

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

ASSISTANT CHIEF ADMINISTRATIVE LAW JUDGE  
EHREN SEYBERT, in attendance

ADMINISTRATIVE LAW JUDGE JOANNA PEREZ-GREEN, presiding

|                                         |   |             |
|-----------------------------------------|---|-------------|
| Application of Pacific Gas and Electric | ) | EVIDENTIARY |
| Company for Approval of Its Billing     | ) | HEARING     |
| Modernization Initiative (U39M).        | ) |             |
|                                         | ) | Application |
|                                         | ) | 24-10-014   |

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21  
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23  
24  
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| INDEX                                                       |        |          |
|-------------------------------------------------------------|--------|----------|
| WITNESS                                                     |        | PAGE     |
| MATTHEW HEDGES                                              |        |          |
| Direct Examination By Mr. Stepanovic                        |        | 48       |
| Cross-Examination By Mr. Cheng                              |        | 51       |
| Cross-Examination By Mr. Strauss                            |        | 83       |
|                                                             |        |          |
| EXHIBITS                                                    | MARKED | RECEIVED |
| TURN-02, TURN-03, TURN-04                                   |        | 113      |
| PGE-01, PGE-02, PGE-02C, PGE-03,<br>PGE-03C, PGE-04, PGE-05 |        | 113      |

VIRTUAL PROCEEDING

JUNE 9, 2026 - 9:58 A.M.

\* \* \* \* \*

ADMINISTRATIVE LAW JUDGE PEREZ-GREEN: We are  
on the record.

This is the continuation of the remote  
evidentiary hearing for Application 24-10-014, the  
Application of Pacific Gas and Electric Company, or  
PG&E, for Approval of Its Billing Modernization  
Initiative. I am Joanna Perez-Green, the assigned  
administrative law judge to the proceeding.

Before we're get started with our first  
witness, are there any matters that parties would like  
to address?

MR. STEPANOVIC: None from PG&E, your Honor.

ALJ PEREZ-GREEN: I don't see anything from  
other parties either. Let's move on to the witness.

Can PG&E call their first witness, and then  
I'll administer the attestation.

MR. STEPANOVIC: Yes, your Honor. PG&E calls  
its next witness, Mr. Matthew Hedges.

Mr. Hedges, could you please introduce  
yourself.

MR. HEDGES: My name is Matthew Hedges, I am  
currently a senior manager within our business

1 technology organization at PG&E. My home office is in  
2 Oakland where I am today.

3 (Reporter clarification.)

4 ALJ PEREZ-GREEN: Please raise your right hand.

5 Do you agree to tell the truth, the whole  
6 truth, and nothing but the truth, and do you agree to  
7 abide by the witness attestation in the June 2nd ruling?

8 MR. HEDGES: I do.

9 ALJ PEREZ-GREEN: Thank you. You may lower  
10 your hand.

11 MATTHEW HEDGES,  
12 called as a witness by Pacific Gas and  
13 Electric Company, having been sworn and  
14 attested, testified as follows:

15 ALJ PEREZ-GREEN: Mr. Stepanovic, you may  
16 proceed.

17 DIRECT EXAMINATION

18 BY MR. STEPANOVIC:

19 Q Mr. Hedges, if we could just go through that  
20 one more time, if you could please introduce yourself.

21 A Sure. Matthew Hedges. I graduated from  
22 UC Berkeley in 2003 with a degree in industrial  
23 engineering operations research. I was hired on to  
24 PG&E's advanced billing solutions team soon after as a  
25 developer working on complex rate development.

1 I later transitioned into a development  
2 supervisor in the broader meter-to-cash systems  
3 department, kind of the same overall systems working in  
4 and around our billing systems.

5 I later transitioned to a position of manager  
6 of planning and project management in that same  
7 organization where I was responsible for oversight of  
8 the projects that were being executed in that  
9 department.

10 And then my current role I started in 2023  
11 where I oversee development of the projects for this  
12 billing modernization initiative.

13 Q Thank you. Mr. Hedges, I'd like to confirm the  
14 testimony that you're sponsoring in this proceeding. In  
15 what has been marked for identification as Exhibit  
16 PGE-01, are you sponsoring Chapters 4 and 5?

17 A Yes.

18 Q The workpapers for PG&E Exhibit 01, Chapters 4  
19 and 5 as presented in PG&E Exhibit 02?

20 A Yes.

21 Q In what has been marked as PG&E Exhibit 01, are  
22 you sponsoring your statement of qualifications in  
23 Appendix A?

24 A Yes.

25 Q In what has been marked as Exhibit PGE-03, are

1     you sponsoring Chapter 2, Sections A, B, D, F, and H  
2     through N?

3           A     Was that in Exhibit 3 or Exhibit 4?

4           Q     Sorry, Exhibit 3, Chapter 2.

5           A     Yes.

6           Q     In what has been marked as Exhibit PGE-04, are  
7     you sponsoring Sections A, B, C, and E, and  
8     co-sponsoring Section D.1?

9           A     That is correct.

10          Q     In what has been marked as PG&E Exhibit 05, are  
11     you co-sponsoring workpaper WP-1, Billing Modernization  
12     Initiative Cost Forecast?

13          A     Yes.

14          Q     Were these materials prepared by you or under  
15     your supervision?

16          A     Yes.

17          Q     Do you have any changes, corrections, or  
18     additions to make at this time?

19          A     No.

20          Q     Are the facts contained in these exhibits true  
21     and correct to the best of your knowledge?

22          A     Yes.

23          Q     And do the opinions expressed therein represent  
24     your best professional judgment?

25          A     Yes.

1 Q Thank you.

2 Your Honor, Mr. Hedges is now available for  
3 cross-examination.

4 ALJ PEREZ-GREEN: Mr. Cheng, you may proceed.

5 CROSS-EXAMINATION

6 BY MR. CHENG:

7 Q Thank you, your Honor.

8 Good morning, Mr. Hedges.

9 A Good morning.

10 Q If I could ask you to first turn to your  
11 rebuttal testimony, which has been marked as PGE-03, we  
12 will begin there. We'll start on page 2-17, please.

13 A Okay. Give me one second, please. Did you  
14 say, "2-17"?

15 Q Yes.

16 A Okay. I am there.

17 Q I'm going to read a sentence starting from  
18 line 8, and that's where we're going to begin our  
19 discussion. So line 8 of a sentence that starts with,  
20 "PG&E is currently using CC&B" -- and for the court  
21 reporter, CC&B is, I believe, customer care and  
22 billing -- "CC&B version 2.4, a version that was first  
23 released in November 2012, reached the end of our  
24 extended support in November 2020, and is the last CC&B  
25 version to allow COBOL customizations." I'm going to

1 stop there first.

2 Do you see that?

3 A Yes.

4 Q And then on the second sentence, "The scope of  
5 the project to move PG&E's CC&B to version 2.9 or  
6 version 25.1 are basically identical." We'll stop  
7 there.

8 Do you see that?

9 A Yes.

10 Q So my first question is, what year was version  
11 2.9 released or available; do you know?

12 A If memory serves, it was 2022.

13 Q The reason I'm asking that is, is 2.9 the  
14 version PG&E would have upgraded to if it had chosen to  
15 upgrade CC&B as part of the 2023 GRC? Is that the  
16 version you would have used?

17 A If we had executed the project stemming from  
18 GRC, we would not have implemented CC&B, but we likely  
19 would have implemented C2M version 2.9 because that was  
20 the most recent available at the time.

21 Q I understand. I'm saying with regard to CC&B,  
22 if you had chosen to upgrade CC&B in the 2023 GRC, would  
23 2.9 be the version to do so or would it have been  
24 another version? That's what I'm trying to establish.

25 A Upgrading CC&B was not part of the GRC request.



1           Q     I completely understand.

2           A     Okay.

3           Q     If you had upgraded CC&B, would the version  
4 available have been 2.9? That's all I'm trying to  
5 establish.

6           A     If we had upgraded CC&B around the time we  
7 submitted our GRC request, 2.9 would likely have been  
8 the target CC&B version.

9           Q     Thank you. So your other sentence here, can I  
10 just come from that 2.4 is the last version that was  
11 running COBOL, and versions beyond that was not COBOL;  
12 is that correct?

13          A     What we're saying here is that version 2.4  
14 allowed COBOL customizations to be written. If your  
15 question is whether that version is written in COBOL or  
16 Java, I'm not a hundred percent sure. What I can state  
17 is from 2.5 going forward, COBOL was not allowed within  
18 the Oracle framework, Oracle application.

19          Q     Thank you for that. If we can turn to your  
20 direct testimony, which is PGE-01, and if you can turn  
21 to page 4-29, please.

22          A     Okay. 4-29.

23          Q     Here you're describing some benefits -- and  
24 we'll go through them shortly here -- but here you're  
25 describing the benefits of upgrading CC&B 2.4 to

1 CC&B 25.1. Is that a fair statement of what's happening  
2 here?

3 A Yes.

4 Q I'd like to look at these one at a time. So on  
5 line 8 you state that, first, it would allow PG&E to  
6 remedy the cybersecurity vulnerabilities that are  
7 currently open in Oracle's lack of support for the  
8 system.

9 Do you see that?

10 A Yes.

11 Q Now, I'd like to understand, would this benefit  
12 also exist if PG&E had chosen to upgrade to version 2.9?

13 A Yes, it likely would have existed as well.

14 Q Thank you. So let's look at the second one  
15 which starts on line 17, "Second, due to CC&B 2.4's age,  
16 it is incompatible with current versions of Red Hat and  
17 VMWare that are integral to its stable functioning."

18 Do you see that?

19 A Yes.

20 Q So same question, do you think this benefit  
21 would have existed if PG&E had upgraded to version 2.9?

22 A It would have, but in both of these instances  
23 because 2.9 is an older version, that benefit likely  
24 would have been shorter lived compared to upgrading to  
25 version 25.1 just because of the age, the compatibility.

1 Compatibility only lasts for a certain amount of time as  
2 technology evolves, et cetera.

3 Q Thank you. Moving right along, the third  
4 reason is on line 27, "Third, the move to CC&B 25.1  
5 would also mean a move away from COBOL and on to Java,  
6 the language that C2M uses as well."

7 Do you see that?

8 A Yes.

9 Q So same question, would this benefit have  
10 applied if PG&E upgraded to version 2.9?

11 A Yes.

12 Q Thank you. So I think we're getting to the  
13 last reason you list here. On line 32, "Fourth, the  
14 move to CC&B 25.1 would bring the associated  
15 applications into support along with the CC&B system."

16 Would that benefit have applied if PG&E had  
17 upgraded to version 2.9?

18 A Yes. Again, similar to the first and second  
19 one, that benefit is likely shorter lived given the pace  
20 of technology and how it improves and changes.

21 Q Okay. Thank you. Appreciate it. I'm going to  
22 ask you to turn back to your rebuttal now, which is,  
23 again, PGE-03.

24 A Give me one second, please.

25 Q No problem.

1           A     Which page would you like me to go to?

2           Q     We're going to start on page 2-2, please.

3           A     All right.

4           Q     So starting on line 14, here is the sentence  
5     that starts:

6                     As parties -- and ultimately the California  
7                     Public Utilities Commission -- noted in the  
8                     2023 GRC proceeding, the forecast and estimates  
9                     supporting the 2023 GRC billing systems upgrade  
10                    project were not sufficiently robust.  
11                    Do you see that there?

12          A     Yes.

13          Q     And then further down, the next sentence, you  
14     say, "The Commission correctly directed PG&E to  
15     reevaluate its proposal, and as a result, PG&E reviewed  
16     and re-scoped its entire initiative."

17                   Do you see that?

18          A     Yes.

19          Q     So you state here that as a result, PG&E  
20     reviewed and re-scoped the entire initiatives. Is it  
21     your understanding that the 2023 GRC decision directed  
22     PG&E to re-scope the entire initiative?

23          A     My understanding is that the 2023 GRC gave  
24     guidelines or directed PG&E to resubmit the initiative  
25     with guidelines in terms of the level of detail to

1 provide. Part of that detail was cost, resources,  
2 timeline, requirements, et cetera, kind of general,  
3 right. That required a review of what had been prepared  
4 for the 2023 GRC and actually more detailed scoping for  
5 the phases of the billing modernization initiative.

6 Q More specifically, did any of the requirements  
7 in the decision require PG&E to re-scope the project or  
8 did it require PG&E to submit additional information?

9 A I do not recall if the words "re-scoped" were  
10 used, but in terms of the process to get to resubmitting  
11 information, PG&E needed to look at the scope and look  
12 at the detailed requirements as well as the benefits,  
13 what about the requirements allowed PG&E to realize  
14 benefits, and that effectively caused a re-scoping, if  
15 you will.

16 Q I'd like to point you to part of PG&E's  
17 testimony. I understand that's not your testimony, but  
18 it's summarizing the requirements in the 2023 decision.  
19 Could you turn to Exhibit 1, page 1-11.

20 A Yes.

21 Q Here we have basically a summary of the  
22 directives in the 2023 GRC decision.

23 Do you see that?

24 A Yes, I do.

25 Q Going back to what we were discussing, which

1 one of these do you understand to have directed PG&E to  
2 re-scope the initiative?

3 A Again, I would not say that there was a  
4 directive to re-scope. What I will say -- going one by  
5 one -- "A showing of the requirements, features, and  
6 functionalities of the new proposed system," that's  
7 pointing to our Chapter 4.

8 In Chapter 4, we list in detail the  
9 functionalities that our target system would need to be  
10 able to deliver the functions and features to our  
11 customers. That was a much more detailed investigation  
12 and research than we did in 2023 GRC. So if we want to  
13 call that "re-scope," I think the language is  
14 appropriate, but what we effectively did was define the  
15 scope of what was necessary to deliver our end state.

16 Similarly, the line number two --

17 Q Sorry. Before we move on, can we talk about  
18 this real quick.

19 A Okay.

20 Q You just discussed that PG&E had to look at the  
21 requirements, features, and functionality of the new  
22 proposed system.

23 Now, was it your understanding that the  
24 Commission was asking PG&E to provide additional  
25 information about their proposed system they had

1 proposed in the GRC or was it asking PG&E to come up  
2 with a whole new requirement, features and  
3 functionality, for a completely new system that had not  
4 been proposed?

5 A It's the former. It was to provide details of  
6 what would be needed for the system that was proposed.  
7 That being said, what the details of requirements that  
8 had been put together for GRC were at a much higher  
9 level than what was prepared in this proceeding.

10 Q I won't spend too much time on this. Let's  
11 move on to the next thing. But in summary, your  
12 testimony today here is that PG&E's showing in the 2023  
13 GRC was not sufficiently robust; is that correct?

14 A I believe that to be correct, yes.

15 Q Can we turn to -- this is going to be a TURN  
16 exhibit, which is TURN-04, which I believe is actually  
17 your rebuttal testimony from the 2023 GRC. So it's  
18 going to be TURN-04, page 10-8.

19 A Okay.

20 Q Here you're responding to other parties'  
21 criticism of the forecast. I'm just going to start from  
22 line 11. You state here:

23 The PET is the primary tool that PG&E  
24 planners use to document forecast assumptions  
25 and develop labor and non-labor cost estimates

1           for IT programs and projects. The PET output  
2           is based on multiple assumptions, including  
3           project size, complexity, user impact, and  
4           customer impact, among other things, and  
5           accordingly provides a detailed analytic of the  
6           project. Here, the PET demonstrates the  
7           validity of the forecast for the Billing System  
8           Upgrade Project as a new investment for a large  
9           and complex project.

10          Do you see that section?

11          A     Yes.

12          Q     So here you seem to be stating that your  
13          forecast in the 2023 GRC provided a detailed analytic  
14          and demonstrated the validity of the forecast for this  
15          large and complex project.

16          Do you agree with that?

17          A     I agree that that's what's stated here.  
18          Hindsight being 20/20, the PET's based on a number of  
19          assumptions, and the data that is submitted as part of  
20          the PET is also based on assumptions in terms of project  
21          size, scope, et cetera.

22          One thing I think about is, I believe in your  
23          direct testimony you mentioned how PG&E had been working  
24          with complex rates for the last two decades. Agreed.  
25          Unfortunately, one of the drawbacks was we did not know



1     how to implement that in the new system, which that's  
2     one of the reasons why these complex rates have caused  
3     such an impact to our execution of these projects.  
4     They're hard to do, and we did not have that insight at  
5     the time we developed the PET document.

6           Q     I understand that your assertion of hindsight  
7     is 20/20, but at the time that you wrote this rebuttal  
8     testimony, you believed that this forecast was robust  
9     and detailed and valid; is that correct?

10          A     Based on the information we had at that time,  
11     we believed it was our best estimate and forecast.

12          Q     I'm asking specifically for the words used  
13     here. You also believed it was detailed and valid; is  
14     that correct?

15          A     Again, yes, based on the information we had at  
16     the time.

17          Q     All right. Thank you. So let's move on. I'm  
18     going to ask you to turn to, again, your rebuttal  
19     testimony, and this is PGE-03.

20          A     One second.

21          Q     We're actually going to go to the back,  
22     Appendix B, please.

23          A     Appendix B.

24          Q     Let's go to Appendix B, page 22.

25          A     Okay. Give me a second. Let me get that from

1 a different document. Okay. I am there.

2 Q Appendix B, page 22. This is a data request  
3 from TURN to PG&E. It looks like you were the  
4 sponsoring witness for the response; is that correct?

5 A That is correct.

6 Q Near the bottom, there's a section called  
7 "Answer 001, Supplemental 01."

8 Do you see that?

9 A Yep.

10 Q And it says:

11 Please refer to Attachment 1, Tab  
12 Sub-Part A. PG&E has compiled a list of  
13 requirements and functionality presented in the  
14 Billing Modernization Initiative filing, as  
15 well as the chapter sections. PG&E has also  
16 presented a column to indicate if the  
17 functionality was considered in the preparation  
18 of the scope and business case for 2023 GRC.

19 Do you see that?

20 A Yes.

21 Q Now, that attachment that's being referenced  
22 here is a couple pages later which is labeled as  
23 Appendix B, page 25. Can you turn to that.

24 A Yes.

25 Q We're going to go through some of these here.

1 On this page, you're showing some scope and comparing  
2 whether it's in the BMI versus whether it's in the 2023  
3 GR scope; is that correct?

4 A Yes.

5 Q Let's look at one that says, "Data Privacy  
6 Improvement and Data Governance." I know that there's a  
7 misspelling for the third word, but that was meant to be  
8 "improvement"; is that correct?

9 A That is correct.

10 Q So here you're stating that data privacy  
11 improvements and data governance was not considered for  
12 the 2023 GR scope; is that correct?

13 A When we were putting together the business case  
14 for GRC, that was not one of the scope items that was  
15 considered or evaluated or discussed in GRC or GRC  
16 testimony, but it is a necessary requirement for the  
17 system, and that is something we identified when we  
18 looked into the deeper requirements details of part of  
19 this proceeding.

20 Q Can you turn now to what's been labeled as  
21 TURN-02. This is going to be your testimony in the GRC.  
22 If you could turn to page 10-2, please.

23 A Okay.

24 Q Here on line 1, you state:

25 The Commission's approval of the Customer

1 Care Technology Projects forecast will enable  
2 PG&E to improve customer service, enhance  
3 customer and data privacy, meet regulatory and  
4 legal requirements, and achieve operational  
5 efficiencies.

6 Do you see that?

7 A I do.

8 Q Here you identified data privacy as a benefit  
9 in the 2023 GRC testimony. Can you explain why you  
10 responded that data privacy wasn't considered in the  
11 2023 GRC?

12 A If I recall correctly, the data privacy  
13 functionality that's mentioned here is not part of the  
14 billing system upgrade section and forecast. I believe  
15 it is a separate item.

16 Q But whether it's a different project, it was  
17 part of the suite of upgrades that PG&E proposed in the  
18 2023 GRC; correct?

19 A With that lens, it would be correct. But your  
20 data request is comparing the billing system upgrade  
21 that was submitted as part of 2023 GRC, not the entire  
22 chapter from GRC.

23 Q So what project do you think the data privacy  
24 applied to here?

25 A I believe it was part of the -- give me one

1 second to go through the rest of the chapter. On page  
2 10-23, it's Section C, "Customer Data Management and  
3 Analytics - CCPA/CPRA Solutions." ]

4 Q Okay. So are you asserting that the data  
5 privacy you've included in scope for this application is  
6 different from the data privacy functions that was  
7 included in this project in the GRC?

8 A Yes.

9 Q Can you explain the difference.

10 A So the broad scope is the same. It's to allow  
11 PG&E systems to comply with CCPA and CPRA. Specifically  
12 what's included in this application are the  
13 functionalities and features specific to CC&B and C2M  
14 that enable the system to do data identification or data  
15 de-identification, data deletion, data archival in a  
16 process that is -- that performs from the set of data  
17 that exists in our customer system. It's specific to  
18 the solutions in CC&B and C2M.

19 Q Okay. And that functionality would not have  
20 been implemented with the customer data management and  
21 analytics project?

22 A Correct. We do talk about in testimony how we  
23 have some manual processes today. What we are talking  
24 about in scope for the billing modernization initiative  
25 is more automation and more scale of our ability to meet

1 the requirements of CCPA, CPRA.

2 Q All right. Thank you. Let's look at another  
3 category here. If you turn back to your rebuttal  
4 testimony, Appendix B, page 25.

5 A Okay.

6 Q So No. 8 here says, "automation capabilities";  
7 do you see that?

8 A I do.

9 Q Okay. We're going to turn to what's been  
10 labeled as TURN-03, which is the workpaper for the GRC  
11 testimony. If you could turn to page 10-14 please.

12 A Okay. Would you repeat which exhibit. Was  
13 that TURN-03?

14 Q Yeah. TURN-03, page 10-14.

15 A Okay.

16 Q So this is a workpaper specifically for the  
17 billing system upgrade project; is that correct?

18 A That is correct.

19 Q And on 10-14, in the bottom section of benefits  
20 within billing and customer operations, do you see on  
21 the fourth bullet it says: "Improved interconnection  
22 time with automation of enrollment for NEM customers"?

23 A I do.

24 Q So it seems like automation was considered as  
25 part of the billing system upgrade in the GRC; was it

1 not?

2 A So that was a fairly narrow piece of scope. We  
3 do talk about it in the 2023 GRC testimony, about the  
4 challenges that NEM customers were facing in  
5 interconnecting with PG&E.

6 I would draw your attention to Chapter 4 of our  
7 PG&E Exhibit 1, page 4-12, where we talk about the  
8 advancements in automation and machine learning. That's  
9 where the scoping and -- not scoping. It's a different  
10 type of automation in terms of the scale, and what it  
11 could potentially help with automating routine work, and  
12 things like that, which is different than what is  
13 proposed here in the GRC.

14 Q So is your testimony that if PG&E had  
15 implemented its billing system upgrade that it proposed  
16 in the 2023 GRC, it would not have contained automation  
17 capability?

18 A I'm not sure I can answer that question. For  
19 one, the project that was proposed in the 2023 GRC was  
20 denied. So, ultimately, we did not get into the level  
21 of detail that we've now presented in this proceeding.

22 Second, from an automation standpoint, there's  
23 been a lot of advancement since what we were thinking of  
24 considering as part of 2023 GRC, so I don't think I can  
25 give you a definitive answer.

1 Q Okay. All righty.

2 Let's look at one last category. Back to your  
3 rebuttal appendix, No. 14 here says, "self-service"; do  
4 you see that?

5 A Yes.

6 Q And you're also indicating that self-service  
7 was not considered for the 2023 GRC scope; is that  
8 correct?

9 A That insofar as the way -- yes. Let me say  
10 yes.

11 Q All right. If you could turn to TURN-02.

12 A Give me one second. I got my papers a little  
13 mixed up. So let me go to TURN-02. Okay. What page?

14 Q So from my count, there are 12 references to  
15 "self-service" in TURN-02. So we're not going to go  
16 through all of them. Let's just look at maybe the first  
17 three or four, and I think it's similar. So if we can  
18 start from TURN page 10-1. Page 10-1, starting on line  
19 25, you state:

20 These investments enable Customer Care to  
21 provide solutions across the customer  
22 experience, from billing to customer service to  
23 customer data management. Ongoing investments  
24 are targeted to enable on-demand customer  
25 access to information and self-service



1 capabilities.

2 Then, again, page 10-2, at the bottom in  
3 the "Capital" section, you talk about -- I'll  
4 just read it:

5 The increase in forecast is driven  
6 primarily by the billing system upgrade and  
7 PGE.com web upgrade projects, which are needed  
8 to enable better customer access to PG&E,  
9 enhance self-service features, provide more  
10 nimble rate program development, and provide  
11 more timely and accurate customer bills.

12 Do you see that?

13 A Yes.

14 Q Let's just look at those two so far.

15 A Yes.

16 Q Now, page 10-2, here, you specifically mention  
17 the billing system upgrade project when you're  
18 discussing enhancing self-service features; is that  
19 correct?

20 A In that sentence, it does. I think that  
21 sentence is a very poor context unfortunately because  
22 the self-service features mentioned in that testimony  
23 are referring to the PGE.com web upgrade.

24 Q Okay. Except that's not what you state here.  
25 You state it's "billing system upgrade and PGE.com."

1           A     Correct, but this section, "b., Capital,"  
2                 specifically, is talking about all of the capital in the  
3                 chapter, and that includes the billing system upgrade,  
4                 PGE.com, web upgrade, as well as the other things in the  
5                 chapter.

6           Q     Okay. Now, we'll just look at one more. Let's  
7                 look at page 10-7, starting on line seven:

8                     The customer service value stream focuses  
9                     on solutions that enable PG&E to manage  
10                    customer relationships, respond to and resolve  
11                    customer issues, enable digital access channels  
12                    for on-demand customer access, and provide  
13                    multi-channel self-service tools.

14                 Do you see that?

15           A     Yes.

16           Q     So, again, you're highlighting the benefit of  
17                 spending these capital dollars that PG&E has proposed  
18                 and you're highlighting the self-service tool here; do  
19                 you see that?

20           A     I do.

21                     I would call your attention to the sentence  
22                 that starts at line 15 -- excuse me -- line 14:

23                     The main forecast driver for the Customer  
24                     Service value stream is the PGE.com Web Upgrade  
25                     project.

1 Q Okay. I'm not sure -- are you saying that  
2 means the other projects are not included in the driver?

3 A Correct.

4 Q It says, "the main." It doesn't say "the  
5 only."

6 A I believe there are some other costs within the  
7 customer service value stream. The billing system  
8 upgrade project that was proposed in the GRC was not one  
9 of them.

10 Q Okay. All right. Let's go on to -- let's take  
11 a look at TURN-04, and if we could go to page 10-5.

12 A Okay. I'm there.

13 Q Actually, I read this sentence before already.  
14 If you can look at it yourself. I don't want to read it  
15 again. It's starting on line 14, and in this same  
16 paragraph you also discuss self-service.

17 A That is correct.

18 Q Okay. So is your testimony today that the  
19 capital projects proposed in the 2023 GRC would not have  
20 included the self-service functionalities that you are  
21 now proposing?

22 A What I am stating is that the billing system  
23 upgrade piece of the 2023 capital forecast would not  
24 have included the self-service capabilities that we're  
25 now discussing as part of the billing modernization

1 initiative.

2 The 2023 GRC had -- at least this Chapter 10  
3 had both the billing and rates value stream forecast,  
4 which contained the billing system upgrade as well as  
5 the customer service value stream, which had more  
6 customer-focused investments like PGE.com web upgrade.

7 Q So you're asserting that the self-service  
8 benefits were driven by the PGE.com upgrade; is that  
9 correct?

10 A As it relates to the 2023 GRC, yes.

11 Q And you're saying that none of those  
12 self-service functionalities that were covered under the  
13 PGE.com upgrade is now being proposed in this  
14 application? That they're completely different  
15 self-service functionalities?

16 A In terms of the functionality that would be  
17 implemented, yes. They are different functionalities.

18 What we discuss in Chapter 4 of PG&E's  
19 Exhibit 1, Chapter 4, page 4-47, we talk about the  
20 ability for different customer types to have access to  
21 their data because of the information contained in a  
22 single system in the C2M system and us providing the  
23 access to those features through that system. That is  
24 different than the self-service capabilities that are  
25 described by the PGE.com web upgrades.

1           Q     Okay. I'm not sure I completely understand  
2     what you meant by in terms of the -- I forgot the term  
3     you used. Did you say in terms of the functionalities  
4     implemented? Is that the way you said it?

5           A     Yes.

6           Q     Okay. So what do you mean by that? Let me ask  
7     it this way: Which self-service tools are being  
8     proposed as part of this project that is not covered by  
9     the self-service tools that were proposed by the 2023  
10    GRC, whether it was part of the billing or part of the  
11    other projects?

12          A     So let me, maybe, answer it in kind of how a  
13    customer would access those tools; right. So a customer  
14    may log in to PGE.com to check details of their bill, to  
15    check usage information, to check, maybe, if they're on  
16    their most applicable rate, et cetera.

17                Given the state of our billing systems at the  
18    time, around 2023 GRC, not all customers could do that.  
19    The web did not connect to the relevant customer data  
20    sources to be able for all customers to have all  
21    self-service features.

22                As part of the billing modernization  
23    initiative, we're moving all customers into one system.  
24    We are providing access to that customer data or we will  
25    provide access to that customer data. So then all

1 customers will have the same or at least a very similar  
2 experience in terms of what they're able to do on their  
3 own through the web, through IVR, et cetera.

4 Q Okay. Thank you. So which customer classes  
5 would not have access to the information that you just  
6 described?

7 A The complex customers. The customers that bill  
8 out of ABS. They are probably the largest -- or I  
9 should say the most impacted customers of the  
10 discrepancy in the 2023 GRC versus now.

11 Q I'm sorry. When you say the "complex  
12 customers," is that a customer --

13 A I'm sorry. Yeah. Let me clarify.

14 So in the ABS system at the time and now in ABS  
15 gas and BCS electric, you have large industrial  
16 customers. You have customers on complex rates and  
17 programs like virtual net metering, NEM aggregation,  
18 et cetera. When I refer to "complex customers," it's  
19 the customers that require billing in a separate system  
20 given the challenges that CC&B has today in billing  
21 those customers.

22 Q Okay. So I've heard large industrial  
23 customers, and virtual net metering customers. Were  
24 those the ones you listed?

25 A Those are two examples, yes.

1           Q     Well, let me ask it this way: What percentage  
2     of customers do you estimate would be covered by this  
3     category of customers that you're mentioning could not  
4     have access to the information?

5           A     I believe right now it's maybe five percent.

6           MR. CHENG: All right. Thank you for that.

7           Your Honor, I'm nearing the end. Is it okay if  
8     we take a few minutes for me to check?

9           ALJ PEREZ-GREEN: Yes. Did you want to go off  
10    the record for a couple minutes?

11          MR. CHENG: Thank you, your Honor.

12          ALJ PEREZ-GREEN: Let's go off the record and  
13    why won't don't we take a 10-minute break right now and  
14    come back at 11:00.

15                (Recess taken.)

16          ALJ PEREZ-GREEN: Let's go on the record, and  
17    let's have TURN resume their cross.

18    BY MR. CHENG:

19          Q     Thank you, your Honor.

20                Good morning again, Mr. Hedges.

21          A     Good morning.

22          Q     We're just going to one more last topic here.  
23    Staying on this same data request, which we referenced  
24    earlier, it's going to be PGE-03, Appendix B-22.

25          A     Give me one second to get back to that. Can

1     you please restate, Appendix B, page 25?

2           Q     Page 22, please.

3           A     Okay. Thank you. Okay. I'm there.

4           Q     So I just want to take a look at the question  
5     that TURN asked, and so I'm just going to read part of  
6     the question here. It says: "Please provide in detail  
7     the following," and in Part C, "the difference in cost  
8     between the proposed project in this application as  
9     compared to the proposed project in A.21-06-21."

10           Do you see that?

11          A     Yes.

12          Q     Can you confirm that two pages down on page 24,  
13     that this Part C here, this is the level of comparison  
14     that you were able to provide in answer to that  
15     question?

16          A     Yes.

17          Q     And, now, one more page here, if you go to  
18     page 25. So you were not able to provide the cost  
19     comparison and breakout for these items here that you're  
20     saying is in scope for the new application, but wasn't  
21     in scope for the GRC; is that correct?

22          A     Yes. That is correct on a couple of levels.  
23     One, we didn't go down to this level of granularity in  
24     the GRC when we put the forecast together, but,  
25     secondly, if we had, we did not prepare forecasts by



1 specific functionality.

2           So in Chapter 4, we -- for example, in  
3 Chapter 4, we talk about the different modules of C2M,  
4 customer care, billing module, the MDM module,  
5 service-order management model, et cetera. We did not  
6 prepare detailed forecasts, what it would take to  
7 implement each one of those modules. So we cannot  
8 provide a forecast to this level of detail -- or  
9 comparison. Excuse me.

10         Q     Okay. So I understand that if you didn't have  
11 this level of detail in 2023, you can't compare.

12           Now, for the functionalities that you noted  
13 were not considered for the 2023 GRC, one would think  
14 that you only had to compare it with yourself in this  
15 application.

16           So can you explain why PG&E cannot provide the  
17 cost estimates for the functionalities that are present  
18 here, but were not present in the GRC?

19         A     So the answer to that is as part of this  
20 effort, as part of preparing the additional level of  
21 detail for the billing modernization initiative, we went  
22 in depth in terms of the requirements that were  
23 necessary to implement our end state solution.

24           What's shown on Appendix B, page 25, is pulling  
25 out those scope items from -- and also pointing to the

1 chapter location in BMI. We didn't have that level of  
2 detail from GRC. Had we started and proceeded with  
3 implementing C2M, as part of GRC, we would have  
4 identified the need for these requirements for the end  
5 state solution. We did not list them in GRC.

6 Q Okay. I don't think -- maybe you were confused  
7 by my question, but let me rephrase it again.

8 I'm only asking about the functionalities that  
9 you said did not exist in the GRC. Okay. So these  
10 functionalities only exist in the new application. So  
11 whether or not something was in the GRC seems irrelevant  
12 for those functionalities.

13 My question is for the functionalities that  
14 only exist in this application, why is PG&E unable to  
15 provide the cost forecast for those functionalities?

16 A Well, so two answers to that question, I think.  
17 One, again, we do not have individual forecasts for  
18 these items. I think the second answer would be --  
19 we'll take you back. You mentioned number four, data  
20 privacy improvements and data governance that's listed  
21 on this page. That is a system requirement that must be  
22 done to comply with CCPA, CPRA.

23 Had we moved forward with the project that was  
24 presented in the 2023 GRC, that would have been a  
25 requirement as well. It is something that was necessary

1 to implement, but it was not something that we  
2 considered at the time. We did not get to the level of  
3 detail to identify that as a requirement.

4 Q Okay. Maybe you were talking about different  
5 things. What does whether something is a requirement  
6 have to do with PG&E's ability to forecast the cost  
7 related to that functionality?

8 So let's take automation, for example; why is  
9 PG&E unable to estimate the cost associated with the  
10 automation capability in this application?

11 A So when we put together the forecast for this  
12 application, we first put together the requirements that  
13 were necessary for our in-state solution. We worked  
14 with various vendors, internal experts, subject-matter  
15 experts in various functional areas, and we put together  
16 a forecast based on the contracts that we would need for  
17 outside support, internal labor that would be necessary,  
18 staff augmentation labor that would be necessary to  
19 implement the solution.

20 What we didn't say is of each of those  
21 categories how much applies to automation, how much  
22 applies to data governance. It was based on the full  
23 set of requirements at the time.

24 Q So are you saying that PG&E is unable to  
25 estimate how many contract labor hours, how many -- you

1 know, what internal support is necessary in order to  
2 implement, for example, automation capabilities?

3 A We would be able to identify specific skill  
4 sets that would be necessary. We could potentially  
5 identify the forecast necessary for a resource with  
6 those skill sets during the course of the project, but I  
7 couldn't tell you how much of the project management  
8 forecast is necessary to implement the automation  
9 capabilities, for example.

10 Q And I think the question here is why not? Why  
11 couldn't you forecast how many hours of each resource  
12 would be necessary to implement automation capability?

13 A The different functionalities -- sorry. Not  
14 functionalities. The different work streams and scope  
15 of work within the project are to deliver the full  
16 solution. We did not get vendor estimates or things of  
17 that nature by specific requirement.

18 Q Okay. Isn't that usually how a forecast is  
19 built for a complex system?

20 Don't you need to estimate the cost for each of  
21 the components and then add them up together to get the  
22 final estimate?

23 How else would you do that if you don't know  
24 what the estimates are to each component?

25 A So if you were choosing about certain

1 components to implement, I could see how that may be the  
2 way to go, but what we're saying is all of these  
3 components are necessary. If we were to forecast the  
4 cost to implement an individual component, and an  
5 individual component, and an individual component,  
6 ultimately your cost would be higher because you'd need  
7 to have project management, testing, organizational  
8 readiness dedicated to each one of those, implementing  
9 it within the system; whereas, if you're doing this as  
10 one large-complex project, there's economies of scale to  
11 test the automation as part of the system integration  
12 testing phase, for example.

13 Q What does economies of scale have to do with  
14 your ability to estimate how much of the cost are for  
15 one module? I'm confused.

16 A So I was trying to explain why we would get a  
17 singular estimate for the entirety of our requirements.

18 The estimate that we have based on the  
19 requirements that we want to implement is the reason why  
20 we cannot separate it. I do not have an estimate based  
21 on each individual component of the project.

22 Q Okay. You've gone back to this a few times  
23 now. You keep saying because something is a  
24 requirement, you can't produce the estimated cost.

25 Can you explain that? Why is it that whether

1 something is a requirement versus is not a requirement?

2 How does that affect your ability to estimate  
3 the cost for that functionality?

4 A So let me give an example. We talk about in  
5 Chapter 5 about doing the request for proposal to select  
6 the system integrator to implement C2M; right. At a  
7 high level, we reached out to vendors in the marketplace  
8 that have experienced implementing this sort of  
9 functionality. We evaluated them, scored them on their  
10 ability to do this successfully, ultimately selected a  
11 vendor.

12 We gave them a set of requirements and features  
13 to be implemented. We did not say, give us your  
14 feedback on each one of these items and requirements in  
15 our scope. We asked them to give us their project --  
16 give us their responses based on our project proposal,  
17 the entirety of the requirements.

18 Q Right. So how do you think the vendors came up  
19 with the estimate?

20 Didn't they have to examine each requirement  
21 and estimate the time and resources required for each  
22 requirement and then sum it up to the total?

23 A I do not know how they provided that  
24 information. Excuse me. I could not know how they  
25 calculated that information.

1 MR. CHENG: All right. I think we'll move on.  
2 Your Honor, that's all the questions I have for  
3 Mr. Hedges.

4 Thank you, Mr. Hedges.

5 THE WITNESS: Thank you.

6 ALJ PEREZ-GREEN: Thank you.

7 Let's move on to SBUA; Mr. Strauss.

8 MR. STEPANOVIC: Your Honor, may I have a  
9 moment to confer with my colleagues on whether we have  
10 any redirect questions?

11 ALJ PEREZ-GREEN: Let's go off the record.

12 (Off the record.) ]

13 ALJ PEREZ-GREEN: Let's go on the record.

14 Mr. Strauss?

15 CROSS-EXAMINATION

16 BY MR. STRAUSS:

17 Q Good afternoon, Mr. Hedges. My name is Ariel  
18 Strauss counsel for Small Business Utility Advocates --

19 A Good afternoon.

20 Q -- and I am going to ask you -- am I coming in  
21 clear?

22 A Yes, you are coming in.

23 Q Excellent. Thank you. I always want to make  
24 sure that that -- that baseline is there. Great.

25 So turning to small businesses specifically, I

1 am going to ask some questions about how -- how the  
2 project was scoped in that regard.

3 So can you tell me generally how PG&E  
4 determined what the scope requirements would be for the  
5 BMI application?

6 A Sure. We -- we talk -- we talk about this in  
7 Chapter 4 but at a very high level, we looked at the  
8 needs of what the -- what the billing system needed to  
9 do both in terms of the functionality within its system  
10 in terms of billing, bill print, payment processing,  
11 customer service, field activities, et cetera, and the  
12 systems it needed to interface with. We talked about  
13 pge.com earlier today. That -- that's a -- one of the  
14 bigger systems that we interface with because of the  
15 need for customer data.

16 So looking at the entirety of what the systems  
17 needed to do to be able to deliver the functionality for  
18 PG&E's customers as well as internal -- internal  
19 resources.

20 Q And did PG&E confer with subject experts within  
21 the company regarding the specific billing applications  
22 that would be desired?

23 A You -- you said regarding the specific billing  
24 applications that would be required. Could you maybe  
25 explain what you mean by that?



1           Q     Yes.  So, for instance, I heard about the  
2     possibility of a customer accessing different types of  
3     rates options.  That's an example in my parlance of a  
4     functionality.

5           A     Oh, okay.  Functionality, yes.  We worked with  
6     subject-matter experts from across the business as well  
7     as subject-matter experts on the IT and technical side  
8     for both functional and technical performance  
9     requirements.

10          Q     And did PG&E undertake any internal focus  
11     groups and other data gathering to determine the primary  
12     small business customer billing issues or  
13     functionalities that would be addressed by the billing  
14     modernization initiative?

15          A     I -- I don't believe we focused specifically on  
16     small business functionality, but the functions and  
17     features that we are implementing with the billing  
18     modernization initiative apply to both small business  
19     and the rest of PG&E's customers.

20          Q     So, as an example, for instance, there's a  
21     small business team that does outreach to small business  
22     customers and fields questions from them.

23                 Do you know if that team was conferred with to  
24     assess what small businesses might want to be looking  
25     for, the issues that they encounter with the billing

1 system?

2 A I -- I do not know that.

3 Q Okay. I am going to move on to risk management  
4 related questions.

5 Is it correct to say that PG&E does not have  
6 prior projects that you considered comparable to this  
7 project?

8 A I believe that was what we responded to -- one  
9 of your data requests.

10 In 2021 -- excuse me -- 2001, we imp -- that  
11 was when we first implemented CC&B. That's where we  
12 went from our -- our legacy billing system to CC&B. In  
13 terms of comparison to this project and this  
14 application, we're talking about an implementation of  
15 three -- three large complex projects including our  
16 end-state project that brings all of the customers  
17 billing functionality, et cetera, into a single system.

18 So in -- in that sense, we have not undertaken  
19 a project of this scope and scale.

20 Q And is it fair to say that the -- the  
21 individual people who managed the 20 -- 2001 project are  
22 not the same people who are managing or involved in this  
23 project in a meaningful way?

24 A In -- in general, there are some resources that  
25 are around that are -- that are supporting the current

1 initiative but, by and large, the resources that were in  
2 charge of our original CC&B implementation are no longer  
3 at the company.

4 Q Okay. And has PG&E undertaken analysis to  
5 assess what was most challenging about achieving that  
6 project as part of the risk management scoping for this  
7 project?

8 A Not that I am aware of.

9 Q And can you list some significant risks that  
10 PG&E anticipated would be necessary to manage in order  
11 to implement the billing modernization program  
12 successfully on budget and with desired outcome?

13 A Are you -- are you talking about the risk that  
14 we are tracking now? Are you talking about risks when  
15 we submitted the application? Is there a -- a -- maybe  
16 to ask differently, is there a timing to your question?

17 Q I hadn't considered it necessarily to be a  
18 shift in the view of what those risks are. I just mean  
19 what comes to mind as particularly significant to you as  
20 risks that need to be managed in order to successfully  
21 carry out the project that the application supports?

22 A Okay. Maybe I will highlight a couple of them.

23 I think one -- one of the -- the -- or one area  
24 of risk is data conversion and data governance. CC&B --  
25 the CC&B system today has decades of data and billions

1 of records. It -- it is an outcome of the project that  
2 we want to, one, be able to deploy the system  
3 successfully, but also be able to reduce some of that  
4 data in compliance with CPRA and internal -- internal  
5 data standards.

6 So the per -- the risk to the performance of  
7 the system, for example, and the risk to the performance  
8 of our data conversion, some of the unknowns around will  
9 we -- the -- the timing and performance of doing that,  
10 that's -- that's one area.

11 We are -- the C2M system is a new system, and  
12 we are expecting to implement -- implement functionality  
13 in a new way; and what I mean by that is, we talk --  
14 talking about rates and -- and billing calculations,  
15 we're -- we -- we plan to move from the linear  
16 calculation methodology that we have today to a more  
17 modular calculation methodology.

18 As I stated earlier this morning, PG&E  
19 understands the complexity of its current rates but not  
20 necessarily the best way to implement in this new  
21 methodology. So another example of risk is around  
22 the -- the appropriate way to do so and kind of the --  
23 the unknowns of the new methodology implementations --  
24 or the implementation of the new methodology, excuse me.

25 Q And are these risks specific to using a

1 particular billing systems such as SAP or Oracle?

2 A I -- I think so, but I can only comment in  
3 terms of -- of what we are doing with our projects. So  
4 it -- it -- it's as it relates to the projects that  
5 we're implementing.

6 Q So what about general project management types  
7 of risks, you know, staff turnover, you know, issues  
8 that are not unique to just the billing system itself;  
9 are those significant in this project?

10 A Yes.

11 Q And so, I -- turning to the unexpected delays  
12 that are the subject of the supplemental testimony,  
13 PG&E-04, can you explain generally the cause of those  
14 delays?

15 A Are -- are you referencing in terms of the  
16 delays that were experienced by the BCS implementation,  
17 or are you referencing delay -- are -- to C2M projects?

18 Q Let's start with BCS, please.

19 A Okay. Sorry, give me one second.

20 Q Yeah, sure. There's a pivot there.

21 A Okay. Could you please ask your question again  
22 now that I have the document in front of me?

23 Q Yes, certainly.

24 So what -- can you summarize the primary causes  
25 of delays in BMI implementation that are the subject of

1 your supplemental testimony?

2 A So it -- the -- I believe that was the first  
3 question you asked, and I think you later clarified it  
4 to talk about BCS.

5 As it relates to BCS, in supplemental  
6 testimony, we -- we did discuss that it was deployed in  
7 August of 2025 as compared to June of 2025. The -- the  
8 primary driver for that was additional cycles of  
9 operational readiness testing, effectively doing full  
10 monthly batch billing and -- and a production-like  
11 execution of billing within the BCS system.

12 We -- PG&E made a decision to increase the  
13 amount of operational readiness testing and delay the  
14 implementation mainly to make sure that the system was  
15 ready for production and ready for real customer  
16 billing.

17 Q And then with respect to the C2M delay, what is  
18 the cause of that delay?

19 A That -- we decided to delay the restart of  
20 that. Part of the delay to restarting C2M was the  
21 aforementioned delay to BCS, but we also made some  
22 prudent decisions to delay the start of the CC&B  
23 upgrade.

24 The later starting of the CC&B upgrade caused  
25 us to -- to rethink how we were going to restart the C2M

1 project.

2 Q And were those delays for either of the two  
3 programs specific to Oracle?

4 A From a CC&B standpoint, a little bit.

5 So one of this things that we talk about in --  
6 in supplemental testimony is the -- is the  
7 implementation of Information Lifecycle Management, or  
8 ILM. It's a feature within the Oracle product that  
9 allows for data identification and data removal.

10 It was in the preplanning phase for the CC&B  
11 upgrade, we identified that as a necessary feature set  
12 for the CC&B upgrade. So that is something that was  
13 specific to Oracle. We ultimately made the decision  
14 that we needed a system integrator to help us implement  
15 that feature set because we did not have experts within  
16 PG&E that were familiar with the implementation or  
17 operation of -- of that type of functionality.

18 Q Thank you.

19 And so turning to that same supplemental  
20 testimony we were discussing in PG&E-04, page 3, line 21  
21 to 24. I am just going to read your testimony to help  
22 set up the question I want to ask.

23 A Okay.

24 Q Let me know when --

25 A Give me one second.

1 Q Yes.

2 A You said page 3, lines 23, 24?

3 Q 21 through 24.

4 A Okay.

5 Q It starts with "as PG&E" --

6 A Go for it.

7 Q (Reading from document):

8 As PG&E has gained experience with this  
9 implementation, and through knowledge-sharing  
10 and reviewing the lessons learned from case  
11 studies of other utilities that implemented a  
12 major CIS upgrade (most of whom experienced  
13 unexpected delays.)

14 I am just going to hold the quote there. My  
15 question is about that portion.

16 A Okay.

17 Q Can you explain what knowledge -- what  
18 knowledge-sharing with other utilities occurred?

19 A So I -- I do believe in our data request  
20 response to you, we -- we did discuss discussions that  
21 we had with NextEra, a utility that had gone through a  
22 CIS implementation. We have since talked to another  
23 utility, which I -- the name is escaping me right now,  
24 but we did the -- the billing modernization initiative  
25 leadership met with leaders from -- from that utility as



1 well.

2 We also discussed and worked with Accenture and  
3 Utliligent in terms of their -- their feedback and their  
4 look across utilities that had done these types of  
5 projects to get feedback and knowledge of -- of issues  
6 faced or challenges faced in those projects.

7 Q And this NextEra Energy conferral that you  
8 mentioned, that happened in what year?

9 A I -- I believe it was 2023. I do not recall  
10 the specific year off the top of my head. That is  
11 something that we could look up and confirm that.

12 That was -- it was towards the early beginning  
13 of the C2M project.

14 Q So it's correct to say, though, whatever year  
15 it was, it didn't happen during the 2025 or in response  
16 to the delays that are subject of PG&E-04?

17 A For NextEra? No.

18 Q And do you know if the conferral with NextEra  
19 Energy was pertaining to a specific subsidiary of the  
20 company?

21 A I am not a -- I do not recall.

22 Q Okay. Were you -- did you participate in those  
23 meetings?

24 A I -- I participated in one. I believe there  
25 was more than one, but I participated in one.

1           Q     And do you know if that company used the Oracle  
2     billing system?

3           A     I believe that is the case.

4           Q     Do you know if it was an upgrade to the same  
5     Oracle platform that PG&E is seeking to use?

6           A     I -- I -- I don't recall.

7           Q     And do you know when NextEra Energy's billing  
8     upgrade was accomplished?

9           A     Not off the top of my head; I do not remember.

10          Q     Do you know, in terms of scale, work and cost,  
11     how similar that upgrade was to PG&E's proposal in the  
12     application?

13          A     No, I do not remember.

14          Q     Do you know the cost overruns and just roughly  
15     a sort of percentage or any other sort of magnitude that  
16     NextEra Energy experienced in their program?

17          A     No.

18          Q     Do you know if it was completed on schedule?

19          A     I do not recall.

20          Q     Do you know how closely matching the forecasted  
21     goals and benefits were with what was achieved?

22          A     No, I do -- I do not recall that.

23          Q     Do you --

24                     (Crosstalk.)

25          A     If that information was shared.

1           Q     Thank you.

2                     Do you know the primary cause of any delays or  
3     cost overruns that NextEra Energy did experience?

4           A     I -- I do not recall if we got that  
5     information. I do recall discussions in terms of  
6     opportunities to help ensure that projects are more  
7     successful. So, for one example, I recall discussions  
8     around dedicated staff to the project on both the  
9     business and IT sides that would facilitate decision  
10    making or -- or quicker decision making, less  
11    escalations and, ultimately, the ability for the program  
12    to be delivered with -- with better outcomes.

13          Q     And would you say that the more similarities or  
14    differences in the costs and completion risks faced by  
15    utilities to undertake billing system upgrades but use  
16    different vendors?

17          A     Can -- can you maybe rephrase that question; I  
18    am not sure on what you're asking.

19          Q     Thank you for requesting that clarification.  
20    Let me try again.

21                     Let's say a utility -- one utility is  
22    undertaking a billing operating program, and it uses  
23    Oracle. Another is undertaking a billing modernization  
24    upgrading program that uses SAP.

25          A     Okay.

1           Q     Would you anticipate that the risks --  
2     management risks that they face that they need to  
3     overcome to deliver their project as desired is more or  
4     less similar?

5           A     More or less? Are you asking if there are lots  
6     of similarities in companies that are delivering  
7     projects with two different vendor platforms? Is that  
8     maybe a way to summarize the question?

9           Q     My question is with regard to the completion  
10    risks that --

11          A     Okay.

12          Q     -- those companies face undertaking those  
13    programs not the companies themselves.

14          A     Okay.

15          Q     So with respect to those two hypotheticals --  
16                 (Crosstalk.)

17          A     Sure.

18          Q     -- would you say that there are more  
19    similarities between those two, let's say, applications  
20    or fewer similarities?

21          A     So I -- the answer is it depends, and it  
22    depends on what system those projects are coming from.

23                 So, for example, in -- in our workpapers with  
24    testimony, we included some analysis from Accenture,  
25    which identified both the functionality that SAP and

1 Oracle have in their billing systems.

2 In a vacuum, the completion risks that you  
3 would face in implementing those would largely be the  
4 same, but if you're going from an Oracle product to an  
5 SAP product, or if you're going from a legacy product to  
6 an SAP product, the -- the risks are going to be  
7 different. It's also a little bit dependent on kind of  
8 the size and complexity of functionality.

9 So if you have a really -- if you have a large  
10 number of customers, it's going to be more complicated  
11 and more risky than if you have, you know, 6 million  
12 customers versus 10,000. There's going to be a large  
13 difference in the risk of those projects.

14 Q Thank you.

15 So with respect to Accenture's advising, can  
16 you turn to page -- the 44th PDF page of SBUA-01. It's  
17 a slide from a data response. That's a 40 -- I am  
18 sorry. I realize the page numbers, if you're looking at  
19 a paper version, are missing so let me try to assist you  
20 rather than making you do the count.

21 ALJ PEREZ-GREEN: Can you identify the exhibit  
22 number?

23 MR. STRAUSS: SBUA-01, your Honor.

24 ALJ PEREZ-GREEN: Thank you.

25 ///

1 BY MR. STRAUSS:

2 Q And the document I am referring to, Mr. Hedges,  
3 is in response to question ten from data request set  
4 one, and it is a table that is labeled "CIS Deployment  
5 Industry Comparisons." It has a blue PG&E header. That  
6 may help you.

7 A And you're -- you said slide one, so CIS  
8 Deployment Industry Comparisons  
9 "BillingModernization\_DR\_SBUA\_001-Q010Atch01"?

10 Q Correct. Thank you for identifying that.  
11 I noticed that NextEra is not listed in this  
12 table of comparable utilities. Do you know why it was  
13 not listed?

14 A I couldn't answer specifically. My  
15 recollection was this table was put together with the --  
16 the closest utility comparisons to PG&E. So SDG&E and  
17 SoCal Edison are listed because they are other  
18 California utilities whereas Con Edison, Duke, Exelon  
19 are other utilities that are kind of the size, scale and  
20 complexity of PG&E.

21 Q And to confirm, PG&E did not confer with SDG&E  
22 and SCE about the implementation of their billing  
23 modernization program?

24 A We did not.

25 They implement SAP platforms, so in terms of

1 understanding some of the challenges related to  
2 Oracle-specific stuff, it would not have been  
3 appropriate.

4 Q Okay. And let me ask another question about  
5 that same data response. Actually, sorry, a data  
6 response -- I am going to -- let me restate that.

7 I would actually like to ask about a data  
8 response to SBUA-02, and that is question seven of the  
9 data response. It's appendix -- let me get the page for  
10 you.

11 A Okay.

12 Q This --

13 A Which --

14 (Crosstalk.)

15 Q Go ahead.

16 A Sorry, sorry. Which question for SBUA-02?

17 Q Thank you. It is question seven, and it is  
18 response item "D" as in dog; and I am going to read that  
19 out if you're ready.

20 A So when I look at data request SBUA-02,  
21 question seven, I do not see any multiple parts. I see  
22 a --

23 Q Thank you.

24 A -- question about why PG&E could not remove  
25 capital if the Commission disallowed recovery.

1 Q Yes, let me correct my citation.

2 I am referring to SBUA-02, the exhibit, and  
3 within that --

4 A Ah.

5 Q -- I am referring to data response three,  
6 question seven. Sorry about that.

7 A Okay.

8 Q And I am referring to response item "D" as in  
9 dog on the second page.

10 A Yes.

11 Q And I will just read that for us.

12 The delay in the project completion date of  
13 the Billing Modernization Initiative was not  
14 known to PG&E when it filed Rebuttal Testimony  
15 July 30, 2025. PG&E did, however, disclose  
16 delay in the BCS (Stage 1) go-live date in  
17 response to a data request from Cal Advocates  
18 prior to Rebuttal Testimony.

19 Can you explain the difference between  
20 disclosing the BCS delay and the project completion  
21 delay?

22 A Sure. When we talk about the projected  
23 completion date of the billing modernization initiative,  
24 that is in reference to our completion date of C2M the  
25 final end-state.



1           So at the time that we both -- at the time that  
2     we filed rebuttal testimony, and at the time that we  
3     provided the data request to Cal Advocates, the only  
4     delay that we were really for -- the -- the delay that  
5     we knew for certain was to BCS. We were not yet aware  
6     of the delay and impacts of the C2M project.

7           Q     And is there discussion of the BCS delay in  
8     rebuttal testimony?

9           A     Not that I recall, no.

10          Q     And at the time of filing rebuttal testimony at  
11     the end of July 2025, do you know if PG&E had a plan for  
12     catching up the BCS Stage 1?

13          A     When you say, "catching up," what -- what do  
14     you mean by that?

15          Q     I mean addressing the delay in Stage 1 so it  
16     would not impact the end completion time for subsequent  
17     stages that I understand you said PG&E was not aware  
18     would be impacted yet.

19          A     Yeah, so because PG&E was not aware that they  
20     would be impacted, there was no plan to reduce that  
21     impact.

22          Q     Okay. And so there were no identified costs  
23     implications at the -- at the end of July 2025 with the  
24     BCS Stage 1 delays?

25          A     I believe there was an updated forecast for BCS

1 at that time.

2 Q And then, with respect to that delay, let me  
3 just make sure I understood correctly. I've heard you  
4 say that PG&E met with an additional unidentified  
5 utility to assist with understanding addressing delays  
6 going forward; is that right?

7 A I -- I am not sure I would characterize in that  
8 fashion. PG&E has met with other utilities to discuss  
9 their -- their CIS implementations.

10 Delays and risks were certainly a topic, but it  
11 was -- I would characterize it more as a knowledge and  
12 learning in ter -- in terms of what those utilities  
13 experienced in their -- in their project executions.

14 Q Okay. Thank you for characterizing that in the  
15 way you -- you mean to. I did not mean to  
16 mischaracterize it or characterize it for you; I just  
17 wanted to frame the question.

18 So -- but I heard you say, "utilities." I just  
19 want to make sure I understand correctly.

20 As far as I understand, there are two  
21 utilities, NextEra Energy plus an additional utility. ]

22 A Since I looked at the slide in the attachment,  
23 I do recall two meetings with resources from Con Edison  
24 to discuss their implementation. In regards to the  
25 unnamed utility that I referenced earlier, it's not

1 Con Edison that we subsequently met with, but I still do  
2 not recall off the top of my head what the utility name  
3 was. I could find it in my notes in my computer, but I  
4 do not recall right now.

5 Q That's all right. I understand. Do you know  
6 if the Con Edison discussion happened after the BCS  
7 Stage 1 delays were identified?

8 A It did not. It was much more focused on C2M  
9 given that's what Con Edison was working on at the time.

10 Q I'd like to talk a bit about contingency now.

11 A Okay.

12 Q So the BMI application requested a contingency  
13 of approximately \$84 million. May any type of cost  
14 overrun draw from the contingency regardless of cost?

15 A Yes, I believe that to be correct.

16 Q And my understanding is that PG&E took  
17 approximately \$13.4 million from the CC&B contingency to  
18 use to cover BCS cost overruns; is that right?

19 A No. I believe we reduced our request and the  
20 categorization of costs. We did not draw down the  
21 contingency for the CC&B project.

22 Q Was any contingency funding drawn down in  
23 connection with the delays that are the subject of  
24 PG&E-04?

25 A So in that sense, in terms of our request with

1 supplemental testimony, we did reduce the contingency  
2 for the CC&B upgrade ultimately to keep our overall  
3 request the same from a capital and expense standpoint.

4           Given that CC&B had already gone live -- excuse  
5 me -- given that BCS had already gone live at that time,  
6 there were recorded actuals for the project. And at the  
7 end of the day, if there are additional overruns, we are  
8 not requesting additional return on those other  
9 overruns.

10           Q     Can you clarify the overruns that will not be  
11 requested. What are those specific to?

12           A     What I meant was right now we are -- the dollar  
13 amounts and forecasts that we included with our  
14 supplemental testimony is what we are requesting as part  
15 of this billing modernization initiative. We are not  
16 requesting any additional funds.

17           Q     But if there are overruns in the future, could  
18 PG&E request additional funding through a separate  
19 application or advice letter or some other process?

20           A     I do not believe that to be the case.

21           Q     In terms of the amount of the CC&B contingency  
22 that was reduced, approximately how much was it reduced  
23 by?

24           A     I believe it was approximately 13 million.

25           Q     And was analysis done, to your knowledge, by

1 PG&E to determine that the contingency amount for CC&B  
2 should be reduced in terms of the risk that CC&B faced  
3 to meet a contingency?

4 A Not specific to the risk that had been stated.  
5 I will note that at the time that we filed supplemental  
6 testimony, we were towards the end of the plan-analyze  
7 phase of the CC&B upgrade, so there was more known about  
8 the execution of the rest of the project, but we had not  
9 done that risk and contingency analysis yet.

10 Q And a CC&B contingency has not been replenished  
11 from another budget category; right?

12 A No.

13 Q Thank you. My last set of questions are about  
14 the AFUDC, the allowance for funds used during  
15 construction.

16 A Sure.

17 Q Thank you. So in SBUA-01, Mr. Sheriff, PG&E's  
18 expert, raised a concern that if AFUDC is included in  
19 the budget that's approved by the Commission, quote,  
20 "Any delays to current forecast mean that actual AFUDC  
21 financing costs would be lower and PG&E would keep the  
22 difference."

23 Just focusing on that sentence a moment, do you  
24 agree with the implications of that sentence?

25 A Could you point to me in SBUA-01 where that

1 sentence is.

2 Q Yes. And the question is just trying to frame  
3 your understanding of how AFUDC operates, but I'm happy  
4 to bring up that sentence so we can look at it together.  
5 Just a moment. I'm referring to the page with  
6 footnote --

7 A I realize there aren't page numbers so --

8 Q Yes. I apologize for that. It's the page with  
9 Footnote 57.

10 A Okay.

11 Q And it's lines 5 through 7.

12 A Lines 5 through 7. Okay. "Any delays to the  
13 current forecast mean that actual AFUDC finance costs  
14 would be lower and PG&E would keep the difference."

15 Q Is that a ramification of the manner in which  
16 PG&E includes AFUDC in its forecast?

17 A No. AFUDC is calculated based on costs in a  
18 given month and some application of the costs of the  
19 project to date, so if project costs are lower, the  
20 applied AFUDC would be lower.

21 Q My question is not about the financing costs  
22 being lower. It's about the delays in the forecast. So  
23 the forecast results in the project -- so as the  
24 sentence says, "a delay in the forecast," meaning the  
25 costs are the same, but the duration of the project is

1 extended over more time.

2 What is the implications for AFUDC there?

3 A In that case, AFUDC would be higher. If you  
4 have a same cost over a longer period of time, AFUDC is  
5 applied more often and, thus, your total AFUDC would be  
6 higher.

7 Q Under that circumstance, is that something that  
8 then occurred during the delay that's the subject of the  
9 supplemental testimony?

10 A When you're saying "delay," which project are  
11 you referring to?

12 Q I'm going to ask a slightly different question.  
13 In your rebuttal testimony, there is a statement that --  
14 it's on page 2-22. It's lines 14 through 17.

15 A One second. You said, "2-22, 14 through 17"?  
16 Did I say that back correctly?

17 Q Yes, you did.

18 A Okay.

19 Q Thank you. And that's:

20 AFUDC will be automatically paused by  
21 capital orders that do not have direct charges  
22 (e.g. labor, materials, and contracts) and/or  
23 accounting adjustments (e.g. refunds, billing  
24 credits) for six consecutive months.

25 Is that a correct statement of how AFUDC still

1 operates?

2 A That is the current financial accounting policy  
3 of how AFUDC operates. At the time that we paused C2M  
4 in May of 2024, it was a manual trigger. So there was  
5 no six-month pause. It was effectively we stopped  
6 charges in May. We also stopped AFUDC accrual in May of  
7 2024. But correctly, this is the current way that AFUDC  
8 works in the case of no additional charges.

9 Q How much AFUDC was incurred in 2025 in  
10 connection with the C2M program delay?

11 A As it relates to the delay, it would be zero  
12 because from May -- well, sorry. I believe you said  
13 2025, but I'm going to give the answer from May 2024  
14 through 2025. Effectively, the capital order was  
15 paused. No AFUDC was accrued in that time period. And  
16 even to date, we have not resumed costs for the C2M  
17 projects, so there is still no AFUDC accrued or charged  
18 since that pause.

19 Q And turning back to the quoted language from  
20 rebuttal testimony, there's a reference to "account  
21 adjustments; e.g., refunds, billing credits."

22 How do account adjustments come into play in  
23 terms of calculating the six-month period?

24 A I'm not sure. What I will say is that we did  
25 not take the C2M capital orders off pause. It was a



1 manual adjustment that was done by our finance and  
2 accounting team directly to the system. So it did not  
3 allow resources or contracts or other costs to hit the  
4 capital order number, which would have also accrued  
5 AFUDC. It was a manual, one-time adjustment.

6 Q Thank you for explaining that. And how would  
7 it be done going forward if there are delays in the  
8 project components with respect to AFUDC?

9 A So let's assume for the sake of argument,  
10 June 9th we start the project, today. So resources  
11 would start charging, they would be charging against the  
12 order number in our time system. At the end of the  
13 month, AFUDC would be applied. That would happen each  
14 month over the course of the project until we went live.

15 If there was a delay in the execution of the  
16 project where we needed to delay the go-live date for a  
17 reason -- it's kind of a hypothetical here, but if we  
18 were still working on the project and it was a longer  
19 duration, AFUDC would continue to be accrued.

20 Q What's the mechanism, though, for pausing it or  
21 allowing it to continue, mechanically speaking, in the  
22 PG&E system?

23 A It's effectively no work happens for six  
24 months. It needs to be -- we're not working on this  
25 capital project for longer than six months. That's the

1 triggering mechanism. That was always the triggering  
2 mechanism. The language that you pointed to in rebuttal  
3 testimony was the kind of automated functionality that  
4 we now have to do that pause.

5 Q Thank you. That completes my questions. Thank  
6 you, Mr. Hedges.

7 A Thank you.

8 ALJ PEREZ-GREEN: Let's go off the record.

9 (At the hour of 12:00 p.m., a recess was  
10 taken until 1:00 p.m.) ]

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1 AFTERNOON SESSION - 1:00 P.M.

2 \* \* \* \* \*

3 ALJ PEREZ-GREEN: We are on the record.

4 I have a couple of questions for the witness.  
5 In PG&E-04 regarding PG&E's supplemental testimony,  
6 there's information regarding the revenue requirement.  
7 I would like for you to explain the revenue requirement  
8 reduction by \$73 million for each, the BCS, CC&B 25.4,  
9 and C2M.

10 THE WITNESS: Your Honor, unfortunately I am  
11 not an expert on the revenue requirement. That would  
12 have been witness Marques Cruz. He is representing the  
13 revenue requirement portion of our filing.

14 ALJ PEREZ-GREEN: You previously mentioned that  
15 a reason for AFUDC to be paused was because of a  
16 six-month project delay. I wanted to know if there are  
17 other reasons why AFUDC might be paused.

18 THE WITNESS: AFUDC is paused when spend on  
19 capital projects is paused. The measuring stick is that  
20 it needs to be paused at least six months for AFUDC to  
21 be also paused. The alternative scenario hypothetical  
22 would be project work stops for three months but then is  
23 going to continue. In that situation, it is not  
24 appropriate to pause AFUDC in that three-month delay  
25 window. It's only paused if there's at least a

1 six-month delay of no work.

2 ALJ PEREZ-GREEN: Thank you.

3 Mr. Stepanovic, do you have any redirect?

4 MR. STEPANOVIC: Your Honor, if I may before  
5 redirect, if you'd like, we can respond in writing to  
6 your questions regarding the revenue requirement if that  
7 would be helpful.

8 ALJ PEREZ-GREEN: Thank you. That would be.

9 MR. STEPANOVIC: Okay. If you'd like, you  
10 could send those to us in writing or you could tell us  
11 now, I suppose, and we can begin writing those down  
12 immediately.

13 ALJ PEREZ-GREEN: I may follow up in writing  
14 afterwards. Thank you.

15 MR. STEPANOVIC: Okay. Great. Thank you, your  
16 Honor. PG&E has no redirect for Mr. Hedges.

17 ALJ PEREZ-GREEN: Let's go off the record.

18 (Off the record.)

19 ALJ PEREZ-GREEN: Let's go on the record.

20 At this point, are there any motions to admit  
21 exhibits in the record?

22 Mr. Cheng.

23 MR. CHENG: Thank you, your Honor. TURN would  
24 like to move TURN-02, TURN-03, and TURN-04 into  
25 evidence.

1 ALJ PEREZ-GREEN: Are there any objections?

2 (No response.)

3 ALJ PEREZ-GREEN: I'll admit TURN-02, TURN-03,  
4 and TURN-04 into the record.

5 MR. CHENG: Thank you your Honor.

6 (Exhibits TURN-02, TURN-03, TURN-04 were  
7 received into evidence.)

8 ALJ PEREZ-GREEN: Are there any additional  
9 motions?

10 MR. STEPANOVIC: Yes, your Honor. PG&E moves  
11 to admit Exhibits PGE-01, PGE-02, PGE-02 Confidential,  
12 PGE-03, PGE-03 Confidential, PGE-04, and PGE-05 into the  
13 record.

14 ALJ PEREZ-GREEN: Are there any objections?

15 (No response.)

16 ALJ PEREZ-GREEN: We will admit PGE-01, PGE-02,  
17 PGE-02C, PGE-03, PGE-03C, PGE-04, and PGE-05 into the  
18 record.

19 MR. STEPANOVIC: Thank you, your Honor.

20 (Exhibits PGE-01, PGE-02, PGE-02C, PGE-03,  
21 PGE-03C, PGE-04, PGE-05 were received into  
22 evidence.)

23 ALJ PEREZ-GREEN: With that, this concludes the  
24 evidentiary hearing for the day, or I should say the  
25 evidentiary hearing. Thank you, everyone.

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We are off the record.

(At the hour of 1:08 p.m., this matter  
having concluded, the Commission then  
adjourned.)

]

\* \* \* \* \*

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, ANDREA L. ROSS, CERTIFIED SHORTHAND REPORTER  
NO. 7896, IN AND FOR THE STATE OF CALIFORNIA, DO  
HEREBY CERTIFY THAT THE PAGES OF THIS TRANSCRIPT  
PREPARED BY ME COMPRISE A FULL, TRUE, AND CORRECT  
TRANSCRIPT OF THE TESTIMONY AND PROCEEDINGS HELD IN  
THIS MATTER ON JUNE 9, 2026.

I FURTHER CERTIFY THAT I HAVE NO INTEREST IN THE  
EVENTS OF THE MATTER OR THE OUTCOME OF THE PROCEEDING.

EXECUTED THIS JULY 13, 2026.

A handwritten signature in black ink, reading "Andrea L. Ross". The signature is written in a cursive style with a large, looping "R".

ANDREA L. ROSS  
CSR NO. 7896

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, ASHLEIGH BUTTON, CERTIFIED SHORTHAND REPORTER  
NO. 14013, IN AND FOR THE STATE OF CALIFORNIA, DO  
HEREBY CERTIFY THAT THE PAGES OF THIS TRANSCRIPT  
PREPARED BY ME COMPRISE A FULL, TRUE, AND CORRECT  
TRANSCRIPT OF THE TESTIMONY AND PROCEEDINGS HELD IN  
THIS MATTER ON JUNE 9, 2026.

I FURTHER CERTIFY THAT I HAVE NO INTEREST IN THE  
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EXECUTED THIS JULY 13, 2026.

  
ASHLEIGH BUTTON  
CSR NO. 14013



BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE  
STATE OF CALIFORNIA

CERTIFICATION OF TRANSCRIPT OF PROCEEDING

I, SHANNON ROSS, CERTIFIED SHORTHAND REPORTER  
NO. 8916, IN AND FOR THE STATE OF CALIFORNIA, DO  
HEREBY CERTIFY THAT THE PAGES OF THIS TRANSCRIPT  
PREPARED BY ME COMPRISE A FULL, TRUE, AND CORRECT  
TRANSCRIPT OF THE TESTIMONY AND PROCEEDINGS HELD IN  
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I FURTHER CERTIFY THAT I HAVE NO INTEREST IN THE  
EVENTS OF THE MATTER OR THE OUTCOME OF THE PROCEEDING.

EXECUTED THIS JULY 13, 2026.



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SHANNON ROSS WINTERS  
CSR NO. 8916

| <b>\$</b>                                                             | <b>2</b>                                                                                                                                                                                        | <b>27</b> 55:4<br><b>2nd</b> 48:7                             | <b>A</b>                                                                   |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>\$13.4</b> 103:17                                                  | <b>2</b> 50:1,4                                                                                                                                                                                 |                                                               | <b>A.21-06-21.</b> 76:9                                                    |
| <b>\$84</b> 103:13                                                    | <b>2-17</b> 51:12,14                                                                                                                                                                            | <b>3</b>                                                      | <b>A.M.</b> 47:2                                                           |
| <b>0</b>                                                              | <b>2-2</b> 56:2                                                                                                                                                                                 | <b>3</b> 50:3,4 91:20 92:2                                    | <b>abide</b> 48:7                                                          |
| <b>001</b> 62:7                                                       | <b>2-22</b> 107:14,15                                                                                                                                                                           | <b>30</b> 100:15                                              | <b>ability</b> 65:25 72:20 79:6<br>81:14 82:2,10 95:11                     |
| <b>01</b> 49:18,21 62:7                                               | <b>2.4</b> 51:22 53:10,13,25                                                                                                                                                                    | <b>32</b> 55:13                                               | <b>ABS</b> 74:8,14                                                         |
| <b>02</b> 49:19                                                       | <b>2.4's</b> 54:15                                                                                                                                                                              | <b>4</b>                                                      | <b>Accenture</b> 93:2 96:24                                                |
| <b>05</b> 50:10                                                       | <b>2.5</b> 53:17                                                                                                                                                                                |                                                               | <b>Accenture's</b> 97:15                                                   |
| <b>1</b>                                                              | <b>2.9</b> 52:5,11,13,19,23<br>53:4,7 54:12,21,23<br>55:10,17                                                                                                                                   | <b>4</b> 49:16,18 50:3 58:7,8<br>67:6 72:18,19 77:2,3<br>84:7 | <b>access</b> 68:25 69:8<br>70:11,12 72:20,23<br>73:13,24,25 74:5 75:4     |
| <b>1</b> 57:19 62:11 63:24<br>67:7 72:19 100:16<br>101:12,15,24 103:7 | <b>20</b> 86:21                                                                                                                                                                                 | <b>4-12</b> 67:7                                              | <b>accessing</b> 85:2                                                      |
| <b>1-11</b> 57:19                                                     | <b>20/20</b> 60:18 61:7                                                                                                                                                                         | <b>4-29</b> 53:21,22                                          | <b>accomplished</b> 94:8                                                   |
| <b>10</b> 72:2                                                        | <b>2001</b> 86:10,21                                                                                                                                                                            | <b>4-47</b> 72:19                                             | <b>account</b> 108:20,22                                                   |
| <b>10,000</b> 97:12                                                   | <b>2003</b> 48:22                                                                                                                                                                               | <b>40</b> 97:17                                               | <b>accounting</b> 107:23<br>108:2 109:2                                    |
| <b>10-1</b> 68:18                                                     | <b>2012</b> 51:23                                                                                                                                                                               | <b>44th</b> 97:16                                             | <b>accrual</b> 108:6                                                       |
| <b>10-14</b> 66:11,14,19                                              | <b>2020</b> 51:24                                                                                                                                                                               | <b>5</b>                                                      | <b>accrued</b> 108:15,17<br>109:4,19                                       |
| <b>10-2</b> 63:22 69:2,16                                             | <b>2021</b> 86:10                                                                                                                                                                               | <b>5</b> 49:16,19 82:5 106:11,<br>12                          | <b>accurate</b> 69:11                                                      |
| <b>10-23</b> 65:2                                                     | <b>2022</b> 52:12                                                                                                                                                                               | <b>57</b> 106:9                                               | <b>achieve</b> 64:4                                                        |
| <b>10-5</b> 71:11                                                     | <b>2023</b> 49:10 52:15,22<br>56:8,9,21,23 57:4,18,22<br>58:12 59:12,17 60:13<br>62:18 63:2,12 64:9,11,<br>18,21 67:3,16,19,24<br>68:7 71:19,23 72:2,10<br>73:9,18 74:10 77:11,13<br>78:24 93:9 | <b>6</b>                                                      | <b>achieved</b> 94:21                                                      |
| <b>10-7</b> 70:7                                                      |                                                                                                                                                                                                 | <b>6</b> 97:11                                                | <b>achieving</b> 87:5                                                      |
| <b>10-8</b> 59:18                                                     | <b>2024</b> 108:4,7,13                                                                                                                                                                          | <b>7</b>                                                      | <b>activities</b> 84:11                                                    |
| <b>10-minute</b> 75:13                                                | <b>2025</b> 90:7 93:15 100:15<br>101:11,23 108:9,13,14                                                                                                                                          | <b>7</b> 106:11,12                                            | <b>actual</b> 105:20 106:13                                                |
| <b>11</b> 59:22                                                       | <b>2026</b> 47:2                                                                                                                                                                                | <b>8</b>                                                      | <b>actuals</b> 104:6                                                       |
| <b>11:00</b> 75:14                                                    | <b>21</b> 91:20 92:3                                                                                                                                                                            | <b>8</b> 51:18,19 54:5 66:6                                   | <b>add</b> 80:21                                                           |
| <b>12</b> 68:14                                                       | <b>22</b> 61:24 62:2 76:2                                                                                                                                                                       | <b>9</b>                                                      | <b>additional</b> 57:8 58:24<br>77:20 90:8 102:4,21<br>104:7,8,16,18 108:8 |
| <b>12:00</b> 110:9                                                    | <b>23</b> 92:2                                                                                                                                                                                  | <b>9</b> 47:2                                                 | <b>additions</b> 50:18                                                     |
| <b>13</b> 104:24                                                      | <b>24</b> 76:12 91:21 92:2,3                                                                                                                                                                    | <b>9:58</b> 47:2                                              | <b>address</b> 47:14                                                       |
| <b>14</b> 56:4 68:3 70:22<br>71:15 107:14,15                          | <b>24-10-014</b> 47:7                                                                                                                                                                           | <b>9th</b> 109:10                                             | <b>addressed</b> 85:13                                                     |
| <b>15</b> 70:22                                                       | <b>25</b> 62:23 66:4 68:19<br>76:1,18 77:24                                                                                                                                                     |                                                               | <b>addressing</b> 101:15<br>102:5                                          |
| <b>17</b> 54:15 107:14,15                                             | <b>25.1</b> 52:6 54:1,25 55:4,<br>14                                                                                                                                                            |                                                               | <b>adjustment</b> 109:1,5                                                  |
| <b>1:00</b> 110:10                                                    |                                                                                                                                                                                                 |                                                               | <b>adjustments</b> 107:23<br>108:21,22                                     |

|                                                                                               |                                                                                                                              |                                                                                                                                                                    |                                                                                                                       |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>administer</b> 47:19                                                                       | <b>anticipated</b> 87:10                                                                                                     | <b>August</b> 90:7                                                                                                                                                 | 77:4,21 84:8,10,21,23                                                                                                 |
| <b>administrative</b> 47:4, 11                                                                | <b>apologize</b> 106:8                                                                                                       | <b>automated</b> 110:3                                                                                                                                             | 85:12,13,17,25 86:12, 17 87:11 88:14 89:1,8                                                                           |
| <b>advanced</b> 48:24                                                                         | <b>appendix</b> 49:23 61:22, 23,24 62:2,23 66:4 68:3 75:24 76:1 77:24 99:9                                                   | <b>automatically</b> 107:20                                                                                                                                        | 90:10,11,16 92:24 94:2, 7 95:15,22,23 97:1                                                                            |
| <b>advancement</b> 67:23                                                                      | <b>applicable</b> 73:16                                                                                                      | <b>automating</b> 67:11                                                                                                                                            | 98:22 100:13,23 104:15 107:23 108:21                                                                                  |
| <b>advancements</b> 67:8                                                                      | <b>application</b> 47:7,8 53:18 65:5,12 72:14 76:8,20 77:15 78:10,14 79:10,12 84:5 86:14 87:15,21 94:12 103:12 104:19 106:18 | <b>automation</b> 65:25 66:6,22,24 67:8,10,16, 22 79:8,10,21 80:2,8,12 81:11                                                                                       | <b>Billingmodernization _dr_sbua_001-q010atch01</b> 98:9                                                              |
| <b>advice</b> 104:19                                                                          |                                                                                                                              | <b>aware</b> 87:8 101:5,17,19                                                                                                                                      | <b>billions</b> 87:25                                                                                                 |
| <b>advising</b> 97:15                                                                         |                                                                                                                              | <hr/> <b>B</b> <hr/>                                                                                                                                               | <b>bills</b> 69:11                                                                                                    |
| <b>Advocates</b> 83:18 100:17 101:3                                                           | <b>applications</b> 55:15 84:21,24 96:19                                                                                     | <b>B-22</b> 75:24                                                                                                                                                  | <b>bit</b> 91:4 97:7 103:10                                                                                           |
| <b>affect</b> 82:2                                                                            | <b>applied</b> 55:10,16 64:24 106:20 107:5 109:13                                                                            | <b>back</b> 55:22 57:25 61:21 66:3 68:2 75:14,25 78:19 81:22 107:16 108:19                                                                                         | <b>blue</b> 98:5                                                                                                      |
| <b>aforementioned</b> 90:21                                                                   | <b>applies</b> 79:21,22                                                                                                      | <b>based</b> 60:2,18,20 61:10,15 79:16,22 81:18,20 82:16 106:17                                                                                                    | <b>BMI</b> 63:2 78:1 84:5 89:25 103:12                                                                                |
| <b>afternoon</b> 83:17,19                                                                     | <b>apply</b> 85:18                                                                                                           | <b>baseline</b> 83:24                                                                                                                                              | <b>bottom</b> 62:6 66:19 69:2                                                                                         |
| <b>AFUDC</b> 105:14,18,20 106:3,13,16,17,20 107:2,3,4,5,20,25 108:3,6,7,9,15,17 109:5,8,13,19 | <b>approval</b> 47:9 63:25                                                                                                   | <b>basically</b> 52:6 57:21                                                                                                                                        | <b>break</b> 75:13                                                                                                    |
| <b>age</b> 54:15,25                                                                           | <b>approved</b> 105:19                                                                                                       | <b>batch</b> 90:10                                                                                                                                                 | <b>breakout</b> 76:19                                                                                                 |
| <b>aggregation</b> 74:17                                                                      | <b>approximately</b> 103:13,17 104:22,24                                                                                     | <b>BCS</b> 74:15 89:16,18 90:4,5,11,21 100:16,20 101:5,7,12,24,25 103:6, 18 104:5                                                                                  | <b>bring</b> 55:14 106:4                                                                                              |
| <b>agree</b> 48:5,6 60:16,17 105:24                                                           | <b>archival</b> 65:15                                                                                                        | <b>begin</b> 51:12,18                                                                                                                                              | <b>brings</b> 86:16                                                                                                   |
| <b>Agreed</b> 60:24                                                                           | <b>area</b> 87:23 88:10                                                                                                      | <b>beginning</b> 93:12                                                                                                                                             | <b>broad</b> 65:10                                                                                                    |
| <b>ahead</b> 99:15                                                                            | <b>areas</b> 79:15                                                                                                           | <b>believed</b> 61:8,11,13                                                                                                                                         | <b>broader</b> 49:2                                                                                                   |
| <b>ALJ</b> 47:16 48:4,9,15 51:4 75:9,12,16 83:6, 11,13 97:21,24 110:8                         | <b>argument</b> 109:9                                                                                                        | <b>benefit</b> 54:11,20,23 55:9,16,19 64:8 70:16                                                                                                                   | <b>budget</b> 87:12 105:11, 19                                                                                        |
| <b>allowance</b> 105:14                                                                       | <b>Ariel</b> 83:17                                                                                                           | <b>benefits</b> 53:23,25 57:12,14 66:19 72:8 94:21                                                                                                                 | <b>built</b> 80:19                                                                                                    |
| <b>allowed</b> 53:14,17 57:13                                                                 | <b>asserting</b> 65:4 72:7                                                                                                   |                                                                                                                                                                    | <b>bullet</b> 66:21                                                                                                   |
| <b>allowing</b> 109:21                                                                        | <b>assertion</b> 61:6                                                                                                        |                                                                                                                                                                    | <b>business</b> 47:25 62:18 63:13 83:18 85:6,12,16, 18,21 95:9                                                        |
| <b>amount</b> 55:1 90:13 104:21 105:1                                                         | <b>assess</b> 85:24 87:5                                                                                                     |                                                                                                                                                                    | <b>businesses</b> 83:25 85:24                                                                                         |
| <b>amounts</b> 104:13                                                                         | <b>assigned</b> 47:10                                                                                                        | <hr/> <b>C</b> <hr/>                                                                                                                                               |                                                                                                                       |
| <b>analysis</b> 87:4 96:24 104:25 105:9                                                       | <b>assist</b> 97:19 102:5                                                                                                    | <b>Berkeley</b> 48:22                                                                                                                                              | <b>C2m</b> 52:19 55:6 65:13, 18 72:22 77:3 78:3 82:6 88:11 89:17 90:17,20, 25 93:13 100:24 101:6 103:8 108:3,10,16,25 |
| <b>analytic</b> 60:5,13                                                                       | <b>assume</b> 109:9                                                                                                          | <b>bigger</b> 84:14                                                                                                                                                |                                                                                                                       |
| <b>analytics</b> 65:3,21                                                                      | <b>assumptions</b> 59:24 60:2,19,20                                                                                          | <b>bill</b> 73:14 74:7 84:10                                                                                                                                       | <b>Cal</b> 100:17 101:3                                                                                               |
| <b>and/or</b> 107:22                                                                          | <b>attachment</b> 62:11,21 102:22                                                                                            | <b>billing</b> 47:9 48:24 49:4, 12 50:11 51:22 56:9 57:5 60:7 62:14 64:14, 20 65:24 66:17,20,25 67:15 68:22 69:6,17,25 70:3 71:7,22,25 72:3,4 73:10,17,22 74:19,20 | <b>calculated</b> 82:25 106:17                                                                                        |
| <b>answers</b> 78:16                                                                          | <b>attention</b> 67:6 70:21                                                                                                  |                                                                                                                                                                    | <b>calculating</b> 108:23                                                                                             |
| <b>anticipate</b> 96:1                                                                        | <b>attestation</b> 47:19 48:7                                                                                                |                                                                                                                                                                    |                                                                                                                       |
|                                                                                               | <b>attested</b> 48:14                                                                                                        |                                                                                                                                                                    |                                                                                                                       |
|                                                                                               | <b>augmentation</b> 79:18                                                                                                    |                                                                                                                                                                    |                                                                                                                       |

|                                                                                                                                                                                                  |                                                                                                      |                                                                        |                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>calculation</b> 88:16,17                                                                                                                                                                      | <b>chapter</b> 50:1,4 58:7,8<br>62:15 64:22 65:1 67:6<br>70:3,5 72:2,18,19 77:2,<br>3 78:1 82:5 84:7 | <b>companies</b> 96:6,12,13                                            | <b>conferred</b> 85:23                                                                                                                                                                   |
| <b>calculations</b> 88:14                                                                                                                                                                        |                                                                                                      | <b>company</b> 47:8 48:13<br>84:21 87:3 93:20 94:1                     | <b>confirm</b> 49:13 76:12<br>93:11 98:21                                                                                                                                                |
| <b>California</b> 56:6 98:18                                                                                                                                                                     | <b>Chapters</b> 49:16,18                                                                             | <b>comparable</b> 86:6<br>98:12                                        | <b>confused</b> 78:6 81:15                                                                                                                                                               |
| <b>call</b> 47:18 58:13 70:21                                                                                                                                                                    | <b>characterize</b> 102:7,11,<br>16                                                                  | <b>compare</b> 77:11,14                                                | <b>connect</b> 73:19                                                                                                                                                                     |
| <b>called</b> 48:12 62:6                                                                                                                                                                         | <b>characterizing</b> 102:14                                                                         | <b>compared</b> 54:24 76:9<br>90:7                                     | <b>connection</b> 103:23<br>108:10                                                                                                                                                       |
| <b>calls</b> 47:20                                                                                                                                                                               | <b>charge</b> 87:2                                                                                   | <b>comparing</b> 63:1 64:20                                            | <b>consecutive</b> 107:24                                                                                                                                                                |
| <b>capabilities</b> 66:6 69:1<br>71:24 72:24 80:2,9                                                                                                                                              | <b>charged</b> 108:17                                                                                | <b>comparison</b> 76:13,19<br>77:9 86:13                               | <b>considered</b> 62:17<br>63:11,15 64:10 66:24<br>68:7 77:13 79:2 86:6<br>87:17                                                                                                         |
| <b>capability</b> 67:17 79:10<br>80:12                                                                                                                                                           | <b>charges</b> 107:21 108:6,<br>8                                                                    | <b>comparisons</b> 98:5,8,<br>16                                       | <b>construction</b> 105:15                                                                                                                                                               |
| <b>capital</b> 69:3 70:1,2,17<br>71:19,23 99:25 104:3<br>107:21 108:14,25<br>109:4,25                                                                                                            | <b>charging</b> 109:11                                                                               | <b>compatibility</b> 54:25<br>55:1                                     | <b>contained</b> 50:20 67:16<br>72:4,21                                                                                                                                                  |
| <b>care</b> 51:21 64:1 68:20<br>77:4                                                                                                                                                             | <b>check</b> 73:14,15 75:8                                                                           | <b>compiled</b> 62:12                                                  | <b>context</b> 69:21                                                                                                                                                                     |
| <b>carry</b> 87:21                                                                                                                                                                               | <b>Cheng</b> 51:4,6 75:6,11,<br>18 83:1                                                              | <b>completed</b> 94:18                                                 | <b>contingency</b> 103:10,<br>12,14,17,21,22 104:1,<br>21 105:1,3,9,10                                                                                                                   |
| <b>case</b> 62:18 63:13 92:10<br>94:3 104:20 107:3<br>108:8                                                                                                                                      | <b>choosing</b> 80:25                                                                                | <b>completely</b> 53:1 59:3<br>72:14 73:1                              | <b>continuation</b> 47:6                                                                                                                                                                 |
| <b>catching</b> 101:12,13                                                                                                                                                                        | <b>chosen</b> 52:14,22 54:12                                                                         | <b>completes</b> 110:5                                                 | <b>continue</b> 109:19,21                                                                                                                                                                |
| <b>categories</b> 79:21                                                                                                                                                                          | <b>circumstance</b> 107:7                                                                            | <b>completion</b> 95:14 96:9<br>97:2 100:12,20,23,24<br>101:16         | <b>contract</b> 79:25                                                                                                                                                                    |
| <b>categorization</b> 103:20                                                                                                                                                                     | <b>CIS</b> 92:12,22 98:4,7<br>102:9                                                                  | <b>complex</b> 48:25 60:9,<br>15,24 61:2 74:7,11,16,<br>18 80:19 86:15 | <b>contracts</b> 79:16<br>107:22 109:3                                                                                                                                                   |
| <b>category</b> 66:3 68:2<br>75:3 105:11                                                                                                                                                         | <b>citation</b> 100:1                                                                                | <b>complexity</b> 60:3 88:19<br>97:8 98:20                             | <b>conversion</b> 87:24 88:8                                                                                                                                                             |
| <b>caused</b> 57:14 61:2<br>90:24                                                                                                                                                                | <b>clarification</b> 48:3<br>95:19                                                                   | <b>compliance</b> 88:4                                                 | <b>correct</b> 50:9,21 53:12<br>59:13,14 61:9,14 62:4,5<br>63:3,8,9,12 64:18,19<br>65:22 66:17,18 68:8<br>69:19 70:1 71:3,17 72:9<br>76:21,22 86:5 93:14<br>98:10 100:1 103:15<br>107:25 |
| <b>CC&amp;B</b> 51:20,21,22,24<br>52:5,15,18,21,22,25<br>53:3,6,8,25 54:1,15<br>55:4,14,15 65:13,18<br>74:20 86:11,12 87:2,24,<br>25 90:22,24 91:4,10,12<br>103:17,21 104:2,4,21<br>105:1,2,7,10 | <b>clarified</b> 90:3                                                                                | <b>complicated</b> 97:10                                               | <b>corrections</b> 50:17                                                                                                                                                                 |
| <b>CCPA</b> 65:11 66:1 78:22                                                                                                                                                                     | <b>clarify</b> 74:13 104:10                                                                          | <b>comply</b> 65:11 78:22                                              | <b>correctly</b> 56:14 64:12<br>102:3,19 107:16 108:7                                                                                                                                    |
| <b>CCPA/CPRA</b> 65:3                                                                                                                                                                            | <b>classes</b> 74:4                                                                                  | <b>component</b> 80:24<br>81:4,5,21                                    | <b>cost</b> 50:12 57:1 59:25<br>76:7,18 77:17 78:15<br>79:6,9 80:20 81:4,6,14,<br>24 82:3 94:10,14 95:3<br>103:13,14,18 107:4                                                            |
| <b>cetera</b> 55:2 57:2 60:21<br>73:16 74:3,18 77:5<br>84:11 86:17                                                                                                                               | <b>clear</b> 83:21                                                                                   | <b>components</b> 80:21<br>81:1,3 109:8                                | <b>costs</b> 71:6 95:14<br>101:22 103:20 105:21<br>106:13,17,18,19,21,25<br>108:16 109:3                                                                                                 |
| <b>challenges</b> 67:4 74:20<br>93:6 99:1                                                                                                                                                        | <b>closely</b> 94:20                                                                                 | <b>computer</b> 103:3                                                  |                                                                                                                                                                                          |
| <b>challenging</b> 87:5                                                                                                                                                                          | <b>closest</b> 98:16                                                                                 | <b>Con</b> 98:18 102:23<br>103:1,6,9                                   |                                                                                                                                                                                          |
| <b>channels</b> 70:11                                                                                                                                                                            | <b>co-sponsoring</b> 50:8,<br>11                                                                     | <b>concern</b> 105:18                                                  |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>COBOL</b> 51:25 53:11,<br>14,15,17 55:5                                                           | <b>confer</b> 83:9 84:20<br>98:21                                      |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>colleagues</b> 83:9                                                                               | <b>conferral</b> 93:7,18                                               |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>column</b> 62:16                                                                                  |                                                                        |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>comment</b> 89:2                                                                                  |                                                                        |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>Commission</b> 56:7,14<br>58:24 99:25 105:19                                                      |                                                                        |                                                                                                                                                                                          |
|                                                                                                                                                                                                  | <b>Commission's</b> 63:25                                                                            |                                                                        |                                                                                                                                                                                          |

|                                |                               |                               |                                |
|--------------------------------|-------------------------------|-------------------------------|--------------------------------|
| <b>counsel</b> 83:18           | 10,11 64:3,8,10,12,20,        | <b>depends</b> 96:21,22       | <b>discussed</b> 58:20 63:15   |
| <b>count</b> 68:14 97:20       | 23 65:2,4,6,14,15,16,20       | <b>deploy</b> 88:2            | 93:2                           |
| <b>couple</b> 62:22 75:10      | 68:23 72:21 73:19,24,         | <b>deployed</b> 90:6          | <b>discussing</b> 57:25        |
| 76:22 87:22                    | 25 75:23 78:19,20             | <b>Deployment</b> 98:4,8      | 69:18 71:25 91:20              |
| <b>court</b> 51:20             | 79:22 84:15 85:11 86:9        | <b>depth</b> 77:22            | <b>discussion</b> 51:19        |
| <b>cover</b> 103:18            | 87:24,25 88:4,5,8 91:9        | <b>describing</b> 53:23,25    | 101:7 103:6                    |
| <b>covered</b> 72:12 73:8      | 92:19 97:17 98:3 99:5,        | <b>desired</b> 84:22 87:12    | <b>discussions</b> 92:20       |
| 75:2                           | 7,9,20 100:5,17 101:3         | 96:3                          | 95:5,7                         |
| <b>CPRA</b> 65:11 66:1 78:22   | <b>date</b> 100:12,16,23,24   | <b>detail</b> 56:25 57:1 58:8 | <b>document</b> 59:24 61:5     |
| 88:4                           | 106:19 108:16 109:16          | 67:21 76:6 77:8,11,21         | 62:1 89:22 92:7 98:2           |
| <b>credits</b> 107:24 108:21   | <b>day</b> 104:7              | 78:2 79:3                     | <b>dog</b> 99:18 100:9         |
| <b>criticism</b> 59:21         | <b>de-identification</b>      | <b>detailed</b> 57:4,12 58:11 | <b>dollar</b> 104:12           |
| <b>cross</b> 75:17             | 65:15                         | 60:5,13 61:9,13 77:6          | <b>dollars</b> 70:17           |
| <b>cross-examination</b>       | <b>decades</b> 60:24 87:25    | <b>details</b> 59:5,7 63:18   | <b>draw</b> 67:6 103:14,20     |
| 51:3,5 83:15                   | <b>decided</b> 90:19          | 73:14                         | <b>drawbacks</b> 60:25         |
| <b>Crosstalk</b> 94:24 96:16   | <b>decision</b> 56:21 57:7,   | <b>determine</b> 85:11 105:1  | <b>drawn</b> 103:22            |
| 99:14                          | 18,22 90:12 91:13 95:9,       | <b>determined</b> 84:4        | <b>driven</b> 69:5 72:8        |
| <b>current</b> 49:10 54:16     | 10                            | <b>develop</b> 59:25          | <b>driver</b> 70:23 71:2 90:8  |
| 86:25 88:19 105:20             | <b>decisions</b> 90:22        | <b>developed</b> 61:5         | <b>due</b> 54:15               |
| 106:13 108:2,7                 | <b>dedicated</b> 81:8 95:8    | <b>developer</b> 48:25        | <b>Duke</b> 98:18              |
| <b>customer</b> 51:21 60:4     | <b>deeper</b> 63:18           | <b>development</b> 48:25      | <b>duration</b> 106:25         |
| 63:25 64:2,3 65:2,17,20        | <b>define</b> 58:14           | 49:1,11 69:10                 | 109:19                         |
| 66:20 68:20,21,22,23,          | <b>definitive</b> 67:25       | <b>difference</b> 65:9 76:7   |                                |
| 24 69:8,11 70:8,10,11,         | <b>degree</b> 48:22           | 97:13 100:19 105:22           | <hr/>                          |
| 12,23 71:7 72:5,20             | <b>delay</b> 89:17 90:13,17,  | 106:14                        | <b>E</b>                       |
| 73:13,19,24,25 74:4,12         | 18,19,20,21,22 100:12,        | <b>differences</b> 95:14      | <hr/>                          |
| 77:4 84:11,15 85:2,12          | 16,20,21 101:4,6,7,15         | <b>differently</b> 87:16      | <b>e.g</b> 107:22,23           |
| 90:15                          | 102:2 106:24 107:8,10         | <b>digital</b> 70:11          | <b>e.g.</b> 108:21             |
| <b>customer-focused</b>        | 108:10,11 109:15,16           | <b>direct</b> 48:17 53:20     | <b>earlier</b> 75:24 84:13     |
| 72:6                           | <b>delays</b> 89:11,14,16,25  | 60:23 107:21                  | 88:18 102:25                   |
| <b>customers</b> 58:11         | 91:2 92:13 93:16 95:2         | <b>directed</b> 56:14,21,24   | <b>early</b> 93:12             |
| 66:22 67:4 73:18,20,23         | 101:24 102:5,10 103:7,        | 58:1                          | <b>economies</b> 81:10,13      |
| 74:1,7,9,12,16,18,19,          | 23 105:20 106:12,22           | <b>directive</b> 58:4         | <b>Edison</b> 98:17,18         |
| 21,23 75:2,3 84:18             | 109:7                         | <b>directives</b> 57:22       | 102:23 103:1,6,9               |
| 85:19,22 86:16 97:10,          | <b>deletion</b> 65:15         | <b>directly</b> 109:2         | <b>effectively</b> 57:14 58:14 |
| 12                             | <b>deliver</b> 58:10,15 80:15 | <b>disallowed</b> 99:25       | 90:9 108:5,14 109:23           |
| <b>customizations</b> 51:25    | 84:17 96:3                    | <b>disclose</b> 100:15        | <b>efficiencies</b> 64:5       |
| 53:14                          | <b>delivered</b> 95:12        | <b>disclosing</b> 100:20      | <b>effort</b> 77:20            |
| <b>cybersecurity</b> 54:6      | <b>delivering</b> 96:6        | <b>discrepancy</b> 74:10      | <b>electric</b> 47:8 48:13     |
| <b>cycles</b> 90:8             | <b>demonstrated</b> 60:14     | <b>discuss</b> 71:16 72:18    | 74:15                          |
|                                | <b>demonstrates</b> 60:6      | 90:6 92:20 102:8,24           | <b>enable</b> 64:1 65:14       |
|                                | <b>denied</b> 67:20           |                               | 68:20,24 69:8 70:9,11          |
|                                | <b>department</b> 49:3,9      |                               |                                |
|                                | <b>dependent</b> 97:7         |                               |                                |
| <hr/>                          |                               |                               |                                |
| <b>D</b>                       |                               |                               |                                |
| <hr/>                          |                               |                               |                                |
| <b>D.1</b> 50:8                |                               |                               |                                |
| <b>data</b> 60:19 62:2 63:5,6, |                               |                               |                                |

|                                                                               |                                                                                                 |                                                                                                                                                                                           |                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>encounter</b> 85:25                                                        | <b>Exelon</b> 98:18                                                                             | <b>feedback</b> 82:14 93:3,5 85:13                                                                                                                                                        |                                                                                                                                                                                                                                       |
| <b>end</b> 51:23 58:15 75:7<br>77:23 78:4 101:11,16,<br>23 104:7 105:6 109:12 | <b>exhibit</b> 49:15,18,19,21,<br>25 50:3,4,6,10 57:19<br>59:16 66:12 67:7 72:19<br>97:21 100:2 | <b>fewer</b> 96:20                                                                                                                                                                        | <b>functionality</b> 58:21<br>59:3 62:13,17 64:13<br>65:19 72:16 77:1 79:7<br>82:3,9 84:9,17 85:4,5,<br>16 86:17 88:12 91:17<br>96:25 97:8 110:3                                                                                      |
| <b>end-state</b> 86:16 100:25                                                 | <b>exhibits</b> 50:20                                                                           | <b>field</b> 84:11                                                                                                                                                                        | <b>functioning</b> 54:17                                                                                                                                                                                                              |
| <b>Energy</b> 93:7,19 94:16<br>95:3 102:21                                    | <b>exist</b> 54:12 78:9,10,14                                                                   | <b>fields</b> 85:22                                                                                                                                                                       | <b>functions</b> 58:10 65:6<br>85:16                                                                                                                                                                                                  |
| <b>Energy's</b> 94:7                                                          | <b>existed</b> 54:13,21                                                                         | <b>filed</b> 100:14 101:2<br>105:5                                                                                                                                                        | <b>funding</b> 103:22 104:18                                                                                                                                                                                                          |
| <b>engineering</b> 48:23                                                      | <b>exists</b> 65:17                                                                             | <b>filing</b> 62:14 101:10                                                                                                                                                                | <b>funds</b> 104:16 105:14                                                                                                                                                                                                            |
| <b>enhance</b> 64:2 69:9                                                      | <b>expecting</b> 88:12                                                                          | <b>final</b> 80:22 100:25                                                                                                                                                                 | <b>future</b> 104:17                                                                                                                                                                                                                  |
| <b>enhancing</b> 69:18                                                        | <b>expense</b> 104:3                                                                            | <b>finance</b> 106:13 109:1                                                                                                                                                               |                                                                                                                                                                                                                                       |
| <b>enrollment</b> 66:22                                                       | <b>experience</b> 68:22 74:2<br>92:8 95:3                                                       | <b>financial</b> 108:2                                                                                                                                                                    |                                                                                                                                                                                                                                       |
| <b>ensure</b> 95:6                                                            | <b>experienced</b> 82:8<br>89:16 92:12 94:16<br>102:13                                          | <b>financing</b> 105:21<br>106:21                                                                                                                                                         |                                                                                                                                                                                                                                       |
| <b>entire</b> 56:16,20,22<br>64:21                                            | <b>expert</b> 105:18                                                                            | <b>find</b> 103:3                                                                                                                                                                         | <hr/> <b>G</b> <hr/>                                                                                                                                                                                                                  |
| <b>entirety</b> 81:17 82:17<br>84:16                                          | <b>experts</b> 79:14,15 84:20<br>85:6,7 91:15                                                   | <b>focus</b> 85:10                                                                                                                                                                        | <b>gained</b> 92:8                                                                                                                                                                                                                    |
| <b>escalations</b> 95:11                                                      | <b>explain</b> 64:9 65:9 77:16<br>81:16,25 84:25 89:13<br>92:17 100:19                          | <b>focused</b> 85:15 103:8                                                                                                                                                                | <b>gas</b> 47:8 48:12 74:15                                                                                                                                                                                                           |
| <b>escaping</b> 92:23                                                         | <b>explaining</b> 109:6                                                                         | <b>focuses</b> 70:8                                                                                                                                                                       | <b>gathering</b> 85:11                                                                                                                                                                                                                |
| <b>establish</b> 52:24 53:5                                                   | <b>expressed</b> 50:23                                                                          | <b>focusing</b> 105:23                                                                                                                                                                    | <b>gave</b> 56:23 82:12                                                                                                                                                                                                               |
| <b>estimate</b> 61:11 75:2<br>79:9,25 80:20,22 81:14,<br>17,18,20 82:2,19,21  | <b>extended</b> 51:24 107:1                                                                     | <b>footnote</b> 106:6,9                                                                                                                                                                   | <b>general</b> 57:2 86:24<br>89:6                                                                                                                                                                                                     |
| <b>estimated</b> 81:24                                                        | <hr/> <b>F</b> <hr/>                                                                            | <b>forecast</b> 50:12 56:8<br>59:21,24 60:7,13,14<br>61:8,11 64:1,14 69:5<br>70:23 71:23 72:3 76:24<br>77:8 78:15 79:6,11,16<br>80:5,8,11,18 81:3<br>101:25 105:20 106:13,<br>16,22,23,24 | <b>generally</b> 84:3 89:13                                                                                                                                                                                                           |
| <b>estimates</b> 56:8 59:25<br>77:17 80:16,24                                 |                                                                                                 | <b>forecasted</b> 94:20                                                                                                                                                                   | <b>give</b> 51:13 55:24 61:25<br>64:25 67:25 68:12<br>75:25 82:4,13,15,16<br>89:19 91:25 108:13                                                                                                                                       |
| <b>evaluated</b> 63:15 82:9                                                   | <b>face</b> 96:2,12 97:3                                                                        | <b>forecasts</b> 76:25 77:6<br>78:17 104:13                                                                                                                                               | <b>go-live</b> 100:16 109:16                                                                                                                                                                                                          |
| <b>evidentiary</b> 47:7                                                       | <b>faced</b> 93:6 95:14 105:2                                                                   | <b>forgot</b> 73:2                                                                                                                                                                        | <b>goals</b> 94:21                                                                                                                                                                                                                    |
| <b>evolves</b> 55:2                                                           | <b>facilitate</b> 95:9                                                                          | <b>forward</b> 53:17 78:23<br>102:6 109:7                                                                                                                                                 | <b>Good</b> 51:8,9 75:20,21<br>83:17,19                                                                                                                                                                                               |
| <b>EXAMINATION</b> 48:17                                                      | <b>facing</b> 67:4                                                                              | <b>fourth</b> 55:13 66:21                                                                                                                                                                 | <b>governance</b> 63:6,11<br>78:20 79:22 87:24                                                                                                                                                                                        |
| <b>examine</b> 82:20                                                          | <b>facts</b> 50:20                                                                              | <b>frame</b> 102:17 106:2                                                                                                                                                                 | <b>GR</b> 63:3,12                                                                                                                                                                                                                     |
| <b>examples</b> 74:25                                                         | <b>fair</b> 54:1 86:20                                                                          | <b>framework</b> 53:18                                                                                                                                                                    | <b>graduated</b> 48:21                                                                                                                                                                                                                |
| <b>Excellent</b> 83:23                                                        | <b>fairly</b> 67:2                                                                              | <b>front</b> 89:22                                                                                                                                                                        | <b>granularity</b> 76:23                                                                                                                                                                                                              |
| <b>excuse</b> 70:22 77:9<br>82:24 86:10 88:24<br>104:4                        | <b>familiar</b> 91:16                                                                           | <b>full</b> 79:22 80:15 90:9                                                                                                                                                              | <b>GRC</b> 52:15,18,22,25<br>53:7 56:8,9,21,23 57:4,<br>22 58:12 59:1,8,13,17<br>60:13 62:18 63:14,15,<br>21 64:9,11,18,21,22<br>65:7 66:10,25 67:3,13,<br>16,19,24 68:7 71:8,19<br>72:2,10 73:10,18 74:10<br>76:21,24 77:13,18 78:2, |
| <b>executed</b> 49:8 52:17                                                    | <b>fashion</b> 102:8                                                                            | <b>functional</b> 79:15 85:8                                                                                                                                                              |                                                                                                                                                                                                                                       |
| <b>execution</b> 61:3 90:11<br>105:8 109:15                                   | <b>feature</b> 91:8,11,15                                                                       | <b>functionalities</b> 58:6,9<br>65:13 71:20 72:12,15,<br>17 73:3 77:12,17 78:8,<br>10,12,13,15 80:13,14                                                                                  |                                                                                                                                                                                                                                       |
| <b>executions</b> 102:13                                                      | <b>features</b> 58:5,10,21<br>59:2 65:13 69:9,18,22<br>72:23 73:21 82:12<br>85:17               |                                                                                                                                                                                           |                                                                                                                                                                                                                                       |



|                                                                                          |                                                                                                     |                                                                                                                                            |                                                                 |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 3,5,9,11,24                                                                              |                                                                                                     | <b>included</b> 65:5,7,12<br>71:2,20,24 96:24<br>104:13 105:18                                                                             | <b>involved</b> 86:22                                           |
| <b>Great</b> 83:24                                                                       | <b>I</b>                                                                                            |                                                                                                                                            | <b>irrelevant</b> 78:11                                         |
| <b>groups</b> 85:11                                                                      | <b>identical</b> 52:6                                                                               | <b>includes</b> 70:3 106:16                                                                                                                | <b>issues</b> 70:11 85:12,25<br>89:7 93:5                       |
| <b>guidelines</b> 56:24,25                                                               | <b>identification</b> 49:15<br>65:14 91:9                                                           | <b>including</b> 60:2 86:15                                                                                                                | <b>item</b> 64:15 99:18 100:8                                   |
| <b>H</b>                                                                                 | <b>identified</b> 63:17 64:8<br>78:4 91:11 96:25<br>101:22 103:7                                    | <b>incompatible</b> 54:16                                                                                                                  | <b>items</b> 63:14 76:19<br>77:25 78:18 82:14                   |
| <b>hand</b> 48:4,10                                                                      | <b>identify</b> 79:3 80:3,5<br>97:21                                                                | <b>increase</b> 69:5 90:12                                                                                                                 | <b>IVR</b> 74:3                                                 |
| <b>happen</b> 93:15 109:13                                                               | <b>identifying</b> 98:10                                                                            | <b>incurred</b> 108:9                                                                                                                      | <b>J</b>                                                        |
| <b>happened</b> 93:8 103:6                                                               | <b>ILM</b> 91:8                                                                                     | <b>indicating</b> 68:6                                                                                                                     | <b>Java</b> 53:16 55:5                                          |
| <b>happening</b> 54:1                                                                    | <b>imp</b> 86:10                                                                                    | <b>individual</b> 78:17 81:4,<br>5,21 86:21                                                                                                | <b>Joanna</b> 47:10                                             |
| <b>happy</b> 106:3                                                                       | <b>impact</b> 60:3,4 61:3<br>101:16,21                                                              | <b>industrial</b> 48:22 74:15,<br>22                                                                                                       | <b>judge</b> 47:4,11                                            |
| <b>hard</b> 61:4                                                                         | <b>impacted</b> 74:9 101:18,<br>20                                                                  | <b>Industry</b> 98:5,8                                                                                                                     | <b>judgment</b> 50:24                                           |
| <b>Hat</b> 54:16                                                                         | <b>impacts</b> 101:6                                                                                | <b>information</b> 57:8,11<br>58:25 61:10,15 68:25<br>72:21 73:15 74:5 75:4<br>82:24,25 91:7 94:25<br>95:5                                 | <b>July</b> 100:15 101:11,23                                    |
| <b>head</b> 93:10 94:9 103:2                                                             | <b>implement</b> 61:1 77:7,<br>23 79:1,19 80:2,8,12<br>81:1,4,19 82:6 87:11<br>88:12,20 91:14 98:25 | <b>initiative</b> 47:10 49:12<br>50:12 56:16,22,24 57:5<br>58:2 62:14 65:24 72:1<br>73:23 77:21 85:14,18<br>87:1 92:24 100:13,23<br>104:15 | <b>June</b> 47:2 48:7 90:7<br>109:10                            |
| <b>header</b> 98:5                                                                       | <b>implementation</b> 86:14<br>87:2 88:24 89:16,25<br>90:14 91:7,16 92:9,22<br>98:22 102:24         | <b>initiatives</b> 56:20                                                                                                                   | <b>K</b>                                                        |
| <b>heard</b> 74:22 85:1 102:3,<br>18                                                     | <b>implementations</b><br>88:23 102:9                                                               | <b>insight</b> 61:4                                                                                                                        | <b>kind</b> 49:3 57:2 73:12<br>88:22 97:7 98:19<br>109:17 110:3 |
| <b>hearing</b> 47:7                                                                      | <b>implemented</b> 52:18,19<br>65:20 67:15 72:17 73:4<br>82:13 86:11 92:11                          | <b>instance</b> 85:1,20                                                                                                                    | <b>knew</b> 101:5                                               |
| <b>Hedges</b> 47:21,22,24<br>48:8,11,19,21 49:13<br>51:2,8 75:20 83:3,4,17<br>98:2 110:6 | <b>implementing</b> 78:3<br>81:8 82:8 85:17 89:5<br>97:3                                            | <b>instances</b> 54:22                                                                                                                     | <b>knowledge</b> 50:21<br>92:17 93:5 102:11<br>104:25           |
| <b>high</b> 82:7 84:7                                                                    | <b>implications</b> 101:23<br>105:24 107:2                                                          | <b>integral</b> 54:17                                                                                                                      | <b>knowledge-sharing</b><br>92:9,18                             |
| <b>higher</b> 59:8 81:6 107:3,<br>6                                                      | <b>improve</b> 64:2                                                                                 | <b>integration</b> 81:11                                                                                                                   | <b>L</b>                                                        |
| <b>highlight</b> 87:22                                                                   | <b>Improved</b> 66:21                                                                               | <b>integrator</b> 82:6 91:14                                                                                                               | <b>labeled</b> 62:22 63:20<br>66:10 98:4                        |
| <b>highlighting</b> 70:16,18                                                             | <b>improvement</b> 63:6,8                                                                           | <b>interconnecting</b> 67:5                                                                                                                | <b>labor</b> 59:25 79:17,18,25<br>107:22                        |
| <b>hindsight</b> 60:18 61:6                                                              | <b>improvements</b> 63:11<br>78:20                                                                  | <b>interconnection</b><br>66:21                                                                                                            | <b>lack</b> 54:7                                                |
| <b>hired</b> 48:23                                                                       | <b>improves</b> 55:20                                                                               | <b>interface</b> 84:12,14                                                                                                                  | <b>language</b> 55:6 58:13<br>108:19 110:2                      |
| <b>hit</b> 109:3                                                                         | <b>in-state</b> 79:13                                                                               | <b>internal</b> 79:14,17 80:1<br>84:18 85:10 88:4                                                                                          | <b>large</b> 60:8,15 74:15,22<br>86:15 87:1 97:9,12             |
| <b>hold</b> 92:14                                                                        |                                                                                                     | <b>introduce</b> 47:22 48:20                                                                                                               | <b>large-complex</b> 81:10                                      |
| <b>home</b> 48:1                                                                         |                                                                                                     | <b>investigation</b> 58:11                                                                                                                 |                                                                 |
| <b>Honor</b> 47:15,20 51:2,7<br>75:7,11,19 83:2,8 97:23                                  |                                                                                                     | <b>investment</b> 60:8                                                                                                                     |                                                                 |
| <b>hour</b> 110:9                                                                        |                                                                                                     | <b>investments</b> 68:20,23<br>72:6                                                                                                        |                                                                 |
| <b>hours</b> 79:25 80:11                                                                 |                                                                                                     |                                                                                                                                            |                                                                 |
| <b>hundred</b> 53:16                                                                     |                                                                                                     |                                                                                                                                            |                                                                 |
| <b>hypothetical</b> 109:17                                                               |                                                                                                     |                                                                                                                                            |                                                                 |
| <b>hypotheticals</b> 96:15                                                               |                                                                                                     |                                                                                                                                            |                                                                 |

|                                                                             |                                                                                       |                                                                                                                                           |                                                                  |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>largely</b> 97:3                                                         | <b>made</b> 90:12,21 91:13                                                            | <b>mentioning</b> 75:3                                                                                                                    | <hr/> <b>N</b> <hr/>                                             |
| <b>largest</b> 74:8                                                         | <b>magnitude</b> 94:15                                                                | <b>met</b> 92:25 102:4,8<br>103:1                                                                                                         |                                                                  |
| <b>lasts</b> 55:1                                                           | <b>main</b> 70:23 71:4                                                                | <b>meter-to-cash</b> 49:2                                                                                                                 | <b>narrow</b> 67:2                                               |
| <b>law</b> 47:4,11                                                          | <b>major</b> 92:12                                                                    | <b>metering</b> 74:17,23                                                                                                                  | <b>nature</b> 80:17                                              |
| <b>leaders</b> 92:25                                                        | <b>make</b> 50:18 83:23<br>90:14 102:3,19                                             | <b>methodology</b> 88:16,<br>17,21,23,24                                                                                                  | <b>nearing</b> 75:7                                              |
| <b>leadership</b> 92:25                                                     | <b>making</b> 95:10 97:20                                                             | <b>million</b> 97:11 103:13,17<br>104:24                                                                                                  | <b>necessarily</b> 87:17<br>88:20                                |
| <b>learned</b> 92:10                                                        | <b>manage</b> 70:9 87:10                                                              | <b>mind</b> 87:19                                                                                                                         | <b>needed</b> 57:11 59:6<br>69:7 84:8,12,17 91:14<br>109:16      |
| <b>learning</b> 67:8 102:12                                                 | <b>managed</b> 86:21 87:20                                                            | <b>minutes</b> 75:8,10                                                                                                                    | <b>NEM</b> 66:22 67:4 74:17                                      |
| <b>legacy</b> 86:12 97:5                                                    | <b>management</b> 49:6<br>65:2,20 68:23 77:5 80:7<br>81:7 86:3 87:6 89:6<br>91:7 96:2 | <b>mischaracterize</b><br>102:16                                                                                                          | <b>net</b> 74:17,23                                              |
| <b>legal</b> 64:4                                                           | <b>manager</b> 47:25 49:5                                                             | <b>missing</b> 97:19                                                                                                                      | <b>Nextera</b> 92:21 93:7,17,<br>18 94:7,16 95:3 98:11<br>102:21 |
| <b>lens</b> 64:19                                                           | <b>managing</b> 86:22                                                                 | <b>misspelling</b> 63:7                                                                                                                   | <b>nimble</b> 69:10                                              |
| <b>lessons</b> 92:10                                                        | <b>manner</b> 106:15                                                                  | <b>mixed</b> 68:13                                                                                                                        | <b>non-labor</b> 59:25                                           |
| <b>letter</b> 104:19                                                        | <b>manual</b> 65:23 108:4<br>109:1,5                                                  | <b>model</b> 77:5                                                                                                                         | <b>note</b> 105:5                                                |
| <b>level</b> 56:25 59:9 67:20<br>76:13,23 77:8,11,20<br>78:1 79:2 82:7 84:7 | <b>marked</b> 49:15,21,25<br>50:6,10 51:11                                            | <b>modernization</b> 47:9<br>49:12 50:11 57:5 62:14<br>65:24 71:25 73:22<br>77:21 85:14,18 87:11<br>92:24 95:23 98:23<br>100:13,23 104:15 | <b>noted</b> 56:7 77:12                                          |
| <b>levels</b> 76:22                                                         | <b>marketplace</b> 82:7                                                               | <b>modular</b> 88:17                                                                                                                      | <b>notes</b> 103:3                                               |
| <b>Lifecycle</b> 91:7                                                       | <b>matching</b> 94:20                                                                 | <b>module</b> 77:4 81:15                                                                                                                  | <b>noticed</b> 98:11                                             |
| <b>linear</b> 88:15                                                         | <b>materials</b> 50:14 107:22                                                         | <b>modules</b> 77:3,7                                                                                                                     | <b>November</b> 51:23,24                                         |
| <b>lines</b> 92:2 106:11,12<br>107:14                                       | <b>matters</b> 47:13                                                                  | <b>moment</b> 83:9 105:23<br>106:5                                                                                                        | <b>number</b> 58:16 60:18<br>78:19 97:10,22 109:4,<br>12         |
| <b>list</b> 55:13 58:8 62:12<br>78:5 87:9                                   | <b>Matthew</b> 47:21,24<br>48:11,21                                                   | <b>month</b> 106:18 109:13,<br>14                                                                                                         | <b>numbers</b> 97:18 106:7                                       |
| <b>listed</b> 74:24 78:20<br>98:11,13,17                                    | <b>MDM</b> 77:4                                                                       | <b>monthly</b> 90:10                                                                                                                      | <hr/> <b>O</b> <hr/>                                             |
| <b>live</b> 104:4,5 109:14                                                  | <b>meaning</b> 106:24                                                                 | <b>months</b> 107:24 109:24,<br>25                                                                                                        |                                                                  |
| <b>lived</b> 54:24 55:19                                                    | <b>meaningful</b> 86:23                                                               | <b>morning</b> 51:8,9 75:20,<br>21 88:18                                                                                                  | <b>Oakland</b> 48:2                                              |
| <b>location</b> 78:1                                                        | <b>means</b> 71:2                                                                     | <b>move</b> 47:17 52:5 55:4,<br>5,14 58:17 59:11 61:17<br>83:1,7 86:3 88:15                                                               | <b>occurred</b> 92:18 107:8                                      |
| <b>log</b> 73:14                                                            | <b>meant</b> 63:7 73:2 104:12                                                         | <b>moved</b> 78:23                                                                                                                        | <b>office</b> 48:1                                               |
| <b>longer</b> 87:2 107:4<br>109:18,25                                       | <b>mechanically</b> 109:21                                                            | <b>moving</b> 55:3 73:23                                                                                                                  | <b>older</b> 54:23                                               |
| <b>looked</b> 63:18 84:7<br>102:22                                          | <b>mechanism</b> 109:20<br>110:1,2                                                    | <b>multi-channel</b> 70:13                                                                                                                | <b>on-demand</b> 68:24<br>70:12                                  |
| <b>lot</b> 67:23                                                            | <b>meet</b> 64:3 65:25 105:3                                                          | <b>multiple</b> 60:2 99:21                                                                                                                | <b>one-time</b> 109:5                                            |
| <b>lots</b> 96:5                                                            | <b>meetings</b> 93:23 102:23                                                          |                                                                                                                                           | <b>Ongoing</b> 68:23                                             |
| <b>lower</b> 48:9 105:21<br>106:14,19,20,22                                 | <b>memory</b> 52:12                                                                   |                                                                                                                                           | <b>open</b> 54:7                                                 |
| <hr/> <b>M</b> <hr/>                                                        |                                                                                       |                                                                                                                                           | <b>operates</b> 106:3 108:1,3                                    |
| <b>machine</b> 67:8                                                         | <b>mention</b> 69:16                                                                  |                                                                                                                                           | <b>operating</b> 95:22                                           |
|                                                                             | <b>mentioned</b> 60:23<br>64:13 69:22 78:19 93:8                                      |                                                                                                                                           |                                                                  |



|                                                                |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>operation</b> 91:17                                         | <b>part</b> 52:15,25 57:1,16<br>60:19 63:18 64:13,17,<br>21,25 66:25 67:24<br>71:25 73:8,10,22 76:5,<br>7,13 77:19,20 78:3<br>81:11 87:6 90:20<br>104:14                                                                                                                          | 90:12 91:16 92:5,8 94:5<br>98:5,16,20,21 99:24<br>100:14,15 101:11,17,19<br>102:4,8 103:16 104:18<br>105:1,21 106:14,16<br>109:22 | <b>preparation</b> 62:17                                                                                                                                                       |
| <b>operational</b> 64:4 90:9,<br>13                            | <b>participate</b> 93:22                                                                                                                                                                                                                                                          | <b>PG&amp;E's</b> 48:24 52:5<br>57:16 59:12 72:18 79:6<br>84:18 85:19 94:11<br>105:17                                             | <b>prepare</b> 76:25 77:6                                                                                                                                                      |
| <b>operations</b> 48:23<br>66:20                               | <b>participated</b> 93:24,25                                                                                                                                                                                                                                                      | <b>PG&amp;E-04</b> 89:13 91:20<br>93:16 103:24                                                                                    | <b>prepared</b> 50:14 57:3<br>59:9                                                                                                                                             |
| <b>opinions</b> 50:23                                          | <b>parties</b> 47:13,17 56:6                                                                                                                                                                                                                                                      | <b>PGE-01</b> 49:16 53:20                                                                                                         | <b>preparing</b> 77:20                                                                                                                                                         |
| <b>opportunities</b> 95:6                                      | <b>parties'</b> 59:20                                                                                                                                                                                                                                                             | <b>PGE-03</b> 49:25 51:11<br>55:23 61:19 75:24                                                                                    | <b>preplanning</b> 91:10                                                                                                                                                       |
| <b>options</b> 85:3                                            | <b>parts</b> 99:21                                                                                                                                                                                                                                                                | <b>PGE-04</b> 50:6                                                                                                                | <b>present</b> 77:17,18                                                                                                                                                        |
| <b>Oracle</b> 53:18 89:1 91:3,<br>8,13 94:1,5 95:23 97:1,<br>4 | <b>pause</b> 108:5,18,25<br>110:4                                                                                                                                                                                                                                                 | <b>pge.com</b> 69:7,23 70:4,<br>24 72:6,8,13,25 73:14<br>84:13                                                                    | <b>presented</b> 49:19<br>62:13,16 67:21 78:24                                                                                                                                 |
| <b>Oracle's</b> 54:7                                           | <b>paused</b> 107:20 108:3,<br>15                                                                                                                                                                                                                                                 | <b>Pge.com.</b> 69:25                                                                                                             | <b>primarily</b> 69:6                                                                                                                                                          |
| <b>Oracle-specific</b> 99:2                                    | <b>pausing</b> 109:20                                                                                                                                                                                                                                                             | <b>phase</b> 81:12 91:10<br>105:7                                                                                                 | <b>primary</b> 59:23 85:11<br>89:24 90:8 95:2                                                                                                                                  |
| <b>order</b> 80:1 87:10,20<br>108:14 109:4,12                  | <b>payment</b> 84:10                                                                                                                                                                                                                                                              | <b>phases</b> 57:5                                                                                                                | <b>print</b> 84:10                                                                                                                                                             |
| <b>orders</b> 107:21 108:25                                    | <b>PDF</b> 97:16                                                                                                                                                                                                                                                                  | <b>piece</b> 67:2 71:23                                                                                                           | <b>prior</b> 86:6 100:18                                                                                                                                                       |
| <b>organization</b> 48:1 49:7                                  | <b>people</b> 86:21,22                                                                                                                                                                                                                                                            | <b>pivot</b> 89:20                                                                                                                | <b>privacy</b> 63:5,10 64:3,8,<br>10,12,23 65:5,6 78:20                                                                                                                        |
| <b>organizational</b> 81:7                                     | <b>percent</b> 53:16 75:5                                                                                                                                                                                                                                                         | <b>plan</b> 88:15 101:11,20                                                                                                       | <b>problem</b> 55:25                                                                                                                                                           |
| <b>original</b> 87:2                                           | <b>percentage</b> 75:1 94:15                                                                                                                                                                                                                                                      | <b>plan-analyze</b> 105:6                                                                                                         | <b>proceed</b> 48:16 51:4                                                                                                                                                      |
| <b>outcome</b> 87:12 88:1                                      | <b>Perez-green</b> 47:4,10,<br>16 48:4,9,15 51:4 75:9,<br>12,16 83:6,11,13 97:21,<br>24 110:8                                                                                                                                                                                     | <b>planners</b> 59:24                                                                                                             | <b>proceeded</b> 78:2                                                                                                                                                          |
| <b>outcomes</b> 95:12                                          | <b>performance</b> 85:8<br>88:6,7,9                                                                                                                                                                                                                                               | <b>platform</b> 94:5                                                                                                              | <b>proceeding</b> 47:1,11<br>49:14 56:8 59:9 63:19<br>67:21                                                                                                                    |
| <b>output</b> 60:1                                             | <b>performs</b> 65:16                                                                                                                                                                                                                                                             | <b>platforms</b> 96:7 98:25                                                                                                       | <b>process</b> 57:10 65:16<br>104:19                                                                                                                                           |
| <b>outreach</b> 85:21                                          | <b>period</b> 107:4 108:15,23                                                                                                                                                                                                                                                     | <b>play</b> 108:22                                                                                                                | <b>processes</b> 65:23                                                                                                                                                         |
| <b>overcome</b> 96:3                                           | <b>pertaining</b> 93:19                                                                                                                                                                                                                                                           | <b>point</b> 57:16 105:25                                                                                                         | <b>processing</b> 84:10                                                                                                                                                        |
| <b>overrun</b> 103:14                                          | <b>PET</b> 59:23 60:1,6,20<br>61:5                                                                                                                                                                                                                                                | <b>pointed</b> 110:2                                                                                                              | <b>produce</b> 81:24                                                                                                                                                           |
| <b>overruns</b> 94:14 95:3<br>103:18 104:7,9,10,17             | <b>PET's</b> 60:18                                                                                                                                                                                                                                                                | <b>pointing</b> 58:7 77:25                                                                                                        | <b>product</b> 91:8 97:4,5,6                                                                                                                                                   |
| <b>oversee</b> 49:11                                           | <b>PG&amp;E</b> 47:9,15,18,20<br>48:1 49:18,19,21 50:10<br>51:20 52:14 54:5,12,21<br>55:10,16 56:14,15,19,<br>22,24 57:7,8,11,13<br>58:1,20,24 59:1,23<br>60:23 62:3,12,15 64:2,<br>17 65:11 67:5,7,14 69:8<br>70:9,17 77:16 78:14<br>79:9,24 84:3,20 85:10<br>86:5 87:4,10 88:18 | <b>policy</b> 108:2                                                                                                               | <b>production</b> 90:15                                                                                                                                                        |
| <b>oversight</b> 49:7                                          |                                                                                                                                                                                                                                                                                   | <b>poor</b> 69:21                                                                                                                 | <b>production-like</b> 90:10                                                                                                                                                   |
| <hr/> <b>P</b> <hr/>                                           |                                                                                                                                                                                                                                                                                   | <b>portion</b> 92:15                                                                                                              | <b>professional</b> 50:24                                                                                                                                                      |
| <b>p.m.</b> 110:9,10                                           |                                                                                                                                                                                                                                                                                   | <b>position</b> 49:5                                                                                                              | <b>program</b> 69:10 87:11<br>94:16 95:11,22,24<br>98:23 108:10                                                                                                                |
| <b>pace</b> 55:19                                              |                                                                                                                                                                                                                                                                                   | <b>possibility</b> 85:2                                                                                                           | <b>programs</b> 60:1 74:17<br>91:3 96:13                                                                                                                                       |
| <b>Pacific</b> 47:8 48:12                                      |                                                                                                                                                                                                                                                                                   | <b>potentially</b> 67:11 80:4                                                                                                     | <b>project</b> 49:6 52:5,17<br>56:10 57:7 60:3,6,8,9,<br>15,20 64:16,23 65:7,21<br>66:17 67:19 69:17<br>70:25 71:8 73:8 76:8,9<br>78:23 80:6,7,15 81:7,<br>10,21 82:15,16 84:2 |
| <b>pages</b> 62:22 76:12                                       |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |
| <b>paper</b> 97:19                                             |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |
| <b>papers</b> 68:12                                            |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |
| <b>paragraph</b> 71:16                                         |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |
| <b>parlance</b> 85:3                                           |                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 86:7,13,16,19,21,23<br>87:6,7,21 88:1 89:6,9<br>91:1 93:13 95:8 96:3<br>100:12,20 101:6 102:13<br>103:21 104:6 105:8<br>106:19,23,25 107:10<br>109:8,10,14,16,18,25                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>quick</b> 58:18<br><b>quicker</b> 95:10<br><b>quote</b> 92:14 105:19<br><b>quoted</b> 108:19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16 83:11,12,13 110:8<br><b>recorded</b> 104:6<br><b>records</b> 88:1<br><b>recovery</b> 99:25<br><b>Red</b> 54:16<br><b>redirect</b> 83:10<br><b>reduce</b> 88:3 101:20<br>104:1<br><b>reduced</b> 103:19 104:22<br>105:2<br><b>reevaluate</b> 56:15<br><b>refer</b> 62:11 74:18<br><b>reference</b> 100:24<br>108:20<br><b>referenced</b> 62:21<br>75:23 102:25<br><b>references</b> 68:14<br><b>referencing</b> 89:15,17<br><b>referring</b> 69:23 98:2<br>100:2,5,8 106:5 107:11<br><b>refunds</b> 107:23 108:21<br><b>regard</b> 52:21 84:2 96:9<br><b>regulatory</b> 64:3<br><b>related</b> 79:7 86:4 99:1<br><b>relates</b> 72:10 89:4 90:5<br>108:11<br><b>relationships</b> 70:10<br><b>released</b> 51:23 52:11<br><b>relevant</b> 73:19<br><b>remedy</b> 54:6<br><b>remember</b> 94:9,13<br><b>remote</b> 47:6<br><b>removal</b> 91:9<br><b>remove</b> 99:24<br><b>repeat</b> 66:12<br><b>rephrase</b> 78:7 95:17<br><b>replenished</b> 105:10<br><b>reporter</b> 48:3 51:21<br><b>represent</b> 50:23 | <b>request</b> 52:25 53:7<br>62:2 64:20 75:23 82:5<br>92:19 98:3 99:20<br>100:17 101:3 103:19,25<br>104:3,18<br><b>requested</b> 103:12<br>104:11<br><b>requesting</b> 95:19<br>104:8,14,16<br><b>requests</b> 86:9<br><b>require</b> 57:7,8 74:19<br><b>required</b> 57:3 82:21<br>84:24<br><b>requirement</b> 59:2<br>63:16 78:21,25 79:3,5<br>80:17 81:24 82:1,20,22<br><b>requirements</b> 57:2,6,<br>12,13,18 58:5,21 59:7<br>62:13 63:18 64:4 66:1<br>77:22 78:4 79:12,23<br>81:17,19 82:12,14,17<br>84:4 85:9<br><b>research</b> 48:23 58:12<br><b>resolve</b> 70:10<br><b>resource</b> 80:5,11<br><b>resources</b> 57:1 82:21<br>84:19 86:24 87:1<br>102:23 109:3,10<br><b>respect</b> 90:17 96:15<br>97:15 102:2 109:8<br><b>respond</b> 70:10<br><b>responded</b> 64:10 86:8<br><b>responding</b> 59:20<br><b>response</b> 62:4 92:20<br>93:15 97:17 98:3 99:5,<br>6,8,9,18 100:5,8,17<br><b>responses</b> 82:16<br><b>responsible</b> 49:7<br><b>rest</b> 65:1 85:19 105:8<br><b>restart</b> 90:19,25<br><b>restarting</b> 90:20<br><b>restate</b> 76:1 99:6<br><b>resubmit</b> 56:24 |
| <b>projected</b> 100:22<br><b>projects</b> 49:8,11 60:1<br>61:3 64:1 69:7 71:2,19<br>73:11 86:6,15 89:3,4,17<br>93:5,6 95:6 96:7,22<br>97:13 108:17<br><b>proposal</b> 56:15 82:5,16<br>94:11<br><b>proposed</b> 58:6,22,25<br>59:1,4,6 64:17 67:13,<br>15,19 70:17 71:8,19<br>72:13 73:8,9 76:8,9<br><b>proposing</b> 71:21<br><b>provide</b> 57:1 58:24<br>59:5 68:21 69:9,10<br>70:12 73:25 76:6,14,18<br>77:8,16 78:15<br><b>provided</b> 60:13 82:23<br>101:3<br><b>providing</b> 72:22 73:24<br><b>prudent</b> 90:22<br><b>Public</b> 56:7<br><b>pulling</b> 77:24<br><b>put</b> 59:8 76:24 79:11,<br>12,15 98:15<br><b>putting</b> 63:13 | <hr/> <b>R</b> <hr/> <b>raise</b> 48:4<br><b>raised</b> 105:18<br><b>ramification</b> 106:15<br><b>rate</b> 48:25 69:10 73:16<br><b>rates</b> 60:24 61:2 72:3<br>74:16 85:3 88:14,19<br><b>re-scope</b> 56:22 57:7<br>58:2,4,13<br><b>re-scoped</b> 56:16,20<br>57:9<br><b>re-scoping</b> 57:14<br><b>reached</b> 51:23 82:7<br><b>read</b> 51:17 69:4 71:13,<br>14 76:5 91:21 99:18<br>100:11<br><b>readiness</b> 81:8 90:9,13<br><b>reading</b> 92:7<br><b>ready</b> 90:15 99:19<br><b>real</b> 58:18 90:15<br><b>realize</b> 57:13 97:18<br>106:7<br><b>reason</b> 52:13 55:4,13<br>81:19 109:17<br><b>reasons</b> 61:2<br><b>rebuttal</b> 51:11 55:22<br>59:17 61:7,18 66:3 68:3<br>100:14,18 101:2,8,10<br>107:13 108:20 110:2<br><b>recall</b> 57:9 64:12 93:9,<br>21 94:6,19,22 95:4,5,7<br>101:9 102:23 103:2,4<br><b>recent</b> 52:20<br><b>recess</b> 75:15 110:9<br><b>recollection</b> 98:15<br><b>record</b> 47:5 75:10,12, |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <hr/> <b>Q</b> <hr/> <b>qualifications</b> 49:22<br><b>question</b> 52:10 53:15<br>54:20 55:9 67:18 76:4,<br>6,15 78:7,13,16 80:10<br>87:16 89:21 90:3 91:22<br>92:15 95:17 96:8,9 98:3<br>99:4,8,16,17,21,24<br>100:6 102:17 106:2,21<br>107:12<br><b>questions</b> 83:2,10 84:1<br>85:22 86:4 105:13<br>110:5                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                                                                            |                                                                                                                                |                                                                                             |                                                                                          |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>resubmitting</b> 57:10                                                  | <b>scope</b> 52:4 57:11 58:15<br>60:21 62:18 63:1,3,12,<br>14 65:5,10,24 67:2 68:7<br>76:20,21 77:25 80:14<br>82:15 84:4 86:19 | <b>shown</b> 77:24                                                                          | 15,24 103:7                                                                              |
| <b>result</b> 56:15,19                                                     |                                                                                                                                | <b>side</b> 85:7                                                                            | <b>stages</b> 101:17                                                                     |
| <b>results</b> 106:23                                                      |                                                                                                                                | <b>sides</b> 95:9                                                                           | <b>standards</b> 88:5                                                                    |
| <b>resume</b> 75:17                                                        | <b>scoped</b> 84:2                                                                                                             | <b>significant</b> 87:9,19<br>89:9                                                          | <b>standpoint</b> 67:22 91:4<br>104:3                                                    |
| <b>resumed</b> 108:16                                                      | <b>scoping</b> 57:4 67:9 87:6                                                                                                  | <b>similar</b> 55:18 68:17<br>74:1 94:11 96:4                                               | <b>start</b> 51:12 56:2 59:21<br>68:18 89:18 90:22<br>109:10,11                          |
| <b>rethink</b> 90:25                                                       | <b>scored</b> 82:9                                                                                                             | <b>similarities</b> 95:13 96:6,<br>19,20                                                    | <b>started</b> 47:12 49:10<br>78:2                                                       |
| <b>return</b> 104:8                                                        | <b>SDG&amp;E</b> 98:16,21                                                                                                      | <b>Similarly</b> 58:16                                                                      | <b>starting</b> 51:17 56:4<br>68:18 70:7 71:15 90:24                                     |
| <b>review</b> 57:3                                                         | <b>section</b> 50:8 60:10<br>62:6 64:14 65:2 66:19<br>69:3 70:1                                                                | <b>single</b> 72:22 86:17                                                                   | <b>starts</b> 51:19 54:15 56:5<br>70:22 92:5                                             |
| <b>reviewed</b> 56:15,20                                                   | <b>sections</b> 50:1,7 62:15                                                                                                   | <b>singular</b> 81:17                                                                       | <b>state</b> 53:16 54:5 56:19<br>58:15 59:22 63:24<br>68:19 69:24,25 73:17<br>77:23 78:5 |
| <b>reviewing</b> 92:10                                                     | <b>seeking</b> 94:5                                                                                                            | <b>six-month</b> 108:5,23                                                                   | <b>stated</b> 60:17 88:18<br>105:4                                                       |
| <b>righty</b> 68:1                                                         | <b>select</b> 82:5                                                                                                             | <b>size</b> 60:3,21 97:8 98:19                                                              | <b>statement</b> 49:22 54:1<br>107:13,25                                                 |
| <b>risk</b> 86:3 87:6,13,24<br>88:6,7,21 97:13 105:2,<br>4,9               | <b>selected</b> 82:10                                                                                                          | <b>skill</b> 80:3,6                                                                         | <b>stating</b> 60:12 63:10<br>71:22                                                      |
| <b>risks</b> 87:9,14,18,20<br>88:25 89:7 95:14 96:1,<br>2,10 97:2,6 102:10 | <b>self-service</b> 68:3,6,15,<br>25 69:9,18,22 70:13,18<br>71:16,20,24 72:7,12,15,<br>24 73:7,9,21                            | <b>slide</b> 97:17 98:7 102:22                                                              | <b>Staying</b> 75:23                                                                     |
| <b>risky</b> 97:11                                                         | <b>senior</b> 47:25                                                                                                            | <b>slightly</b> 107:12                                                                      | <b>stemming</b> 52:17                                                                    |
| <b>robust</b> 56:10 59:13<br>61:8                                          | <b>sense</b> 86:18 103:25                                                                                                      | <b>small</b> 83:18,25 85:12,<br>16,18,21,24                                                 | <b>Stepanovic</b> 47:15,20<br>48:15,18 83:8                                              |
| <b>role</b> 49:10                                                          | <b>sentence</b> 51:17,19<br>52:4 53:9 56:4,13<br>69:20,21 70:21 71:13<br>105:23,24 106:1,4,24                                  | <b>Socal</b> 98:17                                                                          | <b>stop</b> 52:1,6                                                                       |
| <b>roughly</b> 94:14                                                       | <b>separate</b> 64:15 74:19<br>81:20 104:18                                                                                    | <b>solution</b> 77:23 78:5<br>79:13,19 80:16                                                | <b>stopped</b> 108:5,6                                                                   |
| <b>routine</b> 67:11                                                       | <b>separate</b> 64:15 74:19<br>81:20 104:18                                                                                    | <b>solutions</b> 48:24 65:3,<br>18 68:21 70:9                                               | <b>Strauss</b> 83:7,14,16,18<br>97:23 98:1                                               |
| <b>ruling</b> 48:7                                                         | <b>serves</b> 52:12                                                                                                            | <b>sort</b> 82:8 94:15                                                                      | <b>stream</b> 70:8,24 71:7<br>72:3,5                                                     |
| <b>running</b> 53:11                                                       | <b>service</b> 64:2 68:22<br>70:8,24 71:7 72:5 84:11                                                                           | <b>sources</b> 73:20                                                                        | <b>streams</b> 80:14                                                                     |
| <hr/>                                                                      |                                                                                                                                |                                                                                             |                                                                                          |
| <b>S</b>                                                                   |                                                                                                                                |                                                                                             |                                                                                          |
| <hr/>                                                                      |                                                                                                                                |                                                                                             |                                                                                          |
| <b>sake</b> 109:9                                                          | <b>service-order</b> 77:5                                                                                                      | <b>speaking</b> 109:21                                                                      | <b>studies</b> 92:11                                                                     |
| <b>SAP</b> 89:1 95:24 96:25<br>97:5,6 98:25                                | <b>set</b> 65:16 79:23 82:12<br>91:11,15,22 98:3<br>105:13                                                                     | <b>specific</b> 65:13,17 77:1<br>80:3,17 84:21,23 88:25<br>91:3,13 93:10,19<br>104:11 105:4 | <b>stuff</b> 99:2                                                                        |
| <b>SBUA</b> 83:7                                                           | <b>sets</b> 80:4,6                                                                                                             | <b>specifically</b> 57:6 61:12<br>65:11 66:16 69:16 70:2<br>83:25 85:15 98:14               | <b>Sub-part</b> 62:12                                                                    |
| <b>SBUA-01</b> 97:16,23<br>105:17,25                                       | <b>shared</b> 94:25                                                                                                            | <b>spend</b> 59:10                                                                          | <b>subject</b> 84:20 89:12,25<br>93:16 103:23 107:8                                      |
| <b>SBUA-02</b> 99:8,16,20<br>100:2                                         | <b>Sheriff</b> 105:17                                                                                                          | <b>spending</b> 70:17                                                                       | <b>subject-matter</b> 79:14<br>85:6,7                                                    |
| <b>scale</b> 65:25 67:10<br>81:10,13 86:19 94:10<br>98:19                  | <b>shift</b> 87:18                                                                                                             | <b>sponsoring</b> 49:14,16,<br>22 50:1,7 62:4                                               | <b>submit</b> 57:8                                                                       |
| <b>SCE</b> 98:22                                                           | <b>shorter</b> 54:24 55:19                                                                                                     | <b>stable</b> 54:17                                                                         |                                                                                          |
| <b>schedule</b> 94:18                                                      | <b>shortly</b> 53:24                                                                                                           | <b>staff</b> 79:18 89:7 95:8                                                                |                                                                                          |
|                                                                            | <b>showing</b> 58:5 59:12<br>63:1                                                                                              | <b>stage</b> 100:16 101:12,                                                                 |                                                                                          |

|                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  |                                                                                                                     |                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>submitted</b> 53:7 60:19<br>64:21 87:15                                                                                                                                                                                                                                                    | <b>table</b> 98:4,12,15                                                                                                                                                                                                          | 102:1 103:9 104:5<br>105:5 107:1,4 108:3,15<br>109:12                                                               | <b>ultimately</b> 56:6 67:20<br>81:6 82:10 91:13 95:11<br>104:2                                                                                                                    |
| <b>subsequent</b> 101:16                                                                                                                                                                                                                                                                      | <b>talk</b> 58:17 65:22 67:3,7<br>69:3 72:19 77:3 82:4<br>84:6 88:13 90:4 91:5<br>100:22 103:10                                                                                                                                  | <b>timeline</b> 57:2                                                                                                | <b>unable</b> 78:14 79:9,24                                                                                                                                                        |
| <b>subsequently</b> 103:1                                                                                                                                                                                                                                                                     | <b>talked</b> 84:12 92:22                                                                                                                                                                                                        | <b>timely</b> 69:11                                                                                                 | <b>understand</b> 52:21 53:1<br>54:11 57:17 58:1 61:6<br>73:1 77:10 101:17<br>102:19,20 103:5                                                                                      |
| <b>subsidiary</b> 93:19                                                                                                                                                                                                                                                                       | <b>talking</b> 65:23 70:2 79:4<br>86:14 87:13,14 88:14                                                                                                                                                                           | <b>times</b> 81:22                                                                                                  | <b>understanding</b> 56:21,<br>23 58:23 99:1 102:5<br>103:16 106:3                                                                                                                 |
| <b>successful</b> 95:7                                                                                                                                                                                                                                                                        | <b>target</b> 53:8 58:9                                                                                                                                                                                                          | <b>timing</b> 87:16 88:9                                                                                            | <b>understands</b> 88:19                                                                                                                                                           |
| <b>successfully</b> 82:10<br>87:12,20 88:3                                                                                                                                                                                                                                                    | <b>targeted</b> 68:24                                                                                                                                                                                                            | <b>today</b> 48:2 59:12 65:23<br>71:18 74:20 84:13<br>87:25 88:16 109:10                                            | <b>understood</b> 102:3                                                                                                                                                            |
| <b>sufficiently</b> 56:10<br>59:13                                                                                                                                                                                                                                                            | <b>team</b> 48:24 85:21,23<br>109:2                                                                                                                                                                                              | <b>tool</b> 59:23 70:18                                                                                             | <b>undertake</b> 85:10 95:15                                                                                                                                                       |
| <b>suite</b> 64:17                                                                                                                                                                                                                                                                            | <b>technical</b> 85:7,8                                                                                                                                                                                                          | <b>tools</b> 70:13 73:7,9,13                                                                                        | <b>undertaken</b> 86:18 87:4                                                                                                                                                       |
| <b>sum</b> 82:22                                                                                                                                                                                                                                                                              | <b>technology</b> 48:1 55:2,<br>20 64:1                                                                                                                                                                                          | <b>top</b> 93:10 94:9 103:2                                                                                         | <b>undertaking</b> 95:22,23<br>96:12                                                                                                                                               |
| <b>summarize</b> 89:24 96:8                                                                                                                                                                                                                                                                   | <b>ten</b> 98:3                                                                                                                                                                                                                  | <b>topic</b> 75:22 102:10                                                                                           | <b>unexpected</b> 89:11<br>92:13                                                                                                                                                   |
| <b>summarizing</b> 57:18                                                                                                                                                                                                                                                                      | <b>ter</b> 102:12                                                                                                                                                                                                                | <b>total</b> 82:22 107:5                                                                                            | <b>unidentified</b> 102:4                                                                                                                                                          |
| <b>summary</b> 57:21 59:11                                                                                                                                                                                                                                                                    | <b>term</b> 73:2                                                                                                                                                                                                                 | <b>tracking</b> 87:14                                                                                               | <b>unique</b> 89:8                                                                                                                                                                 |
| <b>supervision</b> 50:15                                                                                                                                                                                                                                                                      | <b>terms</b> 56:25 57:10<br>60:20 67:10 72:16 73:2,<br>3 74:2 77:22 84:9,10<br>86:13 89:3,15 93:3<br>94:10 95:5 98:25<br>102:12 103:25 104:21<br>105:2 108:23                                                                    | <b>transitioned</b> 49:1,5                                                                                          | <b>unknowns</b> 88:8,23                                                                                                                                                            |
| <b>supervisor</b> 49:2                                                                                                                                                                                                                                                                        | <b>test</b> 81:11                                                                                                                                                                                                                | <b>trigger</b> 108:4                                                                                                | <b>unnamed</b> 102:25                                                                                                                                                              |
| <b>supplemental</b> 62:7<br>89:12 90:1,5 91:6,19<br>104:1,14 105:5 107:9                                                                                                                                                                                                                      | <b>testified</b> 48:14                                                                                                                                                                                                           | <b>triggering</b> 110:1                                                                                             | <b>updated</b> 101:25                                                                                                                                                              |
| <b>support</b> 51:24 54:7<br>55:15 79:17 80:1                                                                                                                                                                                                                                                 | <b>testimony</b> 49:14 51:11<br>53:20 57:17 59:12,17<br>60:23 61:8,19 63:16,21<br>64:9 65:22 66:4,11<br>67:3,14 69:22 71:18<br>89:12 90:1,6 91:6,20,21<br>96:24 100:14,18 101:2,<br>8,10 104:1,14 105:6<br>107:9,13 108:20 110:3 | <b>true</b> 50:20                                                                                                   | <b>upgrade</b> 52:15,22<br>54:12 56:9 60:8 64:14,<br>20 66:17,25 67:15 69:6,<br>7,17,23,25 70:3,4,24<br>71:8,23 72:4,6,8,13<br>90:23,24 91:11,12<br>92:12 94:4,8,11 104:2<br>105:7 |
| <b>supporting</b> 56:9 86:25                                                                                                                                                                                                                                                                  | <b>testing</b> 81:7,12 90:9,13                                                                                                                                                                                                   | <b>truth</b> 48:5,6                                                                                                 | <b>upgraded</b> 52:14 53:3,6<br>54:21 55:10,17                                                                                                                                     |
| <b>supports</b> 87:21                                                                                                                                                                                                                                                                         | <b>thing</b> 59:11 60:22                                                                                                                                                                                                         | <b>turn</b> 51:10 53:19,20<br>55:22 57:19 59:15<br>61:18 62:3,23 63:20,22<br>66:3,9,11 68:11,18<br>75:17 76:5 97:16 | <b>upgrades</b> 64:17 72:25<br>95:15                                                                                                                                               |
| <b>sworn</b> 48:13                                                                                                                                                                                                                                                                            | <b>things</b> 60:4 67:12 70:4<br>79:5 80:16 91:5                                                                                                                                                                                 | <b>TURN-02</b> 63:21 68:11,<br>13,15                                                                                | <b>upgrading</b> 52:25 53:25<br>54:24 95:24                                                                                                                                        |
| <b>system</b> 54:8 55:15<br>58:6,9,22,25 59:3,6<br>60:7 61:1 63:17 64:14,<br>20 65:14,17 66:17,25<br>67:15 69:6,17,25 70:3<br>71:7,22 72:4,22,23<br>73:23 74:14,19 78:21<br>80:19 81:9,11 82:6<br>84:8,9 86:1,12,17 87:25<br>88:2,7,11 89:8 90:11,14<br>91:14 94:2 95:15 96:22<br>109:2,12,22 | <b>thinking</b> 67:23                                                                                                                                                                                                            | <b>TURN-03</b> 66:10,13,14                                                                                          | <b>usage</b> 73:15                                                                                                                                                                 |
| <b>systems</b> 49:2,3,4 56:9<br>65:11 73:17 84:12,14,<br>16 89:1 97:1                                                                                                                                                                                                                         | <b>time</b> 48:20 50:18 52:20<br>53:6 54:4 55:1 59:10<br>61:5,7,10,16 66:22<br>73:18 74:14 79:2,23<br>82:21 101:1,2,10,16                                                                                                        | <b>TURN-04</b> 59:16,18<br>71:11                                                                                    | <b>user</b> 60:3                                                                                                                                                                   |
| <hr/> <b>T</b> <hr/>                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                  | <b>turning</b> 83:25 89:11<br>91:19 108:19                                                                          | <b>utilities</b> 56:7 92:11,18<br>93:4 95:15 98:12,18,19<br>102:8,12,18,21                                                                                                         |
| <b>Tab</b> 62:11                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  | <b>turnover</b> 89:7                                                                                                | <b>utility</b> 83:18 92:21,23,<br>25 95:21 98:16 102:5,                                                                                                                            |
|                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  | <b>type</b> 67:10 91:17<br>103:13                                                                                   |                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  | <b>types</b> 72:20 85:2 89:6<br>93:4                                                                                |                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  | <hr/> <b>U</b> <hr/>                                                                                                |                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                  | <b>UC</b> 48:22                                                                                                     |                                                                                                                                                                                    |

|                                                                                                              |                              |
|--------------------------------------------------------------------------------------------------------------|------------------------------|
| 21,25 103:2                                                                                                  | <b>WP-1</b> 50:11            |
| <b>Utelligent</b> 93:3                                                                                       | <b>written</b> 53:14,15      |
| <hr/>                                                                                                        | <b>wrote</b> 61:7            |
| <b>V</b>                                                                                                     | <hr/>                        |
| <b>vacuum</b> 97:2                                                                                           | <b>Y</b>                     |
| <b>valid</b> 61:9,13                                                                                         | <b>year</b> 52:10 93:8,10,14 |
| <b>validity</b> 60:7,14                                                                                      |                              |
| <b>vendor</b> 80:16 82:11<br>96:7                                                                            |                              |
| <b>vendors</b> 79:14 82:7,18<br>95:16                                                                        |                              |
| <b>version</b> 51:22,25 52:5,<br>6,10,14,16,19,23,24<br>53:3,8,10,13,15 54:12,<br>21,23,25 55:10,17<br>97:19 |                              |
| <b>versions</b> 53:11 54:16                                                                                  |                              |
| <b>versus</b> 63:2 74:10 82:1<br>97:12                                                                       |                              |
| <b>view</b> 87:18                                                                                            |                              |
| <b>virtual</b> 47:1 74:17,23                                                                                 |                              |
| <b>VMWARE</b> 54:17                                                                                          |                              |
| <b>vulnerabilities</b> 54:6                                                                                  |                              |
| <hr/>                                                                                                        |                              |
| <b>W</b>                                                                                                     |                              |
| <hr/>                                                                                                        |                              |
| <b>wanted</b> 102:17                                                                                         |                              |
| <b>web</b> 69:7,23 70:4,24<br>72:6,25 73:19 74:3                                                             |                              |
| <b>word</b> 63:7                                                                                             |                              |
| <b>words</b> 57:9 61:12                                                                                      |                              |
| <b>work</b> 67:11 80:14,15<br>94:10 109:23                                                                   |                              |
| <b>worked</b> 79:13 85:5<br>93:2                                                                             |                              |
| <b>working</b> 48:25 49:3<br>60:23 103:9 109:18,24                                                           |                              |
| <b>workpaper</b> 50:11<br>66:10,16                                                                           |                              |
| <b>workpapers</b> 49:18<br>96:23                                                                             |                              |
| <b>works</b> 108:8                                                                                           |                              |