

# Austin Energy Utility Oversight Committee Meeting

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>> So I notice that it's 1:35 and we don't have quorum. I'm going to give folks two more minutes, and then we will unofficially get started. We don't have any action items at the front end anyway. Then I'd also like to make note that Kerry, who chairs the electric utility commission is going to be joining us from here on out as the chair of that citizen commission, and he can weigh in as he feels it necessary. So welcome, Kerry. We're really glad that you're here. I'll more formally call us to order when I get a quorum, but we'll give it two more minutes. >> I'm going to go ahead and call us to order. And there's our -- as our colleagues sit down, I will notice them.

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Elaine, we're going to get started in just a minute. All right. I'll go ahead and call to order the Austin energy utility oversight committee. It is Wednesday, February 28, 2018, and the time is about 1:36 P.M. We're at Austin city hall, 301 west second street, Austin, Texas. Mayor Adler, councilmember Flannigan, the chair of the electric utility commission, Kerry, and I are here with assistant city manager Robert Goode and a representative from the law department. We'll go ahead and move forward with the things we can do that don't require any action so I will put on the table approval of minutes and move directly to citizen communication general. I have one person signed -- let's see, two people signed up. I'm sorry. Four people signed up for item 2, and that would be Gus Pena, kinesh well, Barbara, and Paul. If y'all didn't get it right this time -- great. Who all is here? Is Mr. Pena here? Is kinesh wells here? We'll move directly to Paul Robbins and Barbara, Sally, if you would look to come up to the table. Remember to turn on your mics. You can't see the red band but that's what indicates the microphone is on. And, Paul, you will have three minutes. Do we have somebody who can keep time for us? Okay. Thank you so much. >> Goodness, do you have sometime that can turn on the mic? >> Pool: It's on multiply welcome, Mr.

Robbins. >> Good evening. Council, I'm here to speak about two things in the brief time I have. First, as you know, I've done considerable research on the customer assistance program in an effort to fix

[1:38:54 PM]

problems. And in the process of this research, I've found something unexpected, a surplus of money. Since 2015, it's been stated publicly, I think several times, that the program is going to run out of funding and at some point we need to shed some of the participants from its rolls to stay within budget. But after several years, the funding has not run out, and out of curiosity I asked for the balance. At the end of fiscal year 2017, cap had over \$7 million in excess funding due to obligations of some of this money this surplus will likely dwindle but I still expect there to be three-\$4 million of surplus by the end of 2020. Over the last several years there's been increased discussion of how to better assist low-income customers with conservation services. One of the alternatives is direct installation door to door of efficiency measures in low-income neighborhoods. Using half of the estimated surplus to pilot this concept seems to be a good idea, and I'm asking you to pursue it in the next budget year. The cap program only gives about one dollar to a customer for every dollar spent, and cap free weatherization results in as little as 25 cents per every dollar spent, a direct installation program for low-cost, high pay back items, such as leds and low-flow shower heads has potential to save customers several dollars for every dollar spent. Council, let's try something new in the next budget year. And most people that propose new programs don't have a funding source.

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I do. The other thing that I wanted to highlight real quick, you'll remember that I appeared before council a few weeks ago about the Texas gas service conservation program and how they were not cost effective. Today Austin energy will be releasing their 2017 program evaluation, and in the appendix you'll find a cost effectiveness evaluation for the 2017 programs and you'll find that all but one, the weatherization program, pass benefit cost analyses, and this is something that Texas gas service should do. [ Buzzer sounding ] In their next budget cycle. Thank you. >> Pool: Thank you, Mr. Robbins. You have three minutes as well. >> Barbara Sally from lost creek. I have good news today. It turns out I'm really tall. Who knew? So I measured just from the solves my feet to my knees and my calves are really long. Based on what I call my base rate, it turns out I'm one of the tallest people around. So that's why I was uniquely able to follow Austin energy's presentation last time when they said their bills are kind of moderate, you know, they're just right in the middle. As long as you're only looking at the base rates, you know, we don't need to charges, the punitive rates, all the fees. No, that's apples and Oranges. Councilmember troxclair said, well, aren't you comparing the fees too to get a full picture of what -- how to compare water bills? And Austin energy's response was, well, you know, we can't do that because a lot of municipalities don't even charge fees. Councilmember troxclair said, "Well, that's kind of

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my point." So I want to urge you to do a real comparison study that takes into account our entire water bills. As consumers, we do care about the individual components, but we are looking at the entire picture, and we ask that you do also. A consumer publication called "The cheat sheet" in November '17 titled "Water bills are getting out of control in these 15 American cities." Guess which one was number 1 in the entire country? Yes, Austin, Texas. No city in America has seen water bill prices increase over the past few years like Austin. According to the analysis water costs have gone up 31% since 2014. Austin is increasing the cost of water for its highest-volume users. The city utility is also charging higher fixed fees. So please take all that into account. You know, it's been an extraordinary four weeks. We've had a public apology, life conference from Austin water and energy, which was a vindication for me because of the way lost creek was treated in the past. I've talked to you before about how completely erroneous information was given to council about lost creek and we caught that error. That was very unfortunate. That was part of the erosion of trust that mirrors what's happening across the stickers a erosion of trust in Austin water utility. We're trying to push the bus around. I appreciate that. I've met wonderful people at Austin energy, starting with Kerry -- lots of wonderful people, I'll butcher his name [ saying names ]. I appreciate those good apples. I appreciate the work you see us doing. I'm glad to have the commissioner here. We have not had those results at wastewater commission. [Buzzer sounding] It's been unfortunately kind of a love fest over

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there. I'll talk to you again about smart meters and remind you not to put all your hope in those as your savior because there are some issues with those, as Greg has pointed out. Thank you. I was glad to be here and I'm pleased with the direction we're heading. >> Pool: Thank you, Ms. Sally. I appreciate that. Looks like we have a quorum now. Councilmember Renteria, mayor pro tem tovo, mayor Adler, councilmember Flannigan, councilmember kitchen, councilmember Casar, and commissioner Kerry from the euc. So let's go back to item number 1, approval of minutes. If I could get a motion? To approve the minutes if there are no corrections. Councilmember Casar moves. Councilmember kitchen seconds. Any comments? All those in favor please raise your hand. It looks like it is unanimously approved, with, let's see, councilmember alter and Garza and troxclair off. And Greg is sitting with councilmember Houston's name tag, so we can swap. [ Laughter ] Just noticed. All right. Okay. We'll move on to item 3, the briefing, and thank you for being here today. I understand that general manager sergeant is at a conference today. Is that right? >> She's travel today, yes, ma'am. Thank you. We're going to go ahead and start -- I'm Elaine, the chief operating officer for Austin energy and we'll start today's general manager report with an update on the residential water bill issue that you just heard about in citizen communications. >> Pool: Not hearing you real well. Maybe bring that a little closer or turn it up. . >> Better? >> Pool: Yes, thanks. >> Okay, great. >> Good afternoon, councilmember pool, mayor pro tem, councilmembers. Kerry Overton with Austin energy, deputy general manager chief compliance

[1:47:02 PM]

officer. As part of the general manager's report wanted to give an update on the high water bill briefing and the activities that have taken place to date. As you're aware, in October of 2017, we noticed an unusual spike in high water escalations. In working with the water department, we began a process of doing analytics and beginning to try to find out what the root cause of some of the customer escalations. We begin by looking at some systematic components of the bill. We looked at bill consumption, looked at water pumpage, bill estimates, and we also began a process of looking at our bill cycles. We did not identify a systematic root cause at that time, but we did have signs that led us to looking at some individual routes, individual customer patterns that drew our attention to a further and a deeper analysis. That analysis led us to 135 specific routes where about 17,000 customers were experiencing this unusual pattern of a very low October read followed by -- I'm sorry, August read followed by high September read. Of that 17,000, 7,400 customers actually, because of the way in which the consumption red low to -- read low to high, it kicked them into a higher tier. We began to do some corrective measures of what we call bill smoothing, working with the water department, and we looked at what it would be if it was average without taking those customers to a higher tier, and those customers that would have now received a credit due to that change, we began a letter campaign and notification of those customers. And I want to say fairly close to about 100% of those customers have began

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to already see the credit on their bill and they've been applied to their account. There have been another number of customers outside of that 7400 that actually we still did the analysis of the bill smoothing, but they would have ended up at the same level or would have received a debit, which means they would have owed the city money. We did not go back and collect on those accounts. So in essence, on the bill smoothing process and our analysis, we're projecting that it would be concluded around March the 15th, but, again, what we've shared with our utility commission, that if we still receive customer calls or we see reasons to review individual accounts, we will still do that beyond that time period. Letters of notifications have gone out. In that process, we also have begun a process of looking at quality control measures and working very closely with the water department. Many of those we've already instituted. One of the main ones was moving forward as we begin 100% photos, in addition to the meter reader being on-site. That establishes at least two things, if not more. One, that photo establishes a gps positioning of the meter reader to the read and the read meter number, and also it gives us a backup for what the meter reader saw in reviewing that account, and that's also entered into our data. Beyond that we've done some other quality controls and those items are in place, and we've been communicating those with our -- with both the water commission and the utility commission. Just to give you a summary, back in February 12, we met with euc task force members and provided more additional detailed analysis of our progress. We met with the water and wastewater commission mid-february.

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We just recently met with the electric utility commission and provided a more formal presentation. We also continue to meet with many of our neighborhood and customers that had very specific complaints and we started the process of addressing those. Not all of them have been completed, but a great deal of those have been worked out to where we could apply something systematically to the customers. And where they had unique situations, not all of the complaints were part of this bill smoothing, but if they had additional complaints we also made contact with those customers. So at this point, moving forward, what we would report to you, council, is we will continue those meetings with the commissioners. We also will -- we provided additional training to our costs and our reps particularly focusing on tone and empathy and that's going very, very well. Our entire call center has been part of that initiative and I've even taken a sample of some of those calls without them knowing, and I think we're doing a very good job in my mind. So we'll continue to coach and develop as we get feedback from the customers to make those adjustments. We also -- what you can expect is the water department will bring forth to the water commission and then later council some additional recommendations for policies around their adjustment policies, meter replacement, and the way in which they handle water leaks. We're not prepared to go into that today, but they're going to formalize their presentation and bring a set of policy changes very shortly, and I think it's estimated to be April, is what I'm thinking. That concludes the general manager formal update and if you have any questions I'll be glad to take them. >> Pool: That's great. Does anybody have any questions for Mr. Overton? Yes, Mr. Flannigan. >> Flannigan: I just wanted to thank, again, Austin water and Austin energy for taking this concern

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seriously by the community. I know I had many folks from district 6 experiencing this water bill issue, and even though in the beginning it was a frustrating experience, your staff continued to work on it, my staff tendon work on it, I know other council offices were doing the same and I can't tell you how much my community appreciates receiving an apology. I know that wasn't easy to do, but it was so valuable to the community to rebuild the trust that we are going to work together to make sure that we're doing the right thing. So I just wanted to thank you for that. >> Thank you. >> Pool: Great. Anybody else? Mr. Renteria. >> Renteria: Yes. I don't know if I missed it, but did y'all find out what's causing the problem? >> Simultaneously to the analysis and the credits that we're providing, we're continuing to work with the previous vendor. They are cooperating, and we're giving them a set of data analysis that has not been concluded at this point. >> Renteria: Okay. Thank you. >> Pool: Anybody else? Yes, mayor pro tem. >> Tovo: Sorry, I know we've talked about this recently, but you're talking -- you're referring to the previous vendor. Are we no longer using that particular vendor? >> That's correct. >> Tovo: This was in that period of time where that was sort of the last bit of their time as vendor and then we switched over? >> That's absolutely correct. >> Tovo: Your memo had talked about that. I had just forgotten it

until this minute. Thank you. >> Pool: All right. Thanks, Mr. Overton. >> In continuing the general manager's briefing, the next item I would like to share with you are upcoming procurements and I don't know if we have slides that might be helpful to follow along? The first is a heavy hauling services contract which will be coming before you. It's a five-year contract, valued at just over \$2.9 million. It was competitively bid. And the current provider was the selected offerer. We use this heavy hauling service for moving large

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equipment. In the next five years we have over 17 very large transformation and substation projects, and these services are going to be essential. One item of note on this procurement, if you look at our historical expend requested ask, we are looking for an increase in services just due to this large amount of work that's coming forward. We also have a contract, it's actually an interlocal agreement coming forward this week. It's coming through fleet but I thought I would mention it here . For dielectric testing services with rcla. They test a lot of our electrical equipment for us, provisioned to do so. The lla is five years in duration, \$3.5 million in value. These are essential to ensure our equipment is safe for our electricians who use it and get near energized primary. A third purchase I wanted to bring to your attention is a domain chiller purchase, coming before you March 8, valued at \$2.8 million. The selected offerer was selected through a competitive process and euc approved this contract on Monday. This is to replace an aged chiller up at the domain, the chillers that have been up at the domain have been systematically replaced. They are vintage 1980s, various periods, so it's time for a more efficient unit, as well as increasing the reliability of the units. And the next month we will be coming back with a more detailed briefing. This spring we expect to bring an rca to you for construction services associated with the third downtown district cooling plant, and that's going to be a sizable amount of spend. So we want to make sure that you'll have the information in the briefing ahead of that rca. Any questions about upcoming procurements? >> Pool: Anybody have any questions on these items? I'd like to ask if you would be willing to meet individually or in small groups of councilmembers if they -- on the downtown district cooling plant number 3 that might be helpful in advance of the briefing that you give us.

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And then we can maybe move through -- get some questions in advance prepared for that. >> Absolutely. >> Pool: You can reach out to the various offices and set that up? >> We will. >> Tovo: Quick question, this is the one we had a briefing about. >> You did. That's prior to -- going into design. We issued a contract for the design of the plant. That is complete and this is actually issuing an rfp, and we're actually in the procurement process right now for the construction services, and it's a significant amount of spend. >> Tovo: Thank you. >> Yes, ma'am. >> Pool: Great. Thanks. >> Next item I'd like to brief y'all on are the moonlight towers. I know council offices have received questions about who moved my moonlight tower, where did my moonlight tower go? For a little history, Austin energy contracted with a firm called intertech resources a little over a year ago to restore the 17 moonlight tower towers

that we have in our community. That work is underway. So when they're moving through the restoration process, they go on-site, dismantle, sandblast them, and them and repaint them. All of the moonlight tower towers are going to be retrofitted with new leds and new electrical components. It's been almost 30 years so it's time to update them. The moonlight tower towers that have been completed and are reinstalled, I'll show you a map in a minute, are listed there. There are two currently out for work. And so I think tower 15, which is on east 11th and Lydia was certainly one that folks were asking when that one was going to come back. We did run into some unique repairs. Each repair is a little bit different, so that one has taken a little longer but we are expecting to put that moonlight tower back in service, the last weekend in March. This really brought to

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light that, you know, maybe there's communication gaps. Certainly we've talked about this in public but at each location we haven't put anything in place letting the community know what we're doing. So moving forward, as each tower is removed, we're going to put some signage at the location, letting folks know where the moonlight tower went and when to expect it back. In addition we're going to reach out to local groups in those areas to notify them of the work and give them updates. If you're interested in a map of where the moonlight towers are, this is too small for me to read, but all of the blue dots are where the moonlight towers are currently located. Yes, ma'am. >> Pool: Quick question. Do you remember in the heyday of the moonlight towers how many total were there around the city? >> Originally, Austin had 31 moon towers and over time we've shrank to these 17 but it is our intent to maintain the historical characteristics and functionality of these 17. >> Pool: Any other questions about the moonlight towers? Yes, mayor pro tem. >> Tovo: Quick one. I want to thank Austin energy for its stewardship of these important historic resources. I believe that we are one of the last cities in the country that still has moonlight towers, is that correct? >> Only one. We're the only one, yes, ma'am. >> Tovo: That's wonderful. I think they're important to maintain. So thank you. >> Yes, ma'am. The last item that I wanted to share in the general manager's report is really a recognition item. This past weekend we held the 62nd annual Austin energy regional science festival. We had 2,839 students from 272 schools representing 21 central Texas school districts submit 2,499 projects. One project short of 2500 projects. Really just we wanted to extend congratulations to all of the winners. The students are phenomenal. Just as an FYI, all of the first through third place

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winners go on to state competition, which this year is held in San Antonio at the end of March. Six best of fair projects will also qualify for going to the international Intel science fair, which this year is in pittsburg. It's a phenomenal event and our students have always competed very strongly at international so we're very excited. Austin energy would really like to thank the city council for their support. This fair is the largest community event that Austin energy sponsors, and we really could want do it without all of you. In particular, really would appreciate councilmember pool presenting and

speaking to the youngsters, right, the elementary school students on Saturday. That meant a lot and was just terrific. So thank you. I think it's so important for us to thank our sponsors, our judges, and volunteers as well. We had over 600 judges. These are folks that live and work in Austin and they take a day out to go and judge projects. So it's really phenomenal. This year we had over 600, it was the largest number of judges we've had in the fair history. And then we certainly can't leave our employees out. This event is -- if you haven't been I'd encourage you to go but we couldn't make it successful without our employees, and we have some of them here and wanted to recognize them. So if you guys would come on up. So this team actually is in marketing and communications, but they are the backbone. They do a lot of the heavy lifting and prep. We have Tamara, Norma, Luis, Tina and Danielle. These folks are never in the spotlight but we wanted them in the spotlight because they really make this event fun and successful. [ Applause ] >> Thank you so much. >> Pool: I just wanted to say it really was quite a special afternoon to be there and an honor to be asked to help up on the stage. I was feeling some -- filling some fairly substantial shoes because the mayor pro tem has done this in the past, and she

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had told me what fun it was, and I'm really glad that I went. And I really thank you to Austin energy for continuing to be the city sponsor for the regional science fair. It's such important work, and the energy and literal electricity in the room was really contagious. It was pretty special. >> Well, thank you. With that, that concludes the general manager's report. The next item I have is an operations briefing that I'll deliver. Any other questions for the general manager's report before I begin the next set of slides? >> Pool: While we're just taking a break I wanted to acknowledge councilmember alter has joined us as has councilmember Houston. And I think we are -- and I think councilmember Garza will be down about 2:30. One of the folks who had signed up to speak to oust during citizens communication is now here. Kinesh wells, and I do hope I'm pronounce og your name properly, ma'am. Please come up here and you'll have three minutes to speak to us and we have someone who can keep the timer for us. Welcome, Ms. Wells. >> Hello, how are you? >> Pool: Good, thank you. >> I used to work for the state of New York for several years. And I just moved down here to Austin, Texas, about a year ago. And the thing is Austin is getting so expensive. Utility bills have gone up tremendously. One of the things I used to do for the state of New York is I used to work with the government in new York City and trying to provide affordability utilities for senior citizens and people that were struggling to pay their utility bills. I know today's topic is not

[2:05:08 PM]

about the rent in Austin, but I do want to mention the rent because I don't often get to come to these meetings. I would like to see for someone to push forth the change to lowering the rent in Austin, Texas, and also lowering the utility bills in Austin, Texas, for not only senior citizens, but for people like myself, who are in a homeless situation. Right now I'm currently homeless and out there on the streets because I cannot afford the utility bills in Austin, Texas, and I cannot afford the rent in Austin. And I've been

sleeping behind city hall because this is a nice location, and I like sleeping around city hall. But I would like to see for someone to be able to help the homeless in this area and also try to see about building more affordable economically apartment complexes and also energy saving type of utility bills, apartment complexes, something that can be economically friendly to people that are struggling here in Austin. So that's what I want to speak to you about. >> Pool: Thank you so much, Ms. Wells. We appreciate you being here. I noticed that Mr. Pena is here as well. Mr. Pena, come on down. >> Thank you. >> Pool: You have three minutes. >> Thank you very much. >> [Off mic] >> Madam chair, good afternoon, Gus Pena, members. Look, I'm a native east

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austinite. I ran for city council twice, at large, and justice of the peace. It was tougher even then. Austin has gotten too expensive, chair and members. Electricity is very expensive too. I have known -- seen people who have their electricity cut. But you know what? I have a good saint -- he's a good friend of mine, Kyle of the city manager's office has intervened on people's behalf. I want to thank that young man because I said we don't need anybody to give him credit for the electrical bills. It's tough enough to pay the expensive rent here in Austin, much less the -- I don't know what's going on, if they have -- they don't have energy -- conserving energy with their apartments or whatever, but I'm glad that we have people like Kyle carveville that will intervene on their behalf and not get services cut. Give them a second and third chance. There's good people out there that ain't making the money out there, and I know a lot of them also. But I just wanted to say thank you and thank this committee also. But it hurts me to see, especially women, homeless. Can't let that happen. I've been working on the homeless issue since Bruce Todd's administration, and we need transitional housing, mayor, transitional housing. I know the chair is over here, but I'm holding you accountable, you. You're the leader. And there's still a lot of homeless veterans out here and some had their utilities cut off because of the work of certain people. An intervention, thank god -- it's hot, it's cold, whatever. Anyway, I want to say look at this. It seems to me, I don't know if they have energy efficiency units or whatever, but I've sent them to their managers and see if they can make an audit, you know, because it's expensive. God knows how so many people are not able to make it now, pay the rent and utilities and pay their hospitalization bills. Anyway, I want to thank

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this committee also. Councilmember Houston, thank you very much for your intervening also. Thank you very much for that. And all the kind hearts we have over here. And my wife says hello, Jimmy Flannigan. Let's make sure we help the less fortunate and needy. Thank you very much for the hard work you do. I look forward to speaking to you tomorrow if the lord allows me to. Thank you very much. >> Pool: Thank you, Mr. Pena. I want you to know we all take our responsibilities really seriously and I feel like we all want to be accountable to you as well. >> We will hold y'all accountable, yes. >> Pool: Thank you. We are back to item 4, which is the quarterly operations briefing. Thank you. And welcome, councilmember

Garza. She's now with us. >> So similar to the financial update that you received at the last utility oversight committee, it's our intent to provide quarterly briefings on relevant high-level programs in the utility as well as updates on operations in your role on the utility oversight committee. Today I'm going to touch on a few items from the operations side of the organization. First and foremost we'll talk about safety. Safety is the number 1 priority for Austin energy, not only safety of our team members but safety of the public. We'll touch on system reliability. We'll discuss power production, market conditions, and I'll also share budget performance details. On the safety front, we track two high-level measures relative to how well we are doing in the area of safety. The first is a recordable injury rate, and the definition is set by on or about osha. We trash our performance and ultimately our goal is zero. We really want to make sure all of our team members go home the way they came but this gives us an indication of how we're performing. We also track the severity

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of incidents. And so in your monthly dashboard you will see both of the measures listed and you'll get that monthly so you can see how we're project. If you look back over the past three full calendar -- fiscal years, pardon me, we have had a precipitous drop in safety events. We have really focused our efforts on looking at each and every situation, identifying where we can make changes to equipment, to processes, to procedures. And ultimately we want to arrive at zero. This year, we are going to continue to look at root cause of any incidents, as well as look at our tooling and equipment use to make sure that we are driving our safety incident rates to zero. And then last year we saw an uptick in the number of vehicle accidents we had. So this year we've had team meetings and have developed a plan to really spend effort on changing behaviors. We're sending all of our team members through a system called Smith driving that really is kind of have beened defensive driving and our goal is to make sure when we're traveling we're keeping the public as well as our team members safe. The system reliability front, we track a lot of things in the utility but from a electric reliability standpoint we track two key indicators. Again, these two indicators will show up on your monthly dashboard. And the two indicators we track are outage duration and frequency. So think about it on a yearly basis. In a year how many of our customers have had outages and we track it using something called safe. If you have a safe of one all your customers would experience one outage in a year. Currently our outage frequency is tracking under one, at .81. We also track the duration. And so this basically is giving us an indication of when customers are out, how long are they out? And that is a measure

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called sad, and right now the average is just under one hour, 57.7 minutes. I know you're looking at all of this and thinking what does this mean? Good, bad, indifferent? We have been for years benchmarking ourselves against other utilities. Our last benchmark study compared our performance against 31 other utilities and we ranked number 3 on the list relative to our peer utilities. So top decile we would really like to continue to improve in this area. We understand that when homes and

businesses are out of electricity everything stops. So just wanted to share that information. Also, wanted to let you know January was a chilly month and on January 17 ercot, as well as Austin energy set a new winter peak. We are a summer peaking utility, which means our highest electrical use occurs in the winter but we set a new winter peak of almost 2400 megawatts on the morning of January 17. Another key item from a system reliability perspective is, you know, where we're spending our spend. Dan Smith has talked quite a bit about this, repowering downtown is a key reliability initiative for us. We have several key transmission circuits we're upgrading and building and several items we'll be bringing before council for down south called bluff springs. Any questions on system reliability? >> Pool: Any questions at this point? Okay. >> I'll switch gears and look at power production and on-site energy resources side of the house. And I should have mentioned the data I'm presenting to you is through the end of November. So we have a little bit of a lag time in collecting data and presenting it back in the form of your dashboard. This is information through the end of November. Through the end of November, our renewable energy production offset

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against load was just shy of 40%. So when you think about that, we buy so much energy from ercot, right, for our load, the production of renewable energy when you measure it on a kilowatt hour by kilowatt hour basis equivalently set 40% or 39.7% that have load requirement had that much offset. Ultimately, as you all know we're headed to 65%, but just wanted to keep you abreast of how we're performing. Some other items, you'll see in the lower right-hand corner, these are our thermal or controllable units. We track two reliability items. One called commercial availability and the other is start success. And commercial availability you can kind of think of as is this -- are these generators ready to produce when the market calls for them? This time of year, November in particular, we had seasonal outages and we do that in our shoulder months when prices tend to be lower. We will take units down and conduct planned maintenance. And so the item that all of the units that have less than their target commercial availability were directly ascribed to planned outage activity. And then the other metric is start success. Throughout the day, prices can get interesting from time to time, and so we have units that can start very quickly, typically within seven minutes. We measure every time those units are called for and whether they were able to come on and get up to speed and full output within the ten-minute requirement, and we had 100% start success for the month of November. Some key projects going on in this area, all focused on on-site energy resources. I mentioned the third downtown cooling plant moving forward and we are working with ACC on supporting their highland campus with a cooling plant. Big focus for all of the stations right now is summer preparedness. It's going to be a tighter market in ercot one and I'll touch on that in a moment but we really want to make sure you're units

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are well maintained and ready to be dispatched for summer. Speaking of market conditions, I wanted to share some recent noteworthy events. Some of you all may have seen some of this in the news. We did

settle -- set our new winter peak as I mentioned. I apologize for the small graphs. I'll flip forward so you can see them in larger view. January, because of weather and some unusual system situations, saw pricing that was quite elevated. In fact, the average Austin load zone price for December for the whole month was just over \$23, January all-in over 40. We saw considerable uptick. In fact I'm going to show you this graph. This graph is looking at each day, average l&p means price, locational marginal price, energy cost, so for each day what the prices were. It's hard to see but the top bar is \$180 and bottom is zero and those were in \$20 increments. Offend many of the days it was pretty level but some days really stood out. January 23 was one that stood out. January 23 had an interesting situation occurred in ercot in the morning before 7:00 A.M. That there are two things that -- many things that ercot looks at but two key things are do I have sufficient resources to meet my load? And then how quick is load growing and how quick can my resources respond? And on the morning of January 23, ercot for a few intervals got extremely tight on the latter item. You can think of it as pace, how quick can everything respond. As a result prices that morning hit \$9,000 twice on a five minute interval for the first time ever in the history of the market. So it really speaks to, you know, for us making sure that our units are ready, every unit that we had fired as required, came online and protected Austin. If you think about a

[2:19:16 PM]

typical day here in Austin, it's not uncommon for a day of load and kind of normal low-energy cost environment to be about a million dollars, but that day our load requirements were over 6 million. It lifted prices that much. Because we had generation that we dispatched and also resources that we have contracted for that we're producing, our load requirements were actually closer to the normal, about a million. So we earned revenue during that morning because everything ran to meet that market condition and helped protect Austin. So this -- certainly got a lot of international attention because of our high system-wide offered cap but really wanted to make y'all aware of the situation and also thank all the teams that helped make sure that that morning was a good morning for us. Another item I wanted to share, the ercot issues something called a cdr, okay? Implant demand and resources event. It talks about how many resources are in the market and what is the load expected to be. And so the recent ercot cdr has been released and ercot is projecting due to some of the recent cold and gas -- coal and gas closures that the reserve margin is moving from where it was last year of about 18% to a little over 9. So ercot has had a lot of questions and the PUC have as well but they've deemed these requirements needed and they do not need the resources in the market. So for us what we are focused on because things are going to be a little tighter, it's possible we might see more of these pricing events, we want to make sure we're ready for summer and that we're protecting our customers against potentially a tightening market. The lasttime item I wanted to share is the operations budget. First up, I have not had an

[2:21:18 PM]

opportunity to talk with y'all about how we set our budget for this fiscal year. You all may remember I had come you to last year with a request to hire a consultant to help us do something called zero based budgeting, probably the most disliked executive in Austin energy for putting my team through that painful exercise. It is a lot of work. But we went through this exercise and categorized every dollar in our budget based on control really. Do we have control of this? Is this something regulatory? Is this something that's policy? Or is it discretionary? So we actually spent several months doing that. Then we performed detailed task and spend analysis, really looked hard at how are we conducting our work and how are we spending our money? We went through several executive challenge and review sessions, and that was fun. But it was really instructive. I think a lot of folks challenged each other on, you know, are there different ways to do what we're trying to accomplish. We focused our efforts on controllable spend. Through that effort we were able to bring identified reductions of 8.5 million over -- or I guess below the 2017 budget. Quite honestly, historically our budget has gone kind of -- we've set it based on last year's budget with some inflation and this was the first year we were able to really turn it in several years. We identified several key opportunities, contractor costs continue to be something we look at, contingency funding, we found -- in the utility, especially with engineers, we're always thinking about risk what can go wrong. Everybody builds contingency in the budgets, so how we manage contingency is a key area. We found several areas in the it area for technology improvements. To the right you can see our o&m performance and plan to date we're on track. Key o&m drivers, I know we talk a lot about capitol projects but for fiscal

[2:23:19 PM]

year '18 key drivers are we have a refueling outage on unit one -- unit two down at stp. Those were considerable. And then the electric service delivery system and growth projects, as well as the chilled water infrastructure. With that that concludes my operations report. I welcome feedback. We do intend to do this quarterly. If there's information that you find helpful on the flip side, information you find you don't need, please let us know and we'll be happy to adjust our methods. >> Pool: Any questions? Yes, Ms. Houston. >> Houston: Thank you so much for the information. On slide -- hold on. The one that talks about power production on-site energy resources, and there's a cross-exam of renewables, I see bio mass did 1.3%. What does that mean? >> Yes, ma'am. So for our contracts and -- since we don't own any of these resources, we will report out during that month how much did that resource produce? So these are pure production numbers you're looking at for -- for when? You can see it's 30.2% of our energy came from wind and bio mass was that one point -- I'm getting old, having a hard time reading from this. >> Houston: 1.3. >> 1.3. The amount of energy that came from our bio mass contract offset 1.3% of our total load. >> Houston: I didn't know we were getting any production from biomass. >> We have continued to work toward optimizing all of our contracts and looking at ways that either through how we offer them to the market and also some creative work with the individual counter parties that we can maximize the use of all of our resources but also, you know, try to drive some costs out. And so I think in the coming months we may have some noteworthy items that we want to bring to

[2:25:19 PM]

council. Some of those may be competitive in nature and we would -- we will likely ask to bring those forward in executive session. But we are continuing to utilize all of our resources to the maximum of our ability. I mentioned earlier that the summer market is getting tighter, right? As a result summer prices that are trading in the future, right, the forward prices, lifted, they got higher. So when those opportunities come we take a look at all our resources, including bio mass and we'll go into that forward market and sell power. Say we want to run this unit during that time. This summer -- you will see that number go up during this summer. >> Houston: Thank you. >> Yes, ma'am. >> Pool: Any other questions? Yes, Allison. >> Alter: Thank you. I wanted to ask about the last page, the 8.5 million in reductions. Am I correct that those are reductions that were necessary to meet the rate reductions or not additional reductions beyond what was already projected in order to be where we needed to be to meet the rate agreement? >> Yes, ma'am. That's exactly right. >> Alter: Okay. Thank you. >> Pool: Anyone else? Yes, Mr. Renteria. >> Renteria: I was looking at the commercial availability. All these generation source that you have listed under this power production on-site are plants that we own here in Austin. Is that correct? >> Most of them are -- they're all plants we own. >> Renteria: Except for the -- I know the fayette and south Texas power plants. >> Yes, sir. >> Renteria: So the green item that's in this circle chart, those 60% represent -- because of this we were able to lower -- keep our costs at the same level. So that added cost, the expense throughout the state, who were mostly those people that got caught without having that kind of protection? >> Different parties may

[2:27:20 PM]

have different risks in those situations. So, for example, utilities like us that own generation will take a similar strategy to what we did, which is make sure that they can earn the revenue to buy-down the cost of energy. For retail electric providers that don't own generation, they will typically put in place financial hedges to protect their contracts that they have with their customers. Merchant generators that don't have any customers, they are constantly just working to make as much profit in the market as they can. So it really depends on the nature of the organization, but for us we continue to operate our assets solely for the benefit of reducing energy costs for our customers. >> Renteria: Thank you. >> Pool: Anybody else? Yes, Mr. Casar. >> Casar: All of this is really helpful. Thank you. I had a question from the beginning of the presentation. So on safety incidents I recognize that we're still well below what you have as the industry comparison. But it does seem to me that we -- our rate almost doubled between the two fiscal years. On safety. Is that primarily driven by the car crashes or driving incidents? Can you expand a little bit for oust? And then obviously just keep us posted. Hopefully we get it back down. >> You bet, yes, sir. So we trend our specific injuries every month and look -- we actually do root causes on every single injury. I think there are two drivers. First and foremost, our number 1 cause of injury right now and has been for the past few years are sprains and strains. I don't know how to say this politely, but we're all getting -- we're all not getting younger, right? [ Laughter ] And so we have implemented stretching programs and encouraged our wellness program because quite honestly a lot of the work that we do in electric operations is very, very physical, whether it's climbing poles or working in a power plant. It's hard on your body.

[2:29:21 PM]

And so I tell my team that they're a great group of athletes. That's exactly what they are. Using good lifting techniques, climbing mean, we're using those but sprains and strains continue to be the number one cause of injuries. So we're going to continue to focus on that. But ultimately, our goal is to make sure everyone goes home safely. >> Pool: Great. Anything else? Yes, mayor pro tem. >> Tovo: If I missed this element, discussion...I wondered how the extent of which Austin energy works with some of our other departments looking at job injuries and illness and injuries, how to prevent them, the fire department, some of our other fire departments that have really well developed programs? >> I would say we haven't explored as much in that area as we can. The stretching program, however, came out of another department that had seen a reduction in some of these injuries, and they recommended this particular person who's helped in teaching -- we've been training trainers, and every morning the teams, before they deploy to their work sites, are going through a series of examinations that are specific to risks in their area. So I think there's more opportunity, so I appreciate that suggestion, to reach out even broader. >> Pool: All right. Anything else on this one? We will move to item number 5, customer energy solutions fiscal year '17 program results. Ms. Kimberly, welcome. It's really nice [indiscernible] That y'all have prepared for us, and the city. >> Thank you. It's my pleasure, Debbie Kimberly. It's my pleasure to give you an overview for the most recently

[2:31:22 PM]

completed fiscal year. If you -- here we go. This is the order in which I'd like to address the presentation, but you do have before you the annual progress report, which my staff, in conjunction with our marketing communication staff, put together. This is literally hot off the press. It was delivered to me at 5:20 P.M. Last night. They were making me wait until the very last minute, testing my patience. But it is a very well-done document. And it is intended to be used to tell people about our program. So you heard other folks talk a bit ago about some of the things we're doing. I'll talk about the goals we have set forth in terms of energy deficiency, demand response, solar. We run, oh, probably about two dozen programs, so rather than step through each and every programs, I'm going to select some of the demand side management or dsm programs that I thought might be of interest to you. I'm going to talk a little bit about the green building program, touch on the solar program. Danielle will append to that in her presentation and then close by talking about electric vehicles. But I will encourage you. This is a first run. We'll have more of these available so if you'd like to share this information with your staff, with your constituents, please feel free to do so. I think it tells the story of what we, the city of Austin, are trying to do to help our customers. So what are our goals? You see in this graphic here that we have a goal to get to 900 megawatts of energy efficiency, eendr and demand response by the year 2025, but we're also looking at getting to a higher level goal. We target as of about a year ago getting to 1% annual savings when you measure our energy efficiency or kwh or mega watt hour sales as a percent of total sales. We also have a goal of getting to 200 Maggie inmegawatts by 2025, a hundred megawatts

minimally customer cited. We also have our program budgets as a percent of revenues, targeting a certain percent to low income and hard to reach

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Margaret, eight to ten fast charge stations within our territory annually, and getting to storage goals. So we have a lot of goals. And I'm happy to say we met or exceeded our gallant last year. -- Exceeded our goals last year. What do customers want? Residential or commercial customer, they both want cost, control, they want cost savings and they want convenience. It's really easy to remember those four C's. Again, whether it's a residential or commercial customer. And even if you are a vertically integrated monopoly, you can do as we have done, a lot to provide customers with choice, convenience, control, and cost savings. The text on the other side of this chart speaks to at a higher level of detail what we're about. So we're about making it easy and pleasant to do business with Austin energy, reducing not only customers' costs, but improving the air quality within the residences or apartments that they occupy. But it gives us value as well. So you just heard Elena talk about the prices that we saw from ercot on January 23rd. She talked to you about tightening reserve margins within the ercot market, looking out into the summer because of the retirement of some facilities. That's when these programs bring real value to the utility. So what's the difference between demand response and energy issues? So this gives you -- the red line here shows you what the typical load profile is for a residential customer. The next line that comes up shows you what you would see if you were able to reduce consumption. So that's energy efficiency. So trying to reduce consumption for a customer throughout the day. And since most in the case of our residential customers, our charges are based on a volumetric or kilowatt hour basis, that's going to save the customer money. But as well, you want to be able to promote demand response, or shifting the peak. Those hours, we talk about coincident peak between the hours of, say, 4:00 to 6:00

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P.M. On a hot summer afternoon, if we can shift peak for those customers, does it save the customer money? Yes. But it also saves us money in terms of having to dispatch and rely on more expensive resources in the ercot market. So I call this the win-win. So where do we stand? Right now, we're about almost 75% of our way to our 900-megawatt goal. So you can see each and every year what we've posted annually, going back to 2007 and the original Austin climate protection plan, we're almost three-quarters of the way there. By the time we get to the end of this year, we've got remaining about 193 megawatts to get to our goal. We are going to -- you will see, in a procurement that will be coming up in months, be looking to retain an independent third-party consultant that will evaluate our savings. Not unlike what you do when you retain an accountant or auditor to look at your books. And after we go through that process, we will determine whether it's possible to get to an even greater goal, a thousand or even 1100 megawatts by the year 2027. So this slide shows a snapshot of the last fiscal year. And all of the details are in the appendices to this report. But last fiscal year, for the year ending September

2017, we were able to serve over 26,000 customers with our various offering. And this excludes circumstantial customers that reside in green building rated commercial space. The solid bars that you see right here, those bars show you energy efficiency programs that just lower overall consumption. The dash bars that you see that are green are green building programs for both residential and commercial customers, and then the yellow slash bars are for the demand response programs. Now, keep in mind that our commercial customers comprise roughly 60% of our

[2:37:26 PM]

energy sales so you would expect to see slightly greater savings. Last fiscal year they saved roughly 38 megawatts in terms of their participation in our programs, and our residential customers saved roughly 27 megawatts. So all totaled, we exceeded our goal for the year and we came in with 65 megawatts of savings. Now, Mr. Robbins spoke earlier about direct installed programs, and I agree this can be one of the most cost effective ways by which to help customers. Now, we don't really go door-to-door, but we do do a number of direct install programs. Last year we had, frankly in recent history, a record year in terms of our low income weatherization program. We had 878 low income customer homes that were weatherized, and I'm happy to report as well that 40% of the people last year that went through that program lived in rental properties. That speaks volumes about our program, is the ability to work with landlords in getting their approval to go in and weatherize a home, in a housing market that is very, very tight. The other thing -- and this is a great example of interdepartmental cooperation -- we work with the fire department, we work with the housing authority of central Austin and other community agencies, meals on wheels and more, to do direct installation of leds in almost 950 homes through the our service territory. Here again, this is something that not only improves the quality of lighting, but it really improves the amount of heat that is generated when you're installing the most efficient lighting in those home. And lastly, through our pilot program, our low-income multifamily weatherization pilot program, we weatherized over 4,000 apartment units. If you look at that circle at the bottom, that's intended to reflect how we've directed all our rebates by segments. So just the residential

[2:39:28 PM]

segment alone, roughly 60% of rebates went to residential low income and hard to reach markets. The other thing we've done, as a member of the large public power council, we've partnered with different retailers to provide point of sale rebates. Nobody likes sending in or clipping a coupon or filling out a form or sending that in, so we brought down the price of different appliances and lighting at Lowe's, Home Depot, batteries plus, Walmart, throughout our service territory. This is really intended to make it easy and pleasant to do business with us and to quickly install a measure. And it has worked phenomenally well. So I mentioned a moment ago our low income weatherization program, and this is a chart that I get really excited about. So if you look at this chart, it shows you what we've done in our low income weatherization program in recent years. We've run this program for roughly 30 years, and we've weatherized over 18,000 program -- homes. Within the last six months, I've received calls from the state

of Tennessee, as well as a city in California, asking for information on how we run our program because we are seen as a model within the industry. And I know that may sound like I'm bragging a bit, but over the last few years, we've done a lot to make our program much more effective. It takes now only about 28 or 30 days to weatherize a home. We are doing outbound calling to some of our customers because when we they receive a letter saying you could be eligible for a free weatherization program, some customers may look at that with some skepticism. So what we've done is to call our customers in advance of them receiving the letter, send the letter to the customers, describing the program, and then call them back, and we've seen real uptake in terms of our participation as a result of that. We don't do this alone, we coordinate with Austin water, Texas gas, as I mentioned, other housing agencies, the housing repair coalition.

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So if a home cannot be weatherized because perhaps there's a hole in the roof, they have missing windows, we work with hrc, the housing repair coalition. The green bars, the real spike on that graph was a point in time when we received over \$9 million from the department of energy in funding to run a weatherization program. That's what drove that spike. But you can see that last year, with 878 homes, we came darn close to the number of homes that we weatherized during that period of time where we had significant outside funding. So I'm going to talk a little bit about a residential bring your own thermostat program. That's what byot stands for. We started the program in 2013. We had as of the end of last fiscal year, 14,000 customers roughly that had these two-way communicating thermostats. It augments the one had of one-way communicating in the 2000s. This is a more effective means to easily control temperature within a home without having to cycle an air conditioning unit on and off. Right? That can be hard to the equipment, perhaps, and can cause greater comfort issues. So by only lowering the temperature by three degrees, it's much easier for a customer to ride through that event. We, as of the end of last fiscal year, have 34 models enrolled. We're now at 37 models that are enrolled in that program. Because why? Customers want choice. They may want an ecob, energy hub, a [indiscernible] Thermostat, Honeywell thermostat. These are sold in various locations and our certified contractors will also install them. We're trying to now transition our single-family or multifamily program to the two-way communicating models. That's a little bit more challenging because it's wi-fi enabled, but we're working on solutions. We've also made it available to small commercial

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customers. They work on narrow margins, so the ability for them to say savings as a result of participating in this program, to get an \$85 rebate per thermostat is very helpful. And lastly, we're developing a home energy monitoring program. One of the things that you'll note at the bottom of the slide is we partnered with epri, the electric power research institute a couple of years ago to run these events off of their platform, the demand response automated platform, and that allowed us very efficiently to control, frankly, not just the thermostats, but as well electric vehicle charging. So we

received the top award by epri that year for our command response program. So what about our commercial programs? Again, commercial customers use more energy. This just gives you an overview of the various programs that our commercial customers took advantage of. Last year we paid out on 350 total projects, almost \$4 million in rebates, saw significant reductions. Our co-op program is similar on a bigger scale to our thermostat program. One thing that happened just last week with Austin ISD enrolled even more of its accounts, so aisd has roughly 500 accounts, and they now have over 90 of those accounts on our load co-op program, meaning they are helping us avoid those peak periods in the summer when you can see up to a \$9,000 price in the ercot market for even a 15 or a half-hour interval, is significant. Plus, we've had 450-plus customers in our small business program receive rebates for lighting. And those customers, as I mentioned before, really operate on narrow margins. The lighting projects will pay back in a year or less so it's really important to them. Our solar program, now in 2018, we've had our solar program for 14 years, and over that 14-year period of time, we've paid out roughly

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\$70 million in rebates to almost 6900 customers. It's important to remember that we comprise roughly 4% of the ercot market, but we lead in terms of solar projects. So 18% of Texas solar projects are installed right here in Austin's energy service territory. We now have over 50 contractors, local contractors that partner with us in our program. We've led the country in terms of reductions in installed cost, and we were the first to pioneer the value of solar rate, which offers the means by which to compensate customers for solar production without working counter to the objectives of energy efficiency, and without engaging in cross subsidization. We rolled it out to commercial customers in 2018. So I can tell you, in speaking of aid, they're very happy because they have solarred a number of their schools so they're also receiving the commercial value of solar. We're about 44% of the way to that 200-megawatt goal that I mentioned earlier. We are, however, very close to getting to the interim goals that were established by the 2014 resource plan. So you will recall that we put in place a solar ramp-down process that said we would get to 110 megawatts, but then as well, 70 megawatts of local solar by the -- these interim deadlines, 2020. And we're actually ahead of schedule. We added another capacity bucket, if you will, to our residential solar rebate program, so right now we're rebaiting at 40 cents a watt for our residential incentives. And the chart gives you a breakdown of the type of solar that you'll see, residential, commercial, municipal schools, and other, then what we have left to get to the interim

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goal. So talking about that ramp-down, if you will, we implemented that following the 2014 resource plan. The idea would be -- was, that once you get to 70 megawatts, then the solar rebates would go away. Why? Well, the whole objective was to help drive down the cost of solar so that you could get to what some people call grid parity or socket parity. And we have seen the cost come down. So right now, base on our projections, we estimate that we'll exceed that 70-megawatt goal. What staff has done since August, officially, is to work with stakeholders, to work with contractors, to work with customers

on continuing to lead the nation in designing a better program. And so what we've designed is a program that we put more emphasis on consumer protection by having customers complete an online training module, but it will also be available in person, say at libraries for customers who don't have access to a computer, where they go through a less than 30-minute training session to learn about the means by which to pick a contractor and to evaluate them. We encourage customers to get at least three bids from solar contractors before installing solar. We define the basic terms to them, and then we will roll out a flat incentive at the end of April. We'll launch the training make the change to the flat incentive for residential customers by the end of April. We're looking at roughly a 2000 to \$2,500 incentive. One thing that we see is with larger systems that go in, you're seeing economies of scale. Very few 10kw systems get installed, but those are seeing significant reductions because you're installing a larger system. So the cost per watt for that system is going to go down. One of the things that Danielle will talk about is the second bullet that appears on this slide, but I

[2:49:31 PM]

did want to give you a brief update on La Loma, the community solar project that's located in east Austin, 2.6 megawatts. It energized in late January and we expect it will get to commercial operation, cod, in mid to late March. It's been a long process. We've learned a lot. We really started that process in roughly the 2014 time frame. It's challenging, shall we say, to site solar within the city of Austin, directly within the city of Austin, certainly because of land costs, because of shading, because of the need to, you know, meet impervious cover requirements, all of which are very valid. And so we are having La Loma, hopefully, a ribbon cutting ceremony on March 24th. Hope to see some of you there. We've got some exciting things planned. We are now looking at our next phase of community solar. And what we believe is important to look at community solar installations within the five-county area, in and around Austin, when you have close proximity like that, it will reduce land losses, especially if ERCOT moves to what's called a marginal line loss requirement. But frankly, moving closer to our load zone also helps lower electricity cost, and building at scale would enable larger cost. So smaller installations generally, not unlike what I talked about with residential rooftop solar, smaller ones already a higher cost per watt. The same holds true for a larger scale, utility scale installation. And frankly, that also reduces congestion issues that you experience when you've got a facility located in west Texas or the panhandle, and it benefits the local economy. I'm going to talk real quickly about the green building program. Now, this slide's a little challenging so just let me try to step you through it high level. Where do we get green building savings?

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We get them from savings we realize through code and savings through properties that go through our rating system, so anywhere from a one-star to five-star rating for both residential and commercial savings. Last year our target was 18 megawatts for green building and we exceeded that. We came in a little over 19 megawatts. The line at the top of this chart shows you the trend in terms of codes for what

is called the international energy conservation code, the iecc. And that's what's applicable to residential homes, single-family homes, as well as dwellings that are under seven stories. And the y-axis shows you the percentage representatives and improvement vis-a-vis the 1975 code. This is pulled from pacific northwest national lab, so it's a third-party presentation. If you look at that red line, it says the 2000 iecc was roughly, oh, 15% better than the 1975 code. And the blue line represents commercial code. What you will see is that within the residential space on code, we're really getting to the point where we've rung about everything out that we can. And the two things that are the biggest drivers of savings in residences are the building envelope and air conditioning. Commercial load is much more diverse, which is why there are still opportunities in commercial building. So that's why you see that continued downward decline in terms of ashre, which is the American society of heating, refrigeration, and air conditioning engineers. That's the means by which we do code -- energy code for commercial buildings. So you can see we have some challenges. We're not necessarily going to be able to get to these levels of savings on a going-forward basis because we have really, really aggressive codes. And I might add, this is just the national codes. Our codes are amended

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locally, so our codes tend to show an even greater improvement. As I said, I'd wrap up with electric vehicles. We had a great year in 2017. We have over 600 charging ports throughout the city of Austin. We launched our electric drive showcase. I know some of you were there for that. It won a number of awards, an E source experiential marketing award was recognized by many others. We launched our home time of use rate for residential customers. We have over 30 customers that are on that rate right now. The eb 360 rate. And we have on our website a savings calculator, so I can go online and say here's the car make and model and year that I drive, here's the type of electric vehicle I'm looking at, here's what I would save if I switched to an electric vehicle. What are we doing now? We're charging station roll-out throughout the city of Austin. You're familiar with the efforts that have been sponsored to electrify the fleet. He have ev program for everyone, so we're looking at a sharing program of electric vehicles. That's being done through the Schmidt foundation. I mentioned earlier the DC fast chargers, and as part of our shines grant, we've also incorporated a single vehicle to grid demonstration, and doe is looking at that and has given us the indication that they will take that in as part of our shines grant. So in summary, we are, all of us, just like you, committed to developing those services that are customer-driven and community-focused. We want to reduce our costs to our customers. We want to enhance the customer experience. So satisfaction is generally transactional. I'm talking about an ongoing experience, giving our residents what they want. They want choice control and convenience, and to be cost effective in terms of how we go about meeting our goals. I often say to my team, you know, you can never stop innovative -- innovating on

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top of our customers. We take that challenge very seriously, and that customer collaboration and engaged employees, which are part of our strategic plan, are really keys to our success. I'm happy to answer any questions you have. >> Pool: Thank you so much for this really comprehensive report. Colleagues, what kind of questions do you have? Yes, Mr. Renteria. >> Renteria: Thank you for this report. I just recently purchased an electric bike and I have over 500 miles on it now, so it saves me a lot of money on my gas bill. >> Thank you. >> Renteria: By driving my old pickup truck. But I was just also noticing, you never mentioned anything about wind power. What's the percentage that we have -- I see here in this last presentation that in the renewal energy load check, wind contributed to 30%. >> That's correct. >> Renteria: So what's the percentage of megawatts that we have in wind power? >> Elena mentioned that, I believe, in her report. It changes moment to moment over time, so you'll see that portion, if you go on our website, you'll see, we call it a widget. And if you go on at night, you'll see a big portion of our resources are coming from wind because of our contracts. I can tell you from a customer perspective, because what I deal with are sort of the customer facing programs, we offer green choice to our customers so they can be 100% wind. And we have roughly 15,000 customers that are enrolled in our green choice program. Last year we were rated by the national renewable energy lab or nrel as being topten, and number one in wind energy. >> I don't have the number down to the single megawatt,

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but we have under contract and producing a little over 1400 megawatts of wind capacity. Relative to future resource requirements, we're going to be guided by the resource plan adopted by city council. When we go through requests for proposals for energy, we tend to be technology agnostic, and that allows developers to bring, you know, the very best projects forward. And so we are committed to making sure that we hit the solar targets that are specifically outlined in the resource plan, but we'll be open to other types of technology as well for ultimately our customers. >> Renteria: Yeah, because I traveled through the country, even down to Mexico, I see those wind turbines down there, and it's really saving them a lot of money. And I think we should take advantage of that as much as we can, especially considering that we also are running electricity at night and we would like to -- and I know solar has that, you know, ability to reproduce when the sun goes away, so we really need to focus so we can have 24-hour renewable energy. >> Pool: Great. Anything else? Yes, councilmember kitchen. >> Kitchen: I have a quick question about the small business program. I guess it's under commercial. So I'm just curious, I think it had served about 450 -- did I see that right? >> Yes. >> Kitchen: So just two questions. Can you help us understand, what are some of the limits to it in the sense of is there something that could be done with this program that would make it even better? In other words, in terms of businesses' ability to access it? Is there a waiting list? Is it more a matter of the parameters are such that it's only workable for relatively small number of small businesses, or just help me understand what the limitations are. >> So we have expanded the availability of the program when we went through a

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modified approach to our rate structure, we did expand the universe of customers that to be eligible for it. >> Kitchen: Uh-huh. Typically, they tend to be non-demand customers but we took the level up higher for small business customers. One of the most effective means by which to reach those customers is through our key accounts program. So I manage the key accounts group within our organization and they go out and meet with customers. They actually look at customers' bills and go out and will meet with customers to target them. A person who's been really, really helpful to us is Rebecca melonsom with aiva, and we've been working with her to go out to reach out to her members, so she's identified, and your question is well-timed. Ibez districts, so so forth little microcommunities within Austin where she will host an event, my staff will go out to the event. We're not going to give them a powerpoint presentation per se, but we'll talk about our program, we'll have brochures and information available. She's actually helped -- she's produced videos this year that she's going to share at the armadillo awards that will be available on her website, so they're testimonials from customers. One is to get customers, sort of the business to business promotion. In our materials that we put out, you can see here, oak hill body shop took advantage of our small business program and wee we found that to make a really compelling case. So those are some of the things that I think are very, very helpful. >> Kitchen: That's very helpful, but I'm trying to understand what the limits are. In other words, we have, like, 4,000 small businesses, and there's 450 in this program, and it may be that that's good, that

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we're meeting all the need. I just want to understand what are the parameters? Is it that this program doesn't make sense for more businesses because they don't need it? Or is there something about the program that we should be looking at? Do you understand my question? >> I do. We pay 90% of the costs on this, so that's a pretty healthy percent. But for some really, really small customers, even that 10% may be difficult for them. >> Kitchen: Okay. >> So we put them in touch with contractors who might be able to offer them financing for that remaining 10%. And it depends on the access to capital they have. I will tell you, based on my experience thus far, one of the biggest challenges that the small business community has here are the rent costs and the fact that if -- let's say they enter into a five-year lease agreement. And what we discovered in our outreach last year to customers was, they're on the hook for an hvac replacement. If that air conditioning unit breaks in year four, they've got to replace the unit on their nickel. A landlord doesn't. So they don't maintain the units, they just roll the dice. So what we're doing, I think, which is perhaps more responsive, as to say let's not just focus on lighting. Let's focus on that, oh, my god, the air conditioner just broke and now I'm out thousands and thousands of dollars. So what we're looking to launch is a program wherein we would buy down the cost of a checkup for customers, and that helps ensure additional life. And those small businesses, as one of them described to us in focus groups this last year, they're the chief cook and bottle washer. They just don't have the band width. So we're trying to give them tools. One of the reasons we extended the power partner thermostat program to those customers is, I have one of those smart thermostats, and I had this happen recently, one of those -- in my home,

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the thermostat says, you might want to check your furnace fan because it's operating continuously. And that was absolutely a case of a prescriptive warning, because my furnace then died two weeks later. So as long as we can do those sort of things and make it easy -- and we will continue, every year, we look at what can we continue to do. Most years, we've come in over budget in our small business program, which says the demand for it continues to grow. >> Kitchen: Uh-huh. Okay. >> Pool: Councilmember Alter. >> Alter: Thank you. This is very interesting and made me think about the aid bond on the billion dollars they're getting ready to spend. And I may be jumping to item 6 a little bit, but I'm curious in how Austin energy is planning to work with aid as they roll out all the improvements and build the new buildings and do the renovations as part of that, because as you noticed, as you mentioned, there's a lot of savings over time from energy conservation, but also the conservation and the education opportunities that that would create could be quite important for aid. Can you speak to that a little bit? Or if it's in the next presentation, just write it -- >> No, it really won't be in the next presentation. So we do a number of things. We have a key account manager that works with aid. And we work with their facilities person. And they come to us with all of this, so if they're going to replace a chiller, they can go through that program and get a rebate for a new which I will other an existing facility. Aisd happens to comprise -- we have six commercial customers that are five-star rated properties. They have five-star raid buildings. And aid comprises two of those. So they've got a high school and the performing arts center which are five stars. So they go through our green building program, they get no rebates. They basically get the services of staff to consult

[3:05:38 PM]

with them and advise in terms of best practices and building and lighting and envelope and all of that. They may choose to install more solar. I don't know that for a fact. Generally for them, some of the biggest costs will relate to equipment replacement. So they have at all of their various facilities some old, old hvac equipment. And so if they install newer hvac equipment that meets certain efficiency standards, they will be eligible for a rebate on that. And I haven't seen the specifics associated with what they're planning to do, but, you know, happy to follow up and get you more information. >> Alter: Yeah, I would really appreciate it if we could make sure, as a city, that we're facilitating all the wins that can happen with respect to this bond and how we can work together. I think many of the schools that are not getting larger renovations are getting the hvac replacements and just making sure that we can make it as easy as possible for them to take advantage of these opportunities to achieve the energy conservation and the savings so that money can go further with that. >> Right. As I said, they added a total of 40 accounts in the space of the last two weeks to the load co-op program, bringing to 91 the number of accounts that will be available. That's 21 megawatts of load, so it's pretty significant. >> Alter: I'd appreciate if you could follow up with me on how that's taken care of. >> Absolutely. Happy to. >> Pool: Anybody else? We have one more item from staff and then item number 7 to complete in 20 minutes. Welcome. This is item 6, update on incentives and programs to increase solar energy adoption and access for underserved markets. Welcome. >> Thank you. My name is Danielle murry.

[3:07:40 PM]

There we go. My name is Danielle murry. I manage the solar programs at Austin energy. So this will piggyback a bit on what you just heard from Debbie. Since our program launched in 2004, we have had \$70 million in incentives go out the door to over 6900 residents and commercial properties, and in commercial we include non-profits, schools, and multifamily affordable housing. So while 55 projects have been installed at multifamily properties and 79 projects at non-profit entities, the majority of projects have gone to either single-family, owner occupied residences, or businesses. And that's largely been driven by the high cost of solar and the large capital investment that was required, especially in the early years when solar was still very expensive. That has shifted over the last few years as solar prices have come down. And I think that is part of what led to a resolution from you all back in October which called on Austin energy to target a half million dollars of our incentive budget this year towards expanding programs to hard to reach markets, including multifamily affordable housing, low income residents, renters, and non-profits. So I'm here in response to that resolution as we promised to give an update on our progress towards this. So there are a number of barriers that these hard to reach markets face in terms of installing solar. The foremost, of course, is financial. Access to capital or financing is difficult for these groups, or the ability to take on more debt, and probably most important, most of them are unable to take advantage of the federal tax credits, which are 30% credit based on the installed cost of the system, as well as depreciation. So for these folks they're already seeing solar be 50% more expensive than somebody who can take these federal tax credits. Additionally, the age and

[3:09:40 PM]

condition of roofs can be a barrier since solar does have a 25-year expected lifetime on it, you of course want to put that on a roof that's in good condition and has a similar life-span ahead of it. You don't want to be changing out the roof once you put the solar on. And lastly, something that's really critical here in Austin is that over half of our residents are renters. And so if you don't own that roof over your head, you, of course, are not going to be able to put solar on it and your landlord likely doesn't have an incentive to put it on for you. In addition, we have a number of different metering metersetups for multifamily types, as well as financing the financing for those projects. We have a number of programs which we've developed and we're continuing to develop to address this is issues and I'll walk you through those on the following slides. The first, which I hope you all know about at this point is our community solar program. We launched this in December of 2016 with the palmer event center project, and as you just heard, we are nearing completion of the la Loma project in east Austin. The idea here is that if you are a renter or someone who has a shaded roof or otherwise can't install solar at your own home, you can subscribe to 100% local solar from one of these community solar projects, which are more centralized larger projects that can serve more than one household. For the regular community solar program, it is a premium, it costs more than our regular power supply, about 1.3 cents per kilowatt hour more, but the rate is locked in place for 15 years so you get some more rate stability. You all approved back in December a discount rate for customer assistance program. Customers taking part in our cap program are also able to describe to la Loma at a discount of 1.5 cents per kilowatt hour, which

makes community solar less expensive current power. From day one, they will see savings. We've a will indicated half

[3:11:42 PM]

the capacity of la Loma to these customers. Since that's been approved, we started outreach on the program. Of course we have information on our website and we've got some good media coverage when it first came out. Some of y'all have sent information out in your newsletters, which I appreciate. We have worked with our cap plus one partners. We'll actually be at their quarterly meetings next week to talk about this some more and other options. We've worked with Austin housing councilmembers and have posters up at our payment centers. Those are bilingual, so Spanish and English, at the payment centers. We've been attending community meetings such as the Springdale airport meeting last night, and we have paid advertisements that started last week on both radio and newspapers that are geared towards these markets and capmetro buses. So we expect to see an uptick in subscriptions over the next few weeks. We're currently at about 15% subscribed since this went up. And I should say the market rate, the regular community solar program is actually fully subscribed and we have the wait list for that program, which is great because it helps us know what the demand is for the program and will drive those future projects that Debbie spoke about. We of course have a residential solar program, too, which can benefit in particular multifamily properties that are individually metered. So we have had, for example, foundation communities install solar at their homestead oaks project to serve each of the individual units in the building. That program, as you heard, is shifting to the flat rebate in April, and one of the benefits of that is that all customers who participate will receive the same incentive amount regardless of the size of their home. So we think that's going to be more equitable for our customers. We're also going to focus on up front education and consumer protection and have a more streamlined process. Our non-profits, like I said, fall under the category of our commercial incentive program. So multifamily affordable housing and non-profits are eligible for commercial performance-based incentives

[3:13:43 PM]

or pbs and they're actually exempted from our customer caps so they can install for solar and receive incentives from us, and they also are eligible for higher incentives for their projects up to 400 kw. So we actually have about -- not about we have 26 non-profits, schools and government projects that are currently receiving performance-based incentives as we speak. And overall, we actually have over 130 non-profit educational and government solar projects installed across Austin energy so here's -- territory. So this is just a snapshot of some of those. It is not an inclusive list, but you'll see up on the top right, the habitat for humanity restored. The middle is a foundation communities property and bottom right is lifeworks, which you might be familiar with. The most recent program we've rolled out is called shared solar and this is geared towards multifamily affordable housing properties which have individually metered units so tenants are paying their own electric bills. The idea here, it doesn't make

that much sense to install a separate little tiny system for each of those units and tie that down to the meter for each unit, but becomes more costly and difficult sneering project to do, and so we have found a way through our metering and billing systems to enable one system to be installed on that roof and have the generation allocated virtually to all accounts, so they'll see solar credits on their individual bills. We are -- we had a request for participants that went out last month, it closed on Monday, and we have four projects that have put in applications to it. There's a dollar incentive for the first pilot phase, as well as an adder if they demonstrate they can get to net zero electric use on the property. We are going to fund up to three projects to a maximum of \$200,000 per project, and will be coming back to you, I think at your first April meeting with those recommendations for council action to fund those.

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So just to summarize progress to date this first half of the fiscal year, we've had a number of stakeholder meetings and will continue to have those going forward. [Indiscernible] Rate was approved by council and has begun implementation. The shared solar pilot has been issue. Call for participants has been issued and we will have those installed by the end of the fiscal year. We've actually had 11 projects at non-profit facilities stalled this year to date totaling three-quarters of a megawatt and over a hundred thousand in incentive based facilities went out the door the first of the year. We think we are certainly on track to meet the \$500,000 spending goal for this year on hard to reach markets, between those performance-based incentives, the shared solar incentive, which could be anywhere from 300,000 to 600,000, depending on those applications as we review them, and the cap community solar discount. And I'll take any questions if you have them. >> Pool: Very helpful. What questions do we have? Yes, councilmember Garza. >> Garza: So the cap program part of the La Loma, is it just less expensive than they would pay at, the I guess, market rate community bill would be? >> Less expensive than the bill would be. They'll actually see a small discount over regular bills, one to two dollars a month, it's very small, but it's locked in for 15 years so that could grow over time. >> Garza: The rate here, what is it, kilowatt? >> Per kilowatt hour. >> Garza: Okay. Yeah. So it is actually the discount from the regular community solar rate actually brings it below our regular power supply adjustment. >> Garza: Okay. And just about community solar in general, because there's a wait list, we see that there's obviously

[3:17:47 PM]

people are interested in it, and I think we talked about this when I met with you in my office, I understand how somebody who lives in an apartment couldn't have access, but would there be the ability to do you understand, for Austin energy to finance putting solar panels, and I guess there would be legalities involved in someone else's roof, but a community solar project, give, like, first -- what is it? - right of refusal to the actual residents, and anybody in that apartment complex that didn't want it, then it could go out to the rest of the community? >> Yes. One of the concepts we've been talking about with stakeholders is what is your interest, especially with multifamily housing providers or non-profits, in hosting a solar project on your roof that you wouldn't have to finance that we could help, and that

there's different models for how that energy could be either provided to the tenants or sold through community solar or otherwise. So you are right, I'm looking at our legal counsel because there's certainly a lot of legal questions with that and programmatic, but it's some of the early ideas that we're starting to float and see what there's interest in before we start digging too much deeper on them. >> Garza: Okay. Thanks. >> Pool: What else do we have? Yes, councilmember Casar. >> Casar: First I just wanted to say thanks because this is obviously a resolution that was pretty recently passed and all of this work happening so quickly is really appreciated, and I look forward to seeing which of the multifamily folks decided to participate in this first sort of shared solar set of work. So thanks on all those fronts. So that's my primary comment. Secondarily, on the La Loma project, the 13% folks signed up. >> Yeah. >> Casar: Do you anticipate that folks will -- the rest of people will sign up by the time this thing opens up, or if you don't get to 100%, that they can keep on signing up even after it's opened? Talk us through that. >> Yeah. So we expect to have at least 200 customers in that program, so we think that the project can generally serve about 400 customers, so half is 200. I do think we'll get fully

[3:19:49 PM]

subscribing community on the cap community solar side by the end of March. That was the deadline we initially put out. We can extend that if we think there's still demand. We just haven't gotten the word yet. I think there's been slow uptake because we haven't had as much outreach out there. It's just kind of hitting the street in the last couple weeks, and we have seen an uptake in numbers in the last week, really. So I don't think we're going to have any trouble hitting it. I think as Debbie mentioned earlier, sometimes there's some skepticism, when you hear free from anybody, let alone the utility. So I think people want to make sure that they really understand what they're getting and that it really is going to be cost effective for them. So I think we'll see those numbers grow a lot in the next few weeks. If by the end of March we don't see them, we can extend a few more weeks and see what happens. >> Casar: Great. Thank you so much for y'all's work on this. >> Pool: Anybody else? Moving on. Yes, councilmember Houston. >> Houston: Well, I was going to give a thank you, not to all of Austin energy because I was looking at their dashboard about Austin energy's hiring and their external hires and the internal hires, and I want to note that I know you all have been going down -- or have started going down to preview a & M university, making sure you're looking to engineers and all those hard-to-hire people, that you're going to that school as well. Thank you. >> Pool: Great. All right. If you got to go, you got to go. Last item, number 7, this was brought up by councilmember Flannigan. He wanted to look at the meeting schedule. Councilmember Flannigan. >> Flannigan: Thank you. So I tried to have this discussion at the last couple of these meetings, and we either didn't have a quorum or the chair was absent, so normally I don't think we would have this discussion at the end of February, but we tried to do this in prior meetings, and

[3:21:49 PM]

just the lines didn't work out. My whole question are the meetings in April, may, and June where, like this week, it's on the same week as a council meeting? And I know that we had you discussed wanting to get our committee meetings into the off weeks, and so I kept trying to say if we could get these three back onto the off week, that would be my preference with several -- couple councilmembers not here for this discussion. Again, I don't know if there's a willingness to engage in this conversation, so I'm just curious if there are any other councilmembers that feel about this the way I do. Maybe not. >> Pool: And thanks for bringing this forward. I know we've had a couple conversations about this, and when -- when we met with the general manager and her staff and the liaison to try to work through the agenda for this year, it was late last fall, and we were looking at moving it to the fourth Wednesday of the month. The dates were then pretty much slotted into place by our Austin energy folks. And if you'll look at the memo that I passed around, this was a posting that I put up on the Austin energy utility oversight committee dates for '18, back in November. And the reason the dates were chosen was sort of a -- to dance around the fact that there's the resource management commission and then there's the electric utility commission, then there's travel that our staff do periodically throughout the year, and then there are all of the meetings that we have. And I know the first year we were all here, back in '15, we didn't have a lot of open spaces on our -- on our calendars because we had so many committees, and it does look a little open here, but my guess is, at this point, that these dates and the

[3:23:49 PM]

weeks have probably started filling in, including with some pretty intense budget work sessions that we've got. My main concern was to try to accommodate what our Austin energy staff have, as far as their -- the dates that they have to work with. So it's not -- it's maybe not optimal, you know, but I do appreciate you bringing the question to the body. Yes, councilmember Houston. >> Houston: Could they just take a look and see if there's any dates that are not on council meeting dates that they could -- >> Pool: I think the staff have done that, but I'd be happy -- they can look again. Do you have something on that? >> We certainly have looked at it, and we can look at it again and see if there are opportunities to further optimize the calendar. We are in flight, and so it may be tricky to move things based on everyone's schedule, but we will take that as an action, if it's the desire of this body for us to do so. >> Pool: I'd like to see what everybody else has on their calendars because at this point it's been set since November, and it may be that these dates aren't actually available anymore. But if you all would go back and look at your calendars and see what you've got, would that help? >> Flannigan: Yeah. And, again, I wanted to have the conversation in November and we just weren't logistically able to have enough folks here to have the conversation. So it is still my preference that we have these meetings off of our council meeting weeks. We're fortunate that our agenda tomorrow is fairly brief, but we know that doesn't always happen, and I'm sure this could have been several hours with stakeholders on a different council meeting week. But if everyone else is not -- I would rather us just decide whether or not we want to do it or not rather than just continue to drag it out. And if we want to do those three on the council meeting week, then that's fine, we can just move forward. But just wanted to close the loop on it without further extending the conversation. >> Pool: Well, maybe we can

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use the message board for people to weigh in. Yes, councilmember kitchen. >> Kitchen: I was just going to say, I appreciate you bringing this forward. I'm okay with them on these days. But I'm okay with whatever y'all work out. But I don't -- I'm okay with keeping them like this. >> Pool: I know I talked with the mayor and he has had to leave, unfortunately, but he was also okay with the dates that we had worked up with Austin energy. Yes, councilmember alter. >> Alter: I will make either work, but we also have audit and finance those mornings, so combining the two of them, which I didn't realize until we started having this question about it, does make -- does make for a heavy amount of meetings in one week. So if we aren't going to change it now, then definitely when we look at it next year, we need to find a way to coordinate better across all of the committees. >> Pool: Yeah. The meeting scheduling is really a tough balancing act, and the reason why we picked -- I picked the fourth Wednesday is that was when the open space environment and sustainability committee had met, and it was, in fact, right after audit and finance. So for a couple of years, we did have some back-to-back, and -- meetings like that, and we did manage. But I take your point, and I certainly agree. All right. Anything else? >> Garza: I have something else. >> Pool: Yes, councilmember Garza. >> Garza: I hope y'all don't get mad at me, but I need an euc, and I object people watching this -- my appointee stepped off, and we've been desperately looking for preferably somebody from district 2. We have some options that are not in my district, but I know a lot of people watch this, more than I would have thought. [Laughter]. So if you know a -- someone that lives in district 2 that's somehow in the industry, if Austin energy

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can help out, I would love to increase our minority representation on the euc, please reach out to my office because I'd love to be able to appoint someone from district 2 to the euc. >> Pool: Great. Thank you. Councilmember Garza, looked like you had something to say. >> I wanted to talk to you after the meeting. I actually have a couple of recommendations for you. I'm not sure if they'll fit all your parameters, but -- but I do have some suggestions. >> Pool: Does everybody know Carrie, by the way? Please greet the chair of the euc on your way out. He's been doing a lot of work in these areas for many, many years and I really appreciate his giving up his afternoon to come join us. >> Thank you. >> Pool: I will make it -- on the schedule I sent out, I had inadvertently put the wrong date for June so I have written in the June 27 date, and it's actually -- Jimmy had done that work that I realized I had typed the wrong number. All right. I think we are done here. Anything else for the good of the cause? Thank you, everybody. We are adjourned right at 3:30. Thank you so much to everybody from Austin energy and the community for being here today.