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CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS
DIRECTOR'S HEARING ON PROPOSED REFUSE RATES
2017 REFUSE RATE APPLICATION

CITY HALL
1 DR. CARLTON B. GOODLETT PLACE, ROOM 400
SAN FRANCISCO, CA 94102

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<p>1 sure we cover all of the topics on the agenda. Before 2 we start cross-examination, I believe the Ratepayer 3 Advocate has an item to enter into the record. 4 MR. JONES: Good morning, Director Nuru. 5 Again, Dwayne Jones, Ratepayer Advocate. 6 I'd like to introduce into evidence the 7 PowerPoint presentation that we made at the first 8 ratepayer hearing. And let's see -- that's it. 9 MR. PRADHAN: That would be Exhibit 22 entered 10 into evidence. 11 (Exhibit 22, "RPA Directors Hearing 1 12 Presentation [Ratepayers]" was admitted into 13 evidence.) 14 DIRECTOR NURU: Okay. Thank you. 15 Okay. Also, I believe the Company wishes to 16 offer several corrected versions for the items entered 17 into the record last week. If you could, please 18 identify them and give them to the clerk. 19 MR. PRADHAN: And excuse me. 20 Counsel, as we go through these, just to make 21 the record clear, if you could specify any ways in which 22 the exhibits are different. 23 MS. PEARCE: Absolutely. Thank you. 24 Yes, we have a couple of corrected exhibits. 25 The first one is Exhibit 2. I believe that -- I think Page 133</p>	<p>1 application; so I've made several copies of the disc of 2 the entire rate application. I'd like to offer it as 3 Exhibit 1A. 4 MR. PRADHAN: Admitted. Thank you. 5 (Exhibit 1A, "Recology 2017 Rate Application 6 Binder [Recology]," was admitted into 7 evidence.) 8 MS. DAWSON: I believe those are all the 9 corrected exhibits we have. 10 DIRECTOR NURU: Okay, thank you. 11 Okay. I believe Ms. Dawson has a couple of 12 follow-up questions for the Company. Please proceed. 13 MS. DAWSON: Thank you, Mr. Nuru. 14 Julia Dawson. I'd like to ask Mr. Maurice 15 Quillen to come back up for some follow-up questions. 16 (Mr. Quillen steps up to the witness stand.) 17 MAURICE QUILLEN, 18 having been previously duly sworn, 19 was examined and testified as follows: 20 CROSS-EXAMINATION 21 BY MS. DAWSON: 22 Q. Good morning. Okay, so I'd like to start our 23 morning with some follow-up questions on Recology 24 San Francisco projects and operations. 25 So in your testimony last week, you said that Page 135</p>
<p>1 the 17th or 18th page of the old exhibit included a note 2 that was inadvertently left in there; so that has been 3 removed. This is the Rate -- "2017 Rate Application 4 Technical Workshop Presentation." I will hand that up. 5 And the next exhibit we'd like to correct is 6 Exhibit 9, which I believe page 3 and 4 of the 7 original -- or 2 and 3 of the original letter were 8 inadvertently left off of that exhibit; so now I have a 9 corrected version of Exhibit 9, which is a letter of 10 October 30th, 2015, from San Francisco Public Works to 11 the members of the Rate Board. And there are two 12 attachments, the "Abandoned Materials Collection Program 13 Report" and the "Special Reserve Fund Report." This is 14 corrected Exhibit 9. 15 MR. PRADHAN: Thank you. Corrected Exhibits 2 16 and 9 are entered into evidence. 17 MS. DAWSON: One final clarification we'd like 18 to make on the record, just to be sure that our 19 entire -- that Recology's entire rate application 20 submission is entered into evidence, we would like to 21 offer as Exhibit 1A, a disc which includes the entire 22 scanned copy of the rate application including the 23 narrative summaries, the schedules, summary of 24 assumptions, and all of the supporting documents that 25 were attached as exhibits at the end of the rate Page 134</p>	<p>1 with the installation of new equipment at Recycle 2 Central, Recology can now process up to 45 tons per 3 hour; correct? 4 A. Correct. 5 Q. Okay. So I'm trying to clarify some of the 6 back-and-forth we had last week. So I'm looking for 7 an estimate of the daily processing capacity of Recycle 8 Central. So if Recology were to operate two shifts a 9 day with seven hours of productive time per shift, 10 then daily capacity would be about 630 tons per day? 11 A. Correct. 12 Q. Okay. And if you were to operate three shifts 13 a day with 21 productive hours, so just one more shift 14 hypothetically speaking, the maximum throughput of 15 Recycle Central would be 945 tons per day? 16 A. Right. 17 Q. Okay. Does that seem like those assumptions 18 are reasonable? 19 A. Yes, they are. 20 (The witness stand's microphone is adjusted.) 21 THE WITNESS: Okay. Yes, it seems that those 22 are reasonable assumptions. 23 MS. PEARCE: Okay. So again, we just agreed 24 that -- or you said last week that Recology's currently 25 processing about 450 tons per day. And Recycle Central Page 136</p>

<p>1 now has the capacity to handle somewhere between another 2 200 and 500 tons depending on the number of shifts 3 you're running at that location. 4 A. Correct. 5 Q. Which adds about 30% to 50% capacity to 6 process recyclables. Are there any other constraints 7 that we should consider that would prevent Recology 8 from being able to achieve that kind of throughput at 9 Recycle Central? 10 A. I'm fairly confident that we can operate the 11 facility with two shifts of approximately 14 hours of 12 time. Running the facility for three shifts could be a 13 bit challenging. 14 Right now what we do from the operation 15 standpoint is we generally focus our 3rd shift on 16 maintenance. The equipment is fairly complex and 17 requires quite a bit of care to keep it operating 18 properly. 19 Generally, we have a lot of disc screens, 20 vibrating screens, vacuum systems, mechanical pieces 21 of equipment that need regular maintenance; so I'm 22 very comfortable that we can operate this system for 23 two hours -- excuse me, to two shifts during the week. 24 And then we can sometimes stretch those shifts a few 25 hours into the overtime realm.</p> <p style="text-align: right;">Page 137</p>	<p>1 A. Yeah. I think from the tonnage standpoint is 2 to say it's been relatively flat. But I think what we 3 need to understand is that we're really not processing 4 tonnage insomuch as we're processing volume. 5 When we talk about the Amazon Effect or all 6 the small bits of cardboard, I think it's more of 7 an anecdotal type of a situation where when we first 8 built the facility and you'd step back and look at the 9 pile on the tipping floor, it was this gray pile of 10 newspaper. It had a lot of glass and it had a lot of 11 cans and bottles. 12 Then you fast-forward 10-15 years, that pile 13 literally is beige. It looks like the cover of our rate 14 application. And what's happened during that period of 15 time is there's quite a bit less newspaper in the waste 16 stream than what we were experiencing. 17 The container industry has gone through 18 serious manufacturing changes. Lightweighting models, 19 the transition from glass to plastic and almost all 20 consumer products has become quite prolific. Also, 21 we're seeing the introduction of lighter containers such 22 the aseptic which are displacing heavier glass or 23 plastic containers. So while we may similar tonnage, we 24 have significantly more volume. 25 Q. Okay, thank you. So I'm going to move to a Page 139</p>
<p>1 But to assume a three-shift-per-day operation, 2 I think, would be highly unlikely given the nature of 3 the equipment. 4 Q. Okay. So two shifts, we'd be at 630 tons per 5 day; and you think you could maybe achieve a little more 6 than that, but it would be limited to maybe an hour or 7 two of overtime beyond that point? 8 A. Correct. 9 Q. Okay. All right. So in your earlier 10 testimony, I think maybe you, Mr. Arsenaault and 11 Mr. Negron -- I think it was probability Mr. Arsenaault 12 more correctly, but I suspect you can speak to this. 13 We were talking about the Amazon Effect that's 14 contributing be to changes in the materials that are 15 being received at Recycle Central. 16 But when we looked at the tonnage figures 17 which were included in Exhibit 2 -- or are in Exhibit 2, 18 I believe, part of the technical workshop had a tonnage 19 chart and I reintroduced it later as, I think, Exhibit 20 11. 21 So there's really not -- there's been almost 22 no growth in the total volume of recyclables that have 23 been collected over the last five years. Can you 24 clarify why we're seeing this type of discrepancy in the 25 data on recyclable tonnage?</p> <p style="text-align: right;">Page 138</p>	<p>1 slightly different topic. And actually at this time, 2 I'm going to want to talk a little bit about the changes 3 in labor since the last application and some of the 4 proposed new positions you have for rate year 2018. 5 So generally, according to the application, 6 labor and benefits represent nearly 65% of operating 7 costs to both Recology San Francisco and the companies. 8 Does that sound generally correct? 9 A. Generally, yes. 10 MS. DAWSON: Okay. So at that this time I'd 11 actually like to introduce an exhibit. On head count, 12 our financial consultants at R3 have helped us prepare a 13 summary that's based on Schedule G.1 in Recology 14 San Francisco's section of the application called, 15 essentially, "Historical and Projected Head Count." 16 And I'd like to offer this as the next 17 exhibit. 18 MR. PRADHAN: This document will be admitted 19 as Exhibit 23. 20 (Exhibit 23, "RSF Historical and Projected 21 Head Count [City]," was admitted into 22 evidence.) 23 BY MS. DAWSON: 24 Q. Okay. So this table identifies positions 25 by functional area that were approved in the 2013 Page 140</p>

<p>1 Director's Order, and then it shows -- compiles 2 the total head count from Recology San Francisco's 3 Schedule G.1 for rate years 2014 through 2018. 4 So I'd like to make sure first that I 5 understand how total head count has grown from 421 in 6 rate year 2014 to an estimated 451 in rate year 2017. 7 Most of that growth has occurred in the last year 8 between rate years '16 and '17. 9 So I understand that the number of drivers 10 performing hauling services has increased as a result of 11 the longer driving distance to the new landfill 12 location. Can you explain the operational changes that 13 have been occurring at the transfer station and Recycle 14 Central that have led to the addition of more than 20 15 positions in the last year? 16 A. Well it needs to be, I think, looked at from 17 a business unit standpoint. And obviously, you've 18 discussed the hauling component. As a result of the 19 landfill, the iMRF is slightly down. Recycle Central is 20 slightly up. 21 You know, it's difficult to sort of do this 22 type of analysis without really understanding what's 23 going on in each of the business units. Generally 24 the tonnage at the facilities is what's driving the 25 increase in head count.</p> <p style="text-align: right;">Page 141</p>	<p>1 to guess right now, which I really don't want to do, 2 I would imagine that most of that transfer station 3 personnel would be driven by the tonnage associated with 4 our public reuse and recycling area. 5 We've seen some fairly extraordinary tonnage 6 through that facility over the last few years, and I 7 would suspect that that tonnage is the predominant or 8 primary factor for driving the change in the head count 9 of transportation. 10 Q. Okay. Well if you could -- 11 A. I'll get back to you with that. 12 Q. Thank you. Okay. So let's move on to rate 13 year 2018. You've requested another ten positions based 14 on head count; five more at Recycle Central, two to 15 handle household Hazardous Waste, and three more at the 16 transfer station. Can you please describe for us the 17 need for those positions? 18 A. Yeah. The Recycle Central operation, as part 19 of our new sorting equipment, we will be bringing on new 20 commodities -- textiles, film plastic, also metal and 21 wood. While we generally get all of these materials in 22 the mix right now, it was contemplated that we would 23 be -- as we roll out the new collection program, 24 advertising the acceptance of these products and 25 therefore getting that material across the line.</p> <p style="text-align: right;">Page 143</p>
<p>1 In addition to the tonnage, we also have a 2 workforce that ages. And as the workforce ages, we 3 accrue additional vacation liability and we need to 4 replace positions for vacation liability. So as more 5 senior employees get their next bump in vacation, at the 6 end of the day that can increase the number of employees 7 required to operate the lines. From the administrative 8 standpoint, we're dealing with things slightly 9 differently. We've moved some head count around. 10 Also, when we look at the math issue you're 11 looking at here, this is generally the actual head 12 count, whereas we performed sort of an FTE distribution 13 which really helps us show the allocation of the 14 employees and what they do. So when you look at the 15 general head count like this and you've got the sick and 16 the vacation and all those factors driving this, whereas 17 the FTE numbers are slightly different. 18 Q. Are you able to speak at all to the change in 19 head count at the transfer station in particular? Or it 20 is it just you're trading off? I did note that the iMRF 21 numbers had gone down and I just wondered whether you'd 22 been transferring around. But it would be helpful to 23 understand a little bit more. 24 A. I would have to get back to you on that. 25 I honestly don't have that answer. I mean, if I had</p> <p style="text-align: right;">Page 142</p>	<p>1 We now have a 14-person pre-sort, whereas in 2 the past we had an 8-person pre-sort; so we need more 3 people to staff the pre-sort, to deal with the textiles 4 and the film plastic. We also have an additional person 5 there to operate -- a maintenance operator to work on 6 the equipment. 7 Q. Okay. And can you speak to the proposal 8 around hazardous -- household Hazardous Waste and any 9 other -- I know there's one particular transfer station. 10 I don't know if you know exactly what that is or whether 11 you want to get back to us, which is fine. 12 A. The household Hazardous Waste is going be a 13 replacement for one individual. And also, we're 14 contemplating putting another collection truck out on 15 the route to collect the household Hazardous Waste from 16 the general public through our on-call collection 17 service. 18 The Transfer Station, I do not have. But 19 that's a complicated business unit because the employees 20 work across multiple functions. I don't know what that 21 position would specifically be. 22 Q. Okay. Well, if you could -- 23 A. I'll get back to you. 24 Q. Yeah, do a little more research on Transfer 25 Station, and then I'll have you come back and answer</p> <p style="text-align: right;">Page 144</p>

1 **those questions at a later hearing.**
2 MS. DAWSON: Those are all the questions I
3 have for now.
4 (Mr. Quillen steps down from the
5 witness stand.)
6 DIRECTOR NURU: Okay. Let's have the Company
7 proceed with your presentation of program changes and
8 capital improvements. I believe when we left off, we
9 left with Mr. Negron of Sunset Recology.
10 Mr. Negron, come back up to the stand.
11 (Mr. Negron steps up to the witness stand.)
12 DAN NEGRON,
13 having been previously duly sworn,
14 was examined and testified as follows:
15 DIRECT EXAMINATION
16 BY MS. PEARCE:
17 **Q. Good morning, Mr. Negron.**
18 A. Good morning.
19 **Q. Last week we were leaving off -- when we left**
20 **off, we were discussing the changeover in truck**
21 **configurations, the changeover proposed to use the**
22 **single-chamber trucks to collect blue bin material and**
23 **split-chamber trucks to collect the black and the green**
24 **material. And I was starting to ask you about what sort**
25 **of research did you do to explore how this configuration**
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1 **would actually work out in the field.**
2 A. Yes. So in 2015 we ran about 11 existing
3 black/blue routes and converted them to black/green,
4 specifically in the Sunset District. And we also tested
5 six single-chamber -- converted six single-chamber
6 organic trucks and made them blue recycling routes.
7 And we ran them for a couple of reasons.
8 We needed to understand how many stops the drivers can
9 make in this new configuration.
10 We needed to understand the capacity as far as
11 putting the black and the compost in the split-bodies
12 and then putting the recyclables -- the bulky items that
13 Maurice talked about earlier as far as the
14 composite-type of materials that we're getting today in
15 the single-chamber collection vehicles.
16 We needed to understand the compost as far as
17 the setouts. You know, we're seeing that for every
18 three customers, two of them are setting out; so we
19 understand that dynamic as it mixes -- as it's
20 co-collected with the trash in the split-bodies.
21 And we also wanted to test out a dual-tipper
22 system. So the single-chamber recycling -- the organics
23 routes were originally picking up -- had just one tipper
24 assembly dumping one toter. I wanted the operational
25 guys to experience a dual-tipper system for the single
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1 blue bins to see if we gain some operational
2 efficiencies there.
3 **Q. So by a "dual-tipper," you mean it can tip two**
4 **bins at one time?**
5 A. That's correct.
6 **Q. And what were the key takeaways from this**
7 **pilot program in the Sunset District in 2015?**
8 A. We learned quickly that the driver times were
9 a big factor. We learned that when we put the original
10 six single-stream blue recycling routes, although our
11 computer system RouteSmart has suggested that we go with
12 seven, I wanted to see if the operations can handle six.
13 It moved those guys to significant hours of
14 10 to 12 hours days. And in some cases we couldn't
15 finish the routes, so we had to send auxiliary help to
16 get those customers picked up for the day's service.
17 We also learned -- also kind of learned that I
18 trusted RouteSmart. So I'm an operational guy. I've
19 been doing it all my life and with a no. 2 pencil and
20 crayons. And then when I introduced this technology,
21 we wanted to trust, but verify.
22 And so in this case we trusted the system
23 and it had produced seven routes, which was what the
24 original plan was, although I told the guys to do six.
25 So I learned that we need to build these routes very
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1 precisely and very tight.
2 We also learned routing efficiencies.
3 We learned that when we put the trash with the compost,
4 we learned that the guys -- the split-body guys were
5 running around 41 hours per week. They dropped to
6 between 32 and 34 hours. And so there is some
7 efficiencies there as far as them picking up two out of
8 every three on the green, and allows me to really upload
9 their tonnage capacity -- load capacities for the trucks
10 so they can pick up as much as they can on the trash
11 side.
12 And we also learned that it's really nice for
13 the split-bodies to go to one location. They don't need
14 to go 12 miles to Pier 96 or Recycle Central and turn
15 around and drive to the transfer station. The drivers
16 are real happy to just go one-stop-shop and dump in both
17 chambers.
18 **Q. So let me just make sure I understand that**
19 **last point. When the split-body collection trucks are**
20 **collecting blue and black bin material together, they**
21 **have to make two stops in order to dump those materials?**
22 A. Yes, yes. They have to -- once they're done,
23 they have to travel down Cargo Street to Recycle
24 Central, dump their recyclables, and then double back to
25 the Tunnel and Beatty facility to dispose of the trash.
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1 **Q. And under the new proposed configuration, the**
2 **black and the green will be collected together and they**
3 **will only go to Tunnel Road; is that right?**
4 A. That's correct.
5 **Q. I understand that Recology's proposing adding**
6 **23 new routes. If this configuration -- this new truck**
7 **configuration goes forward. How did you come up with**
8 **number 23 routes?**
9 A. A lot of people ask me that question.
10 I can tell you routing, generally speaking, is a
11 very challenging process for 140,000 customers or
12 accounts, dealing with both apartments, commercial and
13 residential. But the simple answer with is we collected
14 key information. We ran it through our RouteSmart
15 software and came up with some new route proposals.
16 **Q. And I understand this is a complicated**
17 **process. I want to try to walk through it just a little**
18 **bit from a high level. I understand you put together**
19 **something to try explain this process; is that right?**
20 A. Yes.
21 (Exhibit 24 is displayed.)
22 BY MS. PEARCE:
23 **Q. And is this something that you've prepared to**
24 **help explain the route-modeling methodology that you've**
25 **used?**

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1 A. Yes.
2 MS. DAWSON: Counsel, that's hard to see that.
3 Do you also have --
4 MS. PEARCE: I do, yes. And I'll introduce
5 this as an exhibit, Exhibit 24.
6 MR. PRADHAN: 24 is right.
7 MS. PEARCE: All right. I move to admit
8 Exhibit 24.
9 MR. PRADHAN: Admitted.
10 (Exhibit 24, "Route Modeling Methodology
11 [Recology]," was admitted into evidence.)
12 BY MS. PEARCE:
13 **Q. All right. If you could explain a little bit**
14 **about what this slide shows.**
15 A. So the left side shows the information that we
16 gathered prior to inputting it in RouteSmart, and then
17 we run it through the RouteSmart system or the advanced
18 optimization software, and then we end up with the
19 output. Specifically, there are five main components to
20 the input side. We identify the customer types; so "R"
21 represents residential accounts, "A" is apartments, and
22 "C" is commercial. And each one of those have unique
23 collection and time and distance and time motion
24 requirements based on inside service all the way to
25 100 feet or greater with apartments and/or commercial.

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1 We have "Service Time" components where
2 specifically for service time, it's the time that the
3 person -- the driver gets out of the vehicle, services
4 the customer, and returns to the vehicle and proceeds to
5 the next stop.
6 We have "Travel Time," the distance that it
7 takes from leaving the main yard to the first stop, the
8 distance that it travels when the route's complete and
9 it goes to dump, and then the distance back to the
10 facility.
11 The "Facility Time," which is basically
12 when they're at the facility, either at Pier -- excuse
13 me, Recycle Central or Tunnel and Beatty, the process of
14 dumping the vehicle, and then getting it back to the
15 park-and-stall.
16 And then the "Idle Time." Those requirements,
17 two 15-minute breaks, 30-minute lunch, along with the
18 required DOT -- Department of Transportation safety
19 pre-trip inspection and post-trip inspections. So those
20 are specific to times.
21 Then we considered the weights. And we
22 considered -- we took a rolling average of what we're
23 doing today as far as collection tonnage, and we divide
24 that by the number of customers, and then we look at
25 their service type -- 32 gallon, 64, 96 gallon -- and we

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1 come with an average weight so that the system can
2 really calculate for us on the back end what they think
3 the load's going to be at the end of the optimization
4 process.
5 Then we looked at the legal capacity. We need
6 to make sure that our vehicles are in compliance with
7 gross vehicle weight.
8 And then we look at the collection vehicle
9 type. And we have two main types of vehicles. We have
10 those vehicles, basically 9 tons, 28-yard big collection
11 trucks that are out in the avenues; and then we have the
12 little bit smaller vehicles that are for the tight
13 streets in Chinatown and the Mission and those areas.
14 We take all those variables, we run it through
15 RouteSmart. In the back end, the system will tell me,
16 "Okay Dan, this is what you need: You need X amount of
17 blue single-chamber vehicles based on those variables,"
18 the number of black and green split-bodies, and it gives
19 me the estimated service times, travel times, all those
20 components. It tells me the number of vehicles and
21 tells me the number of drivers.
22 **Q. Do you have the capability in RouteSmart to,**
23 **for example, try to see if you can complete the routes**
24 **that you need to complete with only 20 new routes as**
25 **opposed to 23 new routes, for example?**

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1 A. We have the capability of looking at some of
2 the variables and try to run it as lean as possible, and
3 we did the run this exercise. We have been working on
4 this model for six months or greater.
5 And so right now with the 23-route model,
6 we're running at about 8.03 hours is what we're
7 estimating is going to be the future for the drivers
8 from start to finish. But if we were to run a scenario
9 like to your question, a 20, I'd have to go back, run
10 the analysis, and most likely the drivers will be out
11 there much greater than 8 hours.
12 **Q. I'd like now to take a look at what your**
13 **overall collection operations will look like after the**
14 **proposed migration is complete.**
15 **(Exhibit 25 is displayed.)**
16 **BY MS. PEARCE:**
17 **Q. Again, this is a slide. And I believe --**
18 **have you prepared this slide to summarize today's**
19 **collection processes versus the future collection**
20 **operations?**
21 A. Yes.
22 MS. PEARCE: I'd move to admit this as
23 Exhibit 25.
24 MR. PRADHAN: Admitted.
25 (Exhibit 25, "Today vs. Future Routes

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1 [Recology]," was admitted into evidence.)
2 BY MS. PEARCE:
3 **Q. All right. Just very generally first, can you**
4 **tell me what the left side and the right side of this**
5 **slide depicts?**
6 A. The left side represents what we're actually
7 doing today, and these are average -- our rolling
8 averages over the previous 12 months leading up to
9 today. And the right side is with RouteSmart
10 optimization. This will be the future.
11 **Q. So the right side -- well, you've got sort of**
12 **four areas here. The left side on the "Today" shows,**
13 **for example, 119 split-chamber blue/black recycling**
14 **routes. And it looks like under the "Proposed Changes,"**
15 **you are proposing 106 split-chamber black/green routes.**
16 **Why are you able to lower the number of**
17 **split-chamber routes?**
18 A. Well, going back to the pilot, we learned --
19 so we reduced the split-body chambers by 13 collection
20 vehicles. And that's just optimizing as far as two main
21 components. Like I said earlier, when you put the
22 compost together with the trash, you gain efficiencies
23 as far as reaching the capacity of vehicle. And so
24 you're really optimizing that maximum -- let's just say
25 9 tons per load with the more dense material. Also,

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1 the drivers are working more efficiently because there's
2 less setouts as far as the green -- the under ton that I
3 described earlier, 32 hours.
4 So I was able to reduce it to 13 and really
5 repurpose those vehicles for single-stream in support of
6 the future single-chamber recycling.
7 **Q. Right. And I'm -- under the bottom half, it**
8 **looks like you've got 48, currently, single-chamber**
9 **organics routes. In the future, you're proposing 83**
10 **single-chamber recycling routes. So you still need to**
11 **increase the number of recycling routes above the**
12 **current single-chamber routes; is that right?**
13 A. Yes. We still need to increase -- to my
14 point earlier, that the recycling stops are going to
15 grow significantly where basically everyone puts their
16 materials out. But we're also -- because I modeled it
17 as far as the dual-tipper, we're able to service two
18 blues at the same time. I still believe the system is
19 showing me that we need significantly less
20 single-chambers than we do split-bodies for servicing
21 the same accounts.
22 **Q. Right. You've got 106 split-chamber routes**
23 **planned and only 83 for --**
24 A. And only 83. Because there are some
25 efficiencies that we are going build into the

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1 single-chamber collection system.
2 **Q. Let's talk about the tonnage changes that are**
3 **featured on this slide as well. Specifically on the**
4 **"Future Tonnage Projections," I see that for the trash**
5 **and composting tonnage, together you're projecting that**
6 **you'll have an average of 4.47 tons of trash collected.**
7 **Is that per route?**
8 A. That's correct.
9 **Q. And 3.67 of compost per route as well.**
10 **What's the capacity of those vehicles and how does**
11 **that tonnage compare to the capacity?**
12 A. So in general, those -- that truck would
13 probably bring in about 9 tons -- at legal capacity,
14 9-9.5. In this case, our model's saying they're going
15 to come in around 8 tons; so we do have built-in
16 capacity of a ton or slightly greater.
17 But honestly, we're going to be -- when the
18 16 gallon, the focus is on trash. So when we roll the
19 16 gallon out, we estimate that the trash tonnage will
20 be reduced and give us even greater capacity as far as
21 the gross vehicle weight for the vehicle to be able to
22 collect the same materials on the other side of the
23 chamber.
24 **Q. And then let's look at the tonnage that you're**
25 **estimating for the recycling. "Single-chamber vehicles,**

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1 This is -- I have copies as well.
2 MR. PRADHAN: Is there a page you can
3 reference?
4 MS. PEARCE: Yes. It's page 5 of -- I'm
5 sorry, page -- it can be found on page 7 of the Recology
6 Sunset Scavenger/Golden Gate Summary of Assumptions.
7 Looks a little different because when I put it into this
8 PowerPoint, it changed the format. But it's actually
9 the same exact information.
10 I think it would probably be easiest if we
11 actually just enter this as an exhibit. So I move to
12 admit this as Exhibit 27.
13 MR. PRADHAN: Thank you.
14 It's admitted as Exhibit 27.
15 (Exhibit 27, "Abandoned Materials Collection
16 [Recology]," was admitted into evidence.)
17 BY MS. PEARCE:
18 **Q. All right. I believe this chart shows or**
19 **summarizes some of the information about the Abandoned**
20 **Materials Collection Program from rate year 2014 to**
21 **rate year 2017. Could you just highlight for us what**
22 **you were talking about the response times and how that**
23 **has gone over the years.**
24 A. So we're required on Monday through Friday
25 business hours to be collecting materials once it hits

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1 our data system within four hours. And then on
2 weekends, we're required to pick it up within eight
3 hours and we have crews working seven days per week.
4 **Q. And how has compliance been since 2013 in**
5 **complying with that requirement?**
6 A. Our compliance has been 90% or better, which
7 is what's required based on the Director's Order. The
8 response times on the exhibit, you may see response time
9 averages. It starts in rate year 2014 of 4.54, then
10 4.20. That data is extrapolated from SF311's data, but
11 those are based on a 24-hour clock. I just want to be
12 clear on that. So really, the clock doesn't start for
13 us until the businesses day at 8:00.
14 If you were to look at it from a business
15 perspective, the compliance is above 90%, which is
16 basically two hours or better.
17 **Q. What are some of the challenges that Recology**
18 **has faced in running the Abandoned Materials Collection**
19 **Program?**
20 A. It's been a very popular program with our
21 residents and folks in San Francisco; so it's a very
22 transparent program as far as utilizing the 311 phone
23 app, which is an excellent tool. And so customers --
24 excuse me, folks can easily use the system and
25 communicate directly with our drivers within minutes,

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1 which we respond. So we're very responsive to the
2 requests. It's just a challenge, because it's really
3 competing against another program of ours, a very
4 successful program. It's called the "Bulky Item
5 Recycling," where folks will make appointments for the
6 same request.
7 **Q. Before we talk about the Bulky Item Recycling**
8 **Program, I wanted to have you summarize, if you could,**
9 **what changes Recology's proposing for the Abandoned**
10 **Materials Collection Program in this rate application.**
11 A. In order to continue meeting the City's needs
12 as far as the service level agreements for the response
13 time, in order to continue partnering with Public Works
14 on supporting them with litter patrol, field support --
15 in order to continue supporting their Radio Room
16 requests, which is all the information that their
17 supervisors and superintendents are receiving from the
18 field, we're going to need an additional truck and
19 driver -- excuse me, two trucks and two drivers.
20 And understand it's a crew, so it's one
21 electronics/mattress/appliance vehicle and one
22 bulky item rear loader to support the needs for today
23 and the potential growth it's experiencing.
24 **Q. You mentioned in response to my last question**
25 **the Bulky Items Recycling Program. Could you tell me a**

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1 **little bit about that program?**
2 A. The bulky item recycling, it's available to
3 all residential and apartment customers throughout
4 San Francisco. They can call us, schedule an
5 appointment for any bulky items 10 items or less, and
6 they're allowed up to two appointments per year.
7 It's an extremely popular program, especially for folks
8 who don't have pickup trucks or cars that can bring
9 materials to the transfer station; so for us traveling
10 to the curb is a big, big plus.
11 And now that we've really pushed a phone app
12 as well as just more communication via the Internet, the
13 program has grown exponentially.
14 MS. PEARCE: I have a similar chart also from
15 the Sunset Scavenger/Golden Gate Summary of Assumptions,
16 page 5. It summarizes some of the data on the Bulky
17 Item Recycling Program. I'll hand this up and move to
18 admit as Exhibit 28.
19 MR. PRADHAN: Admitted.
20 (Exhibit 28, "Bulky Item Recycling
21 [Recology]," was admitted into evidence.)
22 (Exhibit 28 is displayed.)
23 BY MS. PEARCE:
24 **Q. Alright, Mr. Negron. You mentioned that this**
25 **has been a very popular program. Can you highlight for**

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1 **us on this chart the increase in appointments that**
2 **you've seen since rate year 2013.**
3 A. So you can see rate year 2013, we had
4 approximately 36,000 bulky item request appointments.
5 That's nearly doubled going into this rate year right
6 now. Up to 67,000 is the projections. Overall, it's
7 probably about a 17% increase -- gradual increase, but
8 it's almost doubled since 2013. The tonnages have
9 almost doubled as well. And with the overtime that's
10 involved in taking care of these appointments, our
11 full-time equivalent has gone up considerably, almost
12 doubled as well.
13 **Q. So what changes is Recology proposing for the**
14 **Bulky Item Recycling Program in this rate application?**
15 A. Again, to support this very popular program,
16 we're proposing one additional crew, which would one box
17 truck and one bulky item rear loader; two trucks and two
18 employees.
19 MS. PEARCE: Thank you, Mr. Negron.
20 I don't have anything else for you.
21 THE WITNESS: Thank you.
22 DIRECTOR NURU: Do you want to cross-examine?
23 MS. DAWSON: I do have a few questions.
24 DIRECTOR NURU: Please proceed.
25 MS. DAWSON: I guess you're not too surprised.

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1 Okay. So I have a couple of questions about
2 some of the collection items that you've talked about.
3 And before we get there, I'm going to go ahead and
4 request to submit into evidence an additional exhibit
5 that relates -- kind of summarizes head count both by
6 program and kind of by labor category.
7 MR. PRADHAN: So this will be admitted as
8 Exhibit 29. It's a two-page document.
9 (Exhibit 29, "RSS/RGG Historical and
10 Projected Head Count [City]," was admitted
11 into evidence.)
12 CROSS-EXAMINATION
13 BY MS. DAWSON:
14 **Q. Okay. So in the exhibit, you'll notice it's**
15 **actually a double-sided exhibit. The first side shows**
16 **the "Historic and Projected Head Count" by operating**
17 **unit, and then if you turn it over, it shows Historic**
18 **and Projected Head Count kind of by labor category.**
19 **Okay. So since rate year '14 and moving**
20 **forward, I'm going to go ahead and just look at the**
21 **programmatic view. Hopefully that might be a little bit**
22 **easier to speak to.**
23 **So we see an increase of 39 positions, and I'm**
24 **wondering -- I think you've probably described some of**
25 **them, but if you want to just look at this and let me**

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1 **know whether you have any other comments about**
2 **programmatic changes where you've shifted head count**
3 **between one program and another.**
4 **It looks like there's kind of a little bit of**
5 **growth in a lot of places, but there's been decreases in**
6 **some including -- it looks like Abandoned Materials**
7 **actually may have gone down a little bit and is now**
8 **going back up. There's reductions in the "Dedicated**
9 **Fan. 3." I don't know if you think you can maybe speak**
10 **a little bit to the programmatic changes that we're**
11 **seeing that can talk about why we've seen an increase in**
12 **the head count over the last four years.**
13 A. Let me see if I can go by category. If I
14 can't answer, I can definitely do a quick analysis and
15 get back to you at the next hearing.
16 **Q. Mm-hmm.**
17 A. So the Abandoned Materials Collection, I'm
18 seeing 2017. Let's go -- oh, this is a full-time
19 equivalent. Okay.
20 So Abandoned Materials, they're running at
21 12.09. There's only ten crew -- ten drivers out there;
22 so that's just the overtime that's involved.
23 **Q. Okay.**
24 A. Them staying out later than 4:30, we'll call
25 at 4:29 and then we have to get it serviced in four

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1 hours; so it's almost a standard that they're going to
2 be out there doing the overtime.
3 The Bulky Item Recycling is running slightly
4 above their head count of ten, and that's the overtime
5 based on the increase that I talked about earlier.
6 The Public Refuse Receptacles, we are running
7 ten. That is -- that is actuals. We did put one in
8 this year.
9 There's been a big push with the Fix-It
10 program, and we're noticing that they want microcosm
11 service, attention to city cans in certain commercial
12 corridors. I believe Sandra Zuniga's been piloting or
13 leading that effort. But we ended up adding one route
14 because it got to the point where we made all the
15 adjustments and we couldn't service all of it; so we
16 ended up adding it in the Mission and the Castro
17 District. That's the plus one.
18 Commercial Composting is static.
19 Commercial Recycling -- I'd have to go back
20 and look at an analysis on the Commercial Recycling.
21 The Fantastic 3 -- obviously, the big bump to
22 2018 is the black/green split.
23 Dedicated Collection -- I'm not sure what
24 you're classifying as a "Fan. 3 Dedicated Collection."
25 I'd have to look at the analysis, see what that business

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1 unit is. I'm not sure what the 44 represents.
2 Front-end Load Collection is static.
3 Rear Load Collection for 2017 has gone down.
4 I'd have to get back to you on that classification.
5 The Waste Zero Specialists & Sales, I'd have
6 to get back to you on that. That's gone from 4 to 1.
7 The Roll-Offs went up slightly, but that's
8 based on the volume of C&D material coming in. That's
9 still holding static.
10 General Admin went plus two.
11 So if you don't mind, I can run a resolution
12 on this easily for the next hearing.
13 **Q. That's fine, thank you.**
14 A. Okay.
15 **Q. Okay. So you did talk a little bit already in**
16 **some of your exhibits. I've tried to kind of summarize**
17 **a little bit of what your tables have shown.**
18 **So in terms of your exhibits, you were**
19 **showing, you know, the 10% reduction and then 7%**
20 **increase and 9% increase. And you spoke a little bit**
21 **in your testimony about your excess capacity. So I'm**
22 **interested in just understanding your weight migration,**
23 **does this assume that the changes that you're making to**
24 **the bins is going drive a certain amount of change in**
25 **behavior? And what does that look like versus the**
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1 **capacity that you're projecting you'll have above what**
2 **you might have today?**
3 A. Right. Good question.
4 We're -- the trash reduction is going to drive
5 the change. So I said a little bit earlier, but on the
6 split-body vehicles that can hold 9 tons, we feel very
7 comfortable that each route will have at least a ton
8 to two tons of capacity in case we experience a 15%
9 reduction or something greater.
10 And frankly, if this thing goes off the charts
11 and people just want to focus on the black carts, we can
12 actually remove another split-chamber vehicle and
13 repurpose that to support the increase in single-chamber
14 commodities.
15 So we have existing vehicles that we can --
16 and we do that often. We're doing that often. If it's
17 not new material and we're picking it up already, all
18 we're doing is moving the materials to another vehicle.
19 We'll repurpose that vehicle and have them pick up the
20 migration. That make sense?
21 **Q. Mm-hmm.**
22 A. Okay.
23 **Q. So you were hinting around a little bit to my**
24 **next question, which is if the tonnage shift is higher**
25 **or lower than your assumptions, how that would affect**
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1 **the number of new routes that you would have.**
2 A. So it's like the magic -- it's the crystal
3 ball. And so we do have capacity if this really takes
4 off. And like I said, I can repurpose vehicles and
5 continue managing the materials that we're already
6 picking up.
7 **Q. So I have a little bit of a follow-up question**
8 **on the Abandoned Materials and the Bulky Item program.**
9 **Have you considered whether those two programs**
10 **could be combined or integrated in some way to achieve**
11 **greater efficiencies? And if so, what would that**
12 **combination of these two services look like?**
13 A. That's been talked about. They're very
14 identical as far as the vehicle types and what they're
15 really picking up. I think if we were to go back and do
16 an analysis, I can give you a better idea.
17 The question will be, "Do you still want
18 to" -- I'm a little concerned about the Abandoned
19 Material Collection and the four-hour response. That's
20 really the driver. So if there was a consideration
21 where we can pick up the abandoned material the next
22 day, then that would allow me to really meet the needs
23 of abandoned material and the BIR customers.
24 I guess we'd have to kind of talk through this
25 and understand what you're asking for as far as the
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1 future, but we would have to talk about that four-hour
2 response. Because the four-hour response for the
3 abandoned materials is really the driver. That is the
4 limiting factor in combining the two programs.
5 **Q. Okay. Perhaps in the next hearing you could**
6 **bring some additional information about what the**
7 **programs -- how they're operating today, what it might**
8 **look like or what some alternatives would be.**
9 A. Okay. For combining the two programs?
10 **Q. Yeah. So that we can just understand more**
11 **about what you're -- what you think the tradeoffs are**
12 **and what your thinking.**
13 A. Okay, I can do that.
14 **Q. Great. So one question we've heard from the**
15 **public at many of our outreach and workshops that we've**
16 **held including information that we've received from the**
17 **Ratepayer Advocate, is the issue of pilfering from the**
18 **blue bins.**
19 **Has Recology ever studied the cost benefit of**
20 **some sort of antitheft device such as locks on the bins?**
21 **Are there other strategies that we have implemented**
22 **or could implement to discourage or deter pilfering?**
23 **I know that when we're talking about the rate increase,**
24 **that issue comes up over and over again.**
25 A. That's very challenging for our crews and our
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1 supervisors. I can tell you what we've done to date.
2 We encourage locks, although the pilferers
3 have a tendency to figure out which key code we're using
4 for the current Master lock. And it costs significant
5 money to change they key code on the lock, and they end
6 up getting the key again.
7 We tested different mechanical components
8 that we can put on the lid so that when it automatically
9 dumps, it will unlock and go. But I can tell you
10 the pilferers are very good at destroying our lids.
11 It's not rocket science as far as plastic and rivets.
12 And so as much as we try to engineer the bins to be
13 anti-pilfering, it becomes sometimes economics, a math
14 problem, "How much do you want to put on this to make
15 these bins?"
16 And it impacts our productivity. The more we
17 lock our materials -- which we encourage -- it slows our
18 crews down significantly. So when I run these
19 RouteSmart optimization programs, I'm running at a clip
20 where these guys can just dump and go, dump and go.
21 And so if they have to stop at every container and start
22 dealing with locking devices, that would really change
23 the whole collection model.
24 So it's a challenge. And we hear it in our
25 public meetings all the time at community events. It is
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1 a challenge. I mean, I can look at it again if you're
2 asking me and then maybe come up with another proposal
3 in the hearings, but I just want to give what's
4 happening today.
5 **Q. I think what would be helpful if maybe some
6 combination of you and Mr. Porter could put together a
7 little summary of information on kind of the revenue
8 that's received from commodities, the potential impact
9 of time and cost on locking down or too many locks on
10 the bins, maybe a little bit of an explanation of the
11 kind of things you've tried, the limits of the
12 technology today. I think it's really just a question
13 of making it far more clear to public what the tradeoffs
14 are in trying to address the problem.**
15 A. Absolutely. We can do that.
16 MS. PEARCE: Okay. Those are all my questions
17 for now.
18 MR. HALEY: Good morning.
19 The Department of Environment will have some
20 questions. We'd like to invite you back next week for
21 those.
22 THE WITNESS: Sounds good.
23 I look forward to it.
24 DIRECTOR NURU: Want to bring --
25 MS. PEARCE: Yes, thank you.
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1 Recology will next call Minna Tao.
2 DIRECTOR NURU: Please swear her in.
3 (Ms. Tao steps up to the witness stand.)
4 MINNA TAO,
5 having first been duly sworn, was
6 examined and testified as follows:
7 DIRECTOR NURU: Proceed.
8 DIRECT EXAMINATION
9 BY MS. PEARCE:
10 **Q. Good morning, Ms. Tao.**
11 A. Good morning.
12 **Q. Could you please spell your name for the
13 record.**
14 A. It's M-I-N-N-A, Tao, T as in "Tom"-A-O.
15 Minna Tao.
16 **Q. And Ms. Tao, what is your position at
17 Recology?**
18 A. I'm the General Manager for Recology Golden
19 Gate.
20 **Q. How long have you been with the Recology
21 companies?**
22 A. I've been there for six years now.
23 **Q. How long have you been the General Manager?**
24 A. Two years.
25 **Q. Tell us a little bit more, just briefly, about
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1 **Golden Gate and the customers it services.**
2 A. Okay. Well, we operate a 24-by-7 operation at
3 Recology Golden Gate; so our territory's primarily
4 through the Presidio, North Beach, Chinatown, Financial
5 District, Tenderloin; so we have a diverse customer
6 base.
7 **Q. As a part of the 2017 rate application,
8 Recology is proposing to add a route management system
9 to its collection vehicles. Could you tell us what a
10 "route management system" is and what are the key
11 purposes of such a system?**
12 A. Okay. So a route management system that we're
13 look at is really a platform of a combination of
14 hardware, software applications that allows realtime
15 two-way communications between the drivers out there
16 driving, servicing our customers, as well as the back
17 office. When a customer calls, you know, the route
18 maintenance specialist checks in and a customer service
19 representative.
20 **Q. What is the purpose of this technology on a
21 general level?**
22 A. To improve driver efficiency. To cut down
23 paperwork that we do. Eliminate some of the data
24 entry -- duplicative data entry. And customer service,
25 again.
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<p>1 Q. Is there a particular management system that 2 Recology is proposing to use? 3 A. Yes. We are proposing to use Routeware, which 4 is a proven technology in the waste industry. And back 5 in 2010, Recology selected Routeware to be implemented 6 down in the San Mateo/San Bruno area. And since then, 7 we have expanded it into Yuba-Sutter, CleanScope, 8 Seattle, and Weston, Oregon; so we have about 500 units 9 deployed already currently. 10 And most importantly, it is a platform that 11 can grow with us and is pretty sophisticated to address 12 our business requirement. And it's already been 13 integrated between our AS400 and Routeware. So that 14 communications from data flowing back and forth is 15 already there. 16 Q. All right. I'd like you to talk a little bit 17 first about when a driver goes out in the field 18 currently, how does he or she go about completing his 19 route correctly? 20 A. Okay. So currently, this is a route book that 21 we give to every driver as they are being dispatched to 22 do a job. So they have here the duties, the route 23 information, contact information that they may want to 24 have access to, and some route information, maps, and 25 locations of their customer base.</p> <p style="text-align: right;">Page 177</p>	<p>1 Q. And then at the end of the day when they're 2 finished with their routes, what do they do with that 3 information? 4 A. They bring it back to the office and they 5 review all the comments with the dispatch -- I mean, 6 with the check-in route maintenance specialist. And 7 then they will verify the information and then they 8 will -- the route maintenance specialist will key this 9 information into the AS4000. 10 Q. So the back office isn't receiving that 11 information, necessarily, until after the route is 12 already complete? 13 A. Yes, true. Correct. 14 Q. Is there any other paperwork that the driver 15 completes out on his route? 16 A. Yes, there is. You know, some of things that 17 we actually ask them to do in terms off ensuring that 18 the customers are putting in the material correctly into 19 the bin, we ask the drivers to tag the customers to let 20 them know. 21 So what they'll do is they write down to say 22 if you have glass in a compost, they'll say, "Glass in 23 compost" and put it in the back. We will key in 24 information to let the Waste Zero specialist know that 25 we may have to provide an outreach for these customers,</p> <p style="text-align: right;">Page 179</p>
<p>1 So this is a route book that they get. And 2 more importantly, they actually get a route sheet that 3 we print out for every single route -- 350 routes that 4 they get. And these are the lists of customers that 5 they're supposed to pick up and service every day. 6 Along with this, we have special instructions in terms 7 of where to pick up, what are the key codes, and so on 8 and so forth that is in here. So that is, you know, the 9 driver will follow this and service the customer. 10 Q. What does the driver do as he's out on his 11 route? What does he do with the route book? 12 A. So what they do is they take the route sheet 13 and then they mark which one they service and any 14 special instructions. So for example, here, they have 15 like "not out," so they cross it out. And some of the 16 other ones, they said, okay, "not out." And they even 17 mention to say, "Stopped by multiple times," the timing 18 of the customer and still not out, and some specific -- 19 like broken locks, dirty carts that they need to be 20 replaced. So any special instructions that they'd like 21 to communicate back to the back office, they put in on 22 these route sheets. 23 Q. So by "not out," you mean the customer didn't 24 put their carts out and so they couldn't be serviced? 25 A. Right. Or blocked, or yeah, not accessible.</p> <p style="text-align: right;">Page 178</p>	<p>1 especially if the customer is consistently tagged with 2 contaminations. 3 Q. Do you have an example of what the drivers 4 might bring back -- 5 A. Yes. 6 Q. -- into the office? 7 A. So they bring back a stack of cards like this, 8 and we take that and put it into the system. 9 Q. I understand you brought with you an actual 10 Routeware tablet that would -- you're proposing to 11 install on the Recology vehicles. 12 A. Yeah. 13 Q. Could you show us that tablet? 14 A. Yes, I'd be happy to. I actually brought with 15 me a few, and these are live data; so don't put any 16 transactions in. 17 You'll see what the driver typically will see. 18 So at a high level, this is what the driver 19 will be seeing and operating and interacting with. 20 So you will see here that it has the route address -- 21 Can you hear me? 22 -- the route address here. And then on this 23 side, there's a green button and a red button. So if 24 they service the customer, they'll hit the green button, 25 say "Done," and that information actually gets back into</p> <p style="text-align: right;">Page 180</p>

<p>1 the AS400 within 5 minutes. 2 And then if you skip a customer, for example, 3 it will show you -- you can have an option of another 4 pull down menu why it is this customer is being skipped. 5 You know, is it not accessible, not out? And they can 6 go back. There's a couple of very good information too. 7 Also on this side, on the red, is like a Post-It. These 8 are special instructions and comments for the drivers 9 for that particular account. 10 And then when they want to know -- if they are 11 not familiar with the route, they can hit the navigation 12 button here and then a map will show up to show them 13 where go and how to get to that point A to point B. 14 So go back to the customer, you can see that 15 there are red customers. These are customers that we 16 shouldn't service. 17 Currently there are times that we go through, 18 the drivers are very efficient. They want to make sure 19 that we service all the customers, and this is a good 20 opportunity for to us respond back to say, "Hey, the 21 customer did put out the cans," and allow customer 22 service to call them to say there, "Your cans are put 23 out. Do you want to turn your service back on?", 24 for example. 25 Q. So the red will show if the customer -- if Page 181</p>	<p>1 A. Right. 2 Q. And there will also be a button that they 3 could also push as soon as they've completed the 4 service? 5 A. Exactly. 6 MS. PEARCE: I know that we will not be able 7 to enter the actual tablets into evidence; so I would 8 propose that we -- actually, I've had exhibits made of 9 the paperwork and also of the tablet themselves, and I 10 would move their admission as Exhibit 30 and 31. 11 THE WITNESS: Julia, I hope you're not 12 entering any data there. 13 We'll be in trouble -- I'll be. 14 MS. PEARCE: Let's have the paperwork be 30 15 and the picture of the tablet be 31. 16 MR. PRADHAN: So just to clarify, Exhibit 30 17 is one photograph of some paperwork and maps, it looks 18 like. I'm just summarizing. 19 MS. PEARCE: The route book and the route 20 sheets and the tags for the customers when there's an 21 issue for their collection. 22 MR. PRADHAN: Correct, yeah, what the witness 23 has testified about. And then Exhibit 31 consists of 24 two photographs of a tablet, again, similar to what the 25 witness has just testified about. Page 183</p>
<p>1 that address is not currently a customer of Recology; is 2 that correct? 3 A. Exactly, exactly. 4 Q. Where will that tablet actually be placed in 5 the truck? 6 A. Good question. So this is actually going to 7 be installed in the cradle. That is movable and it's 8 clipped in and locked. And the driver can easily -- 9 so they would be driving here. Usually the cradle is 10 here so it's not interfering with their vision -- 11 where they're going. 12 Q. Is this the only piece of equipment from 13 Routeware that will be installed on the vehicle or are 14 there other pieces of equipment? 15 A. Well, there are other pieces of equipment. 16 So there's cameras that we integrated with the 17 Routeware, and then there's also an external monitor for 18 trucks that typically service the customer like a 19 rear-loader or side-loader. We really don't want to the 20 drivers to be running back and forth from the cab to 21 where they're servicing; so it makes it easier for them 22 to have a pound, a button key and a screen. But this is 23 still the brain, though. 24 Q. The screen -- the screen you're describing 25 will be on the outside of the truck? Page 182</p>	<p>1 And those two exhibits will be admitted. 2 MS. PEARCE: I think that Exhibit 31 is just 3 one photograph. 4 MR. PRADHAN: I apologize. 31 is one page, a 5 photograph. 6 MS. PEARCE: Thank you. 7 (Exhibit 30, "Route Paperwork [Recology]," was 8 admitted into evidence.) 9 (Exhibit 31, "Routeware Tablet [Recology]," 10 was admitted into evidence.) 11 BY MS. PEARCE: 12 Q. Ms. Tao, how will you ensure that the drivers 13 take advantage and make use of this technology? 14 A. You know, change is hard. So of course we 15 want to make it as easy as possible for the drivers. 16 But I am surprised that many of the drivers are kind of 17 excited about this technology. You know, maybe because 18 they're using iPhones now and they feel satisfied that 19 they're able to report their progress. And when they 20 say "not out," they can take a photo to prove it. 21 Q. You mentioned some of the efficiencies that 22 you hope to gain from implementing this technology. 23 What are some of those actual efficiencies? I would 24 like you to talk a little bit more detail about some of 25 the efficiencies you're hoping to achieve using this Page 184</p>

<p>1 technology. 2 A. So you know, when we're actually out, for 3 example, there is a feature in Routeware that's called 4 "dynamic routing." So if a truck is down, we're able to 5 select the customer that has still yet to be serviced 6 and kind of redistribute the work out to the outlying 7 trucks and electronically send those addresses with the 8 special instructions to the routes so that the customer 9 can be serviced the same day.</p> <p>10 Q. What about any paperwork efficiencies that 11 you're hoping to achieve from that? 12 A. Absolutely. You know, you saw all those 13 paperwork that we have to key in. So nowadays, you 14 know, the drivers put it in and then we're actually able 15 to verify the information and then submit it as the data 16 and we can respond to it quickly. You know, if we are 17 able to -- if there's a "not out" customer, if we're 18 able to service it, that saves the customer calls in the 19 back end and the customer is more happy about our 20 service.</p> <p>21 Q. You mentioned customer service efficiencies 22 as well. How much of a challenge is that for Recology 23 currently to address all the customer service requests 24 that come through your back office? 25 A. We get a lot of service requests. We have</p> <p style="text-align: right;">Page 185</p>	<p>1 this technology that we have, we also need somebody to 2 help verify the data, make sure the routes is loaded 3 correctly, make sure the sequencing is up to date and 4 correct. So it creates a lot more activities because of 5 the data that we're receiving.</p> <p>6 Q. Are you proposing any additional head count in 7 order to address some of these issues? 8 A. Yes. We're proposing adding three route 9 specialists, maintenance specialists to help make 10 sure that the route is up to date, make sure that 11 the equipment is being used properly, and then also 12 be able to be proactive when we get the information 13 and if there's anything that's customer service-related, 14 we can act on it timely.</p> <p>15 Q. Does Routeware have any capabilities that 16 maybe you're not implementing right now or you're not 17 thinking about implementing right now, but you may want 18 to implement down the road? 19 A. Yes. One of the -- high on our priority list 20 is adding a second camera to capture contaminations so 21 that we could take photos of it as the material is being 22 dumped inside the hopper, so we can manage that.</p> <p>23 Other -- the other things that we would like 24 to do is right now is very, very informational, back and 25 forth. But what we would like to move forward with is</p> <p style="text-align: right;">Page 187</p>
<p>1 about 140,000 customers that we service, and think 2 about: 1% is 1,400 service requests that we get a day. 3 And that is a lot of paperwork, customer requests that 4 we to verify. We have to note some of them are service 5 tags, stop service, reminder service, change bin size, 6 missing charts, deliver locks, operation verifications. 7 So it's -- there's a lot of transactions that go 8 through.</p> <p>9 Q. It sounds like Routeware is going to offer 10 you a lot of new information and opportunities to 11 communicate that you didn't have before. How are you 12 planning to manage that information? 13 A. It's a great question. You know, we get a lot 14 of information. Some gets lost because of the paper 15 shuffling and, you know, we're not perfect. And more 16 importantly, information, when the drivers are back in 17 the yard when they finish their route, a lot of the 18 information becomes irrelevant. So really, it's not 19 entered and captured anywhere.</p> <p>20 With Routeware, allows them to put comments 21 when they're actually on their route doing their work. 22 It actually creates a lot of data -- a lot more data 23 than we've ever had before, and we have to respond to 24 it, You know, and we're able to respond to it, which the 25 good thing. And in addition, if you think about all</p> <p style="text-align: right;">Page 186</p>	<p>1 once we have the information and we can set criteria and 2 have a transaction, for example, if a customer is "not 3 out," instead of having to call, why don't we send them 4 an e-mail or a text to let them know the material is not 5 out.</p> <p>6 Q. Automatically? 7 A. Automatically. So we want to automate a lot 8 more transactions than we currently do now.</p> <p>9 Q. If this technology is approved, how will it be 10 rolled out across the collection companies? 11 A. Our plan is -- well first of all, we're very 12 excited about this technology. We want to roll it out 13 as soon as possible to all the trucks. But I think what 14 we'll do is by route type. You know, hit with the 15 commercial, the more complicated routes first.</p> <p>16 You know, one of the things that I didn't 17 mention is drivers do take vacations. And when they do, 18 when we have a casual driver that backs them up to 19 service, they're not as familiar with the route as the 20 normal drivers are. This Routeware system allows you to 21 really follow the details on where the bins are and be 22 able to provide a lot more directions to the drivers.</p> <p>23 And we will also know whether the driver's 24 having a hard time finishing the routes so we can send 25 help.</p> <p style="text-align: right;">Page 188</p>

1 **Q. Did Recology consider any other technology**
2 **besides Routeware before deciding on that particular?**
3 A. We did. We looked at some cheaper
4 alternatives, but a lot of the cheaper alternatives
5 doesn't have the rich platform to support San Francisco,
6 because it's very complex. We have a lot of special
7 services.
8 And more importantly, we want something that
9 can support multiple different cameras, you know,
10 cameras that sort of look at where there's service and
11 to capture the contaminations. We selected Routeware
12 also because we have a really good relationship with
13 Routeware, that they work with us very closely to
14 develop future applications.
15 For example, one of the things that they did
16 with us is the abandoned waste. You know, I mean, that
17 is a game changer for us to service. So it goes from
18 somebody taking photos of abandoned waste and reporting
19 it on 311 app, to dispatching it to the Routeware system
20 so that actually the closest truck will pick up the
21 abandoned waste. When they're there, they confirm that
22 they serviced the customer. That transaction really
23 loops back into 311 in letting the actual person that
24 actually initiated the transaction know that that
25 request has been completed.

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1 **Q. So do I understand you correctly that Sunset**
2 **Scavenger or Recology Golden Gate is already using**
3 **Routeware?**
4 A. Mm-hmm.
5 **Q. And in the Abandoned Materials Collection**
6 **Program?**
7 A. That's correct.
8 **Q. It's been successful?**
9 A. It's been very successful and allows us to
10 really meet the four-hour service level agreement with
11 the City.
12 MS. PEARCE: Thank you, Ms. Tao.
13 I don't have any more questions for you.
14 Thank you.
15 DIRECTOR NURU: Okay. Cross-examine?
16 MS. PEARCE: I have a couple of questions.
17 THE WITNESS: Okay.
18 CROSS-EXAMINATION
19 BY MS. DAWSON:
20 **Q. Quick. So you had mentioned that you'll be**
21 **able to do dynamic routing. So say for instance you**
22 **have some sort of truck that's down, and then you'd be**
23 **able to reissue that route to another vehicle.**
24 **What happens today when that happens?**
25 A. What happens today is we will -- the truck

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1 will be there, and we manually print out the route
2 sheets, and somebody will calculate that route. And
3 then usually we only do one person. We take the whole
4 route and we give it to another truck.
5 **Q. So do you deploy a new truck or do you put**
6 **it -- do you assign it and extend the route of some**
7 **truck that's already in the field?**
8 A. Probably both, depending on when the truck was
9 broken down.
10 **Q. And then there's clearly overtime that may**
11 **well happen as a result of the extension that shift?**
12 A. Yes.
13 **Q. And do you imagine the dynamic routing**
14 **would reduce any of those additional costs by maybe**
15 **distributing them better or being able to plan for it**
16 **better?**
17 A. It will allow us to plan for it better.
18 But based on the current contract agreement with the
19 Union, there will be limited savings if you're looking
20 for overtime.
21 **Q. Okay. What about some of these customer**
22 **service benefits? You mention that you're going to be**
23 **able to have a lot more efficiencies. Are you expecting**
24 **that your shifting administrative staff right now that**
25 **takes care of things that are more on paper -- and you**

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1 **had mentioned that you'd asked for three additional head**
2 **count for --**
3 A. Mm-hmm.
4 **Q. -- people who were doing different kinds of**
5 **work related to route maintenance. But what about the**
6 **way in which this far more manual system is being**
7 **supported today? And is there any ability to repurpose**
8 **people from one function to another?**
9 A. That will be the whole entire goal in the long
10 run. But as we get to know this system, we're actually
11 dealing with a lot more data than we ever have before.
12 A lot of the data, to be honest, the drivers, when they
13 go home, a lot of information is not provided to us and
14 we're not able to respond to it.
15 So that's really primarily one of the drivers
16 of requesting the three route maintenance specialists.
17 Having to deal with all this technology that we don't
18 have, which is paper, there's a lot of data verification
19 and confirmations that we do that we don't do today.
20 **Q. Do you expect that you might see a reduction**
21 **in complaints?**
22 A. Yes. We sure hope that there will be a
23 reduction in complaints.
24 **Q. Do you have any data of the kind of -- how**
25 **many people are actually -- it'd be interesting to**

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1 understand just how many complaints in terms of
2 deficient service you're getting versus how you think
3 this new system will change that dynamic and whether
4 that --
5 I mean, clearly those complaints are taking up
6 customer service peoples' time.
7 A. We can look at the different complaints.
8 Initially, I would say that the overlooks will be better
9 managed. We'll be able to respond quickly.
10 Q. Okay. So you had mentioned the Abandoned
11 Waste Program, is already using this. Are they actually
12 using tablets? Or is this tablet piece going to be new?
13 A. The software is still the same, but the
14 equipment is different. I think the Abandoned Waste has
15 three-year-old technology; so they have three pieces of
16 devices in the cab versus one tablet.
17 Q. And you're planning to replace those three
18 devices? Are you going tablets systemwide?
19 A. I'm seeing -- yes.
20 MS. DAWSON: Okay. I don't have any more
21 questions at this time.
22 THE WITNESS: Okay, thank you.
23 DIRECTOR NURU: Okay. Would the Company like
24 to call up another witness?
25 MR. HUGHES: Yes, Mr. Nuru. My name is

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1 Jonathan Hughes for Recology. We will recall
2 Mr. Quillen.
3 DIRECTOR NURU: Okay. Mr. Quillen, take the
4 stand.
5 (Ms. Tao steps down from the witness stand.)
6 (Mr. Quillen steps up to the witness stand.)
7 MAURICE QUILLEN,
8 having been previously duly sworn,
9 was examined and testified as follows:
10 DIRECT EXAMINATION
11 BY MR. HUGHES:
12 Q. Mr. Quillen, you remain under oath; so I'll
13 remind you of that.
14 Mr. Quillen, you've introduced yourself
15 already to us in this room. Can you remind us of your
16 title with Recology?
17 A. Maurice Quillen, General Manager with
18 Recology San Francisco.
19 Q. And what are the major facilities within
20 San Francisco that you manage?
21 A. I manage the transfer and processing
22 operations, specifically Recycle Central at Pier 96 and
23 Recology San Francisco Tunnel Beatty complex, which
24 includes the transfer operation, the public reuse and
25 recycling area, the household hazardous waste

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1 department, and the transfer operation, as well as the
2 iMRF.
3 Q. What I wanted to talk with you this morning in
4 the time that we have left are the capital projects that
5 are contemplated by the rate application.
6 Can you tell us the capital projects that will
7 be impacting the facilities that you manage?
8 A. Yes. We're proposing three capital projects
9 in our rate application. The West Wing, which is
10 a project to create a new building where we can
11 transfer -- tip and transfer organic material.
12 We have a trash processing pilot, which is a
13 piece of equipment that we'll be installing over at
14 Pier 96 to allow us to process the black bin material on
15 a pilot basis.
16 We also have two contingent schedules in the
17 rate application. One of them is the relocation of the
18 iMRF building to the Port of San Francisco, Pier 96.
19 And then the second contingent schedule would be the
20 expansion of the Zero Waste Processing Project in the
21 building that was once housing the iMRF.
22 Q. All right. I'd like to take each of those
23 projects in turn and have you describe for us a little
24 bit about what those are going to do. I'd like to start
25 with the West Wing project and perhaps introduce an

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1 exhibit, pictures on the screen in a moment.
2 I think we may be on Exhibit 32.
3 MR. PRADHAN: Exhibit 32 is two photographs.
4 Actually --
5 (Exhibit 32, "West Wing Renderings
6 [Recology]," was admitted into evidence.)
7 (Exhibit 32 is displayed.)
8 MR. HUGHES: Exhibit 32 is two or three
9 renderings of the West Wing project. Thank you.
10 BY MR. HUGHES:
11 Q. Mr. Quillen, can you describe for us perhaps
12 in reference to the image that we're seeing on the
13 screen at the moment what the West Wing project would do
14 generally.
15 A. Yeah, the image on the screen is an image of
16 our transfer station. And in the center of the photo
17 and to the left of the image is this triangular
18 building, which is the building we are calling the
19 "West Wing."
20 Q. Let me just see if I can do this here.
21 When you talk about a "triangular building,"
22 you're talking about this here?
23 A. Yes, I am.
24 Q. And this is the proposed West Wing project?
25 A. This is the West Wing project; correct.

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1 **Q. And what are the operations that are**
2 **anticipated to occur at the West Wing?**
3 A. So the West Wing is going to be an accessory
4 building to the transfer station. Its primary function
5 will be to receive and transfer organic materials from
6 the route trucks from Recology Golden Gate and Recology
7 Sunset Scavenger.
8 **Q. And where is that activity currently being**
9 **done?**
10 A. I think if you refer to the picture, the lower
11 right-hand corner is a building that we call the
12 "Organics Annex."
13 **Q. Is it down here, this lower rectangle right**
14 **here?**
15 A. The small building.
16 **Q. This is an existing structure at**
17 **Tunnel Beatty?**
18 A. Correct. It's the organics annex.
19 **Q. And maybe walk us through just a very high**
20 **level what the operations are involved in the organics**
21 **annex currently.**
22 A. Yeah, it's approximately a 6,000 square foot
23 building and it's situated just below the transfer
24 station. Currently, the route trucks have to drive up a
25 ramp into the building, tip the material on the floor.

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1 We have a loader operator that takes the material and
2 comes off the route trucks, stacks it and moves it, and
3 prepares the tipping for the next truck.
4 In addition to receiving the material, we also
5 transfer the organics to the southern portion of the
6 building, top-load the organics into craters, then send
7 it to our processing facilities.
8 **Q. So there's essentially two components to the**
9 **truck traffic; is that right? You've got the collection**
10 **trucks coming in bringing the material, and then it gets**
11 **tipped onto the floor and then ultimately loaded back**
12 **onto the long-haul trucks and taken to Hay Road; is that**
13 **right?**
14 A. Yes, two very separate operations. One's a
15 route-based operation where we receive the route trucks.
16 The other one is a transfer operation where we take the
17 material that comes from the route truck and bring them
18 to market.
19 **Q. And what are some of the challenges that**
20 **Recology's facing is using the organics annex for these**
21 **operations?**
22 A. The organics annex is a 6,000 square foot
23 building. It's not a very large structure. Currently,
24 there's only one way in and out of the building. We
25 get in excess of 100 truck trips a day through that

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1 building, organics. Right now, the trucks have to queue
2 in line, one behind the other, drive up a hill.
3 It's comical that the loader and the truck
4 have to do a little dance. The loader has to make room
5 for the material, exit the building. The truck has to
6 enter the building. Once the truck dumps the material,
7 as the truck exits the building, the loader loops back
8 around and then moves the material off to the side
9 preparing the tipping floor for the next load.
10 It's challenging to get up and down the hill,
11 especially when there's a lot of moisture on the ground.
12 And the building really wasn't designed to handle the
13 moisture content of the material that we experience with
14 in organics.
15 **Q. And describe for us if you will, Mr. Quillen,**
16 **how would the proposed West Wing project address some of**
17 **those issues?**
18 A. The first consideration is the building is
19 nearly double the size. It's a little over 14,000
20 square feet; so that's the biggest factor. We're going
21 to have significantly more tipping area.
22 It's also going to be a purpose-built building
23 designed to handle the organic materials. It's got a
24 very robust moisture retention recovery system; so any
25 material that leaks out of the trucks if they're dumping

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1 it, it will be recovered and quickly evacuated from the
2 tipping floor.
3 It also has a much more consistent --
4 appealing traffic pattern. The traffic pattern is the
5 truck enter the building from the north, dump the
6 material, and then exit the building to the south. It's
7 a very linear operation. The loader would have room to
8 operate inside of the building and wouldn't have to exit
9 the building when the trucks are dumping.
10 It also has provisions for a tipping --
11 a top-loading feature loadout, which is the rectangle
12 to the left of the building.
13 **Q. You're talking about this smaller rectangle**
14 **that's adjacent to what you described as the West Wing**
15 **project?**
16 A. Right.
17 **Q. And that's for what function?**
18 A. That will allow us to bring tractor trailers
19 into the building and top-load material into the trucks.
20 **Q. Let's take a look at the second picture of**
21 **Exhibit 32. Does this show us -- sort of focus our**
22 **attention a little bit more on that part of the**
23 **structure you were just mentioning.**
24 A. Yes, it does.
25 **Q. And can you describe for us, does this feature**

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<p>1 of the West Wing project have improvements that are 2 anticipated for the loading in and loading out of 3 trucks? 4 A. Well, generally we load the material into the 5 trucks. We're held to a very strict weight standard 6 with the trucks. They can only hold so much material, 7 and it's very important for us to maximize the amount of 8 material we put into the trucks. So when we currently 9 load the material into the top of the trucks in the 10 annex, we do load the trucks on a scale so we have a 11 general idea how heavy the truck is. 12 But given the size of the building, it's very 13 hard to maximize the weight of the truck. In any event, 14 the loader operator's a little overzealous and overloads 15 the truck. We now have to pull the truck out of line, 16 bring it around the facility, offload some product, and 17 then get it out on the road after we scale it. 18 The new facility is going have an articulated 19 grapple or "crane," as we call it, that would allow the 20 operator to in an automated fashion take out any extra 21 material or put in smaller amounts of material to 22 maximize the load. In mention of the weight of the 23 truck, we'll also be able to look at the axle weights of 24 the vehicle to ensure that when the truck leaves the 25 facility, it's completely legal.</p> <p style="text-align: right;">Page 201</p>	<p>1 A. Generally the material -- the liquid that is 2 on the floor of the annex gets pushed into the trucks in 3 most cases. Unfortunately, we have some issues. Given 4 nature of the building, it's not sealed very well; so we 5 have some issues of seepage around the eaves of the 6 building and we have to constantly deal with the issues 7 associated with the seepage. 8 Also, the scale that we currently utilize as 9 part of the annex is a pit scale. And essentially all 10 the moisture that doesn't make it into the truck or 11 drips out of the truck during the loading process ends 12 up accumulating underneath the scale and it presents 13 with some significant operational challenges. We have 14 to take that material out of from underneath the scale 15 with some frequency. 16 Q. And you alluded to this already, but can you 17 tell us what the West Wing project proposes to do in 18 terms of the moisture issues in the floor? 19 A. So the key difference is the West Wing will 20 have a graded floor that will be designed to direct the 21 moisture to collection points. The collection points 22 will be purpose-built to accommodate the material and 23 then it will also travel through a series of drains 24 into a treatment facility. We'll be able to take the 25 moisture, the liquid if you will, understand its pH</p> <p style="text-align: right;">Page 203</p>
<p>1 Q. And does that increase the efficiency of 2 getting the right amount of material into each of the 3 truck loads? 4 A. Yes, it does. When you look at our operation, 5 we're processing over 600 tons a day, 25 to 30 truck 6 trips a day easily you'll have us going. If we make a 7 mistake of a couple hundred pounds per truck, at the end 8 of the week there will be several trucks to the market 9 that we have. And if we overload a truck, we would have 10 that truck locked up at scale and subject to having to 11 offload the back of the truck or face fines. 12 Q. You mentioned that this new West Wing project 13 would be purpose-built for the functions we're talking 14 about. What was the organics annex built for? 15 A. The organics annex was built in the 1970s and 16 it was intended to recover steel cans from the waste 17 stream through a very rudimentary set of magnets and 18 conveyors. 19 Q. You mentioned also the issue of liquid. 20 I mean, we're talking about organic material that's 21 being put onto a floor. Is that what we're talking 22 about? 23 A. Correct. We call it the tipping floor. 24 Q. And in the organics annex, what happens to the 25 liquids that are within the organic material?</p> <p style="text-align: right;">Page 202</p>	<p>1 content, treat it, and then release it. 2 In addition to that system, we will still 3 continue to put as much moisture as we can in the trucks 4 in the top-loading process. Obviously, that's 5 beneficial the composting process. 6 Q. Does the West Wing project as it's proposed 7 address odor issues? 8 A. Yes, it does. 9 Q. Tell us how it does that. 10 A. We've operated the transfer station for nearly 11 four decades, and odor's always a constant issue when 12 you're processing MSW. And now that we've extracted the 13 organics from the MSW, we created new and different 14 odor problems. 15 So as part of the West Wing, we have 16 contemplated a system that will treat both the transfer 17 station and the West Wing as a single building, and we 18 would capture all of the air from the facility and run 19 it through a system that would ionize the air before 20 releasing it into the atmosphere. 21 Q. Let me just make sure that we're focused on 22 what you're talking about in terms of "operating 23 assistant." Is this larger building the transfer 24 station? 25 A. Yes, it is.</p> <p style="text-align: right;">Page 204</p>

<p>1 Q. And then we've got the West Wing to the right 2 here. So you're talking about operating an odor-control 3 system that would be for both functions? 4 A. Yes. 5 Q. And how does the system that you 6 contemplate -- you mentioned that it involves ionizing 7 the air. But what does it do in terms of the treatment 8 of the air and what is your understanding of the 9 improvements to odor control? 10 A. Well, the first thing that we're going to do 11 to the building is seal the building up. So we're 12 contemplating high-speed doors for all of the openings. 13 And if we are able to successfully close the building 14 during our operating hours, we get to see ability to 15 capture the air. 16 And then we're going to rely on a series of 17 fans and ducts to take the air from the annex -- excuse 18 me, from the West Wing and transfer station and collect 19 it through a system of pipes and fans. And then the air 20 would then go over through an exchange unit where the 21 ionized air would be injected into the air as it's 22 evacuated from the building. 23 Q. Have you had any opportunity to evaluate the 24 effectiveness of the system? 25 A. Yes, we have. We looked at the different</p> <p style="text-align: right;">Page 205</p>	<p>1 Q. It's something you're familiar with? 2 A. It's something I'm very familiar with in the 3 West Wing. And then when we smelled the air, it came 4 out of the treated bag and it had no perceptible smell 5 whatsoever. So as an operator, I thought that was very 6 successful. 7 We also went to see a full-size facility 8 installation up in Modesto, a pet food facility. And we 9 were able to visit the facility, go inside the facility, 10 and understand what facilities smelled like on the 11 inside, and when we went outside it was obvious that the 12 system was doing its job. 13 Q. All right. Let's turn our attention, I think, 14 with that to the Trash Processing Pilot Program, which 15 is one of the capital projects you mentioned in the rate 16 application. And this one is not in the contingent 17 schedule; is that right? This one's in the actual rate 18 application itself? 19 MS. DAWSON: Counsel? 20 MR. HUGHES: Yes? 21 MS. DAWSON: Given that we've got a number 22 of different projects to talk about and that we have -- 23 we've unfortunately lost a little bit of time. 24 I'm wondering if you'd be willing to have some 25 cross-examination questions on this specific --- and</p> <p style="text-align: right;">Page 207</p>
<p>1 types of technologies that were available, and 2 essentially it was either mechanical filtration which 3 is very expensive, bio-filtration which takes a massive 4 amount of space, or this new technology, ionization. 5 And we were somewhat skeptical of it because 6 no one had really been deploying this ionization 7 technology. So the company came out and installed a 8 desktop test unit. And this test unit functioned in the 9 exact same fashion that the larger system worked. 10 It basically extracted the air from the annex and 11 transfer station and treated it. 12 In order to sort of quantitatively analyze 13 whether or not it was successful doing its job, the air 14 was placed into large bags. The bags of untreated and 15 treated air were then sent to what is called an "odor 16 panel," which a group of individuals with very keen 17 noses and sense of smell who then proceeded to sample 18 the material, the air from the two bags, and make the 19 determination that yes, in fact, the system did do its 20 job and deodorize the air from the transfer station and 21 the annex. 22 Personally, I had not had the opportunity to 23 smell the air of the two bags. And when we smell, we 24 have treated air; undeniably, the air from transfer 25 station.</p> <p style="text-align: right;">Page 206</p>	<p>1 kind of break it up so that I could ask questions, have 2 them about specific facilities. 3 MR. HUGHES: Of course. And he hears that. 4 MS. DAWSON: Okay. That way, hopefully 5 Mr. Quillen will have a very fresh mind. Here we go. 6 CROSS-EXAMINATION 7 BY MS. DAWSON: 8 Q. Okay. So I'm going to talk about the West 9 Wing and ask you some questions. Can you summarize for 10 us briefly how this project differs from the West Wing 11 project that was proposed in the 2013 rate application 12 and then approved under a contingent schedule? 13 A. Well, it's a different building inasmuch as 14 it's a larger building than what we had originally 15 contemplated. The original West Wing that we were 16 looking at constructing was going to be a test facility. 17 It was really designed to test emerging processing 18 technologies and it was going to allow us an opportunity 19 to do that in a portion of the building that would be 20 part of our solid waste facility-permitted area. 21 The difference between that building and this 22 building is we now have before us a production facility 23 that its intended designed purpose is actually 24 purpose-built to receive organics the intention of 25 transferring it.</p> <p style="text-align: right;">Page 208</p>

<p>1 Q. So when you say "new processing technology," 2 you're specifically addressing what's in the black bin? 3 Or it could have been any of them? 4 A. It could have been any number of new 5 technologies. 6 Q. So according to your application, Recology 7 recovers 650 tons per day of compostable materials. 8 What would be the capacity of the new West Wing? 9 A. I would presume the capacity of the West Wing 10 would be in excess of a thousand tons. 11 Q. So based on the historic and projected growth 12 in the organics waste stream, what is the projected 13 useful life of the West Wing? 14 A. It would be -- I would project the useful life 15 in excess of 20 years. 16 Q. Do you think that's consistent with kind 17 of the changes that you've seen just as far as you 18 can tell? 19 A. Yeah. I mean, it will be a fairly robust 20 building. Given its current use, based on what I've 21 seen of the product, it's going to be a challenging 22 environment. It's going to require constant 23 maintenance. This isn't just a simple structure that 24 can just be left to take care of itself. It needs to be 25 cleaned daily, it needs to be washed. There's a lot of Page 209</p>	<p>1 Q. Okay. Would you like me to also -- I have 2 just some questions about notice to proceed and all 3 these things, but it sounds like I should wait for 4 Ms. Butler. 5 A. Yeah. She'll be presenting more of a 6 technical analysis of the process and what led up to 7 the existing permit. 8 MS. DAWSON: Okay. I'll hold the rest of my 9 questions until testimony then. Thank you. 10 THE WITNESS: Thank you. 11 REDIRECT EXAMINATION 12 BY MR. HUGHES: 13 Q. All right. Let's talk about the Trash 14 Processing Pilot, if you could. What is the idea of 15 running a pilot for trash processing? 16 A. Well, processing the trash, essentially 17 sorting through what we call materials in the "pit," 18 or the black bins, is sort of the new frontier of our 19 industry. Recology demonstrated quite a bit of acumen 20 of our ability to process recyclable organics, but we 21 haven't really had much experience processing trash. 22 So this is an important pilot for us because 23 it allows the opportunity to explore trash processing to 24 make some evaluations, assessment of the equipment 25 associated with processing trash. More importantly, Page 211</p>
<p>1 maintenance associated with this. As a result, there's 2 a lot of moisture; so we're definitely going to have 3 some challenges in taking care of this building. 4 Q. Okay. So in Recology's San Francisco 5 schedule H.3 in the rate application, it lists 6 the West Wing construction cost as \$18,857,170. 7 And according to Appendix A in the narrative summary, 8 the construction of the West Wing will begin in July of 9 2017 and be completed in August of 2018. 10 Has Recology received all the permits and 11 other approvals necessary to meet this timeline? 12 A. We received all the land use entitlements, the 13 zoning is all in order, and we currently have a permit 14 package in the planning department right now. And we're 15 in final plan check stages. We expect to have the 16 construction plans in hand probably within 30 to 17 60 days, definitely by inclusion of the rating process. 18 We anticipate that we'll be prepared to initiate the 19 construction process on or about July of this year. 20 Q. So how has Recology and the general contractor 21 agreed on final design, final construction schedule, and 22 final guaranteed maximum price for this project? 23 A. I think I'd like to defer that question to 24 Meghan Butler. She's the project manager who's been 25 working very closely with the design team. Page 210</p>	<p>1 it allows to understand the markets associated with 2 selling material that we derived from the black part. 3 Q. And then at a very general high level, can you 4 tell us how you go about processing trash? 5 A. Yeah. Basically the route trucks come 6 off the routes and we tip them on the floor. We run 7 the material through a size reducer, basically an SSI 8 Shredder. The SSI Shredder takes all of the trash and 9 makes it uniform. We then take that material and we run 10 it across a screen called a Lubo Screen. 11 A Lubo Screen essentially gives us what 12 I'd like to call the "wet-and-dry separation"; so 13 essentially the small four inch-minus material is 14 moisture-heavy, falls through the stream, and then the 15 four inch-larger material, the cans, bottles, paper, 16 plastic, goes across the screen. And then from there, 17 we've got two processes. One of them is the Orex Press 18 which takes the four inch-minus and then presses the 19 organics out of it, and we'll send that material to 20 East Bay MUD where it's converted into energy. 21 The "overs," material that comes off of the 22 Lubo Screen is really what the pilot's going to target. 23 And basically what we're going to do is we're going to 24 take the material, it comes off the screen, transfer it 25 over to Pier 96, and then run it across the purpose- Page 212</p>

1 -built piece of equipment where we can initiate the
2 process of sorting the trash.
3 **Q. What is Recology doing presently from a trash
4 processing perspective? Does it already have the
5 shredder and the machinery that enables the separation
6 and the using of the Orex Press?**
7 A. Yes. Currently we operate the SSI Shredder,
8 the Lubo Screen, and Orex Press. We will be
9 operating -- assuming it's approved, we will be actually
10 installing and operating the Zero Waste Processing Pilot
11 equipment operation over at Pier 96.
12 **Q. So the processing of the smaller material,
13 the organic smaller material is already currently being
14 done by the Orex and wasn't proposed in the rate
15 application as some means of processing the larger
16 material for recyclables?**
17 A. Yes.
18 MR. HUGHES: All right. I'd like to introduce
19 a new exhibit, 33, which is a 3D rendering of some
20 equipment that I'd like you to describe for us, please.
21 But let us introduce this first or get it
22 circulated. Thank you.
23 MR. PRADHAN: The document will be Exhibit 33.
24 (Exhibit 33 is displayed.)
25 ///

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1 (Exhibit 33, "Zero Waste Trash
2 Processing Pilot 3D Rendering [Recology],"
3 was admitted into evidence.)
4 BY MR. HUGHES:
5 **Q. Mr. Quillen, what is Exhibit 33?**
6 A. Exhibit 33 is an image of the proposed
7 equipment, essentially the Zero Waste Processing Pilot
8 equipment.
9 **Q. This is the equipment that would process for
10 recoverable recyclables, that is the oversized materials
11 from the trash?**
12 A. Correct.
13 **Q. And where does Recology propose this equipment
14 would be housed during the pilot?**
15 A. We would be installing this equipment at
16 Pier 96.
17 **Q. In space that's currently being used for what?**
18 A. Currently it's space that's not being used for
19 anything -- little bit of bale stores and equipment
20 storage. It's generally an unutilized department
21 building.
22 **Q. And what is it that you hope to be able to
23 accomplish by employing this equipment?**
24 A. Well, by employing this equipment we hope to
25 get an understanding for the material that we'll be

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1 processing in the future. This equipment will
2 essentially allow us the ability to experiment with the
3 waste stream and understand what type of materials --
4 what type of threshold the market will allow for those
5 materials.
6 **Q. In terms of a scale, how large of a pilot
7 program is this you're contemplating?**
8 A. The pilot is contemplating processing
9 approximately 100 tons a day.
10 **Q. And that's out of how many -- how much of the
11 collected black bin material?**
12 A. Nearly 10% of the material collected on the
13 routes.
14 **Q. So approximately 1,000 tons a day, it'll be
15 100 of it?**
16 A. Yeah. It's a fairly substantial pilot.
17 **Q. And do you have any estimates or projections
18 about the amount of recyclable material that you think
19 you'll be able to pull of that 100 tons of black bin
20 material a day?**
21 A. At this point, we're estimating about
22 25% recovery from the 100 tons. We believe 10% of the
23 material will come from the Orex Press operation, and
24 then we believe that we can recover 15% of the material
25 from the this operation.

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1 **Q. Do you have any expectation about the ability
2 over time for technologies or markets to allow you to
3 recover a greater amount from the black bin?**
4 A. We're very optimistic that as we continue
5 to operate the equipment, we'll learn more about the
6 material. As we learn more about the material and start
7 to actually collect the product, we'll have the ability
8 to test it in the marketplace. As we bring that product
9 into the market, we'll start to understand what the
10 issues are associated with the selling of these
11 products.
12 So you know, we do anticipate that over time
13 through our understanding and our ability to operate the
14 equipment, we should be able to derive higher diversion
15 rates. Potentially, markets could open up further
16 yielding other opportunities for to us market material.
17 MR. HUGHES: Okay. I think that's all I have
18 on the Trash Processing Pilot. So if Ms. Dawson or
19 anyone else has any questions on that, I'm happy to sit
20 down for a moment.
21 RE-CROSS-EXAMINATION
22 BY MS. DAWSON:
23 **Q. So can you just refresh my memory a little bit
24 about just how much of what's currently going to be in
25 the trash waste stream are you going to be trying to**

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<p>1 process during this pilot program? 2 A. We're going to target 100 tons per day. 3 Approximately 10% of what comes off the route trucks 4 will go through this pilot. And the target materials 5 will be the classic recycles: paper, plastic, cans, 6 bottles, cardboard, metal, wood. 7 Q. And through the results of the pilot program, 8 you're hoping to really gain more information about 9 potentially increasing capacity in this area? 10 A. Through the operation of the pilot, we hope 11 to understand more about the material that we will be 12 processing, the marketability of the materials. 13 And once we understand the material qualities and 14 quantities, we can start to make better and more 15 educated assumptions related to the throughput of the 16 debris. 17 Q. So have you also looked at or are currently 18 considering other possible technologies that you might 19 be able to use to process the black waste stream? 20 A. Not at this time. 21 Q. Okay. What equipment specifically is this 22 that you were using for the pilot? Are you able to 23 provide us a little more detail on exactly what you're 24 proposing to purchases? 25 A. Yeah. Essentially this is a European approach Page 217</p>	<p>1 The optical sorter is essentially use infrared 2 light to make an almost split-second determination of 3 what a product is and then sort that material; so it's a 4 mechanical method of sorting. The systems generally 5 sort product into two or three commodities. In this 6 case, we would be splitting the material in two 7 commodities. 8 We would then -- continuing straight, we've 9 got a Ballistic Separator or screen that would then 10 size-reduce. We could three-dimensionally sort the 11 material. At that point, we would be targeting 12 containers and things of that nature. And then we're 13 also proposing a secondary optical sorter off to the 14 right, which would further be able to sort the material. 15 MS. DAWSON: And do you have -- 16 Just a request of Recology or Counsel, for the 17 drawings that you've provided to us today, both of the 18 West Wing and this equipment, would it be possible to 19 label them in a way that you just walked us through so 20 for the benefit of the record and the benefit of the 21 public, I think it amends the equipment a lot better. 22 MR. HUGHES: Of course. 23 MS. DAWSON: And as far as the images of the 24 West Wing go, it might also be helpful to consider 25 introducing as evidence. And as it is of what's at Page 219</p>
<p>1 to processing trash. The system that we have on the 2 slide here, it is a proposal that we received from 3 Van Dyk Baler Corporation. If you'd like, I can walk 4 you through the equipment. 5 Q. At a high level, please. 6 A. At a high level, the little machine with the 7 grapple is obviously the excavator. The excavator would 8 take material from the route trucks and place it from 9 the -- 10 Q. We're starting on the left-hand side, just for 11 the benefit of everybody else? 12 A. Yes. So on the left-hand side we're able to 13 process material larger in the system. It will go into 14 a feed hopper, up an incline to there, and hit a very, 15 very small bale sorter station. We don't really at this 16 point in time want to spend much effort manually sorting 17 the material; so we're proposing an extensively 18 mechanical process. So essentially we'll have a few 19 individuals up there who will pull out large items or 20 things that could potentially damage the material. 21 The next piece of equipment, the one that 22 has that yellow hood is an optical sorter. The optical 23 sorter is generally. 24 MR. HUGHES: This hood, or back here? 25 THE WITNESS: That first hood. Page 218</p>	<p>1 Tunnel Road and marking the current condition, I've 2 seen such images, but they're not currently here. 3 Maybe you've got them lying in wait for me. 4 But in any case you don't, I would ask that 5 you do that because for those people, there are 6 certainly members of the public who've never had the 7 pleasure of being toured around the Recology facilities. 8 I think it would be very helpful to clarify kind of what 9 you've got today and what you're planning to do, 10 including labeling components of the new West Wing in 11 terms of how the flow works, where the loading and 12 unloading happens, things like that. 13 MR. HUGHES: I will. Thank you. 14 MS. DAWSON: So in terms of this particular -- 15 what the throughput is of the proposed Van Dyk 16 equipment, how much can be run over the line, what kind 17 of the respective output might be. Things like that. 18 MR. HUGHES: We will work on that. 19 MR. HALEY: No questions at this time. 20 DIRECTOR NURU: Okay. Can I get a showing of 21 how many people would like to speak in public hearing. 22 Okay. So we can go ahead. 23 MS. DAWSON: Does the Ratepayer Advocate want 24 a little bit of time as well? 25 MS. DILGER: Yes, we would. Page 220</p>

1 MS. DAWSON: So we might want to reserve an
2 extra little bit of time in case there's additional
3 follow-up from the information that the Ratepayer
4 Advocate provides.
5 DIRECTOR NURU: Maybe at this time I think
6 I'll just go ahead and hold off on public comment,
7 since we have about 25 minutes. Continue.
8 MR. HUGHES: We can go ahead and turn the
9 image off on the screen.
10 DIRECTOR NURU: Would the Ratepayer Advocate
11 like to come up.
12 MR. JONES: Great. Thank you for an
13 opportunity to do a few follow-up questions. A few of
14 these are just clarifying questions, and many of these
15 are basically relevant to some of the things that we've
16 been hearing in the now over 41 committee meetings that
17 we've had that pertains to the items that are in the
18 daily agenda.
19 EXAMINATION
20 BY MR. JONES:
21 **Q. The first question, Mr. Quillen, is just**
22 **confirming -- given your earlier responses, my**
23 **understanding or belief that the question is probably**
24 **more appropriate for Ms. Butler, but I just want to make**
25 **certain that at least it is due to your assessment and**
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1 **referral that that's the appropriate respondent for this**
2 **question. It has everything do with the West Wing**
3 **construction and the approval timeline. You indicated**
4 **July 17. It's a pretty aggressive dating. There's some**
5 **interest in the ability for Recology to maintain that**
6 **timeline. And what are the strategies that they'll**
7 **often do that does not subsequently end up increasing**
8 **the construction costs? And so either you can respond**
9 **or you can defer it for Ms. Butler.**
10 A. I think I can try to answer the question.
11 I think it's good to know we have a
12 fully-entitled project that's currently in the final
13 plan check at the Department of Building Inspections.
14 We received our first round of comments and we haven't
15 really seen anything in those comments that, in our
16 mind, would present us with a situation where we believe
17 that we're going to have much slippage from our existing
18 timeline. So as the operator, I believe that we should
19 easily be able to meet the July 2017 schedule. If you
20 need more details, Ms. Butler can talk about that in
21 greater detail.
22 **Q. Great, thank you. Relative to the route**
23 **changes, in order to restructure where you pick up --**
24 **all-in-one blue, black and green -- you'll need to add**
25 **some new routes. Again, how many routes are going to be**
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1 **added?**
2 A. That would be a question for Dan Negron, the
3 Sunset Scavenger General Manager.
4 **Q. And relative to the new routes, there was some**
5 **discussion around new head counts. So the question**
6 **around that confirming that there will be new hires.**
7 **Then subsequently, will there be local hires? And**
8 **what's the notification process for those potential**
9 **applicants?**
10 A. So once again, those will be questions for
11 Dan Negron.
12 **Q. Great, thank you.**
13 DIRECTOR NURU: Please, sir.
14 (Mr. Negron steps up to the witness stand.)
15 DAN NEGRON,
16 having been previously duly sworn,
17 was examined and testified as follows:
18 EXAMINATION
19 BY MR. JONES:
20 **Q. Good morning, sir.**
21 A. The question about truck routes, it will be
22 roughly 23 is what the plan is right now.
23 **Q. Great. And relative to the new hires?**
24 A. We have hiring requirements. Our HR
25 department will be definitely posting those positions on
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1 our careers website on recology.com. And we do have
2 somebody that responds. That's outlined in the
3 postings, as far as being a commercial driver.
4 **Q. Great. And how many new trucks will you need**
5 **to purchase to make the new route changes possible?**
6 A. Parallel with the drivers, 23.
7 **Q. Okay, great. And I know there was some**
8 **discussion around the shifts in Ms. Dawson's line of**
9 **questioning. And so just to be making sure that I got**
10 **the complete question, did you consider increasing night**
11 **shift pickups to take fewer vehicles to be less**
12 **destructive during busy workloads?**
13 A. That's always been a challenge for us.
14 Frankly, if you ask our drivers, they will always be out
15 there at midnight and be off the street by 6:00, even
16 with traffic congestions, but we have quality of life
17 issues that we mitigate. We work closely with the
18 Department of Public Health.
19 And so where we can, we'll start early as far
20 as what we call "commercial corridors." But generally
21 speaking, we don't really -- we start between 4:00 and
22 6:00 a.m. to reduce the noise complaints, which is the
23 biggest challenge.
24 **Q. With respect to the on-board problem**
25 **management system, how will it affect the daily trash**
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<p>1 pickup? 2 A. Actually, it will make it better, in the sense 3 that the route management system will guide the drivers 4 consistently every day. Our drivers have a close 5 relationship with our customers. And so the system will 6 provide consistency to what Minna Tao had mentioned. 7 When there is a backup driver, the customer, it will be 8 transparent to them because the driver's following 9 exactly the same pattern that the regular driver's 10 performed. 11 Q. And will those centers give you a sense of how 12 much trash is being picked up? 13 A. Unfortunately, no, it will not, as far as 14 individual setups. We still track tonnages based on the 15 entire vehicle collecting for the day. 16 Q. And can the data that you are collecting in 17 the new system allow you to possibly incentivize 18 discounted programs for good backers and folks who are 19 really contributing to the zero waste policy? 20 A. That system exists today as far as diversion 21 credits for those that are excellent recyclers. And the 22 City is a very big component of that; so I believe that 23 it will continue as far as the basic model for charging 24 for basic service. There's always going to be a 25 diversion credit of some sort.</p> <p style="text-align: right;">Page 225</p>	<p>1 film as opposed to the things we seem to be hearing more 2 of. 3 A. Yes. Bulky Item Recycling is a very popular 4 program, as we've talked about earlier. I will take 5 Ms. Dawson's recommendation and propose at the next 6 hearing, possibly improving the program depending on the 7 parameters. We are reliable on that to make the Bulky 8 Item Recycling a more responsive program for the 9 customer's needs. 10 Q. Great. And the next set of questions will be 11 mainly requested a little bit later, but I would like 12 submit some of the questions from the last hearing 13 associated with costs and incentives. 14 We've heard from many seniors and advocates 15 that the increase is too high for those in the senior 16 community, particularly, those on fixed incomes. How 17 will you address these concerns? And will there be any 18 discount available for those who need it? 19 A. We do have what they call "lifeline rates," 20 if they qualify. It's a 25% discount. I think our 21 controller, John, would be a better person to talk about 22 as far as the detail applied by it. But generally 23 speaking, yes, there is a plan in place that exists 24 today as far as the 25% discount for that category. 25 Q. Great. I think one of the things that's being</p> <p style="text-align: right;">Page 227</p>
<p>1 Q. Next question is also to types of recycling. 2 What are the types of recycling you'll be able to accept 3 and what's the cost to the consumer? 4 A. I can start from the collection side. So we 5 talked a little bit about we're going to add bags, we're 6 going to add textiles for folks to put in their blue 7 bin, unpainted wood, film plastic bags -- as far as the 8 collection side. As far as the processing side, Maurice 9 can probably talk a little bit about it. 10 MR. QUILLEN: The processing equipment that we 11 currently have installed at Pier 96 will be able to 12 handle the different commodities -- essentially 13 textiles, film plastic, wood and metal. As it relates 14 to the cost, it's difficult to quantify exactly how much 15 the collection of textile really impacts the rate 16 application. I think it's simply a function of the head 17 count associated with that material. And our rate model 18 is fairly complicated. There's many things that drive 19 how the rates are established. 20 BY MR. JONES: 21 Q. Great. And with respect to that, many of the 22 ratepayers we've been having conversations with have 23 consistently asked for more bulky item pickup and 24 e-waste recycling. So the question, I guess, is why the 25 focus on textiles and things like packing and plastic</p> <p style="text-align: right;">Page 226</p>	<p>1 requested for consideration is like that. To qualify 2 for that, you have to make less than \$24,000 dollars a 3 year. The cost of being in San Francisco, as we all 4 know, is extremely high; so it's a challenge for many. 5 And so just drawing back to that, that later we'll be 6 able to -- you know, the rate structure would be a 7 significant thing to hear a little bit more about later. 8 A. Okay. We can do that. We'll talk about it at 9 the next hearing. 10 Q. You mentioned earlier about good recyclers. 11 And so for those who do fantastic job and have weekly 12 pickups, what are the rate structures and incentives for 13 them to continue making less waste recycling and 14 composting more? 15 A. So the incentive as it exists today and what's 16 being proposed is in the service level talk with the 17 total gallons. So we talked about the 32 gallon black, 18 blue, and green. And what we're trying to propose going 19 forward is to focus on trash with the 16 gallon concept, 20 and then upsize their blue for 64 gallon. They're 21 basically gaining 16 gallons of additional capacity to 22 gain credit for those folks that you mentioned are avid 23 recyclers. 24 Q. Great. And one of the things that we've heard 25 consistently is that there's an interest for discounted</p> <p style="text-align: right;">Page 228</p>

<p>1 rates for low waste generators. Has that been factored 2 into the possibility of entering this structure? 3 A. Well, we're proposing this 16 gallon. But if 4 it deals with rate, I probably want to defer that to our 5 controller because there's an impact across the entire 6 spectrum when you start isolating certain types of 7 categories. 8 Q. Okay. Lastly, just kind of want to walk 9 through service level adjustment bin size. So with the 10 new rate structure, based on people exchanging the bins 11 for a new bin sizes, how much is the increase if the 12 ratepayer keeps their old bins? Is that even an 13 possibility? 14 A. It is a possibility. We factor that we're 15 just going to give them a new 16 gallon. That container 16 doesn't exist today; so that's a minimum. And then we 17 want to give them a new 64 gallon blue that doesn't 18 exist currently with the standard setout. 19 And so the customer can, in theory, decline 20 the change and stick with their existing service. But I 21 think a gentleman talked a little bit about those 22 scenarios as far as the those customers that refuse to 23 make the change and what that cost will be to them. 24 Q. Great, thank you. And could you briefly 25 describe the difference between the default sizes? Page 229</p>	<p>1 along can understand what you're talking about. We're 2 all kind of guilty of knowing our own business overly 3 well. 4 And then in particular I noticed the use of an 5 acronym, "MSW," Municipal Solid Waste; is that correct? 6 So I would respect -- I know it's very hard, but I ask 7 that we all we try to use either the full term or common 8 language so that at least the people reading the 9 transcriptions or following along at some point can 10 understand what you're all talking about. 11 THE WITNESS: Absolutely. 12 MS. PEARCE: Thank you. 13 MR. HUGHES: Thank you. 14 DIRECTOR NURU: Thank you. 15 So we will go to public comment. 16 PUBLIC COMMENT BY MARC CHRISTENSEN 17 MR. CHRISTENSEN: Director Nuru, Panel 18 Members, Recology members present, Ratepayer Advocate 19 members present and ratepayers, I am Marc Christensen. 20 I represent a neighborhood association, but I'm not 21 speak -- I'm the president, but I'm speaking only as an 22 individual today; so I'm not going to mention the 23 neighborhood association -- well, respect the 24 neighborhood association. I have two areas that I'd 25 like to address, and hopefully I could have three or Page 231</p>
<p>1 A. Absolutely. So as it stands today when a 2 customer starts service, it starts with a 32 gallon 3 black, 32 gallon blue for recyclables, and 32 gallon 4 green for compost service. So basically 96 gallons of 5 volumetric service. 6 What we're proposing is a 16 gallon trash, 7 which is cutting their trash in half, and then getting 8 them to sort their materials more towards the 32 gallon 9 compost and 64 gallon -- doubling their 32 blue to a 10 64 gallon blue so that gets more material out of the 11 trash. 12 Q. My final question is what's the justification 13 for the new \$20-dollar-per-unit fee? 14 A. The fixed charge. 15 Q. Great. 16 A. Yeah, I'll have John Porter talk about that 17 specifically. 18 MR. JONES: I don't have any more questions. 19 Thank you. 20 DIRECTOR NURU: Cross-examine? 21 MS. PEARCE: I don't have a cross-examination, 22 but I do just have two quick comments for Recology. 23 You refer a lot to "setout." It might be good 24 to try say in more plain English what we mean by that 25 when we're talking just so people who are following Page 230</p>	<p>1 four minutes to do that. 2 First has to do with how Recology can save 3 money. As you know, several million dollars a year is 4 lost in pilfering. And one of the things that I'd like 5 to put down here -- 6 (Exhibit 34 is displayed.) 7 MR. CHRISTENSEN: This is something that was 8 given out a while back, and everybody on our block has 9 one of those on our can. However, it's not enforced, 10 obviously. And that's one of the things we need do. 11 We need to do two things: find some locking mechanism, 12 maybe with a fob that the driver comes up and unlocks 13 it, and something along that line, well, we really need 14 to look at that to prevent pilfering. 15 Because once a person then enters a locked 16 container, that's breaking and entering. And we know 17 that once a material has been put in there, it's the 18 property of Recology. So it's several million dollars 19 that being pilfered; so there needs to be a way that to 20 prevent that. 21 Another thing that needs to be done is if 22 Recology could tell customers within a two-hour period, 23 hopefully, of when they would actually be picking up, 24 people could then put that material out. At my house, 25 on my block, the green bin is picked up sometime between Page 232</p>

<p>1 4:00 and 7:00 in the morning. The black and blue bins 2 are picked up anywhere from 4:00 in the morning until 3 11 o'clock in the morning. It would be nice to have 4 more time when we could put it out and prevent 5 pilfering. So that's no. 1. 6 Second of all, I propose -- 7 Yes? 8 MR. PRADHAN: Sorry, just one second. 9 Do you happen to have a copy of the document 10 that you have up, just for the record? 11 MR. CHRISTENSEN: I'm going to give you this 12 copy. 13 MR. PRADHAN: Perfect. Thank you. 14 MR. CHRISTENSEN: And I also gave Recology. 15 They have several of these. So anyway, thank you. 16 The second thing -- and I think this is very 17 important and will save Recology money -- and I'm 18 willing to do this as a pilot program in my 19 neighborhood; we've done it on our block. We have 20 people who put their bins out next to each other. 21 And as you know, the trucks run down the street, they go 22 pick up at one house, move 25 feet, stop, pick up again, 23 move 25 feet, stop, and pick up again. This is not 24 cost-effective. 25 Both for the time on the street, I think the Page 233</p>	<p>1 rate increase in 2017, 2018, 2019, equal across the 2 board is much more palatable than having those two first 3 massive rate increase the first year. So that would be 4 my suggestion. And thank you very much for your time. 5 Thank you. 6 DIRECTOR NURU: Next speaker. 7 PUBLIC COMMENT BY TOM WILLIAMS 8 MR. WILLIAMS: Good morning. 9 There's a charge that Sunset Scavenger 10 assesses that I don't see addressed in any of the 11 literature I looked at, and that's rate for splitting 12 billing for one point of service. For instance, in my 13 building, in our entryway, we don't have room for two 14 sets of trash cans; so my upstairs neighbor and I shared 15 the trash cans and we each receive a bill. But Sunset 16 Scavenger, instead of just splitting the bill in half, 17 splits it in half and then charges 150% of that half so 18 that we wind up paying a 150%, a bit more of a fee. 19 I understand that this might be some problem 20 for a bookkeeper somewhere, but the computer-generated 21 bills, I have noticed that much of a burden and I don't 22 think that this fee is justifiable. I think it's rather 23 arbitrary. I would ask that you take a look at it. 24 Thank you. 25 ///</p> <p>Page 235</p>
<p>1 drivers -- if we put our bins next to each other, two 2 houses, possibility three, you put the bins next to each 3 other -- and I'm willing to meet with somebody with 4 Recology in my neighborhood, go out with chalk -- blue, 5 green, and either black or white chalk -- mark areas 6 with the address where you want those bins put. We get 7 trucks on and off the street quicker, less stops, much 8 quicker service, and I think that would help. So I'm 9 willing to work on that. 10 I'd also like to see Recology at least put 11 this into their bill -- put the notice in the bill. To 12 do this, I think this is a good way to educate neighbors 13 on what they can do to help out. 14 Secondly -- and this is other thing I wanted 15 to talk about -- and that's rated increase. I really 16 believe that 16% on the fist year plus another 5% the 17 next year is way too much. I would be willing to have 18 discussions and negotiations on a percentage rate 19 increase over the next three years that's more 20 equitable. Perhaps start -- and I don't have the 21 figures. 22 And Recology should certainly make a profit. 23 Nobody's denying their costs; they should definitely 24 make a profit. But what profit is reasonable for the 25 ratepayers of San Francisco? So I think a percentage Page 234</p>	<p>1 PUBLIC COMMENT BY DAVID PILPEL 2 MR. PILPEL: Good morning. David Pilpel. 3 Here are some comments that have I at this 4 time. 5 I mentioned last week some issues about the 6 DPW website. I noticed Monday a number of additional 7 documents were put up there and I appreciate that. I'll 8 continue to work with staff on getting more recent 9 information there, particularly as the hearings proceed. 10 For example, that next week's agenda will be up by this 11 week. 12 I also asked last week about the public 13 exhibits binder. I thought that was in the works, but 14 on the table I don't see one today. There were a couple 15 of exhibits I think that were handed out earlier that 16 weren't -- double-sided, and I think in compliance with 17 our Environment Code, we should have all exhibits 18 double-sided. Robert smiled. 19 Also, yesterday I attended the Port Commission 20 hearing on the island proposal at Pier 96 with Maurice 21 and others. I think that went well. I assume we'll 22 hear more about that both from Maurice and probably from 23 Meghan. If they don't, I intend to introduce as an 24 exhibit the Port Commission agenda item and 25 presentations made last week; so I think that should be Page 236</p>

<p>1 on the record. 2 A few other bits and pieces. I had a good 3 conversation with lots of the Environment staff 4 yesterday about textiles, dog waste, and the PERA and 5 options to improve recovery of materials from what was 6 known as the "PERA" which I now I understand is being 7 called a "PRRA," just as what used to be known as "Bulky 8 Item Collection" is now being called "Bulky Item 9 Recycling." So I'm trying to avoid using acronyms, 10 as Julie requested, but I think those program title 11 changes should be made clear. 12 As we heard from Dan Negron earlier, there's a 13 lot that goes into routing and mapping. I think one of 14 the primary goals that wasn't discussed a lot was really 15 minimizing the number of containers at each location and 16 the number of lifts, and I think Marc Christensen really 17 spoke to that a little bit. 18 Whatever amount of material is out there, 19 the arrangement that gets to the smallest number of 20 containers really gets to greater efficiency for 21 everyone, and we should look to that. 22 When Dan talked about having more drivers and 23 more routes and minimizing the amount of overtime, there 24 was some contention there, and I know this from MUNI 25 scheduling. If they reorganize -- or if the rerun the Page 237</p>	<p>1 I'm also assuming that what Dan presented 2 applies equally to Golden Gate and what has been 3 presented applies equally to Sunset. 4 Combining the Bulky Item Recycling that would 5 be under the material programs we'll hear about in the 6 next couple of weeks, I suppose. There's also the 7 Gigantic 3 program that I know you're a big supporter 8 of. There's -- in my experience, there's only limited 9 outreach and understanding of what that program. When 10 I served on a City task force, I got a regular mailing 11 from your office, actually, that announced when the 12 Gigantic 3 was happening in my district. 13 As a regular Recology customer, though, 14 I don't get any customer communication indicating when 15 that happens. So it's kind of like if you know about 16 it, it's a great thing; if you don't know about it, 17 you won't avail yourself. The more people that use the 18 Gigantic 3 instead of Bulky Item Recycling, it's a more 19 efficient approach because you just pack and there are 20 trucks and all that. 21 Do you want me to wrap up? 22 DIRECTOR NURU: Yes, please. 23 MR. PILPEL: Okay. Shall I cut it there and 24 we'll continue more next week? 25 DIRECTOR NURU: All right. Page 239</p>
<p>1 routing to include more overtime and fewer drivers. 2 So rather than an 8 hour operation, moving to an 3 8-and-a-half or a 9 hour operation, even if that 4 encompasses more employee overtime, it results in less 5 head count and it probably results in less overall costs 6 considering the framing of the costs. So they shouldn't 7 consider others in those scenarios that might result in 8 fewer routes -- more overtime, but fewer routes and 9 fewer trucks. 10 Although there are split-container trucks, 11 there was no discussion today about the 50/50 trucks 12 versus the 60/40 and what's more efficient given the new 13 black/green scheme, understanding that both black and 14 green are driven more by weight than volume. Blue is 15 more driven by volume, but black and green are more 16 driven by weight. And it's not clear to me which truck 17 kind of makes the most sense under the current scheme, 18 and depending on the shipment of materials, what's the 19 better truck type for the split-chamber approach. 20 Also, the customer behavior changes that 21 Recology included were supposedly based on the pilot, 22 but I'm not sure that there is a lot of evidence yet on 23 the record to support that there's actually going to be 24 a massive change in customer behavior because they got a 25 larger bin and a smaller black bin. Page 238</p>	<p>1 MR. PILPEL: Okay. And I'm intending to put 2 together more comprehensive comments. 3 The one thing I wanted to close on -- sorry. 4 Rachel Warden gave me this the other day. 5 It's the new Public Works logo. I think you should 6 actually have a smaller black bag and a larger blue bag; 7 so if you could think about it. 8 DIRECTOR NURU: Thank you. 9 MR. PILPEL: Thank you. 10 DIRECTOR NURU: Any other public comments? 11 At this time I would like to continue the 12 hearing to March 22nd, 8 o'clock in the morning. 13 We will meet in 406. We will post the agenda for that 14 day as well as for the final scheduled hearing -- 15 Tuesday, March 28 -- at the end of the week on the 16 Public Works website and on the announcement board. 17 I would like to thank everyone for 18 participating in these proceedings, and we are 19 adjourned. Thank you. 20 (Ending time: 11:03 a.m.) 21 22 23 24 25 Page 240</p>

<p>1 REPORTER'S CERTIFICATE 2 3 4 I, MAXIMILLIAN A. CONTRERAS, CSR No. 13876, 5 Certified Shorthand Reporter, certify: 6 That the foregoing proceedings were 7 stenographically reported by me at the time and place 8 therein set forth and were thereafter transcribed; 9 That the foregoing is a true and correct 10 transcript of my shorthand notes so taken. 11 I further certify that I am not a relative or 12 employee of any attorney or any of the parties nor 13 financially interested in the action. 14 I declare under penalty of perjury under the 15 laws of California that the foregoing is true and 16 correct. 17 Dated this 5th day of April, 2017. 18 19 20 21 22 _____ 23 MAXIMILLIAN A. CONTRERAS 24 CSR NO. 13876 25</p> <p>Page 241</p>	

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