEAMAN: And where can we go to get
3 that? That information.

4 MS. PERALTA: - - with that.

5 MR. DAUBIN: Division offices.

6 MS. PERALTA: It's what division office
7 is for, as Jeff just pulled up with the, uh,
8 that little, uh, thunderbolt, you can
9 retrieve them in GIS as well.

10 MR. SEAMAN: Okay.

11 MS. PERALTA: Right there.

12 MR. CAGEN: Does GIS, um, uh--

13 MR. DAUBIN: [Interposing] - - .

14 MR. CAGEN: --lend - - itself to
15 transmission? Is it limited to
16 transmission?

17 MR. DAUBIN: The information contained
18 in, uh--Sarah, yeah?

19 MS. PERALTA: So, so it is primarily
20 transmission. Um, we do have some segments
21 in GI--in our--what we call our Gas
22 Transmission GIS that don't meet the DOT,
23 the Department of, uh, Transportation
24 definition of transmission. And so they're--
25 they're distribution but they, um, are

0154

1 similar characteristics, they're like our
2 DFMs, higher pressures, similar
3 characteristics to our transmission pipeline.
4 So there--there's about 1,000 miles or so of
5 non-transmission, um, contained in GIS. Um.
6 And so this goes back to our, I'm not sure
7 if we've gotten into definitions very much
8 but, um, P G & E uses this greater than 60
9 pound per square inch gauge, um, as
10 delineation between transmission and

11 distribution. And that's a little bit
12 different, um, definition when you get to
13 the DOT definition of transmission. Um, so
14 we do not have a--a GIS system for less than
15 60 pounds or distribution pipeline at this
16 time. And that's in progress right now.

17 MR. SEAMAN: Sarah, I was late joining
18 the meeting, would--would you introduce
19 yourself to the group?

20 MS. PERALTA: I did.

21 MR. SEAMAN: Okay, great.

22 MR. CAGEN: Is there a way to, uh,
23 compare data in the system, um, on those
24 subheadings which I can't really see--

25 MR. [REDACTED]: [Interposing] Mm-hmm.

0155

1 Mm-hmm.

2 MR. CAGEN: --uh, but, uh, that's my
3 eyesight more than anything else. Uh, is
4 there a way to compare, um, the data for two
5 or more pipelines, uh, for one of those sub-

6 -

7 MR. [REDACTED]: [Interposing] Sure.

8 MR. CAGEN: --headings.

9 MR. [REDACTED]: Yeah, we're looking at
10 a--one segment at a time kind of poking with
11 an information tool--

12 MR. CAGEN: [Interposing] Right.

13 MR. [REDACTED]: --but we can also just,
14 uh, open up the whole, uh, transmission main
15 attribute table--

16 MR. CAGEN: [Interposing] Okay.

17 MR. [REDACTED]: --and you've got every-
18 -you can sort by route and segment and--and,
19 uh, you've got everything sort of in numeric
20 order by route and segment. And, uh, all
21 your specs are going out across those
22 columns of information.

23 MR. CAGEN: Okay.

24 MR. [REDACTED]: Yeah.

25 MR. CAGEN: Thanks.

0156

1 [Pause]

2 MR. DAUBIN: Anything else you want to
3 show, Jeff?

4 MR. [REDACTED]: Uh, that's it, unless
5 there's any other questions.

6 MR. SEAMAN: I think this is answering
7 the question but I--if we want to look at
8 those attributes like outside diameter and
9 wall thickness--

10 MR. [REDACTED]: [Interposing] Mm-hmm.

11 MR. SEAMAN: --at a particular post
12 mile location.

13 MR. [REDACTED]: Mm-hmm.

14 MR. SEAMAN: How do you do that--?

15 MR. [REDACTED]: [Interposing] Sure,

16 yeah. Pretty easily. You could go--you
17 could use this search tool which, um, uh,
18 this is intelligent enough to know that
19 route has a mile point system and it will
20 take us to any address on that mile point.
21 So if we went, uh, 105B, uh, like it's
22 something that actually exists, mile point 9.
23 There we have, uh--even though that segment
24 goes from mile point 0 to 11.81, this will
25 take us right to that, uh, address which

0157

1 represents 9. We can flash it. So that's--
2 that's our area right there. We could throw
3 on a aerial photograph. So if you were
4 interested in that mile point based on some
5 piece of information or document you could
6 zoom right there and, okay, oh, I'm at this
7 intersection and here's what's going on.

8 MS. FELTS: Can you find valves that
9 way?

10 MR. [REDACTED]: Valves? Uh, are a
11 little trickier because a lot of the valves
12 are not--they're unique to each route but
13 not to the whole system. So you may have a
14 valve 16, you would have to query up a route
15 and then, uh, grab all the adjacent valves
16 and look for V16 within that route. But you
17 couldn't do it, uh, quite as easily but it's
18 doable.

19 MR. SEAMAN: And--and where are you
20 seeing the--the--

21 MR. DAUBIN: [Interposing] He needs to
22 see the--

23 MR. SEAMAN: --mile point?

24 MR. DAUBIN: Oh, I'm sorry.

25 MR. [REDACTED]: The mile point?

0158

1 MR. SEAMAN: Well--yes--

2 MS. PERALTA: [Interposing] Can you put
3 a label on there Jeff?

4 MR. [REDACTED]: Uh, yeah.

5 MR. SEAMAN: Or valve 2. If he--

6 MR. [REDACTED]: [Interposing] Yeah. Um.
7 Let's see. Where is label mile point?
8 There's some things I don't do in my course
9 of daily work as much as others--

10 MR. [REDACTED]: [Interposing] Yeah, Jeff,
11 that's the third to the far left on that row
12 with all that stuff.

13 MR. [REDACTED]: Ah. Thank you. So
14 this--yeah, well--this is sort of a reverse
15 where you're confirming. Here you can pluck
16 along the line.

17 MR. SEAMAN: Yeah.

18 MR. [REDACTED]: Yeah, and so if we--if
19 we got to that 9 exactly we could then go,
20 label mile point.

21 MR. [REDACTED]: You've got to highlight it
22 first.

23 MR. [REDACTED]: Ah. Thank you. Yeah.
24 And that's just a temporary graphic.

25 MR. SEAMAN: Can you do that same thing
0159

1 for valves?

2 MR. [REDACTED]: Uh, for valves? Yeah.
3 For valves... we are--let me just zoom out.

4 [Off [REDACTED] ctions]

5 MR. [REDACTED]: So valves themselves
6 actually have labels, so if we, uh, if we,
7 uh, were interested in this area, um, we
8 could go Valve, and types of maintenance... I
9 guess, devices. [Pause] Pardon my slowness.
10 And... valve number. And we can just label
11 them up so they're--they're on everywhere
12 you go. They're not on by default 'cause
13 they're--they tend to be a little bit busy.
14 So, uh, but if you choose to, you can have
15 all these valves labeled.

16 MR. CAGEN: I wonder if one of your, uh,
17 pipeline integrity people could explain how
18 a pipeline integrity engineer uses GIS in--
19 in their work?

20 MS. PERALTA: That's probably a good--
21 good segue. We're just talking about
22 integrity management in general, um, and
23 I'll--I'll answer your question in--in the
24 course of that. Um. So I wanted to talk a
25 little bit just more about GIS, just some of

0160

1 the changes that we've made recently. What
2 we're looking at here is Gas Transmission
3 GIS 2.0. So this is a--a platform that we
4 recently transitioned to in, uh, July. And
5 so what this, um, this offered us a few
6 enhancements. It's a--it's an updated data
7 model. There's some increased functionality
8 and tools that helps with the analysis that
9 we do. Um, there was some infrastructure
10 improvements. Um. It--we--we've gotten
11 better performance with our IT, our
12 information technology security standards
13 with this upgrade. And, um, one of the big
14 things is that it--it's a good--it's a--it's
15 a--was a necessary building block to go
16 towards an enterprise GIS system. And so on
17 our August 29 th Pipeline Safety Enhancement
18 Plan filing, um, going to this larger really
19 integrated GIS stuff is--is something that
20 we're looking to do over the long term. And
21 so this was an interim--a necessary interim
22 step to go there. So, um, it's been
23 operational for about two months now. And
24 so that's what we're--what we're looking at
25 here. Um--

0161

1 MR. DAUBIN: [Interposing] Sarah, Sarah.

2 MS. PERALTA: Yes.

3 MR. DAUBIN: One point of clarification.

4 This was a, uh, large-scale plan and moving
5 forward by our San Bruno. The San Bruno
6 event required us to put this on hold. We
7 did not want to go to a new system in the
8 midst of--of that.

9 MS. PERALTA: Mm-hmm.

10 MR. DAUBIN: Um. We ran through with
11 the--with the, uh, old--the older version,
12 uh, through San Bruno--San Bruno and the
13 events following. And then this kind of
14 came back to life when we wanted to continue
15 to move forward when we were ready, so.
16 This is a--a recent upgrade. I think you
17 just say two months ago.

18 MS. PERALTA: Mm-hmm. In July.

19 MR. DAUBIN: Um, but it has been in--in
20 the works for some time and was actually
21 scheduled for deployment, uh, near the time
22 of--of San Bruno.

23 MS. PERALTA: That's--that's absolutely
24 correct.

25 MS. JOHNSON: I'm sorry.

0162

1 MS. PERALTA: Yes.

2 MS. JOHNSON: - - just back up a little
3 bit regarding--

4 MS. PERALTA: [Interposing] Mm-hmm.

5 MS. JOHNSON: --the--this coming online
6 - - two months and the--what you're trying
7 to go to and how would that--

8 MS. PERALTA: [Interposing] The
9 difference--

10 MS. JOHNSON: [Interposing] Yeah--

11 MS. PERALTA: --the two? So--

12 MS. JOHNSON: --the old system--and the
13 old GIS, you've been discussing--

14 MS. PERALTA: [Interposing] Right.

15 MS. JOHNSON: --and don't get me
16 confused.

17 MS. PERALTA: No problem. So, um, the
18 difference between--this is 2.0 that we're
19 looking at. So the difference between 1.0
20 and 2.0, to--to the average user is somewhat
21 superficial but it's added a lot more tools
22 for our mappers and our integrity management
23 folks. And it's sort of a stepping stone, a
24 lily pad for where we want to go in the
25 future. And we'll just call it 3.0 just for

0163

1 clarification. And so where we want to go
2 in the future with 3.0, um, is that it's a
3 really--it's a much more integrated system.
4 So it's addressing how we have--we have, um,

5 a lot of leg--um, legacy or external
6 databases like IGIS [phonetic], our leak
7 repair database, um, and some other
8 scheduling tools. So we want to be able to
9 integrate that all so really at any point
10 along the pipeline you can have the app-set
11 [phonetic] and maintenance history
12 associated with it. So it's a really big
13 leap in terms of, um, functionality and
14 centralization, electronic centralization of
15 our records.

16 MR. DAUBIN: So the analogy that I've
17 been told and I kind of like it is the jump
18 from Ga--uh, from 1.0 to 2.0 was essentially
19 like going from Windows 2003 to Windows 2007.
20 You got some enhancements. You got some
21 security updates, uh, a little better
22 usability. The difference from going to 2.0
23 to 3.0 is very analogous to say going from
24 that Windows 2007 to say Windows Server.
25 Windows Server gets your whole system-wide,

0164

1 uh, uh, population, all of the assets
2 associated with your company, not just your
3 department, not just Gas but--but electric,
4 uh, T-line, substation. We'd then start to
5 use this enterprise-wide, uh, functionality.
6 Does that help?

7 MS. JOHNSON: And that's where you're
8 trying to go.

9 MR. DAUBIN: That's where we--that's
10 where we are planning to go is that full
11 enterprise-wide solution.

12 MS. JOHNSON: And so you're saying that
13 this was planned prior to San Bruno.

14 MR. DAUBIN: Uh, this upgrade here--

15 MS. JOHNSON: -- - - 2--2.0--

16 MR. DAUBIN: [Interposing] Yes.

17 MS. JOHNSON: --2.0, right, which is
18 what--

19 MS. PERALTA: [Interposing] Right.

20 MS. JOHNSON: --this is right here.
21 And it was put on hold right now, but you--
22 it's two months old right now.

23 MS. PERALTA: Yes. We went forward
24 with it. We found the time, thought it was
25 good, we deployed it. So we're in 2.0 and

0165

1 we're looking to the future for--for 3.

2 That's--that's where we're kind of--that's
3 the plan right now.

4 MS. JOHNSON: Okay, so when was 3.0
5 thought of?

6 MS. PERALTA: That was, um, part of our
7 continuous improvement efforts that we've
8 been, um, working through in 2011. So
9 that's a newer, new--newer in concept and

10 it's part of our overall Pipeline Safety
11 Enhancement Plan that we filed on August 26 th
12 with the Commission. And that's--so it's
13 pipeline modern--modernization. It's the
14 valve automation and then there's a big
15 thing around records and the GIS system. So
16 that's part of that project.

17 MS. JOHNSON: And so this one, 2.0--

18 MS. PERALTA: [Interposing] Mm-hmm.

19 MS. JOHNSON: --was part of... you didn't
20 expose it--deploy it prior to the time - -
21 when did you guys?

22 MS. PERALTA: Deploy--

23 MS. JOHNSON: [Interposing] Right.

24 MS. PERALTA: --physically deploy it?
25 It was in July.

0166

1 MS. JOHNSON: No, no, but when was it
2 developed, I'm sorry. It--it was supposed
3 to go online prior--last year--

4 MS. PERALTA: [Interposing] Right.

5 MS. JOHNSON: --right?

6 MS. PERALTA: Right.

7 MS. JOHNSON: And so you guys thought
8 about that when?

9 MS. PERALTA: So this has been in the--
10 actually in the works for some time. I want
11 to say, um, maybe since the, uh, 2009 time
12 period. And so we--we, uh, we, you know,
13 were working out some of the issues in 2010.
14 And then we were set to launch in the fall
15 of 2010. And then it was put on hold, um,
16 until July of 2011 with all going on.

17 MS. JOHNSON: And so if I wanted to
18 find out information related to cost, where
19 do I--what--what files do I need?

20 MS. PERALTA: Cost is cost for?

21 MS. JOHNSON: This--this software.

22 MS. PERALTA: The 2.0?

23 MS. JOHNSON: Yes.

24 MS. PERALTA: I think we can get that
25 to you. Yeah. The cost information for the

0167

1 project. Yeah, we have that.

2 [Pause]

3 MS. PERALTA: Any other questions--did
4 that clarify?

5 MS. JOHNSON: Yes. Thank you.

6 MS. PERALTA: Mm-hmm.

7 MS. FELTS: Regarding quality control
8 of the information that goes into GIS.

9 MS. PERALTA: Mm-hmm.

10 MS. FELTS: Do you have a policy for
11 how--how you manage that?

12 MS. PERALTA: So for--so it's stated
13 with, um, Integrity Management, we have a
14 management of change, um, requirement in our

15 plan. And so what that is, is that, is that
16 my team has flagged certain data fields that
17 are--are very key to our program such as
18 diameter and pressure. And if any changes
19 on any of our thousands of segments are made
20 to those--to any of those key, um, key data
21 elements that we flagged, um, they go into
22 this audit change log. And every one of
23 those is reviewed by one of our engineers
24 for impact on the program and for, um,
25 accuracy and, um, and--and those--you can

0168

1 imagine there's quite a few changes, we have,
2 you know, several, you know, 3,000 miles,
3 10s of 1,000s of segments, and so we get
4 thousands of changes that we review in that
5 log.

6 MR. CAGEN: How long has that policy
7 been--or practice been in op--

8 MS. PERALTA: [Interposing] It's been--

9 MR. CAGEN: --operation.

10 MS. PERALTA: --since, aside from the
11 manager - - management for about two years
12 now and it's been in place since before that.
13 I--I'm not sure if it was from the very--
14 very beginning of our program which was
15 initiated in, informally in 2004 but Jeff--

16 MR. [REDACTED]: [Interposing] It's
17 since I've been here so 4.5 years at least.

18 MS. PERALTA: Okay.

19 MR. DAUBIN: And--and Margaret, you're
20 talking about a controls, um, on the quality
21 control perspective, the mappers input the
22 data into GIS from the construction packages
23 that come back from the field. Our
24 procedures require that quality control
25 check as the mapper is inputting

0169

1 documentation into, uh--or from
2 documentation and putting it into GIS, that,
3 uh, just the way the system works, that is
4 put onto, and Jeff help me with the
5 technical terms, but it's put onto a layer,
6 essentially. And until such time as the
7 principal mapper, that's--that's the lead
8 mapper associated--most knowledgeable
9 typically, uh, in the, uh, Mapping Group,
10 until they review that, uh, job package,
11 until they review all the changes associated
12 with that job package in GIS, they would
13 then integrate, as a control check, they
14 would then integrate that into the default
15 layer which you see here. So there's a
16 quality check--quality control check from a,
17 uh, supervisory standpoint in the procedures
18 associated with mapping, as those jobs are
19 being put into the system.

20 MS. FELTS: Okay. And so the
21 information that was originally used to
22 populate GIS.

23 MR. DAUBIN: Mm-hmm.

24 MS. FELTS: Which is a while back
25 apparently, um, what efforts are you making

0170

1 to verify that that information, your
2 underlying information is correct?

3 MR. DAUBIN: Currently? Or prior to
4 San Bruno?

5 MS. FELTS: Either or both.

6 MR. DAUBIN: There's a big distinction.

7 MS. FELTS: Both.

8 MR. DAUBIN: I can't--I can't, I can't
9 answer to that. And I don't know that
10 there's anybody here that worked on that--I
11 don't think there's anybody here in this
12 room that worked on that transition from
13 plat sheets. So I don't know that I can--I
14 know I can't answer that. But since San
15 Bruno we have an entire MAOP Validation
16 effort that's going on, taking project jobs-
17 -uh, project folders, verifying all of the
18 characteristics and pipe specifications
19 associated with that project and actually
20 verifying each one and each segment of that
21 line through its entirety. Um, due to
22 priority, we started with, uh, Class 3 and 4
23 and Class 1 to HCAs [phonetic] but our, you
24 know, our intention is to continue on with
25 that and do it for our entire pipeline

0171

1 system.

2 MS. FELTS: So that's only part of your
3 MAOP.

4 MR. DAUBIN: Validation. It will be a
5 complete GIS validation as well. In fact,
6 uh, it--that--that was the intent is that we
7 would verify MAOP associated with all the
8 HCAs, continue on with our system and--and
9 as we go through that process, that GIS
10 would be validated as well.

11 MR. CAGEN: So you're still validating
12 GIS? Are--I mean are you in--have you
13 finished with that or is it ongoing?

14 MR. DAUBIN: The simple answer is we'll
15 never be finished with that. And the
16 primary reason for that is there is always
17 going to be quality control checks. There's
18 always going to be field changes. And we
19 continue the quality control and--and have
20 quality assurance processes around that.
21 But I think more specific to your question
22 is have we gone through the validation
23 effort. And the answer is no. We have not
24 completed the--the full validation effort of

25 our system. So therefore that information
0172
1 has not--by default, hasn't got into GIS
2 because it hasn't been validated yet.
3 MR. CAGEN: And do you have a expected
4 date for full validation of, of the full
5 system?
6 MR. DAUBIN: Uh, we--
7 MR. CAGEN: [Interposing] For GIS?
8 MR. DAUBIN: We do. I know--know--
9 that's been provided in a filing and I--I
10 don't--
11 MS. PERALTA: [Interposing] I--
12 MR. DAUBIN: --I'm sorry I just don't--
13 MS. PERALTA: [Interposing] I--
14 MR. DAUBIN: --know the dates.
15 MS. PERALTA: --think it's, um, spring
16 of 2013 is the--the tentative time for that.
17 And I believe as of our June 30 th filing, um,
18 status filing of the MAOP status, we had
19 validated 150, approximately minus.
20 MR. CAGEN: Well are--are you saying
21 really that it's the same, same date, uh,
22 for GIS fi--uh, validation as, uh, for MAOP
23 validation?
24 MS. PERALTA: So the MAOP--um--so, um,
25 fundamentally the MAOP did--uh, validation
0173
1 is a validation of our GIS system through--
2 MR. CAGEN: [Interposing] Right.
3 MS. PERALTA: --records and, uh, field
4 excavations.
5 MR. CAGEN: So you're using it the same
6 way in--
7 MR. DAUBIN: [Interposing] Yeah we--
8 MR. CAGEN: --in this instance.
9 MR. DAUBIN: --in--
10 MR. CAGEN: [Interposing] Oh, okay.
11 MR. DAUBIN: We don't plan to do a re--
12 redundant validation. We're going to use
13 all of the findings associated with that
14 MAOP validation to move into and ensure the
15 integrity and the quality of the information
16 associated with GIS.
17 MR. CAGEN: I understand. Thank you.
18 MS. PERALTA: So in terms of getting
19 back to your question about how--how GIS is
20 used, um, for integrity management. Um, as
21 Jeff pointed out we do house integrity
22 management-related information here.
23 Whether or not it, um, the segment is in HCA,
24 why it is in HCA, um, what--what method
25 we're going to assess it by and when, you
0174
1 know, what year we're going to do that
2 assessment. So all that's contained in here.
3 Um. We do do a lot of analysis in--in--err,

4 you know, we do do analysis in GIS, um, like
5 high consequence area analysis. That's a
6 process that we do on all 40 of our counties
7 on an annual basis. Um. And really we're--
8 we're panning through the system in
9 conjunction with parcel data which tells us
10 about the type of structures as well as our
11 aerial photography, um, to let us know what
12 has changed around the pipeline. H--uh,
13 HCAs are very living, breathing things, as
14 things change on the pipeline, um,
15 environment, and that can impact the HCA.
16 So we use that, um, we use it as a tool for
17 analysis. And we augment that with, um,
18 with field verification. We have field
19 engineers that walk a good portion of our--
20 of our system every year, um, over our high
21 consequence areas in preparation for--for,
22 um, certain assessments. And they feed
23 information back to the risk management team
24 about what may or may not be, uh, an HCA.
25 Um. What else did I want to say about that?

0175

1 So for our actual assessments, GIS is really
2 just a starting point for when we're going
3 to go do an integrity management assessment.
4 Um, so we--we take the GIS data but then we
5 do a lot of manual pulling of records, um,
6 to, to build the information that we're
7 going to analyze to do a full integrity
8 assessment. So again the field engineers
9 will go out to the division offices and the
10 district offices like where you were today
11 and, uh, manually pull, um, job records that
12 may be missing or assumed in GIS, um, leak
13 records, cathodic [phonetic] detection
14 records, um, and a myriad of other, um,
15 items that we have in a--in a checklist.
16 And then we assemble those manually for
17 public [phonetic] review by an engineer as
18 part of our assessment.

19 MR. CAGEN: Well let me ask this. Uh,
20 if you're trying to, if, uh, one of your
21 pipeline integrity people is trying to, uh,
22 rank, uh, the, uh, let's say, uh, five most
23 dangerous, um, uh, pipelines or segments in,
24 uh, uh, your service territory. How would
25 you use GIS, uh, if at all, so, uh, for that

0176

1 purpose?

2 MR. DAUBIN: Bob, point of
3 clarification. We don't rank the most
4 dangerous. We wo--we rank the most at risk
5 pipelines.

6 MR. CAGEN: Well, to me, that's the
7 same thing, I--

8 MR. DAUBIN: [Interposing] Not

9 necessarily, there's a difference.
10 MR. CAGEN: --I--yeah, I--I know about
11 high consequence--
12 MR. DAUBIN: [Interposing] Oh, okay.
13 MR. CAGEN: --areas. Uh. And all that,
14 uh, so, um, I, uh, why don't you answer it
15 as--as though, uh, it's at risk--uh--
16 MS. PERALTA: [Interposing] Right,
17 because that's--that is an important--
18 MR. CAGEN: --the five most at risk.
19 MS. PERALTA: --point of clarification
20 'cause--
21 MR. CAGEN: [Interposing] Sure.
22 MS. PERALTA: --sometimes, um, and
23 I'll--I'll--I'll talk about how we--we use
24 GIS to evaluate risk. Um. Sometimes what
25 can simply be driving risk is not the actual,
0177
1 um, danger of the pipeline but it could be
2 our lack of information about the pipeline
3 where we may conservatively assume values.
4 So by the end of it, um, you know, if you're
5 using the lowest grade steel and the highest
6 diameter, you can end up with a higher
7 relative risk ranking that doesn't truly
8 maybe reflect what's--what's going on with
9 that high risk pipeline. Um. So we do, we
10 run risk on our entire system annually. We
11 produce an annual risk evaluation. Um, and
12 there's a lot of, um, factors that go into
13 that. And we have, um, weightings that are--
14 -that are, um, that have, uh, input by
15 subject matter experts. So we have
16 different committees associated with the
17 different threats. Um, and so they give, um,
18 weightings to the factors. And then, you
19 know, we turn the crank every year. So over
20 the course of the year, GIS is constantly
21 being updated. Right? We're--we're
22 replacing pipe. Um, maybe we had a, you
23 know, a leak on a--on a pipeline so it's
24 all--it's put into GIS and then when we, um,
25 do our risk evaluation annually we take all
0178
1 that into consideration. And the primary
2 use of that is really, um, for our HCAs,
3 it's for scheduling our--give--scheduling
4 our integrity management assessments and
5 giving priority to those assessments with a
6 greater risk. That's the primary use of our
7 risk evaluations. Um. Does that answer
8 your question? It's a very, uh, it's a very
9 time consuming process. It requires, um,
10 upfront validation of just, um, simply what
11 is a transmission line. Do we have our, you
12 know, what is out--which lines are de--are
13 defined as transmission, right? Because

14 that's really the starting point. Um. And
15 then we go from there and do a lot of
16 validation with our leaks which is, um, you
17 know, our performance data on the pipeline.
18 Um. I don't know, Chris, other top--other
19 data that we--that we pull into the risk
20 evaluation [bumping noise] I suppose
21 [bumping noise] it's huge. The spreadsheet
22 is very large and the, um, the equations get
23 complicated quickly but it's really the
24 likelihood, um, the likelihood factor where
25 I talked about the weightings, in terms of
0179

1 the confidence factor. And the consequence
2 factor takes into account impact on, um,
3 reliability, environment, and population.

4 MR. CAGEN: I guess I'm asking how much
5 of that data do you glean from GIS? And how
6 much from other sources?

7 MS. PERALTA: Right. Much of it from
8 GIS. Um, and again what it's used for is
9 for scheduling our integrity management
10 assessments.

11 MR. SEAMAN: Uh, Sarah--

12 MS. PERALTA: [Interposing] The risk
13 evaluation.

14 MR. SEAMAN: Uh, I have a question.
15 I'm, uh, with respect to your, uh, baseline
16 assessment, your integrity management--

17 MS. PERALTA: [Interposing] Mm-hmm.

18 MR. SEAMAN: --I'm surprised, you--
19 you're referring to everything as HCA but
20 isn't your definition for baseline
21 assessment potential impact radius, not
22 necessarily HCA?

23 MS. PERALTA: So, um, for our high
24 consequence areas, we use Method 2, which is
25 based on PIR [phonetic], you're exactly
0180

1 right, as authorized opposed to Method 1,
2 right, which uses Class [phonetic] location.
3 So in terms of--so PIR for us--

4 MR. SEAMAN: [Interposing] Mm-hmm.

5 MS. PERALTA: --um, in HCAs is--is
6 somewhat synonymous, not necessarily, uh--

7 MR. SEAMAN: [Interposing] Okay, that's
8 what I'm hoping you can explain so--

9 MS. PERALTA: [Interposing] Okay.

10 MR. SEAMAN: Is it all 3 and 4's are
11 in--in integrity management and 2 and 3
12 HCAs?

13 MS. PERALTA: No. It's less Method 1--

14 MR. SEAMAN: [Interposing] Okay.

15 MS. PERALTA: --so Method 1 is Class
16 locations, all Class locations, um, 3, 4 and
17 then, um, identified sites in Class 1 and 2.

18 MR. SEAMAN: Right.

19 MS. PERALTA: So Method 2 which is what
20 we use, is we create a circle around the
21 pipeline and that circle is a function of
22 the diameter and pressure and then we move
23 it up and down the pipeline. And you can
24 envision, as you move it up and down, it
25 gets bigger and smaller depending on how big

0181

1 the pipeline and what pressure it's
2 operating at. And then as we move it along,
3 we can--we care about what is in that circle.
4 Um, and it's how many houses are in that
5 circle.

6 MR. SEAMAN: Right.

7 MS. PERALTA: So 20 or more houses or
8 if there's 1, um, identified site which is
9 gathering places and there's some criteria
10 around gathering places, limited evacuation
11 facility. And we, um, are a little bit more
12 conservative in our deter--determinations
13 that--for an identified site, the actual
14 site doesn't need to be in the PIR but
15 could--you could just graze the corner of
16 the property and we would include it as an
17 identified site. So does that help?

18 MR. SEAMAN: It does. I'm just--I'm
19 still confused what you're saying that you
20 use GIS for--to identify HCAs during
21 integrity management.

22 MS. PERALTA: Mm-hmm.

23 MR. SEAMAN: When really what you're
24 actually doing is, um, you--well what you
25 say you're doing is you're using Method 2.

0182

1 MS. PERALTA: Right.

2 MR. SEAMAN: To determine potential
3 impact radius at--

4 MS. PERALTA: [Interposing] Correct.

5 MR. SEAMAN: --point of transmission
6 lines. So I'm not clear on, um, the in and
7 out route, like it sounds like there's some
8 3's and 4's that are not in baseline
9 assessment from integrity management.

10 MS. PERALTA: There are some Class--
11 there are Class 3's that are non--

12 [Scraping noise and crosstalk]

13 MR. SEAMAN: [Interposing] So is Method
14 2 a more conservative--it's a less
15 conservative method I suppose.

16 MS. PERALTA: I wouldn't say it's less
17 conservative. I'd say it's--it's more--it's
18 more focused on--

19 MR. SEAMAN: [Interposing] Okay.

20 MS. PERALTA: --truly where your--your--
21 --you know, people consequence is.

22 [Crosstalk]

23 MR. DAUBIN: [Interposing] John, could

24 I just--
25 MR. SEAMAN: [Interposing] So you're
0183
1 using GIS to--to pull HCA.
2 MS. PERALTA: Mm-hmm.
3 MR. SEAMAN: How do you know that's
4 what, um, is supposed to be in--in integrity
5 management? Um, it seems like there's some
6 ambiguity there. It's just--
7 MR. YANG?: [Interposing] It's--it's--
8 not - - Class 2 and Class--um, Method 1 or 2,
9 it depends.
10 MR. SEAMAN: Well if you--if you query
11 GIS right now, and you say give me all my
12 HCA, because I want to do integrity
13 management, by Sarah's own admission,
14 there's going to be some areas that are not
15 supposed to be in baseline assessment in
16 integrity management.
17 [REDACTED] A Class 2 or 3 or 4--
18 MR. SEAMAN: [Interposing] It doesn't
19 matter. There's going to be some HCA
20 identified in GIS that--
21 MS. PERALTA: [Interposing] I think
22 that we're mixing--
23 MR. SEAMAN: --shouldn't be in the--
24 MS. PERALTA: [Interposing] I think--I
25 think that we're missing terminology here.
0184
1 So, um--
2 MR. SEAMAN: [Interposing] Yeah, that--
3 and that's exactly--
4 MS. PERALTA: [Interposing] Okay--
5 MR. SEAMAN: --what I'm trying to
6 clear--
7 MS. PERALTA: --so--so let's--
8 MR. SEAMAN: --clarify.
9 MS. PERALTA: --so let's take, John,
10 'cause I think this is an important point.
11 Um. So per--per subpart L [phonetic] of the
12 Federal Regulations an operator is allowed
13 to do Method 1--
14 MR. SEAMAN: [Interposing] Right.
15 MS. PERALTA: --which is classification
16 or Method 2. So we--we chose to use Method
17 2 so it has nothing to do with
18 classifications. We are--HCA analysis is
19 totally separate from classifications. So
20 what we do during the HCA process is we pull
21 in, um, we get parcel data on a regular
22 basis. We get data about, um, daycare
23 centers because sometimes you have places
24 where the home of people are running the
25 daycares out of but we care about those,
0185
1 they're identified sites. And then we have
2 aerial photography. And so we go through

3 foot by foot and we're counting structures
4 and we're making phone calls and we're
5 trying to find out is this an identified
6 site or not. We're sending people out there
7 to do, um, you know, to count heads. And so
8 that's how we're--we're determining whether
9 it is or is not an HCA. So there's nothing--
10 -there's no core [phonetic] that you would
11 do that would say that we have stuff in GIS
12 that's not in HCA--

13 MR. SEAMAN: [Interposing] Okay, so all
14 your, all your HCAs in GIS are defined by
15 Method 2.

16 MS. PERALTA: Correct.

17 MR. SEAMAN: Okay. That--that's--
18 thanks.

19 MS. PERALTA: [Interposing] Correct,
20 okay, yes.

21 [REDACTED] And I--I want to say by
22 conservative is, uh, the Method 1 is based
23 on 660 feet.

24 MR. SEAMAN: Excuse me?

25 [REDACTED] Method 1, they based on the, uh,
0186

1 the radius, the impact radius of 660 feet,
2 the structures around the pipe.

3 MR. SEAMAN: Uh, or identified--

4 MS. PERALTA: [Interposing] Right.

5 MR. SEAMAN: --sites.

6 [REDACTED] Or identified sites. But Method
7 2 have another one, PIR, so we have--

8 MR. SEAMAN: [Interposing] Yeah.

9 [REDACTED] --locations where our PIR is
10 bigger than that so--

11 MS. PERALTA: [Interposing] And that's
12 a good point--

13 [REDACTED]: --you may--it may--

14 MR. SEAMAN: [Interposing] Yeah.

15 MS. PERALTA: [Interposing] Sometimes
16 it's much more precise.

17 [REDACTED] --it's some--it's enough--we're
18 going to say one method is conservative the
19 other that's why--

20 MR. SEAMAN: [Interposing] Well, no,
21 it's just that--

22 [REDACTED] --it's to depend on the method
23 you choose to be--

24 MR. SEAMAN: --under--it's the fact
25 that your HCAs and - - are defined by Method
0187

1 2--

2 [REDACTED] [Interposing] Yeah.

3 MR. SEAMAN: --and so forth.

4 MS. PERALTA: Yes. Yes.

5 MR. SEAMAN: I was thinking that GIS
6 was defined by Method 1 and then you were
7 trying to somehow relate that to integrity

8 management--
9 MS. PERALTA: [Interposing] No, we're
10 not.
11 MR. SEAMAN: --and that's where I was--
12 MS. PERALTA: [Interposing] Yeah.
13 MR. SEAMAN: --referring to the
14 ambiguity.
15 MS. PERALTA: Yeah. And so again on
16 the HCA analysis, we look at all 40 counties
17 every year. Uh, and it's, um, HCAs is
18 really where, um, integrity management
19 starts. And so it's--we've put a lot of
20 energy around, um, exactly what Jeff pulled
21 up there which is, um, PIRs, we use buffers,
22 um, and all sorts of things. I don't know,
23 Jeff, if you want to explain any of the--
24 MR. [REDACTED]: [Interposing] I might
25 be at a loss--
0188
1 MS. PERALTA: --the psychedelic
2 [laughing].
3 MR. [REDACTED]: --but, uh, maybe Chris
4 would talk.
5 MS. PERALTA: --um, circles there.
6 MR. [REDACTED]: Yeah.
7 [REDACTED]: Let me just, um, take one column.
8 Just to make the 40--
9 MR. [REDACTED]: [Interposing] Yeah.
10 [REDACTED]: --we have 3 here. Then you can
11 see.
12 MR. DAUBIN: So [REDACTED]'s trained me
13 well today. Uh, how are we doing on time--
14 MS. PERALTA: [Interposing] Yeah, I
15 think--
16 MR. DAUBIN: --and is this, first of
17 all is this of interest to everybody in the
18 group or is this something that needs to be
19 done in the offline or?
20 MR. [REDACTED]: So, so I think so far
21 we're doing okay on time--
22 MR. DAUBIN: [Interposing] Okay.
23 MR. [REDACTED]: --I was actually going to
24 let this discussion go on whatever topics
25 for another 15 minutes. Reserving about an
0189
1 hour to go to, uh, upstairs to the Integrity
2 Management Library and also to the
3 Engineering Records Center. So probably a
4 half hour in each location so--
5 MR. DAUBIN: [Interposing] Thank you.
6 MS. PERALTA: Okay.
7 MR. [REDACTED]: If, if CPC and, uh, other
8 parties are comfortable with this discussion,
9 I'd say let it go.
10 MS. PERALTA: Do you guys want to hear?
11 I have a few more things to cover--
12 MR. CAGEN: [Interposing] Sure.

13 MS. PERALTA: --in terms of records and
14 integrity management. Do you want to come
15 back to this? Or would--do you have any
16 questions on how this is, um, the HCA
17 analysis is done?

18 MS. FELTS: We're there now, why don't
19 you go--

20 MS. PERALTA: [Interposing] Okay, sure.

21 MS. FELTS: --explain it.

22 MS. PERALTA: Sure. Do you, [REDACTED]

23 [phonetic] do you want to maybe jump in?

24 [REDACTED] Yeah, could you zoom out a little
25 bit--

0190

1 MR. [REDACTED]: [Interposing] Mm-hmm.

2 [REDACTED] --because, uh...

3 MS. PERALTA: So [REDACTED] again, he's one
4 of our Senior Risk Management Engineers. Um,
5 in the--in our Risk Management team under
6 Integrity Management.

7 MR. [REDACTED]: It's drawing a little
8 slowly.

9 [Pause]

10 MR. [REDACTED]: It's thinking.

11 [Pause]

12 MR. [REDACTED]: There we go. Too far?

13 [REDACTED] Yeah, it's too far, yeah.

14 MR. [REDACTED]: Come back in about
15 halfway?

16 [Pause]

17 MR. [REDACTED]: Okay.

18 [REDACTED]: You don't see the everything in
19 there.

20 MR. [REDACTED] Yeah. I may not have
21 turned things on correctly but--

22 [Crosstalk]

23 MR. [REDACTED]: --they're kind of put
24 on, by default there's a--

25 [REDACTED]: [Interposing] Just go, just go to

0191

1 zoom.

2 MR. [REDACTED]: In here?

3 [REDACTED] In here.

4 MR. CAGEN: [Interposing] - - pipeline
5 should be, you know, 'cause that's where the
6 danger is going to be.

7 [REDACTED] This is, um, an example we do the,
8 uh, this year, we--we come to the, uh,
9 review this for every--40 counties. And we
10 have two way of doing it, um. Every 5 year
11 we go to complete review from 1 end of the
12 county to the other. We look for change, uh,
13 ident--identified sites or number of
14 structure or any new division housing. Uh,
15 another method we do is, uh, we just based
16 on the change in the, uh, parcel data.
17 Parcel chance could be the land use code in

18 the--the structure change or the APN change
19 or, uh, anything can change we--we put the
20 change in except that we--all--in that case
21 we are only focused on the area, non-HCA.
22 In this case here, you see, uh, area non-HCA.
23 We'd build, uh, the buffer, the--the PIR
24 data, the impact around the pipe and we look
25 around to see any--any--stuff--any--I decide
0192

1 I need more like 20--more than 20 structures
2 around that pipe. And we calculate a new
3 HCA. And from that we look on based on our
4 requirement of the CFR to see when we're
5 going to be accept those things, uh, we do.

6 MS. JOHNSON: So, um, [REDACTED] to answer
7 this gentleman's question, um, the
8 difference between a P--a PIR and then how
9 that develops the extent of the HCA. So I
10 think the PIR is the development but then we
11 extended the HCA, I think, based upon how
12 many--how long you go with each PIR, before--
13 before you stop. With the extense
14 [phonetic] of--building sites? Um?

15 [REDACTED] Yeah, we--uh, the--the CFR have
16 a--uh--uh a suggestion on where--how we, uh,
17 cut the, uh, the HC--the pipeline, say, the
18 first, uh, it's not easy to--to--I need to
19 draw on--on a--on a board just to show you
20 how we identify.

21 [Pause]
22 [REDACTED] [At the board] Let's say you got
23 a--a pie like this, that is how you
24 determine, uh, you go this house right here.
25 It's HCA. So we do--we--we draw a line like
0193

1 this, first one, and from it we draw a line
2 like this based on [creaking noise] buffer
3 [phonetic] and same thing this one. Draw
4 like--like this. And then same would be
5 like that. So from here to here that would
6 be HCA line. Not just common - - . But how
7 we get the - - .

8 MALE VOICE 2: And you said that's
9 based upon the buffer you choose?

10 [REDACTED] Yeah. We got lot of buffer.

11 MALE VOICE 2: And how do you determine
12 which buffer to choose?

13 [REDACTED] We--we, uh, the GIS have a way we
14 can look at buffer. But buffer based on the,
15 uh, like Charles say, with your pressure and
16 OD. 46-9 PD squared.

17 MALE VOICE 2: So it's--it's a
18 calculation.

19 [REDACTED] It's a calculated value. Yes.
20 Based on the OD and the envelope [phonetic]
21 of pressure--

22 MALE VOICE 2: [Interposing] And is

23 that something you came up with internally
24 or is that an industry standard?
25 [REDACTED] That's the CFR, that's for--

0194

1 MS. PERALTA: [Interposing] Yeah,
2 that's--
3 MALE VOICE 2: [Interposing] That's
4 part of CFR?
5 MS. PERALTA: --Code of Federal
6 Regulations. Uh--
7 [REDACTED] [Interposing] - - .
8 MS. PERALTA: It's empirically derived
9 equation where, um, anyone living outside
10 of--outside the PIR would have--it has to do
11 with survival rate but it--there's--it's a
12 very durable equation and that's what we use
13 it for. Um. [REDACTED] lating the--
14 MR. [REDACTED]: [Interposing] So we're--
15 we're...
16 MS. PERALTA: Getting a little into the
17 weeds.
18 MR. [REDACTED]: We're--we're slightly
19 getting onto the topic of--of records and
20 documentation. I just want to--I'm taking a
21 poll here, um, getting into a very technical
22 discussion in regards to, uh, the
23 calculation of PIR and HCA. I don't know if
24 that was the intent of today's meeting but,
25 uh--

0195

1 MS. PERALTA: [Interposing] I'd like to
2 actually transition to the Fiscal Records
3 Room 'cause we're going to go up to the
4 Kettleman Room and it's kind of small.
5 There's not--there's not enough space for us
6 to sit and actually talk. So maybe we can
7 talk about it before we go up there and then
8 go up there?
9 MR. [REDACTED] I--I think that--that's
10 all right with everybody--
11 MS. PERALTA: [Interposing] If that's
12 okay?
13 MR. [REDACTED] --I think that would be a
14 good idea and a good transition--
15 MS. PERALTA: [Interposing] Okay.
16 MR. [REDACTED] --we're getting up to, uh,
17 see the library and the record center.
18 MS. PERALTA: Okay, um, so--
19 MR. [REDACTED] [Interposing] Thank you
20 [REDACTED]
21 MS. PERALTA: --so, yeah, thanks [REDACTED]
22 Um. So there's--so for integrity management
23 we have internally generated records and so
24 I talked a little bit about this where the
25 field engineers go out and they pull, you

0196

1 know, CP records and name forms [phonetic].

2 And those come in and they go into a project
3 folder. Um, you'll see--you'll see some of
4 those upstairs [door closing] and then we
5 also have externally received information.
6 So we have vendors that support our
7 integrity management program. So they send
8 us reports and data, uh, for integrity
9 management. And, um, for many of--of those
10 types of--of records, they are received by,
11 um, our--our clerical staff, a clerk. And
12 they're, um, they're filed electronically
13 but they're also time stamped because it's
14 really important for us to know when we
15 received those documents 'cause there's a
16 lot of dates that key off of that when we
17 have to do excavations, buy-ins [phonetic]
18 and everything like that. So that's a--
19 that's a controlled process where we, um,
20 formally receive those documents and post
21 them. And then, um, the clerk hands that--
22 hands that project to the engineer
23 responsible, and then the clock has
24 basically started, um, for some aspects of
25 the work. Um, the Kettleman Library which
0197

1 you'll go up and see, it's actually a, a
2 called a library but it's also a conference
3 room. Um, and it's a, um, majority of the--
4 the--the files you'll see that they're--
5 they're, um, double-sided, um, large file
6 cabinets are locked and controlled. And
7 those are the records that--that my group is
8 responsible for and we have a--we have a
9 check-out log. Um, and so some of the--some
10 of the folks on my team, they may go in to
11 look something up or--or--you know, they may
12 be familiar with this system and so like
13 they will go and grab one and take it back
14 but for anyone else, not on my team, we
15 require that they formally check those out
16 so we know where everything's at. Um. At
17 any given time. You'll see that they all
18 have these collected--these, uh, fluorescent
19 collected six--stickers on them, and they
20 have--those documents, um, have all been
21 collected and scanned as part of our, um,
22 our records retrieval, um, and archive
23 process. Um. Just some--I did a little bit
24 about future enhancements. We--I--I'm sure
25 you were--were, um, recent--we are in
0198

1 transition right now. We're adding a lot of
2 new employees, um, not just on my team but
3 throughout the building. And so we're
4 restacking the suites, um, kind of making
5 the cubes smaller in order to make room for
6 more employees. So we're, um, you know,

7 we're seeking out more space for not only
8 our people but for our records. And I'm in,
9 um, talks with the building manager to
10 actually make that Kettleman--which is a
11 conference room now, eliminate it as a
12 conference room and just keep it for
13 Integrity Management records. So that's
14 something that's in process right now. Mm-
15 hmm.

16 MS. JOHNSON: But you just said that
17 anyone that's not on your team, they can
18 sign it out--

19 MS. PERALTA: [Interposing] Right.

20 MS. JOHNSON: But on your team, it was
21 kind of off, now where's the tracking on
22 that--?

23 MS. PERALTA: [Interposing] Some, some
24 folks, so--so--so Jeff is--he's, uh, really
25 good about, um, kind of keeping in tune with

0199

1 what's going on there. And like I said
2 they're--they're--they're under lock and key.
3 And so only a few people have the keys. So
4 you have to go get someone to even get the
5 record most of the time.

6 MS. JOHNSON: On the team.

7 MS. PERALTA: Not--not even everyone on
8 the team has a key. Yeah.

9 MS. JOHNSON: So how do you keep track?
10 People who are not on the team--

11 MS. PERALTA: [Interposing] Right.

12 MS. JOHNSON: --have to sign, you know,
13 who it is, where it went, but--

14 MS. PERALTA: [Interposing] Right.

15 MS. JOHNSON: --but on the team, they
16 don't have to sign. I'm just trying to get
17 a grasp on--

18 MS. PERALTA: [Interposing] Right, so
19 these--these are--it's a very limited group.
20 And these would be the working engineers who
21 are--are responsible for these projects.
22 And so they are the ones that are populating
23 folders. They're doing analysis. So they
24 need ready access for--they're basically
25 their files. But they're just centrally

0200

1 stored.

2 MR. [REDACTED]: We still check it out if
3 we're going to take it for more than an hour.

4 [Off mic discussion]

5 MS. JOHNSON: So there's still a lot -
6 - .

7 MR. CAGEN: Who has access within P G &
8 E to GIS?

9 MS. PERALTA: So--so that's a good
10 question. Um, We have, I think we have, um,
11 we've added many, many more users over the

12 last--over the course of this year. Um, but
13 I don't know exactly what that number is--
14 MALE VOICE 5: [Interposing] It--it
15 potentially can be anybody with a P G & E
16 computer and a P G & E domain, uh--
17 MS. PERALTA: [Interposing] Right.
18 MALE VOICE 5: --associated with their
19 LAN ID. And so if you were an employee you
20 can get access.
21 MS. PERALTA: But it's--it's--it's, um,
22 it's not edit access. That's--that's very--
23 MR. CAGEN: [Interposing] Right.
24 MS. PERALTA: --you know--
25 MALE VOICE 5: [Interposing] Yes.

0201

1 MS. PERALTA: --that is controlled,
2 it's view access.
3 MR. CAGEN: So that--
4 [REDACTED] [Interposing] Level one access.
5 MR. CAGEN: --people can look at it.
6 MS. PERALTA: Mm-hmm.
7 MR. CAGEN: Yep.
8 MS. PERALTA: So unless there's any
9 more questions and even if there are, we can
10 certainly talk up there. You guys want to
11 take a walk upstairs?
12 MR. [REDACTED] Hey, Austin, there's--
13 there's some new folks who joined the room,
14 we might like to know--
15 MR. YANG: [Interposing] Oh, That's
16 [REDACTED]-that's - - sorry about that. Um. So
17 I'm--I'm just recording this for my inter--
18 personal notes because it's fast--easier
19 than writing everything down but, uh, I am
20 required to ask for your consent. Um. To
21 do that, so. If anyone has a problem,
22 please let me know and, uh, we can take care
23 of it, but...
24 MALE VOICE 3: No problem.
25 MS. FELTS: I have one question. Um.

0202

1 Did you--you may have spoken earlier when I
2 wasn't here but where are the project
3 folders kept?
4 MR. DAUBIN: Project folders. So the
5 project folders that [someone coughing] in
6 Chapter 2A of our--of our testimony, really
7 records OAI [phonetic], they're located, uh,
8 primarily the backbone, uh, project folders
9 was located here in the Walnut Creek Records.
10 We're going to go see that but those--those
11 project folders have been moved and
12 consolidated in Emeryville. And the reason
13 for that is because we pulled out project
14 folder information from the division so
15 there were copies of project folders, uh,
16 associated, in with divisions that we wanted

17 and--and received back. But it was also, uh,
18 original job files that were in the
19 divisions as well for those, uh, local
20 transmission jobs that were designed and
21 constructed, uh, out in the divisions. So
22 to the extent that we pulled those back in
23 for MAOP validation, those have been moved
24 to Emeryville. There still remains, uh,
25 project folders out in the divisions. And,

0203

1 uh, but they have been moved from Walnut
2 Creek to Emeryville for the backbone.

3 MS. FELTS: Job folders, project
4 folders--

5 MR. DAUBIN: [Interposing] Thank you.

6 MS. FELTS: --and job files--

7 MR. DAUBIN: [Interposing] They--

8 MS. FELTS: --are they all the same
9 thing?

10 MR. DAUBIN: They're all synonymous.

11 And I apologize for that. We--we--we
12 typically, depending on probably the era in
13 which you came in to P G & E, call them
14 different things, but, yeah, Margaret's
15 comment was project folders, job files--

16 MS. FELTS: [Interposing] Job folders.

17 MR. DAUBIN: --what was the other
18 thing? And job folders--

19 [Laughter, crosstalk]

20 MR. DAUBIN: --a combination of the two.

21 MS. FELTS: [Interposing] I just--don't
22 -- a data request, right?

23 [Laughter]

24 MR. DAUBIN: You laugh. Uh, those--
25 those are all synonymous for a--a--what we

0204

1 call, uh, a--a project folder and the
2 project folder contains all the information
3 associated with the job. Um. The--the
4 actual construction drawings, uh, the, uh,
5 primarily the construction drawing as they
6 went out but the redlined copies as they
7 come back, job estimate, string test
8 pressure report from the--the field, um, as
9 that job was, uh, string--uh, tested. Uh or
10 hydro-tested as it's--as it's typically
11 called. Uh, all that information is
12 retained within that job file, project
13 folder, or, uh, job folder.

14 MR. CAGEN: Can we see, uh, uh, job
15 folders today? Someplace--

16 MR. DAUBIN: [Interposing] Uh.

17 MR. CAGEN: --or are they not available
18 at the places that we're going to?

19 MR. DAUBIN: Uh, I don't believe so.
20 Somebody can correct me. But, um, the best
21 place is Emeryville. I mean that--there's

22 boxes and boxes of job folders, uh, project
23 folders.

24 MS. FELTS: Yeah I'm probably going
25 there.

0205

1 MR. DAUBIN: Um. That--that really is
2 the best place to get an understanding. And
3 the reason why is because one of--one--one
4 of the things that's hard to grasp is, you
5 know, I mean here is your manil--manila
6 project folder, right. But the reality of
7 it is, it's really based upon the size of
8 the job, uh. Most often correlates to the
9 size of the project folder. We have project
10 folders, if you will, that are several, uh,
11 boxes--

12 MS. PERALTA: [Interposing] Boxes.

13 MR. DAUBIN: --in some cases, um.
14 Depending on the size of the job. We have
15 others that are in a, uh, a 50-foot reco
16 [phonetic] in the field and it's the job
17 estimate, it's the, uh, uh, and--and it's
18 the--the construction drawing that showed
19 where that location was. So it--I mean it's
20 very small type stuff to very large type--
21 type stuff--

22 MR. CAGEN: [Interposing] Were they
23 typically, uh, organized chronologically?

24 MR. DAUBIN: No. They are not issued--
25 or they are not, uh, stored chronologically.

0206

1 They are stored by job number. And remember
2 I talked to you about the system called
3 Docu-Track? Docu-Track would point to the
4 location of that job file, based on its job
5 number. It would also correlate to what the
6 job description was and the line or the
7 facility that it related to. So if I wanted
8 to look at all the job files associated with
9 Line 132, I could call that up, just like I
10 could do with GIS. I could call up GIS and
11 tell me, give me all the job numbers
12 associated with GIS. What Docu-Track would
13 give you that GIS typically wouldn't is, uh,
14 obsolete or potentially abandoned pieces of
15 pipe. So if I did a job, uh, if I put a job
16 in that was 1,000 and over time I replaced
17 that 1,000 feet and more, that original
18 1,000-foot job probably wouldn't be in GIS
19 but Docu-Track would have that as an
20 obsolete job folder. And you'd be able to
21 get back that information.

22 MS. JOHNSON: So Docu-Track is still in
23 use or?

24 MR. DAUBIN: Docu-Track is still in use.
25 Yes, because we are using it--Charles, I'm

0207

1 looking at you to confirm--
2 MR. [REDACTED]: [Interposing] Every day.
3 Yes, we still use Docu-Track.
4 MR. DAUBIN: --okay, um, because we
5 still have station drawings located in that
6 facility that we're going to go see. And
7 every one of those stations, uh, uh,
8 drawings is in Docu-Track and you'd be able
9 to point to what bin it's in, where it's
10 located. You'd be able to retrieve that,
11 that drawing, that hard copy drawing.
12 MS. JOHNSON: And so is Docu-Track
13 still being updated or is it--it's GIS now,
14 right?
15 MR. DAUBIN: It's still alive, a living
16 program--
17 MR. [REDACTED]: [Interposing] Docu-Track is
18 currently being updated on a day to day
19 basis.
20 MS. JOHNSON: Okay.
21 MR. [REDACTED]: That's just because the
22 station drawings are a part of Docu-Track.
23 MR. DAUBIN: So even though that
24 information, uh, and--and--and this is an
25 assumption, I want to confirm this, the, uh,
0208
1 the job folders that were sent over, we have
2 a running record of the--well actually I
3 know, this is not an assumption, I know we
4 have a running record in Emeryville of what
5 was removed. So Docu-Track still has that
6 information associated with where those
7 project--project folders are at and where
8 the drawings are at. So it's still a live
9 database that's being updated by our records
10 personnel in there, uh, the Walnut Creek
11 records, which we'll go see. Okay--
12 MS. JOHNSON: [Interposing] But then
13 how does Docu-Track - - relate to your 3.0
14 that you wanted?
15 MR. DAUBIN: Docu-Track does not relate
16 to GIS in any way. Um, Docu-Track is an
17 offline database that houses and locates job
18 files or drawings in Engineering Records.
19 MS. JOHNSON: Based on this then, it
20 stays as-is.
21 MR. DAUBIN: It is going to stay as-is
22 or maybe phased out depending on, depending
23 on what--what 3.00 encompasses. If it
24 removed all of the drawings from Engineering
25 Records and make--makes them electronic.
0209
1 And now the electronic version is the
2 document of record, there would be not--
3 there would not be a need for Docu-Track,
4 right? So there's still some planning to be
5 taking place in regards to what--what the

6 overall plan for drawings is going to be.
7 MS. JOHNSON: So at this point you're
8 not sure?
9 MR. DAUBIN: At this point we do not
10 have, uh, an overall plan solidified for
11 Docu-Track, no.
12 MS. JOHNSON: But you have the--but you
13 have 3.0 out there.
14 MR. DAUBIN: But 3.0 is an enterprise-
15 wise GIS system, so I don't--
16 MS. JOHNSON: [Interposing] I'm just
17 trying to understand that, that's all.
18 MR. DAUBIN: I--I understand. So it--
19 GIS--and--and that's why I'll--I'll explain
20 from a geographical information system, our
21 geographical information system does not
22 contain, uh, the drawings, construction
23 drawings, for our pipeline facilities or our
24 station facilities. It doesn't contain the
25 drawings. The--the, the "drawings" that you
0210
1 saw, we refer to those as operating diagrams,
2 operating maps. Those do not show the
3 specifics by which--how--and how that
4 pipeline or that station was constructed.
5 Those documents are in, uh, Engineering
6 Records across the parking lot. So there is
7 not--there is no direct correlation between
8 Docu-Track and GIS, now. Uh. In the future
9 it will depend on what the overall system,
10 enterprise-wide system is going to look like.
11 And those probably will not be housed in GIS
12 either. But whether Docu-Track remains or
13 is obsoleted and moves to another system, I
14 don't know.
15 MS. JOHNSON: But there's not problem
16 with Docu-Track right now. It's working as
17 planned, as--
18 MR. DAUBIN: [Interposing] Mm-hmm.
19 Working as designed.
20 MR. [REDACTED]: Okay--
21 MS. JOHNSON: [Interposing] It's been
22 accurate--I mean--
23 MR. [REDACTED]: [Interposing] So.
24 MS. JOHNSON: --pull up something, it
25 says it's over here or there, - - problems
0211
1 with it.
2 MR. DAUBIN: Uh, not to my knowledge,
3 no.
4 MR. [REDACTED]: [Something crackling] - -
5 station bindings and, uh, drop overs. Not
6 the station drawings.
7 MR. DAUBIN: As it relates, say that
8 again, I'm sorry, Charles.
9 MR. [REDACTED]: She's asking if you look at
10 Docu-Track, for a particular data, it would

11 tell us exactly where that data would be.
12 And my answer to that would be only linked
13 to station binders and, uh, the job folders
14 that were removed.

15 MR. DAUBIN: Gotcha.

16 MR. [REDACTED]: Okay. So what we're
17 going to do now is--

18 [END LS100011]

19 [START LS100012]

20 MR. BRIAN DAUBIN: Um, so we can see
21 that. And I also have a floor plan. So,
22 let's first orient -- orientate ourselves to
23 what it looked like prior to September 9th.

24 So, as you can, as you can see, looking
25 back in this direction, uh, several banker

0212

1 boxes that were numbered and, uh, and ID'd,
2 our rack locations were numbered. All of
3 the rack locations and box numbers are what
4 is in DocuTrak.

5 All of the bins located on the side
6 there, were there, uh, present day. And
7 these file cabinets -- which we call our
8 drawing bins -- were also there.

9 We have, uh, a reprographics center --
10 if you will -- that does scanning of hard
11 copy documents. Um, and then, uploads those
12 into the ELS system -- that is the viewable
13 system by which everybody in the company can
14 see a hard copy drawing. Um, for the very
15 large jobs -- remember we talked about some
16 jobs are three to four drawings.

17 Other jobs are hundreds of drawings.
18 For those very large jobs, we would send
19 those to our reprographics center, which has
20 a much higher capacity to do that type of
21 work, in San Francisco. Um, but in either
22 method they would be scanned.

23 The new revisions would be uploaded to
24 ELS so that the individuals in the field
25 could see those new revisions. And then,

0213

1 job packages were also -- went through a
2 reprographics process.

3 Oftentimes we would send, uh, you know,
4 multiple copies to the field on a
5 construction project for field use, project
6 management, project engineering. All of
7 them would have that project package -- if
8 you will -- the construction package. Okay?

9 MARGARET: Now what's happening to that
10 process that you just described? I
11 understand that the files have been moved to
12 Emeryville. But this sounds like a day-to-
13 day core process of updating drawings, and -
14 -

15 MR. BRIAN DAUBIN: Great question.

16 Process has not changed. Project folders
17 are no longer kept here. Bill, help me out
18 because I've been out of the fold for a
19 little bit. Are they being sent to
20 Emeryville?
21 BILL: They, they come in through the
22 normal mapping process --
23 MR. BRIAN DAUBIN: [Interposing] Okay.
24 BILL: -- and instead of putting them
25 here, they're sent to Emeryville. It's the
0214
1 only deviation.
2 MR. BRIAN DAUBIN: Okay. So the only
3 deviation is, uh, there's an additional step
4 in the process. And that's moving them to
5 Emeryville. Um, but from a location
6 standpoint, and a physical location, they
7 are no longer here -- in this facility --
8 they've been moved to Emeryville. Okay?
9 MALE VOICE 3: Have they from every
10 office?
11 MR. BRIAN DAUBIN: Are they -- have the
12 files --
13 MALE VOICE 3: [Interposing] From every
14 office, uh, moved --
15 MR. BRIAN DAUBIN: [Interposing] To
16 Emeryville.
17 MALE VOICE 3: -- uh, to Emeryville.
18 MR. BRIAN DAUBIN: The answer is no.
19 So from every office, we've collected a
20 subset of those records. We collected Class
21 3 and 4 and Class 1 and 2 HCAs. Those have
22 been moved to Emeryville, and are -- and
23 remain there.
24 All of the files associated with Walnut
25 Creek, uh -- a good portion of those -- fell
0215
1 in that same category, but not all. We
2 moved those to Emeryville as well.
3 MALE VOICE 4: Brian, can you explain
4 that -- the distinction between those
5 documents gathered before March 15th, when
6 PG&E had to um, um, meet a deadline for MAOP
7 validation, and those collected after?
8 MR. BRIAN DAUBIN: I'm not sure that I
9 can, um, because I think that that's more of
10 a [REDACTED] question. But I, I can give it a
11 shot. I -- the first phase was immediately
12 identifying those job files that were
13 associated with, again, Class 3 and 4 and
14 Class 1 and 2 HCA.
15 We went out, did a large search for
16 those, pulled those files. We brought all
17 of those files to Emeryville. Since, uh --
18 or subsequent to that time -- we have, um,
19 had additional requests, either by NTSB,
20 CPUC, um, or our own internal folks, dealing

21 with the records OII. Um,--
22 MALE VOICE 4: [Interposing] And the
23 later phase of the --
24 MR. BRIAN DAUBIN: And later --
25 MALE VOICE 4: -- phase of the MAOP
0216
1 validation.
2 MR. BRIAN DAUBIN: -- phase of the MAOP
3 validation, because there are multiple
4 phases. Um, so, in some cases we have gone
5 out, um, post-March 15th and done, uh,
6 subsequent, uh, records research out there.
7 Although they changed their methodology,
8 what they did was, uh, was they scanned on-
9 site. Because it was a far less voluminous
10 task that what was originally presented on
11 March 15th.
12 So, we, we made that change. It was a,
13 it was a conscious business decision to do
14 so. Um, and we, we changed that process so
15 all of the information is now in ECTS in
16 either case. But the files associated with
17 Class 3 and 4, Class 1 and 2 HCAs are in
18 Emeryville.
19 In addition to that, there are other
20 files that were in Walnut Creek that didn't
21 fit that criteria. But because we already
22 had them centralized here, we moved those
23 out.
24 Another reason was -- as you see here,
25 the cubical locations -- we needed office
0217
1 space. Due to the issues at hand, we were
2 growing rapidly. We needed the resource, uh,
3 support. We had individuals coming into
4 this location. We didn't have anywhere to
5 put them. So we made that --
6 MALE VOICE 3: [Interposing] So the
7 other offices --
8 MR. BRIAN DAUBIN: -- fundamental
9 decision to --
10 MALE VOICE 3: -- just have their HCA,
11 uh, pipeline, uh, uh, job files sent to
12 Emeryville. And they've kept their other
13 ones, whereas this is sent all your files.
14 Um, is that the only -- is this the only
15 office where it's worked that way? Does it
16 -- no distinction between, uh, HCA and non-
17 HCA?
18 MALE VOICE 4: I, I led you down this
19 path and, and the farther we go, the more I
20 think you're right. We need to re-talk this
21 thing - -
22 MR. BRIAN DAUBIN: Again, that's truly
23 a question for [REDACTED] and his team. He, he's
24 in charge of the retrieval teams. Um, to
25 some extent we, we moved a lot of records

0218

1 from Bayshore. But I do not know the full
2 extent of what --
3 MALE VOICE 3: All right.
4 MR. BRIAN DAUBIN: -- was moved from
5 Bayshore.
6 MALE VOICE 3: Okay.
7 MR. BRIAN DAUBIN: I mean, we most --
8 MALE VOICE 3: [Interposing] So, we --
9 MR. BRIAN DAUBIN: [Interposing]
10 Certainly can get that information to the --
11 MALE VOICE 3: -- this is something for
12 us to research further.
13 MALE VOICE 4: Yeah.
14 MR. BRIAN DAUBIN: Sounds like --
15 MARGARET: [Interposing] Let me ask you
16 --
17 MR. BRIAN DAUBIN: -- it's something for
18 us to research.
19 MALE VOICE 3: [Interposing] Well, both
20 of us. Yeah.
21 MARGARET: -- something else, and that
22 is that if you did pull a job file -- say on
23 a, a job done with.
24 MR. BRIAN DAUBIN: Mm-hmm.
25 MARGARET: Um, did you take the entire

0219

1 file and upload it to ECTS or did you take
2 documents out of a job file and load them up
3 to ECTS?
4 MR. BRIAN DAUBIN: So, for the, for
5 the jobs that were taken to Emeryville, um,
6 those, those project folders -- the job
7 files that were taken to Emeryville -- those
8 were taken, uh, from the divisions, checked
9 out. They were taken from Walnut Creek,
10 checked out, moved to Emeryville. Those
11 were uploaded to ECTS.
12 MARGARET: The entire contents of each
13 folder? Or did you select things out of the
14 folders?
15 MR. BRIAN DAUBIN: I believe -- again,
16 [REDACTED] --
17 BILL: [Interposing] I, I think --
18 MR. BRIAN DAUBIN: -- is the person to
19 ask.
20 BILL: -- it depends on when it was
21 done.
22 MR. BRIAN DAUBIN: Okay.
23 BILL: And, and it's tied to when --
24 which -- submittal you're talking about.
25 Currently I believe they're doing a full

0220

1 project scan.
2 MR. BRIAN DAUBIN: Okay. The prior --
3 BILL: [Interposing] But initially it
4 was just --

5 MR. BRIAN DAUBIN: -- prior to March
6 15th?
7 BILL: -- those documents. Uh --
8 MR. BRIAN DAUBIN: [Interposing] It was
9 just the MAOP related documents?
10 BILL: Well, I'm not clear on, on the
11 March 15th date.
12 MR. BRIAN DAUBIN: Okay.
13 MARGARET: Wait, um, --
14 BILL: But I know at some point they,
15 they get shipped over to --
16 MARGARET: [Interposing] I'm just
17 trying to decide whether what I'm seeing
18 when I pull a folder out --
19 BILL: [Interposing] What you're seeing
20 --
21 MARGARET: -- is the whole folder or if
22 I should ask for the folder. That's all,
23 you know.
24 MR. BRIAN DAUBIN: Well when you --
25 when you pick up, uh, a -- the folder, that
0221
1 will be the entire folder.
2 MARGARET: Uh-huh.
3 MR. BRIAN DAUBIN: Okay? When you talk
4 about ECTS?
5 MARGARET: Uh-huh.
6 MR. BRIAN DAUBIN: That's really where
7 the question come in play. Am I seeing
8 everything that was in that folder, or am I
9 seeing just the MAOP related documents?
10 MARGARET: Right.
11 MR. BRIAN DAUBIN: And that, that is
12 actually -- can be deducted from ECTS,
13 because in ECTS it's broken down by
14 documents that apply to MAOP. And if
15 there's any other documents that don't, you
16 know that that folder was scanned completely.
17 But --
18 BILL: [Interposing] And the --
19 MR. BRIAN DAUBIN: -- that would take
20 some deductive reasoning and, and -- to be
21 able to go through -- I don't know if you
22 want to do that. You'd make --
23 BILL: Margaret, I have it on my to-do
24 list from our conversation this morning that
25 we need to get back with you and make ECTS
0222
1 more workable. And so I will add that to my
2 to-do list, to try and get you an answer to
3 that question.
4 MARGARET: Okay.
5 MR. BRIAN DAUBIN: Yeah. If you
6 wouldn't mind sharing that with me, that
7 would be great.
8 [laughter]
9 [crosstalk]

10 FEMALE 2: -- you get the documents -
11 -

12 MARGARET: [Interposing] We're never
13 going to be informed.

14 FEMALE 2: -- before you moved to
15 Emeryville -- filed to Emeryville -- you
16 used DocuTrak?

17 MR. BRIAN DAUBIN: Uh, we used several
18 pieces of information. Um, so to answer to
19 your question, uh, yes. We did use DocuTrak.
20 We searched, um, the line numbers of
21 DocuTrak but remember DocuTrak only
22 correlated to a line. It didn't correlate
23 to a line and a mile point. Um, or a line
24 and, hey this is an HCA. Um, so it
25 correlated to a line number, which we could

0223

1 then search by job number. Uh, GIS had --
2 because it's geographical -- we could say,
3 okay, this is your HCA and these are the
4 jobs associated with it.

5 So we got our job numbers out of, of
6 GIS. We also then used the plat sheets --
7 the physical, hard copy, plat sheets -- we
8 also investigated those as well to determine
9 were there any jobs that were particularly
10 marked obsolete on past revisions that we
11 would want to also pull. Um, and in some
12 cases we found some that -- because of a
13 full replacement or a section that has been
14 removed altogether, um -- they were obsolete
15 job files. We pulled those as well.

16 And so we did a full search to validate
17 for MAOP that way. So we used several
18 systems, it wasn't just one. But we had to
19 use DocuTrak to be able to find the folder
20 here. I mean, DocuTrak is really isolated
21 to this building.

22 It is, it is the librarian, so to speak
23 -- librarian's database -- to be able to go
24 in and talk to one of the individuals -- uh,
25 the records personnel -- and say, you know,

0224

1 I need this job folder. Tell me what job
2 folder number it is. It's Job 123. They
3 would type in Job 123 and they would go get
4 it out of bin 22 shelf 2.

5 FEMALE 2: And then from there we could
6 see what was in it and say, okay, GIS needs
7 to look further to find -- so you had to
8 look -- in order to move to Emeryville or to
9 pull something if someone requested it, you
10 had to check several sources is what you're
11 saying, basically. You couldn't just go one
12 place and go, okay I know exactly --

13 MR. BRIAN DAUBIN: It, it depends for,
14 it depends for what activity you're talking

15 about. I, I am assuming you're talking
16 about for the MAOP validation.

17 FEMALE 2: Yeah. When you were
18 requested to pull files.

19 MR. BRIAN DAUBIN: [Interposing] So what
20 --

21 FEMALE 2: What were your sources? You
22 had to go several places to do --

23 MR. BRIAN DAUBIN: [Interposing] It, it
24 was not okay for us to operate under the
25 same paradigm that we operated under prior

0225

1 to San Bruno.

2 Prior to San Bruno we would have come
3 in here, we would have asked records
4 personnel to hand me that file. GIS and the
5 plat sheet tells me it's these job numbers.

6 They would have taken -- they would
7 have taken the word of GIS, and taken the
8 word of the plat sheets, and said, yeah,
9 these are the job numbers I need.

10 We no longer can operate under that
11 paradigm. We were most certainly trying to
12 validate every single one of our records.
13 So that case we checked any redundant system
14 we had. We pulled DocuTrak based on line
15 number. We pulled GIS information
16 associated with each HCA segments. We
17 looked at plat sheets that were designated
18 within an HCA segment. We looked at all of
19 that information. Anything that we could
20 pull, we pulled in as part of the MAOP
21 validation. Um, I'm trying to think of any
22 -- oh.

23 Another system that we used was the
24 distribution plat sheets. Remember, um, you
25 remember, uh, Jeff showed you the

0226

1 distribution plat sheets that were scanned
2 into GIS. We also went in, into the
3 divisions and said give me your source
4 documentation for these job numbers and see
5 if you can locate a job file. And I want
6 that information if you have it.

7 So we went through every extent, every
8 database, every job, offline job query that
9 we could find to be able to pull that
10 information. And we'll continue to do that
11 with our entire system.

12 So before San Bruno we would have come
13 in here and we would have got that job file.
14 Um, and we would have done a search in the
15 divisions and we would have done a search
16 here. And --

17 MALE VOICE 3: [Interposing] For what?

18 MR. BRIAN DAUBIN: For a -- she's
19 asking, if I want a particular job.

20 MALE VOICE 3: Right.
21 MR. BRIAN DAUBIN: Right.
22 MALE VOICE 3: Okay. You mean a job
23 file in the correct -- job files in the
24 correct, uh, division?
25 MR. BRIAN DAUBIN: No. If I just
0227
1 wanted job, Job 123.
2 MALE VOICE 3: Okay.
3 MR. BRIAN DAUBIN: If I wanted Job 123,
4 I'd come in here. I'd request Job 123.
5 They would note whether it was here or
6 whether it was in the division. And they
7 would make those requests accordingly.
8 They'd get that job to me. And I'd be happy
9 as a clam.
10 What her question was -- really was --
11 about MAOP validation. And so on MAOP
12 validation --
13 MALE VOICE 3: [Interposing] Correct.
14 MR. BRIAN DAUBIN: -- we pushed off our
15 old paradigm and said it's no longer good
16 enough to say this system is going to lead
17 me to that job folder. We looked in every
18 source document--
19 MALE VOICE 3: [Interposing] Right.
20 MR. BRIAN DAUBIN: -- that we could
21 find to find any job numbers associated with
22 a particular HCA.
23 MALE VOICE 3: Well at, at this point
24 I'm trying to figure what your paradigm was
25 before San Bruno --
0228
1 MR. BRIAN DAUBIN: [Interposing] Okay.
2 So --
3 MALE VOICE 3: -- you know, when
4 you're--
5 MR. BRIAN DAUBIN: -- before San --
6 MALE VOICE 3: -- comparing it --
7 MR. BRIAN DAUBIN: -- before San Bruno,
8 if I needed a job folder -- if I needed Job
9 123, I would have come in here and I would
10 have asked for Job 123.
11 They would have either gotten it out of
12 bin 19 or it would have been noted that the
13 Division had that job, or maybe both. Maybe
14 there was the bin 19 and there was also
15 noted that Division had a copy. So we would
16 request both and the engineer would look at
17 it and be -- and, and do--
18 MARGARET: [Interposing] They --
19 MR. BRIAN DAUBIN: -- the research
20 based on that.
21 MARGARET: [Interposing] Are you saying
22 that they would -- before San Bruno, they
23 would have assumed everything in the record
24 was correct?

25 MALE VOICE 3: And, uh, in GIS? Or in
0229
1 --
2 MARGARET: [Interposing] In the job file.
3 [crosstalk]
4 MALE VOICE 3: Okay.
5 MR. BRIAN DAUBIN: Yeah. So, now MAOP
6 validation is a, is a 100% - - check on the
7 data associated with that in every redundant
8 database that we may have in every nook and
9 cranny that we can find. I mean, that's
10 really where we are.
11 MALE VOICE 3: To make sure that it's
12 correct?
13 MR. BRIAN DAUBIN: Yeah.
14 FEMALE 2: So now with the change, can
15 you now after -- with this new process -- go
16 to one place and have everything? Or it's
17 still the same process of some's in the
18 Division, that some's here and some's here.
19 MALE VOICE 5: It, it --
20 FEMALE 2: [Interposing] I, I'm trying
21 to find out if it's -- now --
22 MALE VOICE 5: [Interposing] Yes.
23 FEMALE 2: -- you can go to one source.
24 Go to one place and get everything you need.
25 MR. BRIAN DAUBIN: We still cannot.
0230
1 MALE VOICE 5: Okay.
2 MR. BRIAN DAUBIN: And the reason why
3 we cannot is because, through the MAOP
4 validation, we haven't concluded that
5 process.
6 There's a multi-year process in which
7 we'll continue to drive forward until it's
8 done. At which point we will have housed
9 our records electronically, and then made
10 decisions based upon what we are going to be
11 doing with the hard copies. Those final
12 plans have not been - - developed.
13 FEMALE 2: So really you're not totally
14 away from away what you were doing?
15 MARGARET: - -
16 MR. BRIAN DAUBIN: No.
17 FEMALE 2: You still have to go to
18 different sources to find everything on a
19 job.
20 MR. BRIAN DAUBIN: Absolutely.
21 Absolutely.
22 FEMALE 2: Is that --
23 MR. BRIAN DAUBIN: [Interposing] Uh,
24 and it -- the, the issue is, is, if it is a,
25 if it is one of the, if it's a job MAOP
0231
1 validation has looked into, we now can go to
2 one source.
3 We can go to ECTS and we can go, uh,

4 find, uh, that job in ECTS and research
5 every document there is, if they scanned the
6 full job folder. If not, we go to one
7 location. That's Emeryville now, um, which,
8 you know, we're, we're getting to that point
9 where, ah, this is really nice.

10 If I have a job and it's a job that's
11 been validated, I go to one source. It's
12 Emeryville, I get the job folder -- and what
13 we do now rather than request the job be
14 driven over from Emeryville -- is we make
15 that a priority. They go in from Emeryville,
16 they pull that job folder out, they scan
17 that job folder, and then they upload it to
18 ECTS.

19 So ECTS is really starting to be our
20 one-stop shop for those records. However,
21 it will not be -- we don't believe it to be
22 -- our final platform. It is our
23 transitional platform, by which we are using
24 for MAOP validation.

25 Let me be clear on that because it was

0232

1 a system that was taken -- it was a system
2 that we currently have and it was the most,
3 uh, viable option for us to be able to use
4 it for, uh, scan documentation and
5 associating metadata with that scan document.

6 BILL: Uh, under the time pressures of
7 the MAOP validation.

8 MR. BRIAN DAUBIN: Under the time
9 pressures of the MAOP validation effort.
10 Yeah.

11 MALE VOICE 3: Is it your, um, long
12 term plan to get all job folders in to
13 Emeryville or some other central place?

14 MR. ROLAND TREVINO: Want me to tackle
15 that one?

16 MR. BRIAN DAUBIN: Please.

17 MR. ROLAND TREVINO: I mentioned to you
18 earlier that, uh, my role with PG&E will be
19 to, uh, deal with all of the asset knowledge.
20 And we're, we're really at the starting
21 point of evaluating all that. We're
22 actually going to go look and evaluate all
23 of the record systems that are in place
24 today. And develop a plan around how, how
25 to deal with that. So that's still to come.

0233

1 MALE VOICE 3: Okay.

2 MR. BRIAN DAUBIN: Do, do --

3 MALE VOICE 4: [Interposing] So --

4 MR. BRIAN DAUBIN: -- you have any
5 ideas about how you might prioritize certain
6 records over others in that effort?

7 MALE VOICE 5: I'm going to go -- I'm
8 going to jump in here because some folks

9 here know who Roland is, others don't. So
10 maybe, Roland, you should introduce yourself.

11 MR. ROLAND TREVINO: Uh, I am, uh,
12 Roland Trevino [phonetic]. I'm the Senior
13 Director of Asset Knowledge Management for
14 PG&E. It's a brand new position that is, uh
15 -- matter of fact, I've been in the role for
16 about a week and a half now -- so, uh, I
17 report directly to, to Nick Stavropoulos
18 [phonetic]. And, again, my role would be to
19 come in and evaluate everything around, um,
20 the distribution system, the transmission
21 system, the GIS, production mapping, uh,
22 data quality.

23 I think we're going to have, uh, an
24 organization whose sole responsibility is to
25 deal with all of this -- these -- sources of
0234

1 data. Evaluate the quality to make sure
2 they're all completely - - disseminated into
3 their final, uh, repositories.

4 And then, there's also another
5 organization that will deal with the, the
6 technology and tools around, uh, data and
7 data collection. So, um, that, that's my
8 role going forward. Uh, we're, we're in the
9 current -- we're currently, uh, developing a
10 plan for how to deal with all of this. So -
11 -

12 MR. BRIAN DAUBIN: So I can take you
13 through -- and I actually have taken you
14 through -- the process in regards to, um, I
15 as an engineer, I need a project folder. Um,
16 I would come into records and this is --
17 again this is trying to take you back to
18 prior to September 9th, which was what the
19 original request was. Um, I would come in
20 here. I would put in a request, um, looks
21 like this. So it's a records request form.
22 I would fill that out. It would be time
23 stamped. It would be, uh, taken by records
24 personnel.

25 Depending on the request itself, it
0235

1 could be, hey I need, uh, 400 sets of this
2 300 page document. Uh, I'm not going to get
3 that back in an hour. Uh, so it would be
4 time stamped. And we had guidelines around
5 -- and metrics associated with -- records
6 personnel being able to provide requests.
7 Um, we had specific, uh, agreements with the
8 line of business -- the engineer, the design
9 drafting groups -- in regards to what those
10 timeframes would be. So we had some
11 controls in place, uh, in records.

12 So let's talk about a job folder -- if
13 I wanted a job folder. I was an engineer --

14 let's say I was working with the, uh, the
15 Integrity Management Group. And I need to
16 do that pre-assessment work. I would come
17 in, I would fill out a records, uh, request
18 form saying in need Job number XYZ and Job
19 number 123. I would hand that in to records
20 personnel. They would fulfill that request
21 by looking in DocuTrak, finding the
22 locations of those folders, seeking those
23 folders out, putting them together for me.
24 I would then be notified, I would come
25 back to records. Those would be checked out

0236

1 to me in DocuTrak. So they would be
2 formally, uh, assigned to me in DocuTrak so
3 that records personnel -- when someone else
4 comes to look for Job 123, for instance --
5 they would know that I have it. Uh, and
6 they would say that that job is already
7 checked out to Brian Daubin. Uh, once I
8 took those project folders they would be on
9 a time clock, um, based on DocuTrak.

10 DocuTrak had some other project
11 controls where I couldn't just forget about
12 that project folder, uh, and leave it on my
13 desk for more than 90 days. It would kick
14 out an automatic email saying don't forget,
15 you have this job folder assigned to you.
16 And it would also kick one back to the
17 records personnel to be able to say, hey,
18 you have this -- this job order's checked
19 out. Do you still need it? Uh, once I was,
20 uh -- I would go through that job folder. I
21 would glean out all the information
22 associated with that job folder.

23 I would take that job folder back to
24 Records. I would hand that back to Records
25 personnel, they would formally check that

0237

1 out of DocuTrak for me. And I essentially
2 would be off the hook now.

3 Um, If I needed drawings -- there's two
4 methods by which, um, we can get drawings,
5 um, from engineering records. One is I can
6 use the ELS system. I can go on my web page.
7 I can get to the ELS front page and I can
8 type in drawing numbers.

9 I can type in station names and all of
10 the associated drawings -- many thousands in
11 some cases for our, uh, more complex
12 compressor stations -- uh, five or six
13 drawings for maybe a very small reg station,
14 uh, would be available to me. And I could,
15 uh, click those and view those, one-by-one.
16 Very similar to ECTS actually, but it's just
17 the construction drawings. Um --

18 MALE VOICE 3: Is it the same drawings,

19 or --

20 MR. BRIAN DAUBIN: It is the same
21 drawings in most cases with ECTS. Yes.
22 What, what it doesn't have that ECTS has is
23 all the voucher information, all of the
24 stuff that you would find contained in that
25 job file. This is just the drawings.

0238

1 The other method though -- that I could
2 do -- is I could come into records --
3 because I don't have a plotter at my desk
4 and I want to feel the hard copy because I
5 love the way that paper feels -- I could
6 come in and I could ask -- fill out another
7 request form.

8 And I could ask that engineering, uh,
9 records unit, uh, get and find that drawing
10 for me. Um, and they could -- they would
11 then -- go to ELS themselves, print out that
12 request. Um, or they could go to the bins,
13 um, and pull a drawing. Um, there are,
14 there are some issues.

15 There are some things that need to be
16 noted about the drawings in the bins. And
17 that is that they are not always the latest
18 and greatest copy. And the reason that is,
19 is because we make a point to upload images
20 into ELS, based on a wet stamp -- wet stamp,
21 engineer's stamp -- uh, State of California
22 -- whether it be a professional mechanical
23 or professional civil stamp -- with a
24 signature. Those have been moved in ELS and
25 that is the latest and greatest copy.

0239

1 We file those records back into the
2 bins in the hard copy. What we, what --
3 what we are -- and the reason we are
4 transitioning that way is to get engineers
5 to use the, the uploaded ELS version. Um,
6 but oftentimes we send packages of drawings
7 to San Francisco. And San Francisco will
8 upload those into ELS. And once they upload
9 those into ELS they send those back to here.

10 We then take those drawings and we put
11 them in the bin. There is no quality check
12 or quality control to make sure that we
13 receive our drawings back. So, again, we're
14 -- and the reason for that is because we're
15 always pushing for the latest and greatest
16 in ELS.

17 We note that sometimes, uh, an engineer
18 can come in here and pull the old version,
19 uh, for historical purposes. And that's
20 primarily what we have here. We may have a
21 situation that that drawing -- that archive
22 drawing -- is the latest that's in ELS,
23 because nothing's been revised since then.

24 Um, but, but we consider ELS our, out latest
25 revision.

0240

1 MALE VOICE 3: Is the drawing for the
2 whole, uh, system or just -- are the
3 drawings for the whole system or is it just,
4 uh, the area around here?

5 MR. BRIAN DAUBIN: No. The drawings
6 are for the entire system. Um, but to be
7 clear, because I'm not certain on the
8 question -- we may have a very large drawing
9 of a facility.

10 We may have a drawing that only takes a,
11 a, a mimic board or, or uh, a distribution
12 panel, um, electrical panel. Uh, so they're
13 -- they can be very localized as far as what
14 the drawing details -- very detailed
15 localized drawing.

16 Or they could be very wide spread
17 drawing that shows piping layouts throughout
18 our compressor station.

19 MARGARET: These are transition --
20 transmission drawings only?

21 MR. BRIAN DAUBIN: Yes. They are
22 transmission drawings only.

23 MARGARET: And do you still have
24 drawings in the flat files here or have
25 those all been moved over to Emeryville?

0241

1 MR. BRIAN DAUBIN: All of those are
2 still here. We did not move, uh, drawings
3 located in Walnut Creek records, uh, to
4 there.

5 To the extent that the drawings -- and
6 remember that as-built drawing sets are in
7 the project folders, um, so those go with
8 the project folders. Those were moved to
9 Emeryville. So I don't want to give you the
10 false impression that there's no drawings
11 over in Emeryville. There's quite a few
12 that are in the -- the as-built drawings are
13 in the project folders.

14 MARGARET: Mm-hmm. Okay.

15 FEMALE 2: Would you explain--

16 MALE VOICE 5: [Interposing] I'm going
17 to give you --

18 FEMALE 2: -- the difference. Oh,
19 sorry.

20 MALE VOICE 5: -- five more minutes to
21 cover whatever you think is key in the
22 facility, recognizing that this is the only
23 time that we're going to be meeting with you
24 folks. So, um, well I do want to bring it
25 to a close.

0242

1 MR. BRIAN DAUBIN: You got it. Yep.

2 FEMALE 2: I just wondered if you could

3 quickly explain the difference between the
4 transmission drawing -- if I could get that
5 -- and an as-built.

6 MR. BRIAN DAUBIN: Um, I sure can. So
7 transmission drawing is a generic term for
8 any drawing associated with our transmission
9 system, whether that be pipeline drawing or
10 whether that be a station drawing. Okay?

11 Station drawings are a far bigger realm
12 of electrical P&ID -- piping and
13 instrumentation diagrams. Um, the, uh, you
14 know, wiring diagrams, um, PLCI of -- and
15 there's a lot of electrical drawings in
16 station drawings.

17 Whereas pipeline drawings are primarily
18 the pipe itself, the layout, whether it be a
19 plan in profile, and maybe some detailed
20 drawings associated with how it offsets
21 around some substructure. Uh, there, that's
22 the subtleties and differences between
23 station drawings and pipeline drawings.

24 As far as as-builts -- as-builts are
25 the construction drawing. However, they are
0243

1 redlined by the construction folks to note
2 any changes associated with that drawing.
3 Uh, and so that's the distinction. It's a
4 red-line copy.

5 MARGARET: Technically those changes
6 have been put into a final drawing that's
7 then uploaded to something?

8 MR. BRIAN DAUBIN: That's a great
9 question. So the, the process -- the
10 process on the station side -- is we have
11 IBM DB2 that has those drawings on the
12 station side. We do -- we check those out.
13 It is the latest and greatest, updated
14 version.

15 Um, and let's just say it, it's -- or
16 let's just say we created a new drawing --
17 new Greenfield construction project for
18 station. We create a CAD drawing. It's
19 called our construction drawing, Revision 1.
20 It's signed off, approved by an engineer.
21 It's gets loaded into IBM DB2.

22 All of the controls associated with DB2
23 are, are in place. I know who did it, who
24 checked it in, and what that, what that
25 drawing name, job number -- all that -- was
0244

1 associated with. That, that, that drawing
2 goes to the field and now I construct it.

3 But instead of going left around the
4 flagpole, I went right around the flagpole.
5 And I got the engineer's approval to do so.
6 And he said document it on the drawing.

7 So now, I have to document it on the

8 drawing. I have to do my measurements and
9 associate that change on my drawing. I
10 submit that drawing along with the project
11 folder back to, uh, uh, engineering.

12 Engineering grabs that document and
13 says okay, I have a updated document. I
14 pull that out of IBM DB2 and I make those
15 associated changes in the system. I revise
16 it to Revision 2 now.

17 So same project, but Revision 1 was
18 construction, Revision 2 is as-built. I
19 check that back in to IBM DB2 in the
20 electronic copy. That hard copy red line, I
21 fold up -- because they're very large
22 drawings -- and I stick in the job folder.
23 And I take that job folder down to records
24 and records files that job file.

25 MARGARET: Okay.

0245

1 MALE VOICE 3: Is it always an engineer
2 that does the, uh, as-built drawings or the
3 update to it?

4 MR. BRIAN DAUBIN: Actually it is, uh,
5 never an engineer.

6 [Crosstalk]

7 MR. BRIAN DAUBIN: The engineer okays
8 the changes and okays the --

9 MALE VOICE 3: [Interposing] Who does
10 it?

11 MR. BRIAN DAUBIN: -- process. It is a
12 design drafter, which is an E.S.C.
13 bargaining unit employee.

14 MALE VOICE 3: Okay.

15 MARGARET: And then, is it -- the
16 drawing -- then stamped again when it's
17 uploaded? By an engineer?

18 MR. BRIAN DAUBIN: Uh, we do not stamp
19 our as-built drawings. We require, uh,
20 engineering sign off, uh, to the, uh, to the
21 changes. Any changes that would require a
22 stamp would typically require a new revision
23 of a construction drawing. So anything that
24 significant, we wouldn't necessarily capture
25 in an as-built. We would, we would require

0246

1 the--

2 MARGARET: [Interposing] To issue a new
3 one.

4 MR. BRIAN DAUBIN: -- the design
5 drafters to issue, uh, construction drawings.

6 FEMALE 2: I'm just curious, where in
7 Emeryville do the files go - -

8 MR. BRIAN DAUBIN: Uh, we have a
9 facility. They're -- I'm sorry I don't know
10 the specific address.

11 FEMALE 2: It's not going to [REDACTED]

12 [crosstalk]

13 BILL: It's going to [REDACTED]
14 MR. BRIAN DAUBIN: [REDACTED] Yes. Yeah.
15 You know. Go ahead. I, I, I'm not aware of
16 the address, but it's off [REDACTED] you're
17 right. How'd I do?
18 MALE VOICE 5: Okay. Great. Time's up.
19 (laughter)
20 MR. BRIAN DAUBIN: Thank you.
21 [END LS100012]
22
23

24 C E R T I F I C A T E
25

0247

1 I, Debra L. Bonogofsky, certify that
2 the foregoing transcript is a true record of
3 said proceedings, that I am not connected by
4 blood or marriage with any of the parties
5 herein nor interested directly or indirectly
6 in the matter in controversy, nor am I in
7 the employ of the counsel.
8
9 Signature
10
11 Date October 6, 2011
12
13
14
15
16
17
18
19
20
21
22
23

24 C E R T I F I C A T E
25

0248

1 I, Laura L. Springate, certify that the
2 foregoing transcript is a true record of
3 said proceedings, that I am not connected by
4 blood or marriage with any of the parties
5 herein nor interested directly or indirectly
6 in the matter in controversy, nor am I in
7 the employ of the counsel.
8
9
10 Signature
11 Date October 6, 2011
12
13
14
15
16
17

18
19
20
21
22
23
24
25
0249
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

I, Brian Henderberg, certify that the foregoing transcript is a true record of said proceedings, that I am not connected by blood or marriage with any of the parties herein nor interested directly or indirectly in the matter in controversy, nor am I in the employ of the counsel.

Signature
Date 10/06/2011