1	ILLINOIS POWER MEETING
2	RENEWABLE ENERGY & THE FUTURES JOBS ACT
3	Wednesday, July 12, 2017 at 11:00 a.m.
4	ICC: 160 North LaSalle Street
5	Hearing Room 8th
6	Chicago, Illinois 60601
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8	REPORT OF PROCEEDINGS had at the Illinois
9	Power and Future Energy Jobs Act meeting of the
10	Illinois Commerce Commission on July 12, 2017 at the
11	hour of 11:00 a.m., pursuant to notice, at 160 North
12	LaSalle Street, Chicago, Illinois.
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     PANELIST:
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    MR. ANTHONY STAR, Director Illinois Power Agency
    MS. BECKY STANFIELD, Senior Director,
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    MR. ANDREW BARBEAU, the Accelerate Group
     MS. MELENA HESSELL, Policy Advocate
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     MS. AZEEA AKRAM, Moderator
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     ALSO PRESENT:
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    MR. BRIEN SHEAHAN, Chairman
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    MS. SADZI OLIVA, Commissioner
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    MR. JOHN ROSALES, Commissioner
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     MS. SHERINA MAYE EDWARDS, Commissioner
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## PROCEEDINGS

2 COMMISSIONER ROSALES: We would like to ask 3 people to take their seats. Please, can we have 4 everyone's attention, please have your seats. I'm 5 going to get us started. Procedurally then, 6 Commissioner Oliva is going to take over. The session 7 is to convene pursuant to the Regular Public Open 8 Meetings Act. Our guests and panelists should be aware 9 that a Court Reporter is present and a transcript of 10 this session will be posted to the Commission's 11 website. With us today are Commissioners Del Valle, 12 Edwards, Rosales and Ms. Oliva. We now have a quorum. 13 I'll hand it over to Acting Commissioner Oliva to 14 introduce the session.

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15 MS. OLIVA: Good morning, everyone. I am 16 Acting Commissioner Sadzi Oliva. Welcome to 17 Installment 1 of Illinois Power Meter. Today's 18 policy session covers the current landscape of 19 renewable energy in the state and the effective 20 renewable energy objective under the future Energy Jobs 21 This discussion is relevant because Governor Act. 22 Bruce Rauner signed milestone legislation known as the 23 Future Energy Jobs Act on December 7, 2016. It went 24 into effect only six weeks ago on June 1st. So it's

1 really important to have a current reading of Illinois' 2 Renewable Energy Meter to understand where we are 3 headed pursuant to the legislation policy objective, 4 and because we want this open discussion to leave us 5 thinking about the future and what we should know as 6 regulators within this changing landscape. 7 In an effort to increase this dialogue, 8 the Commission for the first time invited the general 9 public to ask panelists questions via Twitter. So 10 listen out for those Twitter questions. And to 11 continue the dialogue after today, state tune for 12 Installment 2 of Illinois Power Meter which we will 13 host with Commissioner Edwards office. 14 Today's session will be moderated by my 15 Legal Policy Advisors, Azeema Akram and Gerardo 16 Delgado. With that said, please join me in welcoming 17 Azeema who will be leading the morning panel. 18 (Applause) 19 MS. AKRAM: Thank you. Good morning 20 Commissioners, panelists and attendees. Thank you so 21 much for being here today. I will be moderating our 22 first panel entitled "Illinois Current Renewable Energy 23 Meeting and Renewable Objectives." As Acting 24 Commissioner Oliva expressed, Illinois is among the

states leading the nation with the implementation of
 the Future Energy Jobs Act or FEJA as we will be
 referring to today.

4 Accordingly, this session will begin by 5 highlighting the renewable energy goals within the recently past FEJA. We'll also hear our panelists 6 7 examine Illinois' current wind and solar landscape and 8 FEJA's projected effects under the industries as well 9 as the large potential impact on communities. То 10 conclude, our panelists will discuss how to manage and 11 define the reliability of renewables.

12 The format of the panel would consist of 13 brief presentations by each of our panelists, followed 14 a series of questions from Gerardo, myself and Acting 15 Commissioner Oliva. And hopefully this will get an 16 open-ended discussion going. If there is time at the 17 end, we'll take some questions from the audience.

Before we begin, I would like to introduce our panelists who are much more accomplished than what I will be sharing with you just now. First, we will be hearing from Anthony Starr, Director at the Illinois Power Agency. In his role Anthony oversees the development and implementation of plans to procure electricity and renewable energy resources for 1 customers of Ameren Illinois, Comm Ed and MidAmerican.

In 2017 he is leading the Agency's work in developing a new long-term renewable resource and procurement plan and the zero emissions standard procurement plan. Anthony previously served as a policy adviser to two chairmen of the Illinois Commerce Commission.

8 We will then hear from Becky Stanfield, 9 Senior Director for the western states at Vote Solar. 10 In her role, Becky manages the organization's campaigns for the midwest to the west coast. Based in Chicago, 11 12 she has been pushing for clean energy reforms at the 13 state and federal level for 23 years. Becky came to 14 Vote Solar after working as Vice President for Policy 15 and Energy Markets at Solicity. Previously she 16 directed MRDC's Midwest Energy Program and worked as a 17 clean energy advocate for Environment America.

Following Becky, we'll hear from MeLena Hessel, a clean energy and sustainable business policy advocate working on clean development analysis and Great Lakes Protection initiative. MeLena previously worked for LaSalle Investment Management performing market research and regional economic analysis and for the U.S. Army Corps of Engineers construction, engineering research laboratories on water
 sustainability investment and water conservation
 recommendation.

4	Finally, we will hear from Andrew Barbeau,
5	the President of the Solid Group, a midwest based
6	strategic and consulting and innovation firm. Andrew
7	has helped companies and governments and
8	not-for-profits to work to advance clean technology,
9	smart cities, innovative government and economic
10	development projects at a local and global scale.
11	Please welcome the panelists by joining me in a round
12	of applause.
13	(Applause)
14	Anthony, take it away whenever you are
15	ready.
16	MR. STAR: Thank you. Good morning.
17	Chairman, Commissioner and everyone attending today.
18	So what I'm going to do is start off this morning and
19	list a high level overview discussion of legislation
20	and Renewable Portfolio Energy for the state. In order
21	to do that, I need to step back for a moment to
22	describe what things were like before Public act 99 or
23	506 or the Futures Energy Jobs Act. So the old regime
24	for Renewable Portfolio Standard was one where we

1 really in Illinois did not have a Renewable Portfolio 2 Standard. We had multiple Renewable Portfolio 3 Standards. These are the customers who did not switch 4 suppliers and this was run through the Illinois Power 5 Agency where we had the high level of increasing 6 percentages in increasing up to 25 percent by 2025. We 7 addressed this much like the Illinois Power Agency 8 addressed the planning process. Each year we put 9 together an annual plan, looked at the goal and looked 10 at what the gaps were. This really forced us to 11 short-term, other than certain set of procurements we 12 did in 2010, and long-term power purchase agreements. 13 Meanwhile, the alternative suppliers, 14 basically all the large industrial commercial 15 customers, large portions of the residential customers had a responsibility that they met. Partially by 16 17 purchasing renewable credits to meet the balance of 18 their obligations. And because any given year, any 19 given suppliers amount that they are selling to their 20 customers could go up or down. This really forces them 21 in short-term in what they were buying for renewable 22 energy.

23 The IPA was to administer the resources.24 Some of the funds from suppliers went into this fund

1 for us to use to purchase additional renewables. It 2 seemed like a very good idea at the time. It turned 3 out not to work the way we wanted it to. There was 4 challenges in the language of the law that prevented us 5 from spending it the way it was intended for. At one 6 point some of the money was borrowed and later paid and 7 later on that \$90 million of the funds were reallocated 8 to other purposes of the state. Some collected from 9 customers and went to other purposes.

10 So Renewable Energy Resources Fund had 11 challenges. I want to say it had successes as well. 12 Legislation past in 2014 created what was known as the 13 Supplemental Photovoltaic Procurement Process allocated 14 \$30 million of that fund to the procurement which we're 15 using to help building new small scale solar projects 16 in Illinois. I think 1300 as a result of that. More 17 than half of those already would be coming online over 18 the course of the next year.

19 The result of having these different 20 renewables was because of things of customers switching 21 and not knowing how many customers were going to be 22 part of what the procurement was going to be doing and 23 what portion of customers were going to be served by 24 alternative suppliers, it really made it hard to manage towards budgets and targets. And arguably when the low points of it was in 2013 and 2014 when Comm Ed's budgets were lower than what they needed to for the commitments made in 2010 long-term procurement and those contracts were curtailed. These were situations that we wanted to avoid and we would be able to avoid in the future.

8 So on that note, we had successes. We did 9 have long-term procurements and did have a small system 10 developed. But it was a system because of these 11 multiple buckets really did not function the way I 12 think that I dreamed it would be meeting our goals.

So that leads to our new legislation. So the
key components are the initial procurements.
Development of long-term renewable resources plan and
phasing out of those obligations of the alternative

17 supplier over the next two years.

18 It is an interesting idea that the General 19 Assembly, included in its legislation, realizing we 20 would be developing a long-term plan and a long-term 21 way of doing this, that takes a while. They wanted to 22 jump start the solar and wind market in Illinois 23 instructing the power agency to conduct procurements 24 that take place before we do our planning process. 1 I'll come back to those.

Actually, I'll mention that we are planning to have our first round of wind and solar and obvious additional rounds of procurements over the course of the next year. So that should lead to hundreds of megawatts of new wind and solar starting to develop the process while we're working all the details of our long-term plan.

9 Meanwhile we are working on this long-term 10 plan. We expect that it will be released in draft form 11 in September. And if you look through the dates and 12 the law in terms of the public comments, and before the 13 Commission, much like our power procurement plans 14 before the Commission. That should lead to the 15 planting of probably March of next year and then we'll 16 be able to ramp up the program and the programs 17 beginning to launch next summer.

One of the biggest changes, we in the past always handled renewables like we handled energy procurement process. We will be entering into a new phase of the Illinois Power Agency and that would be the programs that are ongoing rather than the procurement and real change of how we do things and create a lot more stability for the development of 1 small resources.

2 A key provisions here also is the alternative 3 supplier that we will be phasing out over the next two 4 years. So when all is said and done, IPA will be 5 running procurements for all the energy resources for 6 the state rather than have the split services where we 7 have to worry what the budgets and the targets are. It 8 will significantly increase the amount of renewables we 9 would be doing for the entire of the utilities, rather 10 than right now. Somewhere in the 20 to 25 percent over 11 the entire state load. So again the scale of things 12 will increase significantly, but the rationale, the 13 rationale would lead to the model.

14 In terms of how things split up, this is a 15 high level overview of key roles and the 16 responsibility. The Illinois Power Agency will be 17 developing the long-term resources. That will be the 18 framework from what we're doing in the future and we 19 would be doing the administration, running the actual 20 programs and the procurements that flow out of that. 21 Utilities will be both signing the contracts for these 22 and making payments for renewable energy credits. They 23 also will be providing funding for job training and the 24 solar programs. Then also there is provisions of

legislation for net meter changes and things that will
 help the solar energy industry as well that comes
 through the utilities.

4 The Commerce Commission role's remains 5 similar to what it has been in the past in that like 6 our annual renewable plans that come through a 7 proceeding, the long-term renewables plan and in the 8 future will be subject to ICC review and approval. 9 Regulatory function of the ICC remains intact and 10 really essential here. Likewise all contracts coming out of here would require ICC approval. 11

12 There the final part of this is the 13 Alternative Supplier Compliance is something that will 14 remain relevant in the next two years as they 15 transition and phase out their responsibilities. So 16 what is in the long-term plan?

17 At the high level the basic concept that we 18 want to head towards the RPF 2025 remains -- it now 19 becomes more rationale with the single stream of 20 procurements and programs rather than these multiple 21 2 million for wind and solar by 2020 and 3 ones. 22 million by 2025 and 4 million by 2030. For solar a 23 specific carve out, what portion of that comes from 24 utility scale projects. One portion comes from the

1 small scale projects as well as specifically for solar 2 on ground fields. It is some interesting provisions 3 there that seek to match the way in which the wind and 4 solar of new projects get by the time that we'll see 5 how those work out in terms of whether or not as the 6 wind and solar ramps up whether that way to expand the 7 amount of wind.

8 We also will be running programs that 9 I'll come to in a minute. Final point, if you look at 10 the quantitative targets in the law and percentage 11 goals that we have, it does not appear that they don't 12 quite match up. What other procurements can we do to 13 meet the percentage goals or what other renewable 14 resources out there that we can procure in order to 15 meet the goals. One thing I wanted to highlight is 16 many, many, many changes in the law to the Renewable 17 Portfolio Standard in Illinois.

18 One significant one is a change of locational 19 references. In the past it was handled, when we did 20 procurements we first looked at the bids that came from 21 the projects or resources from adjacent states. And if 22 they didn't fill our goals, we looked at resources 23 elsewhere in the United States. That model is going 24 away and being replaced by a new model. It is wordy,

1 public interest criteria, really related to minimizing 2 pollution. I consider Illinois deemed by the law to 3 meet the standard. But one of the things we would have 4 to do in the long-term plan is develop an approachable 5 adjacent state -- consider whether they meet that 6 standard. Projects in Illinois would be eligible. 7 Adjacent state resources would have to meet a stringent 8 test. We have a division, this covers their cost and 9 they impact some of the eligibilities of the projects, 10 particularly in other states.

11 To wrap up quickly, on a small scale solar we 12 are really changing from the amount we have done in the 13 past and wrapping things up significantly where we will 14 be developing a set of prices and schedules, basically 15 available to people who can come in and apply and get 16 payments for credits on a set schedule. A lot more certainty to the industry. One challenge of it is 17 18 however less structure of the payments and this will 19 also include community solar, is that they are front 20 loaded. We don't have to balance the fact that we pay 21 people up front in the contract, but they have an 22 obligation, how do we ensure that the credits are 23 produced and delivered.

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Longer term plan, we'll flesh this out. And

how we do this as well, as well as public consumer protections so that people can enter into the contract to build solar -- and subscribe to the community and make sure they are getting an appropriate, fair and good deal.

6 So to wrap up, I want to talk briefly about 7 Illinois solar. This is legislation. It takes 8 renewable funds focuses them on ensuring low end 9 customers participate in the solar economy. We are 10 charged to make sure the economic environmental benefits are realized by the participants. We view 11 12 that as something making a showing that the challenges 13 that customers have would be paid for -- assistance or 14 subscribe to solar will be mitigated and made 15 affordable for them.

16 Programs looked similar to the ones that we 17 There is a community solar, two community solar have. 18 options as well as public facilities. One thing I 19 really like about this legislation is I think that they 20 make mistakes when they don't put enough money in 21 education. This law has specifics -- carve out to 22 ensure that community based, grassroots and the success 23 of this program, that we have the ability to dedicate 24 some of the funding to make sure we can overcome the

informational barriers to make sure this program is available through the state. Likewise, we are charged with looking at issues of the environmental justice goal, 25 percent of the program is focusing on what is known as environmental. So with that, I think that I am out of time and I'll pass it on to Becky.

7 MS. STANFIELD: Thank you. Can you hear me 8 okav. Thank you for making time for this room and to 9 Commissioner Oliva in particular and the staff for the 10 work that they have been making possible for everyone 11 for your time to be here. I was asked to give a basic 12 snapshot of the current market for wind and solar across the country and drill it down into Illinois 13 14 before I get into my slides. Just a couple of big 15 picture realities of the market. If you take --16 remember nothing else that I say, if you zoom out to the 10,000 foot level, the two big market realities in 17 18 solar is that prices are declining really rapidly. 19 Employment is going up substantially. All the slides 20 that I have will reinforce those two dynamics. For 21 Illinois all our markets have been hampered by the 22 things that Anthony described in the Renewable 23 Portfolio standard. The supply is there and the demand 24 is there. So now the Future Energy Jobs Act has given

us the tools to scale market barriers to deployment.
 We are ready for the liftoff in Illinois.

3 If you remember nothing else about Illinois, 4 we did a little bit of modeling to try to put some 5 numbers around the economic impact of the Future Energy 6 Jobs Act for the solar industry in Illinois. Just 7 between now and 2020, we would expect about 4,000 8 full-time direct jobs in deploying solar systems around 9 the state. And more than 10,000 jobs, if you include 10 supply chains and induce job benefits, that would result from the Future Energy Jobs Act between now and 11 12 2020 with \$12 million in economic impact from those 13 jobs. So it is significant. Those first three years 14 is just the beginning.

15 So jumping into the slides, the first one is 16 about the U.S. Solar Market basics. What you see there 17 is what I said before. So the red line is declining 18 cost. The blue bars are annual deployment, not 19 cumulative, the annual, 2016 was the biggest year by 20 far and 45 gigawatts of solar deployed around the 21 country. That is about \$8 million homes. So it is 22 about the same as summer capacity that exist in 23 Illinois.

24

That utility scale in 2016, that is where we

1 created that big bar at the end. And projections for 2 deployment between now and 2022 are continued strong 3 growth. We expect to triple capacity between now and 4 then. Of the 45 megawatts that exist, 15, so a third 5 of them, were installed in 2016. So it is just how the 6 market is increasing. The price reduction was from \$7 7 a watt in 2009 to less than \$2 a watt installed in 8 2016. That is how quickly the prices are going down. 9 And across the country economic impact in the industry, 10 there is 260,000 people working in the solar industry. 11 There is a \$83 million contribution and \$12 million 12 contribution to the federal tax revenues.

13 And the last part of the market dynamic that 14 I will touch on relates to customer interest. So 15 customers are poled frequently on the topic. We see 16 time and time again everyone wants more solar in the 17 economic mix and half of the people are seriously 18 considering investing in the solar system. We saw this 19 last year with the Smart Energy. Usually customers 20 found that 69 percent of the 200 people they poled were 21 interested in going solar and 47 percent were already 22 in the middle of investing. In particular as community 23 solar subscription based solar becomes more available, 24 it presents a new opportunity.

1 So drilling into Illinois, again we have a 2 lot of customer interest and we have the supply. We 3 have a number of installers and developers and we have 1100 companies in the state. The market hasn't taken 4 5 off yet because the policy environment has not been 6 there. We rank 37 for 2016 installations. Lots and 7 lots of room of improvement, although we already have 8 3718 people working in the industry in Illinois. Tons 9 of improvement. We expect that over the next few 10 years.

11 Moving to wind market basis. Again it shows 12 the solar energy deployment way up. It is 200 13 gigawatts across the country. That is enough to power 14 2 million homes and ten percent was installed in 2016, 15 a 60 percent reduction wind generation or wind 16 installation cost. For both solar winds on an energy 17 basis, utility solar are now competitive with national 18 gas and electricity. So you are getting, we are at 19 some places and getting there.

102,000 jobs in the industry currently across
the country. In Illinois winds we have 4,000 megawatts
installed. We're Number 6 in the country. Wind
generates about 5 and a half percent of our
electricity, making an economic impact in the state.

1 These are numbers from the Illinois state study that we 2 are looking at. Just the biggest wind installations 3 in the state and estimating the economic impact that 4 20,000 construction jobs, 869 permanent jobs, \$13 5 million and more than \$30 million in property taxes. 6 So again lots of room of improvement. A lot 7 of it installed pursuant to the other state policies 8 and now that Illinois has a RPF, it can drive new 9 investment. It will certainly increase our leadership 10 fold.

11 So ramping up and taking the lead, as Anthony 12 said we have targets in the law that require 2 million 13 megawatts hours of solar by 2020, 3 million by 2025, 14 and 4 million by 2030 for the wind side. What we set 15 up in solar in terms of capacity added pursuant to 16 reach those goals is about 3 megawatts and 1300 17 megawatts in the wind and that is by 2030.

18 So I mentioned at the outset that we did a 19 little bit of modeling, job modeling that developed to 20 give us some estimate of the impact of the solar piece 21 of that by 2020. And again more than 4,000 -- more 22 than doubling the current industry between now and 2020 23 and of course that will keep ramping up through 2030. 24 I want to note that there are other drivers

1 and factors that would impact the market over the next 2 few years. And just to name a few, I think the 3 reduction in cost for battery storage is going to have 4 a huge impact on how much wind and solar we can 5 integrate into the grid. So that is a good factor for 6 wind technologies. I think federal policies will 7 impact the markets. And of course everyone is 8 following the trade case that actually bumped up the 9 cost of the solar system that are imported. So 10 everyone' has an eye on that. And local policy as 11 well, local rules can support or damage the market. 12 There is work to do. Make sure you understand the 13 significance of making this market work. Then the 14 other thing, the national timeline, data transparency 15 and other things that really depend on close 16 partnerships between the solar wind industry and 17 utility and the Commission. 18 So that is what I have. 19 MS. AKRAM: Thank you so much Becky. 20 MeLena, take over whenever you are 21 ready. 22 MS. HESSEL: Can everyone hear me all right? 23 First of all, thank you to Commissioner Oliva and all 24 of you for inviting me and listening to me today. I

1 was asked and I should -- I was asked to speak about 2 the community impact of the renewable portion of the 3 Future Energy Jobs Act which I may refer to as FEJA. Ι was asked to speak about the community impact. So how 4 5 would FEJA impact community? I think the first big 6 take away that I want to leave all of you with is that 7 the major impact to communities from this legislation 8 are going to come as a result of this new build of wind 9 and solar that both Becky and Anthony already talked 10 about that is coming as a result of this legislation. 11 There is other pieces and renewable legislation. We 12 will be buying racks to meet our 2025 goals. So I'm 13 going to spend the first half talking broadly what some 14 of those impacts may be. And then I'll spend the 15 second half talking about some of the specific programs 16 in the legislation that have the most potential to 17 impact communities and in particular to increase access 18 to the solar in the communities throughout Illinois. 19 Those are really what I'm excited about. So broadly 20 speaking what are the impacts that we might see from 21 this.

Number one, jobs. We have heard Becky talk
about that a little. I think many of us have heard it
as in the lead up to the General Assembly passing this

1 law. We will see jobs in the communities throughout 2 Illinois from solar development and wind development 3 from this bill. But there are also others. They come 4 from property tax revenue as well as payments that are 5 made by solar and wind developers to owners throughout 6 Illinois. We're somewhat familiar with this from the 7 wind we have already seen developed and we are already 8 seeing since the legislation passed. We're already 9 seeing solar developers talking to landowners across 10 the state. We have had talks to get more information 11 and we know this is happening with the impact in the 12 line of sight. Talking about the potential for the 13 developers reaching out to the landowners, anyone who 14 has driven from Chicago to Springfield have seen the 15 impact of the development around and what this 16 legislation means is that we might start seeing solar 17 development on farms in Illinois as well.

18 There are a lot of potential places to go 19 with the land use impact. I know on the solar side, if 20 every single solar panel that was developed as a result 21 of these targets went on land, none of it went on a 22 roof. None of it went on industrial and landfills. 23 But specifically on farmland, this would lead to less 24 than one percent of our farmland converting to solar 1 use in Illinois.

2 So I mention that because I think that we'll 3 see some dramatic impacts from this. But in terms of 4 the growth impact across the state it is still 5 relatively limited. So what other impacts? 6 Environmental health. So these impacts come because 7 putting working energy on the grid has potential to 8 display more polluting. What that means is fewer 9 asthma attacks, less days off work for folks that are 10 suffering from problems related to air pollution. It 11 means less greenhouse gas emissions that would lessen 12 the impact of climate change. And also know that both 13 the negative impacts that went into air pollution as 14 well as the negative impact related to climate change. 15 Researchers have found that they are felt more by low 16 income communities and the marginalized minority 17 communities. I think these impacts are important for 18 those communities in Illinois.

19 Energy costs. How incorporating renewables 20 onto the grid will impact energy costs. It depends on 21 the market structure. But broadly speaking, 22 incorporating zero costs, zero margin costs into the 23 grid for the long term would help to bring costs down, 24 public energy costs down. And in particular, solar

1 which is -- we'll see a lot more due to this bill, that 2 produces the most when we are using, we are at energy 3 peak. Hot summer days everybody has their AC on. We 4 are using the most energy. There is potential 5 specifically to lower the cost when you get to peak 6 usage. I'm going to pause here before I get to the 7 individual energy bills. They is an impact of the new 8 build coming. I think it is important to note, because 9 there is multiple goals in this RPF. The percentage 10 goals and the new bill goals and to the extent that the 11 jobs, the low economic impact to the extent that we are 12 hoping for the environmental health benefit, you want 13 to see an impact. We are looking at that. This 14 depends on the new bill programs that are going to be 15 part of the IC plan, working well to get those 16 resources deployed.

17 The last impact is to the individual energy This historically has been someone installing 18 bills. 19 solar on their rooftop and being able to save money on 20 their energy bills. This is correct, great. However, 21 that is not an option that is really available for 22 everyone throughout the state. If you rent, if you 23 own, but you own a condo, if you have had a giant tree in the front of your property, you would have to cut it 24

1 down to get the similar energy benefit. What is 2 excited about this legislation are the programs that 3 are within it that will change the game and enable solar access for folks who didn't have access to the 4 5 solar before. The first of those programs is the 6 community solar program. So Anthony mentioned this 7 briefly. Step back and explain solar because I think 8 it is a new concept for a lot of people.

9 I would like to say community solar is like a 10 community garden. I can't grow tomatoes in my back 11 yard. I have a plot among other people and can grow 12 tomatoes there. That is what is mine. I can't put a 13 panel on my roof. There is an offsite development that 14 I own or lease a panel and I can get the benefits of 15 that energy production on my electricity bills. Now 16 the major difference I think it is important to realize 17 between the solar community garden and community solar 18 is that people next to me, the folks that you see at 19 this table, they are residential users. The community 20 of folks using energy in Illinois is much broader than 21 just household. It includes businesses. There are 22 major folks working in major companies working in 23 offices downtown right here that obviously can't afford 24 solar on the roof. They are only on floor 25-30 of a

1 84 floor building.

2 There are government users that cannot access 3 solar, schools and nonprofits. So the difference 4 between a community solar development and community 5 garden is often that they are a lot larger in the 6 scale. You are seeing larger users access those. I 7 think that this is a really exciting opportunity for 8 Illinois to really bring solar access to widen solar 9 access throughout the state. It is an opportunity for 10 Illinois to become a leader in pushing solar access 11 forward. Where Illinois can lead, others can follow. 12 The next program that I want to talk about is 13 the solar for all programs that Anthony mentioned. 14 This is a low income solar program. Anthony already 15 spent a little time talking about it. I want to talk 16 about why this is important. There are barriers to 17 solar deployment and some of these are really obvious. 18 The community solar program can address some of them. 19 Lower income folks are less likely to own their own 20 home and therefore less able to just install solar on 21 their roof. That's not where the barriers end. There 22 is also for the first time when it is large up front 23 cost to reap the benefit. There are financing

24 barriers. People with lower credit scores may have

problems borrowing money needed to get -- or community solar projects serve low income communities may have a problem getting subscribers if they don't have high credit scores.

5 Education outreach is also a challenge when 6 you have cultural barriers, language barriers. You 7 want to make sure that the markets serving low income 8 households is providing the background and education 9 needed for the folks to really understand and feel 10 comfortable. So I think Anthony's point about the money set aside for grassroot education, lower income 11 12 solar programs for all is very important.

13 We are really excited about this program. 14 Excited about potential for lower bills for the 15 long-term customers, about the carve outs that were 16 mentioned for environmental justice communities and 17 also about the potential for the job training programs 18 to provide a pipeline for folks and provide job 19 training programs and opportunities for their students 20 to get on the roof training.

The last program I wanted to mention doesn't expand. It is important when it comes to community. It is the Brownfield solar portion of the bill. So there is a carve out and there is requirements that

some of the solar that gets developed through this legislation fits the on contaminated land on Brownfield and landfills here in Illinois. You don't necessarily want the Board of Health coming in. They are sitting on -- communities. They are not developing because of contamination.

Solar could be a really positive development
opportunity for these sites. I'm really excited and
hopeful that we'll see development on the ground.

10

MS. AKRAM: Andrew, you are up.

11 MR. BARBEAU: Thank you. I think that I have 12 had the pleasure of going at the end of everybody else 13 and I can steal their ideas and add on top. Within the 14 Future Energy Jobs Act there is lots of pieces that 15 were very specific, a lot of general outlines. The IPA 16 has to accommodate and deal with. I would give a lot 17 of the credit to Anthony for losing his summer. He is 18 doing an incredible job. Once he's done, the 19 Commission gets to do all that as they make those 20 decisions as well. It is going to be a busy year. Ι 21 think there is a lot of excitement coming out of it.

I'm going to take a little bit of a step upward, I guess, from what we have you and the people this afternoon to talk a little bit about as we see

1 this development coming what is the impact to be here 2 and how does this dovetail in the broader international 3 and national efforts and discuss the climate and energy 4 policy and what is happening here. What we may have to 5 look at in the course over the next 10 to 15 years to 6 enable that kind of future to continue to grow. A lot 7 of people are aware that response to growth of 8 renewable energy and displacing some traditional 9 aspects throughout the country, and we are seeing a 10 response from the Secretary. I think we have seen also 11 a good conversation that that is inspired about what is 12 the value of that. What is the value of that baseload 13 that we see in the market. There is a lot of new 14 studies and reports that have come out in the last 15 couple of months that really kind of take that question 16 of baseload away from the value of it. It's a given 17 that we need baseload here.

18 This is a new report that came out from 19 energy in the Brown group. It talks about kind of what 20 is the difference between the traditional baseload in a 21 planning sense. So when you have the Commission 22 decisions on resources for long-term utilities, the 23 traditional will look at how the staff resources to 24 make long-term decisions about assets.

1	What we have seen, when you work in a market
2	sense, it doesn't work in a state that has deregulated
3	generation. As we see more and more of these, we are
4	seeing them replaced by a new volume of energy to kind
5	of serve the needs of the loads. So kind of redefine,
6	from my standpoint more economically flexible
7	generation. It is generation that cannot ramp up and
8	ramp down economically. It doesn't necessarily respond
9	to kind of interchanging grids.
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17	As we move forward and not because we have
18	renewables, but because of more consumer sources and
19	technology that change load patterns on the grid and
20	vehicles and as you said rooftop, we really have to
21	start thinking about this.
22	We have the ability of data and communization
23	technology that we didn't have 50 years ago to be able
24	to manage, not just sit and hope that the lights don't

1 go out. You could make sure that this happen. It is 2 trying to say if you look at over time the ability of 3 solar plus wind to kind of serve in meeting peak 4 demand. It is possible. It is possible to look at how 5 to do that. How do you incorporate that flexibility? 6 We will talk a little bit here. We'll see a lot of 7 developments come out over the next 13 years by 2030. 8 It is not going to happen exactly overnight, but it is 9 something we should start thinking ahead long-term. If 10 we were to get to a place where it is more beneficial 11 for our economy, what do we have to do to get there. 12 It is not an insurmountable task. It is something that 13 requires new market design and new technologies. It is 14 all very feasible. We have taken steps over the past 15 several years through the markets in order to 16 accommodate that. There is nothing that we need 17 mystery technology that doesn't yet.

18 When we look at flexibility, this is not just 19 a large, you know, view of do we have over the course 20 of the season and source of the day, a typical resource 21 question -- operators look at do we have a capacity to 22 meet peak demand. That is the market that we have 23 today. If you start scaling back and look at the 24 flexibility that we need in the grade and lower level,

1 it gets to be a little bit more dynamic. So going from 2 bottom to top, you look at -- you start looking at the 3 need for new markets and new scheduling and resources 4 on a day ahead or daily basis to manage -- what 5 happened, sort of forcing generation and you are 6 incorporating generation based on the distribution of 7 assets. How do you look at transmissions? 8 Incorporating smoother exchange over wide areas to 9 accommodate small regionals differences. Thermostats 10 that we put on our walls. Then you start pulling back 11 and getting down to a shorter time frame. Ten minutes 12 or even down to a couple of seconds. What do we look 13 at in terms of small reserves? What do we have in 14 reserves. It can't ramp up or ramp down quickly and 15 respond every couple of seconds or microseconds. How 16 do you better balance it?

17 So as we look at some of these things. What 18 we need is a market design to allows us flexibility to 19 emerge. If you only need to have regulation to help 20 keep the grid, there is actually a value to some being 21 able to respond to that in seconds 95, 98 percent of 22 the time.

By creating that market value, we saw we
 could do this better -- resources jumped into the

1 market. We are already close to, depending on who you 2 talk to, kind of the maximum need for the battery. 3 There is lots of other things that it could be doing as 4 we have a level -- grid, how we would be able to --5 talking about the battery, storage, and lots of time 6 when people talk about battery storage, they think of 7 shifting from solar energy to -- how do you store 8 energy in a battery, the kilowatt hours of the battery 9 during the times that you are not generating access. 10 That is one use. I use that in a place like California 11 where we have a difference to accommodate. But there 12 is also lots of other tools that batteries could 13 provide. If you think about -- and kind of a toolbox 14 that apply a lot of value as a machine that could do a 15 lot of things autonomously.

16 We don't want to think about the kilowatt 17 hours, but thinking about other needs of providing --18 on distribution centers. And we find the markets for 19 those values. We would be able to find ways for any 20 technology and batteries may be -- So that is what we 21 talked about, increasing flexibilities. Speaking of 22 incentives and go back to FEJA, we're probably leading 23 the country in one of these areas as well, bringing it 24 from the large scale transmission down to the local

1 system. Part of the acts -- it has a little bit of 2 tension, not a whole lot of tension, is been this 3 value -- there is a rebate -- first it will appear as 4 the \$250 per kilowatts. That goes up to compensate 5 them for distribution grid that they are compensated 6 for. Then over time once we hit on 5 percent 7 commissions could have a big responsibilities here. 8 They would have to open an investigation. Three 9 percent of that year. To investigate what is the value 10 of the resources because particularly solar to 11 distribution system, what value do they create? This 12 is a conversation that's going on in a few places in 13 the past couple of years. What is the value of 14 distributed assets to offset costs? How do we serve the same grid. Illinois will be front and center for 15 16 this conversation depending on the scale and 17 development that we see. And the big question that is 18 going to be posted, what are the geographic times and 19 performance based benefits of solar. Providing that 20 value as a front and center to the customer. Bill 21 upfront payment that would offset the cost. But it 22 will compensate them just like a utility transformer or 23 wires on the system allowed to treat those assets. How 24 do we create these assets on the system to help

everything. These are things that we have to tackle.
What they look at how do you value these assets in the
distribution? It is going to continue to speak at the
federal level. We can say the growth of solar, there
should be solar batteries. How do we be forward looking
and accommodate this and create this access. I would
turn this back over.

8 MS. AKRAM: Thank you, Andrew. I think we've 9 gotten a good overview of FEJA and the the importance 10 of FEJA that had to do with renewables and what the 11 landscape looks like and what is going to look like. 12 And some of the forward thinking that we need to 13 address with respect to how FEJA is going to change the 14 renewables landscape.

So at this point, we'll be moving into the the Q and A portion of the panel. We will be posing questions to the entire panel. And kind of start the discussion and the rest of you could jump in. I do want to point out that we have a lot of solar questions and the sun just came out. So I think that is just in time. We'll mix up the Twitter questions.

Just to get us startled, we heard about a lot of the changes that FEJA will be making to the landscape in Illinois. We want to take a look at when

1 these changes will occur. Not the ones that are 2 statutorily set in FEJA, but when would we be seeing 3 some of these changes. For example, when will we see 4 of high penetration of renewable on the grid. How can 5 we accommodate and address these changes going forward? 6 MS. STANFIELD: That gets into what Andrew 7 was talking about when do we need to see the markets 8 for other services that can be prevented by resources 9 and when do we need to get concrete about the 10 locational value of the resources. I quess in a word I 11 would say, you know, not now. We have time. There is, 12 you know, we are at a very, very small penetration 13 rate. Less than half a percent of our power is coming 14 from solar at this point. So as an example, you know, 15 there was a day this merged in California. A day in 16 March when -- for the middle of the day the total 17 demand for electricity was at 29 gigawatts. And solar 18 was providing 14 of those gigawatts. So half was 19 coming from solar for California, which is a huge 20 market. And they have not figured out all the issues. 21 So we have a long way to go. But it is now. It is 22 time to be -- we can be ready, you know, five years 23 from now, seven years from now, we can optimize the 24 resources to maximize benefits.

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Q

We have a Twitter question.

2 COMMISSIONER EDWARDS: Can we ask a couple of 3 questions?

COMMISSIONER ROSALES: Some basic questions 4 5 on community solar. I noticed you had the Gomez 6 family, a large area in the community, solar panel that 7 you had post. How do you break that down? Families in 8 the neighborhood, pick up a panel and this is what is 9 going to -- what happens when these panels are 10 allocated, do they move on to the next phase or how 11 does that work? How do you see that work?

12 MS. HESSEL: We've actually seen a couple of 13 other states in the community programs. I think that 14 defines how the model, I expect them going forward 15 here. So I'll start by saying there is a ton of 16 different ways you could do this. You could get really 17 creative. What we have seen most commonly with larger 18 communities, solar development companies that helps 19 facilitate this process. And I think what we have 20 seen --

21 COMMISSIONER ROSALES: Who is going to 22 regulate the sun? It is just going to come out. This 23 is what we want to do?

24

MS. HESSEL: It is a good question.

1 Certainly through part of what we're going to need to 2 think about as we're developing consumer protection 3 side of that for community solar, which is really 4 important. Something that we have seen other states 5 require a standard disclosure form for folks that I'll 6 say the most common model that I have seen is a 7 subscription model. Where someone pays a monthly fee 8 to the benefit on their bill. And, you know, my hope 9 is that the benefits outweigh the cost of the service. 10 But certainly, you know, translating for a rooftop 11 solar model, you will only start getting -- it takes 12 time to get your full pay back. So depending on how 13 long your subscription is, it could change how much you 14 are paying. However, what you'll see is other state 15 consumer protection is the standard disclosure form. 16 Make sure that customers that are subscribing to sign 17 up to get a monthly share of the community is given 18 information about what they are going to be charged 19 every month, what fees, if any, come along with the 20 project. What benefits they expect to see on their 21 bill. How if they need to move, in the legislation it 22 is required that these subscriptions are portable and 23 transferable. That someone can get out of their subscription, or they can bring it with them if they 24

1 move here from one house in the neighborhood to another 2 house in the neighborhood, you don't have to give up 3 your subscription because you moved.

4 So disclosures are one of those tools and 5 there is a couple of issues to think about as well. 6 Make sure that there aren't any hidden fees. The fee 7 structure is part of it. Folks know what they are 8 getting into when they sign up for it. So there are 9 good models in other states that would help quide us.

10 MS. STANFIELD: From the brief time that I 11 was in the solar industry, I know that the last 12 developer was a disgruntle customer. So the whole 13 future of the market depends on solar going viral. 14 Their neighbors telling neighbors how great it is. 15 Make sure that they understand what they are getting 16 into at the outset. So as MeLena was saying, standard 17 contracts that have been developed.

18 MR. STAR: We held some workshops in May and 19 issued a request for comments after that. And Consumer 20 Protection wanted to make sure, the majority of May be 21 well good and Becky described it doesn't take a lot of 22 bad actors to tarnish the industry and making sure we 23 have good consumer protection.

24

COMMISSIONER ROSALES: Who is making sure of

1 that?

2 MR. STAR: When we develop our plan, we can 3 propose the terms and conditions of the different 4 programs. We wrote proposals about that in our long 5 term plan that would come before the Commission for 6 review.

7 The other thing I was going to mention, there 8 is a community solar -- it is still a fairly new way of 9 developing solar. And while there are a lot of 10 projects around the country, it is still contingency --11 the business model that the people use and maintain, 12 these projects remain to be seen. We, perhaps, have some flexibility. We would see a combination of things 13 14 where developers who will develop a project and go out 15 and sell this kind of commodity project.

16 We also see where there is communities, some 17 that are interested. Really have something tangible 18 for their communities. First I described, we don't 19 know where the project is going to be developed and 20 where the subscribers will come from. I hope that we 21 would be able to accommodate a variety of models. So 22 we see as the model develops across the country what is 23 viable for access to the communities.

24

COMMISSIONER VALLE: I was wondering,

1 Commissioner Rosales, this time it is an important 2 point. We're still working on ensuring that consumers 3 of this are protected. Do we have it right now in the 4 rules? I'm not sure. So when you talk about consumer 5 protection, I'm wondering what role do you see the 6 Commission playing in ensuring what we come up -- going 7 to protect people from predatory lending type of 8 activities that we see out there and ensuring that 9 community education actually has an effect. Because 10 certainly on the choice side, the electricity, we 11 haven't seen it. We still see a lot of marketing 12 problems out there. Where there is a buck to be made, 13 people are going to look for a way to make that buck. 14 I think that the point about the developers and the 15 impact that adverse kinds of situations could have 16 under long-term process is a good point. But people 17 still fall victim in different cases. I think it does 18 have an effect of discouraging folks as we're seeing 19 now in the retail choice area, discouraging folks from 20 even participating. So this is something that needs 21 to be developed up front sooner rather than later.

22 MS. HESSEL: I agree with you. Hopefully, we 23 can learn from the experiences that we had in Illinois 24 with the electric choice. I mean community solar is not the same as -- but there may be some overlap and
 you should look to where there is potential for abuse.
 But thinking about that, we'll incorporate it in the
 long-term plan for sure.

5 MS. STANFIELD: It is bad actors in the 6 market. The whole community is devoted, they are making 7 sure that there are protections.

8 COMMISSIONER EDWARDS: So first of all kudos 9 for bringing this timely discussion before the 10 Commission. Thank you for being here today. I think it is clear that the FEJA is definitely a framework of 11 12 what is going to take Illinois to the next level as it 13 relates to development and shift overall to renewables. 14 But I think we all know too that the key really is that 15 is half the answer having that development of 16 renewables. The other half I think it is not going to 17 be -- integration fees. Wee don't often talk about --18 I know there are other countries that really they have 19 all the resources in the world, but they are looking on 20 that and their whole plan has been for not. What 21 specifically in FEJA points out the overall success of 22 how we're going to get there.

23 MR. BARBEAU: I think there is a couple of 24 things that we're looking at here while FEJA is a great

1 first step, we didn't -- we have rebuilt targets that 2 are strong. I think there is opportunity for more. I 3 think it will be, while we're going to have a 4 significant development, it will be some time before we 5 have a really struggling challenges. The broader 6 question is how do we ensure that we have a diverse mix 7 of generation. Do we have a variety of needs. I think 8 if we focus on putting customers first and center of 9 how do we serve them and not focus on the needs of 10 companies and industry and these are in terms of generators and industry as a whole, so I think that is 11 12 a great start. When we look at the examples of the 13 framework, how we start these discussions, that was 14 because if there are needs and loans that are met and 15 how you power that, I think we're going to be 16 successful than others that have not focused on having 17 this -- meet certain numbers and targets as a whole. 18 It is like Germany lived on a lot of, you know, new 19 development and top solar. They also had a lot of 20 cheap Chinese solar panels. They are seeing a lot of 21 integration.

I think there is a doing it right. We'll need to be looking at this on a larger scale movement of energy and transmission and it is going to be very

important. So I think there is a wide range of
 activities that we are going to be engaged in 15 or 20
 years.

4

COMMISSIONER EDWARDS: Thank you.

5 MS. STANFIELD: Just to add the two pieces of 6 unfinished business that the Commission and the state 7 can take on subsequent here is integrated system 8 planning for the system and batteries. How do we --9 batteries, talk about it. So I think, I would love to 10 engage with people in this room to figure out how we 11 develop both of those policies pieces over time.

12 MS. AKRAM: This is good time for the twitter 13 question.

14 COMMISIONER OLIVA: One of our Twitter 15 questions comes from Illinois. What policy change 16 would you make from the status quo to best advance 17 Illinois' energy goals?

18 MR. BARBEAU: Status quo. It's important to 19 look at. Long-term we're getting there. As I 20 mentioned before, I think finding a way to value 21 flexibilities in the market that enables you to better 22 use electric vehicles, batteries, thermostats. It is 23 essential for that innovative question of how do we 24 accommodate our goals. I think those are questions that FEJA left out. We didn't tackle all the
 Commission planning. We didn't attack all the
 specifics of the distribution and the value question.
 We left a lot up to the Commission. I think that is
 where we start looking at having focus on that.

6 MS. HESSEL: I would agree. We have been 7 talking about energy storing batteries a lot, but you 8 don't see them mentioned in the Future Energy Jobs Act. 9 In terms of where to go into the future to advance our 10 energy goals, anything about how to incorporate that 11 into our policies. And I think we have a lot to learn 12 about how that will integrate here in Illinois in 13 connection with the process. But at some point, 14 anything about actively working to support some of 15 the -- potentially looking at employment goals would be 16 something. And other states start thinking about this 17 including Massachusetts and Nevada and Oregon. That is 18 the next step for the energy policy in Illinois.

19 MS. STANFIELD: I already said my top two, 20 system planning, batteries. Also I want to also say I 21 think electric vehicles are part of the system and we 22 need a strategy around electric vehicle integration as 23 well.

24

MR. STAR: As much as I like government

1 programs to help encourage things, we have had to --2 whether or not that has served as a natural cap, I 3 think we have to watch and see. We have a tendency --4 it seems like, how quickly will changes happen over the 5 next few years. That might be too long. We are 6 getting battery storage to take off. We could get 7 behind in the curve. We would have to keep an eye on 8 that.

9 CHAIRMAN SHEAHAN: Obviously we are in a 10 restructured state. We are grappling with policy 11 support for a particular type of market prices. I'm 12 kind of curious as to your opinions of how markets in 13 the future has penetration of this electricity from 14 these resources becomes more significant, how do 15 markets deal with that increase in impact on market 16 prices and whether the RTO market should mitigate? In 17 other words penalize or harmonize the existence of 18 these resources in the market?

19 MR. STAR: The model we have right now where 20 we review through energy credits to keep it separate 21 from the energy markets is working fairly well. I 22 think policy changes on that in the short-term, I think 23 that is something that helps us reach that gap. 24 MR. BARBEAU: I would say going back to

1 looking at kind of an enhancement of the flexibility 2 around these markets in awarding flexibility and 3 adaptations, when we look at maintaining certain 4 assets, because it is hard. We look at environmental 5 attributes that's even accessible, that is something 6 that's going forward. When we look at beyond energy, 7 and environmental attributes, that is a lot of other 8 things that we need on grid that sometimes are embedded 9 in terms of the utility values and sometimes they are 10 provided by large scale generators and batteries that 11 are capped out. So if we start opening up, just like 12 we did, with the regulation market to enable higher 13 payments of market flexibility faster and better, we 14 are going to be able to see some of the more 15 integration addressed, whether it is a lot of things 16 that we would value outside that.

17 It is not a question of penalizing removals, 18 I guess. There is a question of why are we assuming 19 that everything has to done and slow. If we can reward 20 being smarter and faster, I think we would be able to 21 achieve these without having rate penalties and 22 structures whether it is on a large scale or small 23 scale.

24

MS. AKRAM: I want to add in the afternoon

1 session we will be expanding on this issue with regard 2 to the environmental policies. I hope that you would 3 stick around. We have a few more minutes. I am going 4 to shoot you a few more questions to you all. The 5 first question I want to ask, we talked a little bit 6 about the Brownfields to Brightfields, what that's 7 going to help with respect to solar development. Ate 8 there any factors that make land attractive for solar 9 development?

10 MS. HESSEL: I think one of the key things 11 that makes it attractive and this will be for either a 12 Brownfield or with any site is proximity to substations 13 and being able to interconnect to that is number one. 14 After that you are talking about being flat and you are 15 talking about not being shaded. And you know having 16 the right amount. In terms of Brownfield specifically 17 depending on the contamination there, there are 18 different things to consider. But one of the real 19 advantages in terms of solar as a tool for Brownfield 20 is that you don't have to dig into the ground when you 21 are developing. You can ballast. You could use waste. 22 So that they could work pretty well.

MR. STAR: Having things to the non brown
Brownfield solar side of this, if you look at the

1 geography of Illinois, a very large portion of the area 2 of the state is actually territory of rural co-ops. 3 Even though to a certain extent people are looking for 4 sites for new solar that connect well to the 5 transmission grid being close to the substation, et 6 cetera, we're hearing anecdotally more and more, I want 7 to say the issues, but confusion out there because it 8 is very hard in Illinois to figure out whether you are 9 in a rural co-op. And the co-ops are not regulated by 10 the state. They are not part of this. And I think they are happy to have it that way. They are getting 11 12 more inquiries from their members who are having people 13 who want to do -- lease their land for the solar 14 property.

MS. AKRAM: Tying that to the people of Illinois and job creation, what types of jobs are we going to see in the solar market. Is it just people installing panels? Are there going to be other types of jobs that we'll see?

20 MS. STANFIELD: The vast majority would be 21 installer jobs. Our amazing people are going out in 22 trucks, getting on roofs and putting the panels on the 23 roof. You know there is administrative jobs and sales 24 is the big component, but I think the vast majority is

installation jobs. Throughout the supply chain there
 are some performing jobs in solar now and that will
 continue to increase.

4 COMMISSIONER VALLE: You mentioned carved up 5 to community. Have these areas been identified? If 6 not, how would they be identified? 7 MR. STAR: That is a work in progress. We 8 have been very fortunate that the Illinois 9 Environmental Justice Commission -- it is helpful 10 feedback, as well as we would be able to take in order 11 to map those. We are definitely talking to them and 12 looking at recommendations and the approach to that. 13 We have not yet at this time come up with a definition 14 or done the mapping. What would be considered in 15 environmental justice. This would be focusing 25 16 percent of the program to communities. The flip side 17 is there would be a narrow definition. I think our 18 challenge would be to encompasses the value of 19 environmental justice. 20 COMMISSIONER ROSALES: Isn't there a RFP on

21 that?

MISSIONER ROSALES: Isn't there a RFP or

22 MR. STAR: There is not a RFP. We are hiring 23 a Program Administrator to run the Solar Program. The 24 approach to how we handle the definition of environmental justice community will be contained in a
 long-term goal that would come before the Commission
 for review and approval.

4 COMMISSIONER ROSALES: Tell me about the 5 education part. You have five percent going to 6 grassroot education. There is a big difference from 7 education and market. When you talk about the jobs, 8 that is the marketing part. The education part is what 9 I'm centering on. Whose responsibility is that for 10 education?

11 MR. STAR: Still to be determined whether 12 that would be part of our Program Administrator. 13 Whether we seek a separate RFP to get someone to do 14 that. We haven't decided yet on that. That goes 15 through the plan to give you an opportunity to look at 16 that.

17 That is all the time we have for MS. AKRAM: 18 questions. Thank you Chairman and the Commissioners 19 for asking these fantastic questions. For the 20 panelist, let's give them a round of applause. 21 (APPLAUSE) 22 MS. AKRAM: Now that we have done a renewable 23 tweeting of the Illinois Power Meter, we'll break for 24 lunch until 1:45 p.m. Enjoy your break and we will see

1	you back here in an hour and a half.
2	(WHEREUPON the meeting was adjourned
3	at 12:30 p.m.
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STATE OF ILLINOIS ) ) COUNTY OF COOK) CERTIFICATE The within and foregoing hearing was taken before GWENDOLYN BEDFORD, Certified Shorthand Reporter in the City of Chicago, County of Cook and State of Illinois, and there were present at the hearing Counsel as previously set forth. The undersigned is not interested in the within case, nor of kin or counsel to any of the parties. IN TESTIMONY WHEREOF, I have hereunto set my hand this 3rd day of August 2017. GWENDOLYN BEDFORD, C.S.R. No. 084-003700