1 DEPARTMENT OF PUBLIC WORKS 1 INDEX 2 DIRECTOR'S HEARING ON PROPOSED REFUSE RATES 2 TESTIMONY: 3 2013 REFUSE RATE APPLICATION 3 Witness Examination by 4 Maurice Quillen Mr. Baker 5 CITY HALL 5 Mr. Legg 730 6 1 DR. CARLTON B. GOODLETT PLACE, ROOM 416 6 Mr. Haley 780 7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 790 9 Wednesday, May 22, 2013 9 John Glaub Mr. White 70 10 Volume 6 Mr. Legg 753, 7	Page 723
2 DIRECTOR'S HEARING ON PROPOSED REFUSE RATES 2 TESTIMONY: 3 2013 REFUSE RATE APPLICATION 3 Witness Examination by 4 Maurice Quillen Mr. Baker 5 CITY HALL 5 Mr. Legg 730 6 1 DR. CARLTON B. GOODLETT PLACE, ROOM 416 6 Mr. Haley 78 7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 79 9 John Glaub Mr. White 70	723
3 2013 REFUSE RATE APPLICATION 4	723
4 Maurice Quillen Mr. Baker 5 CITY HALL 5 Mr. Legg 73(6 1 DR. CARLTON B. GOODLETT PLACE, ROOM 416 6 Mr. Haley 78(7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 79(9 Wednesday, May 22, 2013 9 John Glaub Mr. White 7	723
5 CITY HALL 5 Mr. Legg 730 6 1 DR. CARLTON B. GOODLETT PLACE, ROOM 416 6 Mr. Haley 780 7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 79 9 Wednesday, May 22, 2013 9 John Glaub Mr. White 70	
6 1 DR. CARLTON B. GOODLETT PLACE, ROOM 416 6 Mr. Haley 78 7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 79 9 Wednesday, May 22, 2013 9 John Glaub Mr. White 70	1
7 SAN FRANCISCO, CA 94102 7 Mr. Drew 79 8 Mr. White 79 9 Wednesday, May 22, 2013 9 John Glaub Mr. White 70	
8	
9 Wednesday, May 22, 2013 9 John Glaub Mr. White 7	
1	
$1 ext{ } ext{10} ext{ Volume 6} ext{ } 1 ext{ } ext{10} ext{ } ext{Mr 1 eac} ext{ } ext{753 7}$	744, 754
1.00,1	62
11 (pp. 716-837) 11 Mr. Deibler	
	770, 787
13 Mr. White 772, 7	
14 Mr. Legg 774	
15 Mr. Baker 77	8
16 Jon Braslaw Mr. Legg	798
17 Mr. Deibler 799, 8	
18 Mr. Baker 81	5
	820
20oOo	
21	
22 REPORTED BY: FREDDIE REPPOND 22	
23	
24 FREDDIE REPPOND, STENOGRAPHIC REPORTER 24	
25 (415) 469-8867 25	
Pa	ge 718
ADDEADANOES	
1 APPEARANCES 1 INDEX OF EXHIBITS 2 Exhibit Description Page	
FOR DEPARTMENT OF PUBLIC WORKS: 3 83 Abandoned Materials Program 722	
Mohammed Nuru, Director 4	
4 Douglas Legg Marlena Cohen 84 On-Site CNG Fuel Cost (Recology) 745	
5 City Hall, Room 348	
6 San Francisco, CA 94102-4645	
(415) 554-6920 86 Email, dated 5/21/13, from S. Wine to 747 7 J. Mendoza (Recology)	
FOR DEPARTMENT OF THE ENVIRONMENT: 8 87 CNG Compressor Specifications (Recology) 748	
8 Robert Haley 9 88 CNG Compressor Electrial Cost (Recology) 748 10 89 Recology Electricity Costs (Recology) 748	
9 Jack Macy 11 90 Revised Schedule L-3, Fuel Expenses 750	
10 San Francisco, CA 94102 12	
11 FOR OFFICE OF THE CITY ATTORNEY: 12 Thomas Owen, Deputy City Attorney 13 Gate CNG Vehicles at Sunset Shop	
Thomas M. Bruen, of Counsel	
13 City Hall, Room 234 1 Dr. Carton B. Goodlett Place	
14 San Francisco, CA 94102-4682 92 Cind Venicles Requiring Maintenance 757	
16 Peter Deibler, Ratepayer Advocate 16 93 Summary of Facility Safety Modifications 759 Peter Deibler, Ratepayer Advocate	
17 FOR THE COMPANY: 18 Michael J. Baker, Esq. Required to Maintain CNG Vehicles (Recology)	
Gabriel White, Esq. 18 94 Natural Gas Vehicle Facility Modification 759	
19 ARNOLD & PORTER Code Overview for Maintenance Garages Three Embarcadero Center, 7th Floor 19 (Recology)	
20 San Francisco, CA 94111-4024 20 95 Guideline for Determining the 759	
21 Compressed Natural Gas and Liquefied	
MEMBERS OF THE PUBLIC: Natural Gas Vehicles to Existing	
Nancy Wuerfel 23 96 Residential Development Pipeline 774	
23 Robert Kenoe Remit Kubitz December 2012 (City)	
24 David Pilpel 97 Update of Public Comment Received 814	
25 by Ratepayer Advocate (Ratepayer Advocate)	
Page 717	ge 719

1	98 2013 Refuse Hearing Notifications (City) 814	¹ the audience.
2	99 Excerpt from Exh. 35 with Annotations 820	2 We will continue with the Company's rebuttal
	(Wuerfel)	to the staff report followed by cross-examination by City
3	(Wachel)	
4	oOo	
5	000	, , , , , , , , , , , , , , , , , , , ,
6		incoording the time begin time the company processing
7		7 Mr. Baker, are you ready to proceed?
8		8 MR. BAKER: Yes. Good afternoon, Mr. Nuru. I
9		9 have one housekeeping matter to start with. We noted at
10		the last hearing, during Mr. Yamamoto's testimony, that
11		Exhibit 77 had an error in it, because for San Francisco
12		tonnage we had only included Jepson and not also Grover.
13		So we have a corrected version of Exhibit 77 which I'll
14		14 hand forward.
15		15 DIRECTOR NURU: Thank you.
16		MR. BAKER: And just for the record, the
17		correct tonnage for San Francisco as reflected on this
18		18 replacement Exhibit is 148,630 tons.
19		We'd like to cover four subjects today. Just
20		to give you a preview of the order, the first is
21		21 Mr. Quillen will testify regarding the abandoned
22		materials program. Secondly, Mr. Glaub will testify on
23		two subjects, CNG fuel prices and also the truck
24		maintenance and repair facility at the Golden Gate
25		location. And, finally, we have no further evidence on
		location. Atta, intally, we have no rather evidence on
	Page 720	Page 722
1	Wednesday May 22, 2012	1 the final subject that's all in but I'd like to
2	Wednesday, May 22, 2013 1:02 p.m. PROCEEDINGS	and man dubject and an in the te
3		mane a crief processianon about or the brief tarm
	DIRECTOR NURU: Good afternoon, everyone. If	, p
4 5	you'll take your seats, I'd like to call the hearing to	4 MR. BAKER: Thank you. Why don't we begin 5 with Mr. Quillen. We have an exhibit for Mr. Quillen's
	order. I am Mohammed Nuru of the Department of Public	Will this gamen we have all exhibit for this gamene
6	Works, City and County of San Francisco. This is the	6 testimony, which I'll hand forward. This will be
7	sixth and final day of the Director's Hearing on	7 exhibit
8	Recology's application for an increase in residential	8 MR. OWEN: 83.
9	refuse collection and disposal rates.	9 MR. BAKER: 83. Thank you.
10	Today is Wednesday, May 22nd. The agenda for	(The document referred to was marked for
11	today is on the table on the side there. As in every	identification and received into
12	hearing, we will reserve the last period for public	evidence as Exhibit 83.)
13	comment. I intend to close the record at the end of	MR. BAKER: By way of a quick background, we
14	today's hearing, so if you have anything to add to those	did a cross-examination of Mr. Legg on Monday regarding
15	proceedings, I encourage you to take advantage of the	the staff's proposal that there be performance penalties
16	last opportunity. Speaker cards are available at the	16 including in the new abandoned materials program that
17	table. And I will ask that you fill out them out so that	17 Recology is going to take over. And since Monday,
18	I have an indication of the number of people wishing to	Recology has given some consideration to the parameters
19		of a performance program. If the Director feels that
	speak today. You may also convey any comments you may	The second secon
20	speak today. You may also convey any comments you may have to our Ratepayer Advocate, Mr. Peter Deibler.	the staff recommendation is appropriate, Recology still
20 21		1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	have to our Ratepayer Advocate, Mr. Peter Deibler.	the staff recommendation is appropriate, Recology still
21	have to our Ratepayer Advocate, Mr. Peter Deibler. Once again, we have Mr. Freddie Reppond	the staff recommendation is appropriate, Recology still urges that performance penalties are not necessary and
21 22	have to our Ratepayer Advocate, Mr. Peter Deibler. Once again, we have Mr. Freddie Reppond transcribing our meeting this afternoon. I want to	the staff recommendation is appropriate, Recology still urges that performance penalties are not necessary and creates some risks because of certain unknowns and
21 22 23	have to our Ratepayer Advocate, Mr. Peter Deibler. Once again, we have Mr. Freddie Reppond transcribing our meeting this afternoon. I want to remind everyone who speaks to come forward and speak	the staff recommendation is appropriate, Recology still urges that performance penalties are not necessary and creates some risks because of certain unknowns and particularly what the volume of material and calls is
21 22 23 24	have to our Ratepayer Advocate, Mr. Peter Deibler. Once again, we have Mr. Freddie Reppond transcribing our meeting this afternoon. I want to remind everyone who speaks to come forward and speak clearly into the microphone so that he can take your	the staff recommendation is appropriate, Recology still urges that performance penalties are not necessary and creates some risks because of certain unknowns and particularly what the volume of material and calls is going to be going forward once the program changes.

2 (Pages 720 to 723)

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 has taken a close look at the proposal regarding 2 performance penalties. And Mr. Quillen is going to 3 testify regarding some suggested changes that the 4 company would have if the performance penalty program 5 was included in the Director's report. So we will 6 proceed on that basis. 7

MAURICE QUILLEN,

having been previously sworn, appeared and testified as follows:

DIRECT EXAMINATION

BY MR. BAKER:

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

- Q. Mr. Quillen, in terms of the proposal from the City for a performance penalty schedule, what are Recology's concerns about that?
- A. The primary concern that Recology has concerning the performance penalty is the fact that they're based upon goals that were established by Recology and that the goals do not necessarily represent any operational performance metrix that we've had the ability to test out or observe on a historical basis.
- Q. So if there were performance penalties, what modifications does Recology think would be necessary and appropriate in order to have them be fairly realistic?
- A. Well, initially Recology would propose revisiting performance guidelines and looking towards

the tons collected were to go up, the Recology companies would have to look at putting more trucks on the road. We are looking at potentially increasing the fleet by one pair of vehicles for every 20 percent more calls or tons. So if the tons or calls were to go up in excess of this percent for a period of time, we would then want to have the ability to put an additional pair of collection trucks on the road.

- Q. So in terms of the proposal that Recology made that's setting a goal of four hours on weekdays -- four business hours -- let's say a call comes in at 4:00 in the afternoon on a Tuesday under a four-hour window, when would that four hours be up?
- A. Calls received during our normal business hours, which would be 7:30 in the morning to 4:30 in the afternoon, would be dealt with within our performance standards. Calls received after the close of business would be dealt with on the following day. And we would assume at that point that the performance standard would then start at 7:30 on the following day.
- Q. So take my example, 4:00 o'clock in the afternoon under a four-hour goal, that would take you till 11:00 o'clock in the morning the next day?
- A. If the call came in at 4:00 o'clock in the afternoon, we would pick it up that day.

Page 726

Page 724

establishing a longer period of time by which Recology would have to collect the material which was called in by 311. The thought process would be that it would give us the abilities to understand a little bit more about the waste stream. Our proposal would look towards an eight-hour window for weekday operations and a twelve-hour window for weekend operations.

- Q. Is Recology still prepared to stick by its goals of four hours for weekdays, eight hours for weekends, as opposed to a penalty standard?
- A. Yes, we would be willing to adhere to the goals that we referenced; but we wouldn't want those goals to become a performance standard.
- Q. Now, what about the volume of calls and volume of material as it might relate to a penalty?
- A. Well, when Recology looked at the expense associated with this program, we looked at the number of stops that were given currently to DPW and the tons that DPW is collecting and the number of trucks and manpower used in the collection of the material. And the company believes that, if the numbers were to change, it would become very difficult for us to meet the performance standards. Generally, we believe we could tolerate some slight movement of the numbers.

But in the event that the number of calls or

Q. Oh.

- A. Because it would be within the business day.
- Q. I got it.
- A. If 311 received the call after 4:30, which was dispatched to the company after the close of business, we would deal with that specific collection call the following day.
- Q. I see. So if the call came in at 4:00 o'clock on Tuesday afternoon, under the eight-hour weekday permit standard you're proposing, that abandoned material would be collected by what time?
 - A. Within eight hours of receiving that call.
 - Q. By midnight?
- A. By midnight.
- Q. Now, in coming up with the goals that you had and which you still have at four hours on a weekday and eight hours on a weekend, you say that was based upon a review of a historic volume of calls and tonnages at the City. What numbers did you use as the standard?
- A. We receive a weekly update in our operations coordination meeting which references the 311 calls. Based on the information that we receive from the City, we averaged the number to be approximately 440 calls pe week.
 - Q. And that averages to 63 per day?

Page 727

Page 725

3 (Pages 724 to 727)

A. 63 calls per day.

- Q. How about tonnage?
- A. Tonnage was approximately 3,000 tons on an annualized basis. And that's approximately 10 tons per day.
- Q. So these are the three bullet points of Recology's proposal as to how the performance penalty could be fairly modified from Recology's standpoint at least. And you've already talked about the first bullet point. That's, while the goals would remain the same, the standard for the penalty would be eight hours on weekdays and twelve on weekends.

What about the second bullet point that are you proposing there?

- A. In the event that the calls for any given day were to exceed 20 percent of what our historical average is or what the assumptions are, we would propose that the performance standards not be put in place for that given day.
- Q. That's because you have a concern that you don't have sufficient trucks and manpower based upon the historical averages to deal with significantly more tonnage and calls?
 - A. Correct.
 - Q. And the third bullet point, what's the

that Recology would have higher -- the City would have higher expectations of Recology as to how much would be picked up in a given day or else an penalty would be imposed?

That's a complicated sentence and I'm sure you're going to say yes, but let me try it again.

- A. Can you restate that question?
- Q. Yes. That wasn't very clear.

Am I right that the if the tonnages and the calls increased in volume and the City elected to have Recology put another pair of trucks on the road and sufficient labor that under Recology's proposal the requirement on Recology would increase as well, that is Recology would be expected to pick up more and would be subject to penalty if it failed to do so?

- A. The expectation is that Recology will pick up whatever calls come in. The additional trucks and manpower would be in response to the expectation. The goals would not change from what our proposal is. In the event that the City wanted to pursue those stringent goals of four and eight hours, then we would comply.
- Q. Okay. I think that I had something different in mind, so maybe you and I won't agree on it, but I'll tell you what I think we have in mind here. And that is if the City -- if the volumes increased and the City

Page 730

Page 728

proposal there?

A. Third bullet point would look at the program on a larger scale. In the event that the calls or tonnage exceeded 20 percent for a period of time, 60 days, the company would at that point in time want to put out an additional collection pair, which would mean one packer truck, one box van, and two drivers. In the event that the calls or tonnage did exceed 20 percent, we would then look to the City to fund the additional trucks and labor.

Q. Would this be at the City's election as to whether they wanted to do that?

A. I would like to have the third bullet sort of be applied in a more mechanical fashion. We track the tonnage on a daily basis. We're prepared to deal with anomalies that occur on a day-to-day basis. But if the trend continues for a significant period of time, we would want to have something in the rate order that would allow us the ability to put those trucks on the road immediately.

Q. So if the calls and tonnages were greater than historical averages and if the additional amount was allowed for more trucks and for labor, then am I right that Recology would agree that the thresholds -- or would propose that the thresholds would then be increased so

Page 729

wanted to fund additional equipment and manpower in order to deal with the increased volumes, the penalty threshold which we have here of 75 calls, or 12 tons, would be increased as well, because the expectations imposed on Recology should be greater and the resources applied would increase as well. So we would understand that the penalty threshold would be more stringent, if there was more resources applied.

A. I agree with that.

MR. BAKER: There you go. All right.
So that's all we have on that subject. If the
City would like to cross.

CROSS-EXAMINATION

MR. LEGG: Yes. I have a couple of questions, Maurice.

Q. Under Recology's proposal that was submitted with the -- as part of the rate application -- Recology was proposing that they would be responding to 311 calls. There were a few things that were implicit in the proposal. One was that you will be dispatching and responding to 311 calls for abandoned materials collection. That's the basic thing. When we were providing data to you about the work that our packer trucks were doing, we also shared information with you about daily meets with DPW pickup trucks which are part

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

of the litter patrol. And I think that there were three different times a day that packer trucks go to a certain location. I think there's one near Kezar Stadium; there's one near Olive Alley, kind of in the Tenderloin; and there's a third meet -- I mean back at one of those same places. And that's so the large number of DPW litter patrol vehicles, which are small pickup trucks, could meet and deposit materials in the trucks. And that's the part of your meeting those trucks and collecting those refuse. That refuse is part of your proposal, I believe; is that correct?

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

A. I'm going need to check that, so can I take a minute to check that and then --

Q. Okay. While you're checking that --

A. I'm not quite sure if that was included.

Q. Okay. I think that it's included in the tonnage that we're reporting on the packer trucks, because the packer trucks are responding to 311 calls and they're always picking up -- they're doing these three meets: and I think it's three trucks for three hours a day.

I would be delighted to have Mr. Braslaw come up.

MR. BRASLAW: It is included in the proposal, so we are aware -- when we developed the proposal, we

Page 732

radio in to make sure that the box truck that collects mattresses and other large items would come and collect that?

A. Correct.

Q. The last thing -- I'm not sure if -- I don't think that it would be these trucks that are on the special abandoned materials collection routes or response time -- but if in the course of collecting from or servicing the public litter receptacles somebody has improperly placed a plastic bag filled with household or commercial debris, those would also get picked up by your drivers, your trucks?

A. Yes.

Q. Okay. In your proposal in Exhibit 83 you talk a lot about tonnages that exceed historic averages and since -- one of my concerns is, since a substantial number of the tons that our packer trucks are currently collecting is really the coming from these meet-ups and on certain days it's coming from these events, I would want -- let me phrase that as a question.

Would that kind of larger tonnage -- say it was the day after the Bay to Breakers race and our litter patrol trucks came in with unusually heavy loads and their pickup trucks met and off-loaded into your packer trucks or box trucks at these meets, that would not cause

Page 734

worked with DPW staff to understand all of the work that they did with respect to abandoned materials and then calculated the costs and estimated the time, the tonnage based on those activities so it would include the coordination of the litter patrol pickups with the packer trucks as they exist today. BY MR. LEGG:

Q. Okay. I want to mention a couple of other things that I just want to confirm or include in the proposed service. There are a small number of parades and events that we provide packer truck assistance to --St. Patrick's Day parade, I think the Chinese New Year's parade, a few civic events. And those are also included in the proposal?

A. Yes, they are.

Q. Okay. Finally, it's the City's expectation that as your drivers who are on these special abandoned materials collection routes, if, in the course of running the routes, are responding to dispatch calls and they see a mattress out on the sidewalk or some other abandoned materials, that they would stop the truck and collect those materials?

A. Correct.

Q. And if it was the wrong -- if it was a packer truck that went by and they saw a mattress, they would 1 an extraordinary expense or add any extra time that would 2 make it difficult for you to meet your proposed

3 standards, I would think. I can understand if there are 4 a large number of calls and you have to go to many

5 different locations, that you will have difficulty

6 operationally meeting your four- or eight-hour goals 7 about tons that are coming in through the DPW meet-ups of 8

parades shouldn't -- wouldn't having an effect on your

response time would it.

A. The tons would not have an effect on response time if they came from one of these off-loading situations. I think what would have the effect on our ability to respond in that situation would be how long it would take to off-load the additional tons with the truck.

The reason that we looked at the tonnage number specific to it was that we understood that the Recology trucks would be performing sweep work. And in the event that there was more material on the street than what our expectations were, we wanted to make sure that the goals did not apply. So in the case of the meet-ups, that tonnage generally wouldn't cause an undue hardship to the company as long as the transfer time was relatively efficient, sure.

Q. And when you say "sweeps," you're referring to

Page 735

what I was saying about as your drivers observed materials on the street?

A. Yes.

MR. BRASLAW: Correct. One of the things that we did when we looked at this proposal, we wanted to make sure that the drivers and the companies had the flexibility to apply the resources as they were necessary. And the reason, again, we included the tonnage was in the event that there was a lot of material on the street, even though we hadn't gotten a lot -- a large number -- of 311 calls, that we were able to focus on what needed to be done to keep the streets clean and weren't then put in the position where we would either, a, be penalized or, b, have to really focus on the 311 calls and not stay focused on the larger goal of making sure that the city stays clean. BY MR. LEGG:

- Q. Would your drivers have the ability to be tracking those kind of sweep stops that they make that are not coming through dispatch and 311?
- A. We are looking at tracking every stop that the truck makes and we would be employing technology to track what actually finds its way into the trucks. We understand that we won't be able to identify everything that goes into the trucks, but we do believe that at a

Page 736

how many months of data -- do you think that you would need before you became comfortable making some kind of proposal?

- A. I think that would be difficult. Generally, what ends up on the streets is seasonal. And it would be, I think, very challenging to look at a 30-, 60-, or 90-day window and draw an assumption. In the event that the numbers started to increase and we did not see any downward trend based on seasonality like we see in the rest of our business, I would then be very concerned and I don't think that we would be in a position to, in a reasonable period of time, establish some sort of trend analysis.
- Q. If you're interested in seasonality, would a year be more like what you would be expecting? Or do you think you would need more than a year?

I understand what you're saying about -- you won't be held to this forever more, even though you are --

A. One year would provide seasonal variation that the company would want to see in the waste stream. In the event that the numbers were going up, then we could potentially establish some sort of trend to understand what the numbers look like. If they were going down, we would obviously understand that same trend. But, yes,

Page 738

minimum we could identify where the stop was, the time of the stop, and generally the composition of the material that went into the trucks.

Q. The City has not yet reached the conclusion -- I think the City believes that companies are making fair points about if there are differences in tons and number of calls and that kind of thing, that the companies made a proposal based on historic numbers essentially and that the companies -- I think the City recognizes that the performance standards and expectations that we proposed in the staff report probably wouldn't work if there was an extraordinary increase in the number of calls or the tonnage or the amount of materials left out on the street. So I appreciate all of this information that you're providing.

Do you believe that -- when Mr. Baker started his presentation, he said that Recology doesn't believe that there should be any performance penalties at this time. And, Maurice, you said that Recology just doesn't have the statistics or operational knowledge at this point to be able to set metrics that you would be held to. How much time do you think you would need to put together those metrics of your own, including estimates of number of stops and tonnage collected on the sweeps, as opposed to responsive calls from 331, how much data --

Page 737

one year would be adequate.

Q. So no matter what is recommended in the Director's report, Recology would, I expect, have data and be able to come in with a proposal at the time that you come in to ask for a change because of a change in the landfill contract.

We talk in the staff report about a revised procedure for considering a limited number of issues and the staff report talks about landfill and transportation costs and a couple of other issues. This could be added to either impose some kind of performance standards and penalty or incentives or alter whatever is recommended in the Director's report. Does that makes sense?

A. I'd like to refer that question to Mr. Braslaw.

MR. BRASLAW: I think it makes sense that it certainly, once we begin to operate the program, we'll start to build the data that we'll need to understand it better and to set performance goals and performance standards.

We recognize the need ultimately to establish some standards that we can use to measure the performance and control the activity. Ideally, as Mr. Quillen said, having a 12-month period allows you to cover all of the seasonality. And then assuming that, aside from that,

Page 739

6 (Pages 736 to 739)

numbers are relatively stable, you can get a good idea of what type of resource you need, how quickly you can respond to the calls. We're not sure at this point at what point in time the disposal -- if there's a new disposal agreement, it may be necessary to come in. So if it's prior to that one-year period, we would have a better data than we have today, but it may still not be complete. It certainly would be something that we could use to form a basis that's more informed than what we have today.

BY MR. LEGG:

2.4

Q. I wanted to ask a couple questions about the performance penalties in your Exhibit 83. On your second bullet point -- and there's a little confusion -- I was a little confused -- when Mr. Baker was asking questions. Is it your proposal that the standard be relaxed just for -- that essentially days that had especially large volumes both in calls or tons, that those days be excluded from calculations? So if there were two extraordinary days in the month of May, that we would only look at 29 days' worth of data as opposed to all 31 days' worth of data?

A. That is correct.

Q. Okay. And on your third bullet you talk about having additional funds available that could be used to

excess of two months, we will at that point in time would rather pursue an additional set of trucks as opposed to funding it through overtime.

Q. Do you think that it would make sense to have a full year's experience before we made that determination about adding extra trucks?

A. That would be acceptable.

MR. LEGG: I think that's all the questions I have about this at this point, other than I think I'd like to say that whatever standard that we adopt in the Director's Report, it's important to me that they be very transparent and very clear how to implement them. Something that we've experienced as we're working with our performance measurement management systems if we get too complicated -- if the formulas and data that we're looking at is too complicated, it becomes hard to determine what the right answer is. And I think even if there's money on the line, simplicity is even more important, because I want to make sure that we have a system that the City, the companies, and the public all feel is being implemented in a responsible way and that it's very clear that standards are met or standards have not been met as we do that.

So thank you.

DIRECTOR NURU: Mr. Deibler, would you like to

Page 742

Page 740

add routes if volumes over a 60-day period, you had said, are way up.

Do you think there's any -- would there be any opportunity for any of your other routes to be picking up some of these materials, say trucks that are running bulky item collection, if they would able to pick up some of the slack?

A. Bulky item collection trucks could potentially pick up the slack in the event that they weren't fully booked. I know that the Department of Environment is concerned about our ability to schedule the bulky item collection in a timely fashion. And I would not want to have our ability to schedule bulky item collections impaired by the abandoned waste program.

I think it's important that we maintain the commitments to our customers as it relates to the bulky item collection program. Generally, we would probably fund the anomalies or the additional time through overtime. Our proposal would look at the number of calls or tonnages having to increase beyond 20 percent for over a period of time -- a significant period of time. So like we mentioned earlier, the blips would be handled on a daily basis. If we could be excused from meeting the performance standards on those days, that would be good. In the event that this becomes a trend and occurs for an

cross-examine?

MR. DEIBLER: Thank you, Mr. Nuru. I would like to make one comment -- or several comments -- that I think are related.

Just more globally regarding the program, there is more cost to be incurred by Recology taking over the program. That's been documented and currently the City incurs for these services, the trade-off being much higher performance. And so that's the value added, as I understand from making the transfer of these services.

I think I endorse the concept of having one year of good data; and I think that makes sense. I understand and support the concept that it doesn't make sense to begin today with a penalty scheme. And I appreciate the desire -- the need -- for Recology to have some flexibility.

I am concerned about the concept, Mr. Legg, that you just brought up of waiting till the next review. In practice, that's not a date certain, especially in terms of the landfill, when that might occur. And then in terms of when the actual adjustment that comes out of that process might occur, that might, I guess, be three for four years potentially from now.

So I would like to see some sort of standards, even if it's just if you're really not meeting twice the

Page 743

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 level of what you said you would do in one year, there's 2 something that triggers some sort of process at that 3 point, rather than waiting and collecting another three 4 years of data and seeing where you are. So I'm sure 5 Recology will do an excellent job though. 6 And, finally, I'd just like to thank you for 7

your comments you just made, Mr. Legg, about the transparency and the need to keep it simple. I would absolutely agree whatever it is needs to be simple. I've been involved in a lot of incentives processes; and sometimes the people implementing it don't really understand it. So it needs to be simple. Thank you.

DIRECTOR NURU: Okay. So, Mr. Baker, I think we will continue and have John Glaub come up for CNG and truck maintenance questions.

MR. WHITE: Good afternoon, Mr. Nuru.

Before we turn to the CNG fuel prices and maintenance facility upgrades, there's one more topic I'm going to spend two minutes on with Mr. Glaub. That is we're going to speak about the composting tip fee just briefly.

DIRECTOR NURU: Okay.

JOHN GLAUB,

Having previously been sworn, appeared and testified as

Page 744

Q. Okay. What conclusions do you draw from that analysis?

A. I would conclude that tipping fee of \$48.64 three years after the approved tipping fee of \$45 in Rate Year 2011 is a fair tipping fee.

Q. Okay. Now, let's turn to our main topics -the CNG fuel costs and then maintenance. First, we'll go with the fuel price.

To start, we will submit this as an exhibit. I think we're up to Exhibit No. 84.

> (The document referred to was marked for identification and received into evidence as Exhibit 84.)

BY MR. WHITE:

Q. Mr. Glaub, fuel costs comes up in the staff report in Section 8.13; is that correct?

A. Yes.

- Q. Now, with respect to fuel costs the staff report makes certain calculations starting with the price at which gas is purchased. Do you agree with that analysis?
- A. We have conducted our own analysis and arrived at a total cost that is different than the cost in the staff report. Some of the components in the staff report are the same numbers that we're using in the overall

Page 746

DIRECT EXAMINATION

BY MR. WHITE:

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. Mr. Glaub, can I draw your attention, please, to Exhibit 78, submitted last time?

A. Yes.

- Q. With respect to the composting tip fee that is described in very small print at the bottom of that exhibit, could you say a few words about the context of that number? What do those numbers mean in the context of the 2006 application?
- A. Okay. These are the tipping fees that were approved in the last rate order for the respective years in that rate period, from Rate Year 2007 to Rate Year 2011. They range from \$37 a ton in Rate Year 2007 to a rate of \$45 per ton in Rate Year 2011.
- Q. So that number for 2011, the \$45 number, that was a number that was found just and reasonable for that period when the application was --

A. That is correct.

- Q. And have you performed any analysis of the relationship between that \$45 number and the current tip fees?
- A. Yes. The proposed tip fee of \$48.64 in Rate Year 2014 would represent, in comparison to a rate of \$45 three years prior, an annual increase of 2.63 percent.

Q. All right. So looking at Exhibit 84, starting

at the top, can you describe how these numbers factor in to your analysis.

calculation, but other cost components are different.

- A. The procurement charge and transportation charge are the top two rows. Those are derived from PG&E schedule G-NGV1; and that is the same source and those are the same numbers as was used in the staff report.
- Q. Let me stop you there and we'll introduce as an exhibit a copy of that document.

(The document referred to was marked for identification and received into evidence as Exhibit 85.)

BY MR. WHITE:

- Q. Now, so you mentioned that this is the same document that the staff relied on; is that correct?
- A. I believe it's actually a slightly different document. Both documents were from PG&E for the same period of time covering the same procurement and transportation charges. The file -- the reference that was submitted as our exhibit includes the cost shown on PG&E gas schedule G-NGV1. Those costs for procurement charges and transportation charges are identical. Our exhibit also shows the public purpose program surcharge. That was not included in the staff analysis and that

Page 747

```
1
 1
      added another 2.4 cents per therm. That program -- in
                                                                             specifications. Based upon the specifications on the
                                                                       2
 2
      general, a lot of the public purpose programs, including
                                                                             nameplate for the compressor, we calculated the kilowatts
 3
                                                                       3
      LifeLine -- separates renewable energy programs that PG&E
                                                                             that were produced by the compressor when it operates.
 4
      runs under its rate structure that are then charged back
                                                                       4
                                                                                   And then we looked at for one hour's worth of
 5
                                                                       5
      as a surcharge under various rate schedules to
 6
                                                                       6
      ratepayers.
 7
                                                                       7
          Q. Now, another of the numbers that were a part
                                                                       8
 8
      of the staff report were the estimates of the electricity
 9
      costs; is that correct?
                                                                       9
10
                                                                      10
          A. That's correct.
11
                                                                      11
          Q. Do you agree with the staff's analysis on that
                                                                      12
12
      one?
13
          A. I do not. We requested an estimate of the
                                                                      13
14
                                                                      14
      electrical cost to run the compressor for our CNG fueling
                                                                      15
15
      station from the equipment vendor that provided us with
16
                                                                      16
      that equipment. That equipment provider is Clean Energy,
17
                                                                      17
      one of the largest suppliers of CNG fueling equipment in
18
                                                                      18
      energy. We obtained a range from them of 20 to 30 cents
19
                                                                      19
       per diesel gallon equivalent.
20
             MR. WHITE: Let me stop and introduce that
                                                                      20
21
                                                                      21
       estimate as an exhibit. I believe we are up to 85?
                                                                             88. So the cheapest cost for diesel gallon equivalent
22
             MR. OWEN: 86.
                                                                      22
                                                                      23
23
                (The document referred to was marked for
                                                                      24
24
                identification and received into
                                                                             Clean Energy, our equipment vendor.
25
                                                                      25
                 evidence as Exhibit 86.)
                                                    Page 748
 1
                                                                       1
              MR. WHITE: 86.
 2
                                                                       2
              While we're talking about electricity costs,
                                                                             Exhibit 88?
 3
                                                                       3
       I'd like to introduce two further exhibits on that issue.
                                                                                A. Correct.
                                                                       4
 4
       The first will be titled "CNG Compressor Specifications."
                                                                       5
 5
       That will be Exhibit 87.
 6
                                                                       6
              And the second, "CNG Electrical Compressor
 7
                                                                       7
       Costs." That document will be 88.
                                                                                A. Correct.
 8
                                                                       8
              And one more exhibit on the electricity costs.
 9
                                                                       9
```

operation -- so for a one-kilowatt hour, how that would then translate into the number of gallons that we would be fueling for that one-hour period. We multiplied kilowatt hours from our calculations from the compressor specifications times an average electricity cost that we have documented in our exhibit entitled "Recology Electricity Costs." These are actual costs off of our PG&E meter bills based on our meters at our site. We took the lower cost for our medium-demand meters rather than the small-time-of-use meters, which has a higher cost. To be more conservative, we took medium-demand

meters that used a cost of 15.4 cents per kilowatt hour as our average electricity costs. Multiplying that times kilowatt hours provided our electrical cost per hour of 22.35. That's in the table. Our maximum number of diesel gallon equivalents that we can fuel per hour is

would compute to be 25.4 cents. That number turns out to be right around the mid-range of the cost provided by

Q. Okay. That 25.4-cent number, we find it on

Page 750

the CNG compressor electrical cost document, which was Q. And we also find it on the spreadsheet that we

started with, which is Exhibit 84, which is up on the screen; is that correct?

Q. Moving on in the spreadsheet, what is the bottom-line conclusion that you reached?

A. So at this point what I have explained in our calculations of our fuel cost takes us to a total of about a dollar two per diesel gallon equivalent prior to the compressor lease cost itself. So prior to the actual cost of the equipment. And this table includes, in the notes to this table, the cost of the compressor lease on an annual basis, which is \$132,000 and what we believe is our maximum diesel gallon equivalents per year of 114,400 gallons. That then provides a per gallon cost for the compressor lease cost, which brings our total cost of fuel to a little over \$2.18 per gallon -- per diesel gallon equivalent.

Q. Okay. I'll introduce our last exhibit on the topic of the fuel costs. This is copy of a revised Schedule L-3.

(The document referred to was marked for

Page 751

That's 89. It's entitled "Recology Electricity Costs."

(The documents referred to were marked for identification and received into evidence as Exhibits 87, 88, and 89.)

BY MR. WHITE:

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

Q. So going back to the estimate you got from your vendor -- this was Exhibit No. 86 -- could you describe what that exhibit is.

A. This is an email from our vendor to Clean Energy. This is a vendor contact. And Clean Energy provided the estimated range of 20 cents to 30 cents per diesel gallon equivalent to operate the compressor for the CNG fueling station.

Q. Did you also conduct an analysis of the actual electricity costs?

A. Yeah. We also conducted our own estimate of electrical costs based upon the CNG compressor

Page 749

9 (Pages 748 to 751)

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

identification and received into
 evidence as Exhibit 90.)
 BY MR. WHITE:

Q. Is L-3 where these fuel cost numbers appear in the application?

A. Yes.

2.4

Q. And how did you -- what did you do to revise L-3?

A. The final rate application that was based upon off-site fueling, because that was actually the fuel practice at that time that the application was completed, our trucks -- our CNG trucks -- fuel at an off-site station on Bayshore Boulevard not too far from our Tunnel and Beatty location. That was so all of the gallons were assumed to be fueled and continued to be fueled there at that site.

In March of 2013 we began operating a relatively small on-site CNG fueling station. And the staff report recommended that we incorporate the cost -- appropriate cost of fueling on-site rather than assuming everything off-site. So we calculated our fuel costs as you've just described and applied those to the number of gallons that we believe will be fueled on-site. The remainder will continue to be fueled off-site. And as our fleet grows, the amount fueled on-site is fixed, but

Page 752

Q. Now, after performing these revisions and applying what you analyze to be the appropriate parameters for the program, what is the change to the bottom line?

A. The net change from the final rate application is only \$248.

Q. So after applying these actual costs and all the various adjustments that the company feels appropriate is \$248, as opposed to the staff report's suggested adjustment of \$284,000, give or take; is that correct?

A. That is correct.

Q. Do you have anything else to add on fuel costs?

A. No, I do not.

Q. Then let's move on to the maintenance issues. CROSS-EXAMINATION

MR. LEGG: Before you start, I have one clarifying question about the exhibit that's an email from the vendor, 86.

Q. He's quoting -- this is just to clarify. He's quoting the cost per DGE. I assume that's diesel gallon equivalent?

A. Correct.

Q. Everything that we've done is in gasoline

Page 754

- the surplus will be fueled at our site at the location that we are using.
- Q. Let me interject one quick question. Now, in the staff report was the assumption different from that assumption you just described about where the trucks will be fueled?
- A. Yes. So to further refine the issue of on-site and off-site, the staff report reflected the fact that we now have an on-site fueling station. The staff report assumed everything would be -- all CNG trucks would be fueled on-site. That is not physically possible with the physical limitations of this system. So some will be fueled on-site, but some will continue to be fueled off-site.
- Q. And in your revision of L-3 you made an analysis of how many trucks would be fueled off-site.
- A. That is correct. So this version of L-3 shows CNG fueling on-site as well as off-site. And there are a few other relatively minor changes from L-3 in the final application, because this also reflects other changes in truck numbers through the revisions that have been made as well as a slightly different understanding of how many vehicles will be CNG in the near term versus those that will remain on bio-diesel until the conversion occurs or until they are replaced.

Page 753

gallon equivalent. Would there be any difference between --

- A. Well, we have diesel engines in our vehicles, so we'd use diesel gallon equivalent.
- Q. I understand. The staff report was based on -- I just don't know if the cost -- I'm trying to find out. I don't know if the cost of electricity for diesel gallon equivalent would be any different from the cost for gasoline gallon equivalent. I have no idea what the answer is.
- A. I would -- I think the staff report intended to be using diesel gallon equivalent. I could not speak for that author, but the conversion that I saw between therms and diesel equivalents used by the staff report is the same conversion as for diesel gallon equivalents, so a factor of 1.3.

MR. LEGG: Thanks.

REDIRECT EXAMINATION

19 BY MR. WHITE:

Q. Okay. The issue of maintaining and servicing CNG-powered equipment is also in Section 8.13 of the staff report; is that correct?

A. Yes.

Q. What was the recommendation of the staff report; do you recall?

- A. The recommendation of the staff report was not to install the maintenance facility safety modifications at the Golden Gate maintenance facility, but instead do all maintenance of CNG trucks in our fleet at our Sunset maintenance facility, which would receive those safety upgrades.
- Q. Now, just for a brief summary and then we'll get into the details, but do you think that's a good idea?

A. No, I do not.

б

2.4

MR. WHITE: Now, my first exhibit on this topic is entitled "Impracticality of Maintaining CNG Vehicles at Sunset Shop." It's Exhibit 90; is that correct?

MR. OWEN: Exhibit 91.

(The document referred to was marked for identification and received into evidence as Exhibit 91.)

MR. WHITE: 91.

- Q. Now, this is sort of a summary -- is it fair to say that that is a summary of all of your objections to the idea of maintaining CNG vehicles for Golden Gate at Sunset Scavenger facilities?
- Yes, that is a good description of the document.

every new collection vehicle we purchase is a CNG-fueled vehicle. So while we could potentially accommodate the staff report request for a relatively short period of time, it would not be much beyond our current fleet, certainly not over the next two years; and it would require an additional head count or two.

Sunset shop to maintain all the CNG vehicles because

Q. So even at the current levels of CNG vehicles, it would -- even if you could muddle through for a little while, is it fair to say it wouldn't be efficient or cost-effective or the best way of doing things?

A. That is correct.

- Q. Now, the next exhibit is Exhibit 92. Could you please describe for me, Mr. Glaub, what Exhibit 92 is.
- A. This exhibit is an estimate of the number of CNG vehicles that we will have in our fleet at any point over the next three rate years. These numbers may vary somewhat from our fuel estimates and our capital costs because those are based on averages per year. These are actually net during that year, so even if we are getting a delivery of a truck in May or June of a rate year, those numbers are reflected in these total number of CNG vehicles requiring maintenance during that rate year, just to clarify that point.

Page 756

Page 758

- Q. Okay. Now, stepping back for a moment, taking the current levels of -- current volume of CNG vehicles in Golden Gate and the Sunset Scavengers fleet, with no changes, would it be practical to adopt the staff's recommendations of performing all of the maintenance at the one facility?
- A. Not with our current staffing level. The Golden Gate vehicles need to be dispatched out of the Golden Gate yard at the start of each collection day because that is where the Golden Gate employees report and that is where the dispatching operations are managed for Golden Gate's collection system. Sunset and Golden Gate -- the majority of their maintenance operations are at night when the fleet is in the yard. So maintaining Golden Gate trucks at Sunset would require shuttling vehicles back and forth between the yards during the maintenance shift, even at our current fleet level. To do that, we would need one to two additional head count to perform the shuttling activities even at our current fleet. We estimate that process would take about 30 to 45 minutes per truck, incurring associated labor and fuel expenses; and in the case of a truck that cannot be driven, also a tow truck would be required with those associated additional expenses. So I would say the number of CNG trucks will soon exceed the capabilities of

(The document referred to was marked for identification and received into evidence as Exhibit 92.)

BY MR. WHITE:

- Q. So what is this information about the size of the companies' CNG fleet over the next several years -- what's that do to your analysis of the practicality of the staff report recommendation?
- A. I think it reinforces our view that it is impractical to maintain all of these CNG vehicles in the two companies' fleets at only the Sunset maintenance facility.
- Q. Okay. Are you familiar with the modifications that would need to be made to the Golden Gate facility in order to perform the fueling of CNG vehicles there?
- A. I'm generally familiar with the types of safety features that need to be implemented if a maintenance facility is going to maintain -- provide service on a gaseous-fueled vehicle inside a building.
- Q. And that's what you'd have to do at the Golden Gate facility is inside fueling?
- A. That's correct. Any CNG vehicle would fall into that category requiring those safety features.

MR. WHITE: Okay. I'm going to introduce three exhibits. The first of them is titled "Summary of

Page 759

1 1 Facility Safety Modifications Required to Maintain CNG if there is a problem to alert people in the building, 2 2 other mechanics, we've got a problem, we have gas in the Vehicles." 3 3 building, we have potential for ignition, so to let The second is -- so that would be? 4 MR. OWEN: 93. 4 people know there is a safety hazard. 5 5 MR. WHITE: 93. There's also an off-site alarm notification 6 6 that's automatic and provides information that we have a 94 would be a document titled "Clean Energy: 7 7 Your Connection to NGV Facility Modifications." 94 would condition of gas in the building. There's gas alarm 8 8 be a document entitled "Guideline for Determining the horns and strobes associated with the system. There are 9 Modification Required for Adding Compressed Natural Gas 9 roof-mounted exhaust fans and motors specifically 10 10 and liquefied Natural Gas Vehicles to Existing designed to handle in a safe manner the flow of a gas 11 11 that includes methane. Explosion-proof garage door motor Maintenance Facilities." 12 MR. OWEN: I believe that last one would be 12 operators so that they don't provide sparks under 13 13 operation. And various seals and electromagnetic 95. 14 14 (The documents referred to were marked releases for doors similar to fire-protection systems. 15 15 for identification and received into Q. When you say things like possibility of 16 16 ignition, it's sounding very technical. But the bottom evidence as Exhibits 93, 94, and 95.) 17 BY MR. WHITE: 17 line is this place could explode if you don't do these; 18 18 is that right? Q. Now, Mr. Glaub is it fair to say that the 19 19 A. That is correct. first of these documents, the summary of facility safety 20 modifications, is your summary of the modifications that 20 Q. And it's not just technical regulatory 21 21 requirements. It's a real danger that has to be would be necessary? 22 22 addressed? A. This summary was provided by our compliance 23 23 A. It is a real danger if you have gas in the manager in our operations, yes. 24 24 building. Q. And what are the other two documents, the 25 25 Q. And without these modifications -- is it true Clean Energy document and the guideline for determining Page 760 Page 762 1 1 the modifications? that without these modifications -- I think you answered 2 2 A. The other two documents are third-party this -- the Golden Gate facility could not pick up and 3 3 sources further describing these requirements, the take part in the fueling of the CNG vehicles? 4 4 importance of these safety requirements when you have a A. That is correct. The San Francisco Fire 5 5 vehicle with a gaseous fuel inside a building. One is Department would not allow Golden Gate to maintain CNG 6 6 from Clean Energy, who again I mentioned them earlier as fueled vehicles in the facility. 7 7 the supplier of our fueling equipment. They also Q. And with the new vehicles coming online, you 8 8 provided this to us to and their other clients about when need the Golden Gate facility to do that? 9 9 you maintain these vehicles you need to be aware that A. Yes, we do. 10 10 these are the requirements for maintaining these vehicles Q. Okay. Is there anything else that you'd like 11 11 inside a building. So that is a summary of those to add on this? 12 12 requirements from Clean Energy. A. No. 13 13 And then another is a third-party report from MR. WHITE: Okay. Mr. Glaub is available for 14 August of 2012, the Clean Vehicle Education Foundation, 14 cross-examination. 15 15 also actually considerable detail describing the DIRECTOR NURU: Would you like to examine Mr. 16 16 importance of the safety modifications, the code Glaub? 17 requirements for those facility modifications. 17 RECROSS-EXAMINATION 18 18 Q. Okay. Now, it's written down on the summary. BY MR. LEGG: 19 19 But just for the sake of telling the audience, what are Q. I have a couple of questions. And then 20 20 some of the main safety features that would have to be because all of this is new on the CNG, we'd like to take 21 21 installed if you're going to do this fueling indoors? a little recess so we can discuss what we need to ask 22 22 A. Certainly, methane gas detectors to identify about. I have a couple of questions I'd like to ask 23 23 whether there is methane now present in the building. before we go, just for my understanding. 24 24 There's also a controller for that entire gas-detection So first going back to compost and your 25 system. There are emergency gas alarm pull stations, so 25 statement that your Exhibit 79 shows that the previous

12 (Pages 760 to 763)

Page 763

1 1 rate assumed a composted fee of \$45 for Rate Year 11? be fueled on a daily basis at Sunset? 2 2 A. Yes. A. Currently, with our fleet of 27 CNG vehicles, 3 3 Q. And that assumption or that dollar -- that tip we're just being able to fuel a little over half or 4 fee assumption for Rate Year 11 is actually set during 4 barely half at Sunset and the rest are off-site. We're 5 5 Rate Year 06? trying to push that number up. And we've assumed an 6 6 A. Yes. In the 2006 process. increase in that number in the calculations that I 7 7 Q. In the 2006 process? presented. 8 I could go into more detail. We could also 8 A. Yes, correct. 9 Q. We said in the 2006 process that after five 9 call upon our operations manager, who's here, to also 10 10 years we wanted to have the companies come back in so we discuss this issue. 11 11 could find out what the real costs were to be because we Q. So right now you can only fuel only 13 12 12 acknowledged at that time that it was difficult to see vehicles per day? 13 13 actual costs at that time five years into the future. A. Drivers fuel their own vehicles. We don't 14 14 A. I would agree with that. have a special employee who fuels off collection route 15 15 Q. And you had said that the \$48.64 that you're times. If we did, then we could fuel more, but then it 16 16 proposing is 2.63-percent-a-year annual increase? would be another head count, most likely mechanic, added 17 17 A. Yes. to do that. 18 18 Q. But for most of the expenses in the rate Q. Or a part of a head count perhaps. 19 19 application for two of those years we were assuming you So the window that those 13 vehicles are being 20 were inflating costs by Bay Area CPU. For Rate Year 13, 20 fueled in, I assume, is a fairly narrow number of hours 21 21 that was 2.00 percent and for Rate Year 14 it was 2.2 out of the day because it's at the end of a driver's 22 22 percent? route, I would think. 23 23 A. Yes. A. Yes. 24 24 Q. And do you know --MR. LEGG: Okay. I think at this point we'd 25 25 A. I think the point is that it doesn't seem to like to take a break. Page 764 Page 766 1 1 be unreasonable compared to the rate that was approved And, Robert, how much time do you think should 2 2 four years ago. And actually -we take? Longer than 15 minutes? It seems like we only 3 3 Q. That point is taken. We understand. I just have one more issue to cover. We're going to have -- the 4 4 wanted to clarify those things. Ratepayer Advocate is going to have some questions and 5 5 On the CNG issue -- and I know this is in the then make some final presentation. And I assume the 6 6 rate application, but how many trucks are you companies are going to have a conclusion. At this point 7 7 anticipating Rate Year 14 are going to be on CNG -- using we have two and a half hours left. 8 8 DIRECTOR NURU: What other issue would we want CNG at Golden Gate and Sunset? 9 9 A. We currently have 27 in our fleet and an to discuss other than the CNG? 10 10 additional 12 have been ordered in previous months for MR. LEGG: The companies were going to make a 11 11 39. And I believe the total for rate year 2014 is 60 CNG presentation about OR at Brisbane, so maybe we should 12 12 vehicles with the new vehicles to be ordered. dispense with that now. 13 13 Q. Okay. And the compressor is just at Sunset? MR. HALEY: We'd like a 20-minute break. 14 The fueling that takes place? 14 DIRECTOR NURU: But should we have the 15 15 A. Yes. Brisbane presentation so that when we come back from the 16 16 Q. Of the 39 vehicles that are on the property break, we'll just --17 17 and on order, how many of those are anticipated to go to MR. LEGG: We'll go through until we adjourn. 18 18 Golden Gate? DIRECTOR NURU: Yeah. 19 19 A. I'll have to check through my file. I do not MR. BAKER: Mr. Nuru, we had a brief comment 20 20 have that number here. we'd like to make about the Brisbane tax issue. The 21 21 Q. You can answer that when we come back from the evidence has all been presented on that. So we do not 22 22 break. need an additional witness, but I just wanted to 23 23 And what's the maximum number of vehicles that summarize the companies' views on that particular issue. 2.4 24 can be maintained at Sunset and also what's the maximum The issue, of course, is the recommendation in 25 number of vehicles with your current compressor that can 25 the staff report that an OR not be allowed on the

13 (Pages 764 to 767)

Page 767

Brisbane tax. And the concept behind OR, of course, is to encourage a company to incur an expense that carries a risk of losing money. In other words, the concept of a profit is what has motivated businesses to take the risk of investing in new facilities and operations. In the case of a regulated company like Recology, the regulator here, the City, allows Recology the chance to earn an OR or a profit on expenditures that promote City goals while also carrying the risk of financial loss for the company.

2.4

And the new Brisbane facility tax is one such expenditure. It's one of several costs Recology now incurs to operate at Tunnel/Beatty. While most of the Tunnel/Beatty facility is in San Francisco, the organics annex is in the city of Brisbane. And the location of this annex in Brisbane is what gives rise to this tax we're talking about. This tax is really no different than other expenses that Recology pays to operate its organics program. It's an operational expense just like the cost of equipment, labor, and utilities. This organics program could lose money. That's a risk that Recology takes when it elects to offer an organics program and when it elects to locate part of that operation in Brisbane. And, therefore, like all other expenses related to the program, Recology believes it should be allowed an OR on the Brisbane tax. It's part County for the privilege of dumping San Francisco waste at Altamont is different. Recology earns no OR on those taxes and fees because Recology played no role in selecting Altamont. It was not a risk/reward Recology business decision. Recology hauls to Altamont at the City's direction. Alameda County fees are due as a result of the City's choice of landfills.

In the case of Tunnel/Beatty, on the other hand, Recology is the one that has chosen to operate an organics facility there and to incur the tax that comes with that choice. Recology has chosen to take the business risk of losing money on this tax payment. Therefore, we believe that Recology should earn an OR payment. With OR goes risk. So we urge the Director to carefully consider not only the staff's position on this point but Recology's position as well as we outlined I had.

Thank you.

DIRECTOR NURU: Thank you.

Okay. We should take a 20-minute break and we will be back here at 3:00 o'clock.

(A break was taken from 2:35 p.m. to 3:04 p.m.)

KEVIN DREW.

having previously been sworn, appeared and testified as

Page 770

Page 768

of the risk-reward analysis associated with each of Recology's business decisions and operations.

Now, the risk inherent in this organics program and its location in Brisbane and the risk of it being located in Brisbane are illustrated by how this tax first arose. Brisbane voters and its city council imposed the tax between rate hearings. Therefore, Recology was forced to pay the tax the first year without any opportunity to obtain reimbursement through the rates. Recology paid the city of Brisbane \$2.1 million in last year, 2012, without any reimbursement let alone an OR. That's a risk of doing business and risk of developing new operations like organics processing.

So while the staff has recommended that going forward Recology be reimbursed through the rates for the Brisbane tax, staff does not recommend an OR on the tax. But going forward with the risk of a new tax again between hearings remains. The Brisbane City Council or even San Mateo County could once again, between rate hearings, increase the current tax or add a brand-new tax. So this tax, from Recology's standpoint, is a cost of doing business. That risk of doing business and such business risks warrant an OR as a fair and reasonable mechanism for encouraging the taking of business risks. Now, the fees that Recology pays in Alameda

follows:

DIRECT EXAMINATION

3 BY MR. HALEY:

Q. I just have a few questions for Mr. Drew.
On Exhibit 84, it shows a compressor lease
cost. And I'm wondering if it -- could we not just
handle that compressor lease cost as we do other leases
in the H schedules of the application rather than putting
it over a cost per gallon?

A. Yes, we could.

Q. And it seems to me it might be possible to have someone else fuel the vehicles other than the driver. It seems like this compressor system could do quite a bit more trucks and gallons than is proposed. And one of the bottlenecks appears to be drivers having a limited window to fill trucks. Would it be possible to have someone besides a driver fuel the vehicles?

A. Yes, it seems that staff at Sunset could do that.

Q. And if that were the case, would it be possible to have perhaps a lesser-paid person than a driver?

A. I believe there's shop staff that can do that.

Q. And if that were the case, would it then free up some driver time potentially so that drivers would

Page 771

Page 769

14 (Pages 768 to 771)

1 spend more time on the routes and things like that? 1 to the employees performing different jobs? 2 2 A. That's possible. A. Yes, generally, but not with great 3 3 Q. And if trucks could be fueled at different specificity. 4 4 times, not just, say, at the end of a route, like during Q. With respect to the your analysis of fuel 5 5 the night time, in addition to being able to fuel more costs, did you perform any specific analysis of how much 6 6 trucks and put more natural gas fuel through the system, cheaper it would be if the companies did their fueling at 7 7 might they also get a lesser energy rate or electricity times other than between 12:00 and 5:00? 8 8 charge? A. I talked with staff and our department who 9 A. Yes. I checked with our Clean Energy team. 9 work with PG&E and are familiar with fueling options and 10 10 And the rate for electricity varies from 15 cents to the electricity costs and was -- I used that information as 11 11 35 cents an hour, depending on the time of day that you part of my analysis; and I confirmed that again with a 12 use it. And so using it at the right time of day would 12 second staff member of our department. 13 13 be very cost-effective. Q. The only cost that you considered were the 14 14 Q. And going further, might there not be even prices of fuel. Did you consider any other costs that 15 15 more cost-effective and efficient systems like may be incurred by performing work outside the time of 16 16 trickle-fill or slow-fill? 12:00 to 5:00? 17 17 A. Yes. And those kinds of systems are A. Actually, it wasn't just the fuel. It was 18 18 available. also the cost of electricity. That was the other major 19 19 cost. And then the third cost is that lease cost that we Q. And would there also be some advantage to, 20 say, a tank like that as well, potentially? 20 were discussing. 21 21 A. If you have storage, although there's Q. The price you're referring to by the off-peak 22 22 additional cost involved there, you do flatten out your hours, is it just the price of the electricity or is it 23 23 cost of producing the natural gas, condensing it so you the price of the gas? 24 24 can use it for vehicle fuel. A. No, just the electricity. 25 25 Q. And if you're able to fill more trucks MR. WHITE: No further questions of Mr. Drew. Page 774 Page 772 1 1 on-site, that would also reduce the need to fill trucks DIRECTOR NURU: Okay. Thank you. I think 2 2 off-site at a higher price; is that correct? there are some questions to do with apartments. 3 3 A. Yes. That shows up in this new exhibit that MR. LEGG: Yes. And Mr. Drew did some further 4 4 they show the price off-site is considerably higher. analysis on apartment rates. I have another exhibit to 5 5 Q. These are some things you've looked at and introduce. 6 6 these are the kinds of things you'd expect the company MR. OWEN: This will be Exhibit 96. The 7 7 document is a single sheet with the tag line "Apartment would have looked at and done the analysis on; is that 8 8 correct? Gallons." 9 9 A. Yes. (The document referred to was marked for 10 10 identification and received into MR. HALEY: I have no more questions for 11 11 Mr. Drew, but I do have a couple for the companies on evidence as Exhibit 96.) 12 12 the CNG maintenance when they're back up here. FURTHER DIRECT EXAMINATION 13 13 DIRECTOR NURU: If the companies would like to MR. LEGG: Actually, that's the second page. 14 cross-examine City staff? No? 14 It's "Residential Development Pipeline Revised by City 15 15 Okay. Redirect. So I think we're going to 5/22/13." 16 16 have you stay up here and there's a couple of questions Q. Mr. Drew, on Monday the companies introduced on apartments; is that correct? Okay. This is on CNG? 17 17 Exhibit No. 79, which was in response to the staff 18 18 MR. WHITE: Mr. Nuru, I apologize for the report's finding on additional revenues from apartment 19 19 delay. Just a few questions for Mr. Drew. buildings. And the staff report had found that there 20 2.0 were a total of 2,847 new units coming online. The DIRECTOR NURU: Okay. 21 21 **CROSS-EXAMINATION** companies' Exhibit 79 responded that 405 of those units 22 22 BY MR. WHITE: were already receiving service and so were part of the 23 23 Q. Mr. Drew, in your analysis that you just rates and that 1,542 units were commercial units. And so 24 2.4 discussed, did you consider what restrictions there may they recalculated the staff report numbers to reflect a

15 (Pages 772 to 775)

Page 775

total of 900 additional apartment units.

Page 773

25

be under the collective bargaining agreement with respect

25

- A. Yes I see that.
- Q. And since that time you've done some additional analysis?
 - A. Yes.

б

- Q. First of all, did you take another look at the development pipeline and find the additional apartment dwellings, either condominium or apartment unit, that are scheduled to come online?
 - A. Yes, I did.
- Q. And on exhibit --What was my latest exhibit number? MR. OWEN: 96.
- BY MR. LEGG:
 - Q. On Exhibit 96, where are those new units?
- A. On the column that has "site." It's right at the top and it's the list of addresses. It's the last seven addresses have all been added since the earlier hearing.
- Q. Okay. And so where the staff report had identified a total of 2,847 units, we now believe that for Rate Year 14 there will be 4,002 units?
 - A. Yes.
- Q. Okay. And using the companies' model at the bottom of this sheet, you made a couple of significant adjustments. Can you describe, first of all, the total

Page 776

- a wash. Commercial rates are higher than residential rates, so you get basically a wash as the effect of those new units, the same as an apartment unit.
- Q. Okay. So we're assuming that you use apartment rates as a proxy for value of those commercial rates?
 - A. Yes.
- Q. And on Exhibit 79 the companies calculated that all of the additional units would be getting the minimum required service level, which is 16 gallons of trash service per unit. Do you think that's a reasonable assumption?
- A. Actually, I'm trying to look at some newer units to see if I could establish that; and I found it difficult. So I propose here that we use the average that the apartment industry has, which is a 30-gallon, slightly more than the 16-gallon minimum. But not -- it's absolutely what's out there in the apartment world right now, so we actually took -- we calculated that number by taking information from Exhibit 52.
 - Q. And is that on the back side of Exhibit 96?
 - A. Right. That's apartment gallons calculation.
- Q. Okay. And from that exhibit you estimated that for the existing apartment customers those existing customers are using about 30-gallons of service each?

Page 778

- number of additional apartment units? What did you do there to come to the 3,597?
- A. Basically, I added in the seven buildings, the last tail-end of the site list there, starting at 2299 Market Street; added those in; and then did subtract out the existing units that are in the rate already, to come to this new figure.
- Q. And did you also, unlike what the companies did on Exhibit 79, you've left in the larger buildings that would be under commercial rates?
- A. Yes, I did. I added back the two that they eliminated and I added in an additional one that I found, which is 1998 Market Street.
- Q. And you added those back in because you're assuming that those commercial buildings are going to be producing a certain amount of trash, compost, and recycling and that --
 - A. Yes.
- Q. -- that there will be revenues associated with that?
- A. Yes. While they're not subject to the apartment rate -- they're on a commercial rate -- they are still residences and they will have trash and they will have actually very efficient compactor service that the company provides. And we just took it as essentially

Page 777

- A. Right. As the exhibit shows, 86.89 percent of apartment customers have service in excess of the minimum in the city. That's everybody almost.
- Q. Okay. And the rest of the calculations that are on Exhibit 96 at the bottom of the first page, those are the same as what the companies use -- you didn't make any further --
- A. Right. I didn't make any other adjustment besides the formula.
- Q. And so you found -- how much additional revenue are you currently estimating?
- A. Well, just shy of a million dollars from --Exhibit 79 had 190,633 as an increase and we re-calculated it at 1,169,270.

MR. LEGG: All right. Thank you.
I have no further questions for Mr. Drew.
DIRECTOR NURU: Maybe Mr. Baker would like to.
FURTHER CROSS-EXAMINATION

BY MR. BAKER:

- Q. So Exhibit 96, Mr. Drew, comparing it to Exhibit 79, which was the companies' exhibit -- and you used basically the same format, correct?
 - A. Yes.
- Q. And the companies' Exhibit 79, which talks about additional units coming online, it was drawn in

turn from the analysis that was in the staff report, correct?

A. Yes.

б

2.0

2.4

Q. So company Exhibit 79, which is based on the staff report, had a certain number of units coming online -- 2,847. And your current report updates that with some additional units, which takes us up to a beginning number of 4,002, correct?

A. Yes.

Q. And what you've done is you've added those addresses that I've marked, beginning at 2299 Market Street and below that, correct?

A. Right.

Q. And I think you explained this during your direct and I was talking to Mr. Braslaw and may not have heard exactly what you said but tell me again how you determined these additional units had been left out of the staff report initially.

A. These were actually buildings that I went and visited that I've seen being built that were not on the other list or were further down the list into the projected, like, 2015 completion. So there are things that have accelerated for whatever reason. In other words, the pipeline either was inaccurate or didn't have them on it.

Page 780

Q. So, for example, let's take 1190 Mission, cause that's the largest one, 860 units. How is it that you determined that 1190 Mission will be completed in August of this year?

A. I spoke to the sales staff there. They're showing the units. It actually is completed and it's just beginning the process of filling up.

- Q. And these are all rental units?
- A. Yes, those ones are.
- Q. Do you know what percentage of units have been rented so far?
 - A. No, I don't know. I don't know the number.
- Q. So we really don't know how long it's going to take to rent that building up, do we?
- A. No. The indication of the staff was to get over there if I wanted to get one. I talked to the salesperson. He's a salesperson after all, but encouraged me.
 - Q. Are you interested in one?
 - A. I don't know. Could we go in on one?
- Q. So then just to take one more example, 1645 Pacific. And you indicate here that the earliest estimated completion is fall of 2013. Where did that information come from?
 - A. Again, I talked to someone at the -- called a

Page 781

member of the sales staff and got that approximate date.

Q. Do you think it would be appropriate with regard to these additional addresses that that they be treated as a partial year for this analysis rather than a full year?

A. That's a judgment call.

Q. Even once they become open, no matter how hot the market is, it will take sometime to rent them all up, wouldn't you think?

A. This is the difficulty of trying to project this kind of thing.

Q. Then let me ask you about the assumption regarding their gallons per unit. 30 gallons per unit. As you testified, the 30-gallon per unit number is taken from the current population, so to speak, of rental units that Recology serves; is that right?

A. Yes.

Q. And I think, as you acknowledged at least, the hope and expectation is that the newer buildings are going to be more efficient, more aware of the options available to do more recycling, et cetera, that both the City and Recology expect will cause the number of gallons per unit to be less than the city-wide average current is; is that fair?

A. Yes, that's our hope.

Page 782

Q. And the average of 30 gallons per unit includes units that have been around for a long time and owners that have been around for a long time. There's a certain inertia that has prevented them from getting more up with the times, fair enough?

A. Fair enough.

Q. So you indicated that you thought it would be appropriate to take that into account, but you had difficulty figuring out exactly how to do that, right?

A. Right.

Q. Did you check with the company at all for any quidance on that?

A. I did not specifically ask them. I relied upon -- it is my job to be getting the diversion as high as I can -- and my staff. So we relied upon our knowledge of buildings that are at a lower rate; and we couldn't identify current buildings of that sort.

Q. Well, let me just take this exhibit here and I think there's a clue on there that would provide us an answer to this question. But it will require you to perform some math. Do you have a device that will allow you to do that or -- all right. I've done the math, so I can give you an estimate of it, but then you can confirm it if you want. So --

A. Actually, I did speak to one staff -- to one

2.4

member of Recology staff about the Infinity Towers and described a lower number of gallons per unit. But, again, that was one that was at the commercial rate, where the increase in the cost per unit or per unit of volume would have ameliorated some of that difference. But proceed.

Q. All right. So at the bottom of the first page you show on here that current rate for a 32-gallon bin is \$27.91, correct?

A. Uh-huh, yes.

Q. And that's for 32 gallons?

A. Yes.

б

2.4

Q. And then your math here makes a slight adjustment to take you from 32 down to 30 gallons, correct, when you move from 107,910 down to 94,113?

A. Actually, I don't think that that's math. That's the 30 gallons up from the line above.

Q. Yes, that's what I mean. In other words, if it was 32 gallons -- well, that's not important to what I want to go through.

A. Okay.

Q. In any event, for 30 gallons of service the charge is slightly less than \$27.91, correct?

A. Yes, exactly.

Q. All right. Now, then if we look at the bottom

Page 784

\$14-and-change charge would be closer to 14, 15 gallons than to 30 gallons. Would you agree with me?

A. Yes.

Q. So if you made the adjustment in your calculation, instead of using 30 gallons as assumed use per unit, and instead used half of that -- say, 15 or 14, your number would be less, correct?

A. Yes, it would be.

Q. All right. Now, the final thing I wanted to ask you about. I want you to think back to I think it was Mr. Braslaw's testimony and I think it was in response to a question by Mr. Legg, but I may be wrong. And that is if you have more units to serve -- I think Mr. Braslaw testified if there aren't a whole lot of additional units, Recology can serve those additional customers without putting on additional trucks or additional labor, but that if the additional number of customers passed a certain minimal threshold, then additional costs would be required for additional trucks and the labor to serve additional customers. Do you generally remember that?

A. Yes, I do recall it.

Q. In doing your analysis here, did you give any consideration to whether the additional units that you're projecting here would require additional expenditures on

Page 786

calculation, which came from Recology's Exhibit 79 of the analysis, of 435 China Basin and 150 Otis Street, both for buildings that came online during the current rate year. Is that consistent with your knowledge about this?

A. Yes.

Q. All right. So let's look at China Basin. And this is an actual number that China Basin is online and this is what the building is currently paying \$4,855 a month. Do you see that number?

A. Yes.

Q. Then if you go to the top of the page, we can see how many units there are at 435 China Basin -- 329 units.

A. Yes.

Q. So if we divide 329 into \$4,855, we ought to come up with a price per unit, correct?

A. Uh-huh.

Q. So I've done the math -- and you can check it if you want -- but it's \$14.75. And then if we perform the same calculation for 150 Otis Street, we'd take \$1,079 per month and we would divide that by the number of units, which is 76; and that would get us to \$14.20 per month.

So I would just suggest to you that, since 30 gallons would cost slightly less than 27.91, that a

Page 785

behalf of the company to serve?

A. I took a look at it. I did not see that basic point, but that's a hard one to see.

Q. Would you agree that that's something that needs to be considered?

A. Certainly.

 $\ensuremath{\mathsf{MR}}.$ BAKER: All right. I have nothing further. Thank you.

DIRECTOR NURU: Thank you.

MR. LEGG: I think we have some cross-examination about the CNG maintenance facility. I understand the Ratepayer Advocate would like to do some cross-examination of someone from the company on the Brisbane tax. And Robert has redirect -- on what topic Robert? On the apartment rates?

MR. HALEY: The one we were just covering.
MR. LEGG: So before we move onto other
things, we'll do that and then -- so I guess what I'd
like to do is have you do your redirect. We bring
Mr. Glaub back up for cross-examination with -Mr. Glaub or whoever is going to answer questions about
Brisbane tax. And we would move into Mr. Deibler's
cross-examination at the same time.

And then, Mr. Deibler, maybe you could make your -- I understand that you have some kind of final

1 comments and observation that you want to make. So you 1 perform the maintenance on these trucks. 2 2 Q. And how often does this type of maintenance would do that at that time. 3 3 need to happen for a vehicle type that would require it So Mr. Haley. 4 **FURTHER DIRECT EXAMINATION** 4 to be indoors? 5 5 BY MR. HALEY: A. Generally, we employ three service-level 6 6 Q. Mr. Drew, I just have one question. Mr. Baker maintenance schedules, a 30-day, 60-day, and 90-day. And 7 7 the 30 and 60 are more cursory; and the 90 represents a just discussed 150 Otis and that the service was lower 8 8 major maintenance interval. Generally, those than the 30 gallons. Is that an unusual building in any 9 way? 9 requirements for a 90-day truck would need to be inside. 10 10 A. It is recently completed housing for single What concerns me more from the maintenance 11 11 standpoint isn't necessarily scheduled maintenance. It's senior veterans, so a very low level of generation, 12 obviously. 12 unscheduled maintenance. And the issue, when the trucks 13 13 get brought in for something more significant, it would MR. HALEY: Okay. Thank you. 14 14 be considered a maintenance item. At that point in time MR. LEGG: Mr. Glaub and Mr. Braslaw, why 15 15 the vehicle would need to stay in the shop. And, don't you come on up. 16 16 potentially, if they're in the shop overnight that's when MR. HALEY: I just have a couple of questions 17 17 about the natural gas maintenance facility. It's my we expose ourselves to the most liability. 18 18 understanding that the natural gas maintenance can be Q. Okay. And most of your fleet is bio-diesel 19 19 and you have a certain number of trucks as spares. That performed out of doors and that has been occurring at 20 Golden Gate and Sunset. Is that true? 20 might be in the range of 10 percent. But you could 21 21 continue to use bio-diesel trucks as spares as you're MR. GLAUB: I cannot answer that question. 22 22 experiencing maintenance issues with natural gas trucks; MR. HALEY: Is there someone here who can? 23 23 is that true? MR. BRASLAW: We're going to have Maurice 24 24 A. Yes. We maintain a fleet of spares. We also Quillen come up. He can speak better to operational 25 25 maintain a fleet of trucks that we utilize for Christmas issues with respect to maintenance. Page 790 Page 788 1 1 MR. HALEY: Would you like me to repeat the tree collections and we do put those out on occasion as 2 2 question? spare vehicles. The amount of time that the trucks spend 3 MR. QUILLEN: Yes, please. 3 in the shop and our ability to use a spare is generally a 4 4 matter of course for operations. I can't see why there MAURICE QUILLEN 5 **FURTHER CROSS-EXAMINATION** 5 would be a benefit to not putting a bio-diesel truck out 6 6 BY MR. HALEY: to replace a natural gas truck. It's more important that 7 7 Q. So it's my understanding that the natural gas we take care of the customers and that we get that truck 8 8 maintenance can be performed out of doors and that that on route on time to make sure that we maintain our 9 9 has been happening at both Golden Gate and Sunset; is customers and efficiency standards. 10 10 that correct? Q. And is all of the natural gas you're using 11 11 A. It's correct. Golden Gate and Sunset have odorized? 12 12 been maintaining and storing vehicles that are liquid A. The compressed natural gas is odorized and the 13 13 natural gas and compressed natural gas outside. liquid natural gas is not odorized. And we are going to 14 Generally, this represents an interim measure. And as we 14 be required as a result of space constraints to employ 15 15 move toward larger numbers of trucks in our fleet we both types of fuel in our collection fleet. Some of the 16 16 trucks are not conducive to the CNG because of the space cannot continue to do this. 17 It also presents some environmental issues, in 17 requirements. So in those situations we will employ the 18 18 that we are not generally allowed to conduct maintenance LNG. And the LNG is, obviously, a little different fuel 19 19 and repair business outside. So while we know we have to in the sense it has the ability to off-gas and the trucks 20 20 adhere to our environmental regulations, we also have to do vent overnight. 21 21 deal with some of the maintenance issues associated with Q. So what I'm understanding is the long-haul 22 22 the new trucks. fleet is LNG. Some of your collection trucks may need to 23 23 Q. So some degree of this could continue, but be LNG. And those are non-odorized; is that correct? 2.4 2.4 there are some limitations? A. That is correct. 25 A. We are limited right now in our ability to 25 Q. And do the maintenance facilities service both

19 (Pages 788 to 791)

Page 791

1 types of vehicles -- LNG and CNG -- at the same facility? 1 2 2 A. The long-haul fleet is currently servicing the 3 3 majority of the LNG trucks. We currently are in the 4 4 process of moving some LNG trucks into the commercial 5 5 fleet at both Sunset and Golden Gate. So one would 6 6 assume that the distribution would be somewhat levelized 7 7 over time. At this point I don't have any idea what the 8 8 exact numbers are. 9 Q. Let me ask the question a little differently. 9 10 10 Are the long-haul LNG trucks serviced at a different 11 11 location than the collection vehicles? 12 A. Yes, they are. 12 13 13 Q. Okay. But if a collection vehicle is LNG, 14 14 would it be serviced with the CNG collection vehicles or 15 15 would it be serviced with the long-haul LNG vehicles? 16 16 A. The LNG long-haul trucks are serviced by SF 17 17 Recycling. Any LNG route trucks would be serviced by 18 18 either Recology Sunset or Recology Golden Gate at the 19 19 facility which they are dispatched from. 20 **FURTHER CROSS-EXAMINATION** 20 21 21 MR. DREW: Thanks. Maurice. 22 22 Q. Along the same lines, LNG fleet -- the 23 23 long-haul fleet -- has gotten smaller recently, has it 24 24 25 25 A. To my understanding, we are changing those Page 792 1 1 trucks. 2 2 Q. In some respects you're filling in the 3 3 collection vehicles -- some LNG collection vehicles --4 4 into those slots? 5 5 A. No, we are not. 6 6 Q. But the LNG facility that has been doing the 7 7 long-haul maintenance is still in operation?

saying that it's the -- they ensure the maintenance operation and the inventory that they have to maintain, that makes it difficult?

A. Correct.

MR. HALEY: That's all the questions we have on that subject.

FURTHER DIRECT EXAMINATION MR. WHITE: Just a brief redirect for Mr. Quillen.

THE COURT: Okay. Proceed. BY MR. WHITE:

Q. Mr. Quillen, I believe this is in your area of expertise.

There were several questions that suggested the possibility of moving maintenance workers between Golden Gate and Sunset Scavenger. Is that a possibility under the collective bargaining agreement?

- A. Currently that would not be a possibility under our existing collective bargaining agreements.
- Q. Can you say a few words about why that couldn't happen.
- A. Well, the Recology Golden Gate and Recology Sunset are two specific companies. And while we have a combined collective bargaining agreement, we do apply the collective bargaining agreement in two different

Page 794

A. Yes, it is.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Q. And it will service the LNG new collection vehicles for maintenance?
- A. The LNG fueling facility is in place and will serve as the fueling facility for the new LNG vehicles. And Recology Golden Gate and Recology Sunset will serve as maintenance facility for the LNG vehicles.
- Q. I see, not the existing RSF LNG maintenance facility?
- A. The RSF maintenance facility is where we maintain our long-haul trucks. We generally have different parts inventories and different truck service at those locations.
- Q. I see, yeah, because I couldn't help but notice on the Clean Energy -- the exhibit from Clean Energy -- that all of the requirements for LNG and CNG were the same and therefore you had an existing facility that was meeting the standards necessary. But you're

Page 793

companies.

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Also, there's some workers comp issues. The employees who work for, let's say, Recology Sunset could not be moved to Recology Golden Gate and still be provided all the workers protections under the workers comp; and the company is aware of the liability associated with that. So we try to maintain the Recology Golden Gate workforce at Recology Golden Gate and Recology workforce at Sunset at Sunset. In addition, the union typically objects to these types of movements.

- Q. Now, there were some other questions that suggested the possibility of switching jobs within the company. So taking, for example, the job of fueling the trucks from the driver to some other employee at the same company, does -- are there any problems with that idea?
- A. Currently we don't have any position in the company that would represent a significant cost savings. So having a driver fuel the truck and a mechanic fuel the truck, in my mind, would be very similar.

Personally, I have issues with the mechanics fueling the trucks. In the course of my many years with the company, I've had to experience issues associated with mechanics who have for whatever reason left a job and forgot to put a gasket in or a bolt or created some sort of issue as a result of inattentiveness. So we try

```
very hard to keep a mechanic working on one specific job until he's finished and that at that point he knows that he's responsible for the work and he signs off on it and ultimately the safety of that truck; and that employee is based on that mechanic's work. I would not be in favor of having mechanics moving about the facility fueling trucks, working on trucks, changing tires, and doing multiple tasks.
```

2.4

- Q. And there just isn't anybody else in the company who would represent any sort of cost savings who could perform that job instead of a mechanic?
- A. At this point there is not. We have multiple classifications in the shop -- foreman, mechanic, and shop person. But generally they're very similar in price to cost of the driver.
- Q. And those classifications are set by the collective bargaining agreement?
- A. Yes, they are. They are negotiated in collective bargaining.

MR. WHITE: No further questions.

MR. HALEY: I have a couple of follow-up questions.

We were discussing the possibility of nondrivers fueling vehicles and if they did that, even if they're at the same pay rate, would you agree there might

Page 796

and off-site, which would then be offset by an additional head count to fuel the vehicles in a separate shift; is that correct?

MR. HALEY: That was one of the items. But I think you'd agree that if you had someone fuel the vehicle, it frees up some driver time so you would need less drivers for a certain number of routes, so that could essentially balance out.

MR. GLAUB: No, we have not analyzed all those impacts. But I think Mr. Quillen is correct, that the labor rates are really much more closer than dissimilar.

MR. HALEY: And is there anything in the collective bargaining agreement that precludes a nondriver from fueling a truck?

MR. QUILLEN: There's nothing in the collective bargaining agreement that would preclude that. Generally, these things are argued from a basis of past practice. So the past practice has been that the drivers have fueled the trucks. And I imagine, if they were to lose that responsibility, there could potentially be an objection to that reassignment.

MR. HALEY: And the collective bargaining agreement -- they're an exhibit that we have -- so there's no section that you can cite that says it would preclude that or might lead to such a protest?

Page 798

be other savings potentially, like the electricity savings during the evening, the ability to fill more trucks -- some of those kinds? So beyond the wage savings, there would be some other savings; is that correct?

MR. GLAUB: We would have to investigate that. The schedules that we have with on-peak and off-peak rates at our facility now are actually higher -- the average cost per kilowatt hour is higher than the cost that's used from the medium-duty schedule, which is not a time-of-day service. As you may be aware, PG&E has a variety of commercial industrial schedules similar -- to actually more -- but similar in concept to residential that fit the needs. We'd have to look at other schedules. But the schedules that we have that have on-peak and off-peak, their average kilowatt hour cost is actually higher than the medium duty schedule. In our calculation, here we used 15.4 cents, which I believe was at the bottom of the range that Mr. Drew mentioned for a time-of-day schedule.

MR. HALEY: Have you investigated the other kinds of savings that Mr. Drew discussed?

MR. GLAUB: Those would be savings? I can summarize what I think he suggested, was those would be savings in the fuel costs differential between on-site

Page 797

MR. QUILLEN: I cannot cite a section. But based on experience I have a good understanding of how past practice is established and how the union uses past practice in these situations. And I think it would be very difficult to change procedures at this point in time unless it was negotiated.

MR. HALEY: Okay. That's all the questions I have on that. Thanks.

DIRECTOR NURU: Okay, Jon, I think we have some questions -- staff has questions for both of you. Thank you.

JON BRASLAW.

having previously been sworn, appeared and testified as follows:

FURTHER CROSS-EXAMINATION MR. LEGG: Welcome back, Mr. Braslaw.

Q. I just have a couple of questions regarding apartment revenues and tonnage and then we'll have Mr. Deibler come up to ask you a couple of questions.

As staff is evaluating all of the evidence that's been provided at these hearings about numbers of units and average gallons of service per unit, as you had pointed out on Monday, if we are showing additional revenues, with that will come additional tons. And you had some exhibits that you presented on Monday that

1 1 showed those additional tons based on your Exhibit 79? projected on a future basis and they may not materialize 2 2 A. Correct. to the extent that we project them to. 3 3 Q. Can you just tell us very briefly the Q. But wouldn't that argument apply to other 4 methodology you used to calculate those tonnage figures? 4 pass-through expenses that you've agreed are pass-through 5 5 A. Actually, I'd like to defer to Mr. Glaub. He expenses, such as those related to disposal in Alameda 6 6 did the calculations. County, I mean --7 7 A. Yes. MR. LEGG: Excellent, Mr. Glaub. 8 Q. It would apply? 8 MR. GLAUB: Okay. With respect to the 9 9 A. That's correct. It would apply. increase tonnage associated with growth, it was based on 10 10 Q. So why would one type of expense be a the assumption of minimum service volume per unit. And 11 pass-through and another not? I have a little trouble 11 multiplied by number of units to arrive at total volume 12 12 of service. And then the three streams -- the black, with that, understanding the distinction. 13 13 A. I guess it should be included in the operating blue, and green -- were converted to tonnage using bulk 14 ratio. I guess under that theory -- again, I think what 14 densities. And then annual tonnages were calculated as 15 15 we did is went through the analysis specifically related well as tons per day. 16 16 MR. LEGG: Okay. Thank you. to this fee. And one of the components, again, of our 17 analysis was the fact that when you set revenues you may 17 Mr. Deibler, are you ready? 18 not collect a hundred percent of those that you project 18 CROSS-EXAMINATION BY THE RATEPAYER ADVOCATE 19 19 to collect. MR. DEIBLER: Thank you. I'd like to ask a 20 Q. Okay. I appreciate that. That argument was 20 few questions about the operating ratio, or cost, really 21 21 not made previously. That's an additional argument. of pass-through or not a pass-through of the Brisbane 22 Focusing on the Brisbane fee itself, the 2.1 22 tax. Based on Mr. Baker's comments, who should I 23 million, when did that concept first get raised in any 23 address them to? 24 public sense or when did the company first become aware 2.4 MR. BRASLAW: You can address them to me. 25 there was a consideration of such a fee or tax? 25 Q. Okay. Thanks, Jon. So is it correct that the Page 800 Page 802 1 1 company is arguing that this is effectively not a MR. GLAUB: I don't remember the exact year, 2 2 pass-through expense? but it would be more than one year ago. I don't have 3 3 with me the ballot initiative or the date. I believe it A. That's correct. The company is requesting 4 4 was -- was it fall of 2011? There's an exhibit with the that it be considered as a general expense that's subject 5 5 date of the ballot initiative, so that would identify to the operating ratio. 6 6 Q. Okay. And is it accurate that when it was initially approved. 7 7 BY MR. DEIBLER: unpredictability, if you will, is really the reason why 8 8 Q. Was anyone in the company aware of it it's not a pass-through expense in the sense that it was 9 9 unofficially prior to that -instituted between rate orders? 10 10 A. Yes. A. That's one of the reasons, one of the 11 11 criteria, that we used in evaluating it. Q. I mean certainly there was a great deal of 12 12 Q. What other criteria would there be for why it discussion before it --13 13 wouldn't be a pass-through? A. Yes, we were. 14 A. I think in the regulatory process there's 14 Q. -- was on the ballot --15 15 risks that the companies are subject to with respect to A. Yes, we were. 16 16 Q. I would imagine. rates and rate recovery. As we testified at the 17 17 beginning of this process, in the last rate proceeding we Okay. And when did it become effective? The 18 18 actual date, that's fine. I'm trying to make a point had anticipated a certain level of revenue. And, in 19 19 here; and I don't know what the actual date is. fact, where we are today is essentially lower than where 20 20 MR. GLAUB: There is an exhibit that provides that revenue was. So had we included this fee in a 21 21 that information. revenue schedule cycle, the companies, in fact, would be 22 22 collecting less than 2.1 million because our overall MR. OWEN: The election was held on 23 23 revenue collected is less than what we expected when we November 8, 2011, according to Exhibit 31. 24 2.4 MR. DEIBLER: And then the fee took effect -set the rates. So by going through the proceeding, it 25 25 creates essentially revenue risk because the rates are or the tax took effect immediately or when --Page 801 Page 803

22 (Pages 800 to 803)

```
1
                                                                      1
              MR. BRASLAW: The tax took effect on
                                                                             may also be able to understand.
 2
                                                                      2
        October 15th, 2012. It represented an annual payment.
                                                                                   MR. DEIBLER: I am able to understand that.
 3
        The first payment is due by June 30th of 2013. So it's
                                                                      3
                                                                             Thank you.
 4
                                                                      4
                                                                                   MR. BRASLAW: I think it was a choice. It
        due by the end of next month.
 5
                                                                      5
              MR. DEIBLER: Okay. That's the payment you're
                                                                             was -- the companies felt it was in our best interests
 б
                                                                      6
        arguing you will not be reimbursed for?
                                                                             and in the City's best interests, because again the
 7
                                                                      7
              MR. BRASLAW: That's correct.
                                                                             extent of this process involves a lot of time, effort,
                                                                      8
 8
              MR. DEIBLER: And your company is absorbing?
                                                                             and cost, not only on the part of the company but also
 9
              MR. BRASLAW: That's correct.
                                                                      9
                                                                             on the part of the City.
                                                                     10
10
              MR. DEIBLER: Okay. Did you discuss the
                                                                                   MR. DEIBLER: I understand that. So you made
11
                                                                     11
        concept with the City when it first came up of, Gee,
                                                                             that choice for that one year of tax -- had made a
                                                                     12
12
        Brisbane is talking about this tax. Was that something
                                                                             different choice, which you may or may not have been
13
                                                                     13
        that was discussed at that time?
                                                                             able to make. You would have been reimbursed that; and
14
                                                                     14
              MR. GLAUB: Yes, we did.
                                                                             then the argument that it's a pass-through would still
15
                                                                     15
              MR. DEIBLER: The City -- you informed them?
                                                                             apply going forward, I would suggest, and there would be
16
                                                                     16
              MR. GLAUB: Yes, we did.
                                                                             no rationale for applying an operating ratio.
17
                                                                     17
                                                                                   MR. BRASLAW: No, actually the -- I believe
              MR. DEIBLER: Okay. Given the period in
18
                                                                     18
        between, wouldn't there have been an opportunity for
                                                                             that the point that Mr. Baker was making was the fact
19
                                                                     19
        this to -- I'm sorry -- for the company to request a
                                                                             that the tax came about in an interim period between a
20
        rate adjustment in order to avoid paying this
                                                                     20
                                                                             rate-setting period, or rate-setting processes, is
21
                                                                     21
        2.1 million?
                                                                             indicative of the fact that the companies would be
22
                                                                     22
              MR. BRASLAW: Given the extent, the
                                                                             subject to new tax. Potentially, it could be changed in
                                                                     23
23
        comprehensiveness, and the time period associated with
                                                                             another interim period. So if it's changed next year,
24
                                                                     24
        the rate process, this specific fee on it own was not of
                                                                             then that's a risk that the companies incur operating
25
        sufficient magnitude to warrant a rate process. The
                                                                     25
                                                                             the facility that we operate in Brisbane and now being
                                                                                                                        Page 806
                                                   Page 804
 1
                                                                      1
       company knew that eventually we would be coming in with
                                                                             subject to the tax. So I believe what -- I believe the
 2
                                                                      2
       a rate application. But the timing was such that we
                                                                             discussion was intended to demonstrate that there's a
 3
                                                                      3
       were not able to do it prior to the time that the first
                                                                             risk involved with respect to the tax as using the
                                                                      4
 4
       payment was due under Brisbane tax.
                                                                             setting of that tax as the example.
                                                                      5
 5
             MR. DEIBLER: So is it accurate you made a
                                                                                   MR. DEIBLER: Okay. But what level of risk
                                                                      6
 6
       business decision that this was not a sufficient cost in
                                                                             that will entail, I guess, is very hard to know moving
 7
                                                                      7
       and of itself for you to request a rate adjustment as
                                                                             forward.
 8
                                                                      8
       soon as you first became aware of its possible
                                                                                   Okay. Thank you. I'm done.
 9
                                                                      9
                                                                                   DIRECTOR NURU: Continue with your report.
       existence?
10
                                                                     10
                                                                                   MR. DEIBLER: What I'd like to, if Douglas had
             MR. BRASLAW: I actually wasn't involved in
11
                                                                     11
                                                                             mentioned, if would you like me to -- I want to talk a
       the issue at that time.
                                                                     12
12
             MR. DEIBLER: It was a choice. It was a
                                                                             little bit about the concept of having a cap on
13
                                                                     13
       choice?
                                                                             adjustments. Should I do that now?
14
             MR. GLAUB: You're saying it was a choice not
                                                                     14
                                                                                   MR. LEGG: We should just find out. I don't
15
                                                                     15
       to file a rate application just on the new tax?
                                                                             think the City has any other evidence. I have one
                                                                     16
16
             MR. DEIBLER: Correct, when it became either a
                                                                             exhibit at the end about outreach efforts that I wanted
                                                                     17
17
       reality --
                                                                             to introduce. I don't know if the company has any
18
                                                                     18
             MR. GLAUB: As you've observed, this is a very
                                                                             other.
19
                                                                     19
       involved process. So I think you can understand why one
                                                                                   MR. BAKER: We have nothing further.
                                                                     20
20
                                                                                   DIRECTOR NURU: Nothing from the companies?
       would not just file this extensive 11-month rate
21
                                                                     21
       application with this 11-month process on that tax.
                                                                                   Okay. So why don't you go ahead.
22
                                                                     22
             MR. DEIBLER: Thank you. I think that it
                                                                                   MR. DEIBLER: Okay. I'll try to be quick. I
23
                                                                     23
       could be called a choice.
                                                                             wanted to talk about one substantive issue and then I
                                                                     24
2.4
             MR. GLAUB: I think also there are many
                                                                             have some closing remarks.
25
       expenses associated with the rate application, as you
                                                                     25
                                                                                   The substantive issue was the concept of a cap
                                                   Page 805
                                                                                                                        Page 807
```

23 (Pages 804 to 807)

on adjustments, a percentage cap. This is certainly a fairly common practice in contractual relationships between cities and service providers in the refuse collection industry. And this type of cap can occur either when there's a detailed adjustment sort of similar to what's being envisioned here or during a year where there's a COLA adjustment. Both can apply.

And the idea of a cap is it provides a general incentive to control costs. We've talked about some key areas where it's very hard to really understand the details. And maybe it's not even productive to understand the details of what costs are being controlled and in what way. Maybe it's best to set an incentive for the company to be able to decide itself where are the best places to achieve those savings.

So Exhibit 66, which is the operating ratio study exhibit that was introduced, I guess, on Monday, cites a number of cities. And it cites in that case operating ratios. Those are profit mechanisms that are contained in various agreements with the cities listed in the exhibit. And a number of these cities have some form of cap on adjustment. Two of them include Union City, which is not a Recology service provider; but also the city of Pacifica, which is served by Recology. So it's certainly a concept that the companies are familiar with

a cap mechanism.

So that's all I wanted to say about that.

MR. LEGG: May I ask a question? How would you recommend we determine what that cap should be? I guess we've established a COLA mechanism. And staff recommended some changes to that COLA mechanism, which are tying costs to -- or cost increases -- to various very specific indices and other rates. The two exceptions are the healthcare index, which is tied to actual costs, as the company proposed. But the other is tied to the pension -- the actuary for the pension plan, which showed very low annual increase in contribution rates. So we've already -- in my mind, we've already

kind of established a cap based on real-world cost

indices. And I don't know what Union City or
 Pacifica -- what their adjustments are based on. But

how would we determine what the cap should be, whether it be 3 percent or 6 percent or 15 percent, if the

indices are different?

MR. DEIBLER: Well, first we indicate -- you mentioned use of an index. I think there's two sort of adjustments in a COLA, if I understand. One are based on actual costs incurred by the company that are deemed to be reasonable; in which case those are probably allowable reasonable costs. To the extent you're

Page 808

Page 810

also.

б

2.4

Just briefly, the idea is fairly simply. You cap an annual increase at a certain percentage and then you may allow or not allow recovery of the increment above that cap. And that could occur in a variety of ways. In some cases, there's no opportunity for recouping it. It's 5 percent or 6 percent or whatever it is. That's it. In others, there may be an opportunity for the contractor to demonstrate that actual costs were incurred above the cap and that those actual costs were reasonable and they could be reimbursed or -- and/or, I might say -- that that additional amount might be spread over more than one year into the future.

So let's say six percent and there's an extra three percent. Maybe the three percent occurs in the second or even is spread across the second and third year. As examples.

So my goals for now is, one, to get concept of a cap in the record and hope that it will be addressed in some form in the rate order -- the request be considered in the rate order and moving forward in future processes. And that one area where it might be particularly valid to consider is when there are multiple years during which COLA is going to be applied. When you get beyond a second year of COLA, that it would really consider having

adjusting any components of COLA based on an index, then that's an index. It not's a measure of actual expense

3 incurred by the company. So I would think of

4 applying -- potentially applying the cap concept to

those aspects of COLA -- maybe not total COLA in that
 example -- that you had in terms of what a percentage

should be. There's wide range of them. And in a
 contractual situation those are often the result of a
 negotiation, first of all. And, secondly, they're part

of the overall risk-reward picture in an agreement.

There's many other moving parts.

So looking at them in isolation is a little difficult and say this is the right number. I would suggest maybe you use Exhibit 66 and the underlying referenced documents -- the agreements -- as a source of information. You can get a sense of the range that might be out there.

I think 5, 6 percent is not uncommon though.

I could maybe say that as an annual amount. I think in years of high inflation, which obviously we haven't seen in a while, then you might think of a different number.

You might think of a higher number. So there's nothing etched in stone. And I think it's important to think of it in the concept of the overall package.

So I hope that helps.

Page 811

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

record.

go away all by itself.

1 MR. LEGG: Thank you. 2 DIRECTOR NURU: Okay. Any other staff 3 questions of the companies? Any other questions? 4 If not, I will move to public comment, if 5 there are no questions. Okay. б So I would like to open --7 MR. LEGG: Do you want the Ratepayer Advocate 8 to sum up his findings or --9 MR. DEIBLER: That was the substantive matter. 10 I mean not that this isn't substantive. A few quick 11 close remarks, if I might? 12 DIRECTOR NURU: Yes, you may go ahead. 13 MR. DEIBLER: Thank you. 14 So I have one exhibit -- I am doing my best to 15 help us get up to three digits here. But I only have 16 one. 17 One very quick other comment, if I might, I 18 was asked to make, just to reinforce. On the abandoned 19 materials issue, which we talked about a little bit 20 earlier, just that I mention the concern about waiting 21 till the next rate order to figure this out -- the next 22 rate review process; and that, in fact, to take it one 23 step further, to request that this rate order be explicit 24 about what the process and mechanism will be -- as 25 explicit as it can be for what happens after that first Page 812 1 year of data and when that data comes in. 2 I would like to enter this exhibit. And this 3 gives an update from the exhibit we entered -- I believe 4 it was No. 64, but I'm not sure. I think it was 64, at 5 the end of the April hearings. 6

2 The second is to please bring the public 3 along. And there were a couple of aspects of this I 4 won't reiterate. But in my prior comments, one, I really 5 suggested to both the companies and the City really 6 informing the public of the underlying economics of the 7 application process and disposal in a clear, colorful 8 graphic way. If you need some help doing that, let me 9 know. I think it can be done in a way that can help 10 people understand why things are headed where they're 11 headed and helps provide background for zero waste rate 12 structure changes. And then, regarding those changes, to

really be as open and transparent with the public as you

why are we headed there? I think we benefit zero waste

move forward about where are we now, where are we headed,

goals, frankly, being achieved in this city.

So I think with that, I'd really like to thank staff. Thank you, Mr. Nuru, for the opportunity to provide this role during this process. And I want to very much thank the interested and involved members of the public. So thank you.

DIRECTOR NURU: Thank you.

MR. LEGG: I'd like to introduce one more exhibit which describes the outreach effort DPW has performed. I think it's important that it be on the

Page 814

And what this does is really provide a compilation of the public outreach that has occurred and the comments that we receive from the public. As of Friday we had over 1,200 views of the Website. And a combination between phone calls and emails of about 60 contacts, with a total of about 45 individuals 044 individuals. So it's been a high level of interest. And there's some copies of this over there. It will also be on the Ratepayer Website.

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

2.4

25

Several very quick closing comments. And then I will be done.

In the closing remarks I made on April 24th, which are, I think, pages 584 to 588 in the transcripts, I made a couple of points. I'd like to reiterate those.

One is to really address the scavenging issue head-on and make the argument for why or why it doesn't make sense to be thinking about that lost revenue in a more specific way. And I want the echo the comments that Nancy Wuerfel made on Monday on that. It is a visceral issue. People see it every day. It's just not going to

As you can see, we've done quite a few outreach efforts to both the public and various interest groups on this rate application and the Director's Hearings and the service of the Ratepayer Advocate. And, as you can see in the exhibit, our new director of communication has really stepped up the effort to publicize these hearings, using both traditional press release as well as social media; and has tried to reach a broader audience by directly contacting stakeholder groups such as housing and apartment organizations, neighborhood groups, community newspapers; and has worked to publicize these process and the Ratepayer Advocate; also through members of the Board of Supervisors and Mayor, extensive mailing lists and newsletters.

I think that the number of inquiries and

comments received by the Ratepayer Advocate is indicative of the success of these outreach efforts perhaps more than the turn out at these hearings themselves.

MR. OWEN: The Ratepayer Advocate's exhibit will be numbered 97.

The DPW exhibit will be No. 98.

(The documents referred to were marked for identification and received in evidence as Exhibits 97 and 98,

Page 815

Page 813

25 (Pages 812 to 815)

1 respectively.) 1 you add trucks just to go out in locations or do you 2 2 DIRECTOR NURU: Mr. Baker. reorganize the geography? 3 3 MR. BAKER: I am sorry. Mr. Nuru, there is A. We would reorganize the geography. And we've 4 4 actually one additional piece of evidence that we want seen over time, as our customer base has grown, 5 5 to get in in response to Mr. Drew's Exhibit 96. especially with respect to composting, we've had to go б 6 Mr. Braslaw is the witness on that, if he could come through area by area and reroute. So you don't get a set 7 7 of customers that represents a new route. You get them back up for a moment. 8 8 DIRECTOR NURU: Okay. We'll do that. on all the existing routes to the point where you have 9 Mr. Braslaw, if you would take the stand, Mr. 9 your routes become too long; and then you have to 10 10 Baker will examine you. essentially reroute the area. The number of units --11 11 JON BRASLAW therefore, customers -- we said by this level of growth 12 12 **FURTHER DIRECT EXAMINATION** would require that we add additional service to support 13 13 BY MR. BAKER: 14 14 Q. Mr. Braslaw, I have Exhibit 96 on the screen, Q. Does an additional route mean additional cost? 15 15 which is the document that Mr. Drew introduced earlier. A. Yes. 16 16 And Mr. Drew's presentation was that the rate calculation Q. In what way? 17 17 should account for 350,097 additional units coming online A. It includes additional vehicles, fuel, 18 18 during the next 12 months. Is that what you understood disposal costs, driver time -- all of those things 19 19 him to say? together. 20 A. Yes. 20 Q. Is there a way to estimate what the 21 21 Q. Or over the next rate year. incremental costs would be of an additional route? 22 22 Now, you did an analysis that Mr. Drew built A. The cost is determined to some extent by the 23 23 on here. And in your analysis, Exhibit 79, your nature of the route, whether it's a commercial or a 24 24 calculation was 900 additional units, correct? residential route. We did an analysis and looked. And 25 25 A. That's correct. on an average basis the cost of a single route is between Page 816 Page 818 1 1 \$225,000 and \$250,000. Q. And I think you testified that for 900 2 2 additional units you did not believe that additional Q. And you testified earlier that 900 additional 3 routes would be required, am I right? 3 customers would not necessitate an additional route. Do 4 4 A. That's correct. you have a threshold at which you believe an additional 5 5 route would be required? Q. For 3,597 additional units would additional 6 routes and therefore expenditures be necessary? 6 A. I believe it's between 1,200 and 1,500 units. 7 7 A. Absolutely. And, again, it would really be determined to some extent 8 Q. Can you explain that, please. 8 by the number of dollars that those units represent. 9 MR. BAKER: Thank you. A. Yeah. Actually, I believe it's Exhibit 81 is 9 10 DIRECTOR NURU: Does the City want to ask any the exhibit that showed the additional tonnage that we 10 11 anticipated from the 900 additional units --11 questions? 12 approximately a thousand tons. If you correlate that to 12 MR. LEGG: No. 13 the 3,600 units shown in this exhibit and use about 13 DIRECTOR NURU: No questions. 14 3.500 tons -- so slightly less on the overall -- some of 14 Mr. Deibler, you look like you want to ask a 15 these are larger buildings; you get about 15 tons a day, 15 question. 16 based on our operating days. 15 tons a day is about two 16 FURTHER CROSS-EXAMINATION BY THE RATEPAYER ADVOCATE 17 routes. The trucks hold about 8 tons. And probably, 17 BY MR. DEIBLER: 18 given this number of customers, probably would have two 18 Q. Mr. Braslaw, you're suggesting that you would 19 full trucks. The exact number, you'd have to see how 19 be incurring a marginal cost that would not be covered by 20 many customers it represents, because these are units the additional revenues that would be coming in with the 20 21 within buildings and so it may be slightly more or 21 additional units represented? 22 slightly less. Approximately two routes. 22 MR. BRASLAW: No, I wasn't suggesting that. I 23 Q. So if you have additional customers that 23 was suggesting that the analysis -- my understanding of 2.4 require the adding of routes, let's say, in the example, 24 the analysis Mr. Drew prepared showed additional revenue 25 you've given two routes, how do you add two routes? Do that will be generated by those additional customers. Page 817 Page 819

26 (Pages 816 to 819)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

So the point that I was trying to make was there are, in fact, additional costs also associated with servicing those customers. So that the marginal revenue -- I believe the marginal revenue will exceed a marginal cost, but there are certainly is a marginal cost associated with providing that service.

MR. DEIBLER: Okay. Thank you. DIRECTOR NURU: Okay. No more questions. Thank you. Okay.

We will go to public comment. I would like to open the public comment period. Could everyone wishing to speak, please show your hands so that I can allow enough time so we have -- okay. I'll allow five minutes per person for public comment.

Since this is public comment only you do not need to be sworn in, unless you also intend to present material you'd like also to be placed into the record. If that is the case, I'll have the clerk swear you in.

Also, when you come forward, please state your name so that the court reporter can enter it into the record. Thank you.

Let's proceed with the first speaker, who will be Eileen Bokun. She couldn't stay. So they wrote down her comment. We'll put it into the record.

We have people who are here to speak. Okay.

"just and reasonable" that I think that the Director of 2 Public Works is going to have a real hard time convincing 3 anybody that these rates are just and reasonable. We've 4 really crossed the line. 5

There's also a better example of this, which has to do with the ten highest cities. When you see where we are, at the second from the bottom, on the ten largest cities, we're going to move right under San Jose. We're going to be third in line. And I'm not even sure that this is a comparable chart in terms of apples to apples, but I really want to put it out there.

"Just and reasonable" needs a definition. And I want to make sure that at some point I understand when we top Hayward is that going to be unreasonable? What is going to be the measure in San Francisco? It's never been talked about. And it shouldn't have to be just subjective ad infinitum.

The other thing I want to mention is that today we had a very valuable discussion having to do with the difficulty in understanding the impacts of transferring a city process of collection of abandoned waste from a civil service city activity to a contract. I am going to put it out there right now. I'm opposed to this kind of migration. And we have just experienced the difficulty.

Page 822

Page 820

Nancy Wuerfel.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MS. COHEN: Please raise your right hand. Do you solemnly swear that the testimony you are about to give today is the truth, to the best of your knowledge?

MS. WUERFEL: Yes.

MS. COHEN: Thank you.

MS. WUERFEL: Can I ask the clock to be stopped while I give you this information?

DIRECTOR NURU: Stop the clock.

MS. WUERFEL: Thank you very much.

My name is Nancy Wuerfel. And I want to thank you for concluding these hearings today.

What I am submitting for my exhibit is a document that identifies that we are going to increase the garbage rates from the third quartile to the first quartile. I bring this up for the simple reason that we need to define what is "just and reasonable."

> (The document referred to was marked for identification and received into evidence as Exhibit 99.)

This document is from Exhibit 35. And it's always been stated that the rates are so cheap in San Francisco, we can afford to have other additional costs. Well, I think we've crossed a threshold here that is now letting us understand that without a clear definition of

Page 821

I'm sympathetic with both of you. But when there's a situation, Mr. Nuru, that came to your attention -- if the Mayor called and said, "Pick up all that crap over on X Street," you would have the resources to do it and you wouldn't have to go back to the Board of Supervisors for a supplemental. You would make it happen within your organization. But that's now things happen with a contract. They have to be nailed down with time and parameters. So I want you to think really carefully that this is going to be a big lessons-learned. And I really don't want to have any future contracts of contracting out City work.

Also, you know I'm not happy about the windfall profits. I really need to know where your money is going. And that's one of the reasons why I don't like general fund costs shifted on to the ratepayers, because you have money and I still don't know where it's going. I know I'm a broken record on that, but I feel very strongly.

I also want to bring up the fact that it's very important to do something about the stealing. I have been given this by Supervisor Tang's office. And I would like to recommend that this document be placed on every blue bin in the city so that people know. And it shouldn't be done because somebody called up Supervisor

Tang and said what am I doing to do about it and this is handed out. Should be handed out and stuck on by the garbage rate people -- by the garbage people -- because they have access to these cans. And that's very important.

Also, I would very much urge that the rate order includes enforcement laws against stealing. We have the laws on the books. What we don't have is the will of this town. I think with the strength of your rate orders, if you were to put in a sentence urging the District Attorney to do whatever is necessary and let him decide how this works, to work with the police department and with the public. If you urge that, then at least we're on record in an official document that this is a big deal.

So we've got something that Recology can do, we have something for you to do, and of course I'll be back.

So I thank you very much for all of your good will. I want to also thank staff. I mean some of my suggestions have actually been worked into the staff report and I want to acknowledge that and thank you. And I want to make sure that everybody appreciates that you worked very hard to try to get these rates down. But they're still too high.

Page 824

```
program. I understand that.
```

I know these are questions for another time. But is the program too aggressive at this time? Is it realistic at this time? Should it be implemented in its fullest capacity at this time? But that's a question for another time. Food for thought.

Recology says that they aren't meeting their goals. They need more money.

I'm not against big business. I'm for business. I want to see businesses succeed. I want to see them profit. But at the same time they have to do their due diligence. They have to take care of their own house first before they come to the public in this case. Recology hasn't done that, in my opinion.

Specifically, lost revenue in the theft of recyclables. There's been all kinds of figures thrown around from one million all the way up to ten million. I heard a figure directly from Recology representative Bob Besso, who said the figure was between five and ten million dollars annually. I don't know how he came across that figure. Regardless, it's a huge amount of money. So they aren't sure how much they lost.

If Recology is an employee-owned company, why aren't the employees incensed? Really? One million annually? Ten million annually? That's a huge amount of

Page 826

```
Thank you.
```

б

2.4

DIRECTOR NURU: Thank you.

Our next speaker, Mr. Kehoe.

MR. KEHOE: Good afternoon. My name is Robert Kehoe.

I want to thank you for the opportunity for public comment. I'm here solely as a ratepayer and I want to specifically address the recycling aspect specific to the theft of recycling.

To back up just a little bit, this program started -- recycling started -- 30 years ago, to the best of my knowledge, with the promise that there was going to be a rebate if the citizens were diligent in their recycling. And coming in here today, I had never seen, at least on my bills, any rebate. but I was corrected here by Nancy. She said she had seen 25 and 30 cents on her bill. So perhaps I overlooked it. But, nonetheless, that program no longer exists.

So now here we are 2013 and the citizens of San Francisco now are asked to absorb a 21.5 percent rate increase. As best as I understand, is that correct?

DIRECTOR NURU: Correct.

MR. KEHOE: Thank you.

21.5 percent in one fell swoop. That is a

huge increase. But San Francisco does have a zero waste

```
    million, as I had heard when I sat in on another day for
    a new facility, which I'm sure they need. But if they
```

money that the employees lost. Recology needs \$6.2

recoupled their recyclables, if they were able to limit

the amount of theft, how soon could they pay that debt

off? For 30 years, they've been hemorrhaging millions of

dollars. And in my opinion, as a ratepayer, they haven't
 done anything about it. They go to the community. They

go to community meetings. They ask the police department to do something about it. They want the D.A. and the

to do something about it. They want the D.A. and the
 courts to do something about it. Well, that's all part

of it. But is that the total answer? No, it's not. I

realize that there's organized crime in the city. And I
 realize that you'll never completely stop theft. But

it's not my job as a ratepayer to be calling the police.

16 It's not the police department's job to be running after

people that are stealing recyclables because they're hurting. And many people are hurting. And that's the

way they do it. But, also, as I said, there's organized crime? So what's the fix? What do we do about it?

Well here we are -- is my time over?

Well, here we are -- is my time over?

MS. COHEN: Thirty seconds.

MR. KEHOF: This is the 21st

MR. KEHOE: This is the 21st century. We've been to the moon and back. Build a better bin. Hire an engineering firm that can design a bin that will serve

Page 827

1 1 the purposes. Zero waste is a wonderful idea. How about whole hearing -- says \$15 million is enough. I think you 2 2 zero theft? ought to use some of that reserve. I know the Department 3 3 Recology, step up to the plate. Do something of Public Works has been using 1.3 percent since 2010 for 4 4 on your own instead of throwing it on the community. some purposes. I'd say set the rates using at least 5 5 Thank you. couple million, maybe five million, of that. Work it б 6 DIRECTOR NURU: Thank you. down till you're at the \$15 million level and then look 7 7 Next speaker is Mr. Kermit Kubitz. at the rates in a couple of years after you've used up 8 8 MR. KUBITZ: I have some documents for the some of that reserve. 9 record, so you'll have to swear me in. 9 The third issue is inclusion of other future 10 10 MS. COHEN: Can you please state your name for costs. Generally, I'm opposed to this on an automatic 11 11 the record? basis or a contingent basis. There was discussion of 12 12 MR. KUBITZ: My name is Kermit R. Kubitz. buying some land in Brisbane. Well, if the Brisbane tax 13 13 MS. COHEN: Please raise your right hand. Do situation or fee situation is so up in the air, how can 14 14 you solemnly swear that the testimony you are about to you have a contingent cost thrown in for future 15 15 give is the truth, to the best of your knowledge? facilities in Brisbane? I'm not making this as a real 16 16 MR. KUBITZ: Yes. suggestion, but you can always use that atoll on the 17 17 Olympic Club that's part of Harding Park if you need some MS. COHEN: Thank you. 18 18 MR. KUBITZ: Let me give you copies. I have property in the city of San Francisco. 19 19 multiple copies of a ten-page letter. And, Take that out of the transcript. They'll give 20 20 unfortunately, I only have two more copies of a separate me a hard time. 21 21 attachment that goes to the number of units being served. And, finally, the second document that I 22 22 I'll try to get through four issues in four didn't have multiple copies of, I'd like to support the 23 23 minutes. Ratepayer Advocate's adjustments for revenue, because 24 24 My first issue, I think, was raised by Ms. they made a fairly lucid case for additional apartment 25 25 Wuerfel, but in a different sense. I have a comment buildings. I drove past 1190 Mission; and it looks like Page 828 Page 830 1 1 about transferring abandoned material pickup to Recology. it's got all eight or nine stories up there right now. 2 2 I have a question as to whether that's permissible under So it's well on the way to being developed. I looked at 3 3 Proposition 218. the residential and the commercial numbers in these 4 4 I've tried to look at your materials. I projections. I find it implausible that it shows no 5 5 haven't seen any opinion from the City Attorney, but growth in residential. It shows a flat number of 6 6 fundamentally this appears to be transfer of an existing \$141,244 for 2012, 2013, and 2014. I know personally 7 7 public general service not directly related to my house that a guy is building on Portola, maybe St. Francis 8 8 or my residence or my refuse to Recology. And general Woods, in-fill lot. I know people were putting two lots 9 9 public services can't be funded from project or home together so they can build new residential. Each of 10 10 specific fees under Proposition 218. I give some cite to those is only like 400 bucks of revenue. But on the 11 11 that 1996 analyst's opinion. So I think you'd better commercial side, I see that there's only an increase of 12 12 take a close look. -- it looks to me -- like 31 on the commercial side in 13 13 Another reason I took a close look at that is Exhibit F-1; and the average for the last five years was 14 because unfortunately it says we're going to transfer 14 81 new commercial units. The average for the last two 15 15 this function to Recology, but we're not going to accrue years was 294 new commercial units. So I find the number 16 16 any savings to the people of the City of San Francisco of 31 new commercial units pretty low. When I adjusted, 17 17 and the Department of Public Works, because we're not using the lowest of either the five-year or the two-year 18 18 going to reduce the budget; we're just going to reassign average, I got additional revenue of about 700,000, which 19 19 people. So I don't know how much adding two million or would be in addition to the Ratepayer Advocate's revenue 20 20 three million dollars to Recology's rates without any of a million something from commercial. 21 21 savings on DPW's side does for me or for the rest of the So those are my four issues. Thank you very 22 22 citizens of San Francisco. much for your time. 23 23 The second issue: The reserve amount of \$29 DIRECTOR NURU: Thank you.

29 (Pages 828 to 831)

Page 831

I don't have any more speaker cards at this

Page 829

24

25

time.

2.4

25

million, which has been funded by a 1.3-percent

surcharge. The staff report -- and I haven't been in the

Would you like to speak, sir?

2.4

MR. PILPEL: David Pilpel. I'm wearing my Recology outfit just to distract you. I came to speak about process, reporting, and tracking.

As to process, I found in my review of the staff report the short answers to questions at the end in some cases to be flippy and dismissive of serious public concerns raised throughout this process. I thought that didn't speak well of this process; and that troubled me.

Going forward, I continue to believe that we should have further discussions outside rate application proceedings about refuse collection and disposal, zero waste issues. I've been urging this for many years; and I would strongly urge you to include in your recommended order and report that there be an ongoing process -- whether it's annually, every six months, every quarter -- that involves DPW staff, Department of Environment staff, Recology, and any other interested persons so that we can talk about these issues; and that the rate application process is more about allowable costs than policy considerations.

And it's become conflated so that we talk about both costs and policy issues here when there isn't an established process to talk about those policy issues. And I believe there absolutely should be. There will be

available publicly and posted probably on DPW's refuse rates Website. Right now they are available, but you need to know that they exist and go to somebody and ask for them. It's not the easiest thing in the world.

Finally, with regard to tracking, in addition to those items that are in the public quarterly -- proposing to be public quarterly and annual report -- additional tracking should be done with respect to, as I've suggested before, reusable items at the PDRA and other allocation of costs so that in future rate proceedings we can understand better how much of the bluestream is attributable and allocable -- allocatable -- to residential versus the commercial, to be able to disaggregate the costs and revenues by stream in ways that aren't possible now.

The purchase of materials at Pier 96 and the sale of materials at Pier 96 doesn't clearly indicate which are CRV materials and which are non-CRV materials. Those sorts of items could be better tracked so as to facilitate future rate procedures. To the extent that your report and recommended order addresses those concerns, that would alleviate my need to appeal the matter to the Rate Board, which I think we should try to avoid.

I look forward to your report and recommended

Page 832

Page 834

more difficulty getting to zero waste. There will be more questions about how to do it; and we should have those discussions in public, not in this somewhat adversarial context.

With respect to reporting, the quarterly and annual reports that the company submits, I would ask you to look very carefully at the content requirements, that they be added to also report where recyclable material is going to, what markets, whether they are domestic or international markets, how much of that material is kept in Northern California for processing jobs here rather than elsewhere, even if that means a perhaps diminished rate of return.

I think that there are other items that could be reported on. The pilot less-than-weekly pay per set out program, other pilot programs, the development of the west wing project, other things that were asked for in this rate application and past rate applications. There should be some narrative explanation in the quarterly and annual reports as to company progress on that. Perhaps with the opportunity for the City to also respond formally as to how that -- how those programs and projects are developing.

In addition, with respect to reporting, I think those quarterly and annual reports should be

order. Thank you.

DIRECTOR NURU: Okay. Thank you. So I believe that is our last public speaker. I will close the public comment at this time.

And I will also conclude our hearing. It appears that we have covered all of the items on the agenda. So as the Hearing Officer, I will close the Director's Hearings on Recology's 2013 application for an increase in residential refuse collection and disposal rates.

I want to thank the company for a very clear presentation of the application and for providing additional information and explanations in response to many of our questions.

I'd like to thank City staff and their consultants for your in-depth review of the application and your examination of all underlying assumptions and factors that go into determining fair and reasonable rates. Staff from the Department of Environment demonstrated a considerable expertise and understanding of municipal solid-waste management issues.

I'd like to acknowledge Douglas Legg from Department of Public Works and thank him for his leadership of the review team's work throughout all these proceedings.

Page 835

1	I also want to thank the Ratepayer Advocate	1	CERTIFICATE OF REPORTER
. 2	for your efforts to engage and inform the public on this	2	
3	somewhat complicated topic. You have done an exemplary	3	I, FREDDIE REPPOND, a duly authorized Shorthand
4	job of conveying the public's concern and seeking greater	4	Reporter and licensed Notary Public, do hereby certify
5	clarity from the company as well from the city staff. I	5	that on the date indicated herein that the above
6	believe the role of the Ratepayer Advocate has once again	6	proceedings were taken down by me in stenotype and
7	added considerable value to this process.	7	thereafter transcribed into typewriting and that this
8	Finally, I want to thank the members of the	8	transcript is a true record of the said proceedings.
9	public who sat through hours of testimony and	9	IN WITNESS WHEREOF I have hereunto set my hand on
10	cross-examination and were still here at the end of each	10	this 17th day of June, 2013.
11	day to offer their public comment. Your issues and	11	tills 17th day of stalle, 2015.
12	concerns are important and will be taken into	12	Turkin Rul
13	•	13	FREDDIE REPPOND
14	consideration as I prepare my report and recommended	14	I REDDIE REFFOND
15	order.	15	
16	The next step in the process is for me to	16	
17	consider all the evidence that is before me, including	17	
18	the original application, the supporting documents,	18	
19	exhibits, the staff report, and all testimony and	19	
	cross-examination offered in these hearings as well as		
20	public comment. Before making my recommendation I will	20 21	
21 22	issue my report and recommended order in early June. It	22	
	will be posted on DPW's Website, so check the Website or		
23	the ratepayer advocate Website for notice when this	23	
24	report is available.	24	
25	As a final item, the Proposition 218 hearing	25	
	Page 836		Page 838
			1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
1	to consider written protests will be held on Friday, June		
2	14th, at 1:00 p.m. in Room 400. Under this provision,		
3	any residential customer or property owner may submit a		
4	written protest against the application to me. If more		
5	than half of the ratepayers file a written protest		
6	against the application by the date of the hearing, the		
7	City will not approve the application. Instructions and		
8	guidelines for the submission of written protests are		
9	available on the DPW Website.		
10	Again, I want to thank you for participating		
11	in these proceedings. As I indicated earlier, the record		
12	is now closed and we are adjourned. Thank you very much,		
13	everyone.		
14	(The rate hearing was concluded at 4:41		
15	p.m.)		
16	r/		
17			
18			
19			
20			
21			
22			
23			
24			
25			
	Page 837		

31 (Pages 836 to 838)

```
abandoned (13) 719:3 722:21
  723:16 727:10 731:21
  733:2,17,20 734:7 741:14
  812:18 822:21 829:1
abilities (1) 725:4
ability (11) 724:20 726:7
  729:19 735:13 736:18
  741:11,13 789:25 791:3,19
able (15) 736:11,24 737:21
   739:4 741:6 766:3 772:5,25
  805:3 806:1,2,13 808:14
  827:4 834:13
absolutely (4) 744:9 778:18
  817:7 832:25
absorb (1) 825:20
absorbing (1) 804:8
accelerated (1) 780:23
acceptable (1) 742:7
access (1) 824:4
accommodate (1) 758:3
account (2) 783:8 816:17
accrue (1) 829:15
accurate (2) 801:6 805:5
achieve (1) 808:15
achieved (1) 814:16
acknowledge (2) 824:22
  835:22
acknowledged (2) 764:12
  782:18
activities (2) 733:4 757:19
activity (2) 739:23 822:22
actual (14) 743:21 749:22
  750:11 751:13 754:7
  764:13 785:7 803:18,19
  809:9,10 810:10,23 811:2
actuary (1) 810:11
ad (1) 822:17
add (9) 721:14 735:1 741:1
  754:13 763:11 769:20
  817:25 818:1,12
added (13) 739:10 743:9
   748:1 766:16 776:17 777:3
  777:5,11,12,14 780:10
  833:8 836:7
adding (5) 719:20 742:6
  760:9 817:24 829:19
addition (5) 772:5 795:9
  831:19 833:24 834:5
additional (73) 722:5 726:7
  729:6,9,22 730:17 731:1
  735:14 740:25 741:18
  742:2 757:18,24 758:7
  765:10 767:22 772:22
  775:18,25 776:3,6 777:1,12
  778:9 779:10,25 780:7,17
  782:3 786:15,15,16,17,17
  786:19,19,20,24,25 798:2
  799:23.24 800:1 802:21
  809:12 816:4,17,24 817:2,2
  817:5,5,10,11,23 818:12,14
  818:14,17,21 819:2,3,4,20
  819:21,24,25 820:2 821:23
  830:24 831:18 834:8
  835:13
address (4) 800:23,24 813:20
  825:8
addressed (2) 762:22 809:19
```

```
addresses (5) 776:16,17
  780:11 782:3 834:21
adequate (1) 739:1
adhere (2) 725:11 789:20
adjourn (1) 767:17
adjourned (1) 837:12
adjusted (1) 831:16
adjusting (1) 811:1
adjustment (10) 743:21
   754:10 779:8 784:14 786:4
  804:20 805:7 808:5,7,22
adjustments (7) 754:8 776:25
  807:13 808:1 810:16,22
  830.23
adopt (2) 742:10 757:4
advantage (2) 721:15 772:19
adversarial (1) 833:4
advocate (16) 717:16 719:25
  719:25 721:20 722:4 767:4
  787:12 800:18 812:7 815:5
  815:13,17 819:16 836:1,6
  836:23
advocates (3) 815:20 830:23
  831:19
afford (1) 821:23
afternoon (10) 721:3,22
  722:8 726:12,16,22,25
  727:9 744:16 825:4
agenda (2) 721:10 835:7
aggressive (1) 826:3
ago (3) 765:2 803:2 825:11
agree (11) 729:24 730:23
  731:9 744:9 746:20 748:11
  764:14 786:2 787:4 796:25
agreed (1) 802:4
agreement (10) 740:5 773:25
  794:17,24,25 796:17
  798:13,16,23 811:10
agreements (3) 794:19 808:20
  811:15
ahead (2) 807:21 812:12
air (1) 830:13
alameda (3) 769:25 770:6
alarm (3) 761:25 762:5,7
alert (1) 762:1
alleviate (1) 834:22
alley (1) 732:4
allocable (1) 834:12
allocatable (1) 834:12
allocation (1) 834:10
allow (7) 729:19 763:5 783:21
  809:4,4 820:12,13
allowable (2) 810:25 832:20
allowed (4) 729:23 767:25
  768:25 789:18
allows (2) 739:24 768:7
altamont (3) 770:2,4,5
alter (1) 739:12
ameliorated (1) 784:5
amount (11) 729:22 737:13
  752:25 777:16 791:2
  809:12 811:19 826:21,25
  827:5 829:23
analysis (30) 738:13 745:20
  746:2,21,22 747:4,25
  748:11 749:22 753:16
```

759:7 769:1 773:7,23 774:4

```
774:5,11 775:4 776:3 780:1
                                  809:22 818:6,6,10
  782:4 785:2 786:23 802:15
                                areas (1) 808:10
  802:17 816:22,23 818:24
                               arent (5) 786:14 826:7,22,24
  819:23,24
                                  834:15
analysts (1) 829:11
                                argued (1) 798:17
                               arguing (2) 801:1 804:6
analyze (1) 754:2
analyzed (1) 798:9
                                argument (5) 802:3,20,21
annex (2) 768:14,15
                                  806:14 813:21
annotations (1) 720:2
                                arnold (1) 717:19
annual (12) 745:25 751:16
                                arose (1) 769:6
   764:16 800:14 804:2 809:3
                               arrive (1) 800:11
  810:12 811:19 833:6,20,25
                                arrived (1) 746:22
                                aside (1) 739:25
  834:7
annualized (1) 728:4
                                asked (3) 812:18 825:20
annually (4) 826:20,25,25
                                  833:17
  832:16
                                asking (1) 740:15
anomalies (2) 729:16 741:18
                                aspect (1) 825:8
answer (7) 742:17 755:10
                                aspects (2) 811:5 814:3
  765:21 783:20 787:21
                                assistance (1) 733:11
  788:21 827:12
                                associated (14) 725:17 757:21
                                  757:24 762:8 769:1 777:19
answered (1) 763:1
answers (1) 832:6
                                  789:21 795:7,22 800:9
anticipated (3) 765:17 801:18
                                  804:23 805:25 820:2,6
                                assume (5) 726:19 754:22
  817:11
anticipating (1) 765:7
                                  766:20 767:5 792:6
anybody (2) 796:9 822:3
                                assumed (5) 752:15 753:10
apartment (19) 775:4,7,18,25
                                  764:1 766:5 786:5
   776:6,7 777:1,22 778:3,5
                                assuming (5) 739:25 752:20
   778:16,18,22,24 779:2
                                  764:19 777:15 778:4
   787:15 799:18 815:11
                                assumption (8) 738:7 753:4,5
                                  764:3,4 778:12 782:12
  830:24
apartments (2) 773:17 775:2
                                  800:10
apologize (1) 773:18
                               assumptions (2) 728:17
appeal (1) 834:22
                                  835:17
appear (1) 752:4
                                atoll (1) 830:16
appeared (4) 724:8 744:24
                                attachment (1) 828:21
   770:25 799:13
                                attention (2) 745:3 823:3
appears (3) 771:15 829:6
                               attorney (4) 717:11,12
  835:6
                                  824:11 829:5
apples (2) 822:10,11
                                attributable (1) 834:12
application (29) 716:3 721:8
                                audience (3) 722:1 761:19
   731:17 745:10,18 752:5,9
                                  815:10
   752:11 753:20 754:5
                                august (2) 761:14 781:4
  764:19 765:6 771:8 805:2
                                author (1) 755:13
  805:15,21,25 814:7 815:4
                                authorized (1) 838:3
                                automatic (2) 762:6 830:10
  832:11,19 833:18 835:8,12
  835:16 836:17 837:4,6,7
                               available (9) 721:16 740:25
applications (1) 833:18
                                  763:13 772:18 782:21
applied (5) 729:14 731:5,8
                                  834:1,2 836:24 837:9
  752:22 809:24
                               average (13) 728:16 750:9,17
apply (8) 735:21 736:7
                                  778:15 782:23 783:1 797:9
   794:24 802:3,8,9 806:15
                                  797:16 799:22 818:25
  808:7
                                  831:13,14,18
applying (5) 754:2,7 806:16
                                averaged (1) 727:23
                               averages (5) 727:25 728:22
  811:4.4
appreciate (3) 737:14 743:15
                                   729:22 734:15 758:20
appreciates (1) 824:23
appropriate (7) 723:20
```

avoid (2) 804:20 834:24 aware (8) 732:25 761:9 782:20 795:6 797:11 802:24 803:8 805:8 B **b** (4) 716:6 717:5,13 736:14 back (22) 732:5 748:4 749:14 757:1,16 763:24 764:10 765:21 767:15 770:21 773:12 777:11,14 778:21 786:10 787:20 799:16 816:7 823:5 824:18 825:10

827:24 **background (2)** 723:13 814:11 bag (1) 734:10 baker (27) 717:18 718:4,15 718:18 722:7,8,16 723:4,9 723:13 724:11 731:10 737:16 740:15 744:13 767:19 779:17,19 787:7 788:6 806:18 807:19 816:2 816:3,10,13 819:9 bakers (1) 800:22 balance (1) 798:8 **ballot (3)** 803:3,5,14 barely (1) 766:4 bargaining (10) 773:25 794:17,19,24,25 796:17,19 798:13,16,22 base (1) 818:4 based (24) 724:17 727:17,22 728:21 733:4 737:8 738:9 749:25 750:1,12 752:9 755:5 758:20 780:4 796:5 799:2 800:1,9,22 810:14,16 810:22 811:1 817:16 basic (2) 731:22 787:2 basically (3) 777:3 778:2 779:22 basin (4) 785:2,6,7,12 basis (14) 724:6,20 728:4 729:15,16 740:9 741:23 751:16 766:1 798:17 802:1 818:25 830:11,11 bay (2) 734:22 764:20 bayshore (1) 752:13 beatty (4) 752:14 768:12,13 770:8 began (1) 752:17 beginning (4) 780:8,11 781:7 801:17 behalf (1) 787:1 believe (30) 725:23 732:11 736:25 737:16,17 747:17 748:21 751:16 752:23 760:12 765:11 770:13 771:23 776:20 794:12 797:19 803:3 806:17 807:1 807:1 813:3 817:2,9 819:4 819:6 820:4 832:10,25 835:3 836:6 believes (3) 725:21 737:5 768:24 benefit (2) 791:5 814:15 besso (1) 826:19 best (10) 758:11 806:5,6 808:13,15 812:14 821:4 825:11,21 828:15 better (8) 739:19 740:7 788:24 822:5 827:24 829:11 834:11,19 beyond (4) 741:20 758:5 797:3 809:24 big (3) 823:10 824:15 826:9 bill (1) 825:17

bills (2) 750:12 825:15

790:21 791:5

827:25

bin (4) 784:8 823:24 827:24

biodiesel (4) 753:24 790:18

724:23 752:20 754:2,9

approved (4) 745:12 746:4

approximately (5) 727:23

782:2 783:8

approve (1) 837:7

765:1 803:6

april (2) 813:5,17

approximate (1) 782:1

728:3,4 817:12,22

area (6) 764:20 794:12

```
bit (5) 725:4 771:14 807:12
  812:19 825:10
black (1) 800:12
blips (1) 741:22
blue (2) 800:13 823:24
bluestream (1) 834:12
board (3) 815:14 823:5
  834:23
bob (1) 826:18
bokun (1) 820:23
bolt (1) 795:24
booked (1) 741:10
books (1) 824:8
bottlenecks (1) 771:15
bottom (9) 745:7 754:4
  762:16 776:24 779:5 784:7
  784:25 797:19 822:7
bottomline (1) 751:9
boulevard (1) 752:13
box (3) 729:7 734:1,25
brandnew (1) 769:20
braslaw (26) 718:16 732:22
  732:24 736:4 739:15,16
  780:15 786:14 788:14,23
  799:12,16 800:24 804:1,7,9
  804:22 805:10 806:4.17
  816:6,9,11,14 819:18,22
braslaws (1) 786:11
break (6) 765:22 766:25
  767:13,16 770:20,22
breakers (1) 734:22
brief (3) 756:7 767:19 794:8
briefly (3) 744:21 800:3 809:2
bring (4) 787:19 814:2 821:16
brings (1) 751:19
brisbane (26) 723:2 767:11
  767:15,20 768:1,10,14,15
  768:23,25 769:4,5,6,10,16
  769:18 787:14,22 800:21
  802:22 804:12 805:4
  806:25 830:12,12,15
broader (1) 815:10
broken (1) 823:18
brought (2) 743:18 790:13
bruen (1) 717:12
bucks (1) 831:10
budget (1) 829:18
build (3) 739:18 827:24 831:9
building (12) 759:19 761:5,11
   761:23 762:1,3,7,24 781:14
  785:8 788:8 831:7
buildings (12) 775:19 777:3,9
   777:15 780:19 782:19
  783:16,17 785:3 817:15,21
  830:25
built (2) 780:20 816:22
bulk (1) 800:13
bulky (5) 741:6,8,11,13,16
bullet (8) 728:6,9,13,25 729:2
   729:13 740:14,24
business (18) 726:11,14,17
  727:2,5 738:10 769:2,12,22
  769:22,23,24 770:5,12
  789:19 805:6 826:9,10
businesses (2) 768:4 826:10
buying (1) 830:12
```

```
c (2) 717:1 721:2
ca (5) 716:7 717:6,10,14,20
calculate (1) 800:4
calculated (6) 733:3 750:2
   752:21 778:8,19 800:14
calculation (8) 747:1 778:22
   785:1,20 786:5 797:18
  816:16,24
calculations (7) 740:19
   746:19 750:8 751:11 766:6
  779:4 800:6
california (1) 833:11
call (9) 721:4 726:11,24 727:4
   727:6,8,12 766:9 782:6
called (5) 725:2 781:25
  805:23 823:3,25
calling (1) 827:15
calls (33) 723:23 725:14,25
  726:4,5,14,17 727:18,21,23
  728:1,15,23 729:3,8,21
  730:10,17 731:3,18,21
  732:18 733:19 735:4
  736:11,15 737:7,12,25
  740:3,18 741:19 813:10
cans (1) 824:4
cant (2) 791:4 829:9
cap (15) 807:12,25 808:1,4,8
  808:22 809:3,5,10,19 810:1
  810:4,14,17 811:4
capabilities (1) 757:25
capacity (1) 826:5
capital (1) 758:19
cards (2) 721:16 831:24
care (2) 791:7 826:12
carefully (3) 770:15 823:9
carlton (3) 716:6 717:5,13
carries (1) 768:2
carrying (1) 768:9
case (11) 735:21 757:22 768:6
   770:8 771:20,24 808:18
  810:24 820:18 826:13
  830:24
cases (2) 809:6 832:7
category (1) 759:23
cause (4) 734:25 735:22 781:2
center (1) 717:19
cents (10) 748:1,18 749:19,19
  750:16,22 772:10,11
  797:18 825:16
century (1) 827:23
certain (13) 723:22 732:2
   734:19 743:19 746:19
  777:16 780:5 783:4 786:18
  790:19 798:7 801:18 809:3
certainly (9) 739:17 740:8
   758:6 761:22 787:6 803:11
  808:1,25 820:5
certificate (1) 838:1
certify (1) 838:4
cetera (1) 782:21
challenging (1) 738:6
chance (1) 768:7
change (7) 725:21 730:19
  739:5,5 754:3,5 799:5
changed (2) 806:22,23
```

changes (8) 723:24 724:3

753:19,20 757:4 810:6

```
814:12,12
                                   751:1 752:12,18 753:10,18
changing (2) 792:25 796:7
                                   753:23 756:4,12,22 757:2
charge (5) 747:5,6 772:8
                                   757:25 758:1,8,17,23 759:6
                                   759:10,15,22 760:1 763:3,5
  784:23 786:1
charged (1) 748:4
                                   763:20 765:5,7,8,11 766:2
charges (3) 747:20,23,23
                                   767:9 773:12,17 787:11
chart (1) 822:10
                                   791:16 792:1,14 793:23
cheap (1) 821:22
                                cngfueled (1) 758:2
                                cngpowered (1) 755:21
cheaper (1) 774:6
cheapest (1) 750:21
                                code (2) 719:18 761:16
check (6) 732:12,13 765:19
                                cohen (7) 717:4 821:2,6
  783:11 785:18 836:22
                                   827:22 828:10,13,17
checked (1) 772:9
                                cola (9) 808:7 809:24,25
checking (1) 732:14
                                  810:5,6,22 811:1,5,5
china (4) 785:2,6,7,12
                                collect (5) 725:2 733:21 734:2
chinese (1) 733:12
                                   802:18,19
choice (9) 770:7,11 805:12,13
                                collected (4) 726:1 727:11
  805:14,23 806:4,11,12
                                   737:24 801:23
                                collecting (6) 725:19 732:10
chosen (2) 770:9,11
christmas (1) 790:25
                                   734:8,18 744:3 801:22
cite (3) 798:24 799:1 829:10
                                collection (28) 721:9 725:20
cites (2) 808:18,18
                                   726:7 727:6 729:6 731:22
cities (6) 808:3,18,20,21
                                   733:18 734:7 741:6,8,12,17
                                   757:9,12 758:2 766:14
  822:6,8
citizens (3) 825:13,19 829:22
                                   791:15,22 792:11,13,14
city (57) 716:5 717:5,11,12,13
                                   793:3,3,9 808:4 822:21
   719:23 720:1 721:6 722:3
                                   832:12 835:9
   724:13 727:19,22 729:9
                                collections (2) 741:13 791:1
   730:1,10,20,25,25 731:12
                                collective (10) 773:25 794:17
   736:16 737:4,5,9 742:20
                                   794:19,24,25 796:17,19
  743:8 768:7,8,14 769:6,10
                                   798:13,16,22
   769:18 773:14 775:14
                                collects (1) 734:1
   779:3 782:22 804:11,15
                                colorful (1) 814:7
  806:9 807:15 808:22,24
                                column (1) 776:15
  810:15 814:5,16 819:10
                                combination (1) 813:10
  822:21,22 823:12,24
                                combined (1) 794:24
  827:13 829:5,16 830:18
                                come (23) 721:23 730:17
  833:21 835:15 836:5 837:7
                                   732:22 734:2 739:4,5 740:5
citys (5) 729:11 733:16 770:6
                                   744:14 764:10 765:21
   770:7 806:6
                                   767:15 776:8 777:2,6
citywide (1) 782:23
                                   781:24 785:16 788:15,24
                                   799:19,24 816:6 820:19
civic (1) 733:13
civil (1) 822:22
                                   826:13
clarify (3) 754:21 758:25
                                comes (5) 726:11 743:21
                                   746:15 770:10 813:1
  765:4
clarifying (1) 754:19
                                comfortable (1) 738:2
                                coming (13) 727:15 734:18,19
clarity (1) 836:5
classifications (2) 796:13,16
                                   735:7 736:20 763:7 775:20
clean (14) 736:13,16 748:16
                                   779:25 780:5 805:1 816:17
                                   819:20 825:14
   749:17,18 750:24 760:6,25
                                comment (16) 719:24 721:13
  761:6,12,14 772:9 793:22
                                   743:3 767:19 812:4,17
   793:22
clear (6) 730:8 742:12,22
                                   820:10,11,14,15,24 825:7
  814:7 821:25 835:11
                                   828:25 835:4 836:11,20
clearly (2) 721:24 834:17
                                comments (10) 721:19 743:3
clerk (1) 820:18
                                   744:7 788:1 800:22 813:8
                                   813:15,23 814:4 815:17
clients (1) 761:8
clock (2) 821:7,9
                                commercial (19) 734:11
close (9) 721:13 724:1 726:17
                                   775:23 777:10,15,22 778:1
  727:5 812:11 829:12,13
                                   778:5 784:3 792:4 797:12
                                   818:23 831:3,11,12,14,15
  835:4,7
closed (1) 837:12
                                   831:16,20 834:13
closer (2) 786:1 798:11
                                commitments (1) 741:16
closing (3) 807:24 813:15,17
                                common (1) 808:2
club (1) 830:17
                                communication (1) 815:7
clue (1) 783:19
                                community (4) 815:12 827:8
cng (52) 719:4,8,9,13,14,16
                                  827:9 828:4
   722:23 744:14,17 746:7
                                comp (2) 795:2,6
```

condensing (1) 772:23

748:14,17 749:4,6,21,25

compactor (1) 777:24

crossexamine (2) 743:1

773:14

crv (1) 834:18

795:16

813:1

824:15

debt (1) 827:5

defer (1) 800:5

Page 3

```
condition (1) 762:7
condominium (1) 776:7
conducive (1) 791:16
conduct (2) 749:22 789:18
conducted (2) 746:22 749:24
confirm (2) 733:9 783:23
confirmed (1) 774:11
conflated (1) 832:22
confused (1) 740:15
confusion (1) 740:14
connection (1) 760:7
conservative (1) 750:15
consider (7) 770:15 773:24
  774:14 809:23,25 836:16
  837:1
considerable (3) 761:15
  835:20 836:7
considerably (1) 773:4
consideration (4) 723:18
  786:24 802:25 836:13
considerations (1) 832:21
considered (5) 774:13 787:5
  790:14 801:4 809:20
considering (1) 739:8
consistent (1) 785:4
constraints (1) 791:14
consultants (1) 835:16
contact (1) 749:18
contacting (1) 815:10
contacts (1) 813:11
contained (1) 808:20
content (1) 833:7
context (3) 745:8,9 833:4
contingent (2) 830:11,14
continue (9) 722:2 744:14
   752:24 753:13 789:16,23
  790:21 807:9 832:10
continued (1) 752:15
continues (1) 729:17
contract (3) 739:6 822:22
  823:8
contracting (1) 823:12
contractor (1) 809:9
contracts (1) 823:11
contractual (2) 808:2 811:8
contribution (1) 810:12
control (2) 739:23 808:9
controlled (1) 808:12
controller (1) 761:24
conversion (3) 753:24 755:13
  755:15
converted (1) 800:13
convey (1) 721:19
conveying (1) 836:4
convincing (1) 822:2
coordination (2) 727:21
copies (5) 813:13 828:18,19
  828:20 830:22
copy (2) 747:10 751:23
correct (58) 722:17 728:24
   732:11 733:23 734:4 736:4
  740:23 745:19 746:16
  747:16 748:9,10 751:3,6,7
  753:17 754:11,12,24
  755:22 756:14 758:12
  759:22 762:19 763:4 764:8
  773:2,8,17 779:22 780:2,8
  780:12 784:9,15,23 785:16
```

```
786:7 789:10,11 791:23,24
  794:4 797:5 798:3,10 800:2
  800:25 801:3 802:9 804:7,9
  805:16 816:24,25 817:4
  825:21,22
corrected (2) 722:13 825:15
correlate (1) 817:12
cost (62) 719:4,9 743:6
  746:23,23 747:1,21 748:14
  750:9,13,15,16,18,21,23
  751:1,11,13,14,15,18,19,19
  752:4,19,20 754:22 755:6,7
  755:8 768:19 769:21 771:6
  771.7 9 772.22 23 774.13
  774:18,19,19,19 784:4
  785:25 795:17 796:10,15
  797:9,9,16 800:20 805:6
  806:8 810:7,14 818:14,22
  818:25 819:19 820:5,5
  830:14
costeffective (3) 758:11
  772:13,15
costs (49) 719:10 733:3
  739:10 746:7,15,18 747:22
  748:9 749:2,7,8,9,23,25
  750:11,11,17 751:23
  752:21 754:7,14 758:19
  764:11,13,20 768:11 774:5
  774:10,14 786:19 797:25
  808:9,12 809:9,10 810:7,10
  810:23,25 818:18,21 820:2
  821:23 823:16 830:10
  832:20,23 834:10,14
couldnt (4) 783:17 793:21
  794:21 820:23
council (2) 769:6,18
counsel (1) 717:12
count (5) 757:18 758:7
  766:16,18 798:2
county (5) 721:6 769:19
  770:1,6 802:6
couple (18) 723:25 731:14
  733:8 739:10 740:12
  763:19,22 773:11,16
  776:24 788:16 796:21
  799:17,19 813:19 814:3
  830:5.7
course (7) 733:18 734:8
  767:24 768:1 791:4 795:21
court (2) 794:10 820:20
courts (1) 827:11
cover (3) 722:19 739:24 767:3
covered (2) 819:19 835:6
covering (2) 747:19 787:16
cpu (1) 764:20
crap (1) 823:4
created (1) 795:24
creates (2) 723:22 801:25
crime (2) 827:13,20
criteria (2) 801:11,12
cross (1) 731:12
crossed (2) 821:24 822:4
crossexamination (18) 722:3
  723:14 731:13 754:17
  763:14 773:21 779:18
  787:11,13,20,23 789:5
  792:20 799:15 800:18
```

819:16 836:10,19

```
current (16) 745:21 757:2,2,7
   757:17,19 758:5,8 765:25
   769:20 780:6 782:15,23
  783:17 784:8 785:3
                                   829:17 830:2 832:17
currently (11) 725:18 734:17
                                   835:19,23
   743:7 765:9 766:2 779:11
                                departments (1) 827:16
  785:8 792:2,3 794:18
                                depending (1) 772:11
                                deposit (1) 732:8
cursory (1) 790:7
                                deputy (1) 717:12
customer (2) 818:4 837:3
                                derived (1) 747:6
customers (17) 741:16 778:24
   778:25 779:2 786:16,18,20
                                   758:14 776:25
   791:7,9 817:18,20,23 818:7
  818:11 819:3,25 820:3
                                   753:5 784:2
cycle (1) 801:21
                                describes (1) 814:24
                                describing (2) 761:3,15
             D
                                design (1) 827:25
d (2) 721:2 827:10
                                designed (1) 762:10
daily (4) 729:15 731:25
                                desire (1) 743:15
  741:23 766:1
                                detail (2) 761:15 766:8
danger (2) 762:21,23
data (13) 731:23 737:25
                                detailed (1) 808:5
  738:1 739:3,18 740:7,21,22
                                detectors (1) 761:22
  742:15 743:12 744:4 813:1
                                determination (1) 742:6
date (8) 743:19 782:1 803:3,5
                                   810:17
  803:18,19 837:6 838:5
dated (1) 719:6
                                   818:22 819:7
david (2) 717:24 832:2
day (29) 721:7 726:18,20,23
                                   760:25 835:18
   726:25 727:2.7.25 728:1.5
  728:15,19 730:3 732:2,21
   733:12 734:22 757:9
                                development (4) 719:23
  766:12.21 772:11.12
  800:15 813:25 817:15,16
                                device (1) 783:21
  827:2.836:11.838:10
                                dge (1) 754:22
days (10) 723:25 729:5
                                didnt (5) 779:6,8 780:24
  734:19 740:17,18,20,21,22
                                   830:22 832:9
  741:24 817:16
                                diesel (14) 748:19 749:20
daytoday (1) 729:16
deal (7) 727:6 728:22 729:15
   731:2 789:21 803:11
                                differences (1) 737:6
dealt (2) 726:16,18
debris (1) 734:11
december (1) 719:23
decide (2) 808:14 824:12
decision (2) 770:5 805:6
decisions (1) 769:2
                                   828:25
deemed (1) 810:23
                                differential (1) 797:25
define (1) 821:17
                                differently (1) 792:9
                                difficult (8) 725:22 735:2
definition (2) 821:25 822:12
degree (1) 789:23
                                   799:5 811:13
deibler (32) 717:16 718:11,17
  721:20 742:25 743:2
  787:24 799:19 800:17.19
                                digits (1) 812:15
  803:7,24 804:5,8,10,15,17
                                diligence (1) 826:12
  805:5,12,16,22 806:2,10
                                diligent (1) 825:13
  807:5,10,22 810:20 812:9
                                diminished (1) 833:12
  812:13 819:14,17 820:7
deiblers (1) 787:22
delay (1) 773:19
                                   816:12
delighted (1) 732:22
                                direction (1) 770:6
delivery (1) 758:22
```

```
directly (3) 815:10 826:18
demonstrate (2) 807:2 809:9
demonstrated (1) 835:20
                                   829:7
densities (1) 800:14
                                director (38) 717:3 721:3
department (15) 716:1 717:2
                                   722:15 723:3,19 742:25
   717:7 721:5 741:10 763:5
                                   744:13,22 763:15 767:8,14
  774:8,12 824:12 827:9
                                   767:18 770:14,19 773:13
                                   773:20 775:1 779:17 787:9
                                   799:9 807:9,20 812:2,12
                                   814:22 815:6 816:2.8
                                   819:10,13 820:8 821:9
                                   822:1 825:2,22 828:6
                                  831:23 835:2
                                directors (8) 716:2 721:7
describe (4) 747:3 749:16
                                   724:5 739:3,13 742:11
                                   815:4 835:8
described (4) 745:7 752:22
                                disaggregate (1) 834:14
                                discuss (4) 763:21 766:10
                                   767:9 804:10
                                discussed (4) 773:24 788:7
description (2) 719:2 756:24
                                   797:22 804:13
                                discussing (2) 774:20 796:23
                                discussion (4) 803:12 807:2
                                   822:19 830:11
                                discussions (2) 832:11 833:3
                                dismissive (1) 832:7
details (3) 756:8 808:11,12
                                dispatch (2) 733:19 736:20
                                dispatched (3) 727:5 757:8
                                   792:19
determine (3) 742:17 810:4
                                dispatching (2) 731:20
                                dispense (1) 767:12
determined (4) 780:17 781:3
                                disposal (8) 721:9 740:4,5
determining (4) 719:20 760:8
                                   802:5 814:7 818:18 832:12
                                   835:9
developed (2) 732:25 831:2
                                dissimilar (1) 798:11
developing (2) 769:13 833:23
                                distinction (1) 802:12
                                distract (1) 832:3
  775:14 776:6 833:16
                                distribution (1) 792:6
                                district (1) 824:11
                                diversion (1) 783:14
                                divide (2) 785:15,21
                                document (25) 723:10 746:11
                                   747:10,11,16,18 748:23
  750:20,21 751:12,17,20
                                   749:7 751:1,25 756:16,25
  754:22 755:3,4,7,12,14,15
                                   759:1 760:6,8,25 775:7,9
difference (2) 755:1 784:5
                                   816:15 821:14,18,21
                                   823:23 824:14 830:21
different (22) 730:22 732:2
                                documented (2) 743:7 750:10
   735:5 746:23 747:1,17
                                documents (10) 747:18
  753:4,22 755:8 768:16
                                   749:10 760:14,19,24 761:2
  770:2 772:3 774:1 791:18
                                   811:15 815:23 828:8
  792:10 793:19,19 794:25
                                   836:17
                                doesnt (6) 737:17,19 743:13
  806:12 810:19 811:21
                                   764:25 813:21 834:17
                                doing (12) 731:24 732:19
                                   758:11 769:12,22,22
                                   786:23 793:6 796:7 812:14
  738:4 764:12 778:15 794:3
                                   814:8 824:1
                                dollar (2) 751:12 764:3
difficulty (6) 735:5 782:10
                                dollars (5) 779:12 819:8
  783:9 822:20,25 833:1
                                   826:20 827:7 829:20
                                domestic (1) 833:9
                                dont (33) 723:4 728:21 734:5
                                   738:11 744:11 755:6,7
                                   762:12,17 766:13 781:12
direct (8) 724:10 745:1 771:2
                                   781:12,13,20 784:16
  775:12 780:15 788:4 794:7
                                   788:15 792:7 795:16 803:1
                                   803:2,19 807:14,17,21
                                   810:15 818:6 823:11,15,17
```

Page 4

824:8 826:20 829:19 831:24 door (1) 762:11 doors (3) 762:14 788:19 789:8 douglas (3) 717:4 807:10 835:22 downward (1) 738:9 dpw (10) 725:18,19 731:25 732:6 733:1 735:7 814:24 815:22 832:17 837:9 dpws (3) 829:21 834:1 836:22 dr (3) 716:6 717:5,13 draw (3) 738:7 745:3 746:1 drawn (1) 779:25 drew (19) 718:7,12 770:24 771:4 773:11,19,23 774:25 775:3,16 779:16,20 788:6 792:21 797:19,22 816:15 816:22 819:24 drews (2) 816:5,16 driven (1) 757:23 driver (9) 771:13,17,22,25 795:14,18 796:15 798:6 818:18 drivers (12) 729:7 733:17 734:12 736:1,6,18 766:13 766:21 771:15,25 798:7,19 drove (1) 830:25 **due (5)** 770:6 804:3,4 805:4 826:12 duly (1) 838:3 **dumping (1)** 770:1 duty (1) 797:17 dwellings (1) 776:7 e (12) 717:1,1 719:5 721:2,2 747.6.18.22.748.3.750.12 774:9 797:11

earlier (7) 741:22 761:6 776:17 812:20 816:15 819:2 837:11 earliest (1) 781:22 early (1) 836:21 earn (2) 768:7 770:13 earns (1) 770:2 easiest (1) 834:4 echo (1) 813:23 economics (1) 814:6 **education (1)** 761:14 effect (7) 735:8,10,12 778:2 803:24,25 804:1 effective (1) 803:17 effectively (1) 801:1 efficiency (1) 791:9 efficient (5) 735:24 758:10 772:15 777:24 782:20 effort (3) 806:7 814:24 815:7 efforts (4) 807:16 815:3,18 836:2 eight (6) 725:9 727:12,17 728:11 730:21 831:1 eighthour (3) 725:6 727:9

eileen (1) 820:23

either (8) 736:14 739:11

776:7 780:24 792:18

805:16 808:5 831:17

elected (1) 730:10 election (2) 729:11 803:22 electrial (1) 719:9 electrical (5) 748:14 749:6,25 750:18 751:1 electricity (17) 719:10 748:8 749:2,8,9,23 750:9,11,17 755:7 772:7,10 774:10,18 774:22,24 797:1 electromagnetic (1) 762:13 elects (2) 768:21,22 eliminated (1) 777:12 email (3) 719:6 749:17 754:19 emails (1) 813:10 **embarcadero** (1) 717:19 emergency (1) 761:25 employ (3) 790:5 791:14,17 employee (3) 766:14 795:14 employeeowned (1) 826:23 **employees (5)** 757:10 774:1 795:3 826:24 827:1 employing (1) 736:22 encourage (2) 721:15 768:2 encouraged (1) 781:18 encouraging (1) 769:24 endorse (1) 743:11 ends (1) 738:5 energy (14) 748:3,16,18 749:18,18 750:24 760:6,25 761:6,12 772:7,9 793:22,23 enforcement (1) 824:7 engage (1) 836:2 engineering (1) 827:25 engines (1) 755:3 **ensure** (1) 794:1 entail (1) 807:6 enter (2) 813:2 820:20 entered (1) 813:3 entire (2) 721:25 761:24 entitled (4) 749:9 750:10 756:12 760:8 environment (4) 717:7 741:10 832:17 835:19 environmental (2) 789:17,20 envisioned (1) 808:6 equipment (10) 731:1 748:15 748:16,16,17 750:24 751:14 755:21 761:7 768:19 equivalent (11) 748:19 749:20 750:21 751:12,21 754:23 755:1,4,8,9,12 equivalents (4) 750:20 751:17 755:14,15 error (1) 722:11 especially (3) 740:17 743:19 818:5 esq (2) 717:18,18 essentially (7) 737:8 740:17 777:25 798:8 801:19,25 818:10 establish (4) 738:12,23 739:21 778:14 established (5) 724:17 799:3

810:5,14 832:24

establishing (1) 725:1

estimate (8) 748:13,21 749:14

749:24 757:20 758:16

783:23 818:20 estimated (4) 733:3 749:19 778:23 781:23 estimates (3) 737:23 748:8 estimating (1) 779:11 et (1) 782:21 etched (1) 811:23 evaluating (2) 799:20 801:11 evening (1) 797:2 event (12) 725:25 728:15 729:3,7 730:20 735:19 736:9 738:7,22 741:9,25 784.22 events (3) 733:11,13 734:19 eventually (1) 805:1 everybody (2) 779:3 824:23 evidence (18) 722:25 723:12 746:13 747:13 748:25 749:12 752:2 756:18 759:3 760:16 767:21 775:11 799:20 807:15 815:25 816:4 821:20 836:16 exact (3) 792:8 803:1 817:19 exactly (3) 780:16 783:9 784:24 examination (11) 718:3 722:5 724:10 745:1 755:18 771:2 775:12 788:4 794:7 816:12 examine (2) 763:15 816:10 example (8) 726:21 781:1,21 795:13 807:4 811:6 817:24 822:5 examples (1) 809:17 exceed (5) 728:16 729:8 734:15 757:25 820:4 exceeded (1) 729:4 excellent (2) 744:5 800:7 **exceptions (1)** 810:9 excerpt (1) 720:2 excess (3) 726:5 742:1 779:2 **excluded (1)** 740:19 excused (1) 741:23 exemplary (1) 836:3 exh (1) 720:2 exhaust (1) 762:9 exhibit (94) 719:2 722:11,13 722:18 723:5,7,12 734:14 740:13 745:4,8 746:9,10,13 747:2,10,13,21,24 748:21 748:25 749:5,8,15,16 750:10 751:2,5,22 752:2 754:19 756:11,13,15,18 758:13,13,14,16 759:3 763:25 771:5 773:3 775:4,6 775:11,17,21 776:10,11,14 777:9 778:8.20.21.23 779:1

existence (1) 805:9 existing (10) 719:21 760:10 777:6 778:24,24 793:15,24 794:19 818:8 829:6 exists (1) 825:18 expect (3) 739:3 773:6 782:22 expectation (4) 730:16,18 733:16 782:19 expectations (4) 730:2 731:4 735:20 737:10 expected (2) 730:14 801:23 **expecting** (1) 738:15 **expenditure** (1) 768:11 expenditures (3) 768:8 786:25 817:6 expense (9) 725:16 735:1 768:2,18 801:2,4,8 802:10 811.2 expenses (9) 719:11 757:22 757:24 764:18 768:17,24 802:4,5 805:25 experience (3) 742:5 795:22 799.2 **experienced (2)** 742:13 822:24 experiencing (1) 790:22 expertise (2) 794:13 835:20 explain (1) 817:8 explained (2) 751:10 780:14 **explanation (1)** 833:19 explanations (1) 835:13 explicit (2) 812:23,25 explode (1) 762:17 explosionproof (1) 762:11 expose (1) 790:17 extensive (2) 805:20 815:15 extent (7) 802:2 804:22 806:7 810:25 818:22 819:7 834:20 extra (3) 735:1 742:6 809:14 extraordinary (3) 735:1 737:12 740:20 **f1 (1)** 831:13 facilitate (1) 834:20 facilities (6) 719:22 756:23 760:11 768:5 791:25 830:15 facility (37) 719:16,18 722:24 744:18 756:2,3,5 757:6 759:12,14,18,21 760:1,7,19 761:17 763:2.6.8 768:10.13 770:10 787:11 788:17 792:1.19 793:6.11.12.14.16 793:17,24 796:6 797:8 806:25 827:3 fact (10) 724:16 753:8 801:19 801:21 802:17 806:18,21 812:22 820:2 823:20 factor (2) 747:3 755:16 factors (1) 835:18 failed (1) 730:15 fair (10) 737:5 746:5 756:20 758:10 760:18 769:23 782:24 783:5,6 835:18

fall (3) 759:22 781:23 803:4 exist (2) 733:6 834:3 familiar (4) 759:13,16 774:9 808:25 fans (1) 762:9 far (2) 752:13 781:11 fashion (2) 729:14 741:12 favor (1) 796:5 features (3) 759:17,23 761:20 fee (15) 744:20 745:6,23 746:3,4,5 764:1,4 801:20 802:16,22,25 803:24 804:24 830:13 feel (2) 742:21 823:18 feels (2) 723:19 754:8 fees (6) 745:11,22 769:25 770:3,6 829:10 fell (1) 825:24 felt (1) 806:5 figure (5) 777:7 812:21 826:18,19,21 figures (2) 800:4 826:16 figuring (1) 783:9 file (5) 747:20 765:19 805:15 805:20 837:5 fill (5) 721:17 771:16 772:25 773:1 797:2 filled (1) 734:10 filling (2) 781:7 793:2 **final (9)** 721:7 723:1 752:9 753:19 754:5 767:5 786:9 787:25 836:25 **finally (6)** 722:25 733:16 744:6 830:21 834:5 836:8 financial (1) 768:9 **find (8)** 750:25 751:4 755:6 764:11 776:6 807:14 831:4 831:15 finding (1) 775:18 findings (1) 812:8 finds (1) 736:23 fine (1) 803:18 finished (1) 796:2 fire (1) 763:4 fireprotection (1) 762:14 firm (1) 827:25 first (27) 722:20 728:9 746:7 749:4 756:11 759:25 760:19 763:24 769:6,8 776:5,25 779:5 784:7 802:23,24 804:3,11 805:3,8 810:20 811:9 812:25 820:22 821:15 826:13 828:24 fit (1) 797:14 **five (6)** 764:9,13 820:13 826:19 830:5 831:13 fivevear (1) 831:17 fix (1) 827:20 fixed (1) 752:25 flat (1) 831:5 flatten (1) 772:22 fleet (22) 726:3 752:25 756:4 757:3,14,17,20 758:5,17 759:6 765:9 766:2 789:15 790:18,24,25 791:15,22 792:2,5,22,23 fleets (1) 759:11 flexibility (2) 736:7 743:16 fairly (6) 724:23 728:8 766:20 flippy (1) 832:7 808:2 809:2 830:24

779:5,13,20,21,21,24 780:4

798:23 800:1 803:4,20,23

814:24 815:6,20,22 816:5

783:18 785:1 793:22

807:16 808:16,17,21

811:14 812:14 813:2,3

816:14,23 817:9,10,13

821:13,20,21 831:13

exhibits (8) 719:1 749:3,12

759:25 760:16 799:25

815:25 836:18

```
floor (1) 717:19
flow (1) 762:10
focus (2) 736:12,15
focused (1) 736:15
focusing (1) 802:22
followed (1) 722:3
following (3) 726:18,20 727:7
follows (4) 724:9 744:25
  771:1 799:14
followup (1) 796:21
food (1) 826:6
forced (1) 769:8
foreman (1) 796:13
forever (1) 738:18
forgot (1) 795:24
form (3) 740:9 808:21 809:20
formally (1) 833:22
format (1) 779:22
formula (1) 779:9
formulas (1) 742:15
forth (1) 757:16
forward (13) 721:23 722:14
  723:6,24 769:15,17 806:15
  807:7 809:21 814:14
  820:19 832:10 834:25
found (6) 745:17 775:19
  777:12 778:14 779:10
  832:5
foundation (1) 761:14
four (13) 722:19 725:9 726:10
  726:10,13 727:16 730:21
  735:6 743:23 765:2 828:22
  828:22 831:21
fourhour (2) 726:12,22
francis (1) 831:7
francisco (18) 716:7 717:6,10
  717:14,20 721:6 722:11,17
  763:4 768:13 770:1 821:23
  822:15 825:20,25 829:16
  829:22 830:18
frankly (1) 814:16
freddie (5) 716:22,24 721:21
  838:3,13
free (1) 771:24
frees (1) 798:6
friday (2) 813:9 837:1
fuel (40) 719:4,11 722:23
  744:17 746:7,8,15,18
  750:20 751:11,20,23 752:4
  752:10,12,21 754:13
  757:21 758:19 761:5 766:3
  766:11,13,15 771:12,17
  772:5,6,24 774:4,14,17
  791:15,18 795:18,18
  797:25 798:2,5 818:17
fueled (16) 752:15,15,23,24
  752:25 753:1,6,11,13,14,16
  763:6 766:1,20 772:3
  798:19
fueling (24) 748:14,17 749:21
  750:7 752:10,18,20 753:9
  753:18 759:15,21 761:7,21
  763:3 765:14 774:6,9
  793:11,12 795:13,21 796:6
  796:24 798:14
fuels (1) 766:14
full (3) 742:5 782:5 817:19
fullest (1) 826:5
```

fully (1) 741:9

```
function (1) 829:15
fund (4) 729:9 731:1 741:18
  823:16
fundamentally (1) 829:6
funded (2) 829:9,24
funding (1) 742:3
funds (1) 740:25
further (24) 722:25 749:3
  753:7 761:3 772:14 774:25
  775:3,12 779:7,16,18
  780:21 787:8 788:4 789:5
  792:20 794:7 796:20
  799:15 807:19 812:23
  816:12 819:16 832:11
future (9) 764:13 802:1
  809:13,21 823:11 830:9,14
```

834:10.20 **g** (1) 721:2 gabriel (1) 717:18 gallon (17) 748:19 749:20 750:20,21 751:12,17,18,20 751:21 754:22 755:1,4,8,9 755:12.15 771:9 gallons (24) 750:6 751:18 752:14,23 771:14 775:8 778:10,22 782:13,13,22 783:1 784:2.11.14.17.19.22 785:25 786:1,2,5 788:8 799.22 garage (1) 762:11 garages (1) 719:18 garbage (3) 821:15 824:3,3 gas (28) 719:5,18,21,21 746:20 747:22 760:9,10 761:22,25 762:2,7,7,10,23 772:6,23 774:23 788:17,18 789:7,13,13 790:22 791:6 791:10,12,13 gasdetection (1) 761:24 gaseous (1) 761:5 gaseousfueled (1) 759:19 gasket (1) 795:24 gasoline (2) 754:25 755:9 gate (28) 719:13 722:24 756:3 756:22 757:3,8,9,10,13,15 759:14,21 763:2,5,8 765:8 765:18 788:20 789:9.11 792:5,18 793:13 794:16,22 795:4.8.8 gates (1) 757:12 gee (1) 804:11 general (6) 748:2 801:4 808:8 823:16 829:7,8 generally (17) 725:23 735:22 737:2 738:4 741:17 759:16 774:2 786:21 789:14,18 790:5.8 791:3 793:18 796:14 798:17 830:10

generated (1) 819:25 generation (1) 788:11 geography (2) 818:2,3 getting (5) 758:21 778:9 783:4,14 833:1 give (11) 722:20 725:3 754:10 783:23 786:23 821:4,8 828:15,18 829:10 830:19 given (10) 723:18 725:18

728:15,18 730:3 804:17,22 817:18,25 823:22 gives (2) 768:15 813:3 glaub (28) 718:9 722:22 744:14,19,23 745:3 746:15 758:14 760:18 763:13,16 787:20,21 788:14,21 797:6 797:23 798:9 800:5,7,8 803:1,20 804:14,16 805:14 805:18,24 globally (1) 743:5 gngv1 (2) 747:7,22 **go (24)** 726:1,5 731:10 732:2 735:4 746:7 763:23 765:17 766:8 767:17 781:20 784:20 785:11 807:21 812:12 814:1 818:1.5 820:10 823:5 827:8,9 834:3 835:18 goal (3) 726:10,22 736:16 goals (17) 719:3 724:17,18 725:9,12,13 727:15 728:10 730:19,21 735:6,21 739:19 768:8 809:18 814:16 826:8 goes (3) 736:25 770:14 828:21 going (51) 723:17,24,24 724:2 730:6 732:12 738:22,24 744:19,20 749:14 759:18 759:24 761:21 763:24 765:7 767:3,4,6,10 769:14 769:17 772:14 773:15 777:15 781:13 782:20 787:21 788:23 791:13 801:24 806:15 809:24 813:25 821:14 822:2,8,9,14 822:15,23 823:10,15,17 825:12 829:14,15,18,18 832:10 833:9 golden (29) 719:12 722:24 756:3,22 757:3,8,9,10,12 757:12,15 759:14,20 763:2 763:5,8 765:8,18 788:20 789:9,11 792:5,18 793:13 794:16,22 795:4,8,8 good (11) 721:3 722:8 740:1 741:24 743:12 744:16 756:8,24 799:2 824:19 825:4 goodlett (3) 716:6 717:5,13 gotten (2) 736:10 792:23 graphic (1) 814:8 great (2) 774:2 803:11 greater (3) 729:21 731:5 836:4 green (1) 800:13 groups (3) 815:4,11,12 grove (1) 717:9 grover (1) 722:12 grown (1) 818:4 grows (1) 752:25 growth (3) 800:9 818:11 831:5 guess (7) 743:22 787:18

havent (4) 811:20 827:7 829:5,25 hayward (1) 822:14 hazard (1) 762:4 head (5) 757:18 758:7 766:16 766:18 798:2 headed (4) 814:10,11,14,15 headon (1) 813:21 healthcare (1) 810:9 hear (1) 722:4 heard (3) 780:16 826:18 827:2 hearing (14) 716:2 720:1 721:4.7.12.14 722:10 776:18 830:1 835:5,7 836:25 837:6,14 hearings (11) 769:7,18,20 799:21 813:5 815:5,8,19 821:12 835:8 836:19 heavy (1) 734:23 held (4) 737:21 738:18 803:22 837:1 help (4) 793:21 812:15 814:8 814:9 helps (2) 811:25 814:11 hemorrhaging (1) 827:6 hereunto (1) 838:9 hes (5) 754:21,21 781:17 796:2,3 high (4) 783:14 811:20 813:12 824:25 higher (11) 730:1,2 743:9 750:14 773:2,4 778:1 797:8 797:9,17 811:22 highest (1) 822:6 hire (1) 827:24 historic (3) 727:18 734:15 737:8 historical (4) 724:20 728:16 728:22 729:22

Н

haley (21) 717:8 718:6,12

767:13 771:3 773:10

789:1,6 794:5 796:21

half (5) 766:3,4 767:7 786:6

hand (6) 722:14 723:6 770:9

hall (3) 716:5 717:5,13

821:2 828:13 838:9

handle (2) 762:10 771:7

happen (4) 790:3 794:21

hard (8) 742:16 787:3 796:1

807:6 808:10 822:2 824:24

happening (1) 789:9

happens (1) 812:25

harding (1) 830:17

hasnt (1) 826:14

hauls (1) 770:5

hardship (1) 735:22

happy (1) 823:13

handed (2) 824:2,2

handled (1) 741:22

hands (1) 820:12

823:6,7

830:20

787:16 788:3,5,13,16,22

797:21 798:4,12,22 799:7

h (1) 771:8

hadnt (1) 736:10

hold (1) 817:17 home (1) 829:9 hope (4) 782:19,25 809:19 811:25 horns (1) 762:8 hot (1) 782:7 hour (7) 750:5,16,18,20 772:11 797:9,16 hours (19) 725:9,9 726:10,11 726:13,15 727:12,16,17 728:11 730:21 732:20 750:4,8,18 766:20 767:7 774:22 836:9 house (2) 826:13 829:7 household (1) 734:10 housekeeping (1) 722:9 housing (2) 788:10 815:11 huge (3) 825:25 826:21,25 hundred (1) 802:18 hurting (2) 827:18,18 id (18) 721:4 723:1 739:14 742:9 744:6 749:3 763:22 787:18 800:5.19 807:10

813:19 814:17,23 830:4,22 835:15.22 idea (9) 740:1 755:9 756:9,22 792:7 795:15 808:8 809:2 828:1 ideally (1) 739:23 identical (1) 747:23 identification (12) 723:11 746:12.747:12.748:24 749:11 752:1 756:17 759:2 760:15 775:10 815:24 821:19 identified (1) 776:20 identifies (1) 821:14 identify (5) 736:24 737:1 761:22 783:17 803:5 ignition (2) 762:3,16 ill (10) 722:13 723:6 730:23 751:22 765:19 807:22 820:13,18 824:17 828:22 **illustrated (1)** 769:5 im (28) 730:5 732:12,15 734:5 744:4,18 755:6 759:16.24 771:6 778:13 791:21 803:18 804:19 807:8 813:4 822:9.23 823:1 823:13,18 825:7 826:9,9 827:3 830:10,15 832:2 imagine (2) 798:19 803:16 immediately (2) 729:20 803:25 impacts (2) 798:10 822:20 **impaired** (1) 741:14 implausible (1) 831:4 **implement** (1) 742:12 **implemented** (3) 742:21 759:17 826:4 **implementing** (1) 744:11 **implicit** (1) 731:19 importance (2) 761:4,16

important (10) 741:15 742:11

742:19 784:19 791:6

811:23 814:25 823:21

824:5 836:12

802:13,14 807:6 808:17

guideline (3) 719:20 760:8,25

guidelines (2) 724:25 837:8

810:5

guy (1) 831:7

guidance (1) 783:12

837:1 838:10

kept (1) 833:10

key (1) 808:9

kezar (1) 732:3

797:9,16

822:24

kilowatts (1) 750:2

797:22 826:16

831:6,8 834:3

knows (1) 796:2

828:12,16,18

753:15.17.19

798:11

817:15

822:8

latest (1) 776:11

laws (2) 824:7,8

lead (1) 798:25

774:19

leases (1) 771:7

780:17 795:23

land (1) 830:12

landfills (1) 770:7

736:11 740:17

larger (6) 729:3 734:21

largest (3) 748:17 781:2

leadership (1) 835:24

left (5) 737:13 767:7 777:9

718:16 723:14 731:14

743:17 744:7 754:18

755:17 763:18 766:24

733:7 736:17 740:11 742:8

767:10,17 775:3,13 776:13

779:15 786:12 787:10.17

788:14 799:16 800:7,16

807:14 810:3 812:1,7

814:23 819:12 835:22

736:16 777:9 789:15

landfill (3) 739:6,9 743:20

knew (1) 805:1

kind (10) 732:4 734:21

782:11 787:25 810:14

know (29) 741:10 755:6,7

781:12,12,13,20 789:19

803:19 807:6.17 810:15

826:2,20 829:19 830:2

kevin (2) 718:12 770:24

kilowatt (5) 750:8,16,18

```
impose (1) 739:11
imposed (3) 730:4 731:4
  769:7
impractical (1) 759:10
impracticality (2) 719:12
  756:12
improperly (1) 734:10
inaccurate (1) 780:24
inattentiveness (1) 795:25
incensed (1) 826:24
incentive (2) 808:9,13
incentives (2) 739:12 744:10
include (4) 733:4,9 808:22
  832.14
included (10) 722:12 724:5
  732:15,16,24 733:13 736:8
  747:25 801:20 802:13
includes (6) 747:21 751:14
  762:11 783:2 818:17 824:7
including (4) 723:16 737:23
  748:2 836:16
inclusion (1) 830:9
incorporate (1) 752:19
increase (20) 721:8 730:13
  731:6 737:12 738:8 741:20
  745:25 764:16 766:6
  769:20 779:13 784:4 800:9
  809:3 810:12 821:14
  825:21,25 831:11 835:9
increased (5) 729:25 730:10
  730:25 731:2,4
increases (1) 810:7
increasing (1) 726:3
increment (1) 809:4
incremental (1) 818:21
incur (3) 768:2 770:10 806:24
incurred (5) 743:6 774:15
  809:10 810:23 811:3
incurring (2) 757:21 819:19
incurs (2) 743:8 768:12
indepth (1) 835:16
index (6) 718:1 719:1 810:9
  810:21 811:1,2
indicate (3) 781:22 810:20
  834:17
indicated (3) 783:7 837:11
indication (2) 721:18 781:15
indicative (2) 806:21 815:17
indices (3) 810:8,15,19
individuals (2) 813:11,12
indoors (2) 761:21 790:4
industrial (1) 797:12
industry (2) 778:16 808:4
inertia (1) 783:4
infill (1) 831:8
infinitum (1) 822:17
infinity (1) 784:1
inflating (1) 764:20
inflation (1) 811:20
inform (1) 836:2
information (12) 727:22
   731:24 737:14 759:5 762:6
  774:10 778:20 781:24
  803:21 811:16 821:8
  835:13
informed (2) 740:9 804:15
```

informing (1) 814:6

inherent (1) 769:3

```
initially (3) 724:24 780:18
  803:6
initiative (2) 803:3,5
inquiries (1) 815:16
inside (5) 759:19,21 761:5,11
install (1) 756:2
installed (1) 761:21
instituted (1) 801:9
instructions (1) 837:7
intend (2) 721:13 820:16
intended (2) 755:11 807:2
interest (2) 813:12 815:3
interested (4) 738:14 781:19
  814:20 832:18
interests (2) 806:5,6
interim (3) 789:14 806:19,23
interject (1) 753:3
international (1) 833:10
interval (1) 790:8
introduce (8) 747:9 748:20
   749:3 751:22 759:24 775:5
  807:17 814:23
introduced (3) 775:16 808:17
  816:15
inventories (1) 793:19
inventory (1) 794:2
investigate (1) 797:6
investigated (1) 797:21
investing (1) 768:5
involved (6) 744:10 772:22
  805:10,19 807:3 814:20
involves (2) 806:7 832:17
isnt (4) 790:11 796:9 812:10
  832:23
isolation (1) 811:12
issue (22) 749:3 753:7 755:20
  765:5 766:10 767:3,8,20,23
  767:24 790:12 795:25
  805:11 807:23,25 812:19
  813:20,25 828:24 829:23
  830:9 836:21
issues (18) 739:8,10 754:16
   788:25 789:17,21 790:22
  795:2,20,22 828:22 831:21
  832:13,19,23,24 835:21
  836:11
item (7) 741:6,8,11,13,17
   790:14 836:25
items (7) 734:2 798:4 833:14
  834:6,9,19 835:6
ive (9) 744:9 780:11,20
  783:22 785:18 795:22
  829:4 832:13 834:9
j (2) 717:18 719:7
jack (1) 717:9
jepson (1) 722:12
job (9) 744:5 783:14 795:13
  795:23 796:1,11 827:15,16
```

836:4

jobs (3) 774:1 795:12 833:11

june (5) 758:22 804:3 836:21

john (3) 718:9 744:14,23

ion (5) 718:16 799:9,12

800:25 816:11

judgment (1) 782:6

jose (1) 822:8

keep (3) 736:12 744:8 796:1 kehoe (6) 717:23 825:3,4,5,23 kermit (3) 717:23 828:7,12 limit (1) 827:4 736:19 737:7 738:2 739:11 789:25 kinds (5) 772:17 773:6 797:3 762:4 764:24 765:5 781:10 780:21 814:9 823:13,14,17,18,24 knowledge (6) 737:20 783:16 734:22 785:4 821:4 825:12 828:15 **kubitz** (7) 717:23 828:7,8,12 825:10 13 (7) 719:11 751:24 752:4,8 **labor (8)** 729:10,23 730:12 757:21 768:19 786:17,20 792:11 large (5) 732:6 734:2 735:4 818:1 lease (6) 751:13,15,19 771:5,7 831:2 legg (37) 717:4 718:5,10,14

lot (8) 734:15 736:9,11 lesser (1) 772:7 744:10 748:2 786:14 806:7 lesserpaid (1) 771:21 lessonslearned (1) 823:10 831:8 lots (1) 831:8 lessthanweekly (1) 833:15 low (3) 788:11 810:12 831:16 letter (1) 828:19 letting (1) 821:25 lower (5) 750:13 783:16 level (10) 744:1 757:7,17 784:2 788:7 801:19 778:10 788:11 801:18 lowest (1) 831:17 807:5 813:12 818:11 830:6 lucid (1) 830:24 levelized (1) 792:6 levels (2) 757:2 758:8 \mathbf{M} liability (2) 790:17 795:6 m (6) 717:12 721:1 770:22,23 licensed (1) 838:4 837:2,15 lifeline (1) 748:3 macy (1) 717:9 magnitude (1) 804:25 limitations (2) 753:12 789:24 mailing (1) 815:15 **limited (3)** 739:8 771:16 main (2) 746:6 761:20 maintain (14) 719:16 741:15 line (7) 742:18 754:4 762:17 758:1 759:10,18 760:1 775:7 784:17 822:4,9 761:9 763:5 790:24,25 lines (1) 792:22 791:8 793:18 794:2 795:7 liquefied (2) 719:21 760:10 maintained (1) 765:24 **liquid (2)** 789:12 791:13 **maintaining** (7) 719:12 **list (4)** 776:16 777:4 780:21 755:20 756:12,22 757:14 761:10 789:12 listed (1) 808:20 maintenance (44) 719:14,18 lists (1) 815:15 719:22 722:24 744:15.18 litter (5) 732:1,7 733:5 734:9 746:7 754:16 756:2,3,4,5 757:5.13.17 758:24 759:11 little (14) 725:4 740:14,15 759:18 760:11 773:12 751:20 758:9 763:21 766:3 787:11 788:17,18,25 789:8 791:18 792:9 802:11 789:18.21 790:1.2.6.8.10 807:12 811:12 812:19 790:11,12,14,22 791:25 793:7,10,14,15,17 794:1,15 lng (21) 791:18,18,22,23 major (2) 774:18 790:8 792:1,3,4,10,13,15,16,17 majority (2) 757:13 792:3 792:22 793:3,6,9,11,12,14 making (7) 736:16 737:5 793:15,23 738:2 743:10 806:18 loads (1) 734:23 830:15 836:20 locate (1) 768:22 managed (1) 757:11 located (1) 769:5 management (2) 742:14 location (7) 722:25 732:3 835:21 752:14 753:1 768:14 769:4 manager (2) 760:23 766:9 manner (1) 762:10 locations (3) 735:5 793:20 manpower (4) 725:19 728:21 730:18 731:1 long (6) 735:13,23 781:13 march (1) 752:17 783:2,3 818:9 marginal (5) 819:19 820:3,4 longer (3) 725:1 767:2 825:18 820:4.5 longhaul (8) 791:21 792:2,10 marked (13) 723:10 746:11 792:15,16,23 793:7,18 747:11 748:23 749:10 look (22) 724:1 725:5 726:2 751:25 756:16 759:1 729:2,9 738:6,24 740:21 760:14 775:9 780:11 741:19 776:5 778:13 815:23 821:18 784:25 785:6 787:2 797:14 market (4) 777:5,13 780:11 819:14 829:4,12,13 830:6 782:8 833:7 834:25 markets (2) 833:9,10 looked (9) 725:16,17 735:16 marlena (1) 717:4 736:5 750:4 773:5,7 818:24 mateo (1) 769:19 material (12) 723:23 725:2,15 looking (6) 724:25 726:3 725:20 727:10 735:19 736:21 742:16 747:2 736:10 737:2 820:17 829:1 811:12 833:8,10 looks (2) 830:25 831:12 materialize (1) 802:1 lose (2) 768:20 798:20 materials (19) 719:3 722:22 losing (2) 768:3 770:12 723:16 731:21 732:8 733:2 loss (1) 768:9 733:18,21,22 734:7 736:2 lost (4) 813:22 826:15,22 737:13 741:5 812:19 829:4 827:1 834:16,17,18,18

```
math (5) 783:21,22 784:13,16
  785:18
matter (6) 722:9 739:2 782:7
  791:4 812:9 834:23
mattress (2) 733:20,25
mattresses (1) 734:2
maurice (7) 718:4 724:7
   731:15 737:19 788:23
  789:4 792:21
maximum (4) 750:19 751:17
  765:23.24
mayor (2) 815:15 823:3
mean (9) 729:6 732:5 745:9
  784:18 802:6 803:11
  812:10 818:14 824:20
means (1) 833:12
measure (4) 739:22 789:14
  811:2 822:15
measurement (1) 742:14
mechanic (5) 766:16 795:18
  796:1.11.13
mechanical (1) 729:14
mechanics (5) 762:2 795:20
  795:23 796:5,6
mechanism (5) 769:24 810:1
  810:5,6 812:24
mechanisms (1) 808:19
media (1) 815:9
medium (1) 797:17
mediumdemand (2) 750:13
  750:15
mediumduty (1) 797:10
meet (4) 725:22 732:5,8 735:2
meeting (8) 721:22 727:21
  732:9 735:6 741:23 743:25
  793:25 826:7
meetings (1) 827:9
meets (3) 731:25 732:20
  734:25
meetups (3) 734:18 735:7,21
member (3) 774:12 782:1
  784:1
members (4) 717:21 814:20
  815:14 836:8
mendoza (1) 719:7
mention (3) 733:8 812:20
  822:18
mentioned (6) 741:22 747:15
  761:6 797:20 807:11
  810:21
met (3) 734:24 742:22,23
meter (1) 750:12
meters (4) 750:12,13,14,16
methane (3) 761:22,23
  762:11
methodology (1) 800:4
metrics (2) 737:21,23
metrix (1) 724:19
michael (1) 717:18
microphone (1) 721:24
midnight (2) 727:13,14
midrange (1) 750:23
migration (1) 822:24
million (19) 769:10 779:12
  801:22 802:23 804:21
  826:17,17,20,24,25 827:2
  829:19,20,24 830:1,5,5,6
  831:20
millions (1) 827:6
```

```
mind (4) 730:23,24 795:19
  810:13
minimal (1) 786:18
minimum (5) 737:1 778:10
  778:17 779:2 800:10
minor (1) 753:19
minute (1) 732:13
minutes (5) 744:19 757:21
  767:2 820:13 828:23
mission (3) 781:1,3 830:25
model (1) 776:23
modification (2) 719:18 760:9
modifications (14) 719:16,20
  724:22 756:2 759:13 760:1
  760:7,20,20 761:1,16,17
  762:25 763:1
modified (1) 728:8
mohammed (2) 717:3 721:5
moment (2) 757:1 816:7
monday (7) 723:14,17 775:16
  799:23,25 808:17 813:24
money (9) 742:18 768:3,20
  770:12 823:14,17 826:8,22
  827.1
month (5) 740:20 785:9,21,23
  804:4
months (5) 738:1 742:1
  765:10 816:18 832:16
moon (1) 827:24
morning (2) 726:15,23
motivated (1) 768:4
motor (1) 762:11
motors (1) 762:9
move (8) 754:16 784:15
  787:17,22 789:15 812:4
  814:14 822:8
moved (1) 795:4
movement (1) 725:24
movements (1) 795:10
moving (7) 751:8 792:4
  794:15 796:6 807:6 809:21
  811:11
muddle (1) 758:9
multiple (5) 796:8,12 809:23
  828:19 830:22
multiplied (2) 750:7 800:11
multiplying (1) 750:17
municipal (1) 835:21
```

<u>N</u> n (2) 717:1 721:2

nailed (1) 823:8 name (5) 820:20 821:11 825:4 828:10.12 nameplate (1) 750:2 nancy (6) 717:22 718:19 813:24 821:1,11 825:16 narrative (1) 833:19 narrow (1) 766:20 natural (18) 719:5,18,21,21 760:9.10 772:6.23 788:17 788:18 789:7,13,13 790:22 791:6,10,12,13 nature (1) 818:23 near (3) 732:3,4 753:23 necessarily (2) 724:18 790:11 necessary (9) 722:6 723:21 724:22 736:8 740:5 760:21 793:25 817:6 824:11

```
necessitate (1) 819:3
need (32) 732:12 737:22
   738:2,16 739:18,21 740:2
   743:15 744:8 757:8.18
   759:14,17 761:9 763:8,21
   767:22 773:1 790:3,9,15
  791:22 798:6 814:8 820:16
  821:17 823:14 826:8 827:3
  830:17 834:3,22
needed (1) 736:12
needs (6) 744:9,12 787:5
  797:14 822:12 827:1
negotiated (2) 796:18 799:6
negotiation (1) 811:9
neighborhood (1) 815:12
net (2) 754:5 758:21
never (3) 822:15 825:14
  827:14
new (28) 723:16 733:12 740:4
   758:2 763:7,20 765:12
   768:5,10 769:13,17 773:3
  775:20 776:14 777:7 778:3
   789:22 793:9,12 805:15
  806:22 815:6 818:7 827:3
  831:9,14,15,16
newer (2) 778:13 782:19
newsletters (1) 815:15
newspapers (1) 815:12
ngv (1) 760:7
night (2) 757:14 772:5
nine (1) 831:1
noncry (1) 834:18
nondriver (1) 798:14
nondrivers (1) 796:24
nonodorized (1) 791:23
normal (1) 726:14
northern (1) 833:11
notary (1) 838:4
noted (1) 722:9
notes (1) 751:15
notice (2) 793:22 836:23
notification (1) 762:5
notifications (1) 720:1
nots (1) 811:2
november (1) 803:23
number (65) 721:18 725:17
  725:19,25 727:23 732:6
  733:10 734:17 735:4,17
   736:11 737:6,12,24 739:8
  741:19 745:9,16,16,17,21
  750:6,19,22,25 752:22
   757:25 758:16,23 765:20
  765:23,25 766:5,6,20
  776:11 777:1 778:20 780:5
   780:8 781:12 782:14,22
  784:2 785:7,9,21 786:7,17
  790:19 798:7 800:11
  808:18,21 811:13,21,22
  815:16 817:18,19 818:10
```

743:2 744:13,16,22 763:15 767:8,14,18,19 770:19 773:13,18,20 775:1 779:17 787:9 799:9 807:9,20 812:2 812:12 814:18,22 816:2,3,8 819:10,13 820:8 821:9 823:2 825:2,22 828:6 831:23 835:2 0 o (1) 721:2 **objection (1)** 798:21 objections (1) 756:21 objects (1) 795:10 observation (1) 788:1 observe (1) 724:20 observed (2) 736:1 805:18 obtain (1) 769:9 **obtained (1)** 748:18 obviously (4) 738:25 788:12 791:18 811:20 occasion (1) 791:1 occur (5) 729:16 743:20,22 808:4 809:5 occurred (1) 813:7 occurring (1) 788:19 occurs (3) 741:25 753:24 809:15 oclock (5) 726:21,23,24 727:8 770:21 october (1) 804:2 odorized (3) 791:11,12,13 offer (2) 768:21 836:11 offered (1) 836:19 offgas (1) 791:19 office (2) 717:11 823:22 officer (1) 835:7 official (1) 824:14 offload (1) 735:14 offloaded (1) 734:24 offloading (1) 735:11 offpeak (3) 774:21 797:7,16 offset (1) 798:1 offsite (13) 752:10,12,21,24 753:8,14,16,18 762:5 766:4 773:2,4 798:1 **oh** (1) 727:1 okay (62) 730:22 732:14,16 733:8,16 734:14 740:24 744:13,22 745:11 746:1,6 750:25 751:22 755:20 757:1 759:13,24 761:18 763:10,13 765:13 766:24 770:20 773:15.17.20 775:1 776:19,23 778:4,23 779:4 784:21 788:13 790:18 792:13 794:10 799:7,9 800:8,16,25 801:6 802:20 803:17 804:5 10 17 807:5 8 807:21,22 812:2,5 816:8 820:7,8,9,13,25 835:2 olive (1) 732:4

olympic (1) 830:17

onehour (1) 750:7

oneyear (1) 740:6

ones (1) 781:9

onekilowatt (1) 750:5

once (6) 721:21 723:24

739:17 769:19 782:7 836:6

ongoing (1) 832:15 online (8) 763:7 775:20 776:8 779:25 780:6 785:3,7 816:17 onpeak (2) 797:7,16 onsite (12) 719:4 752:18,20 752:23,25 753:8,9,11,13,18 773:1 797:25 ooo (2) 718:20 720:4 open (4) 782:7 812:6 814:13 820:11 operate (6) 739:17 749:20 768:12,17 770:9 806:25 operates (1) 750:3 operating (9) 752:17 800:20 801:5 802:13 806:16,24 808:16,19 817:16 operation (5) 750:5 762:13 768:23 793:7 794:2 operational (4) 724:19 737:20 768:18 788:24 operationally (1) 735:6 operations (11) 725:6,7 727:20 757:11,13 760:23 766:9 768:5 769:2,13 791:4 operators (1) 762:12 opinion (4) 826:14 827:7 829:5,11 opportunity (9) 721:16 741:4 769:9 804:18 809:6,8 814:18 825:6 833:21 **opposed (7)** 725:10 737:25 740:21 742:2 754:9 822:23 830:10 options (2) 774:9 782:20 order (19) 721:5 722:20 724:23 729:18 731:1 745:12 759:15 765:17 804:20 809:20,21 812:21 812:23 824:7 832:15 834:21 835:1 836:14,21 ordered (2) 765:10,12 orders (2) 801:9 824:10 organics (7) 768:13,18,20,21 769:3,13 770:10 organization (1) 823:7 organizations (1) 815:11 organized (2) 827:13,19 original (1) 836:17 otis (3) 785:2,20 788:7 ought (2) 785:15 830:2 outfit (1) 832:3 outlined (1) 770:16 outreach (5) 807:16 813:7 814:24 815:3,18 outside (4) 774:15 789:13,19 overall (5) 746:25 801:22 811:10,24 817:14 overlooked (1) 825:17 overnight (2) 790:16 791:20 overtime (2) 741:19 742:3 overview (1) 719:18 owen (10) 717:12 723:8 748:22 756:15 760:4,12 775:6 776:12 803:22 815:20 owner (1) 837:3 owners (1) 783:3

819:8 828:21 831:5,15

numbers (22) 725:21,24 727:19 737:8 738:8,22,24

758:23 775:24 789:15

722:8,15 723:3 742:25

792:8 799:21 831:3

nuru (43) 717:3 721:3,5

740:1 745:9 746:25 747:3,8

748:7 752:4 753:21 758:18

numbered (1) 815:21

```
P
p (8) 717:1,1 721:1,2 770:22
  770:23 837:2,15
pacific (1) 781:22
pacifica (2) 808:24 810:16
package (1) 811:24
packer (10) 729:7 731:23
  732:2,17,18 733:6,11,24
  734:17,24
page (6) 718:3 719:2 775:13
  779:Ś 784:7 785:11
pages (1) 813:18
paid (1) 769:10
pair (4) 726:4,7 729:6 730:11
parade (2) 733:12,13
parades (2) 733:10 735:8
parameters (3) 723:18 754:3
park (1) 830:17
part (16) 731:17,25 732:9,10
  748:7 763:3 766:18 768:22
  768:25 774:11 775:22
  806:8,9 811:9 827:11
  830:17
partial (1) 782:4
participating (1) 837:10
particular (1) 767:23
particularly (2) 723:23
  809:22
parts (2) 793:19 811:11
passed (1) 786:18
passthrough (9) 800:21,21
  801:2,8,13 802:4,4,11
  806:14
patricks (1) 733:12
patrol (4) 732:1,7 733:5
  734:23
pay (4) 769:8 796:25 827:5
  833:15
paying (2) 785:8 804:20
payment (6) 770:12,14 804:2
  804:3,5 805:4
pays (2) 768:17 769:25
pdra (1) 834:9
penalized (1) 736:14
penalties (7) 719:3 723:15,21
  724:2,21 737:18 740:13
penalty (13) 724:4,13,16
   725:10,15 728:7,11 730:3
  730:15 731:2,7 739:12
  743:14
pension (2) 810:11,11
people (15) 721:18 744:11
   762:1,4 813:25 814:10
  820:25 823:24 824:3.3
  827:17,18 829:16,19 831:8
percent (24) 726:4,6 728:16
   729:4,8 741:20 745:25
  764:21,22 779:1 790:20
  802:18 809:7,7,14,15,15
  810:18,18,18 811:18
  825:20,24 830:3
percentage (4) 781:10 808:1
  809:3 811:6
perform (7) 757:19 759:15
   774:5 783:21 785:19 790:1
  796:11
performance (26) 723:15,19
```

723:21 724:2,4,13,16,19,21

```
724:25 725:13,22 726:16
  726:19 728:7,18 737:10,18
  739:11,19,19,22 740:13
  741:24 742:14 743:9
performed (4) 745:20 788:19
  789:8 814:25
performing (5) 735:18 754:1
  757:5 774:1,15
period (22) 721:12 725:1
   726:6 729:4,17 738:12
  739:24 740:6 741:1,21,21
  745:13,18 747:19 750:7
  758:4 804:17,23 806:19,20
  806:23 820:11
permissible (1) 829:2
permit (1) 727:9
person (3) 771:21 796:14
  820:14
personally (2) 795:20 831:6
persons (1) 832:18
peter (2) 717:16 721:20
pg (8) 719:5 747:6,18,22
  748:3 750:12 774:9 797:11
phone (1) 813:10
phrase (1) 734:20
physical (1) 753:12
physically (1) 753:11
pick (7) 726:25 730:14,16
   741:6,9 763:2 823:3
picked (2) 730:3 734:11
picking (2) 732:19 741:4
pickup (4) 731:25 732:7
  734:24 829:1
pickups (1) 733:5
picture (1) 811:10
piece (1) 816:4
pier (2) 834:16,17
pilot (2) 833:15,16
pilpel (3) 717:24 832:2,2
pipeline (4) 719:23 775:14
   776:6 780:24
place (7) 716:6 717:5,13
  728:18 762:17 765:14
  793:11
placed (3) 734:10 820:17
  823:23
places (2) 732:6 808:15
plan (1) 810:11
plastic (1) 734:10
plate (1) 828:3
played (1) 770:3
please (11) 721:25 745:3
  758:14 789:3 814:2 817:8
  820:12,19 821:2 828:10,13
point (32) 726:19 728:10,13
   728:25 729:2,5 737:21
  740:3,4,14 742:1,9 744:3
  751:10 758:17,25 764:25
  765:3 766:24 767:6 770:16
  787:3 790:14 792:7 796:2
  796:12 799:5 803:18
  806:18 818:8 820:1 822:13
pointed (1) 799:23
points (3) 728:6 737:6 813:19
police (4) 824:12 827:9,15,16
policy (3) 832:20,23,24
population (1) 782:15
porter (1) 717:19
portola (1) 831:7
```

```
position (5) 736:13 738:11
   770:15,16 795:16
possibility (6) 762:15 794:15
   794:16,18 795:12 796:23
possible (7) 753:11 771:11,16
  771:21 772:2 805:8 834:15
posted (2) 834:1 836:22
potential (1) 762:3
potentially (12) 726:3 738:23
   741:8 743:23 758:3 771:25
   772:20 790:16 797:1
   798:21 806:22 811:4
pp (1) 716:11
practical (1) 757:4
practicality (1) 759:7
practice (7) 743:19 752:11
   798:18,18 799:3,4 808:2
preclude (2) 798:16,25
precludes (1) 798:13
prepare (1) 836:13
prepared (3) 725:8 729:15
   819:24
present (2) 761:23 820:16
presentation (8) 722:6 723:2
   737:17 767:5,11,15 816:16
   835:12
presented (3) 766:7 767:21
   799:25
presents (1) 789:17
press (1) 815:8
pretty (1) 831:16
prevented (1) 783:4
preview (1) 722:20
previous (2) 763:25 765:10
previously (5) 724:8 744:24
   770:25 799:13 802:21
price (9) 746:8,19 773:2,4
   774:21,22,23 785:16
   796:14
prices (3) 722:23 744:17
  774:14
primary (1) 724:15
print (1) 745:7
prior (7) 740:6 745:25 751:12
   751:13 803:9 805:3 814:4
privilege (1) 770:1
probably (6) 737:11 741:17
   810:24 817:17,18 834:1
problem (2) 762:1,2
problems (1) 795:15
procedure (1) 739:8
procedures (2) 799:5 834:20
proceed (6) 722:7 723:3
   724:6 784:6 794:10 820:22
proceeding (2) 801:17,24
proceedings (7) 721:15
   832:12 834:11 835:25
   837:11 838:6,8
process (31) 725:3 743:22
   744:2 757:20 764:6,7,9
   781:7 792:4 801:14,17
   804:24,25 805:19,21 806:7
   812:22,24 814:7,19 815:13
   822:21 832:4,5,8,9,15,20
   832:24 836:7,15
```

```
produced (1) 750:3
producing (2) 772:23 777:16
productive (1) 808:11
profit (4) 768:4,8 808:19
  826:11
profits (1) 823:14
program (26) 719:3 722:22
   723:16,19,24 724:4 725:17
   729:2 739:17 741:14,17
   743:5,7 747:24 748:1 754:3
   768:18,20,22,24 769:4
  825:10,18 826:1,3 833:16
programs (4) 748:2,3 833:16
  833:22
progress (1) 833:20
project (5) 782:10 802:2,18
   829:9 833:17
projected (2) 780:22 802:1
projecting (1) 786:25
projections (1) 831:4
projects (1) 833:23
promise (1) 825:12
promote (1) 768:8
property (3) 765:16 830:18
proposal (22) 723:15 724:1
   724:12 725:5 726:9 728:7
   729:1 730:12,19 731:16,20
   732:11,24,25 733:14
   734:14 736:5 737:8 738:3
  739:4 740:16 741:19
propose (4) 724:24 728:17
   729:25 778:15
proposed (7) 716:2 733:10
   735:2 737:10 745:23
  771:14 810:10
proposing (5) 727:10 728:14
   731:18 764:16 834:7
proposition (3) 829:3,10
  836:25
protections (1) 795:5
protest (3) 798:25 837:4,5
protests (2) 837:1,8
provide (8) 733:11 738:20
   759:18 762:12 783:19
  813:6 814:11.19
provided (8) 748:15 749:19
  750:18,23 760:22 761:8
   795:5 799:21
provider (2) 748:16 808:23
providers (1) 808:3
provides (5) 751:18 762:6
  777:25 803:20 808:8
providing (4) 731:23 737:15
  820:6 835:12
provision (1) 837:2
proxy (1) 778:5
public (43) 716:1 717:2,21
   719:24 721:5,12 734:9
   742:20 747:24 748:2
   802:24 812:4 813:7,8 814:2
   814:6,13,21 815:3 820:10
   820:11,14,15 822:2 824:13
   825:7 826:13 829:7,9,17
   830:3 832:7 833:3 834:6,7
  835:3,4,23 836:2,9,11,20
  838:4
publicize (2) 815:8,13
publicly (1) 834:1
```

publics (1) 836:4 pull (1) 761:25 purchase (2) 758:2 834:16 purchased (1) 746:20 purpose (2) 747:24 748:2 purposes (2) 828:1 830:4 pursue (2) 730:20 742:2 push (1) 766:5 put (14) 726:7 728:18 729:5 729:19 730:11 736:13 737:22 772:6 791:1 795:24 820:24 822:11,23 824:10 putting (5) 726:2 771:8 786:16 791:5 831:8

0 quarter (1) 832:16 quarterly (5) 833:5,19,25 834:6.7 quartile (2) 821:15,16 question (15) 730:7 734:20 739:14 753:3 754:19 783:20 786:12 788:6,21 789:2 792:9 810:3 819:15 826:5 829:2 questions (38) 731:14 740:12 740:15 742:8 744:15 763:19,22 767:4 771:4 773:10.16.19 774:25 775:2 779:16 787:21 788:16 794:5,14 795:11 796:20,22 799:7.10.10.17.19 800:20 812:3,3,5 819:11,13 820:8 826.2 832.6 833.2 835.14 quick (6) 723:13 753:3 807:22 812:10,17 813:15 quickly (1) 740:2 quillen (15) 718:4 722:21 723:5 724:2,7,12 739:23 788:24 789:3,4 794:9,12

quite (3) 732:15 771:14 815:2

798:10,15 799:1

quoting (2) 754:21,22

quillens (1) 723:5

r (3) 717:1 721:2 828:12 race (1) 734:22 radio (1) 734:1 raise (2) 821:2 828:13 raised (3) 802:23 828:24 832:8 range (7) 745:14 748:18 749:19 790:20 797:19 811:7,16 rate (77) 716:3 729:18 731:17

745:12.13.13.13.14.15.15 745:23,24 746:4 748:4,5 752:9 754:5 758:18,22,24 764:1,1,4,5,18,20,21 765:1 765:6,7,11 769:7,19 772:7 772:10 776:21 777:6.22.22 783:16 784:3,8 785:3 796:25 801:9.16.17 804:20 804:24,25 805:2,7,15,20,25 809:20.21 812:21.22.23 814:11 815:4 816:16.21 824:3,6,10 825:20 832:11 832:19 833:13,18,18

processes (3) 744:10 806:20

processing (2) 769:13 833:11

procurement (3) 747:5,19,22

809:21

```
834:10,20,23 837:14
ratepayer (23) 717:16 719:25
  719:25 721:20 722:4 767:4
  787:12 800:18 812:7
  813:14 815:5,13,17,20
  819:16 825:7 827:7,15
  830:23 831:19 836:1,6,23
ratepayers (4) 717:15 748:6
  823:16 837:5
rates (30) 716:2 719:5 721:9
  769:10,15 775:4,23 777:10
  778:1,2,5,6 787:15 797:8
  798:11 801:16,24,25 810:8
  810:13 821:15,22 822:3
  824:24 829:20 830:4,7
  834:2 835:10,19
ratesetting (2) 806:20,20
ratio (5) 800:20 801:5 802:14
  806:16 808:16
rationale (1) 806:16
ratios (1) 808:19
reach (1) 815:9
reached (2) 737:4 751:9
ready (2) 722:7 800:17
real (5) 762:21,23 764:11
  822:2 830:15
realistic (2) 724:23 826:4
reality (1) 805:17
realize (2) 827:13,14
really (25) 734:18 736:14
  743:25 744:11 768:16
  781:13 798:11 800:20
  801:7 808:10 809:25 813:6
  813:20 814:4,5,13,17 815:7
  819:7 822:4,11 823:9,11,14
  826:24
realworld (1) 810:14
reason (7) 735:16 736:8
  780:23 795:23 801:7
  821:16 829:13
reasonable (12) 738:12
   745:17 769:23 778:11
  809:11 810:24,25 821:17
  822:1,3,12 835:18
reasons (2) 801:10 823:15
reassign (1) 829:18
reassignment (1) 798:21
rebate (2) 825:13,15
rebuttal (1) 722:2
recalculated (2) 775:24
  779:14
recall (2) 755:25 786:22
receive (4) 727:20,22 756:5
  813:8
received (17) 719:24 723:11
  726:14,17 727:4 746:12
  747:12 748:24 749:11
  752:1 756:17 759:2 760:15
  775:10 815:17,24 821:19
receiving (2) 727:12 775:22
receptacles (1) 734:9
recess (1) 763:21
recognize (1) 739:21
recognizes (1) 737:9
recology (91) 719:3,4,5,7,8,9
  719:10,10,11,13,15,17,19
  719:22 723:17,18,20,25
  724:15,18,22,24 725:1,8,16
  726:1,9 729:24 730:1,2,11
```

```
730:13,14,16 731:5,17
  735:18 737:17.19 739:3
  743:6,15 744:5 749:9
  750:10 768:6,7,11,17,21,24
  769:8,10,15,25 770:2,3,4,5
  770:9,11,13 782:16,22
  784:1 786:15 792:18,18
  793:13,13 794:22,22 795:3
  795:4,7,8,9 808:23,24
  824:16 826:7,14,18,23
  827:1 828:3 829:1,8,15
  832:3,18
recologys (12) 721:8 724:14
  728:7,8 730:12 731:16
  769:2,21 770:16 785:1
  829:20 835:8
recommend (3) 769:16 810:4
recommendation (6) 723:20
  755:24 756:1 759:8 767:24
  836:20
recommendations (1) 757:5
recommended (10) 739:2,12
  752:19 769:14 810:6
  832:14 834:21,25 836:13
  836:21
record (13) 721:13 722:16
  809:19 815:1 820:17,21,24
  823:18 824:14 828:9,11
  837:11 838:8
recouping (1) 809:7
recoupled (1) 827:4
recovery (2) 801:16 809:4
recrossexamination (1)
  763:17
recyclable (1) 833:8
recyclables (3) 826:16 827:4
  827:17
recycling (7) 777:17 782:21
   792:17 825:8,9,11,14
redirect (6) 722:5 755:18
  773:15 787:14,19 794:8
reduce (2) 773:1 829:18
refer (1) 739:14
reference (1) 747:20
referenced (2) 725:12 811:15
references (1) 727:21
referred (12) 723:10 746:11
   747:11 748:23 749:10
  751:25 756:16 759:1
  760:14 775:9 815:23
  821:18
referring (2) 735:25 774:21
refine (1) 753:7
reflect (1) 775:24
reflected (3) 722:17 753:8
  758:23
reflects (1) 753:20
refuse (11) 716:2,3 720:1
  721:9 732:10,10 808:3
  829:8 832:12 834:1 835:9
regard (2) 782:3 834:5
regarding (8) 722:21 723:14
   724:1,3 743:5 782:13
  799:17 814:12
regardless (1) 826:21
regulated (1) 768:6
regulations (1) 789:20
```

regulator (1) 768:6

```
regulatory (2) 762:20 801:14
reimbursed (4) 769:15 804:6
  806:13 809:11
reimbursement (2) 769:9,11
reinforce (1) 812:18
reinforces (1) 759:9
reiterate (2) 813:19 814:4
relate (1) 725:15
related (5) 743:4 768:24
  802:5,15 829:7
relates (1) 741:16
relationship (1) 745:21
relationships (1) 808:2
relatively (5) 735:24 740:1
   752:18 753:19 758:4
relaxed (1) 740:16
release (1) 815:9
releases (1) 762:14
relied (3) 747:16 783:13.15
remain (2) 728:10 753:24
remainder (1) 752:24
remains (1) 769:18
remarks (3) 807:24 812:11
  813:17
remember (2) 786:21 803:1
remind (1) 721:23
renewable (1) 748:3
rent (2) 781:14 782:8
rental (2) 781:8 782:15
rented (1) 781:11
reorganize (2) 818:2,3
repair (2) 722:24 789:19
repeat (1) 789:1
replace (1) 791:6
replaced (1) 753:25
replacement (1) 722:18
report (49) 722:3 724:5
   737:11 739:3,7,9,13 742:11
   746:16,19,24,24 747:8
   748:8 752:19 753:4,8,10
  755:5,11,14,22,25 756:1
   757:10 758:4 759:8 761:13
  767:25 775:19,24 776:19
  780:1,5,6,18 807:9 824:22
  829:25 832:6,15 833:8
  834:7,21,25 836:13,18,21
  836:24
reported (2) 716:22 833:15
reporter (4) 716:24 820:20
  838:1,4
reporting (4) 732:17 832:4
  833:5.24
reports (5) 754:9 775:18
  833:6,20,25
reppond (5) 716:22,24
   721:21 838:3,13
represent (5) 724:18 745:24
   795:17 796:10 819:8
representative (1) 826:18
represented (2) 804:2 819:21
represents (4) 789:14 790:7
  817:20 818:7
request (5) 758:4 804:19
  805:7 809:20 812:23
requested (1) 748:13
requesting (1) 801:3
require (7) 757:15 758:7
   783:20 786:25 790:3
  817:24 818:12
```

```
786:9 787:7 789:25 811:13
required (10) 719:16,20
   757:23 760:1,9 778:10
                                   817:3 821:2 822:8,23
  786:19 791:14 817:3 819:5
                                   828:13 831:1 834:2
                                rise (1) 768:15
requirement (1) 730:13
requirements (10) 761:3,4,10
                                risk (17) 768:3,4,9,20 769:3,4
  761:12,17 762:21 790:9
                                   769:12,12,17,22 770:4,12
  791:17 793:23 833:7
                                   770:14 801:25 806:24
requiring (3) 719:14 758:24
                                   807:3,5
                                riskreward (2) 769:1 811:10
  759:23
reroute (2) 818:6,10
                                risks (4) 723:22 769:23,24
reserve (4) 721:12 829:23
                                  801:15
  830:2,8
                                road (4) 726:2,8 729:19
residence (1) 829:8
                                  730:11
                                robert (6) 717:8,23 767:1
residences (1) 777:23
residential (12) 719:23 721:8
                                   787:14,15 825:4
  775:14 778:1 797:13
                                role (3) 770:3 814:19 836:6
                                roofmounted (1) 762:9
  818:24 831:3,5,9 834:13
  835:9 837:3
                                room (4) 716:6 717:5,13
resource (1) 740:2
                                  837.2
resources (4) 731:5,8 736:7
                                route (13) 766:14,22 772:4
                                   791:8 792:17 818:7,14,21
  823:4
respect (13) 733:2 745:6
                                   818:23,24,25 819:3,5
   746:18 773:25 774:4
                                routes (16) 733:18,19 734:7
  788:25 800:8 801:15 807:3
                                   741:1.4 772:1 798:7 817:3
  818:5 833:5,24 834:8
                                   817:6,17,22,24,25,25 818:8
respective (1) 745:12
                                  818:9
respectively (1) 816:1
                                rows (1) 747:6
respects (1) 793:2
                                rsf (2) 793:15,17
respond (3) 735:13 740:3
                                run (1) 748:14
                                running (3) 733:18 741:5
  833:21
responded (1) 775:21
                                  827:16
responding (4) 731:18,21
                                runs (1) 748:4
  732:18 733:19
response (8) 730:18 734:7
                                              S
   735:9,10 775:17 786:12
                                s (3) 717:1 719:6 721:2
  816:5 835:13
                                safe (1) 762:10
responsibility (1) 798:20
                                safety (12) 719:16 756:2,5
responsible (2) 742:21 796:3
                                   759:17,23 760:1,19 761:4
responsive (1) 737:25
                                   761:16,20 762:4 796:4
rest (4) 738:10 766:4 779:4
                                sake (1) 761:19
  829:21
                                sale (1) 834:17
restate (1) 730:7
                                sales (2) 781:5 782:1
restrictions (1) 773:24
                                salesperson (2) 781:17,17
result (4) 770:7 791:14
                                san (20) 716:7 717:6,10,14,20
  795:25 811:8
                                   721:6 722:11,17 763:4
return (1) 833:13
                                   768:13 769:19 770:1
reusable (1) 834:9
                                   821:22 822:8,15 825:20,25
revenue (15) 779:11 801:18
                                   829:16,22 830:18
  801:20,21,23,25 813:22
                                sat (2) 827:2 836:9
  819:24 820:3,4 826:15
                                savings (12) 795:17 796:10
  830:23 831:10,18,19
                                   797:1.2.4.4.22.23.25
revenues (7) 775:18 777:19
                                   808:15 829:16,21
  799:18,24 802:17 819:20
                                saw (2) 733:25 755:13
  834:14
                                saying (4) 736:1 738:17 794:1
review (6) 727:18 743:18
                                  805:14
                                says (4) 798:24 826:7 829:14
  812:22 832:5 835:16,24
revise (1) 752:7
                                  830:1
revised (4) 719:11 739:7
                                scale (1) 729:3
  751:23 775:14
                                scavenger (2) 756:23 794:16
revision (1) 753:15
                                scavengers (1) 757:3
revisions (2) 753:21 754:1
                                scavenging (1) 813:20
```

revisiting (1) 724:25

right (34) 729:23 730:9

731:10 742:17 747:2

750:23 762:18 766:11

772:12 776:15 778:19,22

779:1,8,15 780:13 782:16

783:9,10,22 784:7,25 785:6

reward (1) 770:4

schedule (11) 719:11 724:13

797:10,17,20 801:21

schedules (7) 748:5 771:8

790:6 797:7,12,15,15

screen (2) 751:6 816:14

scheme (1) 743:14

scheduled (2) 776:8 790:11

741:11,13 747:7,22 751:24

766:14

770:15

793:25

790:11

820:23

```
seals (1) 762:13
seasonal (2) 738:5,20
seasonality (3) 738:9,14
  739:25
seat (1) 721:25
seats (1) 721:4
second (13) 728:13 740:13
   749:6 760:3 774:12 775:13
  809:16,16,25 814:2 822:7
  829:23 830:21
secondly (2) 722:22 811:9
seconds (1) 827:22
section (4) 746:16 755:21
  798:24 799:1
see (24) 727:8 733:19 738:8,9
  738:21 743:24 764:12
  776:1 778:14 785:9,12
   787:2,3 791:4 793:15,21
  813:25 815:2,6 817:19
  822:6 826:10,11 831:11
seeing (1) 744:4
seeking (1) 836:4
seen (6) 780:20 811:20 818:4
  825:14,16 829:5
selecting (1) 770:4
senior (1) 788:11
sense (11) 739:13,16 742:4
   743:12,14 791:19 801:8
  802:24 811:16 813:22
  828:25
sentence (2) 730:5 824:10
separate (2) 798:2 828:20
separates (1) 748:3
serious (1) 832:7
serve (7) 786:13,15,20 787:1
  793:12,13 827:25
served (2) 808:24 828:21
serves (1) 782:16
service (24) 733:10 759:19
  775:22 777:24 778:10,11
  778:25 779:2 784:22 788:7
  791:25 793:9,19 797:11
  799:22 800:10,12 808:3,23
  815:5 818:12 820:6 822:22
serviced (5) 792:10,14,15,16
  792:17
servicelevel (1) 790:5
services (3) 743:8,10 829:9
servicing (4) 734:9 755:20
  792:2 820:2
set (12) 737:21 739:19 742:2
  764:4 796:16 801:24
  802:17 808:13 818:6 830:4
  833:15 838:9
setting (2) 726:10 807:4
seven (2) 776:17 777:3
sf (1) 792:16
shared (1) 731:24
sheet (2) 775:7 776:24
shift (2) 757:17 798:3
shifted (1) 823:16
shop (9) 719:13 756:13 758:1
   771:23 790:15,16 791:3
  796:13.14
short (3) 723:2 758:4 832:6
shorthand (1) 838:3
shouldnt (3) 735:8 822:16
   823:25
```

```
show (3) 773:4 784:8 820:12
showed (4) 800:1 810:12
  817:10 819:24
showing (2) 781:6 799:23
shown (2) 747:21 817:13
shows (8) 747:24 753:17
  763:25 771:5 773:3 779:1
  831:4.5
shuttling (2) 757:15,19
shy (1) 779:12
side (5) 721:11 778:21 829:21
  831:11,12
sidewalk (1) 733:20
significant (5) 729:17 741:21
  776:24 790:13 795:17
significantly (1) 728:22
signs (1) 796:3
similar (6) 762:14 795:19
  796:14 797:12,13 808:5
simple (4) 744:8,9,12 821:16
simplicity (1) 742:18
simply (1) 809:2
single (3) 775:7 788:10
  818:25
sir (1) 832:1
site (5) 750:12 752:16 753:1
  776:15 777:4
situation (5) 735:13 811:8
  823:2 830:13,13
situations (3) 735:12 791:17
  799:4
six (2) 809:14 832:16
sixth (1) 721:7
size (1) 759:5
slack (2) 741:7,9
slight (2) 725:24 784:13
slightly (8) 747:17 753:22
  778:17 784:23 785:25
  817:14,21,22
slots (1) 793:4
slowfill (1) 772:16
small (4) 732:7 733:10 745:7
  752:18
smaller (1) 792:23
smalltimeofuse (1) 750:14
social (1) 815:9
solely (1) 825:7
solemnly (2) 821:3 828:14
solidwaste (1) 835:21
somebody (3) 734:9 823:25
  834:3
somewhat (4) 758:19 792:6
  833:3 836:3
soon (3) 757:25 805:8 827:5
sorry (2) 804:19 816:3
sort (11) 729:13 738:12,23
  743:24 744:2 756:20
  783:17 795:25 796:10
  808:5 810:21
sorts (1) 834:19
sounding (1) 762:16
source (2) 747:7 811:15
sources (1) 761:3
space (2) 791:14,16
spare (2) 791:2,3
spares (3) 790:19,21,24
sparks (1) 762:12
speak (13) 721:19,23,25
  744:20 755:12 782:15
```

```
783:25 788:24 820:12,25
                                stenographic (1) 716:24
  832:1,3,9
                                stenotype (1) 838:6
speaker (6) 721:16 820:22
                                step (3) 812:23 828:3 836:15
  825:3 828:7 831:24 835:3
                                stepped (1) 815:7
speaks (1) 721:23
                                stepping (1) 757:1
special (3) 733:17 734:7
                                stick (1) 725:8
                                stone (1) 811:23
                                stop (8) 733:21 736:21 737:1
specific (10) 727:6 735:17
   774:5 794:23 796:1 804:24
                                   737:2 747:9 748:20 821:9
  810:8 813:23 825:9 829:10
                                   827:14
specifically (5) 762:9 783:13
                                stopped (1) 821:8
  802:15 825:8 826:15
                                stops (3) 725:18 736:19
specifications (5) 719:8 749:4
  750:1.1.9
                                storage (1) 772:21
specificity (1) 774:3
                                stories (1) 831:1
spend (3) 744:19 772:1 791:2
                                storing (1) 789:12
spoke (1) 781:5
                                stream (3) 725:5 738:21
spread (2) 809:12,16
                                   834:14
spreadsheet (2) 751:4,8
                                streams (1) 800:12
st (2) 733:12 831:7
                                street (11) 717:9 735:19
                                   736:2,10 737:14 777:5,13
stable (1) 740:1
stadium (1) 732:3
                                   780:12 785:2,20 823:4
staff (64) 722:3,4 723:20
                                streets (2) 736:12 738:5
   733:1 737:11 739:7,9
                                strength (1) 824:9
                                stringent (2) 730:20 731:7
   746:15,18,24,24 747:8,16
  747:25 748:8 752:19 753:4
                                strobes (1) 762:8
  753:8,9 754:9 755:5,11,14
                                strongly (2) 823:19 832:14
   755:22,24 756:1 758:4
                                structure (2) 748:4 814:12
   759:8 767:25 769:14,16
                                stuck (1) 824:2
  771:18,23 773:14 774:8,12
                                study (1) 808:17
                                subject (9) 723:1 730:15
   775:17,19,24 776:19 780:1
   780:5,18 781:5,15 782:1
                                   731:11 777:21 794:6 801:4
  783:15,25 784:1 799:10,20
                                   801:15 806:22 807:1
  810:5 812:2 814:18 824:20
                                subjective (1) 822:17
  824:21 829:25 832:6,17,17
                                subjects (2) 722:19,23
                                submission (1) 837:8
  835:15,19 836:5,18
staffing (1) 757:7
                                submit (2) 746:9 837:3
staffs (4) 723:15 748:11 757:4
                                submits (1) 833:6
                                submitted (3) 731:16 745:4
stakeholder (1) 815:10
                                   747:21
                                submitting (1) 821:13
stand (1) 816:9
standard (8) 725:10,13
                                substantial (1) 734:16
   726:19 727:10,19 728:11
                                substantive (4) 807:23,25
  740:16 742:10
                                   812:9,10
standards (14) 725:23 726:17
                                subtract (1) 777:5
  728:18 735:3 737:10
                                succeed (1) 826:10
   739:11,20,22 741:24
                                success (1) 815:18
                                sufficient (4) 728:21 730:12
  742:22,22 743:24 791:9
                                   804:25 805:6
                                suggest (3) 785:24 806:15
standpoint (3) 728:8 769:21
                                   811:14
start (6) 722:9 726:20 739:18
                                suggested (7) 724:3 754:10
                                   794:14 795:12 797:24
  746:9 754:18 757:9
started (5) 737:16 738:8
                                   814:5 834:9
  751:5 825:11,11
                                suggesting (3) 819:18,22,23
starting (3) 746:19 747:2
                                suggestion (1) 830:16
                                suggestions (1) 824:21
state (2) 820:19 828:10
                                sum (1) 812:8
stated (1) 821:22
                                summarize (2) 767:23 797:24
                                summary (10) 719:16 756:7
statement (1) 763:25
station (5) 748:15 749:21
                                   756:20,21 759:25 760:19
  752:13,18 753:9
                                   760:20,22 761:11,18
stations (1) 761:25
                                sunset (26) 719:13 756:4,13
statistics (1) 737:20
                                   756:23 757:3,12,15 758:1
stay (4) 736:15 773:16 790:15
                                   759:11 765:8,13,24 766:1,4
                                   771:18 788:20 789:9,11
stays (1) 736:16
                                   792:5,18 793:13 794:16,23
stealing (3) 823:21 824:7
                                   795:3,9,9
                                supervisor (2) 823:22,25
```

```
supervisors (2) 815:14 823:6
supplemental (1) 823:6
supplier (1) 761:7
suppliers (1) 748:17
support (3) 743:13 818:12
  830:22
supporting (1) 836:17
surcharge (3) 747:24 748:5
  829:25
sure (18) 730:5 732:15 734:1
   734:5 735:20,24 736:6,16
   740:3 742:19 744:4 791:8
  813:4 822:9,13 824:23
  826:22 827:3
surplus (1) 753:1
swear (4) 820:18 821:3 828:9
  828:14
sweep (2) 735:18 736:19
sweeps (2) 735:25 737:24
switching (1) 795:12
swoop (1) 825:24
sworn (5) 724:8 744:24
   770:25 799:13 820:16
sympathetic (1) 823:1
system (7) 742:20 753:12
  757:12 761:25 762:8
   771:13 772:6
systems (4) 742:14 762:14
   772:15,17
              \mathbf{T}
table (5) 721:11,17 750:19
  751:14.15
tag (1) 775:7
tailend (1) 777:4
take (32) 721:4,15,24 723:17
   726:21,22 732:12 735:14
   754:10 757:20 763:3,20
   766:25 767:2 768:4 770:11
   770:20 776:5 781:1,14,21
   782:8 783:8,18 784:14
   785:20 791:7 812:22 816:9
   826:12 829:12 830:19
taken (6) 724:1 765:3 770:22
   782:14 836:12 838:6
takes (4) 751:11 765:14
  768:21 780:7
talk (8) 734:14 739:7 740:24
  807:11.23 832:19.22.24
talked (7) 728:9 774:8 781:16
   781:25 808:9 812:19
  822:16
talking (4) 749:2 768:16
  780:15 804:12
talks (2) 739:9 779:24
tang (1) 824:1
tangs (1) 823:22
tank (1) 772:20
tasks (1) 796:8
tax (35) 723:2 767:20 768:1
  768:10,15,16,25 769:5,7.8
   769:16,16,17,20,21,21
   770:10,12 787:14,22
  800:22 802:25 803:25
   804:1,12 805:4,15,21
```

806:11,19,22 807:1,3,4

830:12

taxes (1) 770:3

team (1) 772:9

```
teams (1) 835:24
technical (2) 762:16,20
technology (1) 736:22
tell (3) 730:24 780:16 800:3
telling (1) 761:19
ten (5) 822:6,7 826:17,19,25
tenderloin (1) 732:4
tenpage (1) 828:19
term (1) 753:23
terms (6) 724:12 726:9
  743:20,21 811:6 822:10
test (1) 724:20
testified (9) 724:8 744:24
  770:25 782:14 786:14
  799:13 801:16 817:1 819:2
testify (3) 722:21,22 724:3
testimony (9) 718:2 721:25
  722:10 723:6 786:11 821:3
  828:14 836:9.18
thank (55) 722:15 723:4,9
  742:24 743:2 744:6,12
  770:18,19 775:1 779:15
  787:8,9 788:13 799:11
  800:16,19 805:22 806:3
  807:8 812:1,13 814:17,18
  814:20.21.22 819:9 820:7.9
  820:21 821:6,10,11 824:19
  824:20,22 825:1,2,6,23
  828:5,6,17 831:21,23 835:1
  835:2,11,15,23 836:1,8
  837:10,12
thanks (4) 755:17 792:21
  799:8 800:25
thats (70) 723:1 726:10 728:4
  728:10,20 730:5 731:11,22
  732:6,9 740:9 742:8 743:7
  743:9,19 748:10 749:9
  750:19 754:19,22 756:8
  759:20,22 762:6 768:20
  769:12 772:2 775:13
  778:11,22 779:3 781:2
  782:6,25 784:11,16,17,18
  784:19 787:3,4 790:16
  794:5 797:10 799:7,21
  801:3,4,10 802:9,21 803:18
  804:5,7,9 806:24 809:8
  810:2 811:2 816:25 817:4
  823:7,15 824:4 826:5,25
  827:11,18 829:2 830:17
theft (5) 825:9 826:15 827:5
  827:14 828:2
theory (1) 802:14
theres (38) 732:3,4,5 740:4
  740:14 741:3 742:18 744:1
  744:18 761:24 762:5,7
  771:23 772:21 773:16
  783:3,19 795:2 798:15,24
  801:14 803:4 807:2 808:5,7
  809:6,14 810:21 811:7,11
  811:22 813:13 822:5 823:2
  826:16 827:13,19 831:11
therm (1) 748:1
therms (1) 755:14
thevll (1) 830:19
theyre (15) 724:17 732:19,19
  773:12 777:21,22 781:5
  790:16 796:14,25 798:23
  811:9 814:10 824:25
  827:17
```

```
thevve (1) 827:6
thing (7) 731:22 734:5 737:7
  782:11 786:9 822:18 834:4
things (16) 731:19 733:9
  736:4 758:11 762:15 765:4
  772:1 773:5,6 780:22
  787:18 798:17 814:10
  818:18 823:7 833:17
think (91) 724:22 730:22,24
  732:1,3,16,20 733:12 734:6
  735:3,12 737:5,9,22 738:1
  738:4,6,11,16 739:16 741:3
  741:15 742:4,8,9,17 743:4
  743:11,12 744:13 746:10
  755:11 756:8 759:9 763:1
  764:25 766:22,24 767:1
  773:15 775:1 778:11
  780:14 782:2,9,18 783:19
  784:16 786:10,10,11,13
  787:10 797:24 798:5,10
  799:4,9 801:14 802:14
  805:19,22,24 806:4 807:15
  810:21 811:3,18,19,21,22
  811:23,23 813:4,18 814:9
  814:15,17,25 815:16 817:1
  821:24 822:1 823:9 824:9
  828:24 829:11 830:1
  833:14,25 834:23
thinking (1) 813:22
third (10) 728:25 729:2,13
  732:5 740:24 774:19
  809:16 821:15 822:9 830:9
thirdparty (2) 761:2,13
thirty (1) 827:22
thomas (2) 717:12,12
thought (4) 725:3 783:7
  826:6 832:8
thousand (1) 817:12
three (18) 717:19 728:6 732:1
  732:19,20,20 743:22 744:3
  745:25 746:4 758:18
  759:25 790:5 800:12
  809:15,15 812:15 829:20
threshold (5) 731:2,7 786:18
  819:4 821:24
thresholds (2) 729:24,25
throwing (1) 828:4
thrown (2) 826:16 830:14
tied (2) 810:9,11
till (4) 726:23 743:18 812:21
  830:6
time (67) 725:1 726:6 727:11
  729:4,5,17 733:3 734:8
  735:1,9,11,23 737:1,19,22
  738:12 739:4 740:4 741:18
  741:21,21 742:1 745:4
  747:19 752:11 758:5
  764:12.13 767:1 771:25
  772:1,5,11,12 774:15 776:2
  783:2,3 787:23 788:2
  790:14 791:2,8 792:7 798:6
  799:6 804:13,23 805:3,11
  806:7 818:4,18 820:13
  822:2 823:8 826:2,3,4,5,6
  826:11 827:21 830:20
  831:22,25 835:4
timely (1) 741:12
timeofday (2) 797:11,20
times (7) 732:2 750:9,17
```

```
766:15 772:4 774:7 783:5
                                   733:11,21,25 734:1 735:15
timing (1) 805:2
                                   736:22 744:15 753:21
tip (5) 744:20 745:6,21,23
                                   757:21,22,23 758:22 790:9
  764:3
                                   791:5,6,7 793:19 795:18,19
tipping (4) 745:11 746:3,4,5
                                   796:4 798:14
tires (1) 796:7
                                trucks (79) 725:19 726:2,8
titled (3) 749:4 759:25 760:6
                                   728:21 729:9,19,23 730:11
today (13) 721:10,11,19
                                   730:17 731:24,25 732:2,7,8
                                   732:9,17,18,20 733:6 734:6
   722:19 733:6 740:7,10
  743:14 801:19 821:4,12
                                   734:12,17,23,24,25,25
  822:19 825:14
                                   735:18 736:23,25 737:3
todays (1) 721:14
                                   741:5,8 742:2,6 752:12,12
tolerate (1) 725:23
                                   753:5,10,16 756:4 757:15
                                   757:25 765:6 771:14.16
ton (2) 745:14,15
tonnage (21) 722:12,17 728:2
                                   772:3,6,25 773:1 786:16,19
   728:3,23 729:4,8,15 732:17
                                   789:15,22 790:1,12,19,21
                                   790:22,25 791:2,16,19,22
  733:3 734:21 735:16,22
   736:9 737:13,24 799:18
                                   792:3,4,10,16,17 793:1,18
  800:4,9,13 817:10
                                   795:14.21 796:7.7 797:3
tonnages (6) 727:18 729:21
                                   798:19 817:17,19 818:1
                                true (4) 762:25 788:20 790:23
   730:9 734:15 741:20
  800:14
                                   838:8
tons (22) 722:18 725:18 726:1
                                truth (2) 821:4 828:15
  726:4,5 728:3,4 731:3
                                try (7) 730:6 795:7,25 807:22
   734:17 735:7,10,14 737:6
                                   824:24 828:22 834:23
                                trying (6) 755:6 766:5 778:13
  740:18 799:24 800:1,15
  817:12,14,15,16,17
                                   782:10 803:18 820:1
top (5) 747:3,6 776:16 785:11
                                tuesday (2) 726:12 727:9
  822:14
                                tunnel (4) 752:13 768:12,13
topic (5) 744:18 751:23
                                   770:8
                                turn (4) 744:17 746:6 780:1
   756:12 787:14 836:3
topics (1) 746:6
                                  815:19
                                turns (1) 750:22
total (13) 746:23 751:11,19
  758:23 765:11 775:20,25
                                twelve (1) 728:12
  776:20,25 800:11 811:5
                                twelvehour (1) 725:7
  813:11 827:12
                                twice (1) 743:25
tow (1) 757:23
                                two (31) 722:23 729:7 740:19
towers (1) 784:1
                                   742:1 744:19 747:6 749:3
                                   751:12 757:18 758:6,7
town (1) 824:9
track (2) 729:14 736:22
                                   759:11 760:24 761:2
tracked (1) 834:19
                                   764:19 767:7 777:11
tracking (5) 736:19,21 832:4
                                   794:23,25 808:22 810:8,21
  834:5.8
                                   817:16,18,22,25,25 828:20
tradeoff (1) 743:8
                                   829:19 831:8,14
traditional (1) 815:8
                                twovear (1) 831:17
transcribed (1) 838:7
                                tying (1) 810:7
                                type (5) 740:2 790:2,3 802:10
transcribing (1) 721:22
transcript (2) 830:19 838:8
                                   808:4
transcripts (1) 813:18
transfer (4) 735:23 743:10
                                   795:10
  829:6,14
                                typewriting (1) 838:7
transferring (2) 822:21 829:1
                                typically (1) 795:10
translate (1) 750:6
transparency (1) 744:8
transparent (2) 742:12
                                uhhuh (2) 784:10 785:17
  814:13
```

```
types (4) 759:16 791:15 792:1
ultimately (2) 739:21 796:4
uncommon (1) 811:18
underlying (3) 811:14 814:6
  835:17
understand (29) 725:4 731:6
  733.1 735.3 736.24 738.17
  738:23,25 739:18 743:10
  743:13 744:12 755:5 765:3
  787:12.25 805:19 806:1.2
  806:10 808:10,12 810:22
  814:10 821:25 822:13
  825:21 826:1 834:11
understanding (11) 753:22
  763:23 788:18 789:7
```

```
791:21 792:25 799:2
   802:12 819:23 822:20
   835:20
understood (2) 735:17 816:18
undue (1) 735:22
unfortunately (2) 828:20
   829:14
union (4) 795:10 799:3
  808:22 810:15
unit (15) 776:7 778:3,11
   782:13,13,14,23 783:1
   784:2,4,4 785:16 786:6
   799:22 800:10
units (46) 775:20,21,23,23,25
   776:14,20,21 777:1,6 778:3
   778:9,14 779:25 780:5,7,17
   781:2,6,8,10 782:15 783:2
   785:12,13,22 786:13,15,24
   799:22 800:11 816:17.24
   817:2,5,11,13,20 818:10
   819:6,8,21 828:21 831:14
  831:15,16
unknowns (1) 723:22
unofficially (1) 803:9
unpredictability (1) 801:7
unreasonable (2) 765:1
  822:14
unscheduled (1) 790:12
unusual (1) 788:8
unusually (1) 734:23
update (3) 719:24 727:20
  813:3
updates (1) 780:6
upgrades (2) 744:18 756:6
urge (4) 770:14 824:6,13
  832:14
urges (1) 723:21
urging (2) 824:10 832:13
use (17) 727:19 739:22 740:9
   755:4 772:12,24 778:4,15
   779:6 786:5 790:21 791:3
  810:21 811:14 817:13
  830:2.16
uses (1) 799:3
utilities (1) 768:19
utilize (1) 790:25
valid (1) 809:22
valuable (1) 822:19
value (3) 743:9 778:5 836:7
van (1) 729:7
variation (1) 738:20
varies (1) 772:10
variety (2) 797:12 809:5
various (6) 748:5 754:8
  762:13 808:20 810:7 815:3
vary (1) 758:18
vehicle (13) 719:5,18 758:2,3
  759:19,22 761:5,14 772:24
  790:3,15 792:13 798:6
vehicles (51) 719:13,14,16,21
   726:4 732:7 753:23 755:3
   756:13,22 757:2,8,16 758:1
   758:8,17,24 759:10,15
   760:2.10 761:9.10 763:3.6
```

763:7 765:12,12,16,23,25

766:2,12,13,19 771:12,17

789:12 791:2 792:1,11,14

transportation (4) 739:9

trash (3) 777:16,23 778:11

trend (6) 729:17 738:9,12,23

747:5,20,23

treated (1) 782:4

738:25 741:25

tricklefill (1) 772:16

tried (2) 815:9 829:4

triggers (1) 744:2

trouble (1) 802:11

troubled (1) 832:9

truck (23) 722:23 729:7

tree (1) 791:1

```
792:15 793:3,3,10,12,14
  796:24 798:2 818:17
vendor (6) 748:15 749:15,17
  749:18 750:24 754:20
vent (1) 791:20
version (2) 722:13 753:17
versus (2) 753:23 834:13
veterans (1) 788:11
view (1) 759:9
views (2) 767:23 813:9
visceral (1) 813:24
visited (1) 780:20
volume (10) 716:10 723:23
   725:14,14 727:18 730:10
  757:2 784:5 800:10,11
volumes (4) 730:25 731:2
  740:18 741:1
voters (1) 769:6
```

W

wage (1) 797:3 waiting (3) 743:18 744:3 812:20 want (43) 721:22 725:12

726:6 729:5,18 733:8,9 734:20 738:21 741:12 742:19 767:8 783:24 784:20 785:19 786:10 788:1 807:11 812:7 813:23 814:19 816:4 819:10,14 821:11 822:11,13,18 823:9 823:11.20 824:20.22.23 825:6,8 826:10,10 827:10 835:11 836:1.8 837:10

wanted (14) 729:12 730:20 731:1 735:20 736:5 740:12 764:10 765:4 767:22 781:16 786:9 807:16,23 810:2

warrant (2) 769:23 804:25 wash (2) 778:1,2

wasnt (4) 730:8 774:17 805:10 819:22

waste (11) 725:5 738:21 741:14 770:1 814:11,15 822:22 825:25 828:1 832:13 833:1

way (15) 723:13 736:23 741:2 742:21 758:11 788:9 808:13 813:23 814:8,9 818:16,20 826:17 827:19 831:2

ways (2) 809:6 834:14 wearing (1) 832:2 website (7) 813:9,14 834:2 836:22.22.23 837:9

wed (8) 722:19 755:4 763:20 766:24 767:13,20 785:20 797:14

wednesday (3) 716:9 721:1 721:10

week (1) 727:24 weekday (3) 725:6 727:9,16 weekdays (3) 725:9 726:10

weekend (2) 725:7 727:17 weekends (2) 725:10 728:12 weekly (1) 727:20 welcome (1) 799:16

went (4) 733:25 737:3 780:19 802:15

west (1) 833:17 weve (16) 724:19 742:13 754:25 762:2 766:5 808:9 810:5,13,13 815:2 818:3,5 821:24 822:3 824:16 827:23

whats (7) 728:25 759:7 765:23,24 778:18 808:6 827:20

whereof (1) 838:9 white (26) 717:18 718:8,9,13 744:16 745:2 746:14 747:14 748:20 749:1,13 752:3 755:19 756:11,19 759:4,24 760:5,17 763:13 773:18,22 774:25 794:8,11 796:20

whos (1) 766:9 wide (1) 811:7 willing (1) 725:11 windfall (1) 823:14

window (6) 725:6,7 726:12 738:7 766:19 771:16

wine (1) 719:6 wing (1) 833:17 wishing (2) 721:18 820:11 witness (5) 718:3 722:5 767:22 816:6 838:9

wonderful (1) 828:1 wondering (1) 771:6 wont (4) 730:23 736:24 738:18 814:4

woods (1) 831:8 words (5) 745:8 768:3 780:24 784:18 794:20

work (13) 731:23 733:1 735:18 737:11 774:9,15 795:3 796:3,5 823:12 824:12 830:5 835:24

worked (4) 733:1 815:12 824:21.24

workers (4) 794:15 795:2,5,5 workforce (2) 795:8,9 working (3) 742:13 796:1,7 works (8) 716:1 717:2 721:6 822:2 824:12 829:17 830:3 835:23

world (2) 778:18 834:4 worth (3) 740:21,22 750:4 wouldnt (10) 725:12 735:8,22 737:11 758:10 782:9 801:13 802:3 804:18 823:5 written (5) 761:18 837:1,4,5

wrong (2) 733:24 786:12

wrote (1) 820:23 wuerfel (10) 717:22 718:19 720:2 813:24 821:1,5,7,10 821:11 828:25

x (1) 823:4

yamamotos (1) 722:10 yard (2) 757:9,14 yards (1) 757:16

yeah (4) 749:24 767:18 793:21 817:9

year (41) 738:15,16,20 739:1 743:12 744:1 745:13,13,14 745:15,24 746:5 751:17 758:20,21,22,24 764:1,4,5 764:20,21 765:7,11 769:8 769:11 776:21 781:4 782:4 782:5 785:4 803:1.2 806:11 806:23 808:6 809:13,17,25 813:1 816:21

years (23) 733:12 742:5 743:23 744:4 745:12,25 746:4 758:6,18 759:6 764:10,13,19 765:2 795:21 809:23 811:20 825:11 827:6 830:7 831:13,15 832:13

youd (7) 759:20 763:10 773:6 798:5 817:19 820:17 829:11

youll (3) 721:4 827:14 828:9 youre (23) 727:10 730:6 732:14 735:25 737:15 738:14,17 743:25 761:21 764:15 772:25 774:21 777:14 786:24 790:21 791:10 793:2,25 804:5 805:14 810:25 819:18

youve (11) 728:9 752:22 773:5 776:2 777:9 780:10 780:10 802:4 805:18 817:25 830:7

zero (7) 814:11,15 825:25 828:1,2 832:12 833:1

00 (12) 726:11,21,23,24 727:8 764:21 770:21 774:7,7,16 774:16 837:2

000 (6) 728:3 751:16 754:10 819:1,1 831:18

002 (2) 776:21 780:8 **02** (**1**) 721:1

04 (1) 770:23 044 (1) 813:11

06 (1) 764:5 079 (1) 785:21

097 (1) 816:17

1 (18) 716:6 717:5,13 721:1 755:16 769:10 775:23 779:14 785:21 801:22 802:22 804:21 813:9 819:6 819:6 829:24 830:3 837:2 10 (2) 728:4 790:20 **107** (1) 784:15 **11 (4)** 717:9 726:23 764:1,4 113 (1) 784:15 114 (1) 751:17

1190 (3) 781:1,3 830:25 11month (2) 805:20,21 **12 (5)** 731:3 765:10 774:7,16 816:18

12month (1) 739:24 **13 (7)** 719:6 746:16 755:21 764:20 766:11,19 775:15 132 (1) 751:16 **14 (7)** 764:21 765:7 776:21

785:19,22 786:1,6 141 (1) 831:6

148 (1) 722:18

14andchange (1) 786:1 14th (1) 837:2

15 (**11**) 750:16 767:2 772:10 786:1,6 797:18 810:18 817:15,16 830:1,6

150 (3) 785:2,20 788:7

15th (1) 804:2 **16 (1)** 778:10

1645 (1) 781:21 **169** (**1**) 779:14

16gallon (1) 778:17

17th (1) 838:10 **18 (1)** 751:20

190 (**1**) 779:13 1996 (1) 829:11

1998 (1) 777:13

2 (16) 745:25 748:1 751:20 764:16,21,21,21 769:10 770:22 775:20 776:20 780:6 801:22 802:22 804:21 827:1

20 (8) 726:4 728:16 729:4,8 741:20 748:18 749:19 785:22

200 (2) 813:9 819:6 **2006 (4)** 745:10 764:6,7,9

2007 (2) 745:13,14 2010 (1) 830:3

2011 (6) 745:14,15,16 746:5 803:4,23

2012 (5) 719:23 761:14 769:11 804:2 831:6 2013 (11) 716:3,9 720:1 721:1

752:17 781:23 804:3 825:19 831:6 835:8 838:10

2014 (3) 745:24 765:11 831:6 2015 (1) 780:22

20minute (2) 767:13 770:20 21 (3) 719:6 825:20,24 218 (3) 829:3,10 836:25

21st (1) 827:23 22 (4) 716:9 721:1 750:19

775:15 **225 (1)** 819:1

2299 (2) 777:4 780:11 **22nd** (1) 721:10

234 (1) 717:13 **244 (1)** 831:6

248 (2) 754:6,9 24th (1) 813:17

25 (3) 750:22,25 825:16 **250 (1)** 819:1

27 (5) 765:9 766:2 784:9,23 785:25 **270 (1)** 779:14

284 (1) 754:10 29 (2) 740:21 829:23

294 (**1**) 831:15

3 (10) 728:3 755:16 770:21,23 777:2 810:18 817:5,13,14 830.3 **30 (21)** 726:15,15,20 727:4

738:6 748:18 749:19 757:20 782:13 783:1 784:14,17,22 785:25 786:2 786:5 788:8 790:7 825:11 825:16 827:6

30day (1) 790:6

30gallon (2) 778:16 782:14 30gallons (1) 778:25 **30th** (1) 804:3

31 (**4**) 740:21 803:23 831:12 831:16

311 (9) 725:3 727:4,21 731:18 731:21 732:18 736:11,15 736:20

32 (3) 784:11,14,19

329 (2) 785:12,15

32gallon (1) 784:8 331 (1) 737:25

348 (1) 717:5 **35 (5)** 720:2 750:19 770:22

772:11 821:21 **350 (1)** 816:17 **37 (1)** 745:14

39 (2) 765:11,16 3percent (1) 829:24

4 (15) 726:11,15,21,24 727:4 727:8 748:1 750:16.22 776:21 780:8 785:8,15 797:18 837:14

400 (3) 751:17 831:10 837:2

405 (1) 775:21 **41 (1)** 837:14

415 (3) 716:25 717:6,20

416 (**1**) 716:6

435 (2) 785:2,12 **440** (1) 727:23

45 (8) 745:15,16,21,24 746:4 757:21 764:1 813:11 4698867 (1) 716:25

4713143 (1) 717:20

48 (**3**) 745:23 746:3 764:15 4cent (1) 750:25

5 (8) 719:6 774:7,16 775:15 809:7 811:18 825:20,24 **500 (2)** 817:14 819:6 **52 (1)** 778:20 **542 (1)** 775:23 **5546920 (1)** 717:6

584 (1) 813:18 588 (1) 813:18

597 (2) 777:2 817:5

6

6 (5) 716:10 809:7 810:18 811:18 827:1 **60 (5)** 729:4 738:6 765:11 790:7 813:10

600 (1) 817:13

60day (2) 741:1 790:6

				Page 13
	1	<u> </u>		
63 (3) 727:25 728:1 745:25	9			
630 (1) 722:18				
633 (1) 779:13	90 (4) 719:11 752:2 756:13			
63percentayear (1) 764:16	790:7			
64 (5) 745:23 746:3 764:15	900 (5) 775:25 816:24 817:1			
	817:11 819:2			
813:4,4	90day (3) 738:7 790:6,9			
66 (2) 808:16 811:14	91 (7) 719:12 756:15,18,19			
	784:9,23 785:25			
7	910 (1) 784:15			
7 (2) 726:15,20	92 (4) 719:14 758:13,14 759:3			
700 (1) 831:18	93 (4) 719:16 760:4,5,16			
716837 (1) 716:11	94 (5) 719:18 760:6,7,16			
722 (1) 719:3	784:15			
723 (1) 718:4	94102 (2) 716:7 717:10			
730 (1) 718:5	941024645 (1) 717:6			
744 (1) 718:9	941024682 (1) 717:14			
745 (1) 719:4	` /			
746 (1) 719:5	941114024 (1) 717:20 95 (2) 719:20 760:13 16			
747 (1) 719:6	95 (3) 719:20 760:13,16			
748 (3) 719:8,9,10	96 (12) 719:23 775:6,11			
75 (2) 731:3 785:19	776:12,14 778:21 779:5,20			
	816:5,14 834:16,17			
750 (1) 719:11	97 (3) 719:24 815:21,25			
753 (1) 718:10	98 (3) 720:1 815:22,25			
754 (1) 718:9	99 (2) 720:2 821:20			
755 (1) 719:12				
757 (1) 719:14				
759 (3) 719:16,18,20				
76 (1) 785:22				
762 (1) 718:10				
77 (2) 722:11,13				
770 (1) 718:12				
772 (1) 718:13				
774 (2) 718:14 719:23				
778 (1) 718:15				
78 (1) 745:4				
787 (1) 718:12				
788 (1) 718:6				
79 (12) 763:25 775:17,21				
777:9 778:8 779:13,21,24				
780:4 785:1 800:1 816:23				
791 (1) 718:7				
793 (2) 718:8,13				
798 (1) 718:16				
799 (1) 718:17				
7th (1) 717:19				
8				
8 (4) 746:16 755:21 803:23				
817:17				
81 (2) 817:9 831:14				
814 (2) 719:24 720:1				
815 (1) 718:18				
818 (1) 718:17				
820 (2) 718:19 720:2				
83 (6) 719:3 723:8,9,12				
734:14 740:13				
84 (6) 719:4 746:10,13 747:2				
751:5 771:5				
847 (3) 775:20 776:20 780:6				
85 (3) 719:5 747:13 748:21				
855 (2) 785:8,15				
86 (7) 719:6 748:22,25 749:1				
749:15 754:20 779:1				
860 (1) 781:2				
87 (3) 719:8 749:5,12				
88 (5) 719:9 749:7,12 750:21				
751:2				
89 (4) 719:10 749:9,12 779:1				
	I		I	I