

1 PLACE: Dobbs Building, Raleigh, North Carolina
2 DATE: Monday, November 3, 2008
3 DOCKET NO.: E-100, Sub 121
4 TIME IN SESSION: 1:03 P.M. - 2:15 P.M.
5 BEFORE: Chairman Edward S. Finley, Jr., Presiding
6 Commissioner Robert V. Owens, Jr.
7 Commissioner Lorinzo L. Joyner
8 Commissioner Howard N. Lee
9 Commissioner William T. Culpepper, III

10 IN THE MATTER OF:
11 Generic Proceeding - Electric: Presentation from Potential
12 Vendors

13 A P P E A R A N C E S:

14 FOR PJM:

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P R O C E E D I N G S

CHAIRMAN FINLEY: Let's everybody have a seat, please, and we'll come to order. Good afternoon and welcome to the Commission. This is a proceeding we are having in connection with Docket No. E-100, Sub 121. My name is Edward Finley of the Commission and with me is Commissioner Lorinzo L. Joyner, Commissioner Howard N. Lee and Commissioner William Culpepper, III.

On August 20, 2003, the North Carolina Utilities Commission enacted Comprehensive Energy Legislation Session No. -- Session Law 2007-397, also commonly called Senate Bill 3, which established a renewable energy and energy efficiency portfolio standard for the State.

G.S. 62-133.8(i) required the Commission to adopt rules to implement provisions of this new law. It also requires the Commission to provide for the monitoring of compliance with the enforcement of the portfolio standards and to develop procedures to track and account for renewable energy certificates, including the ownership of renewable energy certificates that are derived from customer-owned renewable energy facilities.

On February 29, 2008, and March 13, 2008, the Commission issued orders in Docket No. E-100, Sub 113, adopting final and amended rules to implement Senate Bill

1 3.

2 In the February 29 Order, the Commission
3 concluded that compliance would be determined by tracking
4 the renewable energy certificates, also known as RECs,
5 associated with renewable energy and energy efficiency.
6 The Commission also concluded that a third-party REC
7 tracking system would help the Commission and stakeholders
8 to track the creation, retirement and ownership of RECs
9 for compliance with the new portfolio standard.

10 On September 4, 2008, the Commission opened a
11 new docket, Docket No. E-100, Sub 121, and issued an Order
12 in that docket establishing a process for defining the REC
13 track system requirements and selecting a provider. Part
14 of that process has involved stakeholder meetings to
15 refine a draft system requirements document. Stakeholders
16 have met in person or over the phone four times and are
17 scheduled to meet again November 13th and are making good
18 progress as we understand it.

19 Another part of the process is selecting a
20 vendor in this Commission meeting today, during which
21 potential vendors have the opportunity to make brief
22 presentations to the Commission and respond to our
23 questions.

24 Three organizations contacted the Commission and

1 asked to be placed on today's agenda: PJM Environmental
2 Information Services, Inc.; APX, Inc.; and Clean Power
3 Markets, Inc. All three organizations provided their
4 written materials in advance and that material is
5 available via the Commission web site.

6 We welcome you to North Carolina. We appreciate
7 your traveling to Raleigh to be with us today. We look
8 forward to learning more about your organizations and REC
9 tracking systems.

10 And I would advise all members of the Commission
11 of their duty to avoid conflicts of interest under Chapter
12 138A of the Government Ethics Act and inquire whether any
13 member of the Commission has a direct conflict with
14 respect to any matter coming before us this morning -- or
15 this afternoon?

16 (No Response.)

17 Seeing none, we will proceed. We understand
18 that PJM Environmental Information Services is to make the
19 first presentation. We'll call you to come forward and do
20 that, please.

21 MR. OTT: Good afternoon. Can you hear me?

22 CHAIRMAN FINLEY: Yes.

23 MR. OTT: Okay. Good afternoon. I
24 appreciate -- my name is Andy Ott. I'm from PJM

1 Environmental Information Services. I also brought with
2 me Ken Schuyler who will assist me in answering any
3 questions you may have after our overview remarks.

4 I appreciate the opportunity to visit North
5 Carolina today and to go over with you some of the aspects
6 of services that PJM EIS provides.

7 If I could go to my slide three -- am I --

8 MS. JONES: Yeah, unfortunately --

9 MR. OTT: I'm going to run this, okay.

10 MS. JONES: Thank you.

11 MR. OTT: Appreciate that.

12 MS. JONES: I think it will go better than if I
13 did.

14 MR. OTT: Okay. What do I --

15 MS. JONES: The arrow I've been told.

16 MR. OTT: Okay, the arrow. Uh-oh.

17 MS. JONES: You've got it. You're fine.

18 MR. OTT: Keep going?

19 MS. JONES: No, no. Stop.

20 MR. OTT: I thought I would dispense with the --
21 what is a certificate tracking system and talk a little
22 bit about PJM EIS itself: As soon as we get ourselves
23 together here, we'll be able to -- PJM EIS was formed
24 essentially to provide environmental and emissions

1 attribute services to certain states within our region.

2 It's a wholly-owned subsidiary of PJM Technologies.

3 PJM is a regional transmission organization. We
4 run a grid in the wholesale power markets over a 13-state
5 region, plus District of Columbia. The GATS system
6 actually, as I'll talk later, only applies to a subset of
7 that region, only the states who need certificate
8 tracking, therefore EIS was actually set aside as a
9 separate corporation so that we could capitalize it
10 independently. We could actually provide services to only
11 those members who need it.

12 So the actual funding of the GATS system is born
13 by the entities who use it as opposed to the entire RTO
14 community. So that's essentially the structure under
15 which we formed GATS.

16 If you go to the next slide, please. Give you a
17 little history on how it was founded. The first mover
18 within our region, New Jersey State Commission, the Board
19 of Public Utilities in New Jersey, actually had been the
20 first state in our area to require certificate tracking,
21 so they provided a low interest loan to get the system
22 started.

23 We then, as I'll talk later, had evolved and
24 added other states as we went. The PJM staff actually

1 work for EIS. The employees of EIS actually are all
2 employees of PJM also.

3 The software vendor who had originally created
4 the GATS system was APX, and the production system went
5 in -- went live on September 2005.

6 So I go to the next slide, please. Again, this
7 is the structure of EIS. We have a board of directors
8 that essentially are all officers of the PJM RTO. I'm one
9 of those officers. I am Senior Vice President of Markets
10 at PJM. I also serve as one of the governing board
11 members for EIS.

12 Then we have a set of officers that are all,
13 again, PJM employees. One of those with me today is Ken
14 Schuyler, who's the vice president. And Ken and two other
15 staffers are the primary people who actually provide
16 services to EIS. We do have a subset of developers within
17 the PJM Information Technology Division who also provide
18 services to GATS.

19 If I go to the next slide. The way we govern,
20 if you will, the EIS organization, we have two entities,
21 two stakeholder groups, if you will, who provide us with
22 guidance on how to develop new features within GATS. One
23 is the GATS subscriber group, which were essentially the
24 entities who were either our resources or the consumers of

1 certificates. Then we have state advisory committees
2 which are comprised of our state commission staff
3 generally who provide us guidance based on the needs of
4 the, you know, the particular state. And again, I'll go
5 into which states we actually serve in a subsequent slide.

6 But essentially the state advisory group meets
7 probably about once every six months. It's really as
8 needed to provide us input. The GATS' users group meet, I
9 believe, twice a year. And the state agencies, of course,
10 also outside the meetings interact with us as we need to
11 support them, if you will, in their RPS performance.

12 If you go to the next slide, talk a little bit
13 about the design of the system. Again, it's designed --
14 the system's designed to be policy neutral, meaning each
15 state has different requirements in their RPS standards
16 and GATS is essentially designed to try to accommodate the
17 various types of designs so it doesn't have to be designed
18 uniquely for each state. So it's one system for all the
19 states. And we do have -- certificates can actually go
20 across state boundaries or be imported into a state or
21 exported from a state.

22 Again, the system accommodates banking
23 certificates and the various types of renewables I list
24 there, including energy efficiency. We do facilitate

1 bilateral trades. And, of course, we do behind the meter
2 type of generation.

3 All right. Spend now -- probably spend the
4 remainder of my time talking a little bit about our
5 experience. Again, we provide the following services. We
6 do have a hotline that's effective in normal business
7 hours. We get a fair amount of calls into our hotline.
8 They're handled by my EIS staff. We do have the periodic
9 meetings as I had mentioned. And again we perform -- PJM
10 Information Technology Division performs the maintenance
11 on GATS on an ongoing basis.

12 If you go to the next slide for me. This is a
13 list of some of the activity that we've had as of October
14 of this year. We have 135 subscribers, 482 registered
15 renewable generators. And as you can see, getting over
16 25 million RECs created in 2005 -- 8.

17 You can see our list here of the renewable
18 generators by state that are currently registered in GATS.
19 And, again, we've had a fair amount of activity lately in
20 the solar area mostly because New Jersey has been actually
21 growing their solar as far as GATS goes.

22 Most of the solar facilities you see listed
23 there are very small, are either residential or I'll call
24 small commercial. They generally are not large what I'll

1 call commercial installations of solar. We do get -- are
2 getting increasing amounts of customer calls, you know,
3 from residential homeowners on how to use GATS from a
4 solar point of view.

5 If you go to the next slide for me. Again, we
6 do work with stakeholders to develop -- or had worked
7 obviously to start the initial design of GATS. We
8 continue to work with them to implement new features to
9 GATS. I'll talk about one of those, the New Jersey solar
10 program, in a few minutes.

11 We do have these five states, New Jersey,
12 Maryland, the District of Columbia, Pennsylvania and
13 Delaware are all -- require the GATS system for their
14 compliance. Illinois and Ohio, Ohio effective soon, allow
15 GATS to be used, but it's not mandatory. You can use
16 other tracking systems in that state.

17 So those are the states we've essentially been
18 working with. And as you can see, those were added over
19 time, which as I had said before, New Jersey being the
20 first because they had the initial requirements. And
21 there has been a fair amount of interaction between each
22 of these states and PJM during that evolution.

23 If we look here, this is one example of the
24 types of ongoing work we've done. We had New Jersey come

1 to talk to us about their New Jersey Solar REC Program,
2 which again, in New Jersey solar is growing fairly
3 substantially mostly on a residential level.

4 They had -- we had -- they had decided to
5 transition to GATS. We've been working with them to
6 decide on the functionality they needed. We actually made
7 changes to GATS to accommodate their solar program. And
8 again, the -- we provided training, of course, to their
9 resources. And then of course the transition will be
10 completed June of next year.

11 If I could go to the next slide. This again
12 talks about the enhancement schedule for GATS. The solar
13 items, as we discussed, are being done in September.
14 We're actually seeing some of the stuff going into
15 November to actually generate pricing reports back to the
16 states.

17 And then of course in December we're looking at
18 some of the regional greenhouse gas initiative, which is
19 RGGI, which is the voluntary carbon market up in the
20 Northeast. It's ten states up in the northeastern part of
21 the country. And we also added, of course, the Ohio and
22 North Carolina eligibility flags so that they could be
23 used here.

24 The remainder of the slides are just information

1 on technical support and a picture of what the screen
2 looks like for GATS.

3 I thank you again for your attention, and if you
4 have any questions for us, we're available. Thanks again.

5 CHAIRMAN FINLEY: We may have some questions for
6 you, let's see. I think I've got a few for everybody.

7 What experience has your organization had with
8 tracking RECs associated with energy efficiency and
9 demand-side management, if any?

10 MR. SCHUYLER: Well, some of the other states
11 within the PJM footprint have that same requirement to
12 track RECs from those types of resources.

13 The way we implemented that in the PJM
14 Generation Attribute Tracking System is we treat it like a
15 generator and the -- after the program, the energy
16 efficiency or demand response program is approved by the
17 state agency, then they can register that program in the
18 tracking system just like they would do a generator.

19 They would specify that the fuel type is either
20 energy efficiency or demand response, then we would create
21 credits in that account holder's account like we do for
22 generation, but it would be on a megawatt hour basis for
23 energy efficiency or demand response and then those
24 credits could be traded to other account holders just like

1 other types of RECs.

2 CHAIRMAN FINLEY: And how many states have
3 energy efficiency and demand-side management requirements,
4 if you know, can remember, like North Carolina?

5 MR. SCHUYLER: Pennsylvania does. Ohio will
6 have energy efficiency in their program. New Jersey, they
7 may be -- they're looking at energy efficiency, but it's
8 not currently in their renewable portfolio standard, but
9 it's being considered.

10 CHAIRMAN FINLEY: All right. Could you please
11 comment on the advantages or disadvantages of REC serial
12 numbers having meaning? For example, where certain digits
13 are assigned meaning such as the year, month of creation,
14 fuel type, et cetera versus the serial numbers being
15 merely sequential and all information is contained in
16 other fields or tables.

17 MR. SCHUYLER: Yeah. This came up in the
18 stakeholder comments that we received. And if you look at
19 our response, we provided some of the advantages or
20 disadvantages.

21 One of the advantages is that you'll be able to
22 see just from the serial number some of the information
23 that's relevant to that REC such as the month or year of
24 generation, possibly the fuel type depending on the state

1 requirements. So that's one of the advantages is that you
2 can see all that information in one field.

3 Some of the disadvantages that we listed were
4 that it's redundant because that information already
5 exists in a database and other places and it's easily
6 displayed at the same time as you display the serial
7 number. You know, it's redundant. It might take space.
8 It could affect the performance of the system. Those are
9 some of the other considerations.

10 CHAIRMAN FINLEY: Okay. Thanks. Could you
11 please describe how generation data from multi-fuel
12 generators is handled in the systems that your
13 organization administers or is designed -- or has
14 designed?

15 MR. SCHUYLER: Yes. In the PJM Generation
16 Attribute Tracking System, we have generators that are
17 registered as multi-fuel generators. And when -- during
18 the account holder review period before certificates are
19 created, the owner of that facility has to go in to the
20 system and specify how many megawatt hours came from each
21 of the different fuel types that's used by that generator.
22 So that information is entered by the facility owner
23 during an account holder review period.

24 CHAIRMAN FINLEY: And then does the system

1 calculate the RECs in that situation?

2 MR. SCHUYLER: Yes. The system would calculate
3 the RECs for all the fuel types that have been entered.

4 The PJM Generation Attribute Tracking System is
5 a little bit different from all the other tracking
6 systems, most the other tracking systems, in that we
7 create certificates for a REC for every megawatt hour of
8 generation, even that generation that's not typically
9 considered renewable. And in the PJM footprint we do that
10 so that we can accommodate the state needs for fuel mix
11 and emission disclosure purposes.

12 CHAIRMAN FINLEY: Have situations arisen where
13 there have actually been transfers between tracking
14 systems?

15 MR. SCHUYLER: We have not seen that in our
16 system because of the restrictions in the state RPS
17 programs. Most of the states in the PJM footprint require
18 either that the generator be located in the PJM footprint
19 or that there has to be an energy delivery into PJM.

20 So we would create certificates in GATS for RECs
21 from a compatible tracking system if any of the states
22 would allow that, but none of the states currently allow
23 that.

24 CHAIRMAN FINLEY: Okay. Thanks. Would you

1 please describe the process and data format for estimating
2 megawatt hour output for non-metered generators such as
3 small solar and the systems that your organization
4 administers or has designed.

5 MR. SCHUYLER: Well, as Andy mentioned in his
6 presentation, we recently implemented some new
7 functionalities for solar. We can accept the metered data
8 -- we can accept the production data for solar facilities
9 in a number of different formats.

10 First, is we can create credits for solar based
11 on production estimates, and those production estimates
12 can either be produced by the state that certified the
13 solar facility or the generation -- the GATS'
14 administrator will create those solar estimates,
15 production estimates. So that's one way to create RECs
16 for solar is based on production estimates.

17 The other two approaches are based on the actual
18 kilowatt hour production. And that data can be submitted
19 either electronically in a file or it can be manually
20 entered by the facility owner. And similarly, meter
21 readings for solar can also be either submitted in a file
22 or manually entered by the owner.

23 CHAIRMAN FINLEY: Okay. A couple of more
24 questions here. Could you please describe the process and

1 data format that utilities use to feed control area
2 check-out generator megawatt hour data into the systems
3 that your organization has administered or designed?

4 MR. SCHUYLER: Yes. The file format is
5 described in the other document that we submitted.
6 Included in the file is a generator ID or identifier --
7 identifier. The actual megawatt hour generation is
8 included in the file and also a time stamp that -- the
9 month and year of generation. So those are the parameters
10 that are included in the file that is submitted to the
11 tracking system.

12 CHAIRMAN FINLEY: Okay. Similarly, could you
13 describe the process and data format for metering data to
14 be inputted for small generators into the system that your
15 organization administers or has designed? In other words,
16 in situations where the meter is read once a month during
17 the retail billing cycle rather than at month end.

18 MR. SCHUYLER: The timeline for submitting data
19 in GATS is a little bit different from the other tracking
20 systems. It can be submitted on a monthly basis, but it
21 doesn't need to be submitted monthly. It can be submitted
22 either quarterly or on a -- even once per year. So
23 there's some flexibility there for how the data is
24 submitted.

1 The only constraint we have is that for a
2 calendar year the production data has to be submitted by
3 the last certificate creation date for that year, which is
4 the last business day of January for the following year.

5 CHAIRMAN FINLEY: Okay. That -- I'm sort of
6 feeding you some questions that the staff has fed me, so
7 I'm going to ask our staff over here if they have any
8 follow-up questions that they would like to ask for more
9 elaboration.

10 MR. WATSON: I just had one follow-up. You
11 mentioned the advantages and disadvantages of the Smart
12 Tag, and I was just curious which PJM currently
13 implements, the Smart Tag or just a sequential number?

14 MR. SCHUYLER: Our system came with just a
15 sequential number and we haven't had any requests to do
16 anything different, so that's the way it still is. It's
17 just a sequential number.

18 MS. JONES: Back on the multi-fuel question. Do
19 the generators literally put in a megawatt hour or do they
20 put in a Btu number and then GATS calculates the megawatt
21 hour?

22 MR. SCHUYLER: Yeah. Currently all the data
23 that's entered in the tracking system is either on a
24 megawatt hour or a kilowatt hour basis.

1 MS. JONES: Okay.

2 MR. SCHUYLER: We don't have anybody entering --

3 MS. JONES: Btu's --

4 MR. SCHUYLER: -- Btu's at this point.

5 MS. JONES: Thank you.

6 MR. WATSON: I was kind of curious. You said
7 that you create RECs for all the megawatt hours, even if
8 they're not renewable.

9 MR. SCHUYLER: Yes.

10 MR. WATSON: Does that create confusion when
11 folks are trying to trade RECs? I mean, you know, we
12 always heard a REC was a renewable energy certificate and
13 this is a non-renewable REC.

14 MR. SCHUYLER: Right. Yeah, we'll create
15 certificates for all megawatt hours of generation; coal,
16 nuclear, oil, gas, in addition to typical renewable
17 generators. The -- each certificate clearly specifies
18 what fuel type and whether it's eligible for any of the
19 state RPS programs.

20 So it's pretty clear looking at the certificate
21 whether it would be eligible for any programs.

22 MR. OTT: Again, one of the reasons we do that
23 is some of the states use that information for fuel mix
24 requirements within the state. So, again, if we can

1 provide, you know, the additional information, I think
2 it's certainly worth doing.

3 And, you know, I think the fact that they're
4 clearly marked clearly hasn't created a problem. It's
5 probably helped the states more than hurt because they get
6 to see the fuel mix, actually megawatt hour fuel mix
7 within their state, which is something, you know, they may
8 not get elsewhere.

9 MR. WATSON: The last question I had -- you
10 mentioned RGGI. Can you talk a little bit more about what
11 RGGI is and what kind of -- how that's intergraded in,
12 what kind of reporting, who's asking for it and what
13 they're getting?

14 MR. SCHUYLER: RGGI is the Regional Greenhouse
15 Gas Initiative. It was implemented by some of the
16 northeast states. There's three states within the PJM
17 footprint that are participating. Those three states are
18 Maryland, Delaware and the District of Columbia.

19 And so they had a need for some additional
20 reports from the Generation Attribute Tracking System that
21 would help them track if there was leakage within the PJM
22 footprint. And by leakage, I mean they're imposing some
23 caps on CO2 within those three states within PJM and they
24 wanted to be able to see if there was actual reductions

1 being achieved or if there was just additional CO2 being
2 produced and imported into those states or leaking into
3 those states from other parts of the PJM footprint.

4 So the enhancements that Andy talked about for
5 RGGI were to produce some additional reports that would
6 show the CO2 or carbon dioxide production in those
7 different portions of PJM over time.

8 CHAIRMAN FINLEY: Okay. Anybody else have any
9 questions?

10 (No Response.)

11 Thank you very much, gentlemen. We appreciate
12 it. It's nice of you to come and talk with us today.

13 I think APX is next.

14 MR. KERECHAN: Could we just sit at the -- and
15 use those mikes there as well?

16 MS. JONES: I think --

17 MR. KERECHAN: Can I just give you these?

18 MR. WATSON: Sure.

19 MS. JONES: I think if you just hit five on the
20 screen -- or escape rather, I'm sorry, and then your
21 presentation should be on the desktop.

22 MR. KERECHAN: And then these will just work,
23 right?

24 MS. JONES: If you hit -- I think you hit

1 escape.

2 MR. WALTON: Yeah. I hit escape there.

3 MS. JONES: And then I think minimize that and
4 then yours should be sitting on the desktop itself. Or if
5 you see it there, you can go ahead and grab it, but --

6 MR. KERECHAN: Can you see it?

7 MS. JONES: Yeah. It's one of those three to
8 the right.

9 MR. KERECHAN: Oh, it's right there. There it
10 is right there. Technology is slow here today.

11 CHAIRMAN FINLEY: This is part of the test to
12 see how efficient you are --

13 MR. KERECHAN: Exactly.

14 CHAIRMAN FINLEY: -- with a computer.

15 MR. KERECHAN: And we're failing it miserably.
16 There we go. All right. Well, thank you. Now that we've
17 gotten beyond the audio/visual problems here, thank you
18 again for having us in today. We've been somewhat active
19 in the process here and look forward to the prospects of
20 potentially working with you on this.

21 I'm Joe Kerechan with APX and I'm also here with
22 my colleague, Devon Walton, from APX. And we're going to
23 divide up the presentation. I'm going to do a few slides;
24 Devon will do a handful and then I'll do the wrap-up here,

1 so --

2 MR. WALTON: So hang on a second now.

3 MR. KERECHAN: Well, we were almost there.

4 MR. WALTON: I thought we wanted it in Power
5 Point, so --

6 MR. KERECHAN: No, no. You're okay with the --
7 it's right there.

8 Well, thanks again. APX is the technology
9 provider or the registry operator in certain cases for all
10 of the organized U.S. REC markets. And I'll speak a
11 little bit more to that as we get through the
12 presentation.

13 We normally provide the services on a software
14 as a service model, meaning it's a completely managed
15 application. We provide administration and it's a
16 volumetrically -- subscription based/volumetric fee based
17 type of service. It's an end-to-end service. We provide
18 all the hosting, all the training, all the upgrades, all
19 the enhancements and so forth that the system requires.
20 And we are prepared to quickly deploy a REC system based
21 on the North Carolina timeline and requirements.

22 The company was founded in 1996. We currently
23 have offices in Santa Clara, California, the New York City
24 metropolitan area and Washington, DC. We're about 80

1 employees right now. We're active in both environmental
2 markets and energy markets.

3 Keep going for the wrong button. This is just
4 the business -- whoop, I'm sorry. Did we jump?

5 MR. WALTON: Yeah.

6 MR. KERECHAN: Okay. From a market solutions
7 standpoint, we provide infrastructure basically. We
8 generally do not take any policy positions. We don't
9 advocate positions one way or the other. We provide an
10 infrastructure that will basically marry up with your
11 requirements to implement your rules and your statutes.

12 We're not an exchange; we're not a trader; we're
13 not a broker. We don't invest in these markets. We have
14 really no economic position in the outcomes of these
15 markets. It's purely infrastructure that we provide to
16 meet your requirements.

17 We have two different lines. We have an energy
18 focus and then an environmental markets focus. And the
19 energy focus was first. We continue to be active in the
20 energy markets area a lot in Texas and a lot in
21 California. We provide a lot of scheduling and settlement
22 services to entities participating in those markets. We
23 provide SCADA control systems and so forth in those
24 markets and then business consulting.

1 On the environmental side, we have these
2 registry services both in terms of RECs as well as carbon
3 markets. We're also active in demand response. For
4 instance, in California we work in terms of helping the
5 CPUC administrate some of its demand-side response
6 programs. And then we provide renewable generators in
7 Texas and in California, scheduling and settlement
8 services as well into those markets.

9 So we really look at three environmental
10 commodities right now that we're working in. The first
11 one that we started in was the REC markets, the renewable
12 energy credit markets. We're also active in energy
13 efficiency markets and we'll speak to that a little bit
14 later in the presentation. And then we are really
15 expanding the business now into carbon markets and are
16 very active in the voluntary carbon offset markets here
17 domestically as well as internationally.

18 This is a chart that illustrates or a graph that
19 illustrates where we're active today. The very first REC
20 system that we developed was in Texas, the ERCOT system.
21 And that was in 2001 time frame. That is a system that is
22 renewable energy only. We did do that as a technology.
23 We provided -- we developed and sold the technology to
24 ERCOT and they actually operate that system.

1 The next market was the NEPOOL-GIS, and that is
2 all the New England states that participate in that one
3 common system through the -- through NEPOOL. And that was
4 around 2002, 2003.

5 That system, much like the PJM-GATS system,
6 tracks all megawatts of generation because they use the
7 system both for renewable energy markets as well as for
8 emissions and fuel disclosure requirements that they have
9 at the state level. So they use the same certificates as
10 a way for accounting for the actual attributes of
11 pollutants and then turn those certificates over -- or
12 report against those certificates of the state for
13 emissions and fuel disclosure. We actually administer and
14 operate that system. It is a software as a service
15 application.

16 PJM-GATS came next. That was around 2005.
17 Again, the system is very much like the New England
18 system, but in this case we sold a license agreement to
19 PJM and they operate it as was described before.

20 And then last year was a very busy year for the
21 company. We launched two systems last year; one being the
22 WREGIS system, which is the Western Renewable Energy
23 Generation Information System. In this case it was
24 technology, however, we continue to support that system

1 with ongoing technology support. The system is actually
2 administered by the WECC, the control area operator or the
3 NERC -- it's a NERC region out there, right?

4 MR. WALTON: Yeah.

5 MR. KERECHAN: -- out in the western states.

6 And in addition to all of the western states,
7 it's really everything west of the Rockies, it also
8 includes parts of Mexico and parts of British Columbia and
9 Alberta.

10 And then also last year we launched the M-RETS
11 system, which is really the upper Midwest. That is a
12 completely managed software as a service application. We
13 administer that system as well. It's fee base structure
14 is subscription and volumetric fees. It also includes
15 Manitoba in Canada.

16 Oh, and last but not least, we are in the
17 process right now of launching the NAR, which is the North
18 American Renewables Registry, which really takes into
19 account the states where there is no organized -- where
20 there are no organized REC markets, where there's strictly
21 voluntary markets at this point in time. And we're
22 providing that system to serve the generators that want to
23 participate into these voluntary markets; working with
24 organizations like the Green-e and so forth. And then

1 some of the voluntary market brokers like Sterling Planet,
2 Evolent Markets -- Evolution Markets and so forth.

3 This is a little bit more about the NAR. Right
4 now we cover 15 states. It's primarily voluntary markets
5 and green pricing program focused. And today it's
6 probably around 2 million megawatt hours or 2 million RECs
7 a year that are transacted through voluntary markets.

8 Next slide. This is just an indication of the
9 clients that we serve. And, you know, we mentioned
10 NEPOOL; we mentioned PJM; we mentioned ERCOT. A couple of
11 other noteworthy names here on the carbon side, we work
12 with the VCS, the Voluntary Carbon Standard. We work with
13 the Gold Standard Foundation and we work with the Climate
14 Action Reserve. These are all voluntary carbon offset
15 markets.

16 We have a host of different types of customers,
17 corporations, financial services, government NGOs. We
18 have about 1,200-plus corporate accounts that are
19 transacted through APX systems.

20 This is sort of the motherhood and apple pie
21 slide which describes how renewable energy is transacted,
22 where the electricity is traded, sold or delivered through
23 conventional electricity markets. And we're really
24 talking about the attributes here that are captured in the

1 forms of these RECs and then transacted in these separate
2 markets.

3 And here I'll turn it over to you, Devon.

4 MR. WALTON: Okay. Great. Thank you, Joe.

5 Again, my name is Devon Walton. Should have done some
6 introductions before. I manage the Environmental Markets
7 Administration and Operations Department at APX,
8 responsible for all the registries and again our
9 administration and operation of those registries
10 regionally.

11 Okay, this slide essentially gives you kind of a
12 top to bottom of what these tracking systems do, their
13 purpose; ensuring trust and transparency infrastructure
14 for environmental commodities, whether it's carbon, energy
15 efficiency or renewable energy. And our systems take it
16 from the beginning to end so when the data is loaded it's
17 validated by the system and by the administrator all the
18 way through to issuance with assigning unique serial
19 numbers.

20 These credits are then -- their transactions are
21 then tracked within the system, whether they're traded to
22 -- directly to utilities as end users or through to
23 brokers on to their counterparties all the way through to
24 retirement and then for reporting.

1 Essentially this next slide, again, just kind of
2 gives you an overview of the process of how it works. The
3 tracking system holds information on account holders and
4 the users of the system. From there it issues those
5 credits, whether the credits are then brokered or traded
6 through various transactions or directly to -- through to
7 the utilities and LSEs. And then the system is accessed
8 by the regulators or other public entities for information
9 on RPS obligation, and as well for the utilities to use
10 for their voluntary purpose, whether it's green pricing or
11 other voluntary retirement purpose.

12 Essentially in these REC tracking systems you
13 have three basic users, as we define them. There's your
14 general account holder. This general account holder can
15 have various flavors, whether it's the utilities, whether
16 it's generator owners, whether it's your independent
17 homeowner, whether it's your corporation like Pepsi-Cola,
18 whether it's your brokers. These are the folks that are
19 generally registering renewable facilities and/or
20 transacting credits.

21 You then have your qualified reporting entities.
22 These can either be the ISOs serving a region or a state
23 or it can be the utilities themselves or independent meter
24 verifiers loading data into the system.

1 And then lastly you have your state, provincial
2 or voluntary program administrators, whether it's state
3 entities, state regulators work in the voluntary programs
4 like Green-e. They have specific access to the system
5 that gives them information about how certificates with
6 their eligibilities are being used and retired in the
7 system.

8 Effectively from here for the account holders
9 you go to generator registration where we're capturing
10 lots of different information about the generators
11 themselves. With each tracking system the requirements
12 for what's being reported here is different. It's not set
13 by APX; it's set by the client. They decide, whether it's
14 the state or the region or The Governance Group, decide
15 what requirements should be in the system.

16 Again, you select what types of fuel types are
17 here, which fuel types are recognized by the state as
18 renewable or recognized by the region as renewable. And
19 then lastly the various eligibilities, whether they're
20 state or voluntary.

21 From here the certificates -- well, from that
22 standpoint, then, the megawatt hours or the kilowatt hours
23 are loaded into the system by your qualified reporting
24 agents. Certificates are issued based on one megawatt

1 hour equals one REC. So we're not -- at this point the
2 systems don't delineate from there. It's one megawatt
3 hour equals one REC, although in some states it's been
4 considered to go down to the kilowatt hour. Again, that's
5 something that's up to the client, not the system itself.

6 And account holders have what we call
7 sub-accounts where they -- where certificates are
8 initially deposited and then the account holders use those
9 sub-accounts to manage their RECs either for use for
10 banking, for internal management and then all the way
11 through into retirement.

12 And then -- I'm sorry, then lastly down to
13 compliance reporting. So every time a certificate is
14 retired, the program administrators are given views to
15 that retirement activity through reports so they can see
16 if -- how a utility or an LSE is meeting their compliance
17 requirements or some of the marketing and pricing claims
18 to make sure that they're retiring what they're supposed
19 to.

20 Okay, a bit on certificate serialization.
21 Again, the serial number is something that's defined by --
22 this is by the system. Essentially what that means is --
23 again, it's the client that defines what they want the
24 serial number to look like. The system will then use it

1 across the board. So for the regional systems there's
2 agreement on what the serial number will look like. At
3 this point we don't have within regional tracking systems
4 there being a decision that one state wants a different
5 serial number than another one. But again, APX is
6 agnostic to that. They don't -- it's really up to the
7 user.

8 Currently all the registry is through to the
9 carbon track. They all decided to go with different
10 serial numbers in particular. And I don't think the list
11 of pros and cons is really that long. But in general --
12 it depends. You can have just the unique serial number,
13 which is what NEPOOL-GIS went with and what PJM-GATS went
14 with. That's certainly simple. You can then go to what
15 WREGIS and M-RETS went with, which was a facility ID. The
16 state -- the location of the facility by state, the
17 vintage number and then the unique identifier and block
18 begin/end.

19 In the carbon registries it attaches on
20 information such like technology, meter begin, meter end.
21 Or in the carbon world it's more monitoring period begin,
22 monitoring period end. But certainly having more
23 information in the serial number makes it easier to look
24 at the data that a REC has so you don't have to dig into

1 the various screens to get there. But certainly, as to
2 what Ken said, the longer they get, it just starts to get
3 tedious and overwhelming.

4 And what we've noticed is that there's -- what a
5 lot of utilities tend to use is they basically take the
6 data out of the system and put into their own track --
7 into their own internal systems. And the longer those
8 serial numbers get, it can be a little -- it can be
9 difficult for them to try and format that out and put it
10 into their own. So I think somewhere in the middle is
11 about where you would want to be. I mean, I think with
12 M-RETS and WREGIS is certainly my own personal preference,
13 but that's about it.

14 Okay, again, an example of what the account
15 structure looks like. Again, in these systems you
16 basically have -- you have your main account and within
17 that account you have what we call three act -- or three
18 sub-accounts. The primary one is your active sub-account.
19 This is where you keep your certificates that you intend
20 to transfer or use at a later date, whether it's -- a
21 state has a banking rule that you can take a credit today
22 and save it to use for a credit -- save it to use for
23 compliance five years down the road.

24 You have your retirement sub-accounts. This, of

1 course, is where you put your certificates when you're
2 ready for retirement, whether it's for, again, a green
3 pricing program or for a compliance program.

4 And then lastly we have at this point really
5 what's called the idea of an export sub-account. Ken
6 briefed on part of it. The idea of a compatible tracking
7 system is something that's been an idea for sometime. And
8 now that tracking systems are beginning to seam together
9 at the border, the idea of using these export sub-accounts
10 is something where the tracking systems are getting
11 together at this point to sort out the best way to do
12 that.

13 In general, the principle is that it's not a
14 technological issue, it's more of a policy issue. And so
15 do states have strict geographic boundaries that they
16 don't want certificates from boundary states coming into
17 their tracking system where they might get confused for
18 compliance use versus a voluntary use, you know, things of
19 that nature.

20 But the idea is that these systems have built in
21 within them the idea of this particular kind of
22 transferring and so there's that kind of sub-account as
23 well.

24 Within each of these sub-accounts you have the

1 ability to create multiple of each, so you can decide to
2 create sub-account -- active sub-accounts either by
3 vintage or by technology. They're basically for your own
4 certificate management needs. And then into your
5 retirement sub-accounts as well, you might have a
6 particular retirement sub-account for your green pricing
7 versus your compliance; you might have them by year, so on
8 and so forth.

9 And, again, when certificates are initially
10 issued, they're deposited directly into the active
11 sub-accounts and immediately useful to the account holder.

12 A brief look at the various types of transfer
13 functionality that's in these tracking systems. Again,
14 all certificates either issued or received in a transfer
15 are deposited into the active sub-account.

16 We have three different types of transfers in
17 these registries. The first is the one-time where I'm
18 going to transfer ten RECs from a facility to Joe, for
19 example.

20 I might also decide to do a forward transfer or
21 a standing order transfer. These are typically recurring
22 monthly transfers that provide the account holder with the
23 ability to set up recurring transfers either based on a
24 fixed amount of credits or a percent amount of credits

1 from the output of a facility. That doesn't require them
2 to come into the system each month, they're on a more
3 frequent basis to manage their activity. So if they have
4 a long-term PPA, for example, or they share ownership with
5 a facility, they can set these up so that each month each
6 individual owner is given their portion of RECs that they
7 would expect on a monthly basis.

8 Okay, in terms of the data needs and how the
9 files that are uploaded to the system reporting your
10 energy output, it's fairly simple. At this point the
11 files contain the facility ID. And, again, this ID can be
12 either what the system uses to identify your unit or it
13 can be what your -- what we call your qualified reporting
14 entity uses to identify your unit such that that reporting
15 entity isn't required to manipulate their systems to meet
16 what the tracking system uses to ID yourself. The system
17 will -- the system will map what we call the QRE uses into
18 its system, so it does that translation. It helps the
19 reporting entity out in terms of what's coming out of
20 their settlement system.

21 So you have the facility ID. We have the meter
22 start, the meter end, so it's not specific to being month
23 end, month begin. It can be mid-month to, you know, the
24 second day of the next month. It's really -- it's however

1 frequently you read your meter data is how you specify
2 what you put in the file.

3 Again, you have the vintage that specifies the
4 month and year of the generation. It basically puts the
5 tag on. It helps the system understand what the banking
6 rules are.

7 And then lastly have your megawatt hours or
8 obviously your kilowatt hours for the smaller facilities.

9 When these files are loaded into the system, the
10 system does a high level validation on what we call
11 engineering feasibility. So a few of the attributes when
12 you register your generator are -- is what is the
13 nameplate capacity and what is the capacity factor.

14 So essentially if I go in as a small solar owner
15 and I put in 100 megawatt hours for the one month, the
16 system looks at that, compares it against what the
17 registered nameplate and the capacity factor and it gives
18 it a fudge factor in there and flags it as being
19 overreported. And if it's flagged as overreported, the
20 administrator of the system is notified as well as the
21 account holder, and certificates are not created until
22 that has been resolved.

23 So, again, there are some cases where generators
24 have great months and sometimes they don't, but the point

1 is that it's flagging those that may try to overreport
2 their meter information.

3 CHAIRMAN FINLEY: And when you flag those and
4 send the information back, has it come back that there
5 have been misinformation, there have been corrections
6 made?

7 MR. WALTON: Right. Exactly. It lets them know
8 that they've -- according to the system's feasibility
9 check, they failed that test and that the administrator
10 will be contacting them to sort out the reason why.

11 And they have the ability to go and report
12 again, but the point is that the system is flagged and
13 that certificates will not be created until that's been
14 resolved.

15 CHAIRMAN FINLEY: And have the -- once you made
16 that report, have you found mistakes that have to be
17 corrected?

18 MR. WALTON: I would say that the vast majority
19 of feasibility fails we've gotten have been because --
20 well, have been because it's -- you know, generation can
21 be very seasonable, especially in the renewable world. So
22 in hydro you're going to have a really good month in the
23 summer and then it gets dry in the winter and so you find
24 that a lot of hydros is failing feasibility during the

1 summer months. And so what we're considering is that it
2 might be -- the way it's done now in M-RETS, for example,
3 it might be a little too sensitive and not accounting
4 correctly for these seasonal differences, so -- but
5 essentially, no. There hasn't been any abuse of
6 overreporting yet.

7 Last on there is, again, about multi-fuel.
8 Similar to how PJM does it, in M-RETS and WREGIS they
9 changed it from explicitly saying what your megawatt hour
10 output is. Now that -- you put in there what your
11 percentage is and so the system then calculates based on
12 the percentage that you input.

13 And, again, that percentage is self-reported by
14 the generators and then when certificates are created --
15 although for these multi-fuel facilities you are reporting
16 100 percent of your facility's output, which includes the
17 nonrenewable piece, you put in what the percentage
18 breakdown is and then at creation the system applies that
19 percentage and issues the appropriate credits.

20 MR. KERECHAN: Yeah. I think the important
21 thing is, whatever you determine to be the requirements in
22 terms of how you want business to be transacted as it
23 relates to that, the system would accommodate those rules
24 and would be designed around that. So there's multiple

1 ways to do these things. Devon indicated as another
2 example here where it's done slightly different.

3 MR. WALTON: Right. Again, if the state itself
4 has rules about they want to use the biomass heat rate of
5 some kind, then that's just something that just is defined
6 when the functional requirements are determined and it's
7 input into the system.

8 Okay, again, just looking at the few data
9 requirements and where their sources are. In general,
10 with the majority of the regional systems, the monthly
11 generator output information either comes from the ISO or
12 it can come from what we call the QRE, the qualified
13 reporting entity.

14 In the event that there isn't an independent
15 third party, they allow for the utility to essentially
16 report its own generation information, but it's ground
17 upon attestations and what we call a QRE contract that
18 they sign before they're allowed to do that.

19 Again, as you saw on an earlier slide, there's
20 the account holder account type that -- that is used to
21 manage all of your certificates and then there's a
22 separate account type, which means there's a separate
23 log-in, separate screens and is viewed as a separate
24 entity that is used pri -- that is used specifically for

1 loading data. So as long as the utility can prove that
2 there's essentially a wall between who's reporting data
3 and who's managing the credits, then they're allowed to
4 report on their own information.

5 For fuel sources and generator characteristics,
6 as well as the RPS eligibility, again, each state is
7 different, but in general the administrator of the system
8 works with the state to figure out the best way to verify
9 and validate that information.

10 Take a quick look at the energy efficiency
11 credits. Primarily -- I mean, as noted even from Ken's
12 presentation, that there aren't a lot of energy efficiency
13 programs from an RPS standpoint. APX's experience is
14 currently and mostly with the State of Connecticut and the
15 NEPOOL-GIS system where they have a program that -- where
16 they recognize three different types of energy efficiency,
17 whether it's conservation load management, which is
18 essentially if a utility has a building then retrofits
19 itself with new lights or energy efficiency means, they
20 work with the state to calculate the amount of energy
21 savings from that particular activity and then they're
22 awarded that number of what we call Class III certificates
23 from that particular program.

24 As well, there's demand response. This is,

1 again, demand response from -- for those end users in
2 demand response that actually cut their load, so it's not
3 energy -- it's not demand response generation, it's demand
4 response load cutting. And so we get that information
5 directly from the ISO of New England. They meter that and
6 that information is put into the system and used. But for
7 each megawatt hour of savings, load shed, you get a
8 credit, a Class III credit that you can use towards
9 Connecticut's program.

10 And then last but not least is the Cogen fuel
11 efficiency. Again, this is more of a obviously a
12 generator, and they earn a credit for each megawatt hour
13 of renewable energy they do, having proved to the state
14 that they qualify as a Cogen fuel efficiency unit.

15 So again, their RPS, the percentage of the state
16 load served by utilities in Connecticut has to be met by
17 these Class III certificates. They're issued, they
18 transact them and they retire them and report them to the
19 state.

20 And, again, data currently is reported in two
21 ways: It's self-reported for the conservation load
22 management and then it's reported directly from the ISO
23 for demand-side response and Cogen fuel efficiency.

24 MR. KERECHAN: So as I said at the beginning

1 here, I mean basically our approach would be to provide
2 the system on a software as a service model. It's fully
3 hosted, 24/7 operational support. We have great
4 experience of high reliability. We would provide system
5 administration. There's really -- there's no upfront
6 costs. It's predictable. It's a fee structure that's
7 very predictable and the ongoing system maintenance,
8 security, support, modifications, enhancements, et cetera,
9 to keep it current and so forth are provided as a part of
10 that fee model.

11 And so as I said before, we are the provider,
12 technology provider or the operator for all organized U.S.
13 REC markets. I mentioned the software as a service model
14 and the fact that we are in the position to quickly
15 provide and deploy a system for you to meet your
16 requirements for a state specific system.

17 So that's it. If you have any questions, we
18 would be happy to take those as well.

19 CHAIRMAN FINLEY: Commissioner have a question?

20 (No Response.)

21 I'll ask the staff to follow up with the
22 questions that we had before, if you have any.

23 MS. JONES: Many of these you covered
24 throughout --

1 MR. KERECCMAN: We try to weave them in, yes.

2 MS. JONES: Yeah. I appreciate that. If I'm
3 understanding right, then, no REC transfers have actually
4 occurred yet because states have different requirements in
5 terms of whether they'll let them count toward compliance,
6 so that's pretty much been the holdup? It's not been a
7 system's issue?

8 MR. KERECCMAN: Yeah. I mean, I would say that
9 North Carolina could be on the front here in terms of
10 actually allowing for REC imports. There's been some
11 discussion and throughout some other states and so forth,
12 but, you know, in large part many of these RPS programs
13 were advanced for economic development, so they've kept
14 their borders as shut as they could to some degree.

15 But this discussion is happening more and more
16 and there's a lot of thought towards the potential federal
17 RPS on the horizon as well, so this question we're hearing
18 in multiple markets at this point as well.

19 MS. JONES: In energy efficiency RECs, I
20 understand the part where you wait for the state to
21 approve the program just like the state would approve a
22 generator. How does the data about how much efficiency
23 say in a given calendar period, how is that developed?
24 Who develops it and how does it get to the system?

1 MR. WALTON: Well, of the three -- in the three
2 different types there that -- the one with the utilities
3 where it's conservation and load management, there is a
4 calculation and I'm not familiar with it. It happens
5 outside the system, but the state determines how much load
6 savings the utility has done as a result of its -- of the
7 programs it's implemented in either its buildings or its
8 infrastructure and that's spread -- that's spread across a
9 five-year period. And so each quarter they report that
10 portion of that and --

11 MS. JONES: So spread prospectively?

12 MR. WALTON: Yes. And then -- right. And then
13 for the other two, it's direct from the meter. So there's
14 no calculations there. You either saved a megawatt hour
15 or you didn't.

16 MS. JONES: Okay. And then, Devon, back away
17 on your slide 19, I think you were, you mentioned while
18 you were there -- it isn't on the slide, but the concept
19 of a Class III certificate. Could you --

20 MR. WALTON: Yeah. Certainly. That's specific
21 to Connecticut. Connecticut has a Class I, Class II
22 renewables. And again, in their RPS program they have --
23 they recognize three different classes of renewables,
24 Class III being the energy efficiency piece. So each

1 utility is subject to a certain percentage of their
2 requirement be from Class I resources, Class II and Class
3 III.

4 So Class I being kind of your new renewables,
5 Class II being your old biomass type stuff and then Class
6 III being energy efficiency.

7 MS. JONES: Okay, I got it.

8 MR. WALTON: Yeah.

9 MR. WATSON: In your North American registry,
10 what -- who sets the prices for participating in that?

11 MR. WALTON: You mean the fee structure?

12 MR. WATSON: Yes.

13 MR. WALTON: Well, because North -- because the
14 NAR, for short we call it, it's a venture by APX. We're
15 currently working out what that fee structure is going to
16 be and we haven't established it yet. In general though,
17 the other systems, that comes as set from The Governance
18 Group. They'll decide.

19 I mean, there's two -- there's various ways of
20 going about it. I can -- a little from the -- from the --
21 the offering for the M-RETS system, in that RP they
22 requested three different fee structures and the winning
23 -- and then the commission decided which one they liked
24 the best when they chose the winner from that particular

1 participant's bid.

2 But in the NAR, at this point it's -- it hasn't
3 been determined just yet.

4 MR. KERECHAN: I mean, these voluntary markets
5 exist today, they just have not had the benefit of a
6 registry. So they're pretty much all based upon, you
7 know, processes, methods and attestations. This is
8 bringing another level of quality to it, so it's really a
9 question of pricing that at a point that people like the
10 Center for Resource Solutions, behind Green-e, and then
11 the voluntary participants like Element Markets and
12 Sterling Planet are comfortable with and that's what we're
13 in the process right now of working out.

14 Any other questions? No. Well, thank you very
15 much. We appreciate your time.

16 CHAIRMAN FINLEY: Thank you for coming. We
17 appreciate it.

18 We'll call on Clean Power Markets, Inc., now.

19 MR. DAVIS: Good afternoon. I won't try to
20 navigate this system here. It's more out of embarrassment
21 to myself than the -- all the special techniques, but I do
22 have a statement I would like to read. Should I do that
23 from this microphone over here?

24 CHAIRMAN FINLEY: That would be fine. Have a

1 seat.

2 MR. DAVIS: This chair is a little intimidating.

3 CHAIRMAN FINLEY: It is a little intimidating.

4 MR. DAVIS: I am not nor have I ever been a
5 member of the communist party.

6 Good afternoon, Mr. Chairman, members of the
7 Commission. My name is Fred Davis. And it is my
8 privilege to appear here before you today to talk to you
9 and Mr. Watson and Ms. Jones. I've been engaged with them
10 for several months, as I have with many of the
11 stakeholders here in North Carolina.

12 I'm a consultant to Clean Power Markets. And
13 Clean Power Markets has been operating these systems for
14 several years in some of the regions of the country,
15 mainly the east. And they have retained me to engage both
16 the stakeholders in North Carolina as well as those in
17 Maryland to pitch our services for a REC tracking system.

18 Maryland and North Carolina are both in the same
19 sort of track, time track in terms of implementing their
20 programs. And Maryland is looking at the options that
21 they might have, stakeholders there, as to what type of
22 system they want to build, and of course you're doing the
23 same thing here in North Carolina.

24 I am not a technical expert, nor will I try to

1 match the previous witnesses with the array of technical
2 details. And probably you've heard enough of that
3 already, but I'll stay a little bit more in terms of
4 general comments about what we try to do and how we do it.

5 So Clean Power Markets is owned -- a
6 wholly-owned subsidiary of Enerwise, which is an energy
7 efficiency and demand-side management company. It in turn
8 is owned by Converge. And if you have -- the set of
9 slides that I provided to you with the blue front outlines
10 some of those features and I would refer you those -- to
11 those as we go through. I will not summarize every slide.
12 I'll just pick out some highlights.

13 But the key here is that Clean Power Markets
14 believes that there's -- there are REC tracking systems
15 and then there are REC tracking and management systems.
16 And I emphasize the word management because we believe
17 that a comprehensive system that provides a menu of
18 services in addition to tracking and recording serial
19 numbers of RECs is important to the success of a renewable
20 energy portfolio standard or, as you call it, REPS here in
21 North Carolina.

22 But we operate a system that serves the needs of
23 all the stakeholders. And what we try to do is to -- is
24 to offer to do here in North Carolina as we've done in

1 Maryland and what we do in New Jersey currently and what
2 we are building in Pennsylvania. Again, Pennsylvania is
3 on the same sort of track you are. They are in a --
4 implementing, effective the beginning of this year, a
5 similar system that has a renewable energy generation
6 piece and then also energy efficiency as well, as you're
7 trying to do here.

8 But we try to serve the generators and utilities
9 who need systems to account for their renewable and energy
10 efficiency compliance needs -- I know compliance is key
11 here in North Carolina -- regulatory entities like you who
12 need valid and transparent management systems that provide
13 confidence in the validity of the compliance of the
14 electric suppliers and other stakeholders, environmental
15 and sustainable energy associations and coalitions that
16 seek those same goals, and businesses who wish to
17 participate in renewable energy and energy efficiency
18 opportunities that will be stimulated by the North
19 Carolina REPS programs.

20 And of course we work with brokers and
21 aggregators and all the stakeholders here and elsewhere
22 that would -- supports for a vision, a bold vision. And
23 you have a bold vision here in North Carolina in terms of
24 the goals that you've set for renewable generation and

1 energy efficiency.

2 The slides you have before you illustrate the
3 range of management systems that we operate currently in
4 New Jersey and Pennsylvania. We've been working in New
5 Jersey, as I said, since 2004, and are now building a
6 system in Pennsylvania that, again, is similar to North
7 Carolina in the range of programs that it's looking at.

8 In the interest of time I won't discuss these
9 slides, but I'll refer you to a few of them. On Page 7
10 you'll allude to the internet based electronic user
11 friendly features we -- that we have. We create the RECs
12 based on production. Serial numbers you heard earlier
13 today, that's an important feature to make sure that you
14 don't get double counting. And the transparency and the
15 valid nature of how they're recorded and where they end up
16 in a system is important. We understand the emphasis on
17 that priority.

18 And we maintain the accounts for buyers and
19 sellers. And we provide a bulletin board to facilitate
20 the trading, the buying and selling of RECs on an
21 electronic basis. People can go on the system and see who
22 has RECs, how many they have, the current price of them,
23 sort of like a stock market exchange type of format. And
24 then that facilitates the trades of the RECs and allows

1 account holders to sell them, transfer them, retire them,
2 export them or bank them.

3 On Page 8, you will see discussion of the
4 important verification components, survival to you as
5 regulators, such as the prevention of the double counting
6 of RECs, the prudent reporting system and the price
7 transparency that is on that bulletin board, a listing of
8 the generation facilities that are certified by the state
9 for meeting, for example, your RPS requirements. We can
10 do that for you.

11 And CPM can provide reports to you with respect
12 to electric complier -- or REC electric supplier
13 compliance and these types of things.

14 And let me mention one thing with respect to
15 that. I attended the sustainable energy conference, Mr.
16 Chairman, where I met you and where I met Sam back in
17 April. And you presided over a breakout session
18 consisting of the electric suppliers; Duke, Progress,
19 Dominion, the municipals and the co-ops.

20 And to the extent that there was a discussion of
21 RECs, the one thing that I heard that day was the concern
22 that a REC tracking system, such as you talk about here
23 today, might present and shoulder -- present burdens on
24 utilities that they would be concerned about, additional

1 data collection, additional resources and -- significant
2 resources I think they were concerned about having to put
3 together to respond to this type of a system.

4 And certainly there should be -- will be some
5 responsibilities, but I think one of the things we ought
6 to emphasize is that what my company tries to do is to
7 work with all the stakeholders, as I said earlier,
8 including the utilities, to build a system that would
9 relieve these burdens or minimize these burdens as it
10 applies to the things that they're responsible to do.

11 So I understand their concerns. I came out of
12 the electric utility industry. I worked in -- for Edison
13 Electric Institute in an earlier time in Washington
14 representing the same -- those companies that here -- that
15 serve North Carolina, the shareholder utilities. And I
16 understand the type of -- those types of concerns when it
17 comes to RPS requirements and et cetera. We think we can
18 work with them to ease those burdens and to put together a
19 system.

20 Pages 10 through 16, those slides summarize our
21 New Jersey program. Again, highlighting of the features.
22 Page 17 and 18 summarize the Pennsylvania activities. And
23 as I mentioned, the Pennsylvania system includes
24 demand-side management, energy efficiency as well as

1 renewable energy components.

2 Lastly, I would sum up by emphasizing the value
3 of a user friendly system, but one with several important
4 features to work with all the stakeholders and to build a
5 program, a system here in North Carolina that best suits
6 your needs and we stand ready to try to help you do that.

7 We also have training sessions for users, for
8 new users, who can plug in by telephone and/or the
9 internet with our -- the folks that operate our system and
10 learn what a REC is, how it's handled, how it's generated,
11 how it's accounted for, how you sell it. So we provide
12 those.

13 We provide -- as mentioned earlier, telephone
14 hotlines, we have those. Obviously e-mail access to us on
15 a regular basis or day-to-day basis to handle inquiries
16 about how we operate our systems.

17 I would also refer you to the couple of letters
18 of endorsement that we received from some regional solar
19 energy associations in the Mid-Atlantic, which we commend
20 to your attention. And as we go forward, we look forward
21 to working with you to see what we can do to help this
22 system be the best that you can have down here.

23 I emphasized earlier that in terms of questions
24 and answers that -- the questions you asked earlier,

1 Mr. Chairman, were ones that we provided written answers
2 to. Those were done by the technical experts in my
3 company and I'm more of a governmental affairs generalist.
4 I'd be happy to try to answer those questions, but I would
5 certainly provide any additional information you need for
6 the record on those and, of course, other things as we go
7 forward with Ms. Jones and Mr. Watson.

8 Being not a technical guy, we can provide that
9 information and -- because that information can be quite a
10 brain burner, as they say. And when I say, wow, that's a
11 brain burner to my kids, they say, yeah, dad, but for you
12 that's a very small fire. So I would defer to my experts
13 in my company. But with that, I would be happy to answer
14 any questions that I might be able to today that haven't
15 been covered by the previous witnesses.

16 CHAIRMAN FINLEY: Anyone have any questions of
17 Mr. Davis? Staff?

18 MS. JONES: Fred, I'm a little confused about
19 what's going on in, say, Pennsylvania and Maryland where
20 PJM-GATS system I know is up and running and then your
21 organization is also providing services. Could you help
22 me understand why both are going on or what --

23 MR. DAVIS: Right. Well, there is some overlap.
24 In New Jersey we are -- and there's a possibility that --

1 we have the current contract to operate the -- and this is
2 primarily solar and for small users in New Jersey. We
3 currently operate that system going back to 2004.

4 GATS is obviously a component up there and there
5 is some dialogue regarding who might continue those
6 services. But right now CPM is the primary provider of
7 those services in New Jersey.

8 In Pennsylvania we actually have a -- not a
9 partnership, but we share the component, share the
10 responsibilities. In Pennsylvania, it's my understanding
11 that GATS provides the basic tracking of the RECs and we
12 provide a menu of things above and beyond that currently
13 for Pennsylvania.

14 And in those situations, the states of
15 Pennsylvania and New Jersey pay for the services that we
16 provide, including GATS as well as CPM. Different price
17 structure between the two states. But -- so there is some
18 overlap and those things going forward may change.

19 In Maryland we are currently engaged with the
20 stakeholders in Maryland to decide what system they want.
21 GATS has for several years, as you probably know,
22 conducted emissions, fossil fuel emissions tracking as
23 part of their original duties and now they are in
24 discussions with Maryland, as we are, about what

1 additional duties they might have.

2 And it's my understanding that by default -- I
3 don't mean that literally, but right now, as I understand
4 it, GATS is doing the basic tracking for the recordation
5 of solar RECs, mostly solar RECs in Maryland. They're
6 still continuing discussions with my company, the
7 commission and the stakeholders in Maryland, as to what
8 additional services they might want.

9 The situation in Maryland is that the State of
10 Maryland is not -- does not have resources, will not have
11 resources and has no plan to provide resources to hire an
12 entity, a third-party entity like us to do things above
13 and beyond what GATS does in terms of tracking. That may
14 change, but right now we haven't secured that. But we
15 have been in discussions for over a year with the State of
16 Maryland stakeholders.

17 The idea being that the guys that install the
18 solar systems as well as other possible entities might get
19 together and provide the resources to retain an entity
20 like us or GATS or APX to do those services, but right now
21 that is in a state of discussion.

22 MS. JONES: And I'm sorry, but I'm still
23 confused.

24 MR. DAVIS: Okay.

1 MS. JONES: The additional services that you
2 talk about as being, I guess, a layer -- an addition to
3 GATS keeping track of metered type data would be like
4 reporting and auditing that --

5 MR. DAVIS: Reporting and auditing, the
6 training. The -- we're getting -- we're in the situation
7 of the -- building the energy efficiency. As you heard
8 earlier, the energy credits will be generated by energy
9 efficiency and demand-side management. We're engaged
10 right now with Pennsylvania in deciding what those
11 services are going to be and what they want and how much
12 of it they want. So that is a process that's still under
13 construction.

14 MR. WATSON: Can you also talk about Connecticut
15 and Wisconsin? You had mentioned those on your slide.

16 MR. DAVIS: Well, those -- Sam, those situations
17 are -- we started a system in Wisconsin several years ago
18 and are no longer participating there. And I believe, I
19 haven't gotten confirmation -- it was a question I was
20 asking a couple of days ago. I know we had some
21 activities in Connecticut. I'm not sure we operate any
22 current systems there, but at some point we helped them
23 start up their operations up there.

24 MR. WATSON: Okay. You mentioned that you were

1 a consultant to Clean Power Markets.

2 MR. DAVIS: Yes. They --

3 MR. WATSON: Tell me a little bit more --

4 MR. DAVIS: A little bit more about that.

5 MR. WATSON: -- about the company.

6 MR. DAVIS: About a year and a half ago I was
7 approached by Clean Power Markets because I'm from
8 Maryland and I was director of the Maryland Energy
9 Administration, under the previous administration,
10 Governor Bob Ehrlich.

11 And when I left there, they found me through
12 some network of contacts or vice versa, and they were
13 actually owned -- at that point they were a small
14 operation and based in California. And they approached me
15 to seek Maryland's -- to seek this business in Maryland
16 because I'm a Marylander and I had some networks there.
17 So that's how they retained me.

18 And then later as North Carolina got moving, I
19 indicated to them that North Carolina is doing similar
20 things and they said please engage the folks down in North
21 Carolina for the same purpose. So that's how I got
22 involved in this particular piece of the business. I
23 don't come at it from the company perspective. I was
24 asked to parachute in and see if I could help them.

1 MR. WATSON: What's the rest of the company?

2 MR. DAVIS: I'm sorry?

3 MR. WATSON: What's the scope of the rest of the
4 company?

5 MR. DAVIS: Well, Clean Power Markets is just
6 REC tracking systems. It's a small, fairly small entity
7 which has some of its own staff, but also support staff
8 supplied by Enerwise. Enerwise is in turn owned by
9 Comverge. And those are two very large, as you know,
10 demand-side management and energy efficiency companies.

11 CHAIRMAN FINLEY: All right. Thank you,
12 Mr. Davis.

13 MR. DAVIS: Thank you, Mr. Chairman --

14 CHAIRMAN FINLEY: Appreciate your coming.

15 MR. DAVIS: -- Commissioners, I enjoyed it. And
16 thanks for not grilling me with the technical questions
17 that you hit the other guys with. Although we would be
18 happy to provide them, I'm not the guy that can sit here
19 today and give you the best answers that you can get from
20 us otherwise. Thank you.

21 CHAIRMAN FINLEY: Understood. Thank you. And
22 we appreciate all three of the presenters being here today
23 and it's been informative. And we appreciate the
24 opportunity to connect a face to these organizations.

1 And I would remind the parties that wish to
2 provide comments regarding the criteria that should be
3 used by the Commission in evaluating applications for
4 potential REC system providers that they should file those
5 comments by November the 14th.

6 If there's nothing further for us today, we will
7 adjourn and thank you very much.

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9 Whereupon, the presentation was adjourned.

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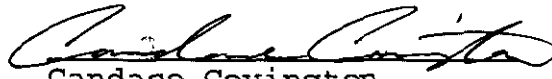
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CERTIFICATE

The undersigned Court Reporter certifies that this is the transcription of notes taken by her during this proceeding and that the same is true, accurate and correct.



Candace Covington
Court Reporter II