Jenny Heeter: Welcome to Understanding Solar Power Claims: Best Practices for Hosting, Leasing, and Owning Solar Generation. Before we get started, I do want to just review a few administrative items. Everyone on the call is joined in Listen Only mode, so the way you can communicate with us during the webinar is through the Q&A Panel. We do encourage you to submit your questions during the webinar. I will collect all of those questions and have a Q&A session after all the speakers have presented. We are recording this webinar, and we'll also post the slides to the link below, which can also be found if you go to greenpower.energy.gov. Everything will be recorded and provided after the webinar. Here's the basic outline of what I'll be speaking on today. I will introduce our presenters, provide some background on this topic and why it is a topic that is of increasing interest in the market, and then I want to just highlight a couple issues and highlight, also, the FTC Green Guides and some claims language that they have commented on, and then, finally, to conclude with some recent action by the FTC, the Federal Trade Commission.

I'll go ahead and just introduce our presenters at the beginning here. I'm Jenny Heeter, as I mentioned, with NREL. After my presentation, we'll hear from Robin Quarrier at Center for Research Solutions. She is the chief counsel there, and she is involved in the development of new standards and policies for the Green-e Energy program. She manages and provides counsel and support for legal issues ranging from contract negotiations to market claims, and the Green-e intellectual property portfolio. Some fun facts for you: she practices Aikido and is an accomplished Ironwoman. We look forward to hearing from you, Robin. Then, we'll conclude with Bryce Smith, who is co-founder and CEO at OneEnergy Renewables, a company that develops distributed utility-scale solar projects and next-generation PPA products. Previously, as director of Bonneville Environmental Foundation's Project Management Group, Bryce oversaw the foundation's nationwide investment in small-scale clean power projects and developed more than 160 solar projects in 16 states. You can see we have great experts that will be presenting today, and I'm going to start by just providing some background on this issue.

We're concerned really on this webinar with the voluntary market. For those that aren't familiar with that market, it's also sometimes called the green power market, and it's a market that is separate from renewable portfolio standards or other compliance obligations. NREL tracks the size of this market over time. You

can see in the figure on the right-hand side there that the market has grown at a steady pace, going back even before 2006, and then from 2012 to 2013, we saw the most significant growth in renewable energy sales in this market. The market overall now tops 62 million megawatt hours. We're looking at about 5.5 million customers in the United States that are voluntarily purchasing green power, which is pretty impressive. Within this market, we do track different sectors, and from 2012 to 2013, we saw green pricing programs, which are those offered by your utility. Those grew by 15 percent on a sales basis, competitive markets grew by, competitive markets grew by 25 percent, and interestingly, we're also seeing solar provide a growing percentage of green power, so it was 1 percent of total green power in 2013. Before that, in 2012, it was .6 percent, so we're seeing a lot of growth in that space.

I wanted to highlight, also, the growth in the solar energy market. We're at about 17.5 gigawatts of solar electric capacity in the U.S., and, increasingly, a larger fraction of new electric capacity is coming from solar, so about 36 percent of all new electric capacity in 2014 came from solar, which is pretty impressive. Six-hundred-thousand U.S. homes and businesses have a solar installation, so if you compare that to how many customers are buying green power, which is 5.5 million, clearly it's a smaller chunk, and there is some overlap in those markets but not a lot, which is one of the issues we'll be talking about today. Then, I also wanted to show system price declines over time, so that's the figure on the bottom-right. We have seen a sharp decline in pricing over time, which is driving a lot of development in on-site solar installation. The prices are projected to decrease increasing deployment going forward.

Another growing market that is sometimes considered to be part of the voluntary market and sometimes is part of the RPS compliance market is that for community solar. Community solar programs are those where a large solar installation is installed, and customers can buy a fraction or sometimes it's denominated in a number of solar panels, or sometimes the number of kilowatt hours of output from that project. The basic concept is that customers are purchasing a share of this larger array, and so that type of program has seen a lot of growth. As of September of last year, there were 64 programs operating around the country, with more than 40 megawatts of capacity, and there's an additional 17 megawatts under development. Some interesting facts about these types of programs, they're having usually around 200 participants, and so far have been around 70 percent subscribed, so there is room for more subscribers within existing programs.

The other market that I wanted to highlight was SREC markets, so that's solar renewable energy certificate markets. That's the mechanism that utilities and other compliance entities use to comply with the RPS policies in a number of states. I wanted to highlight some of the pricing trends in that market so you can see the value that customers are getting for selling their SRECs. That is really important because, as we'll talk about later, when you sell your SRECs, or RECs, you are giving up the right to make a renewable claim. While there may be a strong financial incentive to sell those RECs, what we'll talk about today is how that changes what you're able to say about the facility that may be located on your property. REC claims, in general, we are seeing that companies in particular are increasingly wanting to make claims and to be recognized for their green power purchases, whether that is through the EPA's Green Power Partnership, which recognizes companies and other institutions for buying green power through the Green-e program, which Robin will speak about, or through getting LEED certification for a green building that they may be developing. In all of these cases, REC ownership is crucial to getting recognition from each of these programs.

We know that this issue is increasingly important. A number of years ago, the Federal Trade Commission also recognized that. In 2010, they proposed revisions to their Green Guides, which had last been updated in 1998, and that revision for the first time included some language about renewable energy claims. I have some bullets here from their summary documents, but one of the things was that marketers should not make broad, unqualified general environmental benefit claims, like "green" or "eco-friendly" because those types of claims are difficult to substantiate, if not impossible. They also said that marketers should qualify general claims with specific environmental benefits. Actually, if you go to the next slide, we'll see some specific guidance they gave regarding REC and renewable energy claims.

One of their I guess primary statements was that marketers should not make unqualified claims based on energy derived from fossil fuels unless they purchase the RECs to match the energy use. The FTC really made it clear that marketers need to own the RECs in order to make a claim. They also had some comments about recycled content and renewable materials, which I won't go into here, but they also finally talked about the word "hosting" which is in the last bullet point there. Prior to this guidance, a number of companies had made claims that they hosted a solar facility or a renewable energy facility, even when that company had sold the

RECs to somebody else. The FTC found that, from a consumer perspective, consumers, when they heard the word "hosting" they thought that that meant that the company owned the RECs or was able to make a renewable claim. The FTC said that the term "hosting" would be deceptive in that case, which really prompted a lot of people to re-think what types of claims people could make if they do have a solar facility but sell the RECs.

Most recently, I just wanted to conclude with this recent action by the FTC. This is a case where Green Mountain Power was really cautioned by the FTC regarding some of its renewable energy claims. The case was brought to the FTC from a law school on behalf of a few customers in Vermont. The law school suggested that the claims that Green Mountain Power were making on its website and other materials really were not accurate because Green Mountain Power was selling the RECs from some of its projects. The FTC didn't take up the case, but what it did was write a staff letter to Green Mountain Power, and the FTC reiterated the importance of RECs as a tool for transferring rights to characterize electricity as renewable.

The letter also stated that some of these unqualified claims raise concerns. Importantly, the FTC believes that utilities should follow the Green Guides, and that even as a monopoly, the utilities would be subject to FTC oversight. Traditionally, the FTC has looked at companies involved with making marketing claims, which Green Mountain Power argued that they were not a company that should receive FTC oversight, but the FTC disagreed with that characterization. Finally, as I mentioned, although the FTC is not taking action this time, they did say that they reserve the right to take further action if they identify concerns in the future. It really put Green Mountain Power on notice to make sure that they're making appropriate claims.

This is just my contact information if you have questions to follow up afterwards. Please feel free to contact me, but now I will turn it over to Robin who will get into some of the details about how the Green-e Energy program looks at claims. Robin, I will turn it over to you.

Robin Quarrier: Thanks, Jenny. That was a really helpful overview, particularly of the FTC letter to Green Mountain Power. I think that's very useful for our listeners. My name is Robin Quarrier. I've been at CRS for six years. I'm chief counsel. CRS, the Center for Resource Solutions, is the organization that runs the Green-e programs, and today I'm primarily going to be talking about the Green-e Energy

program, which is the program that certifies RECs and renewable energy.

This is a somewhat technical area, double claims, but it is increasingly important to a variety of different people in the solar industry. This presentation, please share it with as many people as possible. This has relevance not only for participants in the Green-e Energy program who are particularly concerned because they want to know if their RECs are going to pass the verification process and be considered as Green-e Energy eligible and then certified, as well as this has relevance to purchasers of these RECs and renewable energy. This has applications for large and small purchasers because they want to be sure that when they're making public statements that they're making actual statements based on their real ownership rights, and that they have the full rights and authority to make those statements.

This presentation is relevant to generators who have made contractual promises to the people that they're selling the RECs to in the form potentially of attestations or in other contractual methods saying that they will not make claims on their RECs. It's very useful for generators to know what that means, what a claim really means. I also believe that this presentation is relevant to anyone interested in the solar industry because the value of that renewable energy certificate depends upon its exclusive rights of ownership with one particular party. I think that anyone who cares about the growth of the solar industry should care about preventing double claims in the industry.

One of the questions we often get is at what point does Green-e Energy evaluate claims, and there are a number of different times when we evaluate claims. The first and most notable one is during the verification process. We do a sampling of the generators, check to make sure that there aren't double claims. We look on their website and in other materials that we can find. This is something that we do not only for solar generators but for a variety of other generators. However, I should mention that as a whole, I think that this talk is primarily applicable to the solar industry because of the prevalence and the risk for double claims in the solar industry, but these evaluation tools can be used to see if there are double claims on any type of resource, not just solar.

Green-e Energy also reviews claims during tracking system attestation approval and renewal of, or approval of renewals. When someone submits a tracking system attestation to try and get that checkbox in their tracking system, we will look to make sure

that there's not double claims already made on the RECs from that particular facility. Green-e Energy has the right to review claims *sua sponte*. That's of our own prompting. We don't need to have a particular time when we look at it. If we have some extra time, we can always look at those claims, or review claims of participants. Sometimes, we do have participants that will ask us to check their own resources, and they may have questions to make sure that they can purchase RECs from a particular generator, so we are able to do that, as well.

Another common question we get is how do we evaluate claims. I want to point out this explanation of Green-e Energy double claims policy that's on our website. That's on the Learn section of the Green-e Energy website. We also have a new document just posted this morning which is guidelines for REC claims, and the idea behind that other document is that it will be useful for clients or generators. It's a slightly more basic document, whereas the process for the explanation of Green-e Energy double claims policy is a little bit more nuanced, more gray areas. It's more useful if you're trying to evaluate a particular claim, whereas the guidelines are better for a general overview of what should be said and what should not be said, so check out that Learn section and our new documents.

What do you do if you see that a generator you're working with or may be working with, or a utility has made a potential claim or has said something that you're unsure of? The first thing I want you to do is to collect images of the marketing materials, not just links, because it may be updated, and you should be date-stamping these so that you know when the particular statement appeared and, later on, when it was fixed, if it was fixed. You want to be collecting statements, both problematic and innocuous, and that's because we look at the full context of the potential claim if something is ambiguous and there's clarifying information nearby that would lean towards it not being a claim. However, if there's no clarifying information nearby and it does indicate that the particular company is using the renewable energy that you thought you owned, that would likely be a claim. You do want to keep date-stamped images of the particular website, and of both those statements that are damaging and those that are innocuous.

The second thing that I want you to do, particularly if you're a Green-e Energy participant, is to notify your internal teams, notify your procurement, your sales and your legal teams. Those teams need to know about the risks of those particular RECs. They need to know that they probably should not be purchasing any more.

We would ask that you stop transacting those questionable RECs rather than get yourself bundled up in a potentially more damaging situation when you promise that they are going to be eligible to someone else and it turns out that they're not. All of these internal teams need to be informed of the risks so that they can make good choices. What else should you do if you have a potential problem after you've collected the images and you've notified your internal teams? Well, the next best thing to do would be to contact the claimant or the generator and let them know of the situation, educate them about what they promised that they would say or not say and what, in fact, they have said. This can result in a speedy removal of the problematic language.

If that language was not a very damaging claim, if it was very narrow and potentially only affected a specific vintage of RECs, if you are able to get those statements removed and clarified, that can result in later RECs, later generations after the fix has occurred, to be eligible. That's obviously something that you'll want if you're working with a generator and something they would probably want, as well. Now, in some cases, and this is a little bit more rare, but in some cases where the statement is really ambiguous, it's not a clear claim and you're able to quickly provide clarifying information explaining what, in fact, the case was, a quick fix can result in even generation that – it is very critical for you to ask quickly and get that clarifying information added to the website.

Now, I would caution you that clarifying language is not just a footnote that says, "We're selling our RECs." That's not clear to the average customer. You really need to say the type of generation a participant would otherwise be using, or that the purchaser of the generation from that utility or whoever it may be, you need to clarify what's actually being delivered. After you've done your best to get those statements cleared up, if you're a Green-e Energy participant, it's in your best interest to contact CRS rather than wait until verification to find out perhaps you didn't clarify those statements well enough and those RECs are still ineligible. It's in your best interest to contact us and work with us to make sure that your fixes have been effective.

Here are some areas that we commonly see mistakes, risky areas, not particularly risk factors, I guess, but residential solar is one of those areas where leasing companies, the PPA companies tend to talk about the benefits of using solar generation, but then they may be selling off the RECs to another party. This is a very likely area where double claims have been made, so it is worth being very thorough when you're planning on using RECs from residential

solar. You need to make sure that those homeowners understand exactly what they're doing. Another area that we tend to see mistakes made is commercial facilities that reference on-site generation in marketing. Here is where it's not just solar but also biomass facilities do tend to have – they want to talk about the benefits of using that renewable resource but, in many cases, they're selling off the RECs elsewhere, so we would encourage you to use percentages. If you're only using a certain percentage of biomass on site and selling the rest of the RECs, you need to disclose that.

Also, this is another common area we see, solar schools. With solar schools, you want to be checking not only the website of the school that you're potentially working with, but the website of the school district. Commonly, the president of the school district may make statements about the solar generation on all of their schools, so you really need to be thorough when you're working with an entity that is not as savvy as let's say a more advanced, larger entity, like Kohl's or something, that is aware of the value of their renewable energy. When you're working with a school, they commonly don't know what they're giving up when they sell those RECs. Now, there are some areas, and we're going to get to these later, if we have time, some areas where state policy can result in those RECs being ineligible. These are some areas that we'll hopefully get to at the end.

What do you do to protect your RECs and your customers? The primary thing I want you to do is to educate anyone you're working with, whether this be generators or hosts, you need to educate not only the person you're working with and contracting, but also their marketing team. Perhaps the new document that we have, the guidelines for renewable energy claims, can be distributed to them. Perhaps our REC video that we have on our website can be sent out to them. Whatever you need to do to convey to your contractual party that they are not allowed to make certain types of marketing claims.

Now, you don't only want clear contracts, you want contracts that people can understand, and so specifying exactly which types of statements they can and can't say would be very, very useful. You want to regularly review the generators that you're working with to make sure that they're not slipping into making claims. Also, it's worth reviewing null power purchasers claims because, in some cases, they can have an impact on the validity, or on the eligibility of those RECs. This is all the internal review that I want you to focus on in working with your co-parties in your contracts to make

sure that everyone understands what's going on.

Here's what you've all been waiting for. Here's some real language that I want us to walk through. Let's say you have a school where on the sustainability section of their website they're talking about their solar panels and solar energy, and how much they hope to become more sustainable with these new solar panels. They say something like, "In total, the solar systems are expected to meet 80 percent of the total electricity needs of the school." Now, I put this example up here because, technically, that particular statement is true, or it may be true. However, if it's on the sustainability section of a website and next to any other language that implies that the renewable benefits are going to the school, that can be a claim, so you really need to be careful. Even true statements can end up being a claim, and this is something that a lot of generators don't understand, so you need to educate them as to what they're saying. Now, perhaps the same language, if you put that in a contract section that doesn't talk about the sustainability, if you're talking just about the school's ability to keep the lights on or reduced costs as the result of the solar panels, the same language could be innocuous, so it really depends on context.

Here's another good example. If you have a statement that says, "The solar systems promote energy independence and substantially decrease electricity costs by providing clean, green energy for the next 20 years and reduce greenhouse gas emissions by an estimated X many tons," this statement does have some things that are okay. You can talk about the substantial decrease in electricity costs, no problem. But, once you start talking about providing clean, green energy for the next 20 years, you wonder, "Who are they providing clean, green energy for?" Is it the school? If it looks like it's the school, then that's going to end up being a claim. However, if you have the same language and you indicate that it's providing clean, green energy to somebody else, that may not be as big of an issue. It really depends upon the context and the specific phrasing, and I want you to be as clear as possible to reduce the risks in your own marketing language and contacts.

Here's some important factors I want you to think about. These are all in the explanation of double claims, but one particular important issue is who made the statement is very relevant to whether or not it's a claim. Is it someone who looks like an agent of the organization, like a CEO or a principal of the school? Those types of higher-up people are going to be more likely to make a claim. If it's a reporter who may not have even interviewed anyone specifically, or maybe they interviewed a teacher or a custodian

but didn't get an actual quote, that's less likely to be a claim. If a person of authority is talking about using renewable energy on site, that's going to be a claim. It's also important whether or not they're in the chain of custody of the REC or the null power.

These are direct quotes from the Green-e Energy explanation of double claims, and here's something that I think people commonly miss, that even if you're implying ownership in the use of a REC, that can render it ineligible. It's not just the truth of the statement, but it's the implication and what the average customer would think is going on. If the generator uses most of the generation on site, then you have to clarify that they're selling the renewable energy to others and using traditional grid power on site. Now, this is really a best practice, and we encourage you not just to say that you're selling the RECs to another person, but there's a second step here in order to provide a truly clear statement, which is explaining what type of power that you're using on site. I think that after me, Bryce has a very good example of this and how to do it right. If the generator is a utility, then the statements about the amount of renewable energy generated should be accompanied with information about the amount actually delivered to the customer. This is very similar to the one above, and it just shows that this is important for the utilities to do, as well.

You need to think as you're evaluating a claim, "How misleading is the statement to the average consumer?" It's not only important whether or not the statement is true, as we saw with some of the earlier language examples, but if it's likely to cause confusion about REC ownership or renewable energy use. You need to be considering the full context of the statement, how and where the statement appears. Is it on the sustainability page? Is it in the middle of talking about going green and using renewable energy, or is it in a section where you're talking about reduced costs and contractual obligations? There's a very different impact to the customer when they go on the sustainability page of the website and they see the particular facility listed than if they go to see about the contract that one has for electricity procurement. Again, it's important to have clarifying qualifying information, and I encourage you just having a statement that says the RECs are sold elsewhere is not going to be sufficient. You want to add that language that talks about what's actually being delivered to customers.

In the Green-e Energy program, we have a number of attestation requirements. These are the types of things that we require signatures on in order to establish the chain of custody and ensure

that all of those renewable benefits have continued through the full chain of custody. It's important, if you're wondering about what you're bound to with the Green-e Energy program, to read carefully these attestations because, in many cases, a generator who is making particular statements that may be ambiguous, that they would be prohibited from saying that particular statement by their signing of the generator attestation. In order to sign the attestation in good faith, you need to make sure that you're not making a claim, and this goes similarly with the Green-e Energy participant attestation, both of which have very clear language prohibiting these types of double claims.

I promised you, although we're a little bit over time, to get into a couple of special cases of state policy. Now, these are areas that are much more complicated than can be detailed here. But, in general, there are some areas where the Public Utility Commission or a document approved by the Public Utility Commission can render some of the RECs ineligible. This may be the case in Georgia, as well as in Arizona. In short, in Georgia, there are some contracts wherein the solar power is supposedly delivered to Georgia Power but the RECs are left with the generator. We found this to be confusing of where the actual REC lays, and we decided that with this particular issue that these RECs that are claimed by this particular policy would not be eligible, so it is important to look at these RECs in Georgia before purchasing them. This is not all of Georgia, this is just those related to a particular policy that ties with Georgia Power. I'm happy to speak more about this later on.

As well, in Arizona, there is also the potential for some of these RECs in Arizona, particularly in the APS and TEP footprint, to be rendered ineligible. It's not yet decided whether or not these RECs are going to be eligible, but it's going to be an issue that will be decided shortly. I encourage you to pay attention for the advisory notice that we plan on putting out shortly with more info. So, just in general, keep aware of state issues where the Public Utility Commission may adopt certain contracts or adopt certain language wherein they would be counting RECs towards their obligations.

Here's my contact information. I'm happy to answer questions at the end.

Jenny Heeter: Great. Thank you so much, Robin. I've already gotten a few comments in but I'll hold them until the end, but some notes also that this clarity is much overdue, so definitely appreciated by our attendees today. I would note that we're running a few minutes

long, but I want to make sure we get through Bryce's presentation, but as folks are able to hang on the line a little bit after the top of the hour, I will continue to take questions for a few minutes after we were scheduled to end. With that, I will turn it over to Bryce, who will give us some specific examples of REC claims involving a company that they dealt with, so Bryce, I will turn it over to you.

Bryce Smith: Great. Thanks, Jenny. Thanks, Robin. My presentation is fairly short, so I don't think we'll hit the noon mark here, or at least the noon West Coast. Thanks, everybody. My name is Bryce Smith, Co-Founder and CEO of OneEnergy Renewables. I'm going to take a few minutes to review the renewable energy claims issues regarding offsite solar, that is having the source of your solar generation located remotely from your facilities or your point of consumption. This is a fairly novel arrangement but one that's gaining in popularity, so I think it's a pretty up-and-coming and relevant topic. I'll just quickly tell you who we are at OneEnergy Renewables and talk about how the offsite solar concept fits into the customer suite of renewable energy purchasing options. I'll do a quick case study of the National Aquarium's 4.3 megawatt offsite solar project, and then dive into the legitimate claims that they and similar customers can and should make, and those they should not make.

At OneEnergy, we developed what we call distributed utility-scale solar projects, typically in the 2 to 50 megawatt range, and we also create next-generation PPA products that connect end-users of electricity, either directly or indirectly with new solar projects that we developed. We're a certified B-corporation. Both Bill Eddie and I came out of the Bonneville Environmental Foundation, and many of you guys know BEF did the first commercial REC transaction maybe 2001 or so. At OneEnergy, we still have kind of a mission-driven ethos that drives the company. When we founded the company, we wanted to do much larger solar projects but try to retain the similar trailblazing quality that BEF demonstrated.

We really started the company with two independent business lines. We primarily developed utility-scale solar projects, but we also retained a separate REC business unit. Initially, the REC sales generated cash that we could reinvest directly into our new projects, but we quickly discovered that REC customers were increasingly interested in being involved somehow directly with our projects. They wanted not only the environmental benefit of the REC, but also the long-term economic stability and economic benefit of a fixed-price power contract. At this point, solar in a lot of places has gotten inexpensive enough and it's modular enough

in size that it's reasonable for a customer to engage with a specific off-site project. We essentially kind of meshed these two business lines together and created what we call Purpose-Built Solar where the end-user buys the electricity, either directly or indirectly, from the project, and also takes a portion of the project SRECs. That portion could be anywhere between zero and 100 percent. Obviously, this is where the green power claims come into play.

A quick note about project sizing. To date, most solar projects installed have really been on either end of the size continuum, you know, smaller net-metered rooftop projects or massive, utility-scale desert projects. We focus on the 2 to 50 megawatt range because that's really the most meaningful to most organizations, both from an environmental standpoint, and also from an electricity and a budgeting and hedging standpoint. If we look at the history of customer choice, customer renewable energy choice and some important milestones, we see that we have the emergence of the REC in around 2001, which was truly groundbreaking when you no longer had to rely on your utility for green power. Rooftop solar lease options became popular around 2008 or so, and then I believe Google did the first big corporate off-site wind PPA purchase in 2010. Now, we see off-site solar, and our version of this we call Purpose-Built Solar, we see off-site solar really as the fourth major renewable energy purchase option for customers.

Here are some quick details of the project we developed last year for the National Aquarium. It's a 4.3 megawatt project located on the eastern shore of Maryland, maybe 50 miles or so, as the crow flies, from the aquarium in Baltimore. They committed to a long-term power purchase agreement from the project. It's now under construction; probably operational in the next month or two. They receive fixed-price electricity for 25 years, all SRECs in year 16 through 25, and replacement Green-e certified wind RECs in the earlier years. If you take a look at this image here on Slide 9, you'll see probably the basic reason for potential confusion around green power claims with these types of projects and these types of transactions. From the projects' perspective, it needs 100 percent of the revenue, some net present value figure, to build the project, to make it economical. Some of this revenue comes from power sales, and it comes from REC sales, and those REC revenues may be from compliance markets or there may be some voluntary REC revenue.

From the projects' perspective, like I said, the project is really concerned about the MPV of all of that revenue, so when people

ask the question, "Who made the project happen?" that's not an easy, simple, straightforward question to answer. Sometimes we use the analogy when you think about a reception in football, who made that happen, the quarterback or the receiver? The answer is, "Well, they were both necessary." It's not one or the other. In this particular case, the project needs electricity revenue and it also needs some voluntary and some compliance REC revenue to make the project _____ and be financially viable, which obviously brings about a lot of potential confusion in the green power claims. I thought we should probably review some of the claims that we believe are true, accurate, and also appropriate regarding this particular project, keeping in mind some of the things that Robin was mentioning just a minute ago.

Here are the claims that we believe the aquarium can and should make. The National Aquarium is employing an innovative model to stabilize energy costs and to bring a new, large-scale solar energy project online. By locating the project off-site, the National Aquarium can help create a larger, more economical project with greater financial environmental impact. National Aquarium's long-term power purchase commitment and Maryland's strong incentives for solar development combine to ensure the financial viability of this project. National Aquarium will receive 100 percent of the energy produced by the project for 25 years, and approximately 40 percent of the renewable energy certificates produced during that time. National Aquarium will also retire additional wind RECs to match the output of the solar project.

As Robin was saying, context is important, and some of these claims without the others, while accurate, could not tell the whole story, so I think it's important to share as much information about the transaction as possible. By sharing that information, you get a more complete, more accurate picture of the project and the appropriate environmental plans. I believe that is my last slide. I'm not sure, Jenny, if we have any questions.

Jenny Heeter: Yes. Great. Thank you, Bryce, for those specific examples. I think folks are finding that really useful. I do have a number of questions that have come in. One, I guess I will turn to you, Bryce, since it just came in about your last slide. The question is, "What if OneEnergy's statements were on a sustainability page for the aquarium? Would that change the type of statements you could make?" I guess that question is for you, but maybe also for Robin from a Green-e perspective. How do you treat that case?

Bryce Smith: Well, I'd probably let Robin take the bulk of this question, but coming from the Bonneville Environmental Foundation, we have maybe more of an insight into these REC claims issues than the average developer would, so we try to maintain awareness about that and work with our clients to make sure they're saying the right things in the right places. But I guess my short answer would be that it's important to give as much context as possible if that's on the sustainability page or wherever, but I should probably turn that over to Robin for a better answer.

Robin Quarrier: Yeah, and it may be helpful to go back to that last slide. I think that, overall, these are great, clear statements to be making. They all do clarify where the RECs are going. Let's say that second-to-the last one, if it didn't have that last part about the RECs, where the RECs are going, if you just had that first half of the statement and that was on the sustainability section of the website just by itself, I think that that might be misleading. But because it's paired immediately after with an explanation of where the RECs are and, knowing Bryce, this is not the only statement that would appear. There's a lot of clarification of what's going on. I think they're very open about what's going on in most of these cases. I think that that would be fine to have on the sustainability page of their website.

It's not that we want to stop everyone – I mean in this case in particular, the aquarium is actually receiving 100 percent renewable energy, it's just not all from that particular facility because they are retiring additional RECs to match the output. As long as you're clear that it's going to be wind and not all solar, and I think that these are very clear statements, especially if you have them together, and they would be fine on the sustainability page of a website.

Jenny Heeter: Great. Thanks, guys. I am getting a number of questions coming in about what types of claims are appropriate or not. This one just came in noting, "Shouldn't the aquarium add the statement, 'An important part of making the project financially viable is the sale of X percent of the RECs to other entities will claim and not double count the environmental benefits'." I'm wondering could both of you speak to that, whether a statement like that is required in order to explain what's going on here accurately?

Robin Quarrier: I don't think that's required. I think it's certainly additionally helpful information. But when you look at what has been proposed here already, what's on the screen, you do get a full picture of what's going on and exactly how they're making it work

financially, and that the RECs are retired. There's an assumption that those RECs will be retired, so as long as they are, I think that's fine. You don't need to specifically say that they are being retired. That's helpful information but it is certainly not necessary.

Jenny Heeter: Great. Thanks. Bryce, I have a question for you that is a little bit not related to claims, but the question is from the buyer side perspective, "How long of a commitment, such as a contract length, would a buyer need to make in order for the voluntary REC off-take to be considered a financeable part of the project from the developer or investor side?" Can you speak to, I guess, contract lengths in the voluntary market, and what contract length would be required in order to have that investment on the voluntary side make a significant dent in the financing?

Bryce Smith: Sure, I can speak to it, absolutely. There's no easy answer to that question without trying to open a can of worms here. It gets a bit to the additionality issue where each project has its own economics. You have more expensive sites that you can build a project or less expensive sites, or a better interconnection or a worse interconnection. You have certain states that have better sunlight and worse sunlight, and more aggressive renewable portfolio standards and less aggressive. From a developer's perspective, you need a net present value of revenue that hits a threshold rate of return for the financing. If you can hit that required threshold with a ten-year PPA or a 22-year PPA, it's really hard to say except on a case-by-case basis, so it does get very complicated.

Jenny Heeter: Okay. Great. Thanks. Yeah, it is a complicated situation. I know we're at the top of the hour. I just wanted to ask one last question. There seem to be some questions about the case of Arizona, so Robin, I was wondering if you could give us a little bit more background about what's going on with APS there. Also, maybe speak more broadly about explaining to folks what happens when a solar net-metered customer sells their RECs or exchanges their RECs to the utility. How does that influence the type of claims that that customer with a net-metering arrangement can make.

Robin Quarrier: Sure, I'll speak about that, and I did want to point out, I saw there was a typo in our guidelines for renewable energy claims that a couple of you have noted, and I think I want to let you know about it before it causes more confusion. In the diagram on the guidelines for renewable energy claims, it says that 1 megawatt hour of solar generation is converted into a REC that has wind attributes and 1 megawatt hour of electricity. I just wanted to let

you know that that was a typo. It is not supposed to be a wind attribute. It is supposed to be a solar attribute. We will fix that on the website as soon as possible so everything doesn't convert into a wind REC.

Speaking of Arizona, on December 31 of this past year, the Arizona Corporation Commission, the ACC, they're similar to the Public Utility Commission, they issued a decision saying that all of the renewable generation in the footprint of those regulated utilities, like particularly APS and TEP, all of those kilowatt hours need to be reported to the corporation commission for them to use potentially when determining RPF compliance. In some cases, they say that this is for information purposes only; however, they also say that the ACC can use all information, including this particular piece of kilowatt hours that may not have the RECs tied with them when determining compliance for the RPF. The RPF in Arizona specifically requires retirement of the RECs and use of RECs for determining compliance, and by the corporation commission looking at these null power generation without the RECs, they're effectively, or may end up effectively counting those RECs.

This is not all of Arizona. This is just in the footprint of these utilities. It is not yet clear whether the corporation commission will consider these RECs as part of their compliance determination, so more information will be issued in the advisory notice that CRS will issue shortly. But I just want to let you know of the risk of double counting, and that would occur if the corporation commission did factor in these RECs to their compliance. I hope that answers the questions. In terms of with other states, it is very different depending on the state rules where the RECs are going in each state, so you really need to do a state-by-state analysis. This particular Arizona decision does not apply in other states.

Jenny Heeter: Great. Thanks, Robin. We are at the end of our time today. There are a few other questions that we did not have time to answer, but I would encourage those folks or anyone else to communicate with our speakers directly. Just a final note, we will be posting the recording and the presentation slides to the Green Power network, which is at greenpower.energy.gov, so you can find everything there likely early next week. I just wanted to thank our presenters again for this great information on a timely topic, and, again, if you have questions, please follow up with us directly. I hope everyone enjoys the rest of their day.

Robin Quarrier: Thanks so much, Jenny.

Jenny Heeter: You're welcome. Bye, guys.

[End of Audio]