

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

**ORANGE COUNTY CLEANTECH SYMPOSIUM**  
**"Creation of a Renewable Energy Portfolio Standard"**

Thursday, February 18, 2010  
8:00 a.m. - 12:18 p.m.

UCF Executive Development Center  
36 West Pine Street  
Orlando, Florida

Reported by  
Leslie Richmond, RPR

ZACCO & ASSOCIATES REPORTING SERVICES  
605 East Robinson Street, Suite 430  
Orlando, Florida 32801  
(407) 425-6789



Orange County Cleantech Symposium  
**“Creation of a Renewable Energy Portfolio Standard”**  
**Thursday, February 18, 2010**



**AGENDA**

*Special guest speaker at closing of the Symposium —  
 Florida Governor Charlie Christ*

- 8AM-8:15AM: Orange County Introduction/Welcome (John Lewis/Kirstie Chadwick)
- 8:15AM-8:45AM: State of the Union for Florida’s RPS policy (Tommy Boroughs)
- 8:45AM-9:15AM: Programs in Action – Benefits of RPS to Florida (Dr. Jim Fenton)
- 9:15AM-9:30AM: Networking Break
- 9:30AM-10AM: Utility Perspective (Jennifer Szaro, Orlando Utilities Commission)
- 10AM-10:30AM: Builder/Developer Perspectives – Panel Discussion  
  
*Moderator:* Robyn Dowsey, Wharton Smith, Inc.  
*Panelists:*
  - David Bessette, All Solar Florida
  - Kimberly Krutski, Blue-chip Energy
  - Christopher Maingot, Superior Solar
- 10:00AM-10:30AM: Michael Dobson – Where Should FL go from here on RPS?
- 10:30AM-11:00AM: Case Studies of RPS Policy in Other States – Good & Bad (George Cavros)
- 11AM-11:30AM: Open Forum to Share RPS Ideas and Closing Remarks (John Lewis)

***Next meeting – April – date to be announced***

**Special Thanks to Our Sponsors:**



**Partners:**



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

P R O C E E D I N G S

MS. CHADWICK: First of all, thanks, everybody, for coming today, and for those of you who don't know what's going on, this is Orange County TV, so this is getting recorded and it will be put online as part of Orange County's initiatives here in the Cleantech sector and what not.

My name is Kirstie Chadwick. I am the director of venture development for the entity called the Venture Lab out at UCF, and the Venture Lab is an agency that helps technology start ups here in the Central Florida region with business development and finding capital and things like that, so we're just a group of folks that are here to help those of you that have small technology businesses in Central Florida. And Cleantech is, obviously, a hot sector in the world of venture capital and things like that, and so our specific focus is in that type of sector with that type of a company. But, today, I'm here as a facilitator of this event, but it's actually Orange County who is -- who we should be thanking for putting all of this together today. And I'm going to introduce that gentleman that just ran out the door as our first speaker.

This is John Lewis. John Lewis is the economic development administrator for Orange County. He's here

1 representing Mayor Crotty and this whole series of  
2 symposiums and Cleantech studies and what not that have  
3 been going on which you'll learn about today if you  
4 don't already know what that is, our -- Mayor Crotty's  
5 initiative towards trying to promote Cleantech as an  
6 economic development initiative here in Central Florida,  
7 and John is the gentleman that behind the scenes is  
8 doing a lot of the operational economic development  
9 activities on behalf of Mayor Crotty. So with that, I'd  
10 like to introduce John Lewis to kick us off here this  
11 morning.

12 MR. LEWIS: Thank you, Kirstie. I'm told that we  
13 need to stand behind the podium today, we can't walk  
14 around or it makes it difficult for Orange TV, so I'm  
15 going to try to stand still like my father used to tell  
16 me 45 years ago.

17 Mayor Crotty would have been here this morning, he  
18 had a previous commitment and can't be here. He's been  
19 here with us before, and so I think you all know that  
20 Mayor Crotty supports these initiatives and he certainly  
21 will follow up and look at the videos and the  
22 transcripts and we'll talk about what happened today  
23 after today.

24 All of this started back in -- on October the 23rd,  
25 2008 when Mayor Crotty announced his two-pronged

1           Cleantech initiative. The first one was to come up with  
2           a study on Cleantech. What our assets are, what our  
3           possibilities are for growing Cleantech, our potential,  
4           just the presence of Cleantech in the community at the  
5           present time. We didn't have anything like this at the  
6           time, although Cleantech was the buzz word in economic  
7           development from San Diego to San Jose to Austin to  
8           Boston and Dallas. So we felt we really needed to get  
9           up to speed on this and get our fair share of Cleantech  
10          growth.

11                 As you can see, the study has been done, it's been  
12          released. We had three Cleantech symposiums last year  
13          that all provided input into this study. Many of you  
14          participated in that, and already 2,000 copies of the  
15          study have been distributed. The purpose today is to  
16          start the process of furthering discussions on all of  
17          the specific recommendations in the Cleantech study,  
18          starting with a renewable energy portfolio standard, the  
19          goal that we would like to see implemented in Florida.

20                 We've already taken steps, though, to make sure  
21          that implementation moves along. A week after this  
22          study was released, the Orange County Board of County  
23          Commissioners unanimously incorporated all 17  
24          recommendations into their legislative priorities.

25                 Following up on that, two weeks ago, I sent a

1 personalized letter specifically mentioning RPS and a  
2 copy of the Cleantech study to every single state  
3 senator and representative. So, hopefully, that will  
4 reach some of the places where it needs to be. Sandy  
5 Shugard, Dr. Shugard from Valencia, has agreed to chair  
6 a green committee, and we're organizing for that and  
7 we'll be starting that shortly. You'll be hearing more  
8 about that. But the Mayor has also directed our  
9 building department to come up with a strategy and a  
10 process for enacting comprehensive green building codes  
11 and ordinances in Orange County. They've been working  
12 on this for a couple of months, having meetings,  
13 figuring out how they can do this within the framework  
14 of state building codes and so forth, and they're going  
15 to be presenting where they are at our next Cleantech  
16 symposium, and we'll have another line up of stellar  
17 speakers just as we have today.

18 I wanted to -- I looked through the list of people  
19 here today, and I wanted to go through the list and try  
20 to pick out 10 people who would represent the diversity  
21 of this group and realized that that's going to add  
22 another 10 minutes and that would take another 10  
23 minutes away from our speakers. So I'll encourage  
24 everybody to say hello to each other during the breaks  
25 and during the networking opportunities here this

1 morning.

2 First, I want to say thank you, especially to our  
3 sponsors and our partners, because, without them, we  
4 wouldn't be having any of these symposiums, we wouldn't  
5 have been able to complete the Cleantech study. And the  
6 first organization I'd like to thank is the Florida  
7 Solar Energy Center. Dr. Jim Fenton has been a speaker.  
8 I think this is the third time he will have spoken at  
9 one of the symposiums. So the Florida Solar Energy  
10 Center is one of our most important partners.

11 TechAmerica. How many ever heard of TechAmerica?  
12 Formerly AEA. I think we've all heard of AEA,  
13 technology's largest industry advocacy organization.  
14 They assisted us with the registration process and a lot  
15 of other things related to the symposiums and the study.

16 The Metro Orlando EDC. They help us identify  
17 Cleantech companies, reach out to Cleantech companies,  
18 and they developed a section on Cleantech on their  
19 website. I encourage you to go look at that. The EDC  
20 has a tremendous amount of very substantive information  
21 on its website.

22 Mitsubishi Power Systems, one of our largest  
23 Cleantech companies in Metro Orlando. We tend to think  
24 of Cleantech companies as being emerging companies and  
25 start ups. Well, two of our largest employers in

1 Orlando are Cleantech companies, Mitsubishi Power  
2 Systems and Siemens Energy. And Mitsubishi has been  
3 very helpful in supporting the expenses that are  
4 associated with these symposiums.

5 As well as AquaFiber, Cleantech Solutions from  
6 Biology, and Tom Bland. They've been very supportive in  
7 terms of helping us be able to provide the financial  
8 wherewithal to conduct these symposiums.

9 The Institute for Economic Competitiveness at UCF.  
10 This actually was a cornerstone -- establishing this was  
11 the cornerstone of Mayor Crotty's economic stimulus  
12 package in 2002, and it has gone on to achieve great  
13 things under the leadership of Dr. Sean Snaith, and  
14 they're the ones that completed the Cleantech study. I  
15 just saw last night, this is a complete redo of their  
16 website, so you may not recognize it.

17 Of course, the UCF Venture Lab and Kirstie  
18 Chadwick. They're the ones that are organizing this  
19 whole thing, and I think a lot of thanks to Kirstie and  
20 Christa Santos and Sean Christensen and everyone that's  
21 involved with the Venture Lab. I think they're working  
22 with six Cleantech companies right now. There's a  
23 tremendous amount of resource on this website, so I  
24 encourage you to go visit that when you can.

25 And in a larger context all of UCF, really is our

1 partner, not just the Venture Lab and the Institute for  
2 Economic Competitiveness. It's the technology  
3 incubator, the expanded programs at UCF Small Business  
4 Development Center, and a host of programs, and you can  
5 go into UCFopportunity.com and you'll see a whole list  
6 of all the programs at UCF that are related to economic  
7 development. And as you can tell by the particular  
8 screen capture that I took off the UCF website, Orange  
9 County and UCF are great partners in economic  
10 development.

11 Of course, Orange TV. They have videotaped every  
12 one of our symposiums, every presentation, all the  
13 discussions, they've integrated in with the Powerpoints  
14 from the symposiums, and every one of those symposiums  
15 and content is on the UCF Venture Lab website.

16 And Leslie with Zacco & Associates, she's here this  
17 morning and she's taking a word for word transcription  
18 of the whole symposium. So in addition to full video of  
19 all the presentations, you'll have a full word for word  
20 document of the entire symposium, as we have with the  
21 first three symposiums. So much thanks is due to Orange  
22 TV.

23 And, of course, the University of Central Florida  
24 and its Downtown Center where we've been having these  
25 symposiums, an ideal place and setting for this event.

1           I want to make two announcements of events coming  
2           up. One is on March the 2nd where Ford will introduce  
3           its first plug in vehicle in Florida, only the second in  
4           the United States. So there's the website there. I'll  
5           give you a minute to write that down where you can go in  
6           and find some more information about it, but from what I  
7           understand from the press releases, you'll be able to go  
8           out and actually test drive the plug in vehicle if you  
9           have a mind to. Looks like an exciting day.

10           Then coming up on April the 14th is the Annual  
11           Senior Design Symposium for Renewable and Sustainable  
12           Energy. That's where undergraduate students at UCF  
13           showcase their research, innovation and creativity in  
14           the area of clean energy.

15           I want to -- before we move on to the speakers and  
16           the content of the day, I want to mention two handouts  
17           that you have in front of you, I think that you've  
18           picked up at the front door. One is a status report on  
19           energy bills. I asked the legislative people in Orange  
20           County if they could do a quick status report for me  
21           yesterday on what bills were being prepared, ready to be  
22           introduced, and something about them. This is a summary  
23           of those bills. I was surprised to read through here  
24           and see that there are some things that if we want an  
25           RPS we need to support, but there are a few bills that

1 if you want a RPS, you'd better not support them. So a  
2 few of those stood out as well.

3 The other thing that was handed out when you came  
4 in is a feedback form from today. The results of the  
5 feedback form that we had when we released the Cleantech  
6 study is also out there and I think you'll find that  
7 interesting. There's a lot of detail to it. We only  
8 asked one question, rank the 17 recommendations in order  
9 of priority. Pick five, which ones you think are most  
10 important for consideration at a Cleantech symposium.  
11 Out of that one question, I got seven or eight pages of  
12 graphs and charts. But the RPS came clearly out as the  
13 top idea, the top topic that everyone at our symposiums  
14 wanted to talk about today. But there is one question  
15 on here about today's symposium. We'd like to know from  
16 each of you what you think the three most important  
17 actions are that symposium participants can take to  
18 achieve the goal of an RPS in Florida. It's not going  
19 to be just Orange County or UCF or the Florida Energy  
20 Center who's going to make this happen. It's got to be  
21 everyone in this room doing something. And then looking  
22 forward to a nice Cleantech symposium in April, we don't  
23 have a specific date yet, it's going to be on green  
24 building codes and ordinances. Here's a couple of  
25 questions to kind of just get us thinking about this.

1 So I'd like you to respond to that as you're thinking  
2 through the material this morning.

3 And, finally, of course, at the bottom, if your  
4 company or organization would like to help sponsor the  
5 symposiums, we would deeply appreciate it. So you might  
6 think about that and we can add you to the roster of  
7 sponsors at the next symposium.

8 As we move ahead today, as I was watching the  
9 Olympics last night and Shaun White is his name,  
10 fantastic, tried to think of a couple watch words that  
11 maybe we can think about as we hear all the  
12 presentations today. If we really want to establish an  
13 RPS in Florida, seems to me that we ought to be asking  
14 ourselves what's reasonable. Is it 20 percent by 2020?  
15 15 percent? What's included in an RPS? How do we make  
16 it specific to Florida? And how do you answer the  
17 question of cost? So there's a couple things that might  
18 give you some guidance, and just try to think about  
19 these as the presentations are made. Our goal, of  
20 course, is to enact an RPS in Florida. There's a --  
21 sort of to set the global stage for this symposium, I  
22 just want to end my introductory remarks with a quote  
23 from an article that is coming out in next month's issue  
24 of SFO magazine. That stands for Stocks, Futures and  
25 Options magazine. It's just sfo.mag on the Internet.

1 And there is an article coming out in next month's issue  
2 titled, Cleantech, How China Sizzles and the U.S.  
3 Diddles. There's just a couple of sentences from it.

4 As the United States continues to be polarized  
5 around the Cleantech policy, diddling with  
6 implementation of things like a federal renewable energy  
7 standard, the Chinese have quietly leapt to the  
8 leadership position in the industry. In 2006, they  
9 passed RPS renewables to comprise 15 percent of their  
10 energy mix by 2020. They're going to reach that  
11 capacity of 20 percent by 2020. And they'll meet their  
12 2020 solar goal by next year. So they're moving  
13 forward. This article describes how China wants to be  
14 dominant in the Cleantech industry. They want to have a  
15 laser-like focus on Cleantech. Watch for this article  
16 because I think it does sort of provide the framework  
17 within which we have got to get going.

18 So one of the basic underlying questions that we  
19 need to ask ourselves today is how do we sizzle in Metro  
20 Orlando and not diddle.

21 So with that, I'll just welcome -- this is a record  
22 attendance today. I think we're going to end up having  
23 about 85 or 90 people. That's the number of people who  
24 registered. And we're going to continue these  
25 symposiums, and hopefully we hit some home runs.

1           Someone e-mailed me a day or two ago and asked me, how  
2           are you going to measure success from the symposium  
3           today. And the way I would measure it is if Florida  
4           passes an RPS. So I don't want to have egg on my face  
5           going through all this, so I don't think anybody else  
6           does either. We don't want to diddle in terms of doing  
7           what we need to do to be competitive, not just in China  
8           but other states. Over half the states in the United  
9           States have passed renewable energy goals. When we meet  
10          with companies who want to build a PV manufacturing  
11          facility here, these days, in the same breath they ask  
12          about incentives, they ask what kind of clean energy  
13          policies do you have in Florida to support the growth of  
14          Cleantech? Do you have an RPS? Well, we're working on  
15          that, but meanwhile we're doing this, and we point to  
16          all the great resources that support Cleantech in Metro  
17          Orlando. But it would sure help in drawing companies to  
18          Metro Orlando and Florida if we had an RPS of some type.  
19          Over, I think, 30 states, 35 states have mandatory  
20          RPS's. Some have voluntary. But I think the bottom  
21          line is that they all compromised, they all came up with  
22          something. In Dallas, there is something like I-4  
23          called Central Expressway, and over the decades, there  
24          was talk about renovating it and putting it underground,  
25          widening it, elevating it. When we surveyed citizens

1 and did focus groups, the bottom line there was, we  
2 don't care what you do with it, just fix it. So I think  
3 the message to the legislature is, let's do something.  
4 Doing nothing leaves us out of the race.

5 Thanks a lot. Hope you enjoy today. Kirstie?

6 MS. CHADWICK: Okay. I have the honor of  
7 introducing the speakers throughout the day, and it's an  
8 incredible group of folks that have come together here  
9 to help educate all of us on RPS best practices, both  
10 here, I guess, in our -- well, we don't have a lot going  
11 on yet in our state, but we'll get there, but also at  
12 the national level. As a reminder, the speakers do need  
13 to stand, not sit, behind the podium here so that the TV  
14 cameras can record all of your wonderful faces and also  
15 catch your voices on the microphone.

16 So our first speaker for today is Tommy Boroughs,  
17 and Tommy is with the law firm, Holland and Knight. And  
18 we'll excuse him for his lawyerish background because he  
19 also is a wonderful expert on the renewable energy  
20 domain as well. Tommy is -- his practice in law is  
21 focused on the area of zoning and land use, regulatory  
22 matters and -- together with real estate development,  
23 acquisition and sales. He also currently serves as the  
24 co-chair of the firm's land use team. In addition, Mr.  
25 Boroughs served as the Chair of the Florida Energy

1 Commission from 2006 to 2008 and he served on the board  
2 of the Orlando Utilities Commission from 2001 through  
3 2008. He also chaired the American Public Power  
4 Association's Policy Makers Council in 2005 and 2006,  
5 and he served as a member of the Board of Directors of  
6 that association as well. In December of 2005, former  
7 Governor Jeb Bush appointed Mr. Boroughs to the Florida  
8 Energy Forum, and in 2007, Florida Governor Charlie  
9 Crist appointed Mr. Boroughs to the Governor's Energy  
10 and Climate Action Team. Mr. Boroughs was also voted  
11 2006 municipal electrical member of the year. So as you  
12 can see, in addition to his side job as a lawyer, he's  
13 very, very well entrenched with the alternative energy  
14 policy. So with that, I'd like to introduce Mr.  
15 Boroughs to open our day and give us the broad scope on  
16 the state of the union of RPS.

17 MR. BOROUGHS: Technical expert has got to set up  
18 the technically challenged for this presentation here.  
19 Thank you.

20 Good morning, everybody. It's great to be here. I  
21 hope this is one of the last of the cold mornings we're  
22 going to have this year. At least, I've got my fingers  
23 crossed. Before -- rather, after my presentation, I'll  
24 leave plenty of time for questions and comments and  
25 discussion if we want to do that.

1           Before I get started with the RPS history and the  
2           present status of the RPS policy in Florida, let's make  
3           sure we're all on the same page in terms of a definition  
4           of renewable portfolio standard. A renewable portfolio  
5           standard is a requirement that power generating  
6           utilities produce more energy from renewable sources.  
7           It generally establishes a minimum level of electricity  
8           sales that must come from a renewable generation -- must  
9           come from renewable generation by a specific date, like  
10          a certain percent by this date, certain percent by  
11          another date. Okay. Why do we have one? What are the  
12          justifications for having a renewable portfolio  
13          standard? First, you know --

14                 I'm sorry, I'm still under definition of renewable  
15                 energy. Did I do something wrong? No. I'm still on  
16                 the definition for renewable energy now. Sorry. I got  
17                 ahead of where I am in my outline.

18                 But renewable energy means energy produced from a  
19                 method that uses one or more of the following sources of  
20                 the following fuels or energy sources: Biomass, solar  
21                 energy, geothermal energy, wind energy, ocean energy,  
22                 hydroelectric energy. Basically, renewable energy is  
23                 energy from a source that continually replenishes  
24                 itself.

25                 Okay. What's the definition of biomass? Let's

1 talk about biomass. Well, Florida -- this is a  
2 statutory definition of biomass in Florida. It's very  
3 broad as you can see. And it covers not only, you know,  
4 everything from agricultural products to agricultural  
5 waste, including plant and animal, it also covers such  
6 things as municipal solid waste and urban wood waste.  
7 Now I get to the reasons for why we have an RPS. One  
8 reason is to reduce the carbon emissions in our  
9 generation to renewable sources which generate less or  
10 emit less carbon. But also renewable energy emits less  
11 other pollutants such as sulphur oxide, nitrous oxide  
12 and mercury. Also -- and this is one of my favorites --  
13 it reduces dependence upon foreign fossil fuel sources.  
14 In Florida, that's especially important because in  
15 Florida we import 98 percent of the fuel for our energy.  
16 Just think of it, folks. 98 percent of the fuel for our  
17 energy in Florida is imported. We ship all that money  
18 out of our state. Now, why is a -- if I can get to my  
19 next one here. it's not shifting here, Kirstie. What  
20 am I doing here wrong?

21 MS. CHADWICK: Hit next.

22 MR. BOROUGHS: Okay. That ought to work. Now, why  
23 is an RPS especially important to Florida? I told you  
24 one reason about we import all of our energy. But  
25 Florida has a vast potential for renewable energy.

1 Florida could be literally the Saudi Arabia of biomass.  
2 Look at what we've got just from our so called  
3 opportunity fuels, just from our waste fuels. We got  
4 timber waste, agricultural waste, lawn clippings, land  
5 fill waste, animal waste, food processing waste, and we  
6 can grow crops. We've got the land, we've got the  
7 climate, we've got the rainfall. In addition, we've got  
8 good solar, we've got good potential from the  
9 Gulfstream. The Gulfstream that whips around Florida  
10 off the southeast coast is the fastest moving body of  
11 water around the continental United States. And we've  
12 got a potential of offshore wind. Notice I don't  
13 mention onshore wind because it's basically just shore  
14 wind. At least with the technology today and people on  
15 the coast just -- in our country, just -- in our state,  
16 just don't want to see turbines or windmills, you know,  
17 blocking their view of the ocean. The Europeans are a  
18 little bit different. They think of things differently.  
19 I know a lot of you have been to Europe and you've seen  
20 these turbines. Europeans think more of the common  
21 good, in a certain sense. Americans, we tend -- and I  
22 speak in exaggerations and I'll acknowledge that, but  
23 Americans tend to think more of our individual rights.  
24 We don't want to be -- we don't want our view of the  
25 ocean, you know, to be blocked by a turbine or a

1 windmill. So it's going to be tougher to have anything  
2 other than offshore winds. And that's -- I list that as  
3 a potential because that's out there. You can do it,  
4 you can do it now. It's very expensive to do it with  
5 the technology we have now. Eventually, though, we'll  
6 probably do better than that.

7 Okay. Now I'm getting ahead of myself. Let's talk  
8 for a minute about the history of an RPS policy in  
9 Florida. In 2006, the Florida legislature created an  
10 entity called the Florida Energy Commission. Okay.  
11 There were nine of us appointed by the president of the  
12 Florida Senate and the Speaker of the Florida House, and  
13 the purpose of the Commission, the purpose of the  
14 Commission was to advise the Florida legislature on the  
15 future -- on a future energy policy for the state of  
16 Florida. I served as chairman. We had -- in addition  
17 to the nine commission members, we had four advisory  
18 groups. Each of our four advisory groups were chaired  
19 by a member of the Commission but they were staffed by  
20 as many as 15 or 20 members of the public, members of  
21 the public representing all the various vested interest  
22 groups that had a vested interest in a Florida renewable  
23 policy. You know, utilities, customers, businesses,  
24 government, environmentalists, academia. And at the end  
25 of that year -- we had hearings all over Florida, not

1           just our full commission, but also the four advisory  
2           groups. The end of that year, we came up with a set of  
3           recommendations. I've got it here with me. It's about  
4           the same size book as that Cleantech study that all of  
5           you have there at your -- that you were given when you  
6           walked in, that Orange County did, that Cleantech study,  
7           that green book. About that size. And that was one  
8           volume. Volume 2 is more specific with the actual --  
9           the language of the specific legislation we wanted. But  
10          we made 85 separate recommendations to the Florida  
11          legislature in our December 31, 2007 report that would  
12          be the backbone of the beginning of an energy policy for  
13          the future of Florida. One of our four advisor groups  
14          I've told you about was focused on renewable energy, and  
15          we had several recommendations in the renewable energy  
16          area. One of them -- well, let's give you an example.  
17          We recommended the legislature direct the Public Service  
18          Commission to study renewable energy in Florida, to look  
19          at all the various sources, and after that study, to  
20          recommend a renewable -- come up with a recommendation  
21          for a renewable energy policy for the state of Florida.  
22          Okay. It was our recommendation No. 40. That was it.  
23          Okay. Come up with an RPS for the state of Florida.  
24          Well, the 2008 legislature said it did something, the  
25          House did nothing. What did the Senate do? This is the

1 bill the Senate passed. Okay. The Senate said, okay,  
2 Commission, Public Service Commission, adopt rules for a  
3 renewable portfolio standard. Okay. And in doing that,  
4 consult with the DEP, Department of Environmental  
5 Protection of Florida Energy and Climate Commission, and  
6 have a report, have a draft rule for consideration of  
7 legislature by February 1, 2009.

8 All right. Let's look at some of the component  
9 parts. I keep hitting this thing. I got to redo it  
10 here. Let's look at some of the component parts of  
11 that. Let me backup just a minute. So the Public  
12 Service Commission hired a consulting firm called  
13 Navigant Consulting, one of the top consulting firms in  
14 the country, to do the study. And I've got some  
15 excerpts here of the docket of the -- of a public  
16 meeting of the Florida Public Service Commission of  
17 December 31, 2008, at which Navigant made the summary.  
18 They had already published their report and the staff  
19 had already published its recommendations, but these are  
20 some excerpts, okay, from the recommendations of  
21 Navigant. Okay. Here's what Navigant said.

22 No. 1, under the unfavorable scenario for renewable  
23 development, which includes a 1 percent rate cap,  
24 renewable energy in Florida could be 5 percent of IOU  
25 retail sales by 2020.

1 Well, what do they mean by unfavorable scenario?  
2 What they're talking about is -- what they're talking  
3 about is they're referring to their -- the price of  
4 fossil fuel. Okay. The existence and the amount of any  
5 governmental renewable incentives. Such things as the  
6 viability of a market for financing renewable energy.  
7 And under the most unfavorable scenario, you could only  
8 do about 20, 25 percent. Under the mid favorable  
9 scenario which had a 2 percent rate cap -- now, the  
10 unfavorable scenario had a 5 percent. I'm sorry, that  
11 was -- I'm sorry, that's a 1 percent rate cap. The rate  
12 cap means -- the 1 percent rate cap means the percentage  
13 of total retail electric sales a utility has. For  
14 example, if their total retail sales is a hundred  
15 million dollars, 1 percent is 1 million. So that's all  
16 that company would have to spend in, you know, the  
17 following year is 1 million dollars in order to meet the  
18 RPS goal. So that's why it's referred to, our first  
19 bullet there, as an unfavorable scenario. It only gets  
20 to be 5 percent, okay, 2020. You get a 2 percent rate  
21 cap and a little better and more expensive fossil fuel  
22 cost from governmental renewable portfolio and renewable  
23 energy incentives, and a 2 percent rate cap, and you can  
24 do 11 percent by 2020. Under the most favorable  
25 scenario, which includes a 5 percent rate cap, you could

1 do 25 percent by 2020. Okay. So, all right, here is  
2 what they recommend. This is what Navigant recommended  
3 and this is what the staff recommended. By January 1,  
4 2017, 6 percent. Da da da, da da da, da da da. We  
5 don't get to 20 percent to January 1, 2041. Okay. So  
6 that's what they recommended. Well, that was on a  
7 December 31, 2008 meeting, formal adoption of a  
8 recommendation of an RPS in Florida of 20 percent by  
9 2041. Wait a minute, says Governor Charlie Crist. He  
10 said, what do you mean 20 percent by 2041? Didn't you  
11 read my executive order? He issued a set of three  
12 executive orders dealing with renewable energy in the  
13 summer of 2007. One of his executive orders, he asked  
14 the Public Service Commission to prepare a rule  
15 providing for -- getting an RPS of 20 percent by 2020.  
16 He said, didn't you see where I asked for 20 percent by  
17 2020, and you come back with 20 percent by 2040? Now, I  
18 don't know this for a fact but I just would speculate,  
19 he had some of his minions go talk to the Public Service  
20 Commission guys. Do you realize who appoints you? Do  
21 you realize who reappoints you? I need it to be 20 by  
22 2020. Now, lo and behold, guess what, da da da, January  
23 9, 2009, action of Florida Public Service Commission.  
24 voila, 20 percent by 2020. Nine days later, wow, man,  
25 they get the message. The Governor wants 20 percent by

1           2020, the Governor's going to get 20 percent by 2020.  
2           But let's look at the components of the rule, because it  
3           really -- it's the components of the rule that make the  
4           difference on the ground, make the difference in  
5           reality. Here's what they said. This is -- I'm sorry,  
6           this is a schedule. I've already hit that. No, that's  
7           the schedule. This is the way it works with you.  
8           Here's some other components. Okay. Now, here's the  
9           concept. IOUs could do one of two things. They could  
10          either self build their own renewable energy or they  
11          could buy what's called RECs, renewable energy credits.  
12          They could buy them from one utility who had more  
13          renewable energy than it was required to and it would  
14          get so-called REC credits for that. It could sell them.  
15          Okay? It could sell them to utilities. But one way or  
16          the other, you had to make your RPS standard. Okay.  
17          However, there's a rate cap. The rate cap was 2  
18          percent. I want to go back to my hundred million dollar  
19          analogy. Okay. 2 percent of a hundred million dollars  
20          is 2 million dollars. So what that means is, okay, all  
21          that one particular utility would have to spend to get  
22          -- to make that RPS standard in any one year would be 2  
23          million dollars. Now, it provided for a review every --  
24          once every three years and it made the standards  
25          mandatory. Okay. It's mandatory unless, you know, you

1 hit your 2 percent. In other words, you have to do it.  
2 You have to hit your 2 percent. You have to either self  
3 build or you have to buy the RECs. And there are  
4 penalties. Penalties of up to 50 basis points for  
5 unexcused noncompliance, okay, to be assessed the  
6 stockholders. In other words, you can't add that to  
7 your rate, baby. That's what it's going to cost you.  
8 So even though there's a -- what I would call a fairly  
9 generous -- some may disagree -- a fairly generous rate  
10 cap, there's a heck of a penalty if you don't make it.  
11 It comes right out of your shareholders' pocket. Do you  
12 know what that does to your stock? Do you know what  
13 that does to your bond rating? You're going to make it.

14 All right. Here's some more components. They had  
15 a solar and wind carve out. The carve out for solar and  
16 wind was at 25 percent of the RPS requirements had to be  
17 met with either solar or wind. Okay. And the -- some  
18 additional components dealt with cost recovery. In  
19 other words, whatever it costs, whatever additional  
20 amount of money it costs to do renewable energy, the  
21 IOUs, investor owned utilities, who furnish 75 percent  
22 of the electricity to customers in the state, the other  
23 25 percent are from municipalities and co-ops. You  
24 know, they could pass incremental costs on to their  
25 customers. Now, the other 25 percent, the munis and the

1 co-ops, their rates, specific rates, are not reviewable  
2 by the Public Service Commission, so theoretically they  
3 can charge whatever they want to. I say theoretically  
4 because it's more theory than real because nobody wants  
5 to charge anymore -- I can guaranty you, OUC --  
6 Jennifer, are you here? Okay. I guaranty OUC --  
7 Jennifer Szaro at OUC, I guaranty OUC doesn't want to  
8 have to charge its customers anymore than they have to.  
9 They want to do a renewable policy, but they want to try  
10 to keep the cost down. But for the most part, getting  
11 started is going to cost more. Okay.

12 Now, the theory is that the more you install, the  
13 more the price comes down. Like solar is a good 30  
14 percent less than it was this time last year. Solar PV  
15 is 30 percent less than it was this time last year.  
16 Now, it's going to go down. Will it go down at that  
17 same rate? I don't know, but it's going to continue to  
18 go down. Technologies are increasing by leaps and  
19 bounds. I mean, somebody will come up with -- I'm on  
20 the advisory board of the Florida Solar Energy  
21 Consortium and -- which is a group of all the  
22 universities who are trying to coordinate their research  
23 and then to commercialize it. I can tell you that  
24 somebody comes up with something that will, say,  
25 increase the efficiency of a solar PV panel 15 percent,

1           they don't want to invest money in that. That's not  
2           enough. That's not enough incremental change, you know,  
3           for a technology that's basically in its infancy when  
4           you consider what they've looked at. So okay. Let me  
5           make sure where I am here.

6           So they made their report to the legislature, and  
7           here is the legislative proposal. Senate Bill 1154.  
8           The Senate did pass this bill. The House never passed  
9           the bill. It never even got out of committee. Not a  
10          renewable energy bill. The House did pass an offshore  
11          drilling bill. Okay. The Senate didn't take that up.  
12          But at any rate, here it is. It was in Senator King's  
13          committee, and it was very much considered his baby.  
14          Here's the concept. I will allow IOUs to have 20  
15          percent of sales by the end of 2020. So it was a 20 by  
16          20 portfolio standard, but it wasn't a renewable  
17          portfolio standard. It was called a clean portfolio  
18          standard, because, okay, up to 25 percent of the  
19          percentage goal each year could be in what was called  
20          clean energy, which is new nuclear energy, not existing  
21          that some of the utilities have, but new nuclear energy,  
22          or -- or and IGCC with carbon capture sequestration.  
23          IGCC means natural gas combined cycles. So natural gas,  
24          you put carbon capture sequestration with it, called  
25          CCS, and you can do -- you reach 25 percent of your goal

1 if you did that.

2 Okay. Here's some other components. This is the  
3 timing of the goals. So you had 20 percent by 2020. So  
4 essentially, even though it's 20 percent by 2020, it  
5 means the last day, December 31. That's why you see  
6 some of these goals expressed that they say it's 20  
7 percent by 2020, but you'll see somebody showing -- it  
8 really shows January, '21, 2021, because it's the last  
9 day of the year.

10 Okay. The rate cap. The rate cap, same that the  
11 Florida Public Service Commission recommended at 2  
12 percent. Okay. But let's see how that would work.  
13 Okay. I'm sorry, they had it mandatory. Same as the  
14 RPS. It was mandatory. It wasn't aspirational for  
15 IOUs, it was mandatory. They had to do it. Let's hit  
16 the rate cap. Now, here is how the rate cap is set up.  
17 Okay. Up to 1 percent of your cost could come from  
18 class 1 clean energy resources, which are solar and  
19 wind. Class 1, okay. Class 2 was all other clean  
20 energy resources. 1 percent could come from class 2.  
21 Talking about the rate cap now. That's your total rate  
22 cap. No expenses for your clean energy sources, which  
23 is new nuclear and the gas with capture and storage can  
24 be counted toward your rate cap. So that was what the  
25 Senate passed last year. Like I said, the House didn't

1 pass anything. Renewable energy never even got out of  
2 committee.

3 Now, this year -- I think you've got a handout of  
4 some of the senate bills. Not all the senate bills, but  
5 some of the senate bills. This year, Senator Deckert  
6 has got the same bill that was passed last year out of  
7 Senator King's bill. Senator King has since deceased.  
8 That committee is chaired by Senator de la Portilla, and  
9 I haven't spoken with him, I don't know exactly where he  
10 is. I've got to believe since President Jeff Atwar  
11 appointed him and Jeff Atwar would like to see a  
12 renewable bill, would like to see a renewable portfolio  
13 standard, he would support that. I don't know that, but  
14 Senator Deckert has filed the same bill, the exact same  
15 bill that was passed last year by the Senate. Senator  
16 Constantine has passed another renewable portfolio  
17 standard bill that seeks to adopt the rule from the  
18 Public Service Commission. So I've already gone over  
19 what the Senate passed, already gone over what the  
20 Public Service Commission recommended. So those are the  
21 two bills that have been prefiled. Senator de la  
22 Portilla has filed four what we call shell bills.  
23 They're just place holding bills with no detail in it.  
24 Senator Mike Bennett has filed an interesting bill which  
25 deals with renewable energy but it doesn't have a

1 renewable portfolio standard. A lot of folks are afraid  
2 that the House will not pass a renewable portfolio  
3 standard, so in order to kickstart, in order to get some  
4 renewable power going, it calls -- the senate bill calls  
5 for so-called three tranches of renewable power. 310  
6 megawatts in 2010, 200 in each of years 2011 and 2012.  
7 And it could be either -- it can be anything renewable.  
8 Okay. It calls for full cost recovery. Now, the House  
9 -- like I said, nothing has been filed in the House  
10 dealing with anything remote to a renewable portfolio  
11 standard. They have, however, prefiled a bill for the  
12 offshore drilling component, you know, to do away with  
13 the moratorium on offshore drilling in the Gulf in  
14 Florida waters. Now, some people think that's just a  
15 lot of speculation. I don't know. Okay. I just don't  
16 know. There's a lot of speculation that what the House  
17 is going to do is to try to -- because the House passed  
18 the offshore drilling last year, is to try to pass a  
19 bill that will -- I mean, try to use that as a lever to  
20 try to get with the Senate to workout some kind of  
21 renewable portfolio, at least some kind of renewable  
22 legislation, in addition -- you know, in exchange for  
23 the Senate passing offshore drilling. I don't know that  
24 -- I can tell you this. I met with Dean Canon last  
25 week. Dean Canon is the incoming Speaker of the House.

1 He's not speaker this year, but he's incoming, and he'll  
2 be coming there the next year. And, basically, I mean,  
3 the offshore drilling is one of his babies. Okay. But  
4 what he says, and I was aware of this, what he says is  
5 what he wants is a comprehensive energy bill. He wants  
6 a comprehensive energy bill. He believes as I do, and I  
7 think most of us do who study energy policy. You need  
8 all players. You need all the oil and gas, you need all  
9 the renewables. You need nuclear, you need all the  
10 renewables. You need everything you can do, you need  
11 every component you can do. And what I didn't realize  
12 was what he said he was willing to do, what he wanted to  
13 do was all the revenue that the state would make, would  
14 have coming in from the offshore drilling, you know,  
15 from the sale or leases or offshore drilling rights,  
16 that that would come in to support renewable energy.  
17 That's a play that would work with even some  
18 environmentalists. George is going to come up here and  
19 talk in a minute, and I see Melissa shaking her head.  
20 That won't work with everybody, but that will work with  
21 a lot of environmentalists. If we have the right kind  
22 of offshore drilling bill with the right kind of  
23 protection and conditions and all that kind of stuff, I  
24 can go along with that as long as it's with an overall  
25 -- it's an overall energy bill and it's not just drill,

1 baby, bill. So what's going to happen is anybody's  
2 guess.

3 It's very important that Florida have an RPS. Some  
4 of the House members last year were quoted as saying, we  
5 don't need to do this in Florida because the feds are  
6 going to do it. Well, the problem is, if the feds do  
7 it, they won't require that renewable energy to be  
8 produced in Florida. All FP&L has got to do is just  
9 bring those wind credits, those sun credits, and other  
10 states don't have to do a thing in Florida if it's a  
11 federal RPS. But a state RPS, you know, you have to do  
12 -- they would have to generate the renewable energy in  
13 Florida. Okay. And what I've said for all along is  
14 this, if we do it right in Florida, if we do it right,  
15 if we do renewable energy right in Florida, we can do  
16 two things. One, we can develop our economy at the same  
17 time we keep our environment green. Now, that's the  
18 win/win and that's doable. And so that's what I hope we  
19 do.

20 Okay. That's all I've got on my presentation. But  
21 I am very willing to take any questions you have or any  
22 comments you may have. Or any rebuttal, George, or  
23 Melissa.

24 Any questions?

25 Well, I'll be around. And, you know, I encourage

1 -- and I will be around for the break. Right now, I  
2 plan -- unless some client tells me I need to do  
3 something else, I plan to be here the rest of the  
4 program, and I will be interested in talking with anyone  
5 that would be interested in speaking about --

6 Yes. I'm sorry.

7 UNIDENTIFIED SPEAKER: What is it about the House  
8 -- what is it about the House that lost that --

9 MR. LEWIS: Can you come down to the mic?

10 UNIDENTIFIED SPEAKER: Oh, I'm sorry.

11 I'd just like to know, in your opinion, what is it  
12 about the House that has the push back on like the  
13 Senate? The Senate wants to push the RPS and the House  
14 does not. Could you give us a little background on  
15 that, or your opinion?

16 MR. BOROUGHS: Well, part of it is speculation.  
17 You know, I -- first of all, for any bill to get passed,  
18 you need a champion, you know. Whether it's state  
19 legislature or Congress, we have to have a champion.  
20 Somebody needs to get out there and, guys, we need to  
21 get this done. There is no champion in the House. So  
22 you start off -- and the champion needs to be able --  
23 either needs to be leadership, you know, the leader, or  
24 needs to have the ear of the leader, or it just doesn't  
25 work and there is no champion. Second, I think the last

1 year, my impression last year was a lot of folks in the  
2 House just doesn't understand it. You know, there was a  
3 lot of noise. You know, the folks from FAIR were  
4 -- organized folks from FAIR were trying to do feed-in  
5 tariffs, and the Utilities hated it, so a lot of space  
6 in trying to do renewable energy, especially solar,  
7 was taken up by these guys who want to do a feed-in  
8 tariff, and it sort of took away from -- it helped to  
9 poison the well, I'm told. Also, I don't think the  
10 Utilities were organized. You know, they talked about  
11 organizing it, they talked about supporting something,  
12 but they never really did. Okay. They never really did  
13 that. And this year, I mean, you know, they really want  
14 to do some renewables. The devil is in the details,  
15 frankly. I mean, the devil is in the details because  
16 here's the problem. You know, if you get -- no matter  
17 what an RPS says, when they do renewables, even if it  
18 says you can do cost recovery, even though the PSC will  
19 allow them to do cost recovery, PSC still has final say  
20 on what their rates are, basically what their rate of  
21 return is, and they're afraid that they're going to get  
22 nipped on their rate of return. I mean, there are a lot  
23 of interests here, and the Utilities have a lot of sway  
24 with the -- you know, with members of the House.  
25 I know I've answered that in a very general way, and

1           maybe some of you have better answers than I do to that.  
2           Bottom line, the Senate had some champions and I think  
3           -- and the House did not. And the House hopefully will  
4           do better this year. I can tell you that Steve  
5           Precourt, who chairs the energy committee, you know, is  
6           very much in favor of doing something. He won't commit  
7           to how much, but he understands what I've explained  
8           about an RPS. He understands why we need to do one in  
9           Florida. But it's ranking people that will make that  
10          decision. You know, he will not make that decision.  
11          Okay? Don't quote me to Steve on that, please, but  
12          that's the way it works. That's the way it works in our  
13          legislature. You know, if you don't play ball with  
14          those that appoint you, you don't stay in that position  
15          very long.

16                         Yes, Melissa.

17                         UNIDENTIFIED SPEAKER: Of all the bills on this  
18          handout, which one do you think stands a chance of  
19          gaining the most support both in the Senate and the  
20          House?

21                         MR. BOROUGHS: The same one the Senate passed, the  
22          same one that Ken introduced, his committee passed last  
23          year. I think that's got the best chance in the Senate.  
24          I think there's a good chance the House may start with  
25          that. I don't know where they'll end up, but basically

1 -- and affordability is the big issue. Affordability is  
2 the big issue. But -- and nobody, nobody -- this is a  
3 terrible time to be an incumbent in a Florida  
4 legislature right now. You know, none of them want to  
5 add one penny to any taxpayer's burden or one penny, you  
6 know, to any consumer's burden. They don't want to do  
7 it. They're afraid to do it. So affordability is a big  
8 issue. So that's why I think -- I think the rate cap  
9 handles that. That's why you have a rate cap. You're  
10 not going to get to 20 percent if you're just in pure  
11 renewables. Even a clean portfolio standard, 20, 25,  
12 you're probably not going to get there for a 2 percent  
13 rate cap. But that covers the affordability.

14 Yes, sir.

15 MR. STRICKLAND: Hi, Tommy. My name is Blaine  
16 Strickland. Thank you for your comments this morning.  
17 I wonder if you could reflect on maybe the parallel path  
18 of, maybe I would call it, the carrot instead of the  
19 stick in the sense that there is also a move to create  
20 credits for individual homeowners to enhance their own  
21 energy consumption through solar energy panels on their  
22 house and other things that they can do personally. So  
23 this feels like it has to work in concert with maybe a  
24 voluntary holistic type approach.

25 MR. BOROUGHS: I didn't -- I was going to get into

1           that, but I knew I had a constrained amount of time, but  
2           basically it is a carrot and stick approach. Okay. The  
3           stick is the RPS. The carrot is the incentives. There  
4           are any number of incentives, and, you know, we got net  
5           metering, you can sell it back on the grid, we've got  
6           some renewables. I mean, we've got some tax credits  
7           that the state coffers ran out of, but they've been  
8           replenished by the federal stimulus money that's coming  
9           in. So there are any number of ways that you can  
10          stimulate by doing incentives, but in a lean year like  
11          this, the legislature is not likely to do anything  
12          that's going to take away -- that's going to cost them  
13          money. That's what they've -- Steve Precourt told me,  
14          tell me all you want to about incentives, but don't tell  
15          me anything that's going to cost me money. And I think  
16          that's where they are. The feds are in a different  
17          place. However, you know, what you've got to do, you  
18          can't just do a one or two or three year incentive.  
19          That's not a big enough incentive for somebody to go  
20          ahead, you know, and make a bigger investment. You need  
21          to have a longer range incentive. You need to have  
22          something to last 15 years at least, 20 years or better  
23          so you can put in a whole -- whatever. Okay. And you  
24          can finance it out. That's whether you're a homeowner,  
25          a business owner or a plant owner.

1           Kirstie's running me off, folks, but I'll be  
2           around. Okay.

3           MS. CHADWICK: Thank you. Couple of logistical  
4           housekeeping things. If you're going to ask questions,  
5           it would be great if you could just go to the  
6           microphone, because we need to record the questions as  
7           well as the answers for our transcripts as well as for  
8           the television camera folks here. And although we're  
9           behind here a little bit, I promised we'd have a half  
10          hour at the end where we can do an open Q&A time, so we  
11          will get you out of here on time if you need to go, so  
12          because the dialogues are healthy and productive, we're  
13          going to go ahead and try to accommodate questions if we  
14          can.

15          Next up, we have Jim Fenton, the tie guy. Although  
16          I see a couple of ties that looks a lot like Jim's in  
17          the back of the room as well, so this will be a tie  
18          contest, I think, at the break.

19          Jim, many of you may already know him, but he's  
20          been a consistent attending speaker here. We really  
21          appreciate his continued support of what we're doing.  
22          Jim is the director of the Florida Solar Energy Center.  
23          Is it director or executive director?

24          DR. FENTON: Director.

25          MS. CHADWICK: Big cheese guy. He is -- he leads a

1 staff of 140 folks in the research and development of  
2 energy technologies that enhance Florida and the  
3 nation's economy in environment and also educates the  
4 public, students and practitioners on the results of the  
5 research that FSEC conducts. FSEC is the nation's  
6 largest and most active state supported renewable energy  
7 and energy efficient research institute.

8 In addition to his duties as FSEC director, he  
9 leads a 12 member university and industry research team  
10 in a 19 million dollar U.S. Department of Energy  
11 research program to develop the next generation proton  
12 exchange membrane of fuel cell automotive engines. That  
13 sounds serious. Dr. Fenton also serves as a professor  
14 in UCF's mechanical materials and aerospace engineering  
15 department.

16 Prior to joining FSEC, Dr. Fenton spent 20 years as  
17 a chemical engineering professor at the University of  
18 Connecticut. His research activities are fuel cells,  
19 pollution prevention, sustainable energy and in helping  
20 FSEC expand its nationally acclaimed research and  
21 education programs which focus on hydrogen, alternative  
22 fuels, solar energy and building of energy efficiency.

23 With that, I'd like to introduce Jim. Today, he's  
24 going to give -- talk a little bit about some of the  
25 specific programs that could be implemented in Florida

1           should an RPS pass, and he's got a particular project  
2           that he would like to share with you as an example of  
3           that.

4           DR. FENTON: Thank you very much. It's nice to be  
5           here again today. Tommy set a nice stage for the desire  
6           for the State of Florida to have a renewable portfolio  
7           standard, and as he's pointed out, the advantage of a  
8           renewable portfolio standard is you set a bar, a  
9           requirement that the market have so much on a percentage  
10          basis of renewable energy. And with that, an industry  
11          responds and delivers, hopefully, that goal. Or as we  
12          all hope, exceeds that goal. Without a standard such as  
13          that, there is no market. That's the key. Without a  
14          goal, there is no market. All right. If we establish  
15          that goal, we have renewable energy, we've got a cleaner  
16          environment, so on and so forth. That, in turn, also  
17          generates lots of jobs. And, yes, there is a cost.  
18          There's a cost with building any power plant, whether it  
19          be a renewable energy one or a nonrenewable energy one.  
20          I'd like to focus on some of that today.

21          I've got a map here of the United States. You'll  
22          notice, as was pointed out earlier, John Lewis mentioned  
23          this, there are 35 states that have chosen to go green,  
24          along with the District of Columbia. There are a few  
25          checkerboard green states. Those are ones that have

1 actual goals; i.e., no penalty if they don't meet those  
2 goals. And you'll notice in every single case, there's  
3 a percentage, okay, listed next to the state's name,  
4 along with a date at which it plans on achieving that  
5 percentage. Now, Tommy Boroughs also shared with you  
6 that in most cases states have sort of step-wise goals,  
7 so much percent by this year and the next year and so on  
8 and so forth. Of these 35 states, most of them may have  
9 started out a little bit low. They've all raised their  
10 bar. Every single one of them has raised the bar.  
11 Almost every five years, they increase that. California  
12 is now up to 33 percent by 2020. That's their goal.  
13 All right.

14 Now, some of them have carve outs. The little  
15 yellow dot there shows you that solar hot water, okay,  
16 is indeed a mechanism of meeting the goal. The little  
17 FSEC sun symbol there shows that in some cases they  
18 actually have solar carve outs associated with those  
19 things. The other thing you'll notice is that there is  
20 some states that happen to be not green, and you will  
21 happen to notice that they tend to exist in the south.  
22 Okay. Now, there's a reason for that.

23 I've taken that same map in front of you here and  
24 put the retail residential price of electricity on it.  
25 Here in Florida, we're paying about 12.3 cents a

1 kilowatt hour now, okay, for the price of electricity.  
2 You'll notice that up in Connecticut, which is where I  
3 used to be, they're paying 20 cents for electricity. If  
4 you can find West Virginia, believe it or not, West  
5 Virginia went green. Isn't that shocking? Okay. We  
6 haven't done it in Florida, but they've done it in West  
7 Virginia. West Virginia over here is at 7 cents. So  
8 think about that now. People in Connecticut pay three  
9 times the price for electricity as they pay in West  
10 Virginia. Now, we pay more than they pay in West  
11 Virginia. All right. Now, there is one thing I learned  
12 when I moved down here to Florida. To get to the south,  
13 you go north. That's obviously not a geography  
14 question. But you'll notice that those southern states  
15 to our north pay less for electricity than we do.  
16 You'll also notice that Hawaii's out there at 23.8 cents  
17 since the price of fossil fuels has actually gone down  
18 recently. They used to be at 29 cents. And Hawaii gets  
19 its fossil fuels by boat. California is up at 15. The  
20 Pacific Northwest is around 7 or 8. They've got a lot  
21 of cheap hydroelectric. Utah has got a lot of coal.  
22 It's 8.6. But it decided to go green, too. So if you  
23 look at these things, you can see then that there is  
24 part of a reason why the south, okay, is not green. If  
25 the attitude is, if it's cheap, it ain't broke, why fix

1           it, well, that's part of the problem. Okay. People in  
2           Connecticut are paying a fortune for electricity so  
3           they're looking for options. Okay. Alternative energy  
4           will always be alternative until it's cheaper. Okay.

5           All right. Well, there's a lot of states where  
6           it's cheaper. Okay. We're at 12 and a half. Now, it's  
7           interesting that people will tell you that we can't  
8           afford climate change. You, the citizens of Florida,  
9           already voted for it. Okay. The reason why we're  
10          paying 12 cents compared to 10 in the other southern  
11          states is that we chose to burn clean natural gas  
12          instead of coal. And, yes, in today's market, that's  
13          more expensive. So you are paying more for your energy  
14          now because we use clean natural gas and a little bit of  
15          nuclear and few other things than those states to the  
16          north of us that burn coal. Okay.

17          So what we're not aware of is that the price of  
18          electricity in the United States varies widely. Various  
19          policies, various reasons. All right. And as a result  
20          of that, some people are more prone to look for  
21          alternatives than others. One other thing you should  
22          notice. Of all the states other than Alaska, and we can  
23          talk about Alaska too, but all the states other than  
24          Alaska, which one that's green -- okay, that's not green  
25          is the most expensive. Look carefully at the map. All

1 right? All the states that are green, a lot of them are  
2 more expensive, some are cheaper, but the clear one  
3 that's the most expensive on here is Florida. So guess  
4 what. We're next. We will have an RPS. We will figure  
5 out that we need options and alternatives, because the  
6 price of electricity out of the wall is going up. And  
7 we'll look at those options. The question is when.  
8 We'd like it all to be tomorrow.

9 Now, one of the other things that Tommy had pointed  
10 out was that when we purchase fossil fuels, you buy  
11 something. You consume it and it's gone. The State of  
12 Florida spends 60 billion dollars a year on fossil  
13 fuels. After we consume them, they're gone. Now, about  
14 30 billion of that is for transportation, gasoline. The  
15 other 30 billion is for making the electricity that we  
16 use today. None of it comes from Florida. All right.  
17 Now, does anybody remember what the states budget is?  
18 60 billion dollars. So we burn 60 billion dollars.  
19 That's what we do. And it's gone. Okay. So we ship  
20 money out of the state of Florida. That's the business  
21 we're in.

22 Now, there are states that do have coal. So West  
23 Virginia, as you notice, had the cheapest electricity  
24 around there. Unfortunately, they have black lung  
25 disease and various other things that go along with

1           that, but they keep all the money in West Virginia  
2           because it's their coal. Likewise with Utah and so on  
3           and so forth. You'll notice none of the states in the  
4           south keep the money at home. They like cheap prices  
5           but they ship all their money out of their boundaries  
6           because we don't make it here. As Tommy also pointed  
7           out, Florida's the land of biomass and the sun. Take  
8           advantage of that.

9           I was asked to also point out, in addition to  
10          renewables, there is some interesting opportunities out  
11          there for us as we add more renewables into our electric  
12          grid because renewables tend to be a function of time of  
13          day and so on and so forth. They are not baseload power  
14          plants. They are run 24 hours a day, 7 days a week. We  
15          have issues associated with incorporating things into  
16          the grid. I just wanted to point that out. There are  
17          some pictures that came from the Department of Energy.  
18          We're looking at solar or wind as sources of energy.  
19          We're putting these in through the grid. We are feeding  
20          them out to various homes and residences. Some day, we  
21          may integrate our car in with our residences and we do a  
22          systems analysis over that whole big picture because  
23          you'll be using electricity for your transportation.  
24          Keep in mind, right now we think of liquid fuels as our  
25          mode for transportation. The future will be electricity

1 even in your car.

2 We talk a lot about biomass. I remind you that  
3 when you go into biomass, most of you think  
4 transportation fuel. We can coal fire, okay, biomass in  
5 our existing coal plants if we choose to do that. We  
6 just have to say we're going to do it. We already  
7 decided we were going to put 10 percent ethanol in  
8 gasoline. Just did it. And here we are arguing about  
9 an RPS. Well, it's the same thing. 10 percent ethanol  
10 in gasoline. Why don't we just do it. It sets the  
11 market. We can do the same thing with an RPS. I prefer  
12 to think of biomass as baby coal, because that's what it  
13 is, it's baby coal. And what do you do with coal?  
14 Hopefully, you use it wisely, okay. With biomass,  
15 sometimes we get into problems with the fact that we're  
16 interested in subsidizing agriculture, which is a good  
17 thing, but not an energy policy. There's a lot of  
18 things we can do with it. Perhaps more importantly, I  
19 remind everybody that in addition to burning fossil  
20 fuels, those are our chemical feedstock, it's much  
21 better to use them to make something of value, of  
22 interest than to burn them. The lowest value anything  
23 has is its energy value. If you can take garbage and  
24 make something useful out of garbage, it's still better  
25 than burning the garbage. If it really is waste, then

1 let's get the energy value out there. Okay. So that's  
2 where the future lies.

3 Now, I've got two maps here. One's the world's  
4 biggest market for solar energy, and the other one  
5 happens to be the country I live in, and then the state  
6 I live in. Germany is the world's largest market for  
7 solar energy, yet it has half the solar resource of  
8 Florida. Now, New Jersey has far more solar rooftops  
9 than we do in Florida, and yet its solar resource isn't  
10 the same level as Florida's. Okay. A lot of the case,  
11 that's policy that we've talked about here today. It's  
12 also the fact that people in New Jersey already pay more  
13 for electricity than we do. So you've got a lot of  
14 issues associated with this. The other thing that I  
15 want to point out here is that, quite often, people will  
16 say, well, geez, the best solar resource is in the  
17 Arizona, New Mexico sort of desert area. That's  
18 correct. If that's a hundred, that dark scale there,  
19 then we at Florida are at sort of a 75, 85 kind of  
20 level. The real key there, though, is free real estate.  
21 To collect the sun's rays, you need area. Okay. And  
22 where is the free real estate. Well, out in those  
23 Arizona, New Mexico deserts, the real estate is free. I  
24 can build a large power plant, which is what utilities  
25 like to do, and generate energy from that, and hopefully

1 generate it in a cost effective, competitive way. Where  
2 is the free real estate in Florida? That's the key.  
3 It's not the solar resources, it's the free real estate.  
4 The free real estate happens to be on your rooftops.  
5 Top of the Wal-Marts, highway right-of-ways, underneath  
6 those long transmission lines that we run. The  
7 unfortunate thing with that, though, is that it's a  
8 distributed generation model. In other words, that --  
9 how does the utility make money when the power plant's  
10 on your roof. It's just a new model. It's a different  
11 way of thinking of things. We're traditionally used to  
12 thinking of large scale power plants. Eventually, we  
13 will end up with situations where we're taking advantage  
14 of all the free real estate. Until then, we've got  
15 these policy issues to deal with, we've got economics,  
16 so on and so forth. If there's a will, there's a way.  
17 So Germany doesn't have free real estate, Germany  
18 clearly doesn't have the sun and they chose to go ahead  
19 and do it. Okay.

20 Now, recently, Tommy mentioned that there's a  
21 possibility that some of the bills, in addition to  
22 having an RPS, might have what they call tranches on  
23 them. And as he pointed out, 300 megawatts for next  
24 year and maybe 200 megawatts each for the following  
25 years. And this last year, FP&L put 110 megawatts of

1 solar. So on an installed capacity, Florida went from  
2 last to No. 2 behind California in these three  
3 installations. Okay. Now, still a very small fraction  
4 amount of electricity we have, but it can be done. What  
5 I've done here is taken the costs associated with the  
6 installations that FP&L has installed. So you'll see  
7 here that in the case of the Desoto FPL, that was  
8 photovoltaics, and that was 25 megawatts. Turns out  
9 that 25 megawatts generated 2 million dollars worth of  
10 tax revenues for the local community because the  
11 property value that FPL put the solar on was now more  
12 valuable. FPL put in three solar projects, a total of  
13 110 megawatts. Their target was to charge their utility  
14 customers about 31 cents a month more to help pay for  
15 that. When you build any new power plant, it costs you  
16 more money. You go by a new car, your expenses go up,  
17 folks. Okay. So unfortunately you don't get something  
18 for nothing. Okay. You do have to make an investment  
19 in this. So we are paying a little bit more for those  
20 power plants, as we would for any new power plant that  
21 FPL might have installed. In this case, okay, now,  
22 5,000 total jobs came out of that 110 megawatts. All  
23 right. If I extrapolate, and my numbers now in green  
24 are based on using the numbers in black and making  
25 calculations. Okay. So for FPL's three projects, based

1 on the tax revenues that it might have gotten from the  
2 25 megawatts, there would be 9 million dollars worth of  
3 tax revenues associated with the 110 megawatts. I  
4 realize I'm just doing calculations here. Okay. Now,  
5 you'll notice I have a 20 percent solar line there. So  
6 magically, if we decided to go ahead and have 20 percent  
7 of all electricity coming from solar, based on using the  
8 FPL numbers there, you will see that I have 27,000  
9 megawatts of power. Substantially, a thousand times  
10 more than the solar plant. Okay. Your average cost per  
11 month per customer -- this will be spread throughout the  
12 state -- will be \$38. You say, that's a lot of money.  
13 I don't know. \$38 a month to generate 1.2 million jobs.  
14 Maybe that's not too bad. 1.2 million jobs. There's 18  
15 million people live in Florida. That's a substantial  
16 amount of jobs. You can look at some smaller numbers.  
17 10 percent solar, if you'd like. It's 620,000 jobs.  
18 Okay. Or if we go with the tranche, which as you see  
19 here, there's a 3,300 megawatts I put down there. If we  
20 added that in, the cost per month would go up to 42  
21 cents on the citizen's electric bill to pay for that.  
22 Okay. Now, I'll remind you, because they overcharged  
23 you for the price of fossil fuels last year, you are all  
24 getting a rebate in your January electric bill. You may  
25 not have gotten it yet, but you are. That turns out to

1 be \$4 a month. Okay. Because they overcharged you for  
2 the price of fossil fuels last year, you're getting \$4 a  
3 month back. Okay. Wait a minute. 42 cents is what  
4 we're asking for this tranche, and it generates 13,000  
5 jobs. Okay. An RPS is all about jobs, jobs, jobs,  
6 jobs. We have to do a better job of selling that.

7 Now, I show you a picture here of how energy  
8 generation in Florida brings tourists to Florida. You  
9 may have heard that the Orlando Utility Commission, in  
10 concert with Orange County, put on top of the Orange  
11 County Convention Center 1 megawatt of PV. They paid a  
12 little bit more for it. They used some tourist dollars.  
13 Why did they do it? Because it attracts conventions to  
14 Florida. We generate energy renewably. The Super Bowl  
15 was all offset. Okay. It was all renewable energy  
16 generated. Okay. Why do you do that? Because you can  
17 make money doing that. That's why Orlando did it.  
18 Okay. There is an example of energy bringing tourists  
19 to Florida versus energy washing up on our shores and  
20 scaring the tourists away. Some of this is just  
21 marketing.

22 Now, we brought up the fact that the utilities  
23 themselves could go ahead and build these large solar  
24 power plants. There's tremendous opportunities for you  
25 the homeowner to take advantage of putting solar on your

1           rooftops. As an example, if, say, we were going to get  
2           to 20 percent solar, and I've just speculated here that  
3           we might have -- maybe in that scenario we might have 2  
4           percent solar PV on your roofs and 2 percent solar  
5           thermal on your roofs. I've given you the jobs here.  
6           Substantial amount of jobs. Okay. In the lower left  
7           there, 31,000 jobs. Okay. If we have a 2 percent goal  
8           of solar PV on your rooftops, and the solar thermal  
9           would be 32,000 jobs on top of that. So substantial  
10          jobs.

11                 I want to point this out. There is a way to get  
12           something for nothing. Your goal should be to lower  
13           your electric bills. This is a plot of the per capita  
14           electricity use per person as a function of time. Okay.  
15           Back in the '60's, the United States, Florida and  
16           California, were all consuming around 4,000 kilowatt  
17           hours per American in the United States. Then we moved  
18           up into the '70's and everybody's increase was going up.  
19           We were getting bigger houses and so on and so forth.  
20           Okay. The Arab oil embargo, after that period of time,  
21           California went flat, and the rest of us, albeit not  
22           still increasing at the same rate we did before, and if  
23           you look way out to the year 2000, and I don't have any  
24           data after 2002 yet but we'll start getting that soon,  
25           it looks like we're actually dropping back down.

1           Several states are, as well as California's even dipping  
2           down a little bit lower into the future here. But you  
3           see that there is a gap. To give you a flavor of that  
4           gap between California and Florida is 5,000 kilowatt  
5           hours per person. At 12 cents, that's \$600 per person.  
6           At 18 million people in the state of Florida, that's 10  
7           billion dollars because our houses aren't very energy  
8           efficient. So California stopped spending money on  
9           electricity because they choose to invest in their own  
10          homes. And with that energy savings that they're now  
11          not spending on electricity, like we are, they used it  
12          to purchase solar. Okay.

13                 Now, let's talk about the cost of electricity. If  
14          you look at this, this is a table then of the four  
15          largest states, plus the United States, and you can see  
16          the electricity price in cents per kilowatt hours. I  
17          told you that in Florida we're not doing things because  
18          it's pretty cheap, and you can see that Florida and  
19          Texas have cheaper electricity costs. California's at  
20          14 and New York's up there at 19. United States on  
21          average is about 12.

22                 Now, the interesting thing is, I told you that  
23          California's homes don't use much electricity. You can  
24          see here that the average home in California -- and  
25          these are homes, not apartments and so forth, so these

1 are homes -- in California, uses 689 kilowatt hours per  
2 month. You can see in Florida we use almost three times  
3 as much as that. All right. So it's not the price of  
4 electricity. It's not the price of a gallon of gasoline  
5 that matters. It's how much did you spend on the stuff.  
6 How much gasoline did you buy this year? Most of you  
7 don't even know. But you all know the price of a gallon  
8 of gasoline. Okay. If the price of a gallon of  
9 gasoline costs \$100 a gallon and you use none of it, who  
10 cares? Okay. All right. You got to keep in mind, it's  
11 what you really spend on the quantity. Now, look at  
12 that. Florida spends \$190 a month on electricity.  
13 California only spends 97 bucks a month. Now, in  
14 California, \$96, they get a tax of \$2 that comes out of  
15 that 97 to pay for all the renewables they've been using  
16 forever. Okay. So it's not 97 plus 2. The 2 comes out  
17 of the 97. But we have zero. And the zero is coming  
18 out of 190. Okay. So the real answer is, make your  
19 homes all energy efficient, then we'll have no problems  
20 subsidizing renewable energy. But we don't have that  
21 policy either. We're paying a fortune to put  
22 electricity in your house. What you should be doing is  
23 investing in making your home more energy efficient.  
24 Okay. That's the real key.

25 Now, let's look at these taxes, if you will, on

1 your electric bills. There are 16 states, plus the  
2 District of Columbia, that have what are called public  
3 benefit funds for renewables. So you can argue it's a  
4 tax on your electric bill. Okay. That's what it is.  
5 Okay. I have no problems with making energy a sin.  
6 Anytime you use it, you are sinning. So let's tax the  
7 hell out of it. We've got a sin tax and I will use  
8 those resources to help you get over your sinful nature.  
9 It's great. What's the problem? And, by the way, we  
10 keep all the money in the state of Florida. Okay.  
11 Maybe that isn't so bad. It's called wealth  
12 accumulation. Something to think about. But these  
13 other states, mostly the ones that paid a lot for their  
14 electricity prices, as a result of paying a lot for  
15 their electricity prices, they made their homes more  
16 energy efficient and started looking at other options.  
17 We're behind the thing. But we can catch up. Okay.  
18 We also hinted about the fact that PV electricity  
19 on your roof, okay, can be cheaper than in the wall.  
20 Well, okay, back in 2006 on a levelized cost of  
21 electricity, that's what I'm showing you here, it was  
22 about 30 cents. So you say, that's too expensive.  
23 Well, in 2010, it's 15 cents. Okay. In 2015 -- and  
24 these are without subsidies. In 2015, it's going to be  
25 9 cents. We're already paying 12.3 out of the wall. So

1 in 2015, PV on the roof is cheaper than electricity out  
2 of the wall. Will it be Chinese panels or will it be  
3 Florida manufactured panels? I'll definitely be putting  
4 the people back to work to install them. That's good.  
5 We have high manufacturing jobs here. We have to get  
6 ahead of the curve.

7 Now, solar hot water heaters. That's the reason  
8 the Florida Solar Energy Center was founded 35 years  
9 ago. We have a lot of them, at least in numbers. Over  
10 139,000 here in the state of Florida. That leads to  
11 about 152 megawatts of solar energy. Unfortunately,  
12 only 2 percent of the homes in Florida have solar hot  
13 water heaters. Okay. There is an up front cost problem  
14 here. That's what the issue is. Suppose we had 40  
15 percent. Well, if we had 40 percent of all Florida  
16 homes with solar hot water heaters, we'd have 32,000 job  
17 years generated. We'd be replacing about 2 percent of  
18 Florida's electricity with solar hot water heaters. I  
19 switched my logics around for you. When anybody talks  
20 to you about energy efficiency or improvements on your  
21 home, you immediately ask, payback. I don't talk about  
22 that anymore. Okay. For sexy products, nobody ever  
23 talks to me about payback. Okay. You got to go by a  
24 new fancy car, you got to get a granite countertop, you  
25 got to buy a plasma television set, nobody asks what the

1            paybacks for those are. Let's be honest. When you're  
2            paying for sex, nobody cares. All right. That's the  
3            problem. Now, fortunately, PV panels on your roof is  
4            sexy now. So people are asking me about them all the  
5            time. I will tell you, that's fine, that's great,  
6            please make your home more energy efficient, please put  
7            a solar hot water heater on there. This really is your  
8            money. You'll do better with that. Then go ahead and  
9            put PV on your roof. But now when I talk to people  
10           about solar hot water heaters, I give you a different  
11           story. If you have \$2,300 -- a lot of us don't, but if  
12           you have \$2,300, can you get a 20 percent return on your  
13           money? Anybody here getting a 20 percent return on your  
14           money? Invest it in your own home. You will and you'll  
15           keep it all. And, yeah, you'll lower your electric  
16           bill, too. That's what you will get, all right, for a  
17           \$4,000 solar hot water heater installed on your roof  
18           with federal tax credits. Like now, the federal  
19           government will give you 30 percent off. Okay. Along  
20           with a state rebate, it gets you down to the point where  
21           you're getting a 20 percent return on your investment.  
22           At the levelized cost of electricity, even without  
23           rebates, 10 cents, that's cheaper than what you're  
24           paying out of the wall. You should do it even without  
25           that. But it's down to 5 cents if you include the

1 rebates.

2 I'll do this rather briefly here because I know I'm  
3 running out of time. It's interesting how we do things  
4 here in the state of Florida. The recent press releases  
5 have just come out. I got quoted in some of them that  
6 the Governor has come up with 10 million dollars from  
7 the stimulus money to enable us to go ahead and put PV  
8 panels on emergency shelters in 90 schools throughout  
9 the state of Florida. Yes, we're going to go through  
10 that. What's important is that we're putting 90 schools  
11 with some PV to help with emergency shelters. All they  
12 want to talk about is the fact that it's going to cost  
13 10 million dollars. So the headlines always say,  
14 Governor to spend 10 million dollars. I hate that  
15 because I'm getting everybody calling me up recommending  
16 how I can give them money to help spend it versus  
17 volunteering to help me actually put the PV on the  
18 schools. Okay. But we'll get there.

19 What we've had, some nice things going on in this  
20 state, is that we have actually worked with our children  
21 in putting some of the renewables out there. And the  
22 State, through the Florida Energy Office, has been  
23 providing funds to put PV on schools since 2003. And so  
24 we've been putting PV on the schools where the school  
25 children get involved and learn about that energy. And

1 up until 2009 now, working together with utilities, and  
2 the utilities have stepped up to the plate here.  
3 They're not the bad guys. Okay. They're in the  
4 business of making energy for us. You're in the  
5 business of reducing your energy bill. You don't want  
6 to spend anything on energy. They're in the business of  
7 making energy. Now, in fairness, let them make a profit  
8 on renewables. I'm okay with that. That's great. That  
9 keeps the money in Florida. That's the goal. Keeps  
10 people employed in Florida, keeps the money in Florida.  
11 Okay. The utilities have stepped up to the plate. All  
12 of them have. All right. We have over 55 now of these  
13 installations already in Florida where we have one to  
14 six kilowatts of demonstration systems, and we have four  
15 of these 10 kilowatt emergency shelters. This is the  
16 RFA that was given to the Florida Solar Energy Center to  
17 go ahead and put the 90 10 kilowatt systems on top of  
18 the schools. So this will be the future. We will have  
19 these 10 kilowatt PV grid battery backups at 90 schools.  
20 The anticipation is there will be one in every county  
21 and then we'll have a few others.

22 Just to point out real quick, just to give you a  
23 flavor of this, the average high school in Florida uses  
24 a half a million dollars in electricity in a year. A  
25 half a million dollars in electricity in a year. So if

1 we could help educate the kids so they cut the electric  
2 bill down by 10 percent, I can make every single one of  
3 the politicians happy, because we'll go ahead and put PV  
4 on every school and the kids will lower everybody's tax  
5 bill by saving energy in the school. More than what it  
6 will cost to put PV on the rooftop. So if I can't get  
7 the politicians to do it, I'm going to get the 10 year  
8 olds to do it, and they'll probably do it quicker and  
9 better, and then eventually, they'll be elected and  
10 become politicians. So the future is a happy one.  
11 Okay.

12 Very upbeat. We'll get this done. It has a lot to  
13 do with education at all levels. Please get the -- I  
14 want to go back. Please get the word out. You'll  
15 notice that in a lot of cases, the sun comes from up  
16 above. These are my two inspirational slides along with  
17 the educational ones.

18 Thank you very much.

19 MS. CHADWICK: For the second time, we're going to  
20 go ahead and move into our break. Jim will be around.  
21 We're going to have some Q&A sessions towards the end of  
22 the seminar for all the speakers. 15 minutes, very  
23 prompt. Grab your coffee, grab your breakfast, hit the  
24 restrooms. 9:45, we'll be starting.

25 (A break was taken.)

1 MS. CHADWICK: All right. If everybody could have  
2 their seat, I'd greatly appreciate it, and I appreciate  
3 everybody listening to James, the bell ringer. That was  
4 great. Thank you, James. We're just trying to stay on  
5 track as best we can with the agenda so folks can get on  
6 with their days if they have other things to do.

7 Next up is the perspective from the Utilities,  
8 which is a very important aspect of this, because we  
9 all, I think, have ideal goals and hopes for energy  
10 standards and what not in the states, but at the end of  
11 the day, it's the Utilities that ultimately are  
12 responsible and involved and potentially bear some of  
13 the cost of that sort of an implementation. So, today,  
14 I have a good friend as well as an expert from the  
15 Utilities side of things that's come in to represent  
16 that side of the topic.

17 Jennifer Szaro is currently with the Orlando  
18 Utilities Commission. She manages the renewable energy,  
19 corporate sustainability and alternative fuel programs  
20 for OUC and she resides in the sustainable services  
21 business unit of that organization. Prior to coming to  
22 OUC, Jennifer was employed as a senior energy analyst  
23 for FSEC. She works with Jim. She was there for nearly  
24 nine years. She has her bachelor's degree in  
25 environmental science from Florida International

1 University, and she received her master's degree in  
2 business from UCF, and that's where I met her four or  
3 five years ago. With that, I'd like to introduce  
4 Jennifer, and she will talk about the Utilities  
5 perspective. Thank you, Jennifer.

6 MS. SZARO: All right. They've got a stop watch on  
7 me. So we heard a little bit about the resource side of  
8 the debate, and we heard a little bit from the policy  
9 perspective, and now I really want to talk to you about  
10 getting it done. So if we were to get an RPS in  
11 Florida, how might we accomplish that as a utility?  
12 What would be the benefits to the customer and what  
13 would be the barriers or potential risks associated with  
14 it? So we're going to talk a little bit about our  
15 personal business objectives.

16 I can't speak for every utility out there. OUC,  
17 just to give you some background on us, we have about  
18 250,000 customers. We are a municipal utility, so we're  
19 nonprofit. We can't take advantage of some of the other  
20 benefits that maybe some of the investor owned utilities  
21 can take advantage of, like tax credits. So when we  
22 shape our programs to pursue renewable energy, we keep  
23 those factors in mind and we shape our programs  
24 accordingly.

25 One of the biggest issues for us is maintaining a

1 balance between sustainabilities, affordability and  
2 reliability. Everybody wants their lights to stay on  
3 all the time, and we do, too. So that is basically how  
4 we got our moniker, if you will. And we have an  
5 interesting demographics here in Orlando. Our  
6 customers, actually 50 -- over 50 percent of our  
7 customers are multi-family, and the average income for  
8 our customers is \$35,000. So we don't exactly have the  
9 best demographics for promoting some renewable energy  
10 programs, but we're learning creative ways to work  
11 around that. So you might ask, why would a utility  
12 pursue renewable energy? Maybe it's counterintuitive,  
13 but, in fact, it's not. We're trying to take a long  
14 term view of the world. We see the utility industry is  
15 changing and that consumer markets are changing and  
16 we've been keeping a really close eye on these different  
17 markets and industries and trying to figure out, how do  
18 we do the change management to incorporate those  
19 technologies into the way we do business.

20 One of the things that really drives us is  
21 regulation or impending regulations and policies. We  
22 want to make sure, in order to keep the lowest possible  
23 rates for our customers, that we choose the right -- the  
24 right prices for our customers by choosing the right mix  
25 of fuels at that given moment. So it's in a state of

1 constant flux. We never have the exact same portfolio  
2 at any given moment of the day, and in our planning, you  
3 know, we do long term planning and we'll continue to  
4 change our mix as the landscape changes. So we're very  
5 focused on making sure that we have carbon offsets or  
6 RECs where we need them for our customers. We do  
7 generate a lot of coal energy. We have over 50 percent  
8 coal right now, but that's something, again, that's in  
9 flux and it's changing. As I mentioned, since we are a  
10 nonprofit, we can't take advantage of the tax incentives  
11 that are out there, so our programs focus on the  
12 customer side of the meter for the most part. Something  
13 a little bit different than maybe an investor owned  
14 utility might pursue. And we are more directly linked  
15 to our customers and to our community because we are a  
16 city owned utility. So if our customers and  
17 commissioners tell us they want renewables, we're going  
18 to get it for them, but we want to do it in a way that  
19 provides the least cost planning. We don't want to  
20 raise the rates of our customers needlessly.

21 That being said, we've been doing our homework, and  
22 we have waited and waited for the RPS to come along here  
23 in Florida, and it hasn't occurred yet, so we decided,  
24 let's stop waiting. Let's just go ahead and set our own  
25 goals. So in March of this year we will be announcing

1 our own set of internal renewable energy and  
2 conservation goals for OUC.

3 I won't put it down in writing just in case it  
4 changes between now and then, however, we're looking at  
5 something in the neighborhood of 7 percent by 2013 for  
6 our renewable energy goal and just under half a percent  
7 for conservation. So we figure it's better to just go  
8 ahead, do the math, figure out what we can do for our  
9 customers now, and put it out there. If it changes  
10 because of regulation, that's fine, but we're able to  
11 accomplish this goal that we've set for ourselves  
12 without any major rate increases. So I think that's an  
13 important point to make is that we think we can achieve  
14 7 percent without any additional major rate increases.

15 So what are the technologies that we're  
16 particularly looking at? We've decided to focus on two  
17 types of renewables. One is biomass and the other is  
18 solar. On the biomass side, there are a number of  
19 different resources that we are looking at. Landfill  
20 gas, which I'll talk more about, has been the least cost  
21 option for us, so we're pursuing that whenever possible.  
22 Municipal solid waste is also something that we're  
23 investigating, but we're also looking at things like  
24 biomass residues, like forest residues or paper mill  
25 residues. In addition to investigating what we can do

1 with energy crops, specifically, we're taking a close  
2 look at algae. We think there's a lot of promise there.  
3 Something that can be locally produced very quickly. On  
4 the technology side, to convert that energy, we're  
5 looking at things like gasification, coal firing of  
6 traditional fuels, and anaerobic digestion on really wet  
7 fuels. On the solar side, we are looking at the gamut.  
8 We are trying to cover photovoltaics, solar hot water,  
9 and concentrating solar, and we have projects in all  
10 three of those areas in the solar.

11 So starting off with biomass. Some of the benefits  
12 that we've found to biomass is that there are options to  
13 coal fire in our existing coal boilers. We just  
14 finished up a study that showed that we could coal fire  
15 up to 10 percent biomass in our boilers pending that we  
16 can get the fuel and get some long term contracts. But  
17 knowing that we can do it is the first step and we're  
18 very excited to have found that out through a study we  
19 just completed. It is a carbon neutral fuel and it can  
20 contribute to our baseline, which is very important for  
21 our customers, and it will offset coal. It does create  
22 local jobs in the creation of the feedstock itself and  
23 processing, so we think that's a great thing and it is  
24 relatively low cost if you compare it to solar.

25 Some of the challenges that we're facing, as Jim

1 mentioned, it is baby coal, meaning that it's a lower  
2 BTU value, and it's got a lower density. I mean, you  
3 can look at a piece of coal and it's pretty solid and  
4 it's going to provide a high BTU content for that piece  
5 of coal. But if you put the same amount of wood chips  
6 in your hand, obviously, it's less dense and it has a  
7 higher moisture content than the coal. You can feel  
8 that with your hands. So our boilers have to  
9 accommodate that. And there are a number of different  
10 things we're looking at to accommodate those challenges.  
11 There is also the competing uses for bio feedstock.  
12 Obviously, the transportation industry is pursuing bio  
13 feedstock and it's also used for things like mulching  
14 and sent overseas for heating purposes in Europe. So  
15 how cheap can you get it if there are a lot of other  
16 competitors going for the feedstock? The other thing we  
17 learned with biomass is that the vendors that sell the  
18 biomass are not used to doing long term deals. The  
19 contracts we're seeing are in the neighborhood of one to  
20 three years and they can be seasonally disrupted, so  
21 that's a little bit of a challenge from a planning  
22 perspective. So we're trying to figure out how to  
23 overcome that particular barrier. And then uncertain  
24 availability. Again, you are at the mercy of mother  
25 nature with bioscopes, so there are some challenges

1           there on uncertain availability if there's a bad year or  
2           if something happens in the market to divert that fuel  
3           away. So that's a challenge that you have to try to  
4           mitigate with long term contracts.

5           Handling challenges can also be difficult. One of  
6           the things we're looking at is, if we do 10 percent,  
7           that's 90 megawatts of biomass fuel in our boiler. How  
8           do we get 90 megawatts worth of fuel to our facilities?  
9           It's a real challenge. That's a lot of biomass.  
10          Hundreds of trucks a day potentially. On the landfill  
11          side, this is something that we've been quite successful  
12          with. We've had already in place for several years a 10  
13          megawatt landfill gas project at the Orange County  
14          landfill. We're getting ready to expand that to 22  
15          megawatts, and I will go through those projects in a  
16          minute. 24 hours a day that's available to us and it's  
17          extremely low cost. It's cheaper than natural gas for  
18          us. So anytime we can pursue a resource like that, we  
19          absolutely will and we are. It does have a lower BTU  
20          value than natural gas and it does often need to be  
21          cleaned, so there are some additional costs there to  
22          keep from corroding our boilers. And then again, it's  
23          location specific. You don't have landfills everywhere,  
24          so, therefore, landfill gas is not available everywhere.

25                 On the thermal and electric sides for solar, some

1 of the benefits are the fact that you are hedging your  
2 pricing. There are no fuel costs. So once it's in  
3 place, it's in place for 30 years. It is carbon free  
4 and it can be distributed near the user. That does take  
5 some changes to our infrastructure, but these are  
6 changes that we're working toward and that can be  
7 accommodated. Thermal is definitely a low cost option  
8 and it's something that we are pursuing with vigor, and  
9 they do create local jobs because it does require labor  
10 to install and maintain these systems. Some of the  
11 challenges is, until we really figure out some of the  
12 key factors for integrating these technologies into our  
13 grids via smart grid or other methods, they're not  
14 typically dispatchable. They are relatively  
15 predictable, but not necessarily dispatchable. So we  
16 can't always have it exactly when we need it, and that's  
17 a bit of a challenge for us. It's not something that  
18 comes with any of the other fuels that we're currently  
19 using.

20 And on the PV side, it is still pretty expensive  
21 compared with what we're using right now. So without a  
22 carbon tax or something to increase the cost of our  
23 conventional fuels, it's a little bit difficult for us  
24 to justify purchasing large amounts of capacity of solar  
25 and raising the rates of our customers accordingly. And

1           then, right now, PV -- at least thermal does a little  
2           bit on the winter side if you're using your hot water  
3           heater, but PV does not have a huge impact to our winter  
4           peak, so we still have the challenges of building enough  
5           power plants to meet our maximum loads, and that's how  
6           we design power plants is, whatever point along the way  
7           of the year is your maximum load, that's what we have to  
8           build a power plant to accommodate. So that's a little  
9           bit of a challenge.

10                        So talking about that, what I have done for you is  
11           pulled up two of our peak days for the year. This is  
12           our summer peak day from last year. This is June 22.  
13           And you can see how we met our peak day. We used  
14           primarily coal. You can see the three bars that sort of  
15           move, but they're about the same thickness. That's  
16           because those coal plants, once you ramp them up,  
17           they're running 24 hours a day. So mostly coal, with a  
18           mix of landfill gas in there, and then at the top,  
19           you'll see that we ramp up our natural gas as needed to  
20           meet our peak day. This is, again, in the summer. You  
21           can see we're peaking right around 4:00 p.m. So that is  
22           how we're going to design our power plants to meet that  
23           peak of around 4:00 p.m. At the bottom there, we've got  
24           a few at our Indian River site that can be mixed with  
25           distillate fuels, liquid fuels, or gas fuels.

1           So what happens if you add renewables into the mix?  
2           So what I did was I modeled for you 100 megawatts of PV.  
3           Right now, we have about 12 megawatts of PV installed on  
4           our grid, but just for the purposes of discussion today,  
5           I went ahead and modeled what it would look like for 100  
6           megawatts of PV on this particular day with an average  
7           profile for a PV system. So if we were to add that --  
8           is there a way to go backwards?

9           So here's what it was before. I didn't touch the  
10          peak. Everything's going to look the same, it's just  
11          that some of it's going to be covered differently. And  
12          here's where we are now. So you can see that the offset  
13          is mostly going to be on the oil and natural gas side  
14          for solar. It's going to come in from the shoulder a  
15          little earlier in the day because it's going to peak at  
16          like 1 o'clock, 2 o'clock. But it will make a  
17          contribution of about 25 percent of its rate of  
18          capacity. So that means about 35 of those, or, I'm  
19          sorry, about 35 of that 100 megawatts will be available  
20          to us at our peak period. So when we do our system  
21          cleaning and our long term planning, we have to make  
22          sure that if we put in a hundred megawatts of solar, we  
23          have to derate it to 35 megawatts of solar unless we  
24          have some type of storage mechanism because that's what  
25          we'll actually get it at. So you sort of have to

1           overbuild solar in your planning process. It's doable.  
2           You can see that it's made a significant contribution to  
3           our natural gas, but, again, that's about 35 percent of  
4           its rated output. So just something to keep in mind.

5                     On the biogas side, we can definitely offset  
6           natural gas, and I've pointed to that here. And on the  
7           biomass coal firing side, there is three ribbons, if you  
8           will, of coal can all be coal fired opportunities for  
9           us. So those are the kind of things that we're looking  
10          at and these are the ways that we have to work to  
11          incorporate it into our daily ability to provide you  
12          with electricity.

13                    Again, I'll do the same thing for wintertime. You  
14          can see in the winter we have a little more of a  
15          challenge in using solar particularly. Our peak is  
16          right around 8 o'clock, and then we have another peak at  
17          right around 10 o'clock in the evening. So a little bit  
18          different, a little challenging for us to utilize  
19          renewables. So in the winter, we're probably going to  
20          rely more on biomass fuels. You can see there that the  
21          PV contribution is sort of occurring when we need it the  
22          least. It still has a contribution, again, it still has  
23          value, but the challenge is that it's really offsetting  
24          our peak directly in the winter so we would have to make  
25          that up with some other opportunities.

1           So what have we done to date? One of the first  
2 things I want talk to you about is something that we're  
3 working on in a collaborative way. We really believe in  
4 community engagement and collaboration at OUC. That's  
5 what we're all about. So as a group, with the City of  
6 Orlando and Orange County, we applied for funding to  
7 figure out, well, what does it take to build a solar  
8 infrastructure in Orlando. We received a grant to do  
9 that from the U.S. Department of Energy. We're in the  
10 middle of developing numerous brainstorming sessions on  
11 different topics related to solar, as well as training  
12 courses for folks like code officials and people getting  
13 into the solar business. We want to educate, we want to  
14 learn from the stakeholders in the community and figure  
15 out, what do we need to change to make solar easier to  
16 implement in our community. So we're about halfway  
17 through that grant. And some of the things that we've  
18 accomplished to date, again, the 1 megawatt project was  
19 mentioned already, so we're excited about that one. We  
20 have a solar on schools program. We're working with  
21 FSEC on that, and one of the biggest projects on my desk  
22 right now is this 10 megawatt PV project. It will be  
23 built on OUC's site and we'll have a power purchase  
24 agreement because that makes the most sense for OUC is  
25 not to own it but to let the investors get the benefit.

1 We will have that built hopefully by the end of 2010,  
2 and if you look at our 10 megawatts plus some of the  
3 other stuff that we've got with solar on a per capita  
4 basis and compare us with FP&L and what they're  
5 building, we're tied. So I feel pretty good about that.  
6 So sort of a mini muni. We have selected our vendor.  
7 That will be announced on March 9. So we're very  
8 excited to move forward with this project.

9 We also offer programs for our customers directly.  
10 Right now, we have over 300 customers signed up for our  
11 solar programs. That's solar hot water and PV, and we  
12 decided to go with a different trek. A lot of people  
13 were really pushing feed-in tariffs. We looked at that  
14 model, and for our market, it didn't make sense. So we  
15 went with something that's similar to a feed-in tariff  
16 but it's called a production incentive, and it's on the  
17 customer side of the meter. So they get the full demand  
18 savings, which you don't get on the feed-in tariff, and  
19 they get a payment per kilowatt hour. So we used both.  
20 We also offered a loan program, because what we heard  
21 from our customers is that the upfront costs were a  
22 challenge for them. So that's how we addressed it. So  
23 we offered 3 cents per kilowatt hour equivalent for  
24 solar hot water systems, and we offered 5 cents per  
25 kilowatt hour for a PV system. That's on top of net

1 metering. So you get net metering plus 5 cents, and you  
2 get 5 cents on everything you produce whether you are  
3 using it at your home or feeding it back to OUC.  
4 Additionally, there are some costs associated with this  
5 program because we have to measure and verify the  
6 production of these systems in order to pay you. There  
7 are some extra metering costs that have been a challenge  
8 for us with this program, so at the moment we're  
9 offering a \$250 credit to compensate for that cost of  
10 installing the BTU meter. We may be changing this  
11 program as the market changes, and we have found if I  
12 roll all my costs into this program, it costs me about  
13 10 cents a kilowatt hour to get this solar, whereas, the  
14 contract we're negotiating right now for our PV project  
15 is about 19 cents. So for me, this is the least cost  
16 option to pursue solar in my service territory. So for  
17 the loan program, these are the current rates we have.  
18 You can see they're pretty competitive. We start at 0  
19 percent for solar hot water and 2 percent for PV.

20 Some of the biomass projects I mentioned earlier,  
21 we have one landfill project completed, and that one's  
22 growing, and then we have two additional landfill  
23 projects we're working on right now. So anytime we see  
24 a landfill, we get very excited and we go after it. So  
25 nobody likes trash like me. So right now we're going to

1 be adding another 16 megawatts possibly of landfill gas  
2 to our mix of renewable, and we're very excited about  
3 that. On one of the projects that -- I don't know if  
4 Jim Lentz made it today. Jim, are you here today?

5 UNIDENTIFIED SPEAKER: He's in another meeting.

6 MS. SZARO: Is he? Okay. One of the projects I'm  
7 very excited about is this 5 megawatt hybrid solar  
8 biomass project. I don't know anyone else who's doing  
9 this kind of project around here, and I think it's a  
10 great project. It's a cooperative agreement with  
11 Harmony, Florida and FSU, and it uses biomass  
12 gasification and concentrating solar preheats the water  
13 to create steam at a temperature of about 250 degrees,  
14 then you use the biomass to get the rest of the way  
15 there. It's a very exciting project and OUC's really  
16 proud to be part of it.

17 On the MSW side of it -- I told you I love trash --  
18 we're also looking at doing something with the City of  
19 Orlando and their waste stream. So we're looking at  
20 possibly gasifying a portion of their waste stream, and  
21 the City is working on that. We would buy the energy  
22 output from that project.

23 So on the horizon, we talked about some of the  
24 challenges, and I'm not the kind of person that likes to  
25 hear no, so when I see a challenge, I'm going to go

1 after it. And some of the things that on the solar  
2 side, obviously, the costs are challenging and the fact  
3 that we're 50 percent plus multi-family is challenging.  
4 I decided to get a little creative on the solar side.  
5 Here are two business models that I am working on right  
6 now. One of them is a community solar farm where you  
7 don't have to have it on your roof to get the benefits  
8 of net metering. You don't have to pay up front costs.  
9 OUC will go ahead and work with a developer to build a  
10 community solar farm somewhere in our territory and you  
11 buy a piece of it like a timeshare. So it would be a  
12 fixed monthly fee for the life of the contract, and so  
13 far, the calculations we've done has shown it's only 2  
14 or 3 cents above our current retail rate. And that  
15 holds for the life of our program, and our rates  
16 probably won't hold for the life of the program. So we  
17 see a crossover with today's calculations at about year  
18 4 or 5 with this program where you end up being cash  
19 flow positive. It does allow for a virtual net  
20 metering, which encourages conservation. So if you use  
21 less, you save more. If you have shading on your roof,  
22 you live in multi-family, you don't have an appropriate  
23 site for solar, now you can buy into solar and get all  
24 the benefits without having to make the up front  
25 investment.

1           On the commercial side, we wanted to do something  
2           for our commercial customers as well, so we decided why  
3           don't we try to use our buying power and we would do the  
4           same kind of thing. We would buy -- we would enter into  
5           a large conference agreement with a vendor, but the  
6           systems would go on the commercial customer's buildings  
7           and we would act as a billing agent. We would bill the  
8           customer whatever the PPA developer bills us, plus we  
9           would buy that rate down with an incentive, a production  
10          incentive, like we do for our other customers, and they  
11          would be locked into that fixed monthly rate for 20 plus  
12          years. The difference between this and a feed-in  
13          tariff, again, is that these customers retain the demand  
14          savings from those projects because they're installed on  
15          their side of the meter and any net metering. You can't  
16          get that from a feed-in tariff. It's a little bit of a  
17          different model, and they don't have any up front costs  
18          to participate in this program. The six customers we've  
19          chosen to pilot this with will all be cash flow positive  
20          in year 1 or year 2 with this program.

21                 And some things I'm doing on the biomass front. I  
22                 have two projects I'm currently working on. One, I  
23                 mentioned, the coal firing opportunities, and within  
24                 that, we're looking at innovative ways of dealing with  
25                 the feedstock transportation, such as using rail cars to

1 ship biomass long distances. What we find is a lot of  
2 the forestry products are in north Florida. We're in  
3 Central Florida. So is it possible to use our coal rail  
4 to ship biomass instead of coal. That's something that  
5 we're looking at. Then there's a process that is used  
6 often in the charcoal industry, which is called  
7 torrefaction, and you take that and basically burn the  
8 wood a little bit to get some of the moisture out and  
9 improve the BTU content. So that's a technology that  
10 we're looking at as well.

11 On the algae side, we're getting ready to put in a  
12 grant application to look and see if we can use waste  
13 water to grow algae, to use carbon dioxide to feed the  
14 algae, make it big and happy, and then withdraw the  
15 algae from the clean water and crack it to obtain both  
16 biofuels and biomass, and then coal fire that biomass  
17 with our coal.

18 So those are the types of projects that we think  
19 are innovative and maybe we'll overcome some of the  
20 barriers that we're experiencing in the utility  
21 industry.

22 If you have any questions, here's my contact  
23 information, and I am all wrapped up.

24 MS. CHADWICK: We have five minutes or so for Q&A  
25 because I believe a speaker is not going to make it,

1           which does actually give us a little bit of breathing  
2           room. So if you would like to ask a couple quick  
3           questions of Jennifer, I'm going to go double check on  
4           the speaker real quick. Feel free, but please go to the  
5           mic.

6           All right. Yeah, we do have some time if you'd  
7           like. If not, what we'll do is go ahead and move on to  
8           our next set of speakers, and then we'll have another  
9           time for a little networking break here in a little bit,  
10          because some folks were asking if we could have some  
11          more networking time, so --

12          UNIDENTIFIED SPEAKER: Jennifer, with your 7  
13          percent by 2013 with the 10 megawatt project in mind,  
14          where are you guys at right now?

15          MS. SZARO: Okay. Without the 10 megawatt project,  
16          we're at 2 percent, so we're going to be increasing by 3  
17          and a half times what we have now over the next couple  
18          years. With the 10 megawatt, I think that will bump us  
19          to like 2.8 percent.

20          UNIDENTIFIED SPEAKER: Okay. So by 2013, you  
21          expect to be 7 percent solar?

22          MS. SZARO: We have a separate goal of 15 megawatts  
23          by 2013 just for solar, which we are well on our way to  
24          meeting.

25          UNIDENTIFIED SPEAKER: Thanks.

1 MS. SZARO: Any other questions? You all are  
2 quiet. All right.

3 MR. LEWIS: Jennifer, can I -- Jennifer, I think  
4 you mentioned that you are -- it's an internal 7 percent  
5 by 2013?

6 MS. SZARO: 7 percent, right.

7 MR. LEWIS: What would OUC have to do to meet a  
8 goal of 20 percent by 2020?

9 MS. SZARO: A lot more.

10 MR. LEWIS: Is that feasible? Would that be  
11 feasible?

12 MS. SZARO: Well, we're investigating that right  
13 now, and, you know, our analysts wanted to get us to  
14 this first step first and see what we could --  
15 basically, we challenged ourselves to see what we could  
16 do without really making a big rate impact, and we found  
17 that this is what we can do in the near term without  
18 having a rate impact. So can we get to 20 percent by  
19 2020? Possibly. I think we can definitely get there  
20 from a technology standpoint, but at what cost. That's  
21 what we're trying to determine. The challenge to doing  
22 any kind of utility planning is that the technologies  
23 are changing so fast that you kind of have to go back  
24 and revise your forecast like every two days. So it's a  
25 little bit challenging to just put your -- you know,

1           your finger on that number and -- but from a technical  
2           standpoint, yes, I do think it's feasible. What will it  
3           cost us, though.

4           MR. LEWIS: Do you think that 7 percent by 2013  
5           ought to be feasible for any utility company?

6           MS. SZARO: I cannot speak for other utilities  
7           because every utility has their own set of  
8           circumstances, and theirs may not be like ours, and I  
9           wouldn't want to do that to another utility just because  
10          it's very possible that they're just in a completely  
11          different circumstance than we are. I mean, it's  
12          possible for us.

13          MR. LEWIS: I was just looking for something that I  
14          could go to other utility companies and say, Jennifer  
15          said you could do this.

16          MS. SZARO: I'm on to you. I think that it -- you  
17          know, there are definitely possibilities to expanding  
18          renewables, and, again, we are an energy service  
19          company. We provide energy to our customers. We're not  
20          going to rule out anything if it makes sense for the  
21          customers, and so if in 20 years we're all renewable,  
22          we're still an energy service company, we'll just change  
23          our fuel mix. And that's a good thing. That's  
24          progress.

25          Any other questions?

1 UNIDENTIFIED SPEAKER: I've got one. Jennifer, I  
2 applaud OUC for all the partnerships that they do,  
3 especially with the public sector. We do that with  
4 Orange County as well. One of the things, though, we  
5 get internally sometimes is the perspective of how we --  
6 because we are in the public sector, that with the  
7 fairness of dealing with OUC versus some of the other  
8 utilities that are in our environment. How do you all  
9 address that? Is that a concern for you? We know it's  
10 a concern internally, especially on our operations  
11 sides.

12 MS. SZARO: Right. I mean, I -- you know, as the  
13 County, I understand that you are served by two  
14 different utility companies. I understand that. Well,  
15 technically three maybe even. And all we can do is  
16 offer our best opportunity to you as our customers, and  
17 we can't really pressure or speak to what other  
18 utilities offer you. You can take our opportunities or  
19 not take our opportunities. But, again, it's really not  
20 something that I can control as to what the other  
21 utilities are doing. Generally, we do try to  
22 collaborate as utilities and find common ground and find  
23 ways to work together whenever possible. So if it's  
24 possible to work together with a utility on a particular  
25 project, we certainly jump at that chance, especially if

1           there are cost savings involved or efficiencies of  
2           scale. So, again, I hear what you're saying and, you  
3           know, unfortunately, I can't control what other  
4           utilities programs are being offered to you.

5           MS. CHADWICK: Thank you, Jennifer.

6           Okay. Our next session is actually a panel, and it  
7           is the perspective of the builders, and, Robyn, if you  
8           want to come on up. While Robyn is heading up, I'm  
9           going to introduce her, and then she, in turn, will  
10          introduce the panelists which she graciously brought  
11          together for the forum here today.

12          Robyn Dowsey is a member of the facility design and  
13          construction department for Wharton Smith and is also a  
14          leading accredited professional with specialties in  
15          green building design and construction. Robyn currently  
16          serves as the vice chair of the board for the Central  
17          Florida chapter of the U.S. Green Building Council and  
18          is an education course reviewer for the US GBC National.  
19          Robyn has more than 16 years of experience in  
20          construction planning, management and project delivery.  
21          Robyn is very involved in providing support and  
22          education to the Central Florida community. She works  
23          with the community in helping them to better understand  
24          sustainable concepts and delivery methods focused on  
25          integrated project delivery and how to maximize, utilize

1 and implement sustainable technologies. And near to my  
2 heart is a mother of young children, and is involved  
3 with education and in helping school districts implement  
4 technologies that aid in reducing their operational  
5 budgets while improving the school conditions and  
6 overall qualities for students and faculty.

7 I thought it would be interesting to hear the  
8 builders' perspective on RPS because so much of our  
9 economy here in Florida is based on development, and  
10 developers are integral to that, and as much as this --  
11 an RPS policy would impact the utilities in a big way,  
12 it will most definitely impact the development community  
13 as well.

14 So with that, Robyn?

15 MS. DOWSEY: Okay. So I have the pleasure of  
16 introducing your panel to you. I'm going to introduce  
17 them briefly and then I'm going to give them a couple  
18 minutes before I start asking questions to allow them to  
19 elaborate a little bit more with regard to what they do  
20 here in Central Florida. And after we are done with the  
21 questions that we are going to ask, I encourage those in  
22 the audience to pose their own questions to the panel.

23 So first, David Bessette. David Bessette is the  
24 CEO and president of All Solar Service Company. He was  
25 the past president of the Florida Solar Energy

1 Industries Association. He is a CEU instructor and he  
2 puts subject matter together for Professional Testing  
3 Institute.

4 Chris Maingot is the operations director for  
5 Superior Solar. He also sat on the board for the  
6 Florida Solar Energy Industries Association and he  
7 writes exam questions for the North American Board of  
8 Certified Energy Practitioners.

9 Kimberly, I'm going to ruin your name, sorry.  
10 Kimberly Krutski has three years experience in  
11 environmental engineering. She specializes in  
12 photovoltaic system design and she has been project  
13 manager for approximately six megawatts of  
14 photovoltaics.

15 So have a seat, and, David, could you start us off  
16 by elaborating a little bit more on what I started.

17 MR. BESSETTE: I am a small business owner with 30  
18 some employees. I've been installing solar water  
19 heating thermal systems, pool heating and PV for over 30  
20 years in Central Florida. I have been involved with the  
21 Solar Industries Association for a decade, presided over  
22 the industry for three out of the last seven years, and  
23 am uniquely in tune with what's going on in Tallahassee,  
24 as best you can. I have a passion for solar. It's been  
25 my life. I think that solar can play in the mix with

1 the fuels here in Florida. We are the sunshine state.  
2 I really would like to see if we can get some good  
3 questions come out here today, but one of the big things  
4 for me as a small business owner, whatever policy that  
5 we come up with in the state of Florida, I believe, for  
6 one, we have to create jobs for Floridians, and since  
7 Floridians will be footing the bill to the rate payers  
8 or through tax base, I think it's important to keep the  
9 jobs here and keep the money within the state, and I  
10 really would like to see the RPS, see the state of  
11 Florida come up with a RPS prior to the feds coming up  
12 with a RPS. The feds do not see any boundaries as far  
13 as the state's concerned. I think it would be best for  
14 Floridians to have an RPS here in the state. Of course,  
15 there is other policies out there, but I'm all about  
16 bringing clean renewable energy such as solar to  
17 Floridians. It does work and there's many good examples  
18 of it, and it is cost effective today.

19 MS. DOWSEY: Thank you. Kimberly?

20 MS. KRUTSKI: Good morning. I work for Blue-Chip  
21 Energy. We currently install residential and commercial  
22 solar energy systems. We are in negotiations with PPA  
23 agreements for local schools and other government  
24 entities. Our company is about 30 people. And the RPS  
25 is definitely going to increase business, so we're

1 pushing forward for that. Hopefully by April 2nd, we'll  
2 have some legislative issues passed and RPS will be in  
3 full effect.

4 MS. DOWSEY: Great. Chris?

5 MR. MAINGOT: Hi. I started in this business as an  
6 installer a little over 20 years ago. I work for a  
7 local contractor here in Orlando. Like Dave, I've been  
8 in the FSEIA board for the past three years, and I've  
9 been in our legislative chair for the past three years.  
10 So I've been involved in all our lobbying efforts in  
11 Tallahassee to get legislation such as RPS and other  
12 forms of legislation to benefit the industry, to grow  
13 the industry here in Florida. We have -- you know, like  
14 Dr. Fenton said, we've got a unique opportunity here in  
15 Florida. We have, you know, a lot more solar energy  
16 than a lot of other states, but we lag the rest of the  
17 country or the majority of the rest of the country in  
18 solar programs. So we need to start making up for that.  
19 And I'm, you know, optimistic about this year's  
20 legislative session. I think we are going to see a  
21 change in the House leadership, you know, wanting to do  
22 some more stuff, and we see some stuff coming out, some  
23 bills that are going to be probably coming out of the  
24 House and the Senate that are encouraging. I know that  
25 they don't want to raise taxes to the constituents of

1 Florida, but we have to find a way to move solar  
2 industry forward and to move RPS and other renewables  
3 forward. So with that, I'm going to turn it back to  
4 Robyn.

5 MS. DOWSEY: Okay. So all of us have touched on  
6 jobs and making Central Florida as a community strong.  
7 So the first question that I would like to ask the panel  
8 is that, how do the goals of a renewable portfolio  
9 standard from our level do that? How do they create  
10 jobs and how do they infuse our community if we are  
11 going ahead and just gently raising the costs here on  
12 the individual person?

13 MR. MAINGOT: Well, an RPS is geared mainly towards  
14 large utility scale systems, so you will get jobs, but  
15 with large utility scale systems, especially in Florida,  
16 we really don't have -- the contractors in Florida don't  
17 have the solar experience to be doing large utility  
18 sales systems yet. We're working towards those ends, so  
19 a lot of these, you know, are going to be jobs -- jobs  
20 will be created, but a lot of them will be temporary  
21 jobs. A lot of jobs are going to be companies coming in  
22 from out of state to do these very large projects. We  
23 need to see some kind of component for distributed  
24 generation in there, and Dr. Fenton touched briefly on  
25 it. Unless there's a distributed generation portion to

1 the RPS, we're not going to create permanent jobs and  
2 we're not going to grow the industry like we could. So  
3 there needs to be some sort of carve out, I believe, for  
4 a distributed generation in an RPS that will allow the  
5 local contractors to gain the experience necessary to do  
6 some of these bigger jobs.

7 MS. DOWSEY: David?

8 MR. BESSETTE: Well, my take on the renewable  
9 portfolio standards is that, just like Chris was saying,  
10 large solar farms is good, but I also heard that we  
11 created 5,000 jobs to do a project or projects with  
12 FP&L. Those 5,000 people are probably looking for jobs  
13 right now. So although it does create jobs, it creates  
14 jobs on large solar farms just for the short term. What  
15 I would like to see is put the solar on the rooftops.  
16 Let the building owners benefit from it and feed it into  
17 the grid which is needed. So we have a lot of rooftops  
18 here, and that's what we have a lot of, and they're just  
19 sitting up there soaking up the sun. So as far as  
20 distributive, I'd like to see onsite generation of solar  
21 energy. If those folks are paying -- going to pay the  
22 tab, let them benefit from it, whether it be a building  
23 owner or commercial building or whether it be a  
24 homeowner. The homeowner should have the renewable  
25 energy resource on their house. Jennifer and I go back

1 a long ways. I have dealt with Progress Energy, FP&L,  
2 and I hear what they're trying to do, and what they  
3 would like to do is build large solar farms. But the  
4 reality of the situation in my perspective is, put it  
5 onsite, get it on the rooftops, and if Floridians are  
6 paying for it, then they ought to be able to benefit  
7 from it directly. Job growth. That's what I just  
8 referred to earlier with job growth. There is job  
9 growth and job creation to putting it on homes and  
10 buildings. It's a lot more sustainable than just  
11 building large solar farms. Now, that's what my biggest  
12 -- what I would like to see most is job creation and,  
13 you know, I'm being redundant here, but in my experience  
14 of 30 years, I can put a lot more people to work if  
15 we're doing it on our personal homes and if we're doing  
16 it on buildings than we are building solar farms, and  
17 there is a more direct affect for those homeowners, more  
18 beneficial for homeowners to have it on the roof than it  
19 is to pay for programs -- through programs to build  
20 solar farms. First of all, you get charged to build a  
21 farm, and then what's your benefit. I think we need to  
22 get on the customers' side of the meter and deal with it  
23 that way. With that, I'll just pass it on.

24 MS. KRUTSKI: I agree with David. The RPS is going  
25 to create jobs on a smaller scale at first. It's going

1 to push for more statewide incentives. Get the  
2 residential and commercial customers up and running, and  
3 then we'll be able to touch on the solar farms and jobs  
4 -- the jobs for the solar farms will be people that have  
5 been in the industry for 10, 15 years, and that's coming  
6 from California or other states that have been set up  
7 with an RPS.

8 MS. DOWSEY: Thank you. David mentioned and Dr.  
9 Fenton mentioned about putting PV up on top of schools.  
10 And David mentioned how we don't have enough qualified  
11 people here in Central Florida to go ahead and do PV  
12 installations of large magnitudes. How do we -- how  
13 will an RPS, if at all, help us educate our youth with  
14 regard to these renewable resources and these renewable  
15 technologies? Will that added market to Florida  
16 actually perpetuate some learning curriculum that will  
17 support and allow the industry to grow?

18 MR. MAINGOT: Well, I think, you know, we're  
19 talking about distributed generation here, but there's a  
20 need for both. There's a need for large scale and small  
21 scale. There has to be a balance. And if we have an  
22 RPS, and we're already starting to see solar in homes  
23 and businesses, not as much as we would like, but, you  
24 know -- and there is going to be a natural move to push  
25 this into -- especially with the programs that FSEC and

1 with the stimulus dollars we're getting for solar for  
2 schools and there's other solar programs through  
3 stimulus money, we are starting to see it move into the  
4 schools. We're starting to see education in a lot of  
5 schools. A school right next to our office, Lyman High  
6 School, has a solar system on it. It is part of their  
7 curriculum right now. These students learn about the  
8 solar system on their school, and as we start to see big  
9 farms like the 110 megawatts that FP&L has done and some  
10 other projects, it is going to be part of our education  
11 system. They are going to have to start learning about  
12 solar moving forward. So as we build, it will move into  
13 the school system, and it has already started doing  
14 that, and the federal government is giving us money to  
15 help with that through the stimulus program.

16 MR. BESSETTE: I have had the opportunity to  
17 install through the Sunwide for Schools five different  
18 school systems that All Solar, my company, has been able  
19 to install. I appreciate the efforts and the monies  
20 coming down to educate the young folks. I think the  
21 young people get it. I just don't think the legislators  
22 do. I think it was said that the 10 year olds, it might  
23 be easier to talk to the 10 year olds than it is the 50  
24 year olds. It's their future. And there was a clip in  
25 the Orlando Sentinel I clipped out, and I sent it to my

1 daughter who just had a child, and it showed a doctor  
2 holding up the child, and it was crying, mouth wide  
3 open, and the nurse said, well, why is it crying so  
4 hard? And the doctor said, well, it just found out what  
5 its share of the national debt was. You know, well, to  
6 move forward -- and I was speaking to others earlier,  
7 and I asked a question about the House of  
8 Representatives. Why aren't they on board. The fact of  
9 the matter is we have no visionaries and we lack  
10 leadership. We have to look forward, not to today, and  
11 it was said before, every time I hear about solar, they  
12 say when is the payback. When is the payback. Well,  
13 you've got to look on the back end. If we don't do it,  
14 what is the cost going to be then. It's going to be  
15 astronomical. Globally, proliferation of solar  
16 globally. China, talk about Chinese. They're going to  
17 own our marketplace. If we don't bring in and the state  
18 does not come up with a strong renewable portfolio  
19 standard, we will always buy from other folks.  
20 Floridians will always be dependent on foreign oil or  
21 foreign manufactured products that we'll eventually wake  
22 up and see that we need. So we need to come up with a  
23 way. I've talked to people, manufacturers from Sarasota  
24 (sic.), from other manufacturers that would love to come  
25 to Florida. Everybody talks about this 30,000 foot

1 view. These folks aren't even at 30,000 feet with  
2 Florida. They're circling New Jersey and California and  
3 those places where they can land to put their plants.  
4 They're looking at New Jersey right now. They would  
5 love to be in Florida. It's a better distribution for  
6 them for the Caribbean and South America. We've got to  
7 get outside of the box here. Get to the legislators and  
8 let them know. I hear -- like I said, I was a president  
9 and I've heard all of the legislative committee meetings  
10 and all the different folks, and you've got a meeting  
11 here, and you've got a symposium over there, and it's  
12 all rhetoric, it's just rhetoric. The problem is is  
13 that what we may need to do and what I would like to  
14 propose is to do a referendum. Take it out of the  
15 legislators' hands, because they don't have the vision,  
16 and they think if they put a tax, this might be  
17 considered a tax on the citizens, and that would be  
18 political suicide. They may not want to do it. So the  
19 citizens of Florida need to put -- in my opinion, need  
20 to put a referendum together, take it out of legislators  
21 and put it on the ballot, because I've heard over and  
22 over again, I hear people say every single day, hey,  
23 solar's a great idea. I might do it someday. You know,  
24 I don't ever hear somebody say, hey, solar's a bad idea,  
25 that's the worst thing. It pollutes, it's going to

1 kill, it's -- you know, it's a great idea. We have  
2 sunshine, a lot of it here. So I would like to impose  
3 to you folks out there to even think about putting a  
4 referendum together and show the -- show Tallahassee  
5 that we have the vision and we're willing to take the  
6 risk. Now, we can all talk -- like I just said, we can  
7 all talk about this RPS, and I want to continue to talk  
8 about it, but I think we need to go forward and do  
9 something that the legislators can't do themselves.

10 MS. KRUTSKI: I agree with Chris and David on how  
11 we're going to educate the youth. It's -- you know, the  
12 solar energy systems at the schools are going to be part  
13 of the curriculum in the future. And like David stated,  
14 it's easier to educate a 10 year old than it is a 50  
15 year old. Renewable energy just makes sense. It  
16 generates savings, no pollution, and I think the youth  
17 of America are going to see the greener side of things.

18 MS. DOWSEY: Kimberly, I live -- I get so excited,  
19 because I decided to put a solar thermal system on top  
20 of my house, solar water system, and I live,  
21 unfortunately, in an area that is governed by a co-op.  
22 So when I went to them and told them about my bright  
23 idea, they pretty much said, well, that's nice, but it's  
24 not going to help you any with us. So would an RPS  
25 address that with co-ops?

1 MS. KRUTSKI: Co-ops are not required by the RPS  
2 right now. They're not an investor owned utility,  
3 they're not required to be renewable, so you would have  
4 to negotiate a term price with them. Right now, they're  
5 buying energy fed into the grids, and most of them do  
6 have net metering set up, but half of them do not, and  
7 the cost is the cost minus the energy cost minus the  
8 fuel cost, which is at 6 cents on average.

9 MS. DOWSEY: So is there anything we can do to  
10 address those that do not live -- that do not have an  
11 investor owned utility company?

12 MR. BESSETTE: Move.

13 MS. DOWSEY: Okay. That works. Sorry, Lake  
14 County.

15 MR. MAINGOT: Well, the legislature would have to  
16 direct it, and the legislature did in 7135 direct the  
17 co-ops to adopt net metering similar to what the IOUs  
18 did, so the legislature has the power to say you guys  
19 need to get on board. So that's where it would have to  
20 come from, the legislator, for the co-ops. And some of  
21 them are progressive like Jennifer and OUC and some of  
22 them are not as progressive. But for the most part, I  
23 would say the munis and the co-ops have had better  
24 programs before the IOUs had programs in place. So for  
25 the most part, the munis and the co-ops are kind of

1 leading the way, and OUC is -- I think OUC and JEA  
2 probably have the best policies in the state when it  
3 comes to solar programs, so --

4 MS. DOWSEY: We talked a little bit about 1154, and  
5 when we talk about a renewable portfolio, we talk mostly  
6 about solar and talk a little bit more about clean  
7 energy and how that plays into an RPS.

8 MR. BESSETTE: It was said earlier that in order --  
9 well, let me just backup for a second. I think the mind  
10 set is whatever it takes to get off of foreign oil. I  
11 think that's what we have to look at. And within that  
12 mind set, there's going to be a mix, there's going to be  
13 nuclear, there's going to be coal, there's going to be  
14 clean coal, there's going to be gas, there's going to be  
15 solar, there's going to be wind, there's going to be  
16 biomass, there's going to be all of it. So in my  
17 opinion, I don't -- I'm not saying that solar is the  
18 caveat. It's not the answer to all of it. But I think  
19 whatever it takes to get off of the dependence on others  
20 and other states for our coal or foreign oil, and I just  
21 want to address it in that vein, is that the idea is to  
22 bring it on. If we have something clean, it's  
23 non-polluting and it's readily available, then I say we  
24 should go for it and get everybody in the mix.

25 MR. MAINGOT: What was the question again?

1           Clean technologies is part of the RPS. Yeah, we  
2           need a mix, and, in Florida, we do have a good mix. You  
3           know, we have biomass is definitely a viable -- probably  
4           biomass and solar are probably the two most viable  
5           alternatives in Florida. I mean, algae has promise.  
6           You know, a lot of people are looking into algae. You  
7           know, there's waste heat is another one. I mean, we  
8           have -- you know, one of our large fertilizer  
9           manufacturers here in Florida produces a lot of waste  
10          heat. So, I mean, that's another viable technology.  
11          When you say, clean, you know, I -- again, that -- I get  
12          a little offended by that sometimes because people like  
13          to put nuclear and clean, and nuclear is -- I don't  
14          know. I think we have a need for nuclear, but I  
15          wouldn't categorize it as clean. So, you know, there  
16          are a lot of other technologies that we can use in our  
17          RPS in Florida other than solar that, you know, could  
18          play major contributions to the RPS, have a major  
19          contribution to the RPS.

20                 MS. DOWSEY: Without distribution, with just the  
21                 farms and the utility companies, how do you see that  
22                 having an affect financially on the construction market  
23                 and the building market, if at all, here in Central  
24                 Florida?

25                 MR. MAINGOT: Without distributed generation?

1 MS. DOWSEY: Uh-huh. Just as it's being posed  
2 right now. Do you see that having a negative or  
3 positive or a neutral affect on the building industry  
4 and the construction industry here?

5 MR. MAINGOT: I wouldn't say it would be -- I don't  
6 think it would be a very positive affect. I think  
7 distributed generation would be necessary to be able to  
8 -- because most of the builders are going to do small to  
9 medium sized commercial systems, residential systems,  
10 stuff like that. You know, without programs that take  
11 that into account, I don't think that the builders would  
12 be -- and the financial -- I mean, you need -- you know,  
13 for the financial thing, you need long term contracts,  
14 20 to -- you know, 15, 20 years so that you can get,  
15 encourage private monies to come in, and, you know, if  
16 somebody has a 15 or 20 year contract with a utility,  
17 you know, private lending would come into place because  
18 they see a secure contract. So, you know, the private  
19 bankers and, you know, the money people would come into  
20 Florida and create a marketplace basically, because we  
21 need the financial people here to create a marketplace.  
22 Without them, we're not going to have one. But you need  
23 -- for the builders, we need to have that distributed  
24 generation as part of the mix. I'm not saying it would  
25 be nothing, but if we had an RPS with just strictly

1 large systems, it would be a little bit, but I don't see  
2 it affecting the builders in a very positive way.

3 MS. KRUTSKI: I think that it would have a negative  
4 affect on it if there was no distributed generation,  
5 because, you know, the return of investment would be a  
6 little bit longer. It would take years, over 10, 20  
7 years, for these residential systems to get back the  
8 money they paid for the system and the net metering,  
9 plus that OUC offers -- gives a 5 year return of  
10 investment. It just makes business sense for these  
11 residential customers to buy the system.

12 MS. DOWSEY: So what other financial mechanisms can  
13 we put in place to augment or to help the RPS that you  
14 see?

15 Don't fight over not answering the question. You  
16 have to argue over answering it.

17 MR. BESSETTE: No, I -- well, could you --

18 MS. DOWSEY: Rephrase it?

19 MR. BESSETTE: Yes.

20 MS. DOWSEY: What financial mechanisms need to be  
21 put in place to build a sustainable RPS program that  
22 will actually function and work?

23 MR. BESSETTE: Well, I think we could do what I  
24 would consider a public benefit fund. I think it was  
25 brought up earlier. I think if our public benefit fund

1 was tied to that where all the Floridians were paid or  
2 pay into it, I think the return on their investment over  
3 the long haul -- well, not even the long haul depending  
4 on where the utility rates are going, but I think if we  
5 did a public benefit fund where everyone paid into it,  
6 then everybody could benefit from it. That would spur  
7 on the investors to come in to provide the funding  
8 that's going to be needed, because behind every good  
9 idea, you're going to need to have some type of funding  
10 source, but this would be kind of self funding, too.  
11 It's -- in my opinion, when you come to funding this,  
12 it's almost like the cost recovery fund utilities  
13 collect buried within your utility bill where billions  
14 are dollars are collected. These monies could be also  
15 spent for folks, for Floridians to install the systems  
16 on their homes and on their buildings. So I think it  
17 could come from a public benefit fund. But, again, you  
18 run the risk of calling it a tax. But I like the sin  
19 tax. That was a great idea. We could call it a sin  
20 tax. So I'm all for that.

21 MS. DOWSEY: We're running out of time, so I want  
22 to open questions to the floor for the panel. Does  
23 anyone have a question for the panel?

24 UNIDENTIFIED SPEAKER: First of all, let me thank  
25 -- I'm an OUC customer, so I want to thank Jennifer for

1 the customers and, of course, Dr. Fenton. We were  
2 talking about funding this. There is plenty of money,  
3 and I think this is being discussed already, in the  
4 pension fund, and at 2.5 gigawatts at today's prices, I  
5 believe that would be about 10 billion a year that they  
6 would have to invest. That's probably peanuts for some  
7 of these pension funds. So I think probably 2.5  
8 gigawatts of just PV would probably be justifiable.  
9 Although maybe some ears don't want to hear that, but I  
10 think -- that's my opinion here.

11 MS. DOWSEY: Any pension fund presidents in the  
12 room?

13 No, huh.

14 Any other questions? You can come right up to the  
15 podium.

16 UNIDENTIFIED SPEAKER: This is a question that is  
17 probably a small piece of the whole program here, but  
18 because you are contractors, we always address this  
19 internally in our public sector. Putting PV's on roofs,  
20 it's very frowned on. Our roofs are -- we have a  
21 portfolio that's, you know, 30, 40 years old in some  
22 cases. Some new building structures are not there for  
23 it. So there is this struggle internally. Do we put PV  
24 on roofs or do you not? We have over a million square  
25 feet in the county of roof space, and the energy

1 efficiency side of our organization says, put them on  
2 the roofs, and the operations side says, no, because you  
3 don't want to increase your leak rate, your maintenance  
4 and other things. What is your philosophy or approach  
5 to putting PV on roofs, builders and owners that say  
6 they don't want them on roofs?

7 MS. KRUTSKI: Well, there's new technology right  
8 now that is offered on racking systems that don't  
9 penetrate roofs, and that's being widely used by some of  
10 the schools because they have a lot of concerns about  
11 maintenance as well, and we've been using those racking  
12 systems.

13 UNIDENTIFIED SPEAKER: Is it findable on the  
14 websites?

15 MS. DOWSEY: Yes. Self balancing systems, I think,  
16 is what she's talking about. In addition to that, I  
17 think that with everything having to do with  
18 sustainability, renewable energy as well, not everything  
19 is applicable to every situation. So just because we  
20 say, put it on roofs, doesn't mean every single solitary  
21 roof here in Central Florida needs to have a PV system  
22 on it. Some situations it makes sense, and some not so  
23 much.

24 MR. BESSETTE: From a contractor's point of view,  
25 you have a lot of roof penetrations on your commercial

1 roofs and in your homes. You have air handlers on  
2 commercial roofs. There's a lot of penetrations. If  
3 you install it properly, you're not going to have a  
4 problem. And there is engineering that will meet the  
5 Florida building codes and the wind code, so I don't see  
6 leaking as a problem. Now, you've heard that leaking --  
7 anybody that's a facilities manager, that's what his  
8 concern is, but that concern can be easily overcome by  
9 getting a warranty or getting a roofer involved,  
10 whatever you have to do, seal up that roof properly,  
11 give the warranty on it and move on. That's my opinion.

12 MR. MAINGOT: Yeah. I mean, roof spaces are -- you  
13 know, a lot of commercial buildings, we have a lot of  
14 commercial buildings, you can put, you know, 50, 100 KW  
15 systems. We got quite a few commercial buildings we  
16 could put PV on. Not every residence is perfectly sited  
17 for, you know, large PV, but, I mean, most residences,  
18 you can get at least 2 to 5 KW on, and we have a lot of  
19 good available. I mean, we're not going to have -- when  
20 Navigant did their study, they -- and supported rooftops  
21 in their study as part of the PV mix. We won't get  
22 there just by available land or usable land. We will  
23 not. So we have to use rooftops. So that's -- you  
24 know, rooftops are -- I mean, like Dave says, if you got  
25 the right contractors involved, it's not an issue. We

1           have -- you know, we have very few problems with roof  
2           leaks. I mean, compared to the amount of work we do,  
3           it's less than 1 percent of the jobs we do that have  
4           roof leaks. Nobody's perfect. You know, we're all  
5           human beings so we make mistakes occasionally, but roof  
6           leaks are not a big hold back to moving PV forward, I  
7           don't think.

8           MS. DOWSEY: Well, Chris, I'm getting the hook, so  
9           let me just take a minute to thank the panel for coming.  
10          Thank you very much.

11          MR. LEWIS: Is there one or two quick questions  
12          that could be answered quickly?

13          MS. DOWSEY: Are there anymore questions we can ask  
14          really quickly?

15          Go ahead.

16          UNIDENTIFIED SPEAKER: Just a quick question. How  
17          do you -- how do you write this carve out into the RPS  
18          of distributed generation?

19          MS. DOWSEY: How do you write this carve out into  
20          the RPS?

21          UNIDENTIFIED SPEAKER: For distributed generation.

22          MR. MAINGOT: Well, you just got to get the  
23          legislators to cooperate with us. Arizona is a perfect  
24          example. 30 percent of their RPS has to be from mid to  
25          small size commercial and residential. So they've

1 written it into their RPS where you have to have a  
2 certain portion dedicated to distributed generation. So  
3 we can borrow from other states that have, you know, put  
4 these things -- not every -- I mean, a lot of states  
5 don't have it as part of their thing, but it's very easy  
6 for us to write it in. You just got to get the  
7 legislators to cooperate.

8 UNIDENTIFIED SPEAKER: How does that work with a  
9 utility? Does the utility then have to lease someone's  
10 rooftop to put up the PV?

11 MR. MAINGOT: No. I mean, you can be working  
12 directly with the owners of the building. I mean, you  
13 know, there's a utility -- a lot of -- like with OUC,  
14 they can't take advantage of the federal tax credits  
15 because they're not for profit, so what they do is they  
16 enter into a PPA agreement with somebody who can take  
17 advantage of it. Some of the other utilities, like the  
18 IOUs, can take advantage of it, though, and get the  
19 federal tax credit. But in a lot of cases, you know,  
20 you'll be doing -- in the state of Florida, PPA's are  
21 only legal if you're working with a utility. It is not  
22 -- I can't put a system on your roof and sell you the  
23 power. That's not legal in Florida. So you have to  
24 work with a utility if you do a PPA. So, I mean, there  
25 -- you know, there is -- I wish that law would change,

1 and maybe it will going forward, but until that happens,  
2 we're not going to see stuff like that.

3 MS. DOWSEY: One last question. Go ahead.

4 UNIDENTIFIED SPEAKER: There seems to be a  
5 significant weather damage concern in Florida with the  
6 insurance industry.

7 MS. DOWSEY: He's asking about the weather damage  
8 concern and insurance liability.

9 UNIDENTIFIED SPEAKER: So if we start putting these  
10 units on everybody's homes or everybody's commercial  
11 business roofs, will they be insurable, or are the  
12 owners going to be at risk? We already have trouble  
13 with insurance for homeowners in Florida on hurricane  
14 problems.

15 MR. BESSETTE: They are insurable. I can only cite  
16 one example. Jeff Curry with Lakeland Electric.  
17 Lakeland Electric had 60 to a hundred solar hot water  
18 heating systems installed many years ago prior to 2004.  
19 The hurricanes -- and that's -- and he's down in  
20 Lakeland. So just above Lakeland was -- in 2004, was  
21 basically the epicenter of where the three hurricanes  
22 crossed over. Just, you know, in Polk County there. He  
23 put out a report that he only had one damaged collector.  
24 And over the years, I can tell you, I mean, we have  
25 nearly 16,000 installations out there, my company does.

1 Very few were damaged through the hurricane. The ones  
2 that did sustain any damage at all were the pool heating  
3 panels, the plastic panels that fit on your roof.  
4 They're a little more difficult to keep from being  
5 damaged, but the other ones held up pretty good. And  
6 the durability, they use these solar panels in some of  
7 the most remote areas of the world. And so they're very  
8 durable, they're impact resistant. Will there be  
9 damage? Yes. To what extent, I can't tell you at this  
10 point in time, but very durable products.

11 UNIDENTIFIED SPEAKER: But you expect it to be  
12 insurable?

13 MR. BESSETTE: Yes.

14 MS. CHADWICK: We are going to have to wrap up. We  
15 have some positive but unexpected potential of guests  
16 showing up. Looks like our Governor might be popping  
17 in, believe it or not. So as you are watching me stress  
18 out up here, it's all positive, but it's kind of like,  
19 oops. So we are going to just kind of trek right along  
20 here. Unfortunately, the break I promised is obviously  
21 not going to happen because of the unexpected but great  
22 speaker who's going to pop in here whenever he's done  
23 with another meeting that he's at.

24 So next up, George, come on up. George is going to  
25 introduce himself. Thank you.

1           MR. CAVROS: Hi, everyone. Thought it would save a  
2 little time. I'll go through my presentation as quickly  
3 as I can so we can finish on time and leave some time  
4 for questions. My name is George Cavros. I work with  
5 Natural Resources Defense Council and Southern Alliance  
6 for Clean Energy. Those two organizations, we're  
7 heavily engaged in the 15 month rule making process  
8 before the Public Service Commission and advocated for a  
9 renewable energy policy, not only because of  
10 environmental benefits, but also because of the job  
11 benefits and the rate tariff protection benefits. I  
12 also want to congratulate Orange County on trying to  
13 attract clean energy investments to the county. It's a  
14 sector of the economy that has immense potential, but  
15 before we do that, we need to get the rules and  
16 regulations right at the state level. And, you know,  
17 quite frankly, Florida is at a crossroads. I mean,  
18 we're almost at 12 percent unemployment. Even the  
19 Florida Chamber of Commerce has ranked Florida slightly  
20 negative for economic development. Some of our  
21 traditional economic sectors, like construction, like  
22 development, have declined due to situations outside of  
23 our control, and legislative leaders are being asked to  
24 create new economic answers, but that at the same time,  
25 not unduly burden Floridians in the process, and the

1           Cleantech industry provides a real opportunity, unique  
2           opportunity, for Florida to kickstart a new economic  
3           engine, to create jobs, and also in the process to  
4           protect ratepayers as well.

5           This is a graph prepared by the Southern Alliance  
6           for Clean Energy, which shows the potential of over  
7           50,000 jobs in Florida with a 20 percent renewable  
8           energy standard or renewable portfolio standard by 2020.  
9           That was based on studies by Navigant Consulting and  
10          also the University of Florida. As you can see, it's  
11          primarily a biomass and solar opportunity, which are --  
12          which Florida is very rich in those resources.

13          A lot of times people ask, you know, what is a  
14          green job. And if you look at this graph, half of it is  
15          manufacturing and another quarter of it is construction  
16          and craft trade. It's almost 75 percent of green jobs  
17          have the types -- require the types of skills that our  
18          construction industry now has. Many of those folks are  
19          unemployed and they could very easily jump into the  
20          clean energy economy. They could hit the ground running  
21          and be quickly employable.

22          I also wanted to break it down to job potential per  
23          megawatt. Recent studies have shown that 1 megawatt of  
24          capacity of solar will create anywhere from 15 to 30  
25          jobs. 15 is on the lower end. That's generally utility

1 scale solar. 30 is -- tends to be more distributed  
2 generation type solar. Also, biomass will create 9  
3 direct jobs per megawatt of capacity. And the great  
4 thing about biomass and solar is, as it was represented  
5 earlier, the money stays in the state. 85 percent of  
6 the money spent on producing homegrown biomass stays  
7 within a 75 mile radius of the project stimulating local  
8 economies, and the same pretty much can be said with  
9 solar. It's important to note that 80 cents out of  
10 every dollar we spend on energy leaves the state, and  
11 what we need to do, as mentioned earlier by Jim, is keep  
12 those dollars in the state.

13 Now, there's a whole host of benefits to renewable  
14 energy. Job and economic benefits is just one. A rate  
15 impact protection for customers is another. And I kind  
16 of wanted to touch on that with you, because you often  
17 hear that renewable energy is too expensive, and I want  
18 to kind of reframe this for you a little bit.

19 First of all, the kilowatt hour cost of biomass is  
20 already competitive with base load generation. The  
21 problem that biomass developers have in Florida is that  
22 the contracts they're offered through power purchase  
23 agreements, the avoided cost that they have to meet is  
24 simply too low. And you'll hear this all the time from  
25 third party providers. They could not do a project at 5

1 cents or 4 cents a kilowatt hour. It's simply too low.  
2 I pay 12 cents, my retail rates. There's a lot of room  
3 there for negotiation with those biomass developers. I  
4 can also let you know that solar is already cost  
5 competitive with peaking plants, natural gas combustion  
6 of cycle of peaking plants. Those are the plants that  
7 the utility will turn on when its utility demand is  
8 peaking. In South Florida, it's usually about 1:00 to 4  
9 o'clock in the summer days when those air conditioners  
10 are humming. Solar is -- it's profile is really well  
11 suited for that, and Jennifer pointed that out in her  
12 presentation. Also, conventional power has experienced  
13 spiking fuel costs in recent years and also increased  
14 capital construction costs. We've seen double digit  
15 increases in conventional power for the last few years  
16 because of that. You know, one of the reasons is that  
17 natural gas is a highly volatile fuel source. Natural  
18 gas will comprise over 54 percent of our energy mix by  
19 2017. And, again, pointing to its high volatility, it  
20 was \$10.35 cents per thousand cubic feet in 2005. It's  
21 now at about 3 and a half dollars. And while it's good  
22 that it's low, that type of volatility isn't necessarily  
23 good for customers. Also, capital construction costs of  
24 conventional energy is going up due to increases in  
25 cement and steel and the things it takes to build

1 conventional power plants. Just to give you an example,  
2 nuclear capital construction cost estimates have tripled  
3 from 2,500 a kilowatt capacity in 2005 to over 7,500 in  
4 2009. And I would like to point, you know, to solar and  
5 also biomass. By contrast, renewables have -- their  
6 construction costs, or capital costs, are dropping. The  
7 price of -- per watt of peak PV solar has dropped from  
8 \$27 in 1982 to about \$4 today, and I will have to  
9 doublecheck with the solar folks to make sure I'm  
10 accurate on that. Sometimes you get different figures  
11 for that. Also, there is no fuel component in solar and  
12 wind, and, generally, the fuel source for biomass is  
13 pretty stable.

14 So renewables -- well, your energy mix is like a  
15 stock portfolio. Renewables are your staple investment.  
16 The more we can integrate them into our energy mix, the  
17 better off everybody will be. You know, basically, you  
18 have a trend line going up this way with conventional  
19 energy, you have a trend line going down in terms of  
20 cost for renewable energy. So we need to start  
21 integrating those things as soon as possible.

22 Also, avoided water use with renewable energy. You  
23 know, water's the life blood of Florida. Conventional  
24 power plants use a lot of water. In fact, in early  
25 2008, there was a scare that some of the nuclear

1 reactors in the southeast might have to be shut down  
2 because of drought conditions because there simply  
3 wasn't enough water for the cooling requirements.

4 Also, grid support. We've heard that our  
5 transmission grid is old, it's going to need updating.  
6 How do you provide relief to that? One of the things  
7 you can do to reduce line losses is place distributed  
8 generation in closer proximity to demand. That reduces  
9 line loss and also mitigates the need for additional  
10 infrastructure construction. And, of course, you've got  
11 the avoided CO2 emissions benefits from solar and wind,  
12 and biomass is generally CO2 neutral.

13 Before I jump into renewables, I do want to -- I  
14 need to touch on efficiency. I know that Jim touched on  
15 this as well, but efficiency is your lowest cost  
16 resource to any utility. It's a well run program. It's  
17 about 2 to 4 cents a kilowatt hour. Generally, newer  
18 power is going to cost you about 12 cents a kilowatt  
19 hour. Not only that, but it helps maintain your  
20 renewable target baseline from increasing. You know, if  
21 your demand increases at the same time you're trying to  
22 get a percentage of that, of those sales from  
23 renewables, you're simply going to be chasing an ever  
24 higher baseline. And that's why 17 leading states have  
25 made a commitment to capture at least 1 percent of their

1 demand through energy savings. In Florida, we're not  
2 doing as well. We've recently finished a energy goal  
3 docket at the Public Service Commission. They have  
4 taken steps to increase energy savings in Florida, but  
5 we still have a long way to go. Historically, Florida's  
6 utilities have been capturing about 2/10th's of 1  
7 percent. So other states made a commitment to capture  
8 about five times more. Also, including energy  
9 efficiency does create jobs. Jobs like heating, air  
10 conditioner installers, carpenters, roofers. Again,  
11 these are the types of people that are currently  
12 unemployed and can step in and do this work. The AC  
13 Triple E estimates we can create over 19,000 jobs in  
14 Florida just from efficiency if we were to achieve 50  
15 percent of our demand of energy savings by 2020.

16 Okay. Creating a renewable energy market through  
17 an RPS. The overriding goal is two things:  
18 Transparency and certainty. Developers need that,  
19 otherwise, they won't come to the state, they won't  
20 invest. And Tommy touched on some of the major policy  
21 design components in the first presentation, but they  
22 are targets and timelines. Eligible renewable  
23 resources, they're not the same in every state. Do you  
24 want to encourage a specific resource, or do you want to  
25 encourage distributed generation. The RPS's right now

1 are using a renewable energy credit as a form of  
2 compliance and also a premium payment to encourage  
3 investment. Many RPS's have an investment cap or,  
4 alternatively, a compliance payment, which I'll touch on  
5 in a moment. They also have enforcement provisions, and  
6 some of them have exemptions from the RPS, and that  
7 generally goes to municipal utilities and rural  
8 cooperatives. And some of these states are not covered  
9 through an RPS.

10 And you may have seen a similar map to this earlier  
11 today. There are 29 states in DC and the District of  
12 Columbia who have RPS's in place right now, and the  
13 targets really vary. Arizona has 15 percent by 2025.  
14 North Carolina is only 12 and a half percent by 2021,  
15 and they can actually use 25 percent. They can meet 25  
16 percent of their RPS through energy efficiency. And  
17 Hawaii just recently increased theirs to 40 percent by  
18 2030. So there is really a wide diversity of target and  
19 timelines.

20 Same with eligible resources. Your most common are  
21 going to be wind, solar, biomass, hydro, geothermal.  
22 Some of the less common ones you're going to see, for  
23 instance, Nevada has tire waste as a renewable resource.  
24 North Carolina has swine waste. There are more pigs in  
25 North Carolina than there are people. And to them,

1 swine waste is a renewable resource. Same with chicken  
2 waste. About half of the states that have an RPS right  
3 now also have some kind of set aside. The set aside is  
4 sometimes called a carve out, and they have that carve  
5 out either generally for solar or also for distributed  
6 generation.

7 Okay. Renewable energy credits. The renewable  
8 energy credit is the currency of an RPS. It equals one  
9 megawatt hour of renewable energy. It represents that  
10 that's the value of the attribute for that renewable  
11 energy. It also represents an additional payment stream  
12 to the renewable energy developer. Right now, renewable  
13 energy developers can only get the utility's avoided  
14 cost. And by, avoided cost, I mean that's the utility's  
15 cost of providing that next incremental megawatt hour of  
16 electricity. And, generally, that's a natural gas  
17 combined cycle. Plant natural gas is low right now, so  
18 basically, it's just, you know, fuel cost. So they need  
19 that REC to give them the incentive they need. Also,  
20 REC's are usually, let's just say, tracked  
21 electronically. They can be bundled or unbundled. By  
22 bundled, I mean they can be sold with the contract with  
23 the sale of electricity, or they can be unbundled. In  
24 other words, you can have two payment streams. A  
25 developer can sell the electricity and then he can peel

1 off the REC's and sell them independent in other  
2 markets.

3 What you have in other states is you have short  
4 term trades and also long term contracting. And you can  
5 see which dominates which markets. The problem with  
6 short term contracting or short term trade is that you  
7 have a variable renewable energy credit value. You  
8 know, your REC price might be here one day, might be  
9 here another day. That doesn't create that certainty  
10 that we had talked about earlier. The same with long  
11 term contracting. You can negotiate your own long term  
12 contract, but, ultimately, you don't know what that  
13 contract price is going to be and others don't know what  
14 that contract price is going to be. So it's not very  
15 transparent.

16 So what a few utilities are doing, they're going to  
17 standard offer contracts. And what those are are  
18 basically an open invitation to accept a contract based  
19 on certain criteria, and it's usually done at a  
20 specified cost per kilowatt hour over a long term. For  
21 instance, Arizona Public Service offers a 10 to 15 year  
22 contract with REC prices anywhere at 20 cents a kilowatt  
23 hour and 18 cents, respectively. And as we get into  
24 these types of standard offer contracts, you are  
25 starting to approach more of a feed-in tariff type

1 concept. And I just wanted to touch on this because we  
2 haven't talked a lot about the feed-in tariff, but it  
3 varies by -- with the RPS in a couple ways. The  
4 standard regulates the target. A feed-in tariff  
5 regulates the price. For instance, Gainesville recently  
6 established a feed-in tariff at 32 cents a kilowatt  
7 hour. That's the price. The developers know that.  
8 That price is good for 20 years. That creates a lot of  
9 certainty. But you don't know necessarily how much  
10 renewable energy you're going to get. I mean, they have  
11 placed a cap on the program, but still the RPS tends to  
12 set the target. But you don't always know what the  
13 price is going to be and that creates a bit of  
14 uncertainty to developers entering that market. Let's  
15 see what the trends have been.

16 As you can see from this graph, and this is from  
17 Orange Berkeley National Laboratory, that the compliance  
18 has been pretty good. It's been up at around 90 percent  
19 in the early years. It's important to remember that a  
20 lot of these programs are new. Over half of them have  
21 been started since 2004. So some of them may have not  
22 hit their early target. But generally compliance is  
23 good. Some of them are struggling, like Arizona.  
24 Arizona has realized that the renewable energy purchases  
25 are well below 50 percent, and that's because the

1 specific funding amounts have been insufficient to  
2 achieve their target. California, even though they're  
3 at 94 percent today, aren't going to make 20 percent by  
4 2010, which is what they had originally envisioned, and  
5 that's been due to a transmission constraints contract  
6 failure and siting challenges. And even Nevada is  
7 struggling a little bit. But that's, again, due  
8 primarily to transmission constraints between north and  
9 south Nevada that have sort of lowered average  
10 compliance levels.

11 Let's look at the rate impact, because there has  
12 been a lot of discussion on rate impacts. Rate impacts  
13 have generally been around 1 percent or below 1 percent  
14 in a lot of these states. Again, this is the early  
15 years, but the evidence shows that these policies are  
16 not bankrupting consumers. And those types of rate  
17 impacts are pretty low considering, you know, if you  
18 look at it sort of in the context of what we've seen  
19 from conventional energy in the last few years.

20 And there was some discussion today about cost  
21 caps. This is how some of the other states are doing  
22 it. They either place a retail rate cost cap per  
23 customer cost cap or they set an alternative compliance  
24 payment. For instance, Maryland, Maine and New  
25 Hampshire average somewhere between a 25 to 50 megawatt

1 hour compliance payment, so they don't need a cost cap  
2 because if direct value goes above that amount, they'll  
3 just pay the compliance payment. Those funds go into  
4 generally a fund that's dedicated to funding a new  
5 renewable energy project. Also, some have retail rate  
6 caps. In fact, that's the one that we had in Florida in  
7 the Public Service Commission rule at 2 percent. You  
8 see some of the states are lower than that. Colorado is  
9 1.7. Illinois is 1.4. Maryland is 2.1. Oregon and  
10 Washington actually have a 4 percent rate cap. North  
11 Carolina has a per customer rate cap. And there, an RPS  
12 -- the impact of an RPS can exceed \$10 per year to a  
13 residential customer.

14 So the general trends and challenges. Basically,  
15 we've seen an increased stringency of RPS purchase  
16 targets, like Jim mentioned earlier. California has  
17 increased theirs to 33 percent by 2020. Hawaii's  
18 increased theirs to 40 percent. Also, a lot of them  
19 have expanded the program to include municipal utilities  
20 and cooperatives. In some states, they're not covered,  
21 but in many other states, now a hundred percent of the  
22 utilities in those states are covered. You've also seen  
23 a really expanded use of set asides, not only for solar,  
24 but also for distributed generation. And, you know,  
25 thus far, the RPS motivated capacity additions have been

1 mostly wind. And, in fact, wind last year produced, I  
2 think, at least there were contracts for about 10,000  
3 megawatts of wind last year in the United States.

4 Now, what will the interaction be with the federal  
5 RPS, and, you know, right now, there isn't a federal  
6 RPS. There's a possibility that there might be. The  
7 American Clean Energy and Security Act of 2009 was  
8 passed in the House. It's a 20 percent RPS by 2020, but  
9 it allows states to meet 8 percent through energy  
10 efficiency. So, in effect, it could be as little as a  
11 12 percent RPS. But the important thing to remember is  
12 that it will not preempt state efforts. I think it's  
13 important for Florida to set its own course and design  
14 an RPS design specifically to meet the needs of Florida.

15 So in conclusion, the RPS programs are successful,  
16 they're doing well, and they should be -- you know, they  
17 should have greater importance as years go forward, but  
18 the -- you know, the trick is designing an RPS. It's to  
19 meet the challenges of each individual state. So that's  
20 kind of the challenge before us. If you have, and if  
21 you're inclined to do so, I would encourage you to  
22 contact your House of Representatives and ask them to  
23 support an RPS this year. And I apologize for my voice.

24 But I did want to leave you with one last thing,  
25 and that's kind of the shifting utility paradigm that

1 we're heading into. These are really interesting times.  
2 We have about 80 years of history of utility regulation  
3 in this country. And the way it's been set up is that  
4 the utility was a central source of energy. We paid  
5 them for that. Utilities are regulated by the federal  
6 government and through the state to state through  
7 delegated authority. And, you know, the idea was that  
8 we wanted reliable service to customers. We wanted low  
9 cost, and actually, you know, it made a lot of sense.  
10 You didn't want 10 utility companies setting up in one  
11 territory with lines running throughout the city. And  
12 we've been able to do that. We've got reliable service,  
13 we've gotten power extended to rural areas, and we've  
14 gotten generally low rates. But now we're in the 21st  
15 century where you have technologies where we can produce  
16 electricity and the utilities are buying it, are, in  
17 fact, becoming the consumer, so -- which is a little at  
18 odds with the utility model, because utilities,  
19 obviously, are in the business of selling electricity,  
20 and they need those sales to recover the revenue which  
21 goes to append their fixed costs and earnings. So stay  
22 tuned. It will be kind of real interesting to see how  
23 that tension is resolved in the future.

24 Thanks so much.

25 MS. CHADWICK: All right. So what we're going to

1 do, our last speaker did make it. Michael Dobson was  
2 having some difficulty with his travels. He came all  
3 the way from Tallahassee and he's now here, so he has  
4 agreed to limit his comments to 10 minutes or so, and  
5 then we are going to just open the floor to Q&A. The  
6 Governor stepped out of the building, but he's coming  
7 back, so we're just -- if people need to go, we  
8 understand, so we'll go ahead and wrap up right around  
9 our 11:30 to 11:40 time as promised. Please stay if you  
10 can, we'll open the floor for dialogue, and we'll let --  
11 all of the folks that have presented here today will be  
12 here, so we'll let them address any of your questions  
13 jointly at that time. So with that, I'm going to go  
14 ahead and, if Michael is here --

15 Okay. So we started out the morning with Tommy  
16 talking about the history and the legacy thus far in the  
17 legislature with RPS and where it's gone thus far.  
18 We've had some dialogue about the prospectives and  
19 concerns of some of the entities that will be  
20 potentially impacted by RPS, and then George just  
21 wrapped up with kind of best practices and things we  
22 need to look at that other states have already  
23 implemented. So Michael is going to just spend, again,  
24 just 10 minutes or so just kind of wrapping up on where  
25 do we go from here, what do we do based on what other

1 states are doing, and what we've done thus far.

2 Michael is the President of the Florida Renewable  
3 Energy Producers Association. He spends a lot of time  
4 up lobbying in the government on issues related to  
5 renewable energy, so he's a great resource, as are all  
6 the speakers, on just touching base on what's going on  
7 at the legislative side of things and where we can take  
8 it from here. So with that, Michael?

9 MR. DOBSON: Thank you.

10 Thank you, guys, for being patient, and as she  
11 said, I am just going to -- I've got a pretty long  
12 presentation here, but I'm going to just pick a couple  
13 of slides and go through them and just kind of talk  
14 about exactly where do we go from here.

15 As she said, I'm the President of the Florida  
16 Renewable Energy Producers Association, and if there is  
17 anyone that doesn't know who the organization is, we  
18 founded this organization about three years ago, and  
19 it's a 501(c)(6) non-profit, and our mission is to make  
20 sure that Florida has renewable energy landscape with  
21 respect to policies that will allow the industry to  
22 flourish. Our members are mainly large scale renewable  
23 energy developers. We have biomass members, we have  
24 some solar members, and we also have wind developers and  
25 wind manufacturers. We also have biofuels producers, as

1 well. And I won't rehash probably some things that  
2 Tommy and others have discussed, but I'll touch on just  
3 a few things just to kind of T up where we are.

4 And as I'm sure that George and others have  
5 mentioned and I'm sure you've seen a variety of maps,  
6 you know, Florida and the entire southeast is behind the  
7 curve. And the renewable energy portfolio standard is  
8 really designed to do several things. And those several  
9 things are to increase the amount of renewable energy  
10 produced in Florida, promote stable electricity prices,  
11 protect the public's health, improve the quality of  
12 Florida's environment, and stimulate our economy. And  
13 at this point, I'm going to kind of get away from the  
14 presentation a little bit and talk about that,  
15 stimulating the economy.

16 We have an opportunity currently. We have an  
17 unemployment rate that is nearly 12 percent, and as  
18 Tommy and others have suggested to you, over the last  
19 couple of years, we've tried to get a renewable energy  
20 portfolio standard passed in Florida, and we've -- many  
21 of us have made the argument that a renewable energy  
22 portfolio standard in any state that has been adopted  
23 has, in fact, increased renewable energy production.  
24 And given where we are currently in our economy, we need  
25 (a) the jobs, and we need to send a message to the

1 outside world that Florida is, yes, open for business  
2 with respect to renewable energy, and, yes, Florida is a  
3 place that respects and we encourage technology and  
4 science.

5 Currently, there is more venture capital dollars  
6 raised in California per week than there is in Florida  
7 per year. And that's for a variety of reasons, and one  
8 of the key reasons is because they have been able to  
9 position themselves and to market themselves and to,  
10 frankly, prove to the world that they are very  
11 progressive with respect to technology and renewable  
12 energy and a whole host of other things. Not that we  
13 want to be California, but we want to be the best  
14 Florida that we can be.

15 Now, currently, there are several bills in the  
16 Florida legislature regarding renewable energy. As  
17 someone, I'm sure, mentioned that there is a bill signed  
18 by Senator Nancy Detert, which is the same bill that  
19 Senator King filed last year that passed the Senate, and  
20 also there's a bill by your local Senator Lee  
21 Constantine, and it's a renewable energy portfolio  
22 standard bill, but his is a little different in that --  
23 actually, it's a lot different in that it doesn't  
24 include nuclear. And there's a bill to address the  
25 avoided cost issue. I heard George, and I'm sure some

1 others, talked about, and there's a few other bills that  
2 are out there as well. On the House side, there is  
3 nothing that I can really speak to yet with -- you know,  
4 with regard to the Chair of the Energy Committee putting  
5 forward. I have had meetings with him and they have  
6 assured me that they are (a) looking at an RPS, that  
7 there will be an energy bill in the House of  
8 Representatives this year. And some pretty high up  
9 conversations I've had on the Senate side, if they had  
10 their druthers, they would have taken Senator King's  
11 bill, which is now Senator Deter's bill, and passed it  
12 already out of committee. But what they wanted to do  
13 was to, frankly, not embarrass the House, because  
14 there's a lot of things that they're going to need to  
15 negotiate between the House as the legislative session  
16 moves forward. So what they wanted to do is to not just  
17 kind of push that down anybody's throat just yet, but  
18 they're waiting to find out what the House of  
19 Representatives is going to put on the table so that  
20 they can start just trying to figure out what they need  
21 to do at that point.

22 And I was sharing with someone earlier, the issue  
23 of feed-in tariffs is off the table. The Senate has no  
24 appetite for it and nor does the Florida House of  
25 Representatives. And I think, you know, one of the

1 reasons, probably very similar to the national debate on  
2 health care. When we talk about policies that are great  
3 for some other country, there is some legislators who  
4 for ideological purposes and et cetera, they are  
5 apprehensive about embracing those policies. So I'm  
6 sure that the supporters of feed-in tariffs will try and  
7 find some ways to try to get some of their language in  
8 some bills. But I'm just kind of giving a warning shot  
9 out there that's kind of where the legislature is  
10 thinking right now.

11 And I think I heard someone earlier talking about a  
12 public benefits fund, and I would like to call it a  
13 clean benefits fund. I, too, think that is a wonderful  
14 policy. What it does is it provides a stable source of  
15 funding for renewable energy projects. It's a much  
16 stable funding source as opposed to the current programs  
17 that we have now, like the solar rebate program, which  
18 is not sustainable long term because you can't really  
19 depend on it from year to year. So a public benefits  
20 fund is a great policy, but the problem is, and I think  
21 someone mentioned it, it's very difficult to have that  
22 discussion without saying you are raising taxes. So we  
23 have to figure out how do we do that. Do we try to get  
24 the legislature to see the light of the day, or do we  
25 take it to the streets? And what I mean by that is, do

1 we make it a ballot initiative? There is enough polls  
2 that have been provided to the public over the years  
3 that indicate that the public, by and large, would be  
4 willing to pay an additional -- I'm not sure what that  
5 cap would be, but an additional something per month for  
6 renewable energy. And you may be better off taking that  
7 fight to the streets. Just a suggestion.

8 And one of the items, a big item, actually, I'll  
9 mention because I know my time is extremely limited is  
10 that renewable energy environment -- I'm sorry,  
11 renewable energy advocates, we're going to need to do a  
12 better job than we have in the last couple of years.  
13 The complaints that I have heard from the Senate, our  
14 supporters in the Senate, and also our supporters in the  
15 House is that they don't get a clear message from us.  
16 There is confusion. There is noise. They want to help,  
17 but they don't know what to do. I've had a meeting with  
18 -- I guess I can mention, your Senator Constantine and I  
19 have been talking like this for a couple of years. I  
20 met with him last week. He says, Michael, you guys need  
21 to give me a plan. I'm a senator, I have -- I'm a chair  
22 of this committee, I do this, that and the other. I am  
23 not the expert, but what I need to do is a plan, so just  
24 point me in a direction. But what happens is that as  
25 advocates, we have not been consistent and concise in

1 terms of providing that plan, and over the last six  
2 months -- and I see Chris there, he can attest, I've  
3 been out on meetings throughout the state holding  
4 various meetings trying to get the various stakeholders  
5 to at least come together with some principals which we  
6 can all agree on to go to the legislature and work  
7 together. If we can do that, we do have friends on both  
8 sides of the House, democrats and republicans in the  
9 Senate and in the House. If we can do that, they're  
10 ready to help, you know. So I'll encourage that, and  
11 before my time is completely up, I would also suggest to  
12 you in the audience, this will require your help as  
13 well. We ask you to be engaged. The renewable energy  
14 community has not been one that's been successful with  
15 respect to lobbying and organization and et cetera. So  
16 we ask you to get involved, reach out to your friends,  
17 please join us on Twitter. It's Florida Green Energy at  
18 Twitter. Follow us on Twitter, and we encourage you to  
19 reach out and get engaged and let the legislators know  
20 that it's not just myself and George and Chris and Dr.  
21 Fenton and others that are interested in this. They  
22 need to know that there are folks that are in their  
23 legislative districts that think these policies are  
24 important.

25 So I can say a whole bunch more, but I will pause

1 at this point and, if there is any questions, I'll be  
2 glad to entertain them.

3 MR. LEWIS: Well, let's start to draw to a  
4 conclusion by taking a couple of questions, one or two  
5 questions, for Mr. Dobson. Are there some?

6 Can you come down to the mic, please?

7 UNIDENTIFIED SPEAKER: Good morning. You seem to  
8 be in better form or composure than you were when I saw  
9 you in October after the RPS fiasco. At any rate, I  
10 think I have a plan. It would satisfy most parties  
11 involved.

12 Steve Precourt has said that from the legislative  
13 perspective, offshore drilling is the priority. That  
14 and nuclear. So it seems to me, pass the offshore  
15 drilling initiative legislature, take the licensing fees  
16 from that, and -- which are going to be long term and  
17 dependable, put them into a public benefits program that  
18 you can call -- call whatever you want, feed-in tariff  
19 or whatever, that all the utilities can now -- I don't  
20 want to say match 50 percent, but match at some level,  
21 then we would have a sustainable, long term fund for  
22 renewable portfolios.

23 MR. DOBSON: Well, actually that's really not a bad  
24 plan. It's very interesting. I'll just -- what I'll  
25 share with you is Florida Renewable Energy Producers

1 Association, we have not taken a stand with respect to  
2 the offshore oil drilling because, at the end of the  
3 day, when we look at it, we say, well, does this impact  
4 the ability of a biomass developer to get his project  
5 done on Progress Energy's grid. Well, no, it doesn't,  
6 you know. So that's more of a environmental fight than  
7 it is a renewable energy development fight. As  
8 renewable energy developers, we are really business  
9 guys. When you've got to raise 200 million dollars to  
10 build a project, you know, you're really a business guy.  
11 But what I'll share with you is that my concern is that  
12 I don't want the offshore oil drilling to be pitted  
13 against renewable energy. That's the problem. And the  
14 same goes to nuclear. I don't -- we think that those  
15 things should be dealt with on their own, and if there  
16 is some benefit to the renewable energy community, such  
17 as that plan that you just mentioned, I think that would  
18 be wonderful, but we don't want that to impede the  
19 progress we're trying to make.

20 MR. LEWIS: That is a good place to kind of bring  
21 your thoughts together and take the feedback form that  
22 you picked up on the way in, and even if it's not well  
23 worded, if you can just jot down three things that  
24 people in this room, people in this symposium could do  
25 to help insure that RPS passes this year. Should it be

1 something like the plan that was just suggested? Should  
2 we work with the EDO's? If it's jobs, jobs, jobs, then  
3 chambers and economic development commissions and so  
4 forth might be the root to meet the legislators. Is it  
5 a referendum? There were a lot of ideas today, but,  
6 one, two, three, what do you think that everyone in this  
7 room could do? That would be very helpful to us in  
8 bringing everyone's thoughts together to take things to  
9 the next step. There was also a couple of questions on  
10 the feedback form to get us started in planning for our  
11 next Cleantech symposium in April on green building  
12 codes and ordinances. So the feedback forms are very  
13 helpful to us, if you could kindly take a few minutes to  
14 drop it off on your way out.

15 Kirstie?

16 MS. CHADWICK: Our Governor will be here somewhere  
17 in the next 20 to 25 minutes, but we agreed and told you  
18 we'd be done at 11:30. We got pretty fairly close given  
19 the late start. What I think we're going to do is, if  
20 you need to go, please do. All the folks that were  
21 speakers have all agreed to hang out, and I think we're  
22 going to open the floor for questions, and if you can  
23 stay, great. If you have questions, now is the time to  
24 do it. I'm just going to ask all of the speakers,  
25 Robyn, if you could just come -- if you're still here

1 and represent the builders panel so that we don't have  
2 too many folks. Just come on up towards the front.  
3 We'll just do this informally, but if you need to go, we  
4 completely understand. We just want to hold the floor  
5 open a little bit just in case the Governor is able to  
6 pop in here in the next 20 or 30 minutes. But it's  
7 completely up to you. So with that, I will formally  
8 adjourn things, and, informally, we'll hang out and do  
9 the Q&A while we're waiting to see what happens. Okay?

10 MR. LEWIS: Does everyone want to stay where they  
11 are, except for people that have to leave and have other  
12 things they need to be at? I need to be someplace  
13 myself at noon for a couple hours, but I'm going to walk  
14 in late.

15 Maybe one thing that we can -- that someone would  
16 want to address is I'm curious of the organization that  
17 you represent, what are you doing to insure that a RPS  
18 passes this year? What is your action plan? Anybody  
19 want to address that? Because is that a work item for  
20 any organization here? Think about that as the panel  
21 comes up, and they may be able to instigate a few more  
22 questions.

23 MR. BOROUGHS: Let me make a comment. I think  
24 Michael hit the nail on the head when he said, look, if  
25 you're interested in RPS, talk to your local

1 legislators. They are more receptive to members that  
2 vote for them, okay, because the members that vote for  
3 them have citizens that vote for them, have neighbors  
4 that vote for them. They represent you. In many ways,  
5 they're much more influential than highly paid  
6 lobbyists. Tell them it's important. Tell them why  
7 it's important. That's the best thing to do. If we can  
8 get people to do that all over the state, we'll win,  
9 okay? But if we don't, it's not going to go anywhere,  
10 because we've got basically, for the most part, a House  
11 that's kind of reluctant to go very far. But we can do  
12 it if we'll all get out there and talk to our own House  
13 members.

14 MR. LEWIS: I want to recognize Stacy Schmidt who  
15 came in a little while ago. She's someone who you would  
16 all like to meet, I'm sure. She is the manager of the  
17 -- or the director of the Economic Gardening Institute  
18 at UCF that you have been reading about in the papers.  
19 So you might want -- the website is growfl.com?

20 MS. SCHMIDT: That's correct, yes. And I would be  
21 happy to answer any questions you might have about the  
22 growfl program and how we're working in Florida to help  
23 second stage companies grow.

24 MR. LEWIS: Okay. I think the panel would be good  
25 at taking it from here and either making some wrap up

1           comments or asking some questions of people who are  
2           remaining.

3                   UNIDENTIFIED SPEAKER:   Maybe not a question but  
4           more of an observation.  There has been a lot of talk  
5           about a referendum.  I think that's an exceptional idea,  
6           except that I think here in Florida we are in the  
7           Plasticine and our legislature is all Neanderthals, and  
8           I've been working with the Amendment 4 Referendum and  
9           the business lobby is prepared to spend a gazillion  
10          dollars to try to defeat that, and I'm not so sure that  
11          the same thing wouldn't happen on a renewable energy  
12          standard.  All that would have to happen is the tea  
13          partyists and the faux news people, you know, figure out  
14          some reason why it's not a good idea, and we would be  
15          toast and spend a whole lot of money and get nowhere.

16                   MR. LEWIS:  Is that a reason not to, Michael?

17                   MR. DOBSON:  Well, what I would say and I've always  
18          said is that there's more of us than them.  You know,  
19          we've just got to get organized.  I mean, that's really  
20          it.  The problem is there is so many -- gosh, so many  
21          different renewable energy kind of policies and ideas  
22          out there, and what happens is that we go to the  
23          legislature and everybody's, you know, coming there with  
24          these 10 or 20 ideas, you know, and it's confusing to  
25          those guys.  You know, so there is -- again, there is --

1 we got the numbers, but we just got to decide on what it  
2 is we want to aim at.

3 MR. LEWIS: Who initiates the referendum?

4 MR. DOBSON: I don't know. George and I will have  
5 to talk about that.

6 MS. BALDWIN: Hi, this is Melissa Baldwin. I'm  
7 with the Florida Conservation Alliance Institute, and we  
8 work on federal climate and energy policy. I have two  
9 questions. The first question is, what do you think is  
10 the best policy, both on the state and the federal  
11 level, that we can take to increase distributed  
12 generation?

13 MR. CAVROS: You know, I'll take a shot at that.  
14 You know, the one thing you need to do to increase  
15 distributed generation is you need to have certainties  
16 and you need to have transparency, and that's actually  
17 been one of the criticisms of the renewable portfolio  
18 standard in the past is that only the big players can  
19 play. There is really kind of what they call high  
20 transaction costs, which means, you know, you need a  
21 team of lawyers to negotiate these contracts, and that  
22 tends to dissuade smaller developers from participating.  
23 And, additionally, you know, contract negotiation, it's  
24 a very sort of resource intensive process. If you have,  
25 you know, like I talked about earlier in my

1 presentation, sort of open contracts that anyone can  
2 take advantage of if they need certain criteria, like a  
3 standard offer contract or even in components within --  
4 perhaps a carve out for distributed generation. I think  
5 the way you implement that is you offer standard offer  
6 contracts to folks or you incorporate a feed-in tariff  
7 for smaller generators. Maybe, you know, 20 megawatts  
8 or less. In fact, the California Public Utilities  
9 Commission is trying to incorporate the feed-in tariffs  
10 for smaller systems of 20 megawatts and under. They're  
11 having proceedings in that right now, because the  
12 smaller systems just simply aren't getting built with  
13 these RPS's. So that's certainly one way to go about  
14 it.

15 MR. BOROUGHS: Most of my Florida Energy Commission  
16 had a recommendation that dealt with it directly in  
17 Florida. A person or a company cannot sell, cannot set  
18 up a generating unit and sell energy to anybody and any  
19 other utilities district without being considered a  
20 utility, you know, and regulated by the PSC, and so once  
21 you set up business in somebody else's territory, you  
22 know, you are going to have that issue, so -- and we  
23 know all of the IOU's especially oppose that. So our  
24 recommendation was to limit it to 5 megawatts, because  
25 we thought maybe that might be bite size. But if you do

1 that, then you take away a barrier. You know, it's not  
2 necessarily -- you know, one of the things that  
3 government needs to do is not just incentarize, it's to  
4 remove barriers. That's a barrier. We need to remove  
5 that barrier. And the legislation in 2008 took some  
6 steps. We do net metering. Even the munis and co-ops  
7 do net metering. But that still doesn't go as far as  
8 allowing an entity to come in, okay, I'm ABC Company, I  
9 come into your place of business, I -- you know, I set  
10 up some kind of, you know, renewable generation  
11 operation, I sell you my power, and then I sell back  
12 what you don't need, you know, on the grid or to  
13 somebody else. That's one way you get distributed  
14 generation, and distributed generation, once again,  
15 remember, you don't have to transmit it. You hear all  
16 this wind talk, wind energy talk nationally with all  
17 these wind tunnels coming up in the middle of the  
18 country. The problem with that is you got to transport  
19 it all the way to the centers where you need it. This  
20 is one of the problems that California is having now,  
21 because they've got -- a lot of the solar power they buy  
22 or the solar concentrating power that they buy is from  
23 Arizona. You got to transmit it in. Transmission is  
24 very expensive. Okay. Takes a long time. It's very  
25 expensive. You got some losses. We need to encourage

1 all the distributed generation we can.

2 MS. BALDWIN: That sounds like a common sense  
3 policy to me. Are there any law makers who are  
4 championing that idea, or is it in a bill? Has it been  
5 proposed?

6 MR. BOROUGHS: None that I know of.

7 MS. BALDWIN: Why not?

8 MR. BOROUGHS: I don't think anybody wants to take  
9 that on. I mean, I -- that's what I don't think. I  
10 mean, we're having problems right now getting champions  
11 for renewable energy. That's just another -- that's  
12 another rock in somebody's pack, you know, to try to  
13 carry. So I just don't see any will. I think we've got  
14 to take other steps before we get -- it is common sense  
15 and I agree with you, okay, now on the other hand, and  
16 one reason why you might want to keep it small is when  
17 the IOU's say, look, we spent a lot of money, we have a  
18 statutory duty, we have a mandate to serve. So if  
19 you're in our territory, we've got to serve you. That  
20 means we got to have the grid there and everything else.  
21 So we have to consider the whole picture. We can't  
22 throw the baby out the bath water. George mentioned now  
23 we've got that competition between the producer and the  
24 user we didn't have back 80 years ago when we started  
25 this system, but there are ways to work through it, and

1           that's one of the ways we can work through it.

2           MS. SZARO: And I want to add a couple of other  
3           ideas to the mix. One of the things that happened this  
4           year that has slightly disrupted our progress is a  
5           change in legislation regarding property taxes in  
6           tangible tax for solar. So it originally had an  
7           exemption, and now that's being reconsidered, sort of  
8           pulled back and pulled off the table. So that adds to  
9           the cost of installing a system over the life of the  
10          system, not just in the first year. So that right there  
11          is a barrier that we had overcome previously and is now  
12          back on the table.

13          And then the other thing I would want to mention is  
14          permitting requirements. They are all over the board in  
15          the state of Florida, and, you know, we are trying to  
16          work with our code officials and unlock all inspectors  
17          in our service territory, and just in our service  
18          territory, we deal with four code jurisdictions, and  
19          none of them do it the same. And they want to learn and  
20          they are willing to learn, but at the state level, if we  
21          were to try to standardize solar permitting, I think  
22          there would be a huge benefit to both utilities trying  
23          to implement these programs and the customers trying to  
24          participate.

25          MS. BALDWIN: I have one more question, and that

1 is, it has to do with federal energy and climate policy,  
2 and I think one of you mentioned the idea of putting a  
3 price on carbon. What are the benefits of having a  
4 price on carbon in terms of having more certainty in the  
5 marketplace and how would that affect Florida's ability  
6 to draw more clean energy businesses to our state and to  
7 our country?

8 MR. DOBSON: I think it's a good idea, but  
9 politically it's difficult because -- well, I'm sure you  
10 hear the rhetoric, capping tax and all that. I think  
11 that citizens are going to have to show politicians how  
12 much they value clean air, lower emissions, and until  
13 that happens, the -- I guess the two parties -- we only  
14 have a two party system for the most part, they're going  
15 to use this as kind of a political football and it's  
16 going to be a way to either get elected or get defeated.  
17 And that's what's happening now. But, again, we've got  
18 to get engaged and let them know that we care about it.

19 MR. CAVROS: Thanks. I just wanted to add to that,  
20 because we really didn't go to the subject of, you know,  
21 capping CO2 emissions. People respond to price signals.  
22 I have found, you know, that they don't respond really  
23 to anything else except price signals. That's it. They  
24 don't respond to legacy arguments, they don't respond to  
25 saving the planet, they respond to price signals. And

1 to suggest that this is some sort of tax, you know, call  
2 it what you will, but as a society, we always put a  
3 price on things that are not good for the greater  
4 community. You know, alcohol, cigarettes, you know, you  
5 name it. To some extent, you know, we regulate those  
6 activities, and we ought to be doing the same with CO2  
7 emissions, especially living in Florida. We have 1,200  
8 miles of coastline and we're on the front lines of  
9 climate change, and certainly, as a state and as a  
10 nation, we need to lead in that effort to reduce CO2  
11 emissions. It's not going to be easy, but I think the  
12 countries that step out in front of it will be the ones  
13 that do better in the long time, over the long haul in  
14 the world's marketplace. So I think they can all work  
15 together, I think, in energy efficiency, I think in RPS,  
16 and I think some sort of regulation on carbon. It's  
17 really a three legged stool, because also -- a cap on  
18 carbon also goes beyond the electricity industry. It  
19 goes to the greater economy as a whole. Then, you know,  
20 we start to be more competitive on other industries as  
21 well.

22 DR. FENTON: I just want to add, another comment  
23 here is that we're stuck in this sort of situation.  
24 We've heard taxes are bad words. The future, a future  
25 we want, requires an investment. Otherwise, you end up

1 with a future of which you've made no investment, and  
2 you'll get what you get. Okay? So the question is, are  
3 we willing to invest in the future and come together  
4 collectively to determine what that future should be.  
5 And it's difficult, because right now nobody wants to  
6 spend money. So I think we're going to be in a  
7 stalemate of not coming up with a future that we want.  
8 So I think individually we have to make it known that we  
9 want a clean, sustainable future and that we're willing  
10 to make an investment, albeit not a real expensive one,  
11 but more than a penny a month. Okay. And the poll that  
12 came out, by the way, that was passed, it had an 83  
13 percent, you know, approval of this was a dollar a month  
14 of an investment. That's the poll that came out three  
15 years ago said a dollar a month. You notice on the  
16 public benefit numbers that I had put up there,  
17 California is typically on the \$2 a month, and I tried  
18 to explain to you that their electric bill total a month  
19 is about half of what we pay. So, you know, we're  
20 looking at the notices. The rebate you got was \$4 a  
21 month because the price of fossil fuels went down. All  
22 right. So I think the citizens are willing to do it.  
23 We just have to collectively realize it's an investment  
24 in the future. And there's a lot to be said for the  
25 jobs that come out of all this, whether it be cap and

1 trade or renewables or efficiencies, which are the  
2 lowest cost things to go do. There's a lot of  
3 employment to be done, and I would rather have that  
4 employment be my neighbor next door rather than somebody  
5 outside the state.

6 UNIDENTIFIED SPEAKER: Thank you. Good morning  
7 again. I want to make a comment, a take off of Mr.  
8 Cavros's presentation where he believes that Florida is  
9 at a crossroads, and I agree, maybe for a different  
10 reason. It has to do with the nuclear equation. Every  
11 year, the PSC requires utilities to provide a 10 year  
12 plan for baseline, I think, electricity, how they're  
13 going to generate it, and in this year's plan released  
14 in November or December of '09, it calls for the years  
15 2016 to 2018 going from 13 percent nuclear to roughly  
16 about 25 percent nuclear. I, frankly, don't think  
17 that's going to happen in light of the fact that the PSC  
18 just shot FPL and FPE down for rate increases. So I  
19 just can't see these plants coming online to provide  
20 those kind of numbers. So don't know where the  
21 electricity generation is going to come from at that  
22 timeframe, but it seems we're sitting in a unique  
23 position for a renewable portfolio standard this year as  
24 a transition year just looking at those numbers alone  
25 and saying, hey, we have to have a plan in place.

1           Whether it's renewable or nuclear really doesn't matter.  
2           We're talking about electricity in general.

3           MR. DOBSON: Amen.

4           MS. SZARO: I will say, just as an aside, I first  
5           want to congratulate those who are doing such an  
6           excellent job in conservation and demand site market.  
7           So well done. But that does make it a little bit more  
8           challenging to integrate new renewables and new power  
9           into the grid when you already have a 30 percent reserve  
10          margin. So I think that's one of the factors, and I  
11          hear what you're saying about nuclear, and, you know, I  
12          think you are on track with that. So where will it come  
13          from? I think as we start doing more with integrated  
14          resource planning, incorporating solar and other  
15          renewables into the mix, we'll be ready at 2020 with the  
16          right mix at that time.

17          MR. ALLER: Thank you. It's been a great set of  
18          presentations today. My name is Michael Aller. I'm  
19          with Rollins College, and a lot of my questions have  
20          actually been touched on in one way or another, but I do  
21          have a couple questions. One is we are in a very kind  
22          of resource constrained time, both in this state, in the  
23          country, in the local economy. And yet as Dr. Fenton  
24          was just saying, we do need to find ways to make  
25          investments in these areas. Dr. Fenton talked a lot

1 about energy efficiency. What are some ways that we can  
2 try and get -- kind of push energy efficiency, because  
3 that is the most cost effective way, but how can we get  
4 that message across to the people who need to know?  
5 What are some specific, you know, policy things that we  
6 can do to get energy efficiency pushed forward, first of  
7 all, and then second of all, given the importance of  
8 setting prices, you know, setting a price to kind of  
9 follow on behavior, given the problems that cap and  
10 trade has had and others, what are some things that we  
11 as a state can do that we could try and, you know -- or  
12 at a local level that we can try and push these things  
13 forward?

14 DR. FENTON: I think I can handle the first one  
15 here. A little tougher time with the second one. As  
16 George has pointed out and several others have pointed  
17 out, efficiency is the low hanging fruit. The problem  
18 that we often have is this up front cost to pay for  
19 insulation, better windows, so on and so forth. I  
20 remind everybody that you get a 30 year mortgage usually  
21 when you buy a piece of property, and so if we come up  
22 with some policies where there is some ways to have us  
23 finance these things, often with paybacks of 5 years, 10  
24 years, and so forth, we get one stop financing, one stop  
25 shopping to go ahead and make the improvements, we put

1 in some policies that require us to actually measure,  
2 you know, home energy ratings, so you actually know, you  
3 know, how well my house is behaving, what the most cost  
4 effective improvements are that can be made. The role  
5 of government here may be to insure the low cost  
6 financing and the availability of it to the citizens.  
7 Typically, we can get about 30 percent energy savings at  
8 a cost effective mechanism. So that just means I need  
9 financing. And I remind everybody that if you have a  
10 payback that's less than 30 years, when you have a 30  
11 year mortgage, you put money in your pocket the first  
12 month, okay? So a lot of this is just an issue of  
13 finding financing and a creative will. And I think that  
14 could do that. Then if we choose then to use the  
15 savings that we as a collective group use and put that,  
16 say, into some public benefit fund of some sort, you  
17 could then pay for the renewables that are perhaps not  
18 quite as cost effective.

19 MR. CAVROS: I just wanted to add just one thing to  
20 that. There will be legislation, I suspect, this year.  
21 They will be promoting renewable and energy efficient  
22 finance districts which will give local municipalities  
23 the statutory authority they need to go ahead and set up  
24 districts and float bonds to lend money to folks and to  
25 implement energy efficiency measures or renewable energy

1 on their home so that there will be no up front cost for  
2 that, and the payment will be over 20 years at a very  
3 low interest rate. So I think that's kind of one common  
4 sense policy that all of us can support.

5 MR. BOROUGHS: One way to encourage energy  
6 efficiency is to have an energy efficiency standard just  
7 like a renewable portfolio standard. One thing my  
8 Florida Energy Commission recommended was to set that  
9 up. And I realize in the current political environment  
10 that's a tough sell, but I think if you do that, if you  
11 structure that, you could get it. One of the problems,  
12 as Jim has indicated, you know, is the initial cost.  
13 But if you set it up, you work at it, you get the  
14 utilities working with the customers, okay, because the  
15 low hanging fruit is the kilowatt you don't use. I  
16 stole that. Jim Fenton used that line, but the cheapest  
17 kilowatt is the one you don't have to produce, and  
18 that's energy efficiency and conservation, and we need  
19 to encourage both of those. So you are right on.

20 UNIDENTIFIED SPEAKER: The RPS bill now doesn't  
21 have an energy efficiency -- sorry. Nevermind.

22 MR. DOBSON: Can you repeat that, please?

23 UNIDENTIFIED SPEAKER: The question is that the  
24 current renewable portfolio standard bill is not  
25 believed to include an energy efficiency standard.

1 MR. BOROUGHS: Right, it does not.

2 MR. DOBSON: That doesn't mean we can't do some  
3 work and try and include some language that would  
4 address that at a later date.

5 MS. CALLIE: Cookie Callie. I just want to say  
6 that the government does have a program in place, an  
7 energy efficient mortgage program, that does rely on  
8 codes and qualifications that will preapprove someone,  
9 say, who is approved for \$100,000, they can add on the  
10 cost of the improvements and they will be qualified for  
11 that, because it recognizes that they won't be spending  
12 their income for energy in the future. So it is in  
13 place. It's very misunderstood and not well known at  
14 all, but it's really important. It's a really important  
15 program.

16 UNIDENTIFIED SPEAKER: I just want your opinion on  
17 two things. One is quality control and the other one is  
18 storage. I know FSEC, I guess, does a lot of things in  
19 storage. Correct me, I guess, if I'm wrong. But maybe  
20 you can comment on flywheels perhaps or other storage  
21 anyway. And the other one, as far as quality is  
22 concerned, insuring what should be the policy. So  
23 insure that the systems that are put in place, you know,  
24 are performance based, you know, do provide what they're  
25 saying. So what's your opinion?

1 MS. SZARO: I'm going to start backwards and then  
2 hand the mic over. On the performance standards, while  
3 that definitely comes from code officials and making  
4 sure systems are permitted properly, but in our case, we  
5 from the solar perspective wanted to insure that the  
6 systems that we were spending money on were going to  
7 work for the long term, which is why we take the extra  
8 steps we don't have to do, some of the extra steps that  
9 we do, but we do it because we want to make sure the  
10 systems are going to be there. So, for instance, we  
11 established a performance incentive program instead of  
12 an upfront rebate for our programs. Yes, it's a little  
13 more complicated, and, yes, it's a little more involved,  
14 but we feel that it's the best way to insure that we are  
15 getting our money's worth and that the customers are  
16 getting their money's worth. So programs like that that  
17 measure per kilowatt hour or per kilowatt hour saved  
18 will insure that the performance of those measures last  
19 longer and that the folks that are spending the money  
20 are really getting their money's worth. And I would  
21 encourage measurement and verification for all of these  
22 types of programs. I think that's key to making them  
23 last in the long term.

24 DR. FENTON: I agree. It's all about performance.  
25 Okay. Yes, all our high school students can pass high

1 school, but can they perform? Okay? And we can argue  
2 about FACT tests, but measuring performance is key. So  
3 we have to set up performance standards on things, and  
4 the programs that OUC mentioned meet a lot of the needs.  
5 Keep in mind, OUC is the utility of the people. Okay?  
6 So that makes sense that they do some of those things  
7 and I would encourage the others to continue to do that  
8 as well. Regarding long term renewables, as we move  
9 higher up to higher percentages in the 10's and 20's,  
10 which is where we all want to go, it's a question of  
11 when we do have this problem, as Jennifer pointed out,  
12 with peaking and energy storage, and so energy storage  
13 will play a major role. This will help out the grids  
14 and so forth. Our opportunities here in Florida are  
15 limited, are gravity challenged. We can't pump water up  
16 a hill in storage like a lot of places can. We can't  
17 pump air underground. So it probably will be chemical  
18 energy storage probably in the form of flow batteries,  
19 okay, flywheels in the future, super capacitors and  
20 things like this. You know, there's research activities  
21 going on in that, but we haven't quite gotten to that  
22 saturation point. Hopefully, we'll get there where we  
23 will do peak shaving and be able to soften out some of  
24 the peaks that Jennifer had pointed out earlier.

25 MS. CHADWICK: Okay. The Governor is here, so

1 we're going to move the microphone back. We appreciate  
2 you guys punting and filling the time, and, hopefully,  
3 there was some good Q&A while we were tracking the  
4 Governor down.

5 MR. LEWIS: Everyone, Governor Charlie Crist.

6 GOVERNOR CRIST: Hi, how are you?

7 MR. LEWIS: This is the good governor that's been  
8 working with Orange County to help us come up with our  
9 Cleantech initiative and renewable energy and bringing  
10 all those good Cleantech companies to Florida, and I  
11 understand we've got to speak at the podium, but we know  
12 that our agenda matches yours, and we're thrilled that  
13 you stopped by to see us today.

14 GOVERNOR CRIST: I'm honored to be here. Thank you  
15 very much. I want to tell you how encouraged I am by  
16 exactly what you are doing. I know that Senator  
17 Constantine has been a very active participant in  
18 developing clean energy, clean technology, and making  
19 Florida a cleaner and better place to live, and it has  
20 been one of the most passionate drivers of our  
21 administration. I can tell you that. And Tom knows  
22 that because we've had the chance to work together on a  
23 lot of different issues, but I can't help but notice  
24 your tie there with the sun on it, and it reminds me of  
25 a story. When I first got elected governor during the

1 course of the campaign four years ago, we talked a lot  
2 about trying to increase solar energy in Florida. And I  
3 don't know if that's what you're involved in, probably  
4 is due to the tie, but I remember a number of people  
5 said, well, Governor -- after I got sworn in -- you  
6 know, we really don't have enough sunshine in Florida to  
7 develop solar energy. And I thought, Florida, sunshine  
8 state. That really doesn't jive. And, at the time,  
9 Florida in 2006, was dead last in the amount of solar  
10 energy production we were putting forward. Last out of  
11 50 states. Well, I'm proud to tell you that today  
12 Florida is No. 2 in the country in solar energy  
13 production. And, frankly, Florida Power and Light has  
14 done a tremendous amount in order to advance that down  
15 the field, and I'm very grateful to them for it. We  
16 have now the largest solar array panel in North America  
17 in Florida, where it ought to be, the sunshine state,  
18 and I'm very, very pleased that that has happened. But  
19 whether it's solar energy or other types of clean  
20 energy, I think these things are awfully important for a  
21 place, especially like the sunshine state. I mean, it's  
22 the most beautiful state in America. I'm terribly  
23 biased as your governor, and I had better be. But I  
24 believe it to be true as well, and I think that anything  
25 that we can do in any area to -- I mean, look what we've

1 done with rail. You know, you talk about being able to  
2 move safely between Tampa and Orlando with this bullet  
3 train that now the administration has committed to us,  
4 1.25 billions dollars worth of commitment, as a down  
5 payment, I should add, people will be able to get  
6 between these two incredible communities safely,  
7 quickly, and it will be clean. And that's very exciting  
8 to me as well. And whether people believe in climate  
9 change or not is almost irrelevant. What is relevant is  
10 that all the things that you would want to do to address  
11 it are good for Florida. And they're good for Florida  
12 economically, not just environmentally, because Florida  
13 is a special place where the economy and the environment  
14 are inextricably linked. You know, we have this sort of  
15 big industry called tourism. Over 80 million people a  
16 year come to this state, and I'm convinced they don't  
17 come here because she's ugly but because she's rather  
18 beautiful. And, you know, protecting her and protecting  
19 God's work and being good stewards I think is one of the  
20 greatest responsibilities that we all have. And it's  
21 good for our economy, too, in another way. Because of  
22 the new industries that get developed as a result of it.  
23 So there is no down side. Zero. You know, if done  
24 right and done smart. And so I just had the opportunity  
25 to find out that you were here and wanted to come by and

1           thank you for what you're doing. Mayor Crotty I know is  
2           committed to it and Mayor Dyer as well. And, you know,  
3           Orlando is really on fire. It's unbelievable what's  
4           going on here. With Nemours and the Medical City, I  
5           call it Medical Plant, out there, it's so big, but so  
6           many exciting things. The new arena, all of the  
7           projects that are occurring and employing people, and in  
8           this economy, that's critically important. So what you  
9           are doing to develop new areas of potential employment  
10          for more people is one of the most laudable things  
11          anybody can be about right now. It is with great  
12          purpose that I am sure you continue to push forward.  
13          And I want to thank you for it on behalf of the almost  
14          20 million people that live in our state. God bless  
15          you. Thank you.

16                 MR. LEWIS: Thank you so much for all you do for  
17          Florida and Central Florida. We appreciate it.

18                 GOVERNOR CRIST: I want to keep doing it, so if  
19          you'll let me, that will be great, too.

20                 MR. LEWIS: Thanks for stopping by. We're  
21          adjourned.

22                         (Symposium concluded at 12:18 p.m.)

23

24

25

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

CERTIFICATE OF REPORTER

STATE OF FLORIDA  
COUNTY OF ORANGE

I, Leslie Richmond, Registered Professional Reporter, certify that I was authorized to and did stenographically report the foregoing symposium, and that the foregoing transcript, including 158 pages, is a true and complete record of my stenographic notes.

Dated this 1st day of March, 2010.

---

Leslie Richmond, RPR and  
Notary Public



<b>A</b>		
<b>ABC</b> 141:8	30:22 39:8 45:9 46:19	<b>ago</b> 3:16 4:25 13:1 56:9
<b>ability</b> 72:11 134:4	48:21 65:25 104:16	62:3 88:6 108:18
144:5	<b>additional</b> 25:18,19	126:18 137:15 142:24
<b>able</b> 6:5 7:7 9:7 33:22	65:14 68:21 75:22	146:15 156:1
65:10 91:6 92:3 93:18	115:9 118:11 131:4,5	<b>agree</b> 91:24 96:10
100:7 124:12 128:8	<b>additionally</b> 75:4	132:6 142:15 147:9
136:5,21 154:23	139:23	153:24
157:1,5	<b>additions</b> 122:25	<b>agreed</b> 5:5 125:4
<b>absolutely</b> 68:19	<b>address</b> 83:9 96:25	135:17,21
<b>AC</b> 116:12	97:10 98:21 103:18	<b>agreement</b> 73:24 76:10
<b>academia</b> 19:24	125:12 128:24 136:16	78:5 107:16
<b>accept</b> 119:18	136:19 152:4 157:10	<b>agreements</b> 87:23
<b>acclaimed</b> 39:20	<b>addressed</b> 74:22	112:23
<b>accommodate</b> 38:13	<b>adds</b> 143:8	<b>agricultural</b> 17:4,4
67:9,10 70:8	<b>adjourn</b> 136:8	18:4
<b>accommodated</b> 69:7	<b>adjourned</b> 158:21	<b>agriculture</b> 46:16
<b>accomplish</b> 62:11	<b>administration</b> 155:21	<b>ahead</b> 11:8 16:17 19:7
65:11	157:3	37:20 38:13 48:18
<b>accomplished</b> 73:18	<b>administrator</b> 2:25	50:6 51:23 56:6 57:8
<b>account</b> 100:11	<b>adopt</b> 21:2 29:17 97:17	58:7 59:17 60:3,20
<b>accredited</b> 84:14	<b>adopted</b> 127:22	64:24 65:8 71:5 77:9
<b>accumulation</b> 55:12	<b>adoption</b> 23:7	80:7 89:11 92:11
<b>accurate</b> 114:10	<b>advance</b> 156:14	106:15 108:3 125:8
<b>achieve</b> 7:12 10:18	<b>advantage</b> 40:7 45:8	125:14 149:25 150:23
65:13 116:14 121:2	48:13 51:25 62:19,21	<b>aid</b> 85:4
<b>achieving</b> 41:4	64:10 107:14,17,18	<b>aim</b> 139:2
<b>acknowledge</b> 18:22	140:2	<b>ain't</b> 42:25
<b>acquisition</b> 14:23	<b>advise</b> 19:14	<b>air</b> 105:1 113:9 116:9
<b>act</b> 78:7 123:7	<b>advisor</b> 20:13	144:12 154:17
<b>action</b> 15:10 23:23	<b>advisory</b> 19:17,18 20:1	<b>Alaska</b> 43:22,23,24
136:18	26:20	<b>albeit</b> 52:21 146:10
<b>actions</b> 10:17	<b>advocacy</b> 6:13	<b>alcohol</b> 145:4
<b>active</b> 39:6 155:17	<b>advocated</b> 110:8	<b>algae</b> 66:2 79:11,13,14
<b>activities</b> 3:9 39:18	<b>advocates</b> 131:11,25	79:15 99:5,6
145:6 154:20	<b>AEA</b> 6:12,12	<b>Aller</b> 148:17,18
<b>actual</b> 20:8 41:1	<b>aerospace</b> 39:14	<b>Alliance</b> 110:5 111:5
<b>add</b> 5:21 11:6 25:6	<b>affect</b> 91:17 99:22	139:7
36:5 45:11 71:1,7	100:3,6 101:4 144:5	<b>allow</b> 27:14 34:19
143:2 144:19 145:22	<b>afford</b> 43:8	77:19 85:18 90:4
150:19 152:9 157:5	<b>affordability</b> 36:1,1,7	92:17 126:21
<b>added</b> 50:20 92:15	36:13 63:1	<b>allowing</b> 141:8
<b>adding</b> 76:1	<b>afraid</b> 30:1 34:21 36:7	<b>allows</b> 123:9
<b>addition</b> 8:18 14:24	<b>agency</b> 2:10	<b>alternative</b> 15:13 39:21
15:12 18:7 19:16	<b>agenda</b> 61:5 155:12	43:3,4 61:19 121:23
	<b>agent</b> 78:7	<b>alternatively</b> 117:4
		<b>alternatives</b> 43:21 44:5
		99:5
		<b>Amen</b> 148:3
		<b>Amendment</b> 138:8
		<b>America</b> 95:6 96:17
		156:16,22
		<b>American</b> 15:3 52:17
		86:7 123:7
		<b>Americans</b> 18:21,23
		<b>amount</b> 6:20 7:23 22:4
		25:20 37:1 49:4 50:16
		52:6 67:5 106:2 122:2
		127:9 156:9,14
		<b>amounts</b> 69:24 121:1
		<b>anaerobic</b> 66:6
		<b>analogy</b> 24:19
		<b>analysis</b> 45:22
		<b>analyst</b> 61:22
		<b>analysts</b> 81:13
		<b>animal</b> 17:5 18:5
		<b>announced</b> 3:25 74:7
		<b>announcements</b> 9:1
		<b>announcing</b> 64:25
		<b>Annual</b> 9:10
		<b>answer</b> 11:16 54:18
		98:18 137:21
		<b>answered</b> 34:25 106:12
		<b>answering</b> 101:15,16
		<b>answers</b> 35:1 38:7
		110:24
		<b>anticipation</b> 59:20
		<b>anybody</b> 13:5 44:17
		56:19 57:13 105:7
		136:18 140:18 142:8
		158:11
		<b>anybody's</b> 32:1 129:17
		<b>anymore</b> 26:5,8 56:22
		106:13
		<b>anytime</b> 55:6 68:18
		75:23
		<b>anyway</b> 152:21
		<b>apartments</b> 53:25
		<b>apologize</b> 123:23
		<b>append</b> 124:21
		<b>appetite</b> 129:24

<p><b>applaud</b> 83:2  <b>applicable</b> 104:19  <b>application</b> 79:12  <b>applied</b> 73:6  <b>appoint</b> 35:14  <b>appointed</b> 15:7,9 19:11 29:11  <b>appoints</b> 23:20  <b>appreciate</b> 11:5 38:21 61:2,2 93:19 155:1 158:17  <b>apprehensive</b> 130:5  <b>approach</b> 36:24 37:2 104:4 119:25  <b>appropriate</b> 77:22  <b>approval</b> 146:13  <b>approved</b> 152:9  <b>approximately</b> 86:13  <b>April</b> 9:10 10:22 88:1 135:11  <b>AquaFiber</b> 7:5  <b>Arab</b> 52:20  <b>Arabia</b> 18:1  <b>area</b> 9:14 14:21 20:16 47:17,21 96:21 156:25  <b>areas</b> 66:10 109:7 124:13 148:25 158:9  <b>arena</b> 158:6  <b>argue</b> 55:3 101:16 154:1  <b>arguing</b> 46:8  <b>argument</b> 127:21  <b>arguments</b> 144:24  <b>Arizona</b> 47:17,23 106:23 117:13 119:21 120:23,24 141:23  <b>array</b> 156:16  <b>article</b> 11:23 12:1,13 12:15  <b>aside</b> 118:3,3 148:4  <b>asides</b> 122:23  <b>asked</b> 9:19 10:8 13:1 23:13,16 45:9 94:7 110:23</p>	<p><b>asking</b> 11:13 51:4 57:4 80:10 85:18 108:7 138:1  <b>asks</b> 56:25  <b>aspect</b> 61:8  <b>aspirational</b> 28:14  <b>assessed</b> 25:5  <b>assets</b> 4:2  <b>assisted</b> 6:14  <b>associated</b> 7:4 41:18 45:15 47:14 49:5 50:3 62:13 75:4  <b>Associates</b> 1:23 8:16  <b>association</b> 15:6 86:1,6 86:21 126:3,16 134:1  <b>Association's</b> 15:4  <b>assured</b> 129:6  <b>astronomical</b> 94:15  <b>attendance</b> 12:22  <b>attending</b> 38:20  <b>attest</b> 132:2  <b>attitude</b> 42:25  <b>attract</b> 110:13  <b>attracts</b> 51:13  <b>attribute</b> 118:10  <b>Atwar</b> 29:10,11  <b>audience</b> 85:22 132:12  <b>augment</b> 101:13  <b>Austin</b> 4:7  <b>authority</b> 124:7 150:23  <b>authorized</b> 159:4  <b>automotive</b> 39:12  <b>availability</b> 67:24 68:1 150:6  <b>available</b> 68:16,24 71:19 98:23 105:19 105:22  <b>average</b> 50:10 53:21,24 59:23 63:7 71:6 97:8 121:9,25  <b>avoided</b> 112:23 114:22 115:11 118:13,14 128:25  <b>aware</b> 31:4 43:17  <b>awfully</b> 156:20</p>	<p><b>a.m</b> 1:16</p> <hr/> <p style="text-align: center;"><b>B</b></p> <hr/> <p><b>babies</b> 31:3  <b>baby</b> 25:7 27:13 32:1 46:12,13 67:1 142:22  <b>bachelor's</b> 61:24  <b>back</b> 3:24 23:17 24:18 33:12 37:5 38:17 51:3 52:15,25 55:20 56:4 60:14 75:3 81:23 89:3 90:25 94:13 101:7 106:6 125:7 141:11 142:24 143:8,12 155:1  <b>backbone</b> 20:12  <b>background</b> 14:18 33:14 62:17  <b>backup</b> 21:11 98:9  <b>backups</b> 59:19  <b>backwards</b> 71:8 153:1  <b>bad</b> 50:14 55:11 59:3 68:1 95:24 133:23 145:24  <b>balance</b> 63:1 92:21  <b>balancing</b> 104:15  <b>Baldwin</b> 139:6,6 142:2 142:7 143:25  <b>ball</b> 35:13  <b>ballot</b> 95:21 131:1  <b>bankers</b> 100:19  <b>bankrpting</b> 121:16  <b>bar</b> 40:8 41:10,10  <b>barrier</b> 67:23 141:1,4,5 143:11  <b>barriers</b> 62:13 79:20 141:4  <b>bars</b> 70:14  <b>base</b> 87:8 112:20 126:6  <b>based</b> 49:24,25 50:7 85:9 111:9 119:18 125:25 152:24  <b>baseline</b> 66:20 115:20 115:24 147:12  <b>baseload</b> 45:13</p>	<p><b>basic</b> 12:18  <b>basically</b> 16:22 18:13 27:3 31:2 34:20 35:25 37:2 63:3 79:7 81:15 100:20 108:21 114:17 118:18 119:18 122:14 137:10  <b>basis</b> 25:4 40:10 74:4  <b>bath</b> 142:22  <b>batteries</b> 154:18  <b>battery</b> 59:19  <b>bear</b> 61:12  <b>beautiful</b> 156:22 157:18  <b>becoming</b> 124:17  <b>beginning</b> 20:12  <b>behalf</b> 3:9 158:13  <b>behaving</b> 150:3  <b>behavior</b> 149:9  <b>behold</b> 23:22  <b>beings</b> 106:5  <b>believe</b> 29:10 42:4 73:3 79:25 87:5 90:3 103:5 109:17 156:24 157:8  <b>believed</b> 151:25  <b>believes</b> 31:6 147:8  <b>bell</b> 61:3  <b>beneficial</b> 91:18  <b>benefit</b> 55:3 73:25 88:12 90:16,22 91:6 91:21 101:24,25 102:5,6,17 134:16 143:22 146:16 150:16  <b>benefits</b> 62:12,20 66:11 69:1 77:7,24 110:10 110:11,11 112:13,14 115:11 130:12,13,19 133:17 144:3  <b>Bennett</b> 29:24  <b>Berkeley</b> 120:17  <b>Bessette</b> 85:23,23 86:17 90:8 93:16 97:12 98:8 101:17,19 101:23 104:24 108:15 109:13</p>
---	---	--	---

<p><b>best</b> 14:9 35:23 47:16 61:5 63:9 83:16 86:24 87:13 98:2 125:21 128:13 137:7 139:10 153:14</p> <p><b>better</b> 10:1 19:6 22:21 35:1,4 37:22 46:21,24 51:6 57:8 60:9 65:7 84:23 95:5 97:23 114:17 131:6,12 133:8 145:13 149:19 155:19 156:23</p> <p><b>beyond</b> 145:18</p> <p><b>biased</b> 156:23</p> <p><b>big</b> 36:1,2,7 37:19 38:25 45:22 79:14 81:16 85:11 87:3 93:8 106:6 131:8 139:18 157:15 158:5</p> <p><b>bigger</b> 37:20 52:19 90:6</p> <p><b>biggest</b> 47:4 62:25 73:21 91:11</p> <p><b>bill</b> 21:1 27:7,8,9,10,11 29:6,7,12,14,15,17,24 30:4,11,19 31:5,6,22 31:25 32:1 33:17 50:21,24 55:4 57:16 59:5 60:2,5 78:7 87:7 102:13 128:17,18,20 128:22,24 129:7,11 129:11 142:4 146:18 151:20,24</p> <p><b>billing</b> 78:7</p> <p><b>billion</b> 44:12,14,15,18 44:18 53:7 103:5</p> <p><b>billions</b> 102:13 157:4</p> <p><b>bills</b> 9:19,21,23,25 29:4 29:4,5,21,22,23 35:17 48:21 52:13 55:1 78:8 88:23 128:15 129:1 130:8</p> <p><b>bio</b> 67:11,12</p> <p><b>biofuels</b> 79:16 126:25</p> <p><b>biogas</b> 72:5</p>	<p><b>Biology</b> 7:6</p> <p><b>biomass</b> 16:20,25 17:1 17:2 18:1 45:7 46:2,3 46:4,12,14 65:17,18 65:24 66:11,12,15 67:17,18 68:7,9 72:7 72:20 75:20 76:8,11 76:14 78:21 79:1,4,16 79:16 98:16 99:3,4 111:11 112:2,4,6,19 112:21 113:3 114:5 114:12 115:12 117:21 126:23 134:4</p> <p><b>bioscopes</b> 67:25</p> <p><b>bit</b> 18:18 38:9 39:24 41:9 43:14 49:19 51:12 53:2 62:7,8,14 64:13 67:21 69:17,23 70:2,9 72:17 78:16 79:8 80:1,9 81:25 85:19 86:16 98:4,6 101:1,6 112:18 120:13 121:7 127:14 136:5 148:7</p> <p><b>bite</b> 140:25</p> <p><b>black</b> 44:24 49:24</p> <p><b>Blaine</b> 36:15</p> <p><b>Bland</b> 7:6</p> <p><b>bless</b> 158:14</p> <p><b>blocked</b> 18:25</p> <p><b>blocking</b> 18:17</p> <p><b>blood</b> 114:23</p> <p><b>Blue-Chip</b> 87:20</p> <p><b>board</b> 4:22 15:1,5 26:20 84:16 86:5,7 88:8 94:8 97:19 143:14</p> <p><b>boat</b> 42:19</p> <p><b>body</b> 18:10</p> <p><b>boiler</b> 68:7</p> <p><b>boilers</b> 66:13,15 67:8 68:22</p> <p><b>bond</b> 25:13</p> <p><b>bonds</b> 150:24</p> <p><b>book</b> 20:4,7</p>	<p><b>Boroughs</b> 14:16,25 15:7,9,10,15,17 17:22 33:16 35:21 36:25 41:5 136:23 140:15 142:6,8 151:5 152:1</p> <p><b>borrow</b> 107:3</p> <p><b>Boston</b> 4:8</p> <p><b>bottom</b> 11:3 13:20 14:1 35:2 70:23</p> <p><b>boundaries</b> 45:5 87:12</p> <p><b>bounds</b> 26:19</p> <p><b>Bowl</b> 51:14</p> <p><b>box</b> 95:7</p> <p><b>brainstorming</b> 73:10</p> <p><b>break</b> 33:1 38:18 60:20 60:25 80:9 109:20 111:22</p> <p><b>breakfast</b> 60:23</p> <p><b>breaks</b> 5:24</p> <p><b>breath</b> 13:11</p> <p><b>breathing</b> 80:1</p> <p><b>briefly</b> 58:2 85:17 89:24</p> <p><b>bright</b> 96:22</p> <p><b>bring</b> 32:9 94:17 98:22 134:20</p> <p><b>bringing</b> 51:18 87:16 135:8 155:9</p> <p><b>brings</b> 51:8</p> <p><b>broad</b> 15:15 17:3</p> <p><b>broke</b> 42:25</p> <p><b>brought</b> 51:22 84:10 101:25</p> <p><b>BTU</b> 67:2,4 68:19 75:10 79:9</p> <p><b>bucks</b> 54:13</p> <p><b>budget</b> 44:17</p> <p><b>budgets</b> 85:5</p> <p><b>build</b> 13:10 24:10 25:3 47:24 49:15 51:23 70:8 73:7 77:9 91:3 91:19,20 93:12 101:21 113:25 134:10</p> <p><b>builders</b> 84:7 85:8 100:8,11,23 101:2</p>	<p>104:5 136:1</p> <p><b>building</b> 5:9,10,14 10:24 39:22 40:18 70:4 74:5 84:15,17 90:16,22,23 91:11,16 99:23 100:3 103:22 105:5 107:12 125:6 135:11</p> <p><b>buildings</b> 78:6 91:10 91:16 102:16 105:13 105:14,15</p> <p><b>built</b> 73:23 74:1 140:12</p> <p><b>bullet</b> 22:19 157:2</p> <p><b>bump</b> 80:18</p> <p><b>bunch</b> 132:25</p> <p><b>bundled</b> 118:21,22</p> <p><b>burden</b> 36:5,6 110:25</p> <p><b>buried</b> 102:13</p> <p><b>burn</b> 43:11,16 44:18 46:22 79:7</p> <p><b>burning</b> 46:19,25</p> <p><b>Bush</b> 15:7</p> <p><b>business</b> 2:12 8:3 37:25 44:20 59:4,5,6 61:21 62:2,15 63:19 73:13 77:5 86:17 87:4,25 88:5 101:10 108:11 124:19 128:1 134:8 134:10 138:9 140:21 141:9</p> <p><b>businesses</b> 2:15 19:23 92:23 144:6</p> <p><b>buy</b> 24:11,12 25:3 44:10 54:6 56:25 76:21 77:11,23 78:4,9 94:19 101:11 141:21 141:22 149:21</p> <p><b>buying</b> 78:3 97:5 124:16</p> <p><b>buzz</b> 4:6</p> <hr/> <p style="text-align: center;"><b>C</b></p> <hr/> <p><b>C</b> 2:1</p> <p><b>calculations</b> 49:25 50:4 77:13,17</p>
--	---	--	--

<p><b>California</b> 41:11 42:19 49:2 52:16,21 53:4,8 53:24 54:1,13,14 92:6 95:2 121:2 122:16 128:6,13 140:8 141:20 146:17</p> <p><b>California's</b> 53:1,19,23</p> <p><b>call</b> 25:8 29:22 36:18 48:22 102:19 130:12 133:18,18 139:19 145:1 158:5</p> <p><b>called</b> 2:9 13:23 18:2 19:10 21:12 24:11 27:17,19,24 55:2,11 74:16 79:6 118:4 157:15</p> <p><b>Callie</b> 152:5,5</p> <p><b>calling</b> 58:15 102:18</p> <p><b>calls</b> 30:4,4,8 147:14</p> <p><b>camera</b> 38:8</p> <p><b>cameras</b> 14:14</p> <p><b>campaign</b> 156:1</p> <p><b>Canon</b> 30:24,25</p> <p><b>cap</b> 21:23 22:9,11,12 22:12,21,23,25 24:17 24:17 25:10 28:10,10 28:16,16,21,22,24 36:8,9,13 117:3 120:11 121:22,23 122:1,10,11 131:5 145:17 146:25 149:9</p> <p><b>capacitors</b> 154:19</p> <p><b>capacity</b> 12:11 49:1 69:24 71:18 111:24 112:3 114:3 122:25</p> <p><b>capita</b> 52:13 74:3</p> <p><b>capital</b> 2:12,16 113:14 113:23 114:2,6 128:5</p> <p><b>capping</b> 144:10,21</p> <p><b>caps</b> 121:21 122:6</p> <p><b>caption</b> 27:22</p> <p><b>capture</b> 8:8 27:24 28:23 115:25 116:7</p> <p><b>capturing</b> 116:6</p> <p><b>car</b> 45:21 46:1 49:16</p>	<p>56:24</p> <p><b>carbon</b> 17:8,10 27:22 27:24 64:5 66:19 69:3 69:22 79:13 144:3,4 145:16,18</p> <p><b>care</b> 14:2 130:2 144:18</p> <p><b>carefully</b> 43:25</p> <p><b>cares</b> 54:10 57:2</p> <p><b>Caribbean</b> 95:6</p> <p><b>Carolina</b> 117:14,24,25 122:11</p> <p><b>carpenters</b> 116:10</p> <p><b>carrot</b> 36:18 37:2,3</p> <p><b>carry</b> 142:13</p> <p><b>cars</b> 78:25</p> <p><b>carve</b> 25:15,15 41:14 41:18 90:3 106:17,19 118:4,4 140:4</p> <p><b>case</b> 41:2 47:10 49:7,21 65:3 136:5 153:4</p> <p><b>cases</b> 41:6,17 60:15 103:22 107:19</p> <p><b>cash</b> 77:18 78:19</p> <p><b>catch</b> 14:15 55:17</p> <p><b>categorize</b> 99:15</p> <p><b>caveat</b> 98:18</p> <p><b>Cavros</b> 110:1,4 139:13 144:19 150:19</p> <p><b>Cavros's</b> 147:8</p> <p><b>CCS</b> 27:25</p> <p><b>cell</b> 39:12</p> <p><b>cells</b> 39:18</p> <p><b>cement</b> 113:25</p> <p><b>Center</b> 1:17 6:7,10 8:4 8:24 10:20 38:22 51:11 56:8 59:16</p> <p><b>centers</b> 141:19</p> <p><b>central</b> 2:11,15 3:6 8:23 13:23 79:3 84:16 84:22 85:20 86:20 89:6 92:11 99:23 104:21 124:4 158:17</p> <p><b>cents</b> 41:25 42:3,7,16 42:18 43:10 49:14 50:21 51:3 53:5,16</p>	<p>55:22,23,25 57:23,25 74:23,24 75:1,2,13,15 77:14 97:8 112:9 113:1,1,2,20 115:17 115:18 119:22,23 120:6</p> <p><b>century</b> 124:15</p> <p><b>CEO</b> 85:24</p> <p><b>certain</b> 16:10,10 18:21 107:2 119:19 140:2</p> <p><b>certainly</b> 3:20 83:25 140:13 145:9</p> <p><b>certainties</b> 139:15</p> <p><b>certainty</b> 116:18 119:9 120:9 144:4</p> <p><b>CERTIFICATE</b> 159:1</p> <p><b>Certified</b> 86:8</p> <p><b>certify</b> 159:4</p> <p><b>cetera</b> 130:4 132:15</p> <p><b>CEU</b> 86:1</p> <p><b>Chadwick</b> 2:2,8 7:18 14:6 17:21 38:3,25 60:19 61:1 79:24 84:5 109:14 124:25 135:16 154:25</p> <p><b>chair</b> 5:5 14:25 84:16 88:9 129:4 131:21</p> <p><b>chaired</b> 15:3 19:18 29:8</p> <p><b>chairman</b> 19:16</p> <p><b>chairs</b> 35:5</p> <p><b>challenge</b> 67:21 68:3,9 69:17 70:9 72:15,23 74:22 75:7 76:25 81:21 123:20</p> <p><b>challenged</b> 15:18 81:15 154:15</p> <p><b>challenges</b> 66:25 67:10 67:25 68:5 69:11 70:4 76:24 121:6 122:14 123:19</p> <p><b>challenging</b> 72:18 77:2 77:3 81:25 148:8</p> <p><b>Chamber</b> 110:19</p> <p><b>chambers</b> 135:3</p>	<p><b>champion</b> 33:18,19,21 33:22,25</p> <p><b>championing</b> 142:4</p> <p><b>champions</b> 35:2 142:10</p> <p><b>chance</b> 35:18,23,24 83:25 155:22</p> <p><b>change</b> 27:2 43:8 63:18 64:4 73:15 82:22 88:21 107:25 143:5 145:9 157:9</p> <p><b>changes</b> 64:4 65:4,9 69:5,6 75:11</p> <p><b>changing</b> 63:15,15 64:9 75:10 81:23</p> <p><b>chapter</b> 84:17</p> <p><b>charcoal</b> 79:6</p> <p><b>charge</b> 26:3,5,8 49:13</p> <p><b>charged</b> 91:20</p> <p><b>Charlie</b> 15:8 23:9 155:5</p> <p><b>charts</b> 10:12</p> <p><b>chasing</b> 115:23</p> <p><b>cheap</b> 42:21,25 45:4 53:18 67:15</p> <p><b>cheaper</b> 43:4,6 44:2 53:19 55:19 56:1 57:23 68:17</p> <p><b>cheapest</b> 44:23 151:16</p> <p><b>check</b> 80:3</p> <p><b>checkerboard</b> 40:25</p> <p><b>cheese</b> 38:25</p> <p><b>chemical</b> 39:17 46:20 154:17</p> <p><b>chicken</b> 118:1</p> <p><b>child</b> 94:1,2</p> <p><b>children</b> 58:20,25 85:2</p> <p><b>China</b> 12:2,13 13:7 94:16</p> <p><b>Chinese</b> 12:7 56:2 94:16</p> <p><b>chips</b> 67:5</p> <p><b>choose</b> 46:5 53:9 63:23 150:14</p> <p><b>choosing</b> 63:24</p> <p><b>chose</b> 43:11 48:18</p>
---	---	--	---

<p><b>chosen</b> 40:23 78:19  <b>Chris</b> 86:4 88:4 90:9            96:10 106:8 132:2,20  <b>Christa</b> 7:20  <b>Christensen</b> 7:20  <b>cigarettes</b> 145:4  <b>circling</b> 95:2  <b>circumstance</b> 82:11  <b>circumstances</b> 82:8  <b>cite</b> 108:15  <b>citizens</b> 13:25 43:8            95:17,19 137:3            144:11 146:22 150:6  <b>citizen's</b> 50:21  <b>city</b> 64:16 73:5 76:18            76:21 124:11 158:4  <b>class</b> 28:18,19,19,20  <b>clean</b> 9:14 13:12 27:17            27:20 28:18,19,22            36:11 43:11,14 79:15            87:16 98:6,14,22 99:1            99:11,13,15 110:6,13            111:6,20 123:7            130:13 144:6,12            146:9 155:18,18            156:19 157:7  <b>cleaned</b> 68:21  <b>cleaner</b> 40:15 155:19  <b>cleaning</b> 71:21  <b>Cleantech</b> 1:9 2:6,15            3:2,5 4:1,2,3,4,6,9,12            4:17 5:2,15 6:5,17,17            6:18,23,24 7:1,5,14            7:22 10:5,10,22 12:2            12:5,14,15 13:14,16            20:4,6 111:1 135:11            155:9,10  <b>clear</b> 44:2 131:15  <b>clearly</b> 10:12 48:18  <b>client</b> 33:2  <b>climate</b> 15:10 18:7 21:5            43:8 139:8 144:1            145:9 157:8  <b>clip</b> 93:24  <b>clipped</b> 93:25</p>	<p><b>clippings</b> 18:4  <b>close</b> 63:16 66:1 135:18  <b>closer</b> 115:8  <b>coal</b> 42:21 43:12,16            44:22 45:2 46:4,5,12            46:13,13 64:7,8 66:5            66:13,13,14,21 67:1,3            67:5,7 70:14,16,17            72:7,8,8 78:23 79:3,4            79:16,17 98:13,14,20  <b>coast</b> 18:10,15  <b>coastline</b> 145:8  <b>code</b> 73:12 105:5            143:16,18 153:3  <b>codes</b> 5:10,14 10:24            105:5 135:12 152:8  <b>coffee</b> 60:23  <b>coffers</b> 37:7  <b>cold</b> 15:21  <b>collaborate</b> 83:22  <b>collaboration</b> 73:4  <b>collaborative</b> 73:3  <b>collect</b> 47:21 102:13  <b>collected</b> 102:14  <b>collective</b> 150:15  <b>collectively</b> 146:4,23  <b>collector</b> 108:23  <b>College</b> 148:19  <b>Colorado</b> 122:8  <b>Columbia</b> 40:24 55:2            117:12  <b>combined</b> 27:23 118:17  <b>combustion</b> 113:5  <b>come</b> 4:1 5:9 14:8 16:8            16:9 20:20,23 23:17            26:19 28:17,20 31:16            31:18 33:9 58:5,6            61:15 64:22 71:14            84:8 87:3,5,11 94:18            94:22,24 97:20            100:15,17,19 102:7            102:11,17 103:14            109:24 116:19 132:5            133:6 135:25 136:2            141:8,9 146:3,25</p>	<p>147:21 148:12 149:21            155:8 157:16,17,25  <b>comes</b> 25:11 26:13,24            44:16 54:14,16 60:15            69:18 98:3 136:21            153:3  <b>coming</b> 2:3 9:1,10            11:23 12:1 31:2,14            37:8 50:7 54:17 61:21            87:11 88:22,23 89:21            92:5 93:20 106:9            125:6 138:23 141:17            146:7 147:19  <b>comment</b> 136:23            145:22 147:7 152:20  <b>comments</b> 15:24 32:22            36:16 125:4 138:1  <b>Commerce</b> 110:19  <b>commercial</b> 78:1,2,6            87:21 90:23 92:2            100:9 104:25 105:2            105:13,14,15 106:25            108:10  <b>commercialize</b> 26:23  <b>commission</b> 15:1,2            19:10,13,14,17,19            20:1,18 21:2,2,5,12            21:16 23:14,20,23            26:2 28:11 29:18,20            51:9 61:18 110:8            116:3 122:7 140:9,15            151:8  <b>commissioners</b> 4:23            64:17  <b>commissions</b> 135:3  <b>commit</b> 35:6  <b>commitment</b> 3:18            115:25 116:7 157:4  <b>committed</b> 157:3 158:2  <b>committee</b> 5:6 27:9,13            29:2,8 35:5,22 95:9            129:4,12 131:22  <b>common</b> 18:20 83:22            117:20,22 142:2,14            151:3</p>	<p><b>communities</b> 157:6  <b>community</b> 4:4 49:10            64:15 73:4,14,16 77:6            77:10 84:22,23 85:12            89:6,10 132:14            134:16 145:4  <b>companies</b> 6:17,17,23            6:24,24 7:1,22 13:10            13:17 82:14 83:14            89:21 99:21 124:10            137:23 155:10  <b>company</b> 2:18 11:4            22:16 82:5,19,22            85:24 87:24 93:18            97:11 108:25 140:17            141:8  <b>compare</b> 66:24 74:4  <b>compared</b> 43:10 69:21            106:2  <b>compensate</b> 75:9  <b>competing</b> 67:11  <b>competition</b> 142:23  <b>competitive</b> 13:7 48:1            75:18 112:20 113:5            145:20  <b>Competitiveness</b> 7:9            8:2  <b>competitors</b> 67:16  <b>complaints</b> 131:13  <b>complete</b> 6:5 7:15            159:5  <b>completed</b> 7:14 66:19            75:21  <b>completely</b> 82:10            132:11 136:4,7  <b>compliance</b> 117:2,4            120:17,22 121:10,23            122:1,3  <b>complicated</b> 153:13  <b>component</b> 21:8,10            30:12 31:11 89:23            114:11  <b>components</b> 24:2,3,8            25:14,18 28:2 116:21            140:3</p>
--	--	--	---

<b>composure</b> 133:8	<b>consistent</b> 38:20 131:25	<b>contracts</b> 66:16 67:19 68:4 100:13 112:22 119:17,24 123:2 139:21 140:1,6	114:2,20 115:15,18 118:14,14,15,18 119:20 121:20,22,23 122:1 124:9 128:25 143:9 147:2 149:3,18 150:3,5,8,18 151:1,12 152:10
<b>comprehensive</b> 5:10 31:5,6	<b>Consortium</b> 26:21	<b>contrast</b> 114:5	<b>costs</b> 25:19,20,24 49:5 49:15 53:19 54:9 68:21 69:2 74:21 75:4 75:7,12,12 77:2,8 78:17 89:11 113:13 113:14,23 114:6,6 124:21 139:20
<b>comprise</b> 12:9 113:18	<b>constant</b> 64:1	<b>contribute</b> 66:20	<b>Council</b> 15:4 84:17 110:5
<b>compromised</b> 13:21	<b>Constantine</b> 29:16 128:21 131:18 155:17	<b>contribution</b> 71:17 72:2,21,22 99:19	<b>counted</b> 28:24
<b>concentrating</b> 66:9 76:12 141:22	<b>constituents</b> 88:25	<b>contributions</b> 99:18	<b>counterintuitive</b> 63:12
<b>concept</b> 24:9 27:14 120:1	<b>constrained</b> 37:1 148:22	<b>control</b> 83:20 84:3 110:23 152:17	<b>countertop</b> 56:24
<b>concepts</b> 84:24	<b>constraints</b> 121:5,8	<b>Convention</b> 51:11	<b>countries</b> 145:12
<b>concern</b> 83:9,10 105:8 105:8 108:5,8 134:11	<b>construction</b> 84:13,15 84:20 99:22 100:4 110:21 111:15,18 113:14,23 114:2,6 115:10	<b>conventional</b> 69:23 113:12,15,24 114:1 114:18,23 121:19	<b>country</b> 18:15 21:14 47:5 88:17,17 124:3 130:3 141:18 144:7 148:23 156:12
<b>concerned</b> 87:13 152:22	<b>consult</b> 21:4	<b>conventions</b> 51:13	<b>county</b> 1:9 2:4,20,25 4:22,22 5:11 8:9 9:20 10:19 20:6 51:10,11 59:20 68:13 73:6 83:4 83:13 97:14 103:25 108:22 110:12,13 155:8 159:2
<b>concerns</b> 104:10 125:19	<b>consulting</b> 21:12,13,13 111:9	<b>conversations</b> 129:9	<b>County's</b> 2:6
<b>concert</b> 36:23 51:10	<b>consume</b> 44:11,13	<b>convert</b> 66:4	<b>couple</b> 5:12 10:24 11:10,17 12:3 38:3,16 80:2,17 85:17 120:3 126:12 127:19 131:12 131:19 133:4 135:9 136:13 143:2 148:21
<b>concise</b> 131:25	<b>consumer</b> 63:15 124:17	<b>convinced</b> 157:16	<b>course</b> 7:17 8:11,23 11:3,20 84:18 87:14 103:1 115:10 123:13 156:1
<b>concluded</b> 158:22	<b>consumers</b> 121:16	<b>Cookie</b> 152:5	<b>courses</b> 73:12
<b>conclusion</b> 123:15 133:4	<b>consumer's</b> 36:6	<b>cooling</b> 115:3	<b>cover</b> 66:8
<b>conditioner</b> 116:10	<b>consuming</b> 52:16	<b>cooperate</b> 106:23 107:7	<b>covered</b> 71:11 117:8
<b>conditioners</b> 113:9	<b>consumption</b> 36:21	<b>cooperative</b> 76:10	
<b>conditions</b> 31:23 85:5 115:2	<b>contact</b> 79:22 123:22	<b>cooperatives</b> 117:8 122:20	
<b>conduct</b> 7:8	<b>content</b> 8:15 9:16 67:4 67:7 79:9	<b>coordinate</b> 26:22	
<b>conducts</b> 39:5	<b>contest</b> 38:18	<b>copies</b> 4:14	
<b>conference</b> 78:5	<b>context</b> 7:25 121:18	<b>copy</b> 5:2	
<b>confusing</b> 138:24	<b>continental</b> 18:11	<b>cornerstone</b> 7:10,11	
<b>confusion</b> 131:16	<b>continually</b> 16:23	<b>corporate</b> 61:19	
<b>congratulate</b> 110:12 148:5	<b>continue</b> 12:24 26:17 64:3 96:7 154:7 158:12	<b>correct</b> 47:18 137:20 152:19	
<b>Congress</b> 33:19	<b>continued</b> 38:21	<b>corroding</b> 68:22	
<b>Connecticut</b> 39:18 42:2 42:8 43:2	<b>continues</b> 12:4	<b>cost</b> 11:17 22:22 25:7 25:18 26:10,11 28:17 30:8 34:18,19 37:12 37:15 40:17,18 48:1 50:10,20 53:13 55:20 56:13 57:22 58:12 60:6 61:13 64:19 65:20 66:24 68:17 69:7,22 75:9,15 81:20 82:3 84:1 87:18 94:14 97:7,7,7,8 102:12 112:19,23 113:4	
<b>conservation</b> 65:2,7 77:20 139:7 148:6 151:18	<b>contract</b> 75:14 77:12 100:16,18 118:22 119:12,13,14,18,22 121:5 139:23 140:3		
<b>consider</b> 27:4 101:24 142:21	<b>contracting</b> 119:4,6,11		
<b>consideration</b> 10:10 21:6	<b>contractor</b> 88:7		
<b>considered</b> 27:13 95:17 140:19	<b>contractors</b> 89:16 90:5 103:18 105:25		
<b>considering</b> 121:17	<b>contractor's</b> 104:24		

<p>122:20,22  <b>covers</b> 17:3,5 36:13  <b>co-chair</b> 14:24  <b>co-op</b> 96:21  <b>co-ops</b> 25:23 26:1            96:25 97:1,17,20,23            97:25 141:6  <b>CO2</b> 115:11,12 144:21            145:6,10  <b>crack</b> 79:15  <b>craft</b> 111:16  <b>create</b> 36:19 66:21 69:9            76:13 87:6 89:9 90:1            90:13 91:25 100:20            100:21 110:24 111:3            111:24 112:2 116:9            116:13 119:9  <b>created</b> 19:9 89:20            90:11  <b>creates</b> 90:13 120:8,13  <b>Creating</b> 116:16  <b>creation</b> 1:10 66:22            91:9,12  <b>creative</b> 63:10 77:4            150:13  <b>creativity</b> 9:13  <b>credit</b> 75:9 107:19            117:1 118:8 119:7  <b>credits</b> 24:11,14 32:9,9            36:20 37:6 57:18            62:21 107:14 118:7  <b>Crist</b> 15:9 23:9 155:5,6            155:14 158:18  <b>criteria</b> 119:19 140:2  <b>critically</b> 158:8  <b>criticisms</b> 139:17  <b>crops</b> 18:6 66:1  <b>crossed</b> 15:23 108:22  <b>crossover</b> 77:17  <b>crossroads</b> 110:17            147:9  <b>Crotty</b> 3:1,9,17,20,25            158:1  <b>Crotty's</b> 3:4 7:11  <b>crying</b> 94:2,3</p>	<p><b>cubic</b> 113:20  <b>curious</b> 136:16  <b>currency</b> 118:8  <b>current</b> 75:17 77:14            130:16 151:9,24  <b>currently</b> 14:23 61:17            69:18 78:22 84:15            87:21 116:11 127:16            127:24 128:5,15  <b>curriculum</b> 92:16 93:7            96:13  <b>Curry</b> 108:16  <b>curve</b> 56:6 127:7  <b>customer</b> 50:11 62:12            64:12 74:17 78:8            102:25 121:23 122:11            122:13  <b>customers</b> 19:23 25:22            25:25 26:8 49:14            62:18 63:6,7,8,23,24            64:6,15,16,20 65:9            66:21 69:25 74:9,10            74:21 78:2,10,13,18            82:19,21 83:16 91:22            92:2 101:11 103:1            112:15 113:23 124:8            143:23 151:14 153:15  <b>customer's</b> 78:6  <b>cut</b> 60:1  <b>cycle</b> 113:6 118:17  <b>cycles</b> 27:23</p> <hr/> <p style="text-align: center;"><b>D</b></p> <p><b>D</b> 2:1  <b>da</b> 23:4,4,4,4,4,4,4,4            23:22,22,22  <b>daily</b> 72:11  <b>Dallas</b> 4:8 13:22  <b>damage</b> 108:5,7 109:2            109:9  <b>damaged</b> 108:23 109:1            109:5  <b>dark</b> 47:18  <b>data</b> 52:24  <b>date</b> 10:23 16:9,10,11</p>	<p>41:4 73:1,18 152:4  <b>Dated</b> 159:7  <b>daughter</b> 94:1  <b>Dave</b> 88:7 105:24  <b>David</b> 85:23,23 86:15            90:7 91:24 92:8,10            96:10,13  <b>day</b> 9:9,16 13:1 14:7            15:15 28:5,9 45:13,14            45:20 61:11 64:2            68:10,16 70:12,13,17            70:20 71:6,15 95:22            119:8,9 130:24 134:3            159:7  <b>days</b> 13:11 23:24 45:14            61:6 70:11 81:24            113:9  <b>DC</b> 117:11  <b>de</b> 29:8,21  <b>dead</b> 156:9  <b>deal</b> 48:15 91:22            143:18  <b>dealing</b> 23:12 30:10            78:24 83:7  <b>deals</b> 29:25 67:18  <b>dealt</b> 25:18 91:1 134:15            140:16  <b>Dean</b> 30:24,25  <b>debate</b> 62:8 130:1  <b>debt</b> 94:5  <b>decade</b> 86:21  <b>decades</b> 13:23  <b>deceased</b> 29:7  <b>December</b> 15:6 20:11            21:17 23:7 28:5            147:14  <b>decide</b> 139:1  <b>decided</b> 42:22 46:7            50:6 64:23 65:16            74:12 77:4 78:2 96:19  <b>decision</b> 35:10,10  <b>Deckert</b> 29:5,14  <b>declined</b> 110:22  <b>dedicated</b> 107:2 122:4  <b>deeply</b> 11:5</p>	<p><b>defeat</b> 138:10  <b>defeated</b> 144:16  <b>Defense</b> 110:5  <b>definitely</b> 56:3 69:7            72:5 81:19 82:17            85:12 87:25 99:3            153:3  <b>definition</b> 16:3,14,16            16:25 17:2  <b>degree</b> 61:24 62:1  <b>degrees</b> 76:13  <b>delegated</b> 124:7  <b>delivers</b> 40:11  <b>delivery</b> 84:20,24,25  <b>demand</b> 74:17 78:13            113:7 115:8,21 116:1            116:15 148:6  <b>democrats</b> 132:8  <b>demographics</b> 63:5,9  <b>demonstration</b> 59:14  <b>dense</b> 67:6  <b>density</b> 67:2  <b>DEP</b> 21:4  <b>department</b> 5:9 21:4            39:10,15 45:17 73:9            84:13  <b>depend</b> 130:19  <b>dependable</b> 133:17  <b>dependence</b> 17:13            98:19  <b>dependent</b> 94:20  <b>depending</b> 102:3  <b>derate</b> 71:23  <b>describes</b> 12:13  <b>desert</b> 47:17  <b>deserts</b> 47:23  <b>design</b> 9:11 70:6,22            84:12,15 86:12            116:21 123:13,14  <b>designed</b> 127:8  <b>designing</b> 123:18  <b>desire</b> 40:5  <b>desk</b> 73:21  <b>Desoto</b> 49:7  <b>detail</b> 10:7 29:23</p>
---	---	---	--

<p><b>details</b> 34:14,15  <b>determine</b> 81:21 146:4  <b>Detert</b> 128:18  <b>Deter's</b> 129:11  <b>develop</b> 32:16 39:11            156:7 158:9  <b>developed</b> 6:18 157:22  <b>developer</b> 77:9 78:8            118:12,25 134:4  <b>developers</b> 85:10            112:21 113:3 116:18            118:13 120:7,14            126:23,24 134:8            139:22  <b>developing</b> 73:10            155:18  <b>development</b> 1:17 2:9            2:12,25 3:6,8 4:7 8:4            8:7,10 14:22 21:23            39:1 85:9,12 110:20            110:22 134:7 135:3  <b>devil</b> 34:14,15  <b>dialogue</b> 125:10,18  <b>dialogues</b> 38:12  <b>diddle</b> 12:20 13:6  <b>Diddles</b> 12:3  <b>diddling</b> 12:5  <b>Diego</b> 4:7  <b>difference</b> 24:4,4 78:12  <b>different</b> 18:18 37:16            48:10 57:10 63:16            64:13 65:19 67:9            72:18 73:11 74:12            78:17 82:11 83:14            93:17 95:10 114:10            128:22,23 138:21            147:9 155:23  <b>differently</b> 18:18 71:11  <b>difficult</b> 3:14 68:5            69:23 109:4 130:21            144:9 146:5  <b>difficulty</b> 125:2  <b>digestion</b> 66:6  <b>digit</b> 113:14  <b>dioxide</b> 79:13</p>	<p><b>dipping</b> 53:1  <b>direct</b> 20:17 91:17            97:16,16 112:3 122:2  <b>directed</b> 5:8  <b>direction</b> 131:24  <b>directly</b> 64:14 72:24            74:9 91:7 107:12            140:16  <b>director</b> 2:8 38:22,23            38:23,24 39:8 86:4            137:17  <b>Directors</b> 15:5  <b>disagree</b> 25:9  <b>discussed</b> 103:3 127:2  <b>discussion</b> 15:25 71:4            121:12,20 130:22  <b>discussions</b> 4:16 8:13  <b>disease</b> 44:25  <b>dispatchable</b> 69:14,15  <b>disrupted</b> 67:20 143:4  <b>dissuade</b> 139:22  <b>distances</b> 79:1  <b>distillate</b> 70:25  <b>distributed</b> 4:15 48:8            69:4 89:23,25 90:4            92:19 99:25 100:7,23            101:4 106:18,21            107:2 112:1 115:7            116:25 118:5 122:24            139:11,15 140:4            141:13,14 142:1  <b>distribution</b> 95:5 99:20  <b>distributive</b> 90:20  <b>district</b> 40:24 55:2            117:11 140:19  <b>districts</b> 85:3 132:23            150:22,24  <b>diversity</b> 5:20 117:18  <b>divert</b> 68:2  <b>doable</b> 32:18 72:1  <b>Dobson</b> 125:1 126:9            133:5,23 138:17            139:4 144:8 148:3            151:22 152:2  <b>docket</b> 21:15 116:3</p>	<p><b>doctor</b> 94:1,4  <b>document</b> 8:20  <b>doing</b> 3:8 10:21 13:6            13:15 14:4 17:20 21:3            35:6 37:10 38:21 50:4            51:17 53:17 54:22            64:21 67:18 76:8,18            78:21 81:21 83:21            89:17 91:15,15 93:13            107:20 116:2 119:16            121:21 123:16 126:1            136:17 145:6 148:5            148:13 155:16 158:1            158:9,18  <b>dollar</b> 24:18 39:10            112:10 146:13,15  <b>dollars</b> 22:15,17 24:19            24:20,23 44:12,18,18            49:9 50:2 51:12 53:7            58:6,13,14 59:24,25            93:1 102:14 112:12            113:21 128:5 134:9            138:10 157:4  <b>domain</b> 14:20  <b>dominant</b> 12:14  <b>dominates</b> 119:5  <b>door</b> 2:23 9:18 147:4  <b>dot</b> 41:15  <b>double</b> 80:3 113:14  <b>doublecheck</b> 114:9  <b>Downtown</b> 8:24  <b>Dowsey</b> 84:12 85:15            87:19 88:4 89:5 90:7            92:8 96:18 97:9,13            98:4 99:20 100:1            101:12,18,20 102:21            103:11 104:15 106:8            106:13,19 108:3,7  <b>Dr</b> 5:5 6:7 7:13 38:24            39:13,16 40:4 88:14            89:24 92:8 103:1            132:20 145:22 148:23            148:25 149:14 153:24  <b>draft</b> 21:6  <b>draw</b> 133:3 144:6</p>	<p><b>drawing</b> 13:17  <b>drill</b> 31:25  <b>drilling</b> 27:11 30:12,13            30:18,23 31:3,14,15            31:22 133:13,15            134:2,12  <b>drive</b> 9:8  <b>drivers</b> 155:20  <b>drives</b> 63:20  <b>drop</b> 135:14  <b>dropped</b> 114:7  <b>dropping</b> 52:25 114:6  <b>drought</b> 115:2  <b>druthers</b> 129:10  <b>due</b> 8:21 110:22 113:24            121:5,7 156:4  <b>durability</b> 109:6  <b>durable</b> 109:8,10  <b>duties</b> 39:8  <b>duty</b> 142:18  <b>Dyer</b> 158:2</p> <hr/> <p style="text-align: center;"><b>E</b></p> <hr/> <p><b>E</b> 2:1,1 116:13  <b>ear</b> 33:24  <b>earlier</b> 40:22 71:15            75:20 91:8 94:6 98:8            101:25 112:5,11            117:10 119:10 122:16            129:22 130:11 139:25            154:24  <b>early</b> 114:24 120:19,22            121:14  <b>earnings</b> 124:21  <b>ears</b> 103:9  <b>easier</b> 73:15 93:23            96:14  <b>easily</b> 105:8 111:19  <b>East</b> 1:24  <b>easy</b> 107:5 145:11  <b>economic</b> 2:24 3:6,8            4:6 7:9,11 8:2,6,9            110:20,21,24 111:2            112:14 135:3 137:17  <b>economically</b> 157:12</p>
---	---	--	--

<p><b>economics</b> 48:15  <b>economies</b> 112:8  <b>economy</b> 32:16 39:3              85:9 110:14 111:20              127:12,15,24 145:19              148:23 157:13,21              158:8  <b>EDC</b> 6:16,19  <b>EDO's</b> 135:2  <b>educate</b> 14:9 60:1              73:13 92:13 93:20              96:11,14  <b>educates</b> 39:3  <b>education</b> 39:21 60:13              84:18,22 85:3 93:4,10  <b>educational</b> 60:17  <b>effect</b> 88:3 123:10  <b>effective</b> 48:1 87:18              149:3 150:4,8,18  <b>efficiencies</b> 84:1 147:1  <b>efficiency</b> 26:25 39:22              56:20 104:1 115:14              115:15 116:9,14              117:16 123:10 145:15              149:1,2,6,17 150:25              151:6,6,18,21,25  <b>efficient</b> 39:7 53:8              54:19,23 55:16 57:6              150:21 152:7  <b>effort</b> 145:10  <b>efforts</b> 88:10 93:19              123:12  <b>egg</b> 13:4  <b>eight</b> 10:11  <b>either</b> 13:6 24:10 25:2              25:17 30:7 33:23              54:21 118:5 121:22              137:25 144:16  <b>elaborate</b> 85:19  <b>elaborating</b> 86:16  <b>elected</b> 60:9 144:16              155:25  <b>electric</b> 22:13 45:11              50:21,24 52:13 55:1,4              57:15 60:1 68:25</p>	<p>108:16,17 146:18  <b>electrical</b> 15:11  <b>electricity</b> 16:7 25:22              41:24 42:1,3,9,15              43:2,18 44:6,15,23              45:23,25 47:13 49:4              50:7 52:14 53:9,11,13              53:16,19,23 54:4,12              54:22 55:14,15,18,21              56:1,18 57:22 59:24              59:25 72:12 118:16              118:23,25 124:16,19              127:10 145:18 147:12              147:21 148:2  <b>electronically</b> 118:21  <b>elevating</b> 13:25  <b>eligible</b> 116:22 117:20  <b>else's</b> 140:21  <b>embargo</b> 52:20  <b>embarrass</b> 129:13  <b>embracing</b> 130:5  <b>emergency</b> 58:8,11              59:15  <b>emerging</b> 6:24  <b>emissions</b> 17:8 115:11              144:12,21 145:7,11  <b>emit</b> 17:10  <b>emits</b> 17:10  <b>employable</b> 111:21  <b>employed</b> 59:10 61:22  <b>employees</b> 86:18  <b>employers</b> 6:25  <b>employing</b> 158:7  <b>employment</b> 147:3,4              158:9  <b>enable</b> 58:7  <b>enact</b> 11:20  <b>euacting</b> 5:10  <b>encourage</b> 5:23 6:19              7:24 32:25 85:21              100:15 116:24,25              117:2 123:21 128:3              132:10,18 141:25              151:5,19 153:21              154:7</p>	<p><b>encouraged</b> 155:15  <b>encourages</b> 77:20  <b>encouraging</b> 88:24  <b>ends</b> 89:18  <b>energy</b> 1:10 4:18 6:7,9              7:2 9:12,14,19 10:19              12:6,10 13:9,12 14:19              14:25 15:8,9,13 16:6              16:15,16,18,18,20,21              16:21,21,21,22,22,23              17:10,15,17,24,25              19:10,15 20:12,14,15              20:18,21 21:5,24 22:6              22:23 23:12 24:10,11              24:13 25:20 26:20              27:10,20,20,21 28:18              28:20,22 29:1,25 31:5              31:6,7,16,25 32:7,12              32:15 34:6 35:5 36:21              36:21 38:22 39:2,6,7              39:10,19,22,22 40:10              40:15,19,19 43:3,13              45:17,18 46:17,23              47:1,4,7,25 51:7,14              51:15,18,19 53:7,10              54:19,20,23 55:5,16              56:8,11,20 57:6 58:22              58:25 59:4,5,6,7,16              60:5 61:9,18,22 62:22              63:9,12 64:7 65:1,6              66:1,4 73:9 76:21              82:18,19,22 85:25              86:6,8 87:16,21,22              88:15 90:21,25 91:1              96:12,15 97:5,7 98:7              103:25 104:18 110:6              110:9,13 111:6,8,20              112:10,14,17 113:18              113:24 114:14,16,19              114:20,22 116:1,2,4,8              116:15,16 117:1,16              118:7,8,9,11,12,13              119:7 120:10,24              121:19 122:5 123:7,9              124:4 126:3,5,16,20</p>	<p>126:23 127:7,9,19,21              127:23 128:2,12,16              128:21 129:4,7              130:15 131:6,10,11              132:13,17 133:25              134:7,8,13,16 138:11              138:21 139:8 140:15              140:18 141:16 142:11              144:1,6 145:15 149:1              149:2,6 150:2,7,21,25              150:25 151:5,6,8,18              151:21,25 152:7,12              154:12,12,18 155:9              155:18 156:2,7,10,12              156:19,20  <b>Energy's</b> 134:5  <b>enforcement</b> 117:5  <b>engaged</b> 110:7 132:13              132:19 144:18  <b>engagement</b> 73:4  <b>engine</b> 111:3  <b>engineering</b> 39:14,17              86:11 105:4  <b>engines</b> 39:12  <b>enhance</b> 36:20 39:2  <b>enjoy</b> 14:5  <b>enter</b> 78:4 107:16  <b>entering</b> 120:14  <b>entertain</b> 133:2  <b>entire</b> 8:20 127:6  <b>entities</b> 87:24 125:19  <b>entity</b> 2:9 19:10 141:8  <b>entrenched</b> 15:13  <b>environment</b> 32:17              39:3 40:16 83:8              127:12 131:10 151:9              157:13  <b>environmental</b> 21:4              61:25 86:11 110:10              134:6  <b>environmentalists</b>              19:24 31:18,21  <b>environmentally</b>              157:12  <b>envisioned</b> 121:4</p>
---	---	---	--

<p><b>epicenter</b> 108:21  <b>equals</b> 118:8  <b>equation</b> 147:10  <b>equivalent</b> 74:23  <b>especially</b> 6:2 17:14,23              34:6 83:3,10,25 89:15              92:25 140:23 145:7              156:21  <b>essentially</b> 28:4  <b>establish</b> 11:12 40:14  <b>established</b> 120:6              153:11  <b>establishes</b> 16:7  <b>establishing</b> 7:10  <b>estate</b> 14:22 47:20,22              47:23 48:2,3,4,14,17  <b>estimates</b> 114:2 116:13  <b>et</b> 130:4 132:15  <b>ethanol</b> 46:7,9  <b>Europe</b> 18:19 67:14  <b>Europeans</b> 18:17,20  <b>evening</b> 72:17  <b>event</b> 2:19 8:25  <b>events</b> 9:1  <b>eventually</b> 19:5 48:12              60:9 94:21  <b>everybody</b> 2:2 5:24              15:20 31:20 46:19              58:15 61:1,3 63:2              94:25 98:24 102:6              114:17 149:20 150:9  <b>everybody's</b> 52:18 60:4              108:10,10 138:23  <b>everyone's</b> 135:8  <b>Everything's</b> 71:10  <b>evidence</b> 121:15  <b>exact</b> 29:14 64:1  <b>exactly</b> 29:9 63:8 69:16              126:14 155:16  <b>exaggerations</b> 18:22  <b>exam</b> 86:7  <b>example</b> 20:16 22:14              40:2 51:18 52:1              106:24 108:16 114:1  <b>examples</b> 87:17</p>	<p><b>exceed</b> 122:12  <b>exceeds</b> 40:12  <b>excellent</b> 148:6  <b>exceptional</b> 138:5  <b>excerpts</b> 21:15,20  <b>exchange</b> 30:22 39:12  <b>excited</b> 66:18 73:19              74:8 75:24 76:2,7              96:18  <b>exciting</b> 9:9 76:15              157:7 158:6  <b>excuse</b> 14:18  <b>executive</b> 1:17 23:11              23:12,13 38:23  <b>exemption</b> 143:7  <b>exemptions</b> 117:6  <b>exist</b> 41:21  <b>existence</b> 22:4  <b>existing</b> 27:20 46:5              66:13  <b>expand</b> 39:20 68:14  <b>expanded</b> 8:3 122:19              122:23  <b>expanding</b> 82:17  <b>expect</b> 80:21 109:11  <b>expenses</b> 7:3 28:22              49:16  <b>expensive</b> 19:4 22:21              43:13,25 44:2,3 55:22              69:20 112:17 141:24              141:25 146:10  <b>experience</b> 84:19 86:10              89:17 90:5 91:13  <b>experienced</b> 113:12  <b>experiencing</b> 79:20  <b>expert</b> 14:19 15:17              61:14 131:23  <b>explain</b> 146:18  <b>explained</b> 35:7  <b>expressed</b> 28:6  <b>Expressway</b> 13:23  <b>extended</b> 124:13  <b>extent</b> 109:9 145:5  <b>extra</b> 75:7 153:7,8  <b>extrapolate</b> 49:23</p>	<p><b>extremely</b> 68:17 131:9  <b>eye</b> 63:16  <b>e-mailed</b> 13:1</p> <hr/> <p style="text-align: center;"><b>F</b></p> <hr/> <p><b>face</b> 13:4  <b>faces</b> 14:14  <b>facilitator</b> 2:19  <b>facilities</b> 68:8 105:7  <b>facility</b> 13:11 84:12  <b>facing</b> 66:25  <b>fact</b> 23:18 46:15 47:12              51:22 55:18 58:12              63:13 69:1 77:2 94:8              114:24 122:6 123:1              124:17 127:23 140:8              147:17 154:2  <b>factors</b> 62:23 69:12              148:10  <b>faculty</b> 85:6  <b>failure</b> 121:6  <b>fair</b> 4:9 34:3,4  <b>fairly</b> 25:8,9 135:18  <b>fairness</b> 59:7 83:7  <b>fancy</b> 56:24  <b>fantastic</b> 11:10  <b>far</b> 47:8 77:13 87:12              90:19 122:25 125:16              125:17 126:1 137:11              141:7 152:21  <b>farm</b> 77:6,10 91:21  <b>farms</b> 90:10,14 91:3,11              91:16,20 92:3,4 93:9              99:21  <b>fast</b> 81:23  <b>fastest</b> 18:10  <b>father</b> 3:15  <b>faux</b> 138:13  <b>favor</b> 35:6  <b>favorable</b> 22:8,24  <b>favorites</b> 17:12  <b>feasible</b> 81:10,11 82:2              82:5  <b>February</b> 1:15 21:7  <b>fed</b> 97:5</p>	<p><b>federal</b> 12:6 32:11 37:8              57:18,18 93:14              107:14,19 123:4,5              124:5 139:8,10 144:1  <b>feds</b> 32:5,6 37:16 87:11              87:12  <b>fee</b> 77:12  <b>feed</b> 79:13 90:16  <b>feedback</b> 10:4,5 134:21              135:10,12  <b>feeding</b> 45:19 75:3  <b>feedstock</b> 46:20 66:22              67:11,13,16 78:25  <b>feed-in</b> 34:4,7 74:13,15              74:18 78:12,16              119:25 120:2,4,6              129:23 130:6 133:18              140:6,9  <b>feel</b> 67:7 74:5 80:4              153:14  <b>feels</b> 36:23  <b>fees</b> 133:15  <b>feet</b> 95:1 103:25 113:20  <b>felt</b> 4:8  <b>Fenton</b> 6:7 38:15,24              39:13,16 40:4 88:14              89:24 92:9 103:1              132:21 145:22 148:23              148:25 149:14 151:16              153:24  <b>fertilizer</b> 99:8  <b>fiasco</b> 133:9  <b>field</b> 156:15  <b>fight</b> 101:15 131:7              134:6,7  <b>figure</b> 44:4 63:17 65:7              65:8 67:22 69:11 73:7              73:14 129:20 130:23              138:13  <b>figures</b> 114:10  <b>figuring</b> 5:13  <b>filed</b> 29:14,22,24 30:9              128:19  <b>fill</b> 18:5  <b>filling</b> 155:2</p>
---	--	---	---

<p><b>final</b> 34:19  <b>finally</b> 11:3  <b>finance</b> 37:24 149:23  150:22  <b>financial</b> 7:7 100:12,13  100:21 101:12,20  <b>financially</b> 99:22  <b>financing</b> 22:6 149:24  150:6,9,13  <b>find</b> 9:6 10:6 42:4 79:1  83:22,22 89:1 129:18  130:7 148:24 157:25  <b>findable</b> 104:13  <b>finding</b> 2:12 150:13  <b>fine</b> 57:5 65:10  <b>finger</b> 82:1  <b>fingers</b> 15:22  <b>finish</b> 110:3  <b>finished</b> 66:14 116:2  <b>fire</b> 46:4 66:13,14  79:16 158:3  <b>fired</b> 72:8  <b>firing</b> 66:5 72:7 78:23  <b>firm</b> 14:17 21:12  <b>firms</b> 21:13  <b>firm's</b> 14:24  <b>first</b> 2:2,23 4:1 6:2,6  8:21 9:3 14:16 16:13  22:18 33:17 66:17  73:1 81:14,14 85:23  89:7 91:20,25 102:24  112:19 116:21 139:9  143:10 148:4 149:6  149:14 150:11 155:25  <b>fit</b> 109:3  <b>five</b> 10:9 41:11 62:3  79:24 93:17 116:8  <b>fix</b> 14:2 42:25  <b>fixed</b> 77:12 78:11  124:21  <b>flat</b> 52:21  <b>flavor</b> 53:3 59:23  <b>float</b> 150:24  <b>floor</b> 102:22 125:5,10  135:22 136:4</p>	<p><b>Florida</b> 1:18,24 2:11,15  3:6 4:19 6:6,9 8:23  9:3 10:18,19 11:13,16  11:20 13:3,13,18  14:25 15:7,8 16:2  17:1,2,14,15,17,23,25  18:1,9 19:9,9,10,12  19:12,14,16,22,25  20:10,13,18,21,23  21:5,16,24 23:8,23  26:20 28:11 30:14  32:3,5,8,10,13,14,15  35:9 36:3 38:22 39:2  39:25 40:6 41:25 42:6  42:12 43:8 44:3,12,16  44:20 47:8,9,19 48:2  49:1 50:15 51:8,8,14  51:19 52:15 53:4,6,17  53:18 54:2,12 55:10  56:3,8,10,12,15 58:4  58:9,22 59:9,10,10,13  59:16,23 61:25 62:11  64:23 76:11 79:2,3  84:17,22 85:9,20,25  86:6,20 87:1,5,11  88:13,15 89:1,6,15,16  92:11,15 94:25 95:2,5  95:19 99:2,5,9,17,24  100:20 104:21 105:5  107:20,23 108:5,13  110:17,19,19 111:2,7  111:10,12 112:21  113:8 114:23 116:1,4  116:14 122:6 123:13  123:14 126:2,15,20  127:6,10,20 128:1,2,6  128:14,16 129:24  132:17 133:25 137:22  138:6 139:7 140:15  140:17 143:15 145:7  147:8 151:8 154:14  155:10,19 156:2,6,7,9  156:12,13,17 157:11  157:11,12 158:17,17  159:2</p>	<p><b>Florida's</b> 45:7 47:10  56:18 116:5 127:12  144:5  <b>Floridians</b> 87:6,7,14,17  91:5 94:20 102:1,15  110:25  <b>flourish</b> 126:22  <b>flow</b> 77:19 78:19  154:18  <b>flux</b> 64:1,9  <b>flywheels</b> 152:20  154:19  <b>focus</b> 2:17 12:15 14:1  39:21 40:20 64:11  65:16  <b>focused</b> 14:21 20:14  64:5 84:24  <b>folks</b> 2:13 14:8 17:16  30:1 34:1,3,4 38:1,8  39:1 49:17 61:5 73:12  80:10 90:21 93:20  94:19 95:1,10 96:3  102:15 111:18 114:9  125:11 132:22 135:20  136:2 140:6 150:24  153:19  <b>follow</b> 3:21 132:18  149:9  <b>following</b> 4:25 16:19  16:20 22:17 48:24  <b>food</b> 18:5  <b>foot</b> 94:25  <b>football</b> 144:15  <b>footing</b> 87:7  <b>Ford</b> 9:2  <b>forecast</b> 81:24  <b>foregoing</b> 159:5,5  <b>foreign</b> 17:13 94:20,21  98:10,20  <b>forest</b> 65:24  <b>forestry</b> 79:2  <b>forever</b> 54:16  <b>form</b> 10:4,5 117:1  133:8 134:21 135:10  154:18</p>	<p><b>formal</b> 23:7  <b>formally</b> 136:7  <b>former</b> 15:6  <b>Formerly</b> 6:12  <b>forms</b> 88:12 135:12  <b>forth</b> 5:14 40:16 41:8  45:3,13 48:16 52:19  53:25 135:4 149:19  149:24 154:14  <b>fortunately</b> 57:3  <b>fortune</b> 43:2 54:21  <b>forum</b> 15:8 84:11  <b>forward</b> 10:22 12:13  74:8 88:1 89:2,3  93:12 94:6,10 96:8  106:6 108:1 123:17  129:5,16 149:6,13  156:10 158:12  <b>fossil</b> 17:13 22:4,21  42:17,19 44:10,12  46:19 50:23 51:2  146:21  <b>found</b> 66:12,18 75:11  81:16 94:4 144:22  <b>founded</b> 56:8 126:18  <b>four</b> 19:17,18 20:1,13  29:22 53:14 59:14  62:2 143:18 156:1  <b>FPE</b> 147:18  <b>FPL</b> 49:7,11,12,21 50:8  147:18  <b>FPL's</b> 49:25  <b>FP&amp;L</b> 32:8 48:25 49:6  74:4 90:12 91:1 93:9  <b>fraction</b> 49:3  <b>framework</b> 5:13 12:16  <b>frankly</b> 34:15 110:17  128:10 129:13 147:16  156:13  <b>free</b> 47:20,22,23 48:2,3  48:4,14,17 69:3 80:4  <b>friend</b> 61:14  <b>friends</b> 132:7,16  <b>front</b> 9:17,18 41:23  56:13 77:8,24 78:17</p>
---	--	--	--

<p>78:21 136:2 145:8,12 149:18 151:1 <b>frowned</b> 103:20 <b>fruit</b> 149:17 151:15 <b>FSEC</b> 39:5,5,8,16,20 41:17 61:23 73:21 92:25 152:18 <b>FSEIA</b> 88:8 <b>FSU</b> 76:11 <b>fuel</b> 17:13,15,16 22:4 22:21 39:12,18 46:4 61:19 66:16,19 68:2,7 68:8 69:2 82:23 97:8 113:13,17 114:11,12 118:18 <b>fuels</b> 16:20 18:3,3 39:22 42:17,19 44:10 44:13 45:24 46:20 50:23 51:2 63:25 66:6 66:7 69:18,23 70:25 70:25,25 72:20 87:1 146:21 <b>full</b> 8:18,19 20:1 30:8 74:17 88:3 <b>function</b> 45:12 52:14 101:22 <b>fund</b> 101:24,25 102:5 102:12,17 103:4,11 122:4 130:12,13,20 133:21 150:16 <b>funding</b> 73:6 102:7,9 102:10,11 103:2 121:1 122:4 130:15 130:16 <b>funds</b> 55:3 58:23 103:7 122:3 <b>furnish</b> 25:21 <b>furthering</b> 4:16 <b>future</b> 19:15,15 20:13 45:25 47:2 53:2 59:18 60:10 93:24 96:13 124:23 145:24,24 146:1,3,4,7,9,24 152:12 154:19 <b>Futures</b> 11:24</p>	<p style="text-align: center;"><b>G</b></p> <p><b>G</b> 2:1 <b>gain</b> 90:5 <b>Gainesville</b> 120:5 <b>gaining</b> 35:19 <b>gallon</b> 54:4,7,8,9 <b>gamet</b> 66:7 <b>gap</b> 53:3,4 <b>garbage</b> 46:23,24,25 <b>Gardening</b> 137:17 <b>gas</b> 27:23,23 28:23 31:8 43:11,14 65:20 68:13 68:17,20,24 70:18,19 70:25 71:13 72:3,6 76:1 98:14 113:5,17 113:18 118:16,17 <b>gasification</b> 66:5 76:12 <b>gasifying</b> 76:20 <b>gasoline</b> 44:14 46:8,10 54:4,6,8,9 <b>gazillion</b> 138:9 <b>GBC</b> 84:18 <b>geared</b> 89:13 <b>geez</b> 47:16 <b>general</b> 34:25 122:14 148:2 <b>generally</b> 16:7 83:21 111:25 114:12 115:12 115:17 117:7 118:5 118:16 120:22 121:13 122:4 124:14 <b>generate</b> 17:9 32:12 47:25 48:1 50:13 51:14 64:7 147:13 <b>generated</b> 49:9 51:16 56:17 <b>generates</b> 40:17 51:4 96:16 <b>generating</b> 16:5 140:18 <b>generation</b> 16:8,9 17:9 39:11 48:8 51:8 89:24 89:25 90:4,20 92:19 99:25 100:7,24 101:4 106:18,21 107:2 112:2,20 115:8</p>	<p>116:25 118:6 122:24 139:12,15 140:4 141:10,14,14 142:1 147:21 <b>generators</b> 140:7 <b>generous</b> 25:9,9 <b>gentleman</b> 2:22 3:7 <b>gently</b> 89:11 <b>geography</b> 42:13 <b>George</b> 31:18 32:22 109:24,24 110:4 125:20 127:4 128:25 132:20 139:4 142:22 149:16 <b>geothermal</b> 16:21 117:21 <b>Germany</b> 47:6 48:17 48:17 <b>getting</b> 2:4 19:7 23:15 26:10 50:24 51:2 52:19,24 57:13,21 58:15 62:10 68:14 73:12 79:11 93:1 105:9,9 106:8 140:12 142:10 153:15,16,20 <b>gigawatts</b> 103:4,8 <b>give</b> 9:5 11:18 15:15 20:16 33:14 39:24 53:3 57:10,19 58:16 59:22 62:17 80:1 85:17 105:11 114:1 118:19 131:21 150:22 <b>given</b> 20:5 52:5 59:16 63:25 64:2 127:24 135:18 149:7,9 <b>gives</b> 101:9 <b>giving</b> 93:14 130:8 <b>glad</b> 133:2 <b>global</b> 11:21 <b>globally</b> 94:15,16 <b>go</b> 5:19 6:19 7:24 8:5 9:5,7 23:19 24:18 26:16,16,18 31:24 37:19 38:5,11,13 40:23 42:13,22 44:25</p>	<p>46:3 48:18 49:16,16 50:6,18,20 51:23 56:23 57:8 58:7,9 59:17 60:3,14,20 64:24 65:7 68:15 71:8 74:12 75:24 76:25 77:9 78:6 80:3,4,7 81:23 82:14 90:25 92:11 96:8 98:24 106:15 108:3 110:2 116:5 122:3 123:17 125:7,8,13,25 126:13 126:14 132:6 135:20 136:3 137:9,11 138:22 140:13 141:7 144:20 147:2 149:25 150:23 154:10 <b>goal</b> 4:19 10:18 11:19 12:12 22:18 27:19,25 40:11,12,14,15 41:12 41:16 52:7,12 59:9 65:6,11 80:22 81:8 116:2,17 <b>goals</b> 13:9 28:3,6 41:1 41:2,6 61:9 64:25 65:2 89:8 <b>God</b> 158:14 <b>God's</b> 157:19 <b>goes</b> 117:7 122:2 124:21 134:14 145:18 145:19 <b>going</b> 2:4,22 3:3,15 5:14,21 10:18,20,23 12:10,17,22,24 13:2,5 14:10 15:22 19:1 24:1 25:7,13 26:11,16,17 30:4,17 31:18 32:1,6 34:21 36:10,12,25 37:12,12,15 38:4,13 39:24 44:6 46:6,7 52:1,18 55:24 58:9,12 58:19 60:7,19,21 62:14 64:17 67:4,16 70:22 71:10,11,13,14 71:15 72:19 75:25</p>
---	--	--	--

<p>76:25 79:25 80:3,16 82:20 84:9 85:16,17 85:21 86:9,23 87:25 88:20,23 89:3,11,19 89:21 90:1,2,21 91:24 91:25 92:24 93:10,11 94:14,14,16 95:25 96:11,12,17,24 98:12 98:12,13,13,14,14,15 98:15,16 100:8,22 102:4,8,9 105:3,19 108:1,2,12 109:14,19 109:21,22,24 113:24 114:18,19 115:5,18 115:23 117:21,22 119:13,14,16 120:10 120:13 121:3 124:25 125:5,13,23 126:6,11 126:12 127:13 129:14 129:19 131:11 133:16 135:19,22,24 136:13 137:9 140:22 144:11 144:14,16 145:11 146:6 147:13,15,17 147:21 153:1,6,10 154:21 155:1 158:4</p> <p><b>good</b> 15:20 18:8,8,21 26:13 35:24 46:16 56:4 61:14 74:5 82:23 87:2,17,20 90:10 99:2 102:8 105:19 109:5 113:21,23 120:8,18 120:23 133:7 134:20 137:24 138:14 144:8 145:3 147:6 155:3,7 155:10 157:11,11,19 157:21</p> <p><b>gosh</b> 138:20</p> <p><b>gotten</b> 50:1,25 124:13 124:14 154:21</p> <p><b>governed</b> 96:21</p> <p><b>government</b> 19:24 57:19 87:23 93:14 124:6 126:4 141:3 150:5 152:6</p>	<p><b>governmental</b> 22:5,22</p> <p><b>governor</b> 15:7,8 23:9 23:25 58:6,14 109:16 125:6 135:16 136:5 154:25 155:4,5,6,7,14 155:25 156:5,23 158:18</p> <p><b>Governor's</b> 15:9 24:1</p> <p><b>grab</b> 60:23,23</p> <p><b>graciously</b> 84:10</p> <p><b>granite</b> 56:24</p> <p><b>grant</b> 73:8,17 79:12</p> <p><b>graph</b> 111:5,14 120:16</p> <p><b>graphs</b> 10:12</p> <p><b>grateful</b> 156:15</p> <p><b>gravity</b> 154:15</p> <p><b>great</b> 7:12 8:9 13:16 15:20 38:5 55:9 57:5 59:8 61:4 66:23 76:10 88:4 95:23 96:1 102:19 109:21 112:3 126:5 130:2,20 135:23 148:17 158:11 158:19</p> <p><b>greater</b> 123:17 145:3 145:19</p> <p><b>greatest</b> 157:20</p> <p><b>greatly</b> 61:2</p> <p><b>green</b> 5:6,10 10:23 20:7 32:17 40:23,25 41:20 42:5,22,24 43:24,24 44:1 49:23 84:15,17 111:14,16 132:17 135:11</p> <p><b>greener</b> 96:17</p> <p><b>grid</b> 37:5 45:12,16,19 59:19 69:13 71:4 90:17 115:4,5 134:5 141:12 142:20 148:9</p> <p><b>grids</b> 69:13 97:5 154:13</p> <p><b>ground</b> 24:4 83:22 111:20</p> <p><b>group</b> 2:13 5:21 14:8 26:21 73:5 150:15</p>	<p><b>groups</b> 14:1 19:18,18 19:22 20:2,13</p> <p><b>grow</b> 18:6 79:13 88:12 90:2 92:17 137:23</p> <p><b>growfl</b> 137:22</p> <p><b>growfl.com</b> 137:19</p> <p><b>growing</b> 4:3 75:22</p> <p><b>growth</b> 4:10 13:13 91:7 91:8,9</p> <p><b>guaranty</b> 26:5,6,7</p> <p><b>guess</b> 14:10 23:22 32:2 44:3 131:18 144:13 152:18,19</p> <p><b>guests</b> 109:15</p> <p><b>guidance</b> 11:18</p> <p><b>Gulf</b> 30:13</p> <p><b>Gulfstream</b> 18:9,9</p> <p><b>guy</b> 38:15,25 134:10</p> <p><b>guys</b> 23:20 33:20 34:7 59:3 80:14 97:18 126:10 131:20 134:9 138:25 155:2</p> <hr/> <p style="text-align: center;"><b>H</b></p> <hr/> <p><b>half</b> 13:8 38:9 43:6 47:7 59:24,25 65:6 80:17 97:6 111:14 113:21 117:14 118:2 120:20 146:19</p> <p><b>halfway</b> 73:16</p> <p><b>Hampshire</b> 121:25</p> <p><b>hand</b> 67:6 142:15 153:2</p> <p><b>handed</b> 10:3</p> <p><b>handle</b> 149:14</p> <p><b>handlers</b> 105:1</p> <p><b>handles</b> 36:9</p> <p><b>Handling</b> 68:5</p> <p><b>handout</b> 29:3 35:18</p> <p><b>handouts</b> 9:16</p> <p><b>hands</b> 67:8 95:15</p> <p><b>hang</b> 135:21 136:8</p> <p><b>hanging</b> 149:17 151:15</p> <p><b>happen</b> 10:20 32:1 41:20,21 109:21</p>	<p>138:11,12 147:17</p> <p><b>happened</b> 3:22 143:3 156:18</p> <p><b>happening</b> 144:17</p> <p><b>happens</b> 47:5 48:4 68:2 71:1 108:1 131:24 136:9 138:22 144:13</p> <p><b>happy</b> 60:3,10 79:14 137:21</p> <p><b>hard</b> 94:4</p> <p><b>Harmony</b> 76:11</p> <p><b>hate</b> 58:14</p> <p><b>hated</b> 34:5</p> <p><b>haul</b> 102:3,3 145:13</p> <p><b>Hawaii</b> 42:18 117:17</p> <p><b>Hawaii's</b> 42:16 122:17</p> <p><b>head</b> 31:19 136:24</p> <p><b>heading</b> 84:8 124:1</p> <p><b>headlines</b> 58:13</p> <p><b>health</b> 127:11 130:2</p> <p><b>healthy</b> 38:12</p> <p><b>hear</b> 11:11 76:25 80:9 84:2 85:7 91:2 94:11 95:8,22,24 103:9 112:17,24 141:15 144:10 148:11</p> <p><b>heard</b> 6:11,12 51:9 62:7,8 74:20 90:10 95:9,21 105:6 115:4 128:25 130:11 131:13 145:24</p> <p><b>hearing</b> 5:7</p> <p><b>hearings</b> 19:25</p> <p><b>heart</b> 85:2</p> <p><b>heat</b> 99:7,10</p> <p><b>heater</b> 57:7,17 70:3</p> <p><b>heaters</b> 56:7,13,16,18 57:10</p> <p><b>heating</b> 67:14 86:19,19 108:18 109:2 116:9</p> <p><b>heavily</b> 110:7</p> <p><b>heck</b> 25:10</p> <p><b>hedging</b> 69:1</p> <p><b>held</b> 109:5</p> <p><b>hell</b> 55:7</p>
---	--	---	---

<p><b>hello</b> 5:24  <b>help</b> 2:14 6:16 11:4  13:17 14:9 49:14 55:8  58:11,16,17 60:1  92:13 93:15 96:24  101:13 131:16 132:10  132:12 134:25 137:22  154:13 155:8,23  <b>helped</b> 34:8  <b>helpful</b> 7:3 135:7,13  <b>helping</b> 7:7 39:19  84:23 85:3  <b>helps</b> 2:11 115:19  <b>hey</b> 95:22,24 147:25  <b>he'll</b> 31:1  <b>Hi</b> 36:15 88:5 110:1  139:6 155:6  <b>high</b> 56:5 59:23 67:4  93:5 113:19 129:8  139:19 153:25,25  <b>higher</b> 67:7 115:24  154:9,9  <b>highly</b> 113:17 137:5  <b>highway</b> 48:5  <b>hill</b> 154:16  <b>hinted</b> 55:18  <b>hired</b> 21:12  <b>Historically</b> 116:5  <b>history</b> 16:1 19:8 124:2  125:16  <b>hit</b> 12:25 17:21 24:6  25:1,2 28:15 60:23  111:20 120:22 136:24  <b>hitting</b> 21:9  <b>hold</b> 77:16 106:6 136:4  <b>holding</b> 29:23 94:2  132:3  <b>holds</b> 77:15  <b>holistic</b> 36:24  <b>Holland</b> 14:17  <b>home</b> 12:25 45:4 53:24  54:23 56:21 57:6,14  75:3 150:2 151:1  <b>homegrown</b> 112:6  <b>homeowner</b> 37:24</p>	<p>51:25 90:24,24  <b>homeowners</b> 36:20  91:17,18 108:13  <b>homes</b> 45:20 53:10,23  53:25 54:1,19 55:15  56:12,16 91:9,15  92:22 102:16 105:1  108:10  <b>homework</b> 64:21  <b>honest</b> 57:1  <b>honor</b> 14:6  <b>honored</b> 155:14  <b>hook</b> 106:8  <b>hope</b> 14:5 15:21 32:18  40:12  <b>hopefully</b> 5:3 12:25  35:3 40:11 46:14  47:25 74:1 88:1  154:22 155:2  <b>hopes</b> 61:9  <b>horizon</b> 76:23  <b>host</b> 8:4 112:13 128:12  <b>hot</b> 2:16 41:15 56:7,12  56:16,18 57:7,10,17  66:8 70:2 74:11,24  75:19 108:17  <b>hour</b> 38:10 42:1 74:19  74:23,25 75:13  112:19 113:1 115:17  115:19 118:9,15  119:20,23 120:7  122:1 153:17,17  <b>hours</b> 45:14 52:17 53:5  53:16 54:1 68:16  70:17 136:13  <b>house</b> 19:12 20:25 27:8  27:10 28:25 30:2,8,9  30:16,17,25 32:4 33:7  33:8,12,13,21 34:2,24  35:3,3,20,24 36:22  54:22 88:21,24 90:25  94:7 96:20 123:8,22  129:2,7,13,15,18,24  131:15 132:8,9  137:10,12 150:3</p>	<p><b>housekeeping</b> 38:4  <b>houses</b> 52:19 53:7  <b>huge</b> 70:3 143:22  <b>huh</b> 103:13  <b>human</b> 106:5  <b>humming</b> 113:10  <b>hundred</b> 22:14 24:18  24:19 47:18 71:22  108:17 122:21  <b>Hundreds</b> 68:10  <b>hurricane</b> 108:13  109:1  <b>hurricanes</b> 108:19,21  <b>hybrid</b> 76:7  <b>hydro</b> 117:21  <b>hydroelectric</b> 16:22  42:21  <b>hydrogen</b> 39:21</p> <hr/> <p style="text-align: center;"><b>I</b></p> <hr/> <p><b>idea</b> 10:13 95:23,24  96:1,23 98:21 102:9  102:19 124:7 138:5  138:14 142:4 144:2,8  <b>ideal</b> 8:25 61:9  <b>ideological</b> 130:4  <b>ideas</b> 135:5 138:21,24  143:3  <b>identify</b> 6:16  <b>IGCC</b> 27:22,23  <b>Illinois</b> 122:9  <b>immediately</b> 56:21  <b>immense</b> 110:14  <b>impact</b> 70:3 81:16,18  85:11,12 109:8  112:15 121:11 122:12  134:3  <b>impacted</b> 125:20  <b>impacts</b> 121:12,12,17  <b>impede</b> 134:18  <b>impending</b> 63:21  <b>implement</b> 73:16 85:1  85:3 140:5 143:23  150:25  <b>implementation</b> 4:21</p>	<p>12:6 61:13  <b>implemented</b> 4:19  39:25 125:23  <b>import</b> 17:15,24  <b>importance</b> 123:17  149:7  <b>important</b> 6:10 10:10  10:16 17:14,23 32:3  58:10 61:8 65:13  66:20 87:8 112:9  120:19 123:11,13  132:24 137:6,7  152:14,14 156:20  158:8  <b>importantly</b> 46:18  <b>imported</b> 17:17  <b>impose</b> 96:2  <b>impression</b> 34:1  <b>improve</b> 79:9 127:11  <b>improvements</b> 56:20  149:25 150:4 152:10  <b>improving</b> 85:5  <b>incentarize</b> 141:3  <b>incentive</b> 37:18,19,21  74:16 78:9,10 118:19  153:11  <b>incentives</b> 13:12 22:5  22:23 37:3,4,10,14  64:10 92:1  <b>inclined</b> 123:21  <b>include</b> 57:25 122:19  128:24 151:25 152:3  <b>included</b> 11:15  <b>includes</b> 21:23 22:25  <b>including</b> 17:5 116:8  159:5  <b>income</b> 63:7 152:12  <b>incoming</b> 30:25 31:1  <b>incorporate</b> 63:18  72:11 140:6,9  <b>incorporated</b> 4:23  <b>incorporating</b> 45:15  148:14  <b>increase</b> 26:25 41:11  52:18 69:22 87:25</p>
--	--	--	--

<p>104:3 116:4 127:9 139:11,14 156:2 <b>increased</b> 113:13 117:17 122:15,17,18 127:23 <b>increases</b> 65:12,14 113:15,24 115:21 147:18 <b>increasing</b> 26:18 52:22 80:16 115:20 <b>incredible</b> 14:8 157:6 <b>incremental</b> 25:24 27:2 118:15 <b>incubator</b> 8:3 <b>incumbent</b> 36:3 <b>independent</b> 119:1 <b>Indian</b> 70:24 <b>indicate</b> 131:3 <b>indicated</b> 151:12 <b>individual</b> 18:23 36:20 89:12 123:19 <b>individually</b> 146:8 <b>industries</b> 63:17 86:1,6 86:21 145:20 157:22 <b>industry</b> 6:13 12:8,14 39:9 40:10 63:14 67:12 79:6,21 86:22 88:12,13 89:2 90:2 92:5,17 100:3,4 108:6 111:1,18 126:21 145:18 157:15 <b>inextricably</b> 157:14 <b>infancy</b> 27:3 <b>influential</b> 137:5 <b>informally</b> 136:3,8 <b>information</b> 6:20 9:6 79:23 <b>infrastructure</b> 69:5 73:8 115:10 <b>infuse</b> 89:10 <b>initial</b> 151:12 <b>initiates</b> 139:3 <b>initiative</b> 3:5,6 4:1 131:1 133:15 155:9 <b>initiatives</b> 2:6 3:20</p>	<p><b>innovation</b> 9:13 <b>innovative</b> 78:24 79:19 <b>input</b> 4:13 <b>inspectors</b> 143:16 <b>inspirational</b> 60:16 <b>install</b> 26:12 56:4 69:10 87:21 93:17,19 102:15 105:3 <b>installations</b> 49:3,6 59:13 92:12 108:25 <b>installed</b> 49:1,6,21 57:17 71:3 78:14 108:18 <b>installer</b> 88:6 <b>installers</b> 116:10 <b>installing</b> 75:10 86:18 143:9 <b>instance</b> 117:23 119:21 120:5 121:24 153:10 <b>instigate</b> 136:21 <b>institute</b> 7:9 8:1 39:7 86:3 137:17 139:7 <b>instructor</b> 86:1 <b>insufficient</b> 121:1 <b>insulation</b> 149:19 <b>insurable</b> 108:11,15 109:12 <b>insurance</b> 108:6,8,13 <b>insure</b> 134:25 136:17 150:5 152:23 153:5 153:14,18 <b>insuring</b> 152:22 <b>integral</b> 85:10 <b>integrate</b> 45:21 114:16 148:8 <b>integrated</b> 8:13 84:25 148:13 <b>integrating</b> 69:12 114:21 <b>intensive</b> 139:24 <b>interaction</b> 123:4 <b>interest</b> 19:21,22 46:22 151:3 <b>interested</b> 33:4,5 46:16 132:21 136:25</p>	<p><b>interesting</b> 10:7 29:24 43:7 45:10 53:22 58:3 63:5 85:7 124:1,22 133:24 <b>interests</b> 34:23 <b>internal</b> 65:1 81:4 <b>internally</b> 83:5,10 103:19,23 <b>International</b> 61:25 <b>Internet</b> 11:25 <b>introduce</b> 2:22 3:10 9:2 15:14 39:23 62:3 84:9 84:10 85:16 109:25 <b>introduced</b> 9:22 35:22 <b>introducing</b> 14:7 85:16 <b>introductory</b> 11:22 <b>invest</b> 27:1 53:9 57:14 103:6 116:20 146:3 <b>investigating</b> 65:23,25 81:12 <b>investing</b> 54:23 <b>investment</b> 37:20 49:18 57:21 77:25 101:5,10 102:2 114:15 117:3,3 145:25 146:1,10,14 146:23 <b>investments</b> 110:13 148:25 <b>investor</b> 25:21 62:20 64:13 97:2,11 <b>investors</b> 73:25 102:7 <b>invitation</b> 119:18 <b>involved</b> 7:21 58:25 61:12 84:1,21 85:2 86:20 88:10 105:9,25 132:16 133:11 153:13 156:3 <b>IOU</b> 21:24 <b>IOUs</b> 24:9 25:21 27:14 28:15 97:17,24 107:18 <b>IOU's</b> 140:23 142:17 <b>irrelevant</b> 157:9 <b>issue</b> 11:23 12:1 36:1,2 36:8 56:14 105:25</p>	<p>128:25 129:22 140:22 150:12 <b>issued</b> 23:11 <b>issues</b> 45:15 47:14 48:15 62:25 88:2 126:4 155:23 <b>item</b> 131:8 136:19 <b>items</b> 131:8 <b>I-4</b> 13:22 <b>i.e</b> 41:1</p> <hr/> <p style="text-align: center;"><b>J</b></p> <hr/> <p><b>James</b> 61:3,4 <b>January</b> 23:3,5,22 28:8 50:24 <b>JEA</b> 98:1 <b>Jeb</b> 15:7 <b>Jeff</b> 29:10,11 108:16 <b>Jennifer</b> 26:6,7 61:17 61:22 62:4,5 80:3,12 81:3,3 82:14 83:1 84:5 90:25 97:21 102:25 113:11 154:11 154:24 <b>Jersey</b> 47:8,12 95:2,4 <b>Jim</b> 6:7 38:15,19,22 39:23 60:20 61:23 66:25 76:4,4 112:11 115:14 122:16 151:12 151:16 <b>Jim's</b> 38:16 <b>jive</b> 156:8 <b>job</b> 15:12 51:6 56:16 91:7,8,8,9,12 110:10 111:14,22 112:14 131:12 148:6 <b>jobs</b> 40:17 49:22 50:13 50:14,16,17 51:5,5,5 51:5,6 52:5,6,7,9,10 56:5 66:22 69:9 87:6 87:9 89:6,10,14,19,19 89:21,21 90:1,6,11,12 90:13,14 91:25 92:3,4 106:3 111:3,7,16,25 112:3 116:9,9,13</p>
--	---	--	---

<p>127:25 135:2,2,2 146:25 <b>John</b> 2:24,24 3:7,10 40:22 <b>join</b> 132:17 <b>joining</b> 39:16 <b>jointly</b> 125:13 <b>Jose</b> 4:7 <b>jot</b> 134:23 <b>jump</b> 83:25 111:19 115:13 <b>June</b> 70:12 <b>jurisdictions</b> 143:18 <b>justifiable</b> 103:8 <b>justifications</b> 16:12 <b>justify</b> 69:24</p> <hr/> <p style="text-align: center;"><b>K</b></p> <p><b>keep</b> 21:9 26:10 32:17 45:1,4,24 54:10 55:10 57:15 62:22 63:22 68:22 72:4 87:8,9 109:4 112:11 142:16 154:5 158:18 <b>keeping</b> 63:16 <b>keeps</b> 59:9,9,10 <b>Ken</b> 35:22 <b>key</b> 40:13 47:20 48:2 54:24 69:12 128:8 153:22 154:2 <b>kick</b> 3:10 <b>kickstart</b> 30:3 111:2 <b>kids</b> 60:1,4 <b>kill</b> 96:1 <b>kilowatt</b> 42:1 52:16 53:4,16 54:1 59:15,17 59:19 74:19,23,25 75:13 112:19 113:1 114:3 115:17,18 119:20,22 120:6 151:15,17 153:17,17 <b>kilowatts</b> 59:14 <b>Kimberly</b> 86:9,10 87:19 96:18 <b>kind</b> 10:25 13:12 30:20</p>	<p>30:21 31:21,22,23 47:19 72:9 76:9,24 78:4 81:22,23 89:23 97:25 102:10 109:18 109:19 112:15,18 118:3 123:20,25 124:22 125:21,24 126:13 127:3,13 129:17 130:8,9 134:20 137:11 138:21 139:19 141:10 144:15 147:20 148:21 149:2 149:8 151:3 <b>kindly</b> 135:13 <b>King</b> 29:7 128:19 <b>King's</b> 27:12 29:7 129:10 <b>Kirstie</b> 2:8 3:12 7:17 7:19 14:5 17:19 135:15 <b>Kirstie's</b> 38:1 <b>knew</b> 37:1 <b>Knight</b> 14:17 <b>know</b> 2:3 3:4,19 10:15 16:13 17:3 18:16,19 18:25 19:23 22:16 23:18 24:25 25:12,12 25:24 26:17 27:2 29:9 29:13 30:12,15,16,22 30:23 31:14 32:11,25 33:11,17,18,23 34:2,3 34:10,13,16,24,25 35:5,10,13,25 36:4,6 37:4,17,20 38:19 50:13 54:7,7 58:2 64:3 76:3,8 81:13,25 82:17 83:9,12 84:3 88:13,15,19,21,24 89:19 91:13 92:18,24 94:5 95:8,23 96:1,11 99:3,6,7,8,11,14,15 99:17 100:10,12,14 100:15,17,18,19 101:5 103:21 105:13 105:14,17,24 106:1,4</p>	<p>107:3,13,19,25 108:22 110:16 111:13 113:4,16 114:4,17,23 115:14,20 118:18 119:8,12,13 120:7,9 120:12 121:17 122:24 123:5,16,18 124:7,9 126:17 127:6 129:3 129:25 131:9,17 132:10,19,22 134:6 134:10 138:13,18,23 138:24,25 139:4,13 139:14,20,23,25 140:7,20,22,23 141:1 141:2,9,10,12 142:6 142:12 143:15 144:18 144:20,22 145:1,4,4,5 145:19 146:13,19 147:20 148:11 149:4 149:5,8,11 150:2,2,3 151:12 152:18,23,24 154:20 155:11,16 156:3,6 157:1,14,18 157:23 158:1,2 <b>knowing</b> 66:17 <b>known</b> 146:8 152:13 <b>knows</b> 155:21 <b>Krutski</b> 86:10 87:20 91:24 96:10 97:1 101:3 104:7 <b>KW</b> 105:14,18</p> <hr/> <p style="text-align: center;"><b>L</b></p> <p><b>la</b> 29:8,21 <b>Lab</b> 2:10,10 7:17,21 8:1,15 <b>labor</b> 69:9 <b>Laboratory</b> 120:17 <b>lack</b> 94:9 <b>lag</b> 88:16 <b>Lake</b> 97:13 <b>Lakeland</b> 108:16,17,20 108:20 <b>land</b> 14:21,24 18:4,6 45:7 95:3 105:22,22</p>	<p><b>landfill</b> 65:19 68:10,13 68:14,24 70:18 75:21 75:22,24 76:1 <b>landfills</b> 68:23 <b>landscape</b> 64:4 126:20 <b>language</b> 20:9 130:7 152:3 <b>large</b> 47:24 48:12 51:23 69:24 78:5 89:14,15,17,22 90:10 90:14 91:3,11 92:12 92:20 99:8 101:1 105:17 126:22 131:3 <b>larger</b> 7:25 <b>largest</b> 6:13,22,25 39:6 47:6 53:15 156:16 <b>laser-like</b> 12:15 <b>late</b> 135:19 136:14 <b>laudable</b> 158:10 <b>law</b> 14:17,20 107:25 142:3 <b>lawn</b> 18:4 <b>lawyer</b> 15:12 <b>lawyerish</b> 14:18 <b>lawyers</b> 139:21 <b>lead</b> 145:10 <b>leader</b> 33:23,24 <b>leaders</b> 110:23 <b>leadership</b> 7:13 12:8 33:23 88:21 94:10 <b>leading</b> 84:14 98:1 115:24 <b>leads</b> 38:25 39:9 56:10 <b>leak</b> 104:3 <b>leaking</b> 105:6,6 <b>leaks</b> 106:2,4,6 <b>lean</b> 37:10 <b>leaps</b> 26:18 <b>leapt</b> 12:7 <b>learn</b> 3:3 58:25 73:14 93:7 143:19,20 <b>learned</b> 42:11 67:17 <b>learning</b> 63:10 92:16 93:11 <b>lease</b> 107:9</p>
--	--	---	---

<p><b>leases</b> 31:15  <b>leave</b> 15:24 110:3  123:24 136:11  <b>leaves</b> 14:4 112:10  <b>Lee</b> 128:20  <b>left</b> 52:6  <b>legacy</b> 125:16 144:24  <b>legal</b> 107:21,23  <b>legged</b> 145:17  <b>legislation</b> 20:9 30:22  88:11,12 141:5 143:5  150:20  <b>legislative</b> 4:24 9:19  27:7 88:2,9,20 95:9  110:23 126:7 129:15  132:23 133:12  <b>legislator</b> 97:20  <b>legislators</b> 93:21 95:7  95:15,20 96:9 106:23  107:7 130:3 132:19  135:4 137:1  <b>legislature</b> 14:3 19:9  19:14 20:11,17,24  21:7 27:6 33:19 35:13  36:4 37:11 97:15,16  97:18 125:17 128:16  130:9,24 132:6  133:15 138:7,23  <b>lend</b> 150:24  <b>lending</b> 100:17  <b>Lentz</b> 76:4  <b>Leslie</b> 1:19 8:16 159:4  159:10  <b>letter</b> 5:1  <b>let's</b> 14:3 16:2,25 19:7  20:16 21:8,10 24:2  28:12,15 47:1 53:13  54:25 55:6 57:1 64:24  64:24 118:20 120:14  121:11 133:3  <b>level</b> 14:12 16:7 47:10  47:20 89:9 110:16  133:20 139:11 143:20  149:12  <b>levelized</b> 55:20 57:22</p>	<p><b>levels</b> 60:13 121:10  <b>lever</b> 30:19  <b>Lewis</b> 2:24,24 3:10,12  33:9 40:22 81:3,7,10  82:4,13 106:11 133:3  134:20 136:10 137:14  137:24 138:16 139:3  155:5,7 158:16,20  <b>liability</b> 108:8  <b>licensing</b> 133:15  <b>lies</b> 47:2  <b>life</b> 77:12,15,16 86:25  114:23 143:9  <b>light</b> 130:24 147:17  156:13  <b>lights</b> 63:2  <b>likes</b> 75:25 76:24  <b>Likewise</b> 45:2  <b>limit</b> 125:4 140:24  <b>limited</b> 131:9 154:15  <b>line</b> 5:16 13:21 14:1  35:2 50:5 114:18,19  115:7,9 151:16  <b>lines</b> 48:6 124:11 145:8  <b>linked</b> 64:14 157:14  <b>liquid</b> 45:24 70:25  <b>list</b> 5:18,19 8:5 19:2  <b>listed</b> 41:3  <b>listening</b> 61:3  <b>literally</b> 18:1  <b>little</b> 18:18 22:21 33:14  38:9 39:24 41:9,14,16  43:14 49:19 51:12  53:2 62:7,8,14 64:13  67:21 69:23 70:1,8  71:15 72:14,17,18  77:4 78:16 79:8 80:1  80:9,9 81:25 85:19  86:16 88:6 98:4,6  99:12 101:1,6 109:4  110:2 112:18 121:7  123:10 124:17 127:14  128:22 136:5 137:15  148:7 149:15 153:12  153:13</p>	<p><b>live</b> 47:5,6 50:15 77:22  96:18,20 97:10  155:19 158:14  <b>living</b> 145:7  <b>lo</b> 23:22  <b>load</b> 70:7 112:20  <b>loads</b> 70:5  <b>loan</b> 74:20 75:17  <b>lobby</b> 138:9  <b>lobbying</b> 88:10 126:4  132:15  <b>lobbyists</b> 137:6  <b>local</b> 49:10 66:22 69:9  87:23 88:7 90:5 112:7  128:20 136:25 148:23  149:12 150:22  <b>locally</b> 66:3  <b>location</b> 68:23  <b>locked</b> 78:11  <b>logics</b> 56:19  <b>logistical</b> 38:3  <b>long</b> 31:24 35:15 48:6  63:13 64:3 66:16  67:18 68:4 71:21 79:1  91:1 100:13 102:3,3  116:5 119:4,10,11,20  126:11 130:18 133:16  133:21 141:24 145:13  145:13 153:7,23  154:8  <b>longer</b> 37:21 101:6  153:19  <b>look</b> 3:21 6:19 18:2  20:18 21:8,10 24:2  42:23 43:20,25 44:7  50:16 52:23 53:14  54:11,25 66:2 67:3  71:5,10 74:2 79:12  94:10,13 98:11  111:14 121:11,18  125:22 134:3 136:24  142:17 156:25  <b>looked</b> 5:18 27:4 74:13  <b>looking</b> 10:21 43:3  45:18 55:16 65:4,16</p>	<p>65:19,23 66:5,7 67:10  68:6 72:9 76:18,19  78:24 79:5,10 82:13  90:12 95:4 99:6 129:6  146:20 147:24  <b>looks</b> 9:9 38:16 52:25  109:16  <b>loss</b> 115:9  <b>losses</b> 115:7 141:25  <b>lost</b> 33:8  <b>lot</b> 3:8 6:14 7:19 10:7  14:5,10 18:19 30:1,15  30:16 31:21 34:1,3,5  34:22,23 38:16 42:20  42:21 43:5 44:1 46:2  46:17 47:10,13 50:12  55:13,14 56:9 57:11  60:12,15 64:7 66:2  67:15 68:9 74:12 79:1  81:9 88:15,16 89:19  89:20,21 90:17,18  91:10,14 93:4 96:2  99:6,9,16 104:10,25  105:2,13,13,18 107:4  107:13,19 111:13  113:2 114:24 120:2,8  120:20 121:12,14  122:18 124:9 126:3  128:23 129:14 135:5  138:4,15 141:21  142:17 146:24 147:2  148:19,25 150:12  152:18 154:4,16  155:23 156:1  <b>lots</b> 40:17  <b>love</b> 76:17 94:24 95:5  <b>low</b> 41:9 66:24 68:17  69:7 112:24 113:1,22  118:17 121:17 124:8  124:14 149:17 150:5  151:3,15  <b>lower</b> 52:6,12 53:2  57:15 60:4 67:1,2  68:19 111:25 122:8  144:12</p>
---	--	---	---

<p><b>lowered</b> 121:9  <b>lowest</b> 46:22 63:22  115:15 147:2  <b>lung</b> 44:24  <b>Lyman</b> 93:5</p> <hr/> <p style="text-align: center;"><b>M</b></p> <p><b>magazine</b> 11:24,25  <b>magically</b> 50:6  <b>magnitudes</b> 92:12  <b>Maine</b> 121:24  <b>Maingot</b> 86:4 88:5  89:13 92:18 97:15  98:25 99:25 100:5  105:12 106:22 107:11  <b>maintain</b> 69:10 115:19  <b>maintaining</b> 62:25  <b>maintenance</b> 104:3,11  <b>major</b> 65:12,14 99:18  99:18 116:20 154:13  <b>majority</b> 88:17  <b>makers</b> 15:4 142:3  <b>making</b> 44:15 49:24  54:23 55:5 59:4,7  64:5 81:16 88:18 89:6  110:7 137:25 153:3  153:22 155:18  <b>man</b> 23:24  <b>management</b> 63:18  84:20  <b>manager</b> 86:13 105:7  137:16  <b>manages</b> 61:18  <b>mandate</b> 142:18  <b>mandatory</b> 13:19  24:25,25 28:13,14,15  <b>manufactured</b> 56:3  94:21  <b>manufacturers</b> 94:23  94:24 99:9 126:25  <b>manufacturing</b> 13:10  56:5 111:15  <b>map</b> 40:21 41:23 43:25  117:10  <b>maps</b> 47:3 127:5</p>	<p><b>March</b> 9:2 64:25 74:7  159:7  <b>margin</b> 148:10  <b>market</b> 22:6 40:9,13,14  43:12 46:11 47:4,6  68:2 74:14 75:11  92:15 99:22,23  116:16 120:14 128:9  148:6  <b>marketing</b> 51:21  <b>marketplace</b> 94:17  100:20,21 144:5  145:14  <b>markets</b> 63:15,17  119:2,5  <b>Maryland</b> 121:24  122:9  <b>master's</b> 62:1  <b>match</b> 133:20,20  <b>matches</b> 155:12  <b>material</b> 11:2  <b>materials</b> 39:14  <b>math</b> 65:8  <b>matter</b> 34:16 86:2 94:9  148:1  <b>matters</b> 14:22 54:5  <b>maximize</b> 84:25  <b>maximum</b> 70:5,7  <b>Mayor</b> 3:1,4,9,17,20,25  5:8 7:11 158:1,2  <b>mean</b> 22:1 23:10 26:19  30:19 31:2 34:13,15  34:22 37:6 67:2 82:11  83:12 99:5,7,10  100:12 104:20 105:12  105:17,19,24 106:2  107:4,11,12,24  108:24 110:17 118:14  118:22 120:10 130:25  138:19 142:9,10  152:2 156:21,25  <b>meaning</b> 67:1  <b>means</b> 16:18 22:12,12  24:20 27:23 28:5  71:18 139:20 142:20</p>	<p>150:8  <b>measure</b> 13:2,3 75:5  150:1 153:17  <b>measurement</b> 153:21  <b>measures</b> 150:25  153:18  <b>measuring</b> 154:2  <b>mechanical</b> 39:14  <b>mechanism</b> 41:16  71:24 150:8  <b>mechanisms</b> 101:12,20  <b>Medical</b> 158:4,5  <b>medium</b> 100:9  <b>meet</b> 12:11 13:9 22:17  41:1 70:5,20,22 81:7  105:4 112:23 117:15  123:9,14,19 135:4  137:16 154:4  <b>meeting</b> 21:16 23:7  41:16 76:5 80:24  95:10 109:23 131:17  <b>meetings</b> 5:12 95:9  129:5 132:3,4  <b>megawatt</b> 51:11 68:13  73:18,22 76:7 80:13  80:15,18 111:23,23  112:3 118:9,15  121:25  <b>megawatts</b> 30:6 48:23  48:24,25 49:8,9,13,22  50:2,3,9,19 56:11  68:7,8,15 71:2,3,6,19  71:22,23 74:2 76:1  80:22 86:13 93:9  123:3 140:7,10,24  <b>Melissa</b> 31:19 32:23  35:16 139:6  <b>member</b> 15:5,11 19:19  39:9 84:12  <b>members</b> 19:17,20,20  32:4 34:24 126:22,23  126:24 137:1,2,13  <b>membrane</b> 39:12  <b>mention</b> 9:16 18:13  131:9,18 143:13</p>	<p><b>mentioned</b> 40:22 48:20  64:9 67:1 73:19 75:20  78:23 81:4 92:8,9,10  112:11 122:16 127:5  128:17 130:21 134:17  142:22 144:2 154:4  <b>mentioning</b> 5:1  <b>mercury</b> 17:12  <b>mercy</b> 67:24  <b>message</b> 14:3 23:25  127:25 131:15 149:4  <b>met</b> 25:17 30:24 62:2  70:13 131:20  <b>meter</b> 64:12 74:17  75:10 78:15 91:22  <b>metering</b> 37:5 75:1,1,7  77:8,20 78:15 97:6,17  101:8 141:6,7  <b>method</b> 16:19  <b>methods</b> 69:13 84:24  <b>Metro</b> 6:16,23 12:19  13:16,18  <b>Mexico</b> 47:17,23  <b>mic</b> 33:9 80:5 133:6  153:2  <b>Michael</b> 125:1,14,23  126:2,8 131:20  136:24 138:16 148:18  <b>microphone</b> 14:15 38:6  155:1  <b>mid</b> 22:8 106:24  <b>middle</b> 73:10 141:17  <b>Mike</b> 29:24  <b>mile</b> 112:7  <b>miles</b> 145:8  <b>mill</b> 65:24  <b>million</b> 22:15,15,17  24:18,19,20,23 39:10  49:9 50:2,13,14,15  53:6 58:6,13,14 59:24  59:25 103:24 134:9  157:15 158:14  <b>mind</b> 9:9 45:24 54:10  62:23 72:4 80:13 98:9  98:12 154:5</p>
---	---	--	--

<p><b>mini</b> 74:6  <b>minimum</b> 16:7  <b>minions</b> 23:19  <b>minus</b> 97:7,7  <b>minute</b> 9:5 19:8 21:11              23:9 31:19 51:3 68:16              106:9  <b>minutes</b> 5:22,23 60:22              79:24 85:18 125:4,24              135:13,17 136:6  <b>mission</b> 126:19  <b>mistakes</b> 106:5  <b>misunderstood</b> 152:13  <b>mitigate</b> 68:4  <b>mitigates</b> 115:9  <b>Mitsubishi</b> 6:22 7:1,2  <b>mix</b> 12:10 63:24 64:4              70:18 71:1 76:2 82:23              86:25 98:12,24 99:2,2              100:24 105:21 113:18              114:14,16 143:3              148:15,16  <b>mixed</b> 70:24  <b>mode</b> 45:25  <b>model</b> 48:8,10 74:14              78:17 124:18  <b>modeled</b> 71:2,5  <b>models</b> 77:5  <b>moisture</b> 67:7 79:8  <b>moment</b> 63:25 64:2              75:8 117:5  <b>money</b> 17:17 25:20              27:1 37:8,13,15 44:20              45:1,4,5 48:9 49:16              50:12 51:17 53:8              55:10 57:8,13,14 58:7              58:16 59:9,10 87:9              93:3,14 100:19 101:8              103:2 112:5,6 138:15              142:17 146:6 150:11              150:24 153:6,19  <b>money's</b> 153:15,16,20  <b>monies</b> 93:19 100:15              102:14  <b>moniker</b> 63:4</p>	<p><b>month</b> 49:14 50:11,13              50:20 51:1,3 54:2,12              54:13 110:7 131:5              146:11,13,15,17,18              146:21 150:12  <b>monthly</b> 77:12 78:11  <b>months</b> 5:12 132:2  <b>month's</b> 11:23 12:1  <b>moratorium</b> 30:13  <b>morning</b> 3:11,17 6:1              8:17 11:2 15:20 36:16              87:20 125:15 133:7              147:6  <b>mornings</b> 15:21  <b>mortgage</b> 149:20              150:11 152:7  <b>mother</b> 67:24 85:2  <b>motivated</b> 122:25  <b>mouth</b> 94:2  <b>move</b> 9:15 11:8 36:19              60:20 70:15 74:8 80:7              89:1,2 92:24 93:3,12              94:6 97:12 105:11              154:8 155:1 157:2  <b>moved</b> 42:12 52:17  <b>moves</b> 4:21 129:16  <b>moving</b> 12:12 18:10              93:12 106:6  <b>MSW</b> 76:17  <b>mulching</b> 67:13  <b>multi-family</b> 63:7 77:3              77:22  <b>muni</b> 74:6  <b>municipal</b> 15:11 17:6              62:18 65:22 117:7              122:19  <b>municipalities</b> 25:23              150:22  <b>munis</b> 25:25 97:23,25              141:6</p> <hr/> <p style="text-align: center;"><b>N</b></p> <hr/> <p><b>N</b> 2:1  <b>nail</b> 136:24  <b>name</b> 2:8 11:9 36:15</p>	<p>41:3 86:9 110:4 145:5              148:18  <b>Nancy</b> 128:18  <b>nation</b> 145:10  <b>national</b> 14:12 84:18              94:5 120:17 130:1  <b>nationally</b> 39:20              141:16  <b>nation's</b> 39:3,5  <b>natural</b> 27:23,23 43:11              43:14 68:17,20 70:19              71:13 72:3,6 92:24              110:5 113:5,17,17              118:16,17  <b>nature</b> 55:8 67:25  <b>Navigant</b> 21:13,17,21              21:21 23:2 105:20              111:9  <b>Neanderthals</b> 138:7  <b>near</b> 69:4 81:17 85:1  <b>nearly</b> 61:23 108:25              127:17  <b>necessarily</b> 69:15              113:22 120:9 141:2  <b>necessary</b> 90:5 100:7  <b>need</b> 3:13 9:25 12:19              13:7 14:12 23:21 31:7              31:8,8,9,9,10,10 32:5              33:2,18,20 35:8 37:20              37:21 38:6,11 44:5              47:21 64:6 68:20              69:16 72:21 73:15              88:18 89:23 91:21              92:20,20 94:22,22              95:13,19,19 96:8              97:19 99:2,14 100:12              100:13,21,22,23              101:20 102:9 110:15              112:11 114:20 115:5              115:9,14 116:18              118:18,19 122:1              124:20 125:7,22              127:24,25 129:14,20              131:11,20,23 132:22              135:20 136:3,12,12</p>	<p>139:14,15,16,20              140:2 141:4,12,19,25              145:10 148:24 149:4              150:8,23 151:18  <b>needed</b> 4:8 70:19 90:17              102:8  <b>needlessly</b> 64:20  <b>needs</b> 5:4 33:20,22,23              33:24 90:3 104:21              123:14 141:3 154:4  <b>negative</b> 100:2 101:3              110:20  <b>negotiate</b> 97:4 119:11              129:15 139:21  <b>negotiating</b> 75:14  <b>negotiation</b> 113:3              139:23  <b>negotiations</b> 87:22  <b>neighbor</b> 147:4  <b>neighborhood</b> 65:5              67:19  <b>neighbors</b> 137:3  <b>Nemours</b> 158:4  <b>net</b> 37:4 74:25 75:1              77:8,19 78:15 97:6,17              101:8 141:6,7  <b>networking</b> 5:25 80:9              80:11  <b>neutral</b> 66:19 100:3              115:12  <b>Nevada</b> 117:23 121:6,9  <b>never</b> 27:8,9 29:1 34:12              34:12 64:1  <b>Nevermind</b> 151:21  <b>new</b> 27:20,21 28:23              47:8,12,17,23 48:10              49:15,16,20 53:20              56:24 95:2,4 103:22              104:7 110:24 111:2              120:20 121:24 122:4              148:8,8 157:22 158:6              158:9  <b>newer</b> 115:17  <b>news</b> 138:13  <b>nice</b> 10:22 40:4,5 58:19</p>
--	---	--	---

<p>96:23  <b>night</b> 7:15 11:9  <b>nine</b> 19:11,17 23:24          61:24  <b>nipped</b> 34:22  <b>nitrous</b> 17:11  <b>Nobody's</b> 106:4  <b>noise</b> 34:3 131:16  <b>noncompliance</b> 25:5  <b>nonprofit</b> 62:19 64:10  <b>nonrenewable</b> 40:19  <b>non-polluting</b> 98:23  <b>non-profit</b> 126:19  <b>noon</b> 136:13  <b>north</b> 42:13,15 43:16          79:2 86:7 117:14,24          117:25 121:8 122:10          156:16  <b>Northwest</b> 42:20  <b>Notary</b> 159:11  <b>note</b> 112:9  <b>notes</b> 159:6  <b>notice</b> 18:12 40:22 41:2          41:19,21 42:2,14,16          43:22 44:23 45:3 50:5          60:15 146:15 155:23  <b>notices</b> 146:20  <b>November</b> 147:14  <b>nuclear</b> 27:20,21 28:23          31:9 43:15 98:13          99:13,13,14 114:2,25          128:24 133:14 134:14          147:10,15,16 148:1          148:11  <b>number</b> 12:23 37:4,9          65:18 67:9 82:1 156:4  <b>numbers</b> 49:23,24 50:8          50:16 56:9 139:1          146:16 147:20,24  <b>numerous</b> 73:10  <b>nurse</b> 94:3</p> <hr/> <p style="text-align: center;"><b>O</b></p> <hr/> <p><b>O</b> 2:1  <b>objectives</b> 62:15</p>	<p><b>observation</b> 138:4  <b>obtain</b> 79:15  <b>obviously</b> 2:16 42:13          67:6,12 77:2 109:20          124:19  <b>occasionally</b> 106:5  <b>occurred</b> 64:23  <b>occurring</b> 72:21 158:7  <b>ocean</b> 16:21 18:17,25  <b>October</b> 3:24 133:9  <b>odds</b> 124:18  <b>offended</b> 99:12  <b>offer</b> 74:9 83:16,18          119:17,24 140:3,5,5  <b>offered</b> 74:20,23,24          84:4 104:8 112:22  <b>offering</b> 75:9  <b>offers</b> 101:9 119:21  <b>office</b> 58:22 93:5  <b>officials</b> 73:12 143:16          153:3  <b>offset</b> 51:15 66:21          71:12 72:5  <b>offsets</b> 64:5  <b>offsetting</b> 72:23  <b>offshore</b> 18:12 19:2          27:10 30:12,13,18,23          31:3,14,15,22 133:13          133:14 134:2,12  <b>Oh</b> 33:10  <b>oil</b> 31:8 52:20 71:13          94:20 98:10,20 134:2          134:12  <b>okay</b> 14:6 16:11,25          17:22 19:7,10 20:22          20:23 21:1,1,3,20,21          22:4,20 23:1,5 24:8          24:15,16,19,20,25          25:5,17 26:6,11 27:4          27:11,18 28:2,10,12          28:13,17,19 30:8,15          31:3 32:13,20 34:12          35:11 37:2,23 38:2          41:3,15,22 42:1,5,24          43:1,3,4,6,9,16,24</p>	<p>44:19 46:4,14 47:1,10          47:21 48:19 49:3,17          49:18,21,25 50:4,10          50:18,22 51:1,3,5,15          51:16,18 52:6,7,14,20          53:12 54:8,10,16,18          54:24 55:4,5,10,17,19          55:20,23 56:13,22,23          57:19 58:18 59:3,8,11          60:11 76:6 80:15,20          84:6 85:15 89:5 97:13          116:16 118:7 125:15          136:9 137:2,9,24          141:8,24 142:15          146:2,11 150:12          151:14 153:25 154:1          154:5,19,25  <b>old</b> 96:14,15 103:21          115:5  <b>olds</b> 60:8 93:22,23,24  <b>Olympics</b> 11:9  <b>once</b> 24:24 69:2 70:16          140:20 141:14  <b>ones</b> 7:14,18 10:9 40:25          55:13 60:17 109:1,5          117:22 145:12  <b>one's</b> 47:3 75:21  <b>online</b> 2:5 147:19  <b>onshore</b> 18:13  <b>onsite</b> 90:20 91:5  <b>oops</b> 109:19  <b>open</b> 15:15 38:10 94:3          102:22 119:18 125:5          125:10 128:1 135:22          136:5 140:1  <b>operation</b> 141:11  <b>operational</b> 3:8 85:4  <b>operations</b> 83:10 86:4          104:2  <b>opinion</b> 33:11,15 95:19          98:17 102:11 103:10          105:11 152:16,25  <b>opportunities</b> 5:25          45:10 51:24 72:8,25          78:23 83:18,19</p>	<p>154:14  <b>opportunity</b> 18:3 83:16          88:14 93:16 111:1,2          111:11 127:16 157:24  <b>oppose</b> 140:23  <b>opposed</b> 130:16  <b>optimistic</b> 88:19  <b>option</b> 65:21 69:7          75:16  <b>options</b> 11:25 43:3 44:5          44:7 55:16 66:12  <b>Orange</b> 1:9 2:4,5,20,25          3:14 4:22 5:11 8:8,11          8:21 9:19 10:19 20:6          51:10,10 68:13 73:6          83:4 110:12 120:17          155:8 159:2  <b>order</b> 10:8 22:17 23:11          30:3,3 63:22 75:6          98:8 156:14  <b>orders</b> 23:12,13  <b>ordinances</b> 5:11 10:24          135:12  <b>Oregon</b> 122:9  <b>organization</b> 6:6,13          11:4 61:21 104:1          126:17,18 132:15          136:16,20  <b>organizations</b> 110:6  <b>organized</b> 34:4,10          138:19  <b>organizing</b> 5:6 7:18          34:11  <b>originally</b> 121:4 143:6  <b>Orlando</b> 1:18,24 6:16          6:23 7:1 12:20 13:17          13:18 15:2 51:9,17          61:17 63:5 73:6,8          76:19 88:7 93:25          157:2 158:3  <b>OUC</b> 26:5,6,7,7 61:20          61:22 62:16 65:2 73:4          73:24 75:3 77:9 81:7          83:2,7 97:21 98:1,1          101:9 102:25 107:13</p>
--	--	--	--

<p>154:4,5  <b>OUC's</b> 73:23 76:15  <b>ought</b> 11:13 17:22 82:5            91:6 145:6 156:17  <b>outline</b> 16:17  <b>output</b> 72:4 76:22  <b>outs</b> 41:14,18  <b>outside</b> 95:7 110:22            128:1 147:5  <b>overall</b> 31:24,25 85:6  <b>overbuild</b> 72:1  <b>overcharged</b> 50:22            51:1  <b>overcome</b> 67:23 79:19            105:8 143:11  <b>overriding</b> 116:17  <b>overseas</b> 67:14  <b>owned</b> 25:21 62:20            64:13,16 97:2,11  <b>owner</b> 37:25,25 86:17            87:4 90:23  <b>owners</b> 90:16 104:5            107:12 108:12  <b>oxide</b> 17:11,11  <b>o'clock</b> 71:16,16 72:16            72:17 113:9</p> <hr/> <p style="text-align: center;"><b>P</b></p> <p><b>P</b> 2:1  <b>Pacific</b> 42:20  <b>pack</b> 142:12  <b>package</b> 7:12  <b>page</b> 16:3  <b>pages</b> 10:11 159:5  <b>paid</b> 51:11 55:13 101:8            102:1,5 124:4 137:5  <b>panel</b> 26:25 84:6 85:16            85:22 89:7 102:22,23            106:9 136:1,20            137:24 156:16  <b>panelists</b> 84:10  <b>panels</b> 36:21 56:2,3            57:3 58:8 109:3,3,6  <b>paper</b> 65:24  <b>papers</b> 137:18</p>	<p><b>paradigm</b> 123:25  <b>parallel</b> 36:17  <b>part</b> 2:5 26:10 33:16            42:24 43:1 64:12            76:16 93:6,10 96:12            97:22,25 99:1 100:24            105:21 107:5 137:10            144:14  <b>participant</b> 155:17  <b>participants</b> 10:17  <b>participate</b> 78:18            143:24  <b>participated</b> 4:14  <b>participating</b> 139:22  <b>particular</b> 8:7 24:21            40:1 67:23 71:6 83:24  <b>particularly</b> 65:16            72:15  <b>parties</b> 133:10 144:13  <b>partner</b> 8:1  <b>partners</b> 6:3,10 8:9  <b>partnerships</b> 83:2  <b>parts</b> 21:9,10  <b>party</b> 112:25 144:14  <b>partyists</b> 138:13  <b>pass</b> 25:24 27:8,10 29:1            30:2,18 40:1 91:23            133:14 153:25  <b>passed</b> 12:9 13:9 21:1            27:8 28:25 29:6,15,16            29:19 30:17 33:17            35:21,22 88:2 123:8            127:20 128:19 129:11            146:12  <b>passes</b> 13:4 134:25            136:18  <b>passing</b> 30:23  <b>passion</b> 86:24  <b>passionate</b> 155:20  <b>path</b> 36:17  <b>patient</b> 126:10  <b>pause</b> 132:25  <b>pay</b> 42:8,9,10,10,15            47:12 49:14 50:21            54:15 75:6 77:8 90:21</p>	<p>91:19 102:2 113:2            122:3 131:4 146:19            149:18 150:17  <b>payback</b> 56:21,23            94:12,12 150:10  <b>paybacks</b> 57:1 149:23  <b>payers</b> 87:7  <b>paying</b> 41:25 42:3 43:2            43:10,13 49:19 54:21            55:14,25 57:2,24            90:21 91:6  <b>payment</b> 74:19 117:2,4            118:11,24 121:24            122:1,3 151:2 157:5  <b>peak</b> 70:4,11,12,13,20            70:23 71:10,15,20            72:15,16,24 114:7            154:23  <b>peaking</b> 154:12  <b>peaks</b> 154:24  <b>peanuts</b> 103:6  <b>peeking</b> 70:21 113:5,6            113:8  <b>peel</b> 118:25  <b>penalties</b> 25:4,4  <b>penalty</b> 25:10 41:1  <b>pending</b> 66:15  <b>penetrate</b> 104:9  <b>penetrations</b> 104:25            105:2  <b>penny</b> 36:5,5 146:11  <b>pension</b> 103:4,7,11  <b>people</b> 5:18,20 9:19            12:23,23 18:14 30:14            35:9 42:8 43:1,7,20            47:12,15 50:15 53:6            56:4 57:4,9 59:10            73:12 74:12 87:24            90:12 91:14 92:4,11            93:21 94:23 95:22            99:6,12 100:19,21            111:13 116:11 117:25            125:7 134:24,24            136:11 137:8 138:1            138:13 144:21 149:4</p>	<p>154:5 156:4 157:5,8            157:15 158:7,10,14  <b>percent</b> 11:14,15 12:9            12:11 16:10,10 17:15            17:16 21:23,24 22:8,9            22:10,11,12,15,20,20            22:23,24,25 23:1,4,5            23:8,10,15,16,17,24            23:25 24:1,18,19 25:1            25:2,16,21,23,25            26:14,15,25 27:15,18            27:25 28:3,4,7,12,17            28:20 36:10,12 41:7            41:12 46:7,9 50:5,6            50:17 52:2,4,4,7            56:12,15,15,17 57:12            57:13,19,21 60:2 63:6            64:7 65:5,6,14 66:15            68:6 71:17 72:3 75:19            75:19 77:3 80:13,16            80:19,21 81:4,6,8,18            82:4 106:3,24 110:18            111:7,16 112:5            113:18 115:25 116:7            116:15 117:13,14,15            117:16,17 120:18,25            121:3,3,13,13 122:7            122:10,17,18,21            123:8,9,11 127:17            133:20 146:13 147:15            147:16 148:9 150:7  <b>percentage</b> 22:12 27:19            40:9 41:3,5 115:22  <b>percentages</b> 154:9  <b>perfect</b> 106:4,23  <b>perfectly</b> 105:16  <b>perform</b> 154:1  <b>performance</b> 152:24            153:2,11,18,24 154:2            154:3  <b>period</b> 52:20 71:20  <b>permanent</b> 90:1  <b>permitted</b> 153:4  <b>permitting</b> 143:14,21  <b>perpetuate</b> 92:16</p>
--	---	--	---

<p><b>person</b> 52:14 53:5,5 76:24 89:12 140:17</p> <p><b>personal</b> 62:15 91:15</p> <p><b>personalized</b> 5:1</p> <p><b>personally</b> 36:22</p> <p><b>perspective</b> 61:7 62:5,9 67:22 83:5 84:7 85:8 91:4 133:13 153:5</p> <p><b>philosophy</b> 104:4</p> <p><b>photovoltaic</b> 86:12</p> <p><b>photovoltaics</b> 49:8 66:8 86:14</p> <p><b>pick</b> 5:20 10:9 126:12</p> <p><b>picked</b> 9:18 134:22</p> <p><b>picture</b> 45:22 51:7 142:21</p> <p><b>pictures</b> 45:17</p> <p><b>piece</b> 67:3,4 77:11 103:17 149:21</p> <p><b>pigs</b> 117:24</p> <p><b>pilot</b> 78:19</p> <p><b>Pine</b> 1:17</p> <p><b>pitted</b> 134:12</p> <p><b>place</b> 8:25 29:23 37:17 68:12 69:3,3 97:24 100:17 101:13,21 115:7 117:12 121:22 128:3 134:20 141:9 147:25 152:6,13,23 155:19 156:21 157:13</p> <p><b>placed</b> 120:11</p> <p><b>places</b> 5:4 95:3 154:16</p> <p><b>plan</b> 33:2,3 131:21,23 132:1 133:10,24 134:17 135:1 136:18 147:12,13,25</p> <p><b>planet</b> 144:25</p> <p><b>planning</b> 64:2,3,19 67:21 71:21 72:1 81:22 84:20 135:10 148:14</p> <p><b>plans</b> 41:4</p> <p><b>plant</b> 17:5 37:25 40:18 47:24 49:15,20 50:10 70:8 118:17 158:5</p>	<p><b>plants</b> 45:14 46:5 48:12 49:20 51:24 70:5,6,16 70:22 95:3 113:5,6,6 114:1,24 147:19</p> <p><b>plant's</b> 48:9</p> <p><b>plasma</b> 56:25</p> <p><b>plastic</b> 109:3</p> <p><b>Plasticine</b> 138:7</p> <p><b>plate</b> 59:2,11</p> <p><b>play</b> 31:17 35:13 86:25 99:18 139:19 154:13</p> <p><b>players</b> 31:8 139:18</p> <p><b>plays</b> 98:7</p> <p><b>please</b> 35:11 57:6,6 60:13,14 80:4 125:9 132:17 133:6 135:20 151:22</p> <p><b>pleased</b> 156:18</p> <p><b>pleasure</b> 85:15</p> <p><b>plenty</b> 15:24 103:2</p> <p><b>plot</b> 52:13</p> <p><b>plug</b> 9:3,8</p> <p><b>plus</b> 53:15 54:16 55:1 74:2 75:1 77:3 78:8 78:11 101:9</p> <p><b>pocket</b> 25:11 150:11</p> <p><b>podium</b> 3:13 14:13 103:15 155:11</p> <p><b>point</b> 13:15 45:9,16 47:15 52:11 57:20 59:22 65:13 70:6 104:24 109:10 114:4 127:13 129:21 131:24 133:1 154:22</p> <p><b>pointed</b> 40:7,22 44:9 45:6 48:23 72:6 113:11 149:16,16 154:11,24</p> <p><b>pointing</b> 113:19</p> <p><b>points</b> 25:4</p> <p><b>poison</b> 34:9</p> <p><b>polarized</b> 12:4</p> <p><b>policies</b> 13:13 43:19 63:21 87:15 98:2 121:15 126:21 130:2</p>	<p>130:5 132:23 138:21 149:22 150:1</p> <p><b>policy</b> 12:5 15:4,14 16:2 19:8,15,23 20:12 20:21 26:9 31:7 46:17 47:11 48:15 54:21 62:8 85:11 87:4 110:9 116:20 130:14,20 139:8,10 142:3 144:1 149:5 151:4 152:22</p> <p><b>political</b> 95:18 144:15 151:9</p> <p><b>politically</b> 144:9</p> <p><b>politicians</b> 60:3,7,10 144:11</p> <p><b>Polk</b> 108:22</p> <p><b>poll</b> 146:11,14</p> <p><b>polls</b> 131:1</p> <p><b>pollutants</b> 17:11</p> <p><b>pollutes</b> 95:25</p> <p><b>pollution</b> 39:19 96:16</p> <p><b>pool</b> 86:19 109:2</p> <p><b>pop</b> 109:22 136:6</p> <p><b>popping</b> 109:16</p> <p><b>portfolio</b> 1:10 4:18 16:4,4,12 21:3 22:22 27:16,17,17 29:12,16 30:1,2,10,21 36:11 40:6,8 64:1 89:8 90:9 94:18 98:5 103:21 111:8 114:15 127:7 127:20,22 128:21 139:17 147:23 151:7 151:24</p> <p><b>portfolios</b> 133:22</p> <p><b>Portilla</b> 29:8,22</p> <p><b>portion</b> 76:20 89:25 107:2</p> <p><b>pose</b> 85:22</p> <p><b>posed</b> 100:1</p> <p><b>position</b> 12:8 35:14 128:9 147:23</p> <p><b>positive</b> 77:19 78:19 100:3,6 101:2 109:15 109:18</p>	<p><b>possibilities</b> 4:3 82:17</p> <p><b>possibility</b> 48:21 123:6</p> <p><b>possible</b> 63:22 65:21 79:3 82:10,12 83:23 83:24 114:21</p> <p><b>possibly</b> 76:1,20 81:19</p> <p><b>potential</b> 4:3 17:25 18:8,12 19:3 62:13 109:15 110:14 111:6 111:22 158:9</p> <p><b>potentially</b> 61:12 68:10 125:20</p> <p><b>power</b> 6:22 7:1 15:3 16:5 30:4,5 40:18 45:13 47:24 48:9,12 49:15,20,20 50:9 51:24 70:5,6,8,22 73:23 78:3 97:18 107:23 112:22 113:12 113:15 114:1,24 115:18 124:13 141:11 141:21,22 148:8 156:13</p> <p><b>Powerpoints</b> 8:13</p> <p><b>PPA</b> 78:8 87:22 107:16 107:24</p> <p><b>PPA's</b> 107:20</p> <p><b>practice</b> 14:20</p> <p><b>practices</b> 14:9 125:21</p> <p><b>practitioners</b> 39:4 86:8</p> <p><b>preapprove</b> 152:8</p> <p><b>Precourt</b> 35:5 37:13 133:12</p> <p><b>predictable</b> 69:15</p> <p><b>preempt</b> 123:12</p> <p><b>prefer</b> 46:11</p> <p><b>prefiled</b> 29:21 30:11</p> <p><b>preheats</b> 76:12</p> <p><b>premium</b> 117:2</p> <p><b>prepare</b> 23:14</p> <p><b>prepared</b> 9:21 111:5 138:9</p> <p><b>presence</b> 4:4</p> <p><b>present</b> 4:5 16:2</p> <p><b>presentation</b> 8:12</p>
--	---	--	--

<p>15:18,23 32:20 110:2 113:12 116:21 126:12 127:14 140:1 147:8 <b>presentations</b> 8:19 11:12,19 148:18 <b>presented</b> 125:11 <b>presenting</b> 5:15 <b>presided</b> 86:21 <b>president</b> 19:11 29:10 85:24,25 95:8 126:2 126:15 <b>presidents</b> 103:11 <b>press</b> 9:7 58:4 <b>pressure</b> 83:17 <b>pretty</b> 53:18 67:3 69:20 74:5 75:18 96:23 109:5 112:8 114:13 120:18 121:17 126:11 129:8 135:18 <b>prevention</b> 39:19 <b>previous</b> 3:18 <b>previously</b> 143:11 <b>price</b> 22:3 26:13 41:24 42:1,9,17 43:17 44:6 50:23 51:2 53:16 54:3 54:4,7,8 97:4 114:7 119:8,13,14 120:5,7,8 120:13 144:3,4,21,23 144:25 145:3 146:21 149:8 <b>prices</b> 45:4 55:14,15 63:24 103:4 119:22 127:10 149:8 <b>pricing</b> 69:2 <b>primarily</b> 70:14 111:11 121:8 <b>principals</b> 132:5 <b>prior</b> 39:16 61:21 87:11 108:18 <b>priorities</b> 4:24 <b>priority</b> 10:9 133:13 <b>private</b> 100:15,17,18 <b>probably</b> 19:6 36:12 60:8 72:19 77:16 88:23 90:12 98:2 99:3</p>	<p>99:4 103:6,7,8,17 127:1 130:1 154:17 154:18 156:3 <b>problem</b> 32:6 34:16 43:1 55:9 56:13 57:3 95:12 105:4,6 112:21 119:5 130:20 134:13 138:20 141:18 149:17 154:11 <b>problems</b> 46:15 54:19 55:5 106:1 108:14 141:20 142:10 149:9 151:11 <b>proceedings</b> 140:11 <b>process</b> 4:16 5:10 6:14 72:1 79:5 110:7,25 111:3 139:24 <b>processing</b> 18:5 66:23 <b>produce</b> 16:6 75:2 124:15 151:17 <b>produced</b> 16:18 32:8 66:3 123:1 127:10 <b>producer</b> 142:23 <b>producers</b> 126:3,16,25 133:25 <b>produces</b> 99:9 <b>producing</b> 112:6 <b>production</b> 74:16 75:6 78:9 127:23 156:10 156:13 <b>productive</b> 38:12 <b>products</b> 17:4 56:22 79:2 94:21 109:10 <b>professional</b> 84:14 86:2 159:4 <b>professor</b> 39:13,17 <b>profile</b> 71:7 113:10 <b>profit</b> 59:7 107:15 <b>program</b> 33:4 39:11 73:20 74:20 75:5,8,11 75:12,17 77:15,16,18 78:18,20 93:15 101:21 103:17 115:16 120:11 122:19 130:17 133:17 137:22 152:6</p>	<p>152:7,15 153:11 <b>programs</b> 8:3,4,6 39:21 39:25 61:19 62:22,23 63:10 64:11 74:9,11 84:4 88:18 91:19,19 92:25 93:2 97:24,24 98:3 100:10 120:20 123:15 130:16 143:23 153:12,16,22 154:4 <b>progress</b> 82:24 91:1 134:5,19 143:4 <b>progressive</b> 97:21,22 128:11 <b>project</b> 40:1 68:13 73:18,22 74:8 75:14 75:21 76:8,9,10,15,22 80:13,15 83:25 84:20 84:25 86:12 90:11 112:7,25 122:5 134:4 134:10 <b>projects</b> 49:12,25 66:9 68:15 73:21 75:20,23 76:3,6 78:14,22 79:18 89:22 90:11 93:10 130:15 158:7 <b>proliferation</b> 94:15 <b>promise</b> 66:2 99:5 <b>promised</b> 38:9 109:20 125:9 <b>promote</b> 3:5 127:10 <b>promoting</b> 63:9 150:21 <b>prompt</b> 60:23 <b>prone</b> 43:20 <b>properly</b> 105:3,10 153:4 <b>property</b> 49:11 143:5 149:21 <b>proposal</b> 27:7 <b>propose</b> 95:14 <b>proposed</b> 142:5 <b>prospectives</b> 125:18 <b>protect</b> 111:4 127:11 <b>protecting</b> 157:18,18 <b>protection</b> 21:5 31:23 110:11 112:15</p>	<p><b>proton</b> 39:11 <b>proud</b> 76:16 156:11 <b>prove</b> 128:10 <b>provide</b> 7:7 12:16 67:4 72:11 82:19 102:7 115:6 147:11,19 152:24 <b>provided</b> 4:13 24:23 131:2 <b>providers</b> 112:25 <b>provides</b> 64:19 111:1 130:14 <b>providing</b> 23:15 58:23 84:21 118:15 132:1 <b>provisions</b> 117:5 <b>proximity</b> 115:8 <b>PSC</b> 34:18,19 140:20 147:11,17 <b>public</b> 15:3 19:20,21 20:17 21:2,11,15,16 23:14,19,23 26:2 28:11 29:18,20 39:4 55:2 83:3,6 101:24,25 102:5,17 103:19 110:8 116:3 119:21 122:7 130:12,19 131:2,3 133:17 140:8 146:16 150:16 159:11 <b>public's</b> 127:11 <b>published</b> 21:18,19 <b>pulled</b> 70:11 143:8,8 <b>pump</b> 154:15,17 <b>punting</b> 155:2 <b>purchase</b> 44:10 53:12 73:23 112:22 122:15 <b>purchases</b> 120:24 <b>purchasing</b> 69:24 <b>pure</b> 36:10 <b>purpose</b> 4:15 19:13,13 158:12 <b>purposes</b> 67:14 71:4 130:4 <b>pursue</b> 62:22 63:12 64:14 68:18 75:16 <b>pursuing</b> 65:21 67:12</p>
---	---	--	--

<p>69:8  <b>push</b> 33:12,13 92:1,24          129:17 149:2,12          158:12  <b>pushed</b> 149:6  <b>pushing</b> 74:13 88:1  <b>put</b> 2:5 27:24 37:23          41:24 46:7 48:25          49:11,12 50:19 51:10          54:21 57:6,9 58:7,17          58:23 59:17 60:3,6          65:3,9 67:5 71:22          79:11 81:25 90:15          91:4,14 95:3,16,19,20          95:21 96:19 99:13          101:13,21 103:23          104:1,20 105:14,16          107:3,10,22 108:23          129:19 133:17 145:2          146:16 149:25 150:11          150:15 152:23  <b>puts</b> 86:2  <b>putting</b> 2:21 13:24          45:19 51:25 56:3          58:10,21,24 91:9 92:9          96:3 103:19 104:5          108:9 129:4 144:2          156:10  <b>PV</b> 13:10 26:14,25          51:11 52:4,8 55:18          56:1 57:3,9 58:7,11          58:17,23,24 59:19          60:3,6 69:20 70:1,3          71:2,3,6,7 72:21          73:22 74:11,25 75:14          75:19 86:19 92:9,11          103:8,23 104:5,21          105:16,17,21 106:6          107:10 114:7  <b>PV's</b> 103:19  <b>p.m</b> 1:16 70:21,23          158:22</p> <hr/> <p style="text-align: center;"><b>Q</b></p> <p><b>qualifications</b> 152:8</p>	<p><b>qualified</b> 92:10 152:10  <b>qualities</b> 85:6  <b>quality</b> 127:11 152:17          152:21  <b>quantity</b> 54:11  <b>quarter</b> 111:15  <b>question</b> 10:8,11,14          11:17 42:14 44:7 89:7          94:7 98:25 101:15          102:23 103:16 106:16          108:3 138:3 139:9          143:25 146:2 151:23          154:10  <b>questions</b> 10:25 12:18          15:24 32:21,24 38:4,6          38:13 79:22 80:3 81:1          82:25 85:18,21,22          86:7 87:3 102:22          103:14 106:11,13          110:4 125:12 133:1,4          133:5 135:9,22,23          136:22 137:21 138:1          139:9 148:19,21  <b>quick</b> 9:20 59:22 80:2          80:4 106:11,16  <b>quicker</b> 60:8  <b>quickly</b> 66:3 106:12,14          110:2 111:21 157:7  <b>quiet</b> 81:2  <b>quietly</b> 12:7  <b>quite</b> 47:15 68:11          105:15 110:17 150:18          154:21  <b>quote</b> 11:22 35:11  <b>quoted</b> 32:4 58:5  <b>Q&amp;A</b> 38:10 60:21          79:24 125:5 136:9          155:3</p> <hr/> <p style="text-align: center;"><b>R</b></p> <p><b>R</b> 2:1  <b>race</b> 14:4  <b>racking</b> 104:8,11  <b>radius</b> 112:7  <b>rail</b> 78:25 79:3 157:1</p>	<p><b>rainfall</b> 18:7  <b>raise</b> 64:20 88:25 134:9  <b>raised</b> 41:9,10 128:6  <b>raising</b> 69:25 89:11          130:22  <b>ramp</b> 70:16,19  <b>ran</b> 2:22 37:7  <b>range</b> 37:21  <b>rank</b> 10:8  <b>ranked</b> 110:19  <b>ranking</b> 35:9  <b>rate</b> 21:23 22:9,11,11          22:12,20,23,25 24:17          24:17 25:7,9 26:17          27:12 28:10,10,16,16          28:21,21,24 34:20,22          36:8,9,13 52:22 65:12          65:14 71:17 77:14          78:9,11 81:16,18 87:7          104:3 110:11 112:14          121:11,12,12,16,22          122:5,10,11 127:17          133:9 147:18 151:3  <b>rated</b> 72:4  <b>ratepayers</b> 111:4  <b>rates</b> 26:1,1 34:20          63:23 64:20 69:25          75:17 77:15 102:4          113:2 124:14  <b>rating</b> 25:13  <b>ratings</b> 150:2  <b>rays</b> 47:21  <b>reach</b> 5:4 6:17 12:10          27:25 132:16,19  <b>reactors</b> 115:1  <b>read</b> 9:23 23:11  <b>readily</b> 98:23  <b>reading</b> 137:18  <b>ready</b> 9:21 68:14 79:11          132:10 148:15  <b>real</b> 14:22 26:4 47:20          47:20,22,23 48:2,3,4          48:14,17 54:18,24          59:22 68:9 80:4 111:1          124:22 146:10</p>	<p><b>reality</b> 24:5 91:4  <b>realize</b> 23:20,21 31:11          50:4 146:23 151:9  <b>realized</b> 5:21 120:24  <b>really</b> 4:8 7:25 11:12          24:3 28:8 34:12,12,13          38:20 46:25 54:11          57:7 62:9 63:16,20          66:6 69:11 72:23 73:3          74:13 76:15 81:16          83:17,19 87:2,10          89:16 106:14 113:10          117:13,18 122:23          124:1 127:8 129:3          130:18 133:23 134:8          134:10 138:19 139:19          144:20,22 145:17          148:1 152:14,14          153:20 156:6,8 158:3  <b>reappoints</b> 23:21  <b>reason</b> 17:8,24 41:22          42:24 43:9 56:7          138:14,16 142:16          147:10  <b>reasonable</b> 11:14  <b>reasons</b> 17:7 43:19          113:16 128:7,8 130:1  <b>rebate</b> 50:24 57:20          130:17 146:20 153:12  <b>rebates</b> 57:23 58:1  <b>rebuttal</b> 32:22  <b>REC</b> 24:14 118:19          119:8,22  <b>received</b> 62:1 73:8  <b>receptive</b> 137:1  <b>recognize</b> 7:16 137:14  <b>recognizes</b> 152:11  <b>recommend</b> 20:20 23:2  <b>recommendation</b> 20:20          20:22 23:8 140:16,24  <b>recommendations</b> 4:17          4:24 10:8 20:3,10,15          21:19,20  <b>recommended</b> 20:17          23:2,3,6 28:11 29:20</p>
--	--	---	---

<p>151:8  <b>recommending</b> 58:15  <b>reconsidered</b> 143:7  <b>record</b> 12:21 14:14  38:6 159:6  <b>recorded</b> 2:5  <b>recover</b> 124:20  <b>recovery</b> 25:18 30:8  34:18,19 102:12  <b>RECs</b> 24:11 25:3 64:6  <b>REC's</b> 118:20 119:1  <b>redo</b> 7:15 21:9  <b>reduce</b> 17:8 115:7  145:10  <b>reduces</b> 17:13 115:8  <b>reducing</b> 59:5 85:4  <b>redundant</b> 91:13  <b>referendum</b> 95:14,20  96:4 135:5 138:5,8  139:3  <b>referred</b> 22:18 91:8  <b>referring</b> 22:3  <b>reflect</b> 36:17  <b>reframe</b> 112:18  <b>regard</b> 85:19 92:14  129:4  <b>regarding</b> 128:16  143:5 154:8  <b>region</b> 2:12  <b>registered</b> 12:24 159:4  <b>registration</b> 6:14  <b>regulate</b> 145:5  <b>regulated</b> 124:5 140:20  <b>regulates</b> 120:4,5  <b>regulation</b> 63:21 65:10  124:2 145:16  <b>regulations</b> 63:21  110:16  <b>regulatory</b> 14:21  <b>rehash</b> 127:1  <b>related</b> 6:15 8:6 73:11  126:4  <b>relatively</b> 66:24 69:14  <b>released</b> 4:12,22 10:5  147:13</p>	<p><b>releases</b> 9:7 58:4  <b>relevant</b> 157:9  <b>reliability</b> 63:2  <b>reliable</b> 124:8,12  <b>relief</b> 115:6  <b>reluctant</b> 137:11  <b>rely</b> 72:20 152:7  <b>remaining</b> 138:2  <b>remarks</b> 11:22  <b>remember</b> 44:17  120:19 123:11 141:15  156:4  <b>remind</b> 46:2,19 50:22  149:20 150:9  <b>reminder</b> 14:12  <b>reminds</b> 155:24  <b>remote</b> 30:10 109:7  <b>remove</b> 141:4,4  <b>renewable</b> 1:10 4:18  9:11 12:6 13:9 14:19  16:4,4,6,8,9,12,14,16  16:18,22 17:9,10,25  19:22 20:14,15,18,20  20:21 21:3,22,24 22:5  22:6,22,22 23:12  24:10,11,13 25:20  26:9 27:10,16 29:1,12  29:12,16,25 30:1,2,4  30:5,7,10,21,21 31:16  32:7,12,15 34:6 39:6  40:6,8,10,15,19 51:15  54:20 61:18 62:22  63:9,12 65:1,6 76:2  82:21 87:16 89:8 90:8  90:24 92:14,14 94:18  96:15 97:3 98:5  104:18 110:9 111:7,8  112:13,17 114:20,22  115:20 116:16,22  117:1,23 118:1,7,7,9  118:10,12,12 119:7  120:10,24 122:5  126:2,5,16,20,22  127:7,9,19,21,23  128:2,11,16,21</p>	<p>130:15 131:6,10,11  132:13 133:22,25  134:7,8,13,16 138:11  138:21 139:17 141:10  142:11 147:23 148:1  150:21,25 151:7,24  155:9  <b>renewables</b> 12:9 31:9  31:10 34:14,17 36:11  37:6 45:10,11,12  54:15 55:3 58:21 59:8  64:17 65:17 71:1  72:19 82:18 89:2  114:5,14,15 115:13  115:23 147:1 148:8  148:15 150:17 154:8  <b>renewably</b> 51:14  <b>renovating</b> 13:24  <b>repeat</b> 151:22  <b>Rephrase</b> 101:18  <b>replacing</b> 56:17  <b>replenished</b> 37:8  <b>replenishes</b> 16:23  <b>report</b> 9:18,20 20:11  21:6,18 27:6 108:23  159:5  <b>Reported</b> 1:19  <b>Reporter</b> 159:1,4  <b>REPORTING</b> 1:23  <b>represent</b> 5:20 61:15  136:1,17 137:4  <b>representative</b> 5:3  <b>Representatives</b> 94:8  123:22 129:8,19,25  <b>represented</b> 112:4  <b>representing</b> 3:1 19:21  <b>represents</b> 118:9,11  <b>republicans</b> 132:8  <b>require</b> 32:7 69:9  111:17 132:12 150:1  <b>required</b> 24:13 97:1,3  <b>requirement</b> 16:5 40:9  <b>requirements</b> 25:16  115:3 143:14  <b>requires</b> 145:25 147:11</p>	<p><b>research</b> 9:13 26:22  39:1,5,7,9,11,18,20  154:20  <b>reserve</b> 148:9  <b>residence</b> 105:16  <b>residences</b> 45:20,21  105:17  <b>residential</b> 41:24 87:21  92:2 100:9 101:7,11  106:25 122:13  <b>resides</b> 61:20  <b>residues</b> 65:24,24,25  <b>resistant</b> 109:8  <b>resolved</b> 124:23  <b>resource</b> 7:23 47:7,9,16  62:7 68:18 90:25  115:16 116:24 117:23  118:1 126:5 139:24  148:14,22  <b>resources</b> 13:16 28:18  28:20 48:3 55:8 65:19  92:14 110:5 111:12  116:23 117:20  <b>respect</b> 126:21 128:2  128:11 132:15 134:1  <b>respectively</b> 119:23  <b>respects</b> 128:3  <b>respond</b> 11:1 144:21  144:22,24,24,25  <b>responds</b> 40:11  <b>responsibilities</b> 157:20  <b>responsible</b> 61:12  <b>rest</b> 33:3 52:21 76:14  88:16,17  <b>restrooms</b> 60:24  <b>result</b> 43:19 55:14  157:22  <b>results</b> 10:4 39:4  <b>retail</b> 21:25 22:13,14  41:24 77:14 113:2  121:22 122:5  <b>retain</b> 78:13  <b>return</b> 34:21,22 57:12  57:13,21 101:5,9  102:2</p>
--	--	--	--

<p><b>revenue</b> 31:13 124:20  <b>revenues</b> 49:10 50:1,3  <b>review</b> 24:23  <b>reviewable</b> 26:1  <b>reviewer</b> 84:18  <b>revise</b> 81:24  <b>RFA</b> 59:16  <b>rhetoric</b> 95:12,12  144:10  <b>ribbons</b> 72:7  <b>rich</b> 111:12  <b>Richmond</b> 1:19 159:4  159:10  <b>right</b> 7:22 21:8 23:1  25:11,14 31:21,22  32:14,14,15 33:1 36:4  40:14 41:13 42:11  43:5,19 44:1,16 45:24  49:23 54:3,10 57:2,16  59:12 61:1 62:6 63:23  63:24,24 64:8 69:21  70:1,21 71:3 72:16,17  73:22 74:10 75:14,23  75:25 77:5 80:6,14  81:2,6,12 83:12 90:13  93:5,7 95:4 97:2,4  100:2 103:14 104:7  105:25 109:19 110:16  116:25 117:12 118:2  118:12,17 123:5  124:25 125:8 130:10  140:11 142:10 143:10  146:5,22 148:16  151:19 152:1 157:24  158:11  <b>rights</b> 18:23 31:15  <b>right-of-ways</b> 48:5  <b>ringer</b> 61:3  <b>risk</b> 96:6 102:18  108:12  <b>risks</b> 62:13  <b>River</b> 70:24  <b>Robinson</b> 1:24  <b>Robyn</b> 84:7,8,12,15,19  84:21 85:14 89:4</p>	<p>135:25  <b>rock</b> 142:12  <b>role</b> 150:4 154:13  <b>roll</b> 75:12  <b>Rollins</b> 148:19  <b>roof</b> 48:10 55:19 56:1  57:3,9,17 77:7,21  91:18 103:25 104:21  104:25 105:10,12  106:1,4,5 107:22  109:3  <b>roofer</b> 105:9  <b>roofers</b> 116:10  <b>roofs</b> 52:4,5 103:19,20  103:24 104:2,5,6,9,20  105:1,2 108:11  <b>rooftop</b> 60:6 107:10  <b>rooftops</b> 47:8 48:4 52:1  52:8 90:15,17 91:5  105:20,23,24  <b>room</b> 10:21 38:17 80:2  103:12 113:2 134:24  135:7  <b>root</b> 135:4  <b>roster</b> 11:6  <b>roughly</b> 147:15  <b>RPR</b> 1:19 159:10  <b>RPS</b> 5:1 9:25 10:1,12  10:18 11:13,15,20  12:9 13:4,14,18 14:9  15:16 16:1,2 17:7,23  19:8 20:23 22:18 23:8  23:15 24:16,22 25:16  28:14 32:3,11,11  33:13 34:17 35:8 37:3  40:1 44:4 46:9,11  48:22 51:5 62:10  64:22 85:8,11 87:10  87:11,12,14,24 88:2  88:11 89:2,13 90:1,4  91:24 92:7,13,22 96:7  96:24 97:1 98:7 99:1  99:17,18,19 100:25  101:13,21 106:17,20  106:24 107:1 116:17</p>	<p>117:6,9,16 118:2,8  120:3,11 122:11,12  122:15,25 123:5,6,8  123:11,14,15,18,23  125:17,20 129:6  133:9 134:25 136:17  136:25 145:15 151:20  <b>RPS's</b> 13:20 116:25  117:3,12 140:13  <b>ruin</b> 86:9  <b>rule</b> 21:6 23:14 24:2,3  29:17 82:20 110:7  122:7  <b>rules</b> 21:2 110:15  <b>run</b> 45:14 48:6 102:18  115:16  <b>running</b> 38:1 58:3  70:17 92:2 102:21  111:20 124:11  <b>runs</b> 12:25  <b>rural</b> 117:7 124:13</p> <hr/> <p style="text-align: center;"><b>S</b></p> <p><b>S</b> 2:1  <b>safely</b> 157:2,6  <b>sale</b> 31:15 118:23  <b>sales</b> 14:23 16:8 21:25  22:13,14 27:15 89:18  115:22 124:20  <b>San</b> 4:7,7  <b>Sandy</b> 5:4  <b>Santos</b> 7:20  <b>Sarasota</b> 94:23  <b>sat</b> 86:5  <b>satisfy</b> 133:10  <b>saturation</b> 154:22  <b>Saudi</b> 18:1  <b>save</b> 77:21 110:1  <b>saved</b> 153:17  <b>saving</b> 60:5 144:25  <b>savings</b> 53:10 74:18  78:14 84:1 96:16  116:1,4,15 150:7,15  <b>saw</b> 7:15 133:8  <b>saying</b> 32:4 84:2 90:9</p>	<p>98:17 100:24 130:22  147:25 148:11,24  152:25  <b>says</b> 23:9 31:4,4 34:17  34:18 104:1,2 105:24  131:20  <b>scale</b> 47:18 48:12 84:2  89:14,15 91:25 92:20  92:21 112:1 126:22  <b>scare</b> 114:25  <b>scaring</b> 51:20  <b>scenario</b> 21:22 22:1,7,9  22:10,19,25 52:3  <b>scenes</b> 3:7  <b>schedule</b> 24:6,7  <b>Schmidt</b> 137:14,20  <b>school</b> 58:24 59:23  60:4,5 85:3,5 93:5,6,8  93:13,18 153:25  154:1  <b>schools</b> 58:8,10,18,23  58:24 59:18,19 73:20  87:23 92:9 93:2,4,5  93:17 96:12 104:10  <b>science</b> 61:25 128:4  <b>scope</b> 15:15  <b>screen</b> 8:8  <b>seal</b> 105:10  <b>Sean</b> 7:13,20  <b>seasonally</b> 67:20  <b>seat</b> 61:2 86:15  <b>second</b> 9:3 33:25 60:19  98:9 137:23 149:7,15  <b>section</b> 6:18  <b>sector</b> 2:6,16,18 83:3,6  103:19 110:14  <b>sectors</b> 110:21  <b>secure</b> 100:18  <b>Security</b> 123:7  <b>see</b> 4:11,19 8:5 9:24  15:12 17:3 18:16  23:16 28:5,7,12 29:11  29:12 31:19 38:16  42:23 49:6 50:8,18  53:3,15,18,24 54:2</p>
--	--	---	---

<p>63:14 70:13,14,19,21 71:12 72:2,14,20 75:18,23 76:25 77:17 79:12 81:14,15 87:2 87:10,10,12 88:20,22 89:23 90:15,20 91:12 92:22 93:3,4,8 94:22 96:17 99:21 100:2,18 101:1,14 105:5 108:2 111:10 117:22 119:5 120:15,16 122:8 124:22 130:24 132:2 136:9 142:13 147:19 155:13 <b>seeing</b> 67:19 <b>seeks</b> 29:17 <b>seen</b> 18:19 113:14 117:10 121:18 122:15 122:22 127:5 <b>selected</b> 74:6 <b>self</b> 24:10 25:2 102:10 104:15 <b>sell</b> 24:14,15 37:5 67:17 107:22 118:25 119:1 140:17,18 141:11,11 151:10 <b>selling</b> 51:6 124:19 <b>seminar</b> 60:22 <b>senate</b> 19:12 20:25 21:1,1 27:7,8,11 28:25 29:4,4,5,15,19 30:4,20,23 33:13,13 35:2,19,21,23 88:24 128:19 129:9,23 131:13,14 132:9 <b>senator</b> 5:3 27:12 29:5 29:7,7,8,14,15,21,24 128:18,19,20 129:10 129:11 131:18,21 155:16 <b>send</b> 127:25 <b>senior</b> 9:11 61:22 <b>sense</b> 18:21 36:19 73:24 74:14 82:20 96:15 101:10 104:22</p>	<p>124:9 142:2,14 151:4 154:6 <b>sent</b> 4:25 67:14 93:25 <b>sentences</b> 12:3 <b>Sentinel</b> 93:25 <b>separate</b> 20:10 80:22 <b>sequestration</b> 27:22,24 <b>series</b> 3:1 <b>serious</b> 39:13 <b>serve</b> 142:18,19 <b>served</b> 14:25 15:1,5 19:16 83:13 <b>serves</b> 14:23 39:13 84:16 <b>service</b> 20:17 21:2,12 21:16 23:14,19,23 26:2 28:11 29:18,20 75:16 82:18,22 85:24 110:8 116:3 119:21 122:7 124:8,12 143:17,17 <b>services</b> 1:23 61:20 <b>session</b> 84:6 88:20 129:15 <b>sessions</b> 60:21 73:10 <b>set</b> 11:21 15:17 20:2 23:11 28:16 40:5,8 56:25 64:24 65:1,11 80:8 82:7 92:6 97:6 98:10,12 118:3,3 120:12 121:23 122:23 123:13 124:3 140:17 140:21 141:9 148:17 150:23 151:8,13 154:3 <b>sets</b> 46:10 <b>setting</b> 8:25 124:10 149:8,8 <b>seven</b> 10:11 86:22 <b>sex</b> 57:2 <b>sexy</b> 56:22 57:4 <b>SFO</b> 11:24 <b>sfo.mag</b> 11:25 <b>shading</b> 77:21 <b>shaking</b> 31:19</p>	<p><b>shape</b> 62:22,23 <b>share</b> 4:9 40:2 94:5 133:25 134:11 <b>shared</b> 41:5 <b>shareholders</b> 25:11 <b>sharing</b> 129:22 <b>Shaun</b> 11:9 <b>shaving</b> 154:23 <b>shell</b> 29:22 <b>shelters</b> 58:8,11 59:15 <b>shifting</b> 17:19 123:25 <b>ship</b> 17:17 44:19 45:5 79:1,4 <b>shocking</b> 42:5 <b>shopping</b> 149:25 <b>shore</b> 18:13 <b>shores</b> 51:19 <b>short</b> 90:14 119:3,6,6 <b>shortly</b> 5:7 <b>shot</b> 130:8 139:13 147:18 <b>shoulder</b> 71:14 <b>show</b> 51:7 96:4,4 144:11 <b>showcase</b> 9:13 <b>showed</b> 66:14 94:1 <b>showing</b> 28:7 55:21 109:16 <b>shown</b> 77:13 111:23 <b>shows</b> 28:8 41:15,17 111:6 121:15 <b>Shugard</b> 5:5,5 <b>shut</b> 115:1 <b>sic</b> 94:24 <b>side</b> 15:12 61:15,16 62:7 64:12 65:18 66:4 66:7 68:11 69:20 70:2 71:13 72:5,7 74:17 76:17 77:2,4 78:1,15 79:11 91:22 96:17 104:1,2 126:7 129:2,9 157:23 <b>sides</b> 68:25 83:11 132:8 <b>Siemens</b> 7:2 <b>signals</b> 144:21,23,25</p>	<p><b>signed</b> 74:10 128:17 <b>significant</b> 72:2 108:5 <b>similar</b> 74:15 97:17 117:10 130:1 <b>simply</b> 112:24 113:1 115:2,23 140:12 <b>sin</b> 55:5,7 102:18,19 <b>sinful</b> 55:8 <b>single</b> 5:2 41:2,10 60:2 95:22 104:20 <b>sinning</b> 55:6 <b>sir</b> 36:14 <b>sit</b> 14:13 <b>site</b> 70:24 73:23 77:23 148:6 <b>sited</b> 105:16 <b>siting</b> 121:6 <b>sitting</b> 90:19 147:22 <b>situation</b> 91:4 104:19 145:23 <b>situations</b> 48:13 104:22 110:22 <b>six</b> 7:22 59:14 78:18 86:13 132:1 <b>size</b> 20:4,7 106:25 140:25 <b>sized</b> 100:9 <b>sizzle</b> 12:19 <b>Sizzles</b> 12:2 <b>skills</b> 111:17 <b>slides</b> 60:16 126:13 <b>slightly</b> 110:19 143:4 <b>small</b> 2:14 8:3 49:3 86:17 87:4 92:20 100:8 103:17 106:25 142:16 <b>smaller</b> 50:16 91:25 139:22 140:7,10,12 <b>smart</b> 69:13 157:24 <b>Smith</b> 84:13 <b>Snaith</b> 7:13 <b>soaking</b> 90:19 <b>society</b> 145:2 <b>soften</b> 154:23 <b>solar</b> 6:7,9 12:12 16:20</p>
--	---	---	---

<p>18:8 25:15,15,17                  26:13,14,20,25 28:18                  34:6 36:21 38:22                  39:22 41:15,18 45:18                  47:4,7,7,8,9,16 48:3                  49:1,11,12 50:5,7,10                  50:17 51:23,25 52:2,4                  52:4,8,8 53:12 56:7,8                  56:11,12,16,18 57:7                  57:10,17 59:16 65:18                  66:7,8,9,10,24 68:25                  69:24 71:14,22,23                  72:1,15 73:7,11,13,15                  73:20 74:3,11,11,24                  75:13,16,19 76:7,12                  77:1,4,6,10,23,23                  80:21,23 85:24,25                  86:5,6,18,21,24,25                  87:16,22 88:15,18                  89:1,17 90:10,14,15                  90:20 91:3,11,16,20                  92:3,4,22 93:1,2,6,8                  93:12,18 94:11,15                  96:12,19,20 98:3,6,15                  98:17 99:4,17 108:17                  109:6 111:11,24                  112:1,2,4,9 113:4,10                  114:4,7,9,11 115:11                  117:21 118:5 122:23                  126:24 130:17 141:21                  141:22 143:6,21                  148:14 153:5 156:2,7                  156:9,12,16,19  <b>solar's</b> 95:23,24  <b>sold</b> 118:22  <b>solid</b> 17:6 65:22 67:3  <b>solitary</b> 104:20  <b>Solutions</b> 7:5  <b>somebody</b> 26:19,24                  28:7 33:20 37:19                  95:24 100:16 107:16                  140:21 141:13 147:4  <b>somebody's</b> 142:12  <b>someday</b> 95:23  <b>someone's</b> 107:9</p>	<p><b>someplace</b> 136:12  <b>soon</b> 52:24 114:21  <b>sorry</b> 16:14,16 22:10                  22:11 24:5 28:13 33:6                  33:10 71:19 86:9                  97:13 131:10 151:21  <b>sort</b> 11:21 12:16 34:8                  41:6 47:17,19 61:13                  70:14 71:25 72:21                  74:6 90:3 121:9,18                  139:24 140:1 143:7                  145:1,16,23 150:16                  157:14  <b>sounds</b> 39:13 142:2  <b>source</b> 16:23 102:10                  113:17 114:12 124:4                  130:14,16  <b>sources</b> 16:6,19,20 17:9                  17:13 20:19 28:22                  45:18  <b>south</b> 41:21 42:12,24                  45:4 95:6 113:8 121:9  <b>southeast</b> 18:10 115:1                  127:6  <b>southern</b> 42:14 43:10                  110:5 111:5  <b>so-called</b> 24:14 30:5  <b>space</b> 34:5 103:25  <b>spaces</b> 105:12  <b>speak</b> 18:22 62:16 82:6                  83:17 129:3 155:11  <b>speaker</b> 2:23 6:7 14:16                  19:12 30:25 31:1 33:7                  33:10 35:17 38:20                  76:5 79:25 80:4,12,20                  80:25 83:1 102:24                  103:16 104:13 106:16                  106:21 107:8 108:4,9                  109:11,22 125:1                  133:7 138:3 147:6                  151:20,23 152:16  <b>speakers</b> 5:17,23 9:15                  14:7,12 60:22 80:8                  126:6 135:21,24  <b>speaking</b> 33:5 94:6</p>	<p><b>special</b> 157:13  <b>specializes</b> 86:11  <b>specialties</b> 84:14  <b>specific</b> 2:17 4:17                  10:23 11:16 16:9 20:8                  20:9 26:1 39:25 68:23                  116:24 121:1 149:5  <b>specifically</b> 5:1 66:1                  123:14  <b>specified</b> 119:20  <b>speculate</b> 23:18  <b>speculated</b> 52:2  <b>speculation</b> 30:15,16                  33:16  <b>speed</b> 4:9  <b>spend</b> 22:16 24:21 54:5                  54:11 58:14,16 59:6                  112:10 125:23 138:9                  138:15 146:6  <b>spending</b> 53:8,11                  152:11 153:6,19  <b>spends</b> 44:12 54:12,13                  126:3  <b>spent</b> 39:16 102:15                  112:6 142:17  <b>spiking</b> 113:13  <b>spoken</b> 6:8 29:9  <b>sponsor</b> 11:4  <b>sponsors</b> 6:3 11:7  <b>spread</b> 50:11  <b>spur</b> 102:6  <b>square</b> 103:24  <b>stable</b> 114:13 127:10                  130:14,16  <b>Stacy</b> 137:14  <b>staff</b> 21:18 23:3 39:1  <b>staffed</b> 19:19  <b>stage</b> 11:21 40:5                  137:23  <b>stakeholders</b> 73:14                  132:4  <b>stalemate</b> 146:7  <b>stand</b> 3:13,15 14:13                  134:1  <b>standard</b> 1:10 4:18</p>	<p>12:7 16:4,5,13 21:3                  24:16,22 27:16,17,18                  29:13,17 30:1,3,11                  36:11 40:7,8,12 89:9                  94:19 111:8,8 119:17                  119:24 120:4 127:7                  127:20,22 128:22                  138:12 139:18 140:3                  140:5 147:23 151:6,7                  151:24,25  <b>standardize</b> 143:21  <b>standards</b> 24:24 61:10                  90:9 153:2 154:3  <b>standpoint</b> 81:20 82:2  <b>stands</b> 11:24 35:18  <b>staple</b> 114:15  <b>start</b> 2:11 4:16 6:25                  33:22 35:24 52:24                  75:18 85:18 86:15                  88:18 93:8,11 108:9                  114:20 129:20 133:3                  135:19 145:20 148:13                  153:1  <b>started</b> 3:24 16:1 26:11                  41:9 55:16 86:16 88:5                  93:13 120:21 125:15                  135:10 142:24  <b>starting</b> 4:18 5:7 60:24                  66:11 92:22 93:3,4                  119:25  <b>state</b> 5:2,14 14:11                  15:16 17:18 18:15                  19:15 20:21,23 25:22                  31:13 32:11 33:18                  37:7 39:6 40:6 44:11                  44:20 47:5 50:12 53:6                  55:10 56:10 57:20                  58:4,9,20,22 63:25                  87:1,5,9,10,14 89:22                  94:17 98:2 107:20                  110:16 112:5,10,12                  116:19,23 123:12,19                  124:6,6 127:22 132:3                  137:8 139:10 143:15                  143:20 144:6 145:9</p>
--	--	---	---

<p>147:5 148:22 149:11 156:8,17,21,22 157:16 158:14 159:2 <b>stated</b> 96:13 <b>states</b> 9:4 12:4 13:8,8,9 13:19,19 18:11 32:10 40:21,23,25 41:6,8,20 42:14 43:5,11,15,18 43:22,23 44:1,17,22 45:3 52:15,17 53:1,15 53:15,20 55:1,13 61:10 88:16 92:6 98:20 107:3,4 115:24 116:7 117:8,11 118:2 119:3 121:14,21 122:8,20,21,22 123:3 123:9 125:22 126:1 156:11 <b>statewide</b> 92:1 <b>state's</b> 41:3 87:13 <b>status</b> 9:18,20 16:2 <b>statutory</b> 17:2 142:18 150:23 <b>stay</b> 35:14 61:4 63:2 124:21 125:9 135:23 136:10 <b>stays</b> 112:5,6 <b>steam</b> 76:13 <b>steel</b> 113:25 <b>stellar</b> 5:16 <b>stenographic</b> 159:6 <b>stenographically</b> 159:4 <b>step</b> 66:17 81:14 116:12 135:9 145:12 <b>stepped</b> 59:2,11 125:6 <b>steps</b> 4:20 116:4 141:6 142:14 153:8,8 <b>step-wise</b> 41:6 <b>Steve</b> 35:4,11 37:13 133:12 <b>stewards</b> 157:19 <b>stick</b> 36:19 37:2,3 <b>stimulate</b> 37:10 127:12 <b>stimulating</b> 112:7 127:15</p>	<p><b>stimulus</b> 7:11 37:8 58:7 93:1,3,15 <b>stock</b> 25:12 114:15 <b>stockholders</b> 25:6 <b>Stocks</b> 11:24 <b>stole</b> 151:16 <b>stood</b> 10:2 <b>stool</b> 145:17 <b>stop</b> 62:6 64:24 149:24 149:24 <b>stopped</b> 53:8 155:13 <b>stopping</b> 158:20 <b>storage</b> 28:23 71:24 152:18,19,20 154:12 154:12,16,18 <b>story</b> 57:11 155:25 <b>strategy</b> 5:9 <b>stream</b> 76:19,20 118:11 <b>streams</b> 118:24 <b>Street</b> 1:17,24 <b>streets</b> 130:25 131:7 <b>stress</b> 109:17 <b>Strickland</b> 36:15,16 <b>strictly</b> 100:25 <b>stringency</b> 122:15 <b>strong</b> 89:6 94:18 <b>structure</b> 151:11 <b>structures</b> 103:22 <b>struggle</b> 103:23 <b>struggling</b> 120:23 121:7 <b>stuck</b> 145:23 <b>students</b> 9:12 39:4 85:6 93:7 153:25 <b>studies</b> 3:2 111:9,23 <b>study</b> 4:2,11,13,15,17 4:22 5:2 6:5,15 7:14 10:6 20:4,6,18,19 21:14 31:7 66:14,18 105:20,21 <b>stuff</b> 31:23 54:5 74:3 88:22,22 100:10 108:2 <b>subject</b> 86:2 144:20 <b>subsidies</b> 55:24</p>	<p><b>subsidizing</b> 46:16 54:20 <b>substantial</b> 50:15 52:6 52:9 <b>Substantially</b> 50:9 <b>substantive</b> 6:20 <b>success</b> 13:2 <b>successful</b> 68:11 123:15 132:14 <b>suggest</b> 132:11 145:1 <b>suggested</b> 127:18 135:1 <b>suggestion</b> 131:7 <b>suicide</b> 95:18 <b>Suite</b> 1:24 <b>suited</b> 113:11 <b>sulphur</b> 17:11 <b>summary</b> 9:22 21:17 <b>summer</b> 23:13 70:12 70:20 113:9 <b>sun</b> 32:9 41:17 45:7 48:18 60:15 90:19 155:24 <b>sunshine</b> 87:1 96:2 156:6,7,17,21 <b>Sunwide</b> 93:17 <b>sun's</b> 47:21 <b>super</b> 51:14 154:19 <b>Superior</b> 86:5 <b>support</b> 9:25 10:1 13:13,16 29:13 31:16 35:19 38:21 84:21 92:17 115:4 123:23 151:4 <b>supported</b> 39:6 105:20 <b>supporters</b> 130:6 131:14,14 <b>supporting</b> 7:3 34:11 <b>supportive</b> 7:6 <b>supports</b> 3:20 <b>Suppose</b> 56:14 <b>sure</b> 4:20 13:17 16:3 27:5 63:22 64:5 71:22 114:9 126:20 127:4,5 128:17,25 130:6 131:4 137:16 138:10</p>	<p>144:9 153:4,9 158:12 <b>surprised</b> 9:23 <b>surveyed</b> 13:25 <b>suspect</b> 150:20 <b>sustain</b> 109:2 <b>sustainabilities</b> 63:1 <b>sustainability</b> 61:19 104:18 <b>sustainable</b> 9:11 39:19 61:20 84:24 85:1 91:10 101:21 130:18 133:21 146:9 <b>sway</b> 34:23 <b>swine</b> 117:24 118:1 <b>switched</b> 56:19 <b>sworn</b> 156:5 <b>symbol</b> 41:17 <b>symposium</b> 1:9 5:16 8:18,20 9:11 10:10,15 10:17,22 11:7,21 13:2 95:11 134:24 135:11 158:22 159:5 <b>symposiums</b> 3:2 4:12 6:4,9,15 7:4,8 8:12,14 8:14,21,25 10:13 11:5 12:25 <b>system</b> 71:7,20 74:25 86:12 93:6,8,11,13 96:19,20 101:8,11 104:21 107:22 142:25 143:9,10 144:14 <b>systems</b> 6:22 7:2 45:22 59:14,17 69:10 74:24 75:6 78:6 86:19 87:22 89:14,15,18 93:18 96:12 100:9,9 101:1,7 102:15 104:8,12,15 105:15 108:18 140:10 140:12 152:23 153:4 153:6,10 <b>Szaro</b> 26:7 61:17 62:6 76:6 80:15,22 81:1,6 81:9,12 82:6,16 83:12 143:2 148:4 153:1</p>
--	---	---	--

<b>T</b>			
<b>T</b> 127:3	<b>tangible</b> 143:6	<b>temperature</b> 76:13	32:10 41:19 42:11
<b>tab</b> 90:22	<b>target</b> 49:13 115:20	<b>temporary</b> 89:20	43:21 46:9,11,17
<b>table</b> 53:14 129:19,23	117:18 120:4,12,22	<b>tend</b> 6:23 18:21,23	47:14 48:7 53:22
143:8,12	121:2	41:21 45:12	55:17 66:23 67:16
<b>take</b> 5:22 10:17 27:11	<b>targets</b> 116:22 117:13	<b>tends</b> 112:1 120:11	72:13 78:4 82:23
32:21 37:12 45:7	122:16	139:22	95:25 100:13 107:5
46:23 51:25 62:19,21	<b>tariff</b> 34:8 74:15,18	<b>tension</b> 124:23	112:4 123:11,24
63:13 64:10 69:4 73:7	78:13,16 110:11	<b>term</b> 63:14 64:3 66:16	136:15 137:7 138:11
79:7 83:18,19 90:8	119:25 120:2,4,6	67:18 68:4 71:21	139:14 143:13 150:19
95:14,20 96:5 100:10	133:18 140:6	81:17 90:14 97:4	151:7
101:6 106:9 107:14	<b>tariffs</b> 34:5 74:13	100:13 119:4,4,6,6,11	<b>things</b> 2:13,17 6:15
107:16,18 126:7	129:23 130:6 140:9	119:11,20 130:18	7:13 9:24 11:17 12:6
130:25 133:15 134:21	<b>tax</b> 37:6 49:10 50:1,3	133:16,21 153:7,23	17:6 18:18 22:5 24:9
135:8,13 139:11,13	54:14 55:4,6,7 57:18	154:8	32:16 36:22 38:4
140:2 141:1 142:8,14	60:4 62:21 64:10	<b>terms</b> 7:7 13:6 16:3	41:19 42:23 43:15
147:7 153:7	69:22 87:8 95:16,17	114:19 132:1 144:4	44:9,25 45:15 46:18
<b>taken</b> 4:20 34:7 41:23	102:18,19,20 107:14	<b>terrible</b> 36:3	48:11 53:17 58:3,19
49:5 60:25 116:4	107:19 143:6 144:10	<b>terribly</b> 156:22	61:6,15 63:20 65:23
129:10 134:1	145:1	<b>territory</b> 75:16 77:10	66:5 67:10,13 68:6
<b>takes</b> 98:10,19 113:25	<b>taxes</b> 54:25 88:25	124:11 140:21 142:19	72:9 73:2,17 77:1
141:24	130:22 143:5 145:24	143:17,18	78:21 83:4 87:3 96:17
<b>talk</b> 3:22 10:14 13:24	<b>taxpayer's</b> 36:5	<b>test</b> 9:8	104:4 107:4 113:25
17:1 19:7 23:19 31:19	<b>tea</b> 138:12	<b>Testing</b> 86:2	114:21 115:6 116:17
39:24 43:23 46:2	<b>team</b> 14:24 15:10 39:9	<b>tests</b> 154:2	125:21 126:7 127:1,3
53:13 56:21 57:9	139:21	<b>Texas</b> 53:19	127:8,9 128:12
58:12 62:4,9,14 65:20	<b>TechAmerica</b> 6:11,11	<b>thank</b> 3:12 6:2,6 15:19	129:14 134:15,23
73:2 93:23 94:16 96:6	<b>technical</b> 15:17 82:1	36:16 38:3 40:4 60:18	135:8 136:8,12 141:2
96:7,7 98:5,5,6	<b>technically</b> 15:18 83:15	61:4 62:5 84:5 87:19	143:3 145:3 147:2
126:13 127:14 130:2	<b>technologies</b> 26:18	92:8 102:24,25 106:9	149:5,10,12,23
136:25 137:12 138:4	39:2 63:19 65:15	106:10 109:25 126:9	152:17,18 154:3,6,20
139:5 141:16,16	69:12 81:22 85:1,4	126:10 147:6 148:17	156:20 157:10 158:6
157:1	92:15 99:1,16 124:15	155:14 158:1,13,15	158:10
<b>talked</b> 34:10,11 47:11	<b>technology</b> 2:11,14 8:2	158:16	<b>think</b> 3:19 6:8,12,23
76:23 94:23 98:4	18:14 19:5 27:3 66:4	<b>thanking</b> 2:21	7:19,21 9:17 10:6,9
119:10 120:2 129:1	79:9 81:20 99:10	<b>thanks</b> 2:2 7:19 8:21	10:16 11:6,10,11,18
139:25 148:25 156:1	104:7 128:3,11	14:5 80:25 124:24	12:16,22 13:5,19,20
<b>talking</b> 22:2,2 28:21	155:18	144:19 158:20	14:2 17:16 18:18,20
33:4 70:10 92:19	<b>technology's</b> 6:13	<b>theirs</b> 82:8 117:17	18:23 29:3 30:14 31:7
103:2 104:16 125:16	<b>television</b> 38:8 56:25	122:17,18	33:25 34:9 35:2,18,23
130:11 131:19 148:2	<b>tell</b> 3:15 8:7 26:23	<b>theoretically</b> 26:2,3	35:24 36:8,8 37:15
<b>talks</b> 56:19,23 94:25	30:24 35:4 37:14,14	<b>theory</b> 26:4,12	38:18 42:8 45:24 46:3
<b>Tallahassee</b> 86:23	43:7 57:5 64:17	<b>thermal</b> 52:5,8 68:25	46:12 55:12 61:9
88:11 96:4 125:3	108:24 109:9 137:6,6	69:7 70:1 86:19 96:19	65:12,13 66:2,23 76:9
<b>Tampa</b> 157:2	155:15,21 156:11	<b>thickness</b> 70:15	79:18 80:18 81:3,19
	<b>tells</b> 33:2	<b>thing</b> 7:19 10:3 21:9	82:2,4,16 86:25 87:8

<p>87:13 88:20 91:21                  92:18 93:20,21,22                  95:16 96:3,8,16 98:1                  98:9,11,18 99:14                  100:6,6,11 101:3,23                  101:24,25 102:2,4,16                  103:3,7,10 104:15,17                  106:7 123:2,12                  129:25 130:11,13,20                  132:23 133:10 134:14                  134:17 135:6,19,21                  136:20,23 137:24                  138:5,6 139:9 140:4                  142:8,9,13 143:21                  144:2,8,10 145:11,14                  145:15,15,16 146:6,8                  146:22 147:12,16                  148:10,12,13 149:14                  150:13 151:3,10                  153:22 156:20,24                  157:19</p> <p><b>thinking</b> 10:25 11:1                  48:11,12 130:10</p> <p><b>third</b> 6:8 112:25</p> <p><b>thought</b> 85:7 110:1                  140:25 156:7</p> <p><b>thoughts</b> 134:21 135:8</p> <p><b>thousand</b> 50:9 113:20</p> <p><b>three</b> 4:12 8:21 10:16                  23:11 24:24 30:5                  37:18 42:8 49:2,12,25                  54:2 66:10 67:20                  70:14 72:7 83:15                  86:10,22 88:8,9                  108:21 126:18 134:23                  135:6 145:17 146:14</p> <p><b>thrilled</b> 155:12</p> <p><b>throat</b> 129:17</p> <p><b>throw</b> 142:22</p> <p><b>Thursday</b> 1:15</p> <p><b>tie</b> 38:15,17 155:24                  156:4</p> <p><b>tied</b> 74:5 102:1</p> <p><b>ties</b> 38:16</p> <p><b>timber</b> 18:4</p>	<p><b>time</b> 4:5,6 6:8 15:24                  26:14,15 32:17 36:3                  37:1 38:10,11 45:12                  52:14,20 57:5 58:3                  60:19 63:3 80:6,9,11                  94:11 102:21 109:10                  110:2,3,3,24 112:24                  115:21 125:9,13                  126:3 131:9 132:11                  135:23 141:24 145:13                  148:16,22 149:15                  155:2 156:8</p> <p><b>timeframe</b> 147:22</p> <p><b>timelines</b> 116:22                  117:19</p> <p><b>times</b> 42:9 50:9 54:2                  80:17 111:13 116:8                  124:1</p> <p><b>timeshare</b> 77:11</p> <p><b>timing</b> 28:3</p> <p><b>tire</b> 117:23</p> <p><b>titled</b> 12:2</p> <p><b>toast</b> 138:15</p> <p><b>today</b> 2:3,19,21 3:3,13                  3:22,23 4:15 5:17,19                  10:4,14 11:8,12 12:19                  12:22 13:3 14:5,16                  18:14 39:23 40:5,20                  44:16 47:11 61:13                  71:4 76:4,4 84:11                  87:3,18 94:10 114:8                  117:11 121:3,20                  125:11 135:5 148:18                  155:13 156:11</p> <p><b>today's</b> 10:15 43:12                  77:17 103:4</p> <p><b>told</b> 3:12 17:23 20:14                  34:9 37:13 53:17,22                  76:17 96:22 135:17</p> <p><b>Tom</b> 7:6 155:21</p> <p><b>Tommy</b> 14:16,17,20                  36:15 40:5 41:5 44:9                  45:6 48:20 116:20                  125:15 127:2,18</p> <p><b>tomorrow</b> 44:8</p>	<p><b>top</b> 10:13,13 21:13 48:5                  51:10 52:9 59:17                  70:18 74:25 92:9                  96:19</p> <p><b>topic</b> 10:13 61:16</p> <p><b>topics</b> 73:11</p> <p><b>torrefaction</b> 79:7</p> <p><b>total</b> 22:13,14 28:21                  49:12,22 146:18</p> <p><b>touch</b> 71:9 92:3 112:16                  115:14 117:4 120:1                  127:2</p> <p><b>touched</b> 89:5,24 115:14                  116:20 148:20</p> <p><b>touching</b> 126:6</p> <p><b>tough</b> 151:10</p> <p><b>tougher</b> 19:1 149:15</p> <p><b>tourism</b> 157:15</p> <p><b>tourist</b> 51:12</p> <p><b>tourists</b> 51:8,18,20</p> <p><b>track</b> 61:5 148:12</p> <p><b>tracked</b> 118:20</p> <p><b>tracking</b> 155:3</p> <p><b>trade</b> 111:16 119:6                  147:1 149:10</p> <p><b>trades</b> 119:4</p> <p><b>traditional</b> 66:6 110:21</p> <p><b>traditionally</b> 48:11</p> <p><b>train</b> 157:3</p> <p><b>training</b> 73:11</p> <p><b>tranche</b> 50:18 51:4</p> <p><b>tranches</b> 30:5 48:22</p> <p><b>transaction</b> 139:20</p> <p><b>transcript</b> 159:5</p> <p><b>transcription</b> 8:17</p> <p><b>transcripts</b> 3:22 38:7</p> <p><b>transition</b> 147:24</p> <p><b>transmission</b> 48:6                  115:5 121:5,8 141:23</p> <p><b>transmit</b> 141:15,23</p> <p><b>transparency</b> 116:18                  139:16</p> <p><b>transparent</b> 119:15</p> <p><b>transport</b> 141:18</p> <p><b>transportation</b> 44:14</p>	<p>45:23,25 46:4 67:12                  78:25</p> <p><b>trash</b> 75:25 76:17</p> <p><b>travels</b> 125:2</p> <p><b>trek</b> 74:12 109:19</p> <p><b>tremendous</b> 6:20 7:23                  51:24 156:14</p> <p><b>trend</b> 114:18,19</p> <p><b>trends</b> 120:15 122:14</p> <p><b>trick</b> 123:18</p> <p><b>tried</b> 11:10 127:19                  146:17</p> <p><b>Triple</b> 116:13</p> <p><b>tripled</b> 114:2</p> <p><b>trouble</b> 108:12</p> <p><b>trucks</b> 68:10</p> <p><b>true</b> 156:24 159:5</p> <p><b>try</b> 3:15 5:19 11:18                  26:9 30:17,18,19,20                  38:13 68:3 78:3 83:21                  130:6,7,23 138:10                  142:12 143:21 149:2                  149:11,12 152:3</p> <p><b>trying</b> 3:5 26:22 34:4,6                  61:4 63:13,17 66:8                  67:22 81:21 91:2                  110:12 115:21 129:20                  132:4 134:19 140:9                  143:15,22,23 156:2</p> <p><b>tune</b> 86:23</p> <p><b>tuned</b> 124:22</p> <p><b>tunnels</b> 141:17</p> <p><b>turbine</b> 18:25</p> <p><b>turbines</b> 18:16,20</p> <p><b>turn</b> 40:16 84:9 89:3                  113:7</p> <p><b>turns</b> 49:8 50:25</p> <p><b>TV</b> 2:4 3:14 8:11,22                  14:13</p> <p><b>Twitter</b> 132:17,18,18</p> <p><b>two</b> 4:25 6:25 9:1,16                  13:1 24:9 29:21 32:16                  37:18 47:3 60:16                  65:16 70:11 75:22                  77:5 78:22 81:24</p>
---	---	---	---

<p>83:13 99:4 106:11 110:6 116:17 118:24 133:4 135:6 139:8 144:13,14 152:17 157:6 <b>two-pronged</b> 3:25 <b>type</b> 2:18,18 13:18 36:24 71:24 102:9 112:2 113:22 119:25 <b>types</b> 65:17 79:18 111:17,17 116:11 119:24 121:16 153:22 156:19 <b>typically</b> 69:14 146:17 150:7</p>	<p>127:17 <b>unexcused</b> 25:5 <b>unexpected</b> 109:15,21 <b>unfavorable</b> 21:22 22:1,7,10,19 <b>unfortunate</b> 48:7 <b>unfortunately</b> 44:24 49:17 56:11 84:3 96:21 109:20 <b>UNIDENTIFIED</b> 33:7 33:10 35:17 76:5 80:12,20,25 83:1 102:24 103:16 104:13 106:16,21 107:8 108:4,9 109:11 133:7 138:3 147:6 151:20 151:23 152:16</p>	<p>151:15 <b>useful</b> 46:24 <b>user</b> 69:4 142:24 <b>uses</b> 16:19 54:1 59:23 67:11 76:11 <b>usually</b> 113:8 118:20 119:19 149:20 <b>Utah</b> 42:21 45:2 <b>utilities</b> 15:2 16:6 19:23 24:15 25:21 27:21 34:5,10,23 47:24 51:22 59:1,2,11 61:7,11,15,18 62:4,20 82:6 83:8,18,21,22 84:4 85:11 102:12 107:17 116:6 117:7 119:16 122:19,22 124:5,16,18 133:19 140:8,19 143:22 147:11 151:14 <b>utility</b> 22:13 24:12,21 48:9 49:13 51:9 62:11 62:16,18 63:11,14 64:14,16 79:20 81:22 82:5,7,9,14 83:14,24 89:14,15,17 97:2,11 99:21 100:16 102:4 102:13 107:9,9,13,21 107:24 111:25 113:7 113:7 115:16 123:25 124:2,4,10,18 140:20 154:5 <b>utility's</b> 118:13,14 <b>utilize</b> 72:18 84:25 <b>U.S</b> 12:2 39:10 73:9 84:17</p>	<p><b>varies</b> 43:18 120:3 <b>variety</b> 127:5 128:7 <b>various</b> 19:21 20:19 43:18,19 44:25 45:20 132:4,4 <b>vary</b> 117:13 <b>vast</b> 17:25 <b>vehicle</b> 9:3,8 <b>vein</b> 98:21 <b>vendor</b> 74:6 78:5 <b>vendors</b> 67:17 <b>venture</b> 2:9,9,10,16 7:17,21 8:1,15 128:5 <b>verification</b> 153:21 <b>verify</b> 75:5 <b>versus</b> 51:19 58:16 83:7 <b>vested</b> 19:21,22 <b>viability</b> 22:6 <b>viable</b> 99:3,4,10 <b>vice</b> 84:16 <b>video</b> 8:18 <b>videos</b> 3:21 <b>videotaped</b> 8:11 <b>view</b> 18:17,24 63:14 95:1 104:24 <b>vigor</b> 69:8 <b>Virginia</b> 42:4,5,7,7,10 42:11 44:23 45:1 <b>virtual</b> 77:19 <b>vision</b> 95:15 96:5 <b>visionaries</b> 94:9 <b>visit</b> 7:24 <b>voice</b> 123:23 <b>voices</b> 14:15 <b>voila</b> 23:24 <b>volatile</b> 113:17 <b>volatility</b> 113:19,22 <b>volume</b> 20:8,8 <b>voluntary</b> 13:20 36:24 <b>volunteering</b> 58:17 <b>vote</b> 137:2,2,3,4 <b>voted</b> 15:10 43:9</p>
<b>U</b>			
<p><b>UCF</b> 1:17 2:10 7:9,17 7:25 8:3,6,8,9,15 9:12 10:19 62:2 137:18 <b>UCFoppportunity.com</b> 8:5 <b>UCF's</b> 39:14 <b>ugly</b> 157:17 <b>Uh-huh</b> 100:1 <b>ultimately</b> 61:11 119:12 <b>unanimously</b> 4:23 <b>unbelievable</b> 158:3 <b>unbundled</b> 118:21,23 <b>uncertain</b> 67:23 68:1 <b>uncertainty</b> 120:14 <b>undergraduate</b> 9:12 <b>underground</b> 13:24 154:17 <b>underlying</b> 12:18 <b>underneath</b> 48:5 <b>understand</b> 9:7 34:2 83:13,14 84:23 125:8 136:4 155:11 <b>understands</b> 35:7,8 <b>unduly</b> 110:25 <b>unemployed</b> 111:19 116:12 <b>unemployment</b> 110:18</p>	<p><b>union</b> 15:16 <b>unique</b> 88:14 111:1 147:22 <b>uniquely</b> 86:23 <b>unit</b> 61:21 140:18 <b>United</b> 9:4 12:4 13:8 18:11 40:21 43:18 52:15,17 53:15,20 123:3 <b>units</b> 108:10 <b>universities</b> 26:22 <b>university</b> 8:23 39:9,17 62:1 111:10 <b>unlock</b> 143:16 <b>upbeat</b> 60:12 <b>updating</b> 115:5 <b>upfront</b> 74:21 153:12 <b>ups</b> 2:11 6:25 <b>urban</b> 17:6 <b>usable</b> 105:22 <b>use</b> 14:21,24 30:19 43:14 44:16 46:14,21 52:14 53:23 54:2,9 55:6,7 76:14 77:20 78:3 79:3,12,13 99:16 105:23 109:6 114:22 114:24 117:15 122:23 144:15 150:14,15</p>	<p><b>Valencia</b> 5:5 <b>valuable</b> 49:12 <b>value</b> 46:21,22,23 47:1 49:11 67:2 68:20 72:23 118:10 119:7 122:2 144:12 <b>variable</b> 119:7</p>	<p style="text-align: center;"><b>V</b></p>
<b>W</b>			

<p><b>Wait</b> 23:9 51:3  <b>waited</b> 64:22,22  <b>waiting</b> 64:24 129:18  136:9  <b>wake</b> 94:21  <b>walk</b> 3:13 136:13  <b>walked</b> 20:6  <b>wall</b> 44:6 55:19,25 56:2  57:24  <b>Wal-Mart's</b> 48:5  <b>want</b> 6:2 9:1,15,16,24  10:1 11:12,22 12:14  13:4,6,10 15:25 18:16  18:24,24 24:18 26:3,7  26:9,9 27:1 34:7,13  36:4,6 37:14 47:15  52:11 58:12 59:5  60:14 62:9 63:22  64:17,18,19 73:2,13  73:13 82:9 84:8 88:25  95:18 96:7 98:21  102:21,25 103:9  104:3,6 110:12  112:17 115:13 116:24  116:24 123:24 124:10  128:13,13 131:16  133:18,20 134:12,18  136:4,10,16,19  137:14,19 139:2  142:16 143:2,13,19  145:22,25 146:7,9  147:7 148:5 152:5,16  153:9 154:10 155:15  157:10 158:13,18  <b>wanted</b> 5:18,19 10:14  20:9 31:12 45:16 78:1  81:13 111:22 112:16  120:1 124:8,8 129:12  129:16 144:19 150:19  153:5 157:25  <b>wanting</b> 88:21  <b>wants</b> 12:13 23:25 26:4  31:5,5 33:13 63:2  142:8 146:5  <b>warning</b> 130:8</p>	<p><b>warranty</b> 105:9,11  <b>washing</b> 51:19  <b>Washington</b> 122:10  <b>wasn't</b> 27:16 28:14  115:3  <b>waste</b> 17:5,6,6 18:3,4,4  18:5,5,5 46:25 65:22  76:19,20 79:12 99:7,9  117:23,24 118:1,2  <b>watch</b> 11:10 12:15 62:6  <b>watching</b> 11:8 109:17  <b>water</b> 18:11 41:15 56:7  56:13,16,18 57:7,10  57:17 66:8 70:2 74:11  74:24 75:19 76:12  79:13,15 86:18 96:20  108:17 114:22,24  115:3 142:22 154:15  <b>waters</b> 30:14  <b>water's</b> 114:23  <b>watt</b> 114:7  <b>way</b> 13:3 24:7,15 34:25  35:12,12 48:1,11,16  52:11,23 55:9 63:19  64:18 70:6 71:8 73:3  76:14 80:23 85:11  89:1 91:23 94:23 98:1  101:2 114:18 116:5  124:3 125:3 134:22  135:14 140:5,13  141:13,19 144:16  146:12 148:20 149:3  151:5 153:14 157:21  <b>ways</b> 37:9 63:10 72:10  78:24 83:23 91:1  120:3 130:7 137:4  142:25 143:1 148:24  149:1,22  <b>wealth</b> 55:11  <b>weather</b> 108:5,7  <b>website</b> 6:19,21 7:16,23  8:8,15 9:4 137:19  <b>websites</b> 104:14  <b>week</b> 4:21 30:25 45:14  128:6 131:20</p>	<p><b>weeks</b> 4:25  <b>welcome</b> 12:21  <b>went</b> 42:5 49:1 52:21  71:5 74:15 96:22  146:21  <b>West</b> 1:17 42:4,4,6,7,9  42:10 44:22 45:1  <b>wet</b> 66:6  <b>we'll</b> 3:22 5:7,16 14:11  14:18 19:5 44:7 52:24  54:19 58:18 59:21  60:3,12,24 64:3 71:25  73:23 79:19 80:7,8  82:22 88:1 92:3 94:21  125:8,10,10,12 136:3  136:8 137:8,12  148:15 154:22  <b>we're</b> 2:13 5:6 12:22,24  13:14,15 15:21 16:3  38:8,12,21 41:25 43:6  43:9,17 44:4,21 45:18  45:19 46:6,15 48:11  48:13 51:4 52:25  53:17 54:21 55:17,25  58:9,10 60:19,21 61:4  62:14,18 63:10,13  64:4,17 65:4,10,15,21  65:22,23 66:1,4,17,25  67:10,19,22 68:6,14  69:6,18,21 70:21,22  72:9,19 73:2,5,9,16  73:19,20 74:5,7 75:8  75:14,23,25 76:2,18  76:19 77:3 78:24 79:2  79:5,10,11,20 80:16  80:16 81:12,21 82:19  82:21,22 87:25 89:18  90:1,2 91:15,15 92:18  92:22 93:1,4 96:5,11  100:22 102:21 105:19  106:4 108:2 110:6,18  116:1 124:1,14,25  125:7 131:11 134:19  135:19,21 136:9  137:22 142:10 145:8</p>	<p>145:23 146:6,9,19  147:22 148:2 155:1  155:12 158:20  <b>we've</b> 4:20 6:12 8:24  18:2,6,6,7,7,8,11 37:5  37:6 40:15 47:11  48:14,15 55:7 58:19  58:24 63:16 64:21  65:11,16 66:12 68:11  68:12 70:23 73:17  74:3 77:13 78:18  88:14 95:6 104:11  113:14 115:4 116:2  121:18 122:15 124:12  124:12,13,13 125:18  126:1 127:19,20  137:10 138:19 142:13  142:19,23 144:17  145:24 155:11,22  156:25  <b>Wharton</b> 84:13  <b>wherewithal</b> 7:8  <b>whips</b> 18:9  <b>White</b> 11:9  <b>wide</b> 94:2 117:18  <b>widely</b> 43:18 104:9  <b>widening</b> 13:25  <b>willing</b> 31:12 32:21  96:5 131:4 143:20  146:3,9,22  <b>win</b> 137:8  <b>wind</b> 16:21 18:12,13,14  25:15,16,17 28:19  32:9 45:18 98:15  105:5 114:12 115:11  117:21 123:1,1,3  126:24,25 141:16,16  141:17  <b>windmill</b> 19:1  <b>windmills</b> 18:16  <b>windows</b> 149:19  <b>winds</b> 19:2  <b>winter</b> 70:2,3 72:14,19  72:24  <b>wintertime</b> 72:13</p>
--	---	---	---

<p><b>win/win</b> 32:18  <b>wisely</b> 46:14  <b>wish</b> 107:25  <b>withdraw</b> 79:14  <b>wonder</b> 36:17  <b>wonderful</b> 14:14,19  130:13 134:18  <b>wood</b> 17:6 67:5 79:8  <b>word</b> 4:6 8:17,17,19,19  60:14  <b>worded</b> 134:23  <b>words</b> 11:10 25:1,6,19  48:8 118:24 145:24  <b>work</b> 17:22 28:12  31:17,20,20 33:25  36:23 56:4 63:10  72:10 77:9 83:23,24  87:17,20 88:6 91:14  101:22 106:2 107:8  107:24 110:4 116:12  132:6 135:2 136:19  139:8 142:25 143:1  143:16 145:14 151:13  152:3 153:7 155:22  157:19  <b>worked</b> 58:20  <b>working</b> 5:11 7:21  13:14 59:1 69:6 73:3  73:20 75:23 76:21  77:5 78:22 89:18  107:11,21 137:22  138:8 151:14 155:8  <b>workout</b> 30:20  <b>works</b> 24:7 35:12,12  61:23 84:22 97:13  <b>world</b> 2:16 63:14 109:7  128:1,10  <b>world's</b> 47:3,6 145:14  <b>worst</b> 95:25  <b>worth</b> 49:9 50:2 68:8  153:15,16,20 157:4  <b>wouldn't</b> 6:4,4 82:9  99:15 100:5 138:11  <b>wow</b> 23:24  <b>wrap</b> 109:14 125:8</p>	<p>137:25  <b>wrapped</b> 79:23 125:21  <b>wrapping</b> 125:24  <b>write</b> 9:5 106:17,19  107:6  <b>writes</b> 86:7  <b>writing</b> 65:3  <b>written</b> 107:1  <b>wrong</b> 16:15 17:20  152:19</p> <hr/> <p style="text-align: center;"><b>Y</b></p> <hr/> <p><b>yeah</b> 57:15 80:6 99:1  105:12  <b>year</b> 4:12 12:12 15:11  15:22 19:25 20:2  22:17 24:22 26:14,15  27:19 28:9,25 29:3,5  29:6,15 30:18 31:1,2  32:4 34:1,1,13 35:4  35:23 37:10,18 41:7,7  44:12 48:24,25 50:23  51:2 52:23 54:6 59:24  59:25 60:7 64:25 68:1  70:7,11,12 77:17  78:20,20 93:22,23,24  96:14,15 100:16  101:9 103:5 119:21  122:12 123:1,3,23  128:7,19 129:8  130:19,19 134:25  136:18 143:4,10  147:11,11,23,24  149:20 150:11,20  157:16  <b>years</b> 3:16 24:24 30:6  37:22,22 39:16 41:11  48:25 56:8,17 61:24  62:3 67:20 68:12 69:3  78:12 80:18 82:21  84:19 86:10,20,22  88:6,8,9 91:14 92:5  100:14 101:6,7  103:21 108:18,24  113:13,15 120:8,19</p>	<p>121:15,19 123:17  124:2 126:18 127:19  131:2,12,19 142:24  146:15 147:14 149:23  149:24 150:10 151:2  156:1  <b>year's</b> 88:19 147:13  <b>yellow</b> 41:15  <b>yesterday</b> 9:21  <b>York's</b> 53:20  <b>young</b> 85:2 93:20,21  <b>youth</b> 92:13 96:11,16</p> <hr/> <p style="text-align: center;"><b>Z</b></p> <hr/> <p><b>Zacco</b> 1:23 8:16  <b>zero</b> 54:17,17 157:23  <b>zoning</b> 14:21</p> <hr/> <p style="text-align: center;"><b>S</b></p> <hr/> <p><b>\$10</b> 122:12  <b>\$10.35</b> 113:20  <b>\$100</b> 54:9  <b>\$100,000</b> 152:9  <b>\$190</b> 54:12  <b>\$2</b> 54:14 146:17  <b>\$2,300</b> 57:11,12  <b>\$250</b> 75:9  <b>\$27</b> 114:8  <b>\$35,000</b> 63:8  <b>\$38</b> 50:12,13  <b>\$4</b> 51:1,2 114:8 146:20  <b>\$4,000</b> 57:17  <b>\$600</b> 53:5  <b>\$96</b> 54:14</p> <hr/> <p style="text-align: center;"><b>0</b></p> <hr/> <p><b>0</b> 75:18  <b>09</b> 147:14</p> <hr/> <p style="text-align: center;"><b>1</b></p> <hr/> <p><b>1</b> 21:7,22,23 22:11,12  22:15,15,17 23:3,5  28:17,18,19,20 51:11  71:16 73:18 78:20  106:3 111:23 115:25  116:6 121:13,13</p>	<p><b>1st</b> 159:7  <b>1,200</b> 145:7  <b>1.2</b> 50:13,14  <b>1.25</b> 157:4  <b>1.4</b> 122:9  <b>1.7</b> 122:9  <b>1:00</b> 113:8  <b>10</b> 5:20,22,22 43:10  46:7,9 50:17 53:6  57:23 58:6,13,14  59:15,17,19 60:2,7  66:15 68:6,12 72:17  73:22 74:2 75:13  80:13,15,18 92:5  93:22,23 96:14 101:6  103:5 119:21 124:10  125:4,24 138:24  147:11 149:23  <b>10's</b> 154:9  <b>10,000</b> 123:2  <b>100</b> 71:2,5,19 105:14  <b>11</b> 22:24  <b>11:30</b> 125:9 135:18  <b>11:40</b> 125:9  <b>110</b> 48:25 49:13,22  50:3 93:9  <b>1154</b> 27:7 98:4  <b>12</b> 39:9 43:6,10 53:5,21  71:3 110:18 113:2  115:18 117:14 123:11  127:17  <b>12.3</b> 41:25 55:25  <b>12:18</b> 1:16 158:22  <b>13</b> 147:15  <b>13,000</b> 51:4  <b>139,000</b> 56:10  <b>14</b> 53:20  <b>14th</b> 9:10  <b>140</b> 39:1  <b>15</b> 11:15 12:9 19:20  26:25 37:22 42:19  55:23 60:22 80:22  92:5 100:14,16 110:7  111:24,25 117:13  119:21</p>
--	--	---	---

152 56:11	2002 7:12 52:24	250 76:13	57:25 74:24 75:1,2
158 159:5	2003 58:23	250,000 62:18	76:7 77:18 101:9
16 55:1 76:1 84:19	2004 108:18,20 120:21	27,000 50:8	105:18 112:25 140:24
16,000 108:25	2005 15:4,6 113:20	29 42:18 117:11	149:23
17 4:23 10:8 115:24	114:3		5,000 49:22 53:4 90:11
18 1:15 50:14 53:6	2006 12:8 15:1,4,11	<u>3</u>	90:12
119:23	19:9 55:20 156:9	3 74:23 77:14 80:16	50 25:4 63:6,6 64:7
19 39:10 53:20 75:15	2007 15:8 20:11 23:13	113:21	77:3 93:23 96:14
19,000 116:13	2008 3:25 15:1,3 20:24	3,300 50:19	105:14 116:14 120:25
190 54:18	21:17 23:7 114:25	30 13:19 26:13,15	121:25 133:20 156:11
1982 114:8	141:5	44:14,15 55:22 57:19	50,000 111:7
<u>2</u>	2009 21:7 23:23 59:1	69:3 86:17,19 87:24	501(c)(6) 126:19
2 20:8 22:9,20,23 24:17	114:4 123:7	91:14 103:21 106:24	54 113:18
24:19,20,22 25:1,2	2010 1:15 30:6 55:23	111:24 112:1 136:6	55 59:12
28:11,19,20 36:12	74:1 121:4 159:7	148:9 149:20 150:7	<u>6</u>
49:2,9 52:3,4,7 54:16	2011 30:6	150:10,10	6 23:4 97:8
54:16 56:12,17 71:16	2012 30:6	30,000 94:25 95:1	60 44:12,18,18 108:17
75:19 77:13 78:20	2013 65:5 80:13,20,23	300 48:23 74:10	60's 52:15
80:16 105:18 115:17	81:5 82:4	31 20:11 21:17 23:7	605 1:24
122:7 156:12	2015 55:23,24 56:1	28:5 49:14	620,000 50:17
2nd 9:2 88:1	2016 147:15	31,000 52:7	689 54:1
2,000 4:14	2017 23:4 113:19	310 30:5	<u>7</u>
2,500 114:3	2018 147:15	32 120:6	7 42:7,20 45:14 65:5,14
2.1 122:9	2020 11:14 12:10,11,12	32,000 52:9 56:16	80:12,21 81:4,6 82:4
2.5 103:4,7	21:25 22:20,24 23:1	32801 1:24	7,500 114:3
2.8 80:19	23:15,17,22,24 24:1,1	33 41:12 122:17	70's 52:18
2/10th's 116:6	27:15 28:3,4,7 41:12	35 13:19 40:23 41:8	7135 97:16
20 11:14 12:11 19:20	81:8,19 111:8 116:15	56:8 71:19,23 72:3	75 25:21 47:19 111:16
22:8 23:5,8,10,15,16	122:17 123:8 148:15	350 71:18	112:7
23:17,21,24,25 24:1	2021 28:8 117:14	36 1:17	<u>8</u>
27:14,15,16 28:3,4,6	2025 117:13	<u>4</u>	8 42:20 72:16 123:9
36:10,11 37:22 39:16	2030 117:18	4 77:18 113:1,8 115:17	8.6 42:22
42:3 50:5,6 52:2	2040 23:17	122:10 138:8	8:00 1:16
57:12,13,21 78:11	2041 23:5,9,10	4,000 52:16	80 112:9 124:2 142:24
81:8,18 82:21 88:6	21 28:8	4:00 70:21,23	157:15
100:14,14,16 101:6	21st 124:14	40 20:22 56:14,15	83 146:12
111:7 119:22 120:8	22 68:14 70:12	103:21 117:17 122:18	85 12:23 20:10 47:19
121:3 123:8 135:17	23rd 3:24	407 1:25	112:5
136:6 138:24 140:7	23.8 42:16	42 50:20 51:3	<u>9</u>
140:10 151:2 158:14	24 45:14 68:16 70:17	425-6789 1:25	9 23:23 50:2 55:25 74:7
20's 154:9	25 22:8 23:1 25:16,23	430 1:24	112:2
200 30:6 48:24 134:9	25:25 27:18,25 36:11	45 3:16	9:45 60:24
2000 52:23	49:8,9 50:2 71:17	<u>5</u>	
2001 15:2	117:15,15 121:25	5 21:24 22:10,20,25	
	135:17 147:16		

<p>90 12:23 58:8,10 59:17 59:19 68:7,8 120:18 94 121:3 97 54:13,15,16,17 98 17:15,16</p>			
--	--	--	--