

**The 2014 Farm Bill's Rural Energy for America Program
May 21, 2014**

Coordinator: Welcome and thank you for standing by. At this time all participants will be on a listen-only mode for the duration of today's call. I'd also like to inform parties that today's call is being recorded. If you have any objections you may disconnect at this time. I'd now like to turn the call over to Mr. Ian Baring-Gould. Thank you, and you may begin.

Ian Baring-Gould: Great, thank you, and thanks, everybody, for joining us for the May session of the wind exchange webinar. This webinar, very excited to discuss the 2014 farm bills, rural energy for America program, something that all of us have been waiting for, for some time, and it as we all know, it just recently passed out and so it's up and spinning.

And so we have a couple of great presentations to kind of go over the current REAP and then another speaker, Charles Newcomb, who's going to talk us a little bit about it from an industry, so we'll hop onto the two presentations in a second. Just a reminder, everybody, that Q&A is done through the webinar series, so if you go up to the Q&A button at the top of your screen and the menu bar, it'll drop down and it'll allow you to type in a question and then we'll do questions at the end of both Andy and Charles's session at the end.

So go ahead and ask questions whenever they come up and then— whenever they come up to you and then we'll address them at the end. So without further ado, let's jump into it. So we have the extreme pleasure of having Andy Olsen from the environmental law and policy center talking to us about the REAP program, and Andy has tons of experience in regards to this

energy program, but comes to us with kind of vast expertise in the energy field.

He managed Wisconsin's alternative fuel task force where he drafted kind of a proposal to lead the first ever manufactured E85 vehicles under former governor Tommy Thompson. He's done a number of collaborative renewable energy efforts, primarily focused in Wisconsin as well as being a county commissioner at times.

He's been on the board of Renew Wisconsin, Wisconsin Citizen's Utility Board, as well as a number of other positions of that nature. Andy has a degree from the University of Wisconsin, and then a BA in economics from Northwestern. So, Andy.

Andy Olsen: Well thank you very much, Ian, and thank you, everybody, for joining us today. It's good to have you here. I'm from the environmental law and policy center and I'll be talking to you about the REAP program today, which we have been involved in since it was first created. Just a little bit about us, you'll see in our screen a brief description of what ELPC does.

We're an environmental legal advocacy group, but we also seek long-lasting solutions that can work in the business environment. If you want to learn more about us you can go to elpc.org and put the farm program, farmenergy.org. And our farm energy program is my core activity at ELPC and we're—a lot of the work for REAP has been done, and we've become somewhat of a national leader for it.

You see up on the screen right now a recent success stories brochure that we released a third version of last month and if you go to farmenergy.org you can download that or you can send an email to me to get a hard copy. I think

you'll see the Web site right there. So why do we work on—and why do we think everybody should support the energy programs of the farm bill?

And basically it's because they provide so many overlapping policy benefits. It's a win for agriculture, for economic development, environmental progress, and for resilient national security. And one thing I like about these programs in particular is that we get to work with agriculture on solutions. We get to kind of leapfrog the whole climate change debate and go to low carbon solutions, especially wind power.

And rural renewable energy makes sense because so much of our renewable energy is based in rural areas, and the USDA has got a pretty strong service network in place through rural development and some of the other agencies within the department. And if we're going to work on energy independence anywhere within our society, agriculture is a great place to start.

And it also, REAPs and some of these other programs are a way to at least partially address the market feelers that have led to many of the problems we have with our energy supply system today. Just looking backward briefly we are now in the third version of the energy title on the farm bill. Each, you know, major piece of legislation's broken up into titles. This is Title 9 of the farm bill.

The first was in 2002, and it received you know, then what we thought was modest funding. In 2008 the programs were significantly expanded, especially REAP, and we saw a new emphasis on advanced biofuels and energy crops, to 2014 after a long flag in retrenchment, we saw a number of the programs cancelled, and we saw that the funding was moved around between the programs.

But the great news for this audience, if you look here at the breakdown of the funding and where it went within different energy title programs, you'll see that slice on the bottom is the rural energy for America program right there. And that is now the dominant program within the energy title. And I think a big part of the reason for that is the vast range of technology supporting the—renewable energy as well as energy efficiency allow this program to work for all ag sectors, and it works for every state.

And indeed we've seen awards in every state. So what is the REAP program? I'm just going to focus on that now for the rest of my comments. REAP provides grants and loan guarantees, and it's important to point out it does not provide direct loans. There's often confusion on this point. But just loan guarantees, and the agricultural recipients include agricultural producers and rural small businesses.

And I will point out agricultural producers here means ag producers wherever they're located, be they in rural areas or in urban areas. That's a change we won some years ago, so for example if we've seen a number of wind systems installed in greenhouse operations in suburban areas then they're eligible recipients for REAP grants. I mentioned the broad range of technologies, and the award process is done competitively.

It's been changed in recent years so that the competition occurs mainly at the state level, but there's also a national aspect to the funding competition. Each state office gets a funding allocation and once that process is through and those funds are awarded, then the remaining projects that have not been funded are determined at a national level.

Just to draw a little deeper on the two types of incentives provided, the grants provide—or provided up to 25% of the project's total activity costs,

maximum of \$500,000 per project, and the loan guarantees in 2008, that was expanded up to \$25 million of loan guarantees per project, and what those do are they provide a guarantee for the loan, well 80% of the loan. It's a sliding scale and gets complicated.

It's important to note that the benefit there is mainly to secure financing and to reduce any kind of, you know, anxiety from the lender. There is a cost to the project owner. It's 1% of the loan origination fee of the—in the principle, and then each year for the remaining principle a .25% annual renewal fee. So the USDA likes loan guarantees a lot. We encourage them to just let the market decide what they want to do.

And you can apply for both grant and loan guarantees total to up to 75% of your project costs, if that helps you build it. Now one area that we see has got a lot of potential but it's been often overlooked is rural small businesses. And you need to break that definition down into the rural and small business. Rural means communities under 50,000 in population that are not in a major metropolitan area, and there's a rural determination map that you can find through the REAP FAQ at farmenergy.org over at USDA if you're looking at a particular project.

And the small business can be really pretty substantial businesses. There are some incentives we'll talk about a little later for the really small businesses, but for a lot of sectors they can be pretty large. And new businesses do qualify. It often makes sense. They've been used a lot for community wind, and rural electric cooperatives all qualify as rural small businesses and are potential customers for the wind industry as well.

Now in 2008 Congress said that 20% of the funding for REAP needs to be set aside for small projects, for grants of \$20,000 and less. Now that's for the

grant of \$20,000, so the grant is 25%, that'd mean total project cost of \$80,000. And in some years the USDA has trouble reaching that number, so if you're putting an application in and you have a choice between 21,000 and 19,999, you definitely want to aim for 19,999.

And then another subprogram that was added in 2008 is the renewable energy development assistance program, which has been used for some win projects and also energy audits which probably don't apply here as much, and these provide grants and co-ops and local governments and resource conservation and development districts now to provide development assistance. So this can be used by a co-op if you're trying to work with a co-op to get involved in wind power, maybe do an anemometer loan program or help people with site assessments.

They can go to the USDA and get a grant to make that happen. It is not available in 2014 because the grant needs to be made by April, but it will be available next year. So in terms of the funding, they're the same from the right stuff, no bucks—No Buck Rogers, I'm fund of that, but we're happy to report that we did secure mandatory funding for REAP, and it's also baseline funding for any federal budget geeks out there.

And it's \$50 million per year, which will be \$250 million over the five years. These days that does count as a success, but it was a 22% annual reduction compared to the previous farm bill. But as I say, that's still—it still exists and we're going to carry it forward and so that's all good. There's another type of funding which is called discretionary funding which the appropriations committees can make.

The bill limits that to \$20 million, but that's really up to the appropriations committee anyway, and then also for 2014 is going to be a big year for REAP,

and so people really need to be aware of that. \$28 million from previous years from projects that were cancelled and not constructed, but the funds remained in the program and have been rolled over, and so that means that we're looking at a pretty good robust funding level for 2014.

We'll have the \$50 million in mandatory funding and the \$28 million carry-over, and the agency's going to provide that in two rounds. The \$28 million they released earlier this month, and that's out right now, and if you go to farmenergy.org or USDA rural development, you'll find more information there on how to pursue that. Then there's going to be another one in June or July.

So looking at what changed on REAP in the 2014 farm bill, one thing I was sorry to see go was feasibility studies that did help get a number of community wind projects built, but that was removed in the 2014 farm bill as a part of you know, paring back the title. Flexible fuel blender pumps are now prohibited, and that was probably the biggest fight of all for the bill, and the House was against it and the Senate was very much for it.

And when they took out flex fuel blender pumps, they took out all retail energy dispensing, so we saw some projects previously that had electric vehicle recharging stations or compressed biogas systems with digesters. None of that is an allowable expense anymore. Resource conservation and development districts are now eligible entities, and they can help with getting applications together, doing education outreach, so that's good news.

We do have baseline funding which means that when the next farm bill comes up, we will be starting from \$50 million a year, not from 0. And then there is now a three-tiered application system to try to reduce the complexity

and simplify the application process. I'm just going to drill into that a little bit more because I think it can be confusing for folks.

Currently there's two different types of applications under REAP. One is the simplified which applies for total projects costs of \$200,000 or less, and then the other one is the full for total project costs over \$200,000. And that's you know, the grant dividing line there would be around 50. You don't have to ask for 25%, you can ask for 20%, but that's how it works.

And so the simplified application's got a lesser burden in terms of preparing the application, and I think Charles can speak to that a little bit more when he speaks, but the full—you know, because it's more funding being provided and there is an obligation to the taxpayer if it's got a higher threshold. Going—in the new farm bill now there's going to be a new three-tiered system to make it even simpler, and I expect based on conversations with the USDA staff that this'll be implemented in the next funding around for 2014, expected in June or July.

The first tier, which will be the simplest applications, are for total costs of \$80,000 or less, and then the second tier is for total project costing \$80,000 to \$200,000, and on third tier you can see there's over \$200,000. I mentioned the funding available, this lays out the funding, \$28 million now and \$50 million in June or July. You can submit applications all year round, and your state office will work on those.

And many state offices get really aggressive, the states that do the best under the program, and they get their applications in early. So what you really want to do is contact those folks and you can find the contacts for your state offices and application resources at farmenergy.org. Looking back just in terms of how Congress has provided for the program, we can see that the

funding has had a pretty steady rise until—you know, but 2010 and then it kind of fell off a bit.

Now in 2013—I should have added that—it's trending back upwards. And this is such a popular program that the demand has continuously outpaced the funding. So we'll see how that works out this year, and hopefully Congress will continue to provide that funding. And just looking at where the funding has gone for REAP, on this chart the purple slice in the upper left hand side is for wind power.

And the biggest has been for energy efficiency, and that is for a wide range of systems, for maple syrup producers, dairy producers, corn growers, you name it. And that probably makes sense in terms of what the hierarchy should be. And it's been a really good program for wind towers, especially in the earliest years, REAP really helped a lot of community wind projects.

One thing that people should be aware of if you're looking at doing a project with REAP funding in conjunction with the production tax credit, is that there is a haircut from the IRS, which means they reduce to some degree the production tax credit on the back end, and you need to be aware of that going in. I encourage you to consult a tax attorney to learn more about that, or contact me offline. I can give you some information.

And this shows the history of funding to wind over the years, and as you see in the early years where community wind did really well, it was really a substantial part of the program. As a number of changes were made over the years, it fell off, and you know, the wind industry didn't always, you know, couldn't pull the applications into the agency, and then it, you know, caught back up again.

So it's been kind of a—and then when the overall funding went down, the funding to wind went down. And what really makes a big difference here is how people prepare their applications and how the industry mobilizes. In terms of what states have done well for wind power, this chart shows the biggest by the value of the grant, and so Iowa who's number one in REAP overall has done the best with wind power, followed by Minnesota and Illinois.

So we've also seen some states outside the Midwest, Oregon has done pretty well by it, and Texas, and Wisconsin clearly has done well with smaller wind projects. And this kind of scatter chart here gives you an idea of the breadth of the REAP program and how wind power has fared under it as well. Each dot here can represent multiple projects, and these are just the wind projects, and you know, as I've mentioned, it really does have a national reach.

So how can people compete in wind in the REAP program? It's really important to pay attention to the details, and the—some of the lessons I'm going to share with you here come from USDA staff who I've spoken with and put this question to, and so this is coming from the people who see the applications and see the winners and the losers. It's really important to learn and follow the rules, and there's a NOFA, notice of funding availability, that you can download at farmenergy.org or USDA rural development.

It's important to read that and I'm told it's important to organize the application along those lines as well. And when the projects are selected, they're selected on the basis of a score, which we will look at in some detail which is a uniform system so that there is, you know, fair and transparent project evaluation. So it's really important to know that scoring system so you can get the highest score possible and position your project to win.

Staff also are insistent, don't skimp on providing information. Apparently they get a number of applications with missing parts and where people don't address questions, and that can hurt your score. If you can use a simplified application as I mentioned, you'll be better off. Now we do provide at farmenergy.org some resources for applicants, also some links to USDA rural development Iowa office, who also have some good resources there.

So you want to take a look at those and especially the self-scoring sheet and use that. Okay, so that's updating. There it is. Okay, Internet. So I mentioned follow the points, organize the application, and submit a complete application. Surprisingly enough that's not always the case. So looking at the scoring, you can download this breakdown from farmenergy.org, and it shows where the different points are.

And you can see within this chart that there's—that the points are kind of concentrated in a few areas, and Charles is going to talk to some of this, so I won't get into too much of it, but you have the quantity of energy produced or replaced for energy efficiency and then technical merit is 35 of 125 points. So it's really important especially in military to make sure you're providing all the information.

And if you look down at the bottom, the administrator has got the discretion to provide 10 points to you know, account for various exigencies. Wind gets the ten points in the program right now, and I just confirmed that this week, so that's a good thing. Now this slide provides the breakdown for the technical merit scoring, and this is not available on any of the Web sites, but if you want to contact me or if you want to contact the folks who put this program together at NREL, we can get that sheet to you.

But—and the score sheet that we have provides kind of a breakdown for how these are arrived at, and it's safely numbered questions that you need to answer, the qualifications for the team, if you have all their permits, and if you answer those questions, you're going to position yourself pretty well. It's just that you're all on the largest points question, design and engineering, this shows you the kind of things that you need to address under that.

So again it's important to work with the USDA. I hear stories all the time about somebody who plans to submit a proposal and they don't contact the USDA representative until one week out from the deadline. If you do that you're going to be really out of luck as they say because the energy coordinators for rural development get very busy at that time in the process. So you want to plan ahead. They'll need to do a site visit. You'll want to consult with them early.

Oftentimes they can give you some tips that are, you know, publicized elsewhere that are just—have developed in the program, so it's really important to develop that relationship and understand what the USDA's preferences are. And I think I probably mentioned some of the pitfalls previously. If you do need a PE stamp, make sure that they have that and if you're in doubt about including information, then include it.

So I'm just going to look at a few projects quickly to step away from some of the bureaucratic side of things. And many of these are covered in our success stories which you can find all three versions online, and one is—this is a project that I visited. We actually climbed that tower. This is in southwestern Minnesota. I was very exhausted after that climb, and this is a father and son who put together five wind turbines.

This is—they were in the very first year of the program. And this is part of the locally owned community wind projects that were advanced with REAP. We've seen one of those also recently in Iowa, and this is for the crosswinds energy project where they had a partnership with a local rural electric cooperative, and I believe they're providing about 15% of the power to that cooperative. They actually broke this one up into 10 grants each.

And you can see they didn't go for the entire amount for each grant. They didn't go for \$500,000, but half of that. And cooperatives, the program has really helped bring newer cooperatives along to learn more. This is an example from Illinois of a co-op that got their first wind turbine up and they're pretty happy with that, and they've been looking at other ones as well.

Now here's another model that might work if you have rural electric co-op customers. So what they can do is they can go to the USDA and get one large grant, and they can use that for multiple distributed projects. In this case, Verendrye Electric Cooperative in Minot, North Dakota, used it for a number of livestock watering systems across their service territory where they also saved in not having to run distribution lines out there.

This would also obviously be a pretty good application for wind power as well, because you know, if you can pump the water, then you can just store the water there and maybe even heat it. Another example, the community wind project, probably one of the more famous ones from Liberty, Minnesota, and this is with multiple local investors. Then you also have single turbine projects on one farm, and this is the (Nepples) in Iowa, real sweet folks.

And they were very concerned about the future and they're heirs in this so they wanted to contribute by putting their own wind turbine in as part of their grain and hog operation. It's small—wind can do very well in REAP as well

and has for recent years, and this is an example of one of (Leroy Gerolimick)'s projects in Idaho that he installed with a local farmer.

So I'm about to wrap up. Just again, I think I've mentioned it enough that we do have various tools that you can find at farmenergy.org. If you can't find what you're looking for, please do feel free to contact me, and there's my information there. Aolsen, that's an E-N, at ELPC.org. Thank you.

Ian Baring-Gould: Great. Thanks, Andy, for that great overview of the program as it stands now as well as all the work in making that come to pass, as well as for pointing to so many good references. That's fabulous.

So the next speaker is Charles Newcomb, and Charles is certainly no stranger to this organization, as well as this topic. Charles has been really working to advance renewable energy for going on 20 years now in a strong combination of work for the—for—on the research side here at NREL but also within the industry.

So while at NREL, Charles managed the wind and water power deployment group, which is where the wind exchange and stakeholder engagement activities are kind of housed in, as well as the wind for schools program. And then part of that he did, including at that time, did a lot of research in regards to performance and duration tests of field engineering, both domestically and internationally, as well as working very closely with a bunch of other federal departments, interior, agriculture, in the kind of the deployment of wind technologies, and specifically in relevance to the REAP activities in 2000—between 2003 and '05.

He was part of the project team that pulled the technical requirements for the inaugural REAP activities into being, and so was a leader of that activities.

Charles has been also with industry and has had a couple of very important jobs initially as the managing director for Integrity Wind Systems, then as the chief technology officer for NexGen Energy Partnerships.

And right now he's at Endurance Wind Power, where he's the technology director. And in that role he leads both technical and project development teams, and then works really closely with suppliers and customers for integrity systems in the deployment of their wind systems, both here in the US but also in the UK and other places in Europe. So Charles, the kind of industry side of the USDA REAP program.

Charles Newcomb: Thank you, Ian, very much. So storming in, I'll try to follow on with Andy. Andy did a great, great introduction to the program, always wonderful to have folks like you who have provided such a long support for the program. So thinking about what do we do when we've got a program like this from an industry perspective, how do we make it work? What are some thoughts on that?

You know, wind energy can look simple. You know, it's about a resource. It's about a turbine and how it performs, kind of coming up with a production estimate, but then it starts to get complicated of course. You know, we start to thinking about terrain and obstructions and these little loss formulas, and we start to go through this whole documentation process, and wind begins to look complicated enough.

And so why would you want to make it more complicated with something like REAP? And the answer is this: Distributed wind for sure and wind has certainly proven that when we're scared by the PTC vanishing, even big wind needs the incentive, needs some sort of incentive.

And we've seen a lot of the state programs that supported distributed wind and mid-scale and others softened over the years, and OA was a big shock.

And we lost a lot of important programs. We keep hoping New Jersey will come back, and I haven't seen it yet. So REAP in contrast has been sort of a stable program out there. It's competitive. That makes it hard, but it has been there for a decade, and that's fantastic.

When we talk about challenges, financial challenges, doing a single turbine project and the development costs around that, and coming up the learning curve for a single turbine is really hard.

And so having a program like REAP that not only provides financial assistance but also provides structure for thinking about that project is very valuable. Solar has really taken off in the last decade, and Solar City, (Unintelligible), those kinds of projects have—or programs have really demonstrated the power of the third party model. Part of it has to—the success has to do with the ubiquity of the resource, the simplicity of the siting, that kind of thing, which wind is not in that family necessarily.

But there are elements of wind that do lend it towards the third party ownership model, and we're excited to see some new leasing programs beginning to crop up, and we hope they really get legs and run. So that's a little bit of context. REAP is complicated, but there have been a lot of success stories. I know the numbers aren't as good as some of the other technologies have gotten, but you got to recognize it has made a difference.

And in fact it's driven the five-year warranty in the industry, so it's not without its impact, without its good impact. Sometimes when things are complicated, you ask for help, and extending a hand out there or asking

industry to extend a hand to you because you're going to try out a new program that is complicated can be a good thing, because that hand that's extended from industry, whether it be from an installer, a developer, a manufacturer, that hand is going to bring you into the network.

That hand is going to bring you into the community and it's a rich tightly knit community where everybody talks and everybody knows each other and everybody shows up in (Stevens) Point or wherever it is in Vegas a couple weeks ago and it's a family. And so it's having a complicated program like REAP is cool, because it's an introduction to that family.

If you choose to go it yourself, you're going to become very smart. It's a hard—it takes a lot of learning, and it's a cool thing if you have time. I don't know that many farmers who—the timing—this time of year it's really good timing. They're most of them are planting or tilling or whatever, but if you're a small business then this may be a time to come up to learning curve, but it will take a lot of effort.

So thinking about getting that help, I think about it like anybody who's going to broker something, whether it be insurance, whether it be a car, whether it be whatever. You know, think about it in the same way, and if you're looking to buy a car and you don't want to go to a dealership, or if you're thinking about buying life insurance or health insurance, you're going to go to somebody who lives, eats, and breathes that world.

And it's going to be somebody who you're willing to have a cup of coffee with or have dinner with while you discuss your options. So it's got to be somebody you get along with. There are a lot of choices out there in the industry and you want to make sure that the consultant you choose is

somebody you like. So again, I've worked with various consultants, and I was fortunate enough to be the recipient of a lot of USDA grants historically.

And it wasn't done by me alone. It was done by a team of us and it was done by teaming with consultants who knew the program equally well. So there are people out there. You got to get along with them before you can work with them, and they're going to introduce you to the program. They're going to tell you what it's about. They're going to—just to kind of bring you up that learning curve if you will.

And when there is a program like this that's complicated, it usually doesn't make sense for you as an individual to learn everything there is about it that's required to be successful. It usually makes sense to bring in a consultant, just to be clear. But that said, you do want literacy, because without literacy, how do you know when somebody's just feeding you a line?

So again this consultant is going to talk to you about the eligibility requirements, no point if you're not in a rural area at a small business, or if you're not an ag producer or somebody—you got to be eligible for the program. It is a USDA program. They're going to understand the timing really well when stuff is coming out and when cash is becoming available, when the program closes.

They're going to know about deadlines. They're going to know about what you're going to need to provide in terms of financials or you know, load information, electrical load information or thermal load information for your project. They're going to help you and really drive that side of the equation, and hopefully they're going to connect you to somebody who actually does the real work, the person who is actually going to dig the holes, the person who's going to design the collection grid or whatever.

They're going to actually—this consultant is going to do that, but they're going to know who's the right person to do it, because again this is a tight-knit field. I think the other element is this is a federal nexus in the biggest way. It's—when you go and you ask money from the federal government, you trigger a bunch of things, and one of them is NEPA, right, and this whole environmental side of things.

And so they're going to know how to coordinate with them. They're going to know what information is the right amount of information and what is too much information. They're going to know on the state historic side when—they're going to know details about how to work with (unintelligible) that I think is really important, and they're going to run that interference for you so you don't have to become a (unintelligible) nerd or a (unintelligible).

And then they're going to know the scoring. They're going to hopefully be able to guide you in your choice of equipment. They're going to hopefully know how to comprise the team, like who's the best resource person out there or what's the right sort of resource assessment side of things. Who's going to help you with permitting, what are the permitting requirements?

So they're going to know how to build that team around the project to identify them. They don't have to—you don't have to build the team and have it, you know, everybody married before you get this grant, but you've got to be able to make a very credible story for this is what it looks like, this is what's involved, who is, who does what, et cetera. And then they're going to know how to size the project appropriately.

If you're doing self-generation and you want to put in a 5-kilowatt wind turbine and you run a cheese manufacturing plant, that's not going to be much

of a replacement, so they're going to help you right size that. On the other hand if you think you're doing energy replacement with a GE15, they're going to correct you on that as well—or 17 or whatever it is these days.

And then they're going to make sure that you understand who else in the area is trying to do similar things at the state level, so they can align you and get those scores that you need. And as Andy mentioned, that USDA rep, they're busy. They have many programs, whether it be telecommunications, whether it be waste water or water, whether it be community facilities, they're running all these programs, and this program is just one of those that they're running.

And they love it, they like it, they're proud of the program, but it doesn't mean that that's the only thing they have to do. And so Andy's absolutely right. You got to make it easy for them. You got to reach out to them really early. They're a wealth of information and fantastic support. They'll be there for you, but you've got to give them time and let them be successful.

So now I want to kind of visit the second side of the presentation, which is really about tuning your score, so scoring is really important. That's the thing that you're going to be graded on. Now Andy talked about the technical report and that is a big piece of this. Even the simplified application requires a technical report. It can be lighter than the full one, but everything needs a technical report, and that's a big piece at 35 points.

But let's think about some of the other ones, and why we have them. We used to have a saying which is rate them, rank them, and fund them in order of priority. Well, you've got to do a priority score, and that's what this is, so this gives the agency the ability to decide what projects are most worthy. Well, is it really worthy or is it just lowest risk? Well, it's a combination of the two.

You know, you need to have that—you need to—you can't—they have to be good public—awards of public funds, and so they have to make sure that they're managing the risk, but they're also trying to handle geographic diversity. They're trying to handle not technical diversity necessarily, but they're trying to spread the wealth across the technologies for sure, in a way.

They definitely have transparency with this scoring criteria so that you know whether you've been treated fairly and whether you've gotten your point across, and when you have appropriate documentation for your scoring then you can stand behind that and they—and you can be pretty sure that you can follow up with them later and say why do you think I'm scoring low in this area?

I don't think I'm scoring low. Here's the documentation. You overlooked it. That goes to the point of making sure that your documentation is easy to find. It's linked and so that when you've got your scoring sheet that you've filled out and you're saying the page number, the paragraph, the line, where you've done that calculation which is part of the score, you've already made that point.

From your perspective, from the applicant's perspective, I can—again, it forces you to check your work, because if you go through the scoring algorithm or the scoring sheet, you're saying well, how did I calculate? Where is that? And then it gives you the opportunity to add that to the index or to the table of contents. So who scores it again? You better score it first. If you don't score it first and go through that, then you're missing a big opportunity.

The state office does it. They have a state allocation, and so they're going to score everything up to their state allocation, and then beyond that the

national office can get involved for sure. What's the criteria? Let's just move on to the strategy, and understand that as Andy showed you there's a bunch of categories, and some of these things you can change. You can change how you present it.

And some of these things you can't, like if you're a small—a very small ag producer, then you're very small. If you're not, then you're not, so let's get onto that. So this is one of those, it's 10 to 15 points. 15 points is the max you can get in this area. I think it's really important to focus on those words, sort of on the—on that bullet there that says carefully choose the applicable energy application, and that's not my redundant language. That's in the 42.80B reg.

But it's really clear. When we wrote this part, when we crafted this part of the reg, we had in mind that you did not have to replace all of the energy that your dairy consumed or your business consumed that you are allowed to sort of say, okay, here's the circuit that if I had a solar panel or a wind turbine I could connect to the circuit, this is the circuit I'd connect it to. So that can be your carousel there in that, whatever, 7000 head dairy up in the top right.

It can be a center pivot, not all center pivots on your operation, but a center pivot. You can say the northwest pivot located at this latitude, longitude, is what's going to be—I'm going to—it's going to be offsetting greater than 50% of the annual energy consumed by that pivot. Once you break that 50% barrier, you've hit your maximum points, and why wouldn't you? You've got to be able to tune it.

Now on the other hand you don't want to push it so far that people rewrite this to keep people from finding a circuit. So if you want to talk about your Christmas lights, you're going to mess it up for everybody. So you want to be fair and honest and reasonable. So saying I'm going to replace the lighting in

my barn is one thing. Saying that my daughter's wedding is coming up and I'm going to have some Christmas tree lights for a week, that is not appropriate.

So be very careful about that. Don't game the system too much because—or be careful about gaming the system, because it's just—this is an important program. We don't want to ruin it with too much of any fiddling. All right, environmental benefits, this is pretty straightforward. A lot of states have some environmental program that you're in harmony with, so you want to make sure that you're in communication with the governor's office or the state environmental office or whoever it is that will have a program that is about reducing carbon or about reducing some load on the environment.

And you want a letter from that agency, and you want it to specifically call out your project, your address, the type of turbine you're using, where it's going to be located, and how much it's meeting their objectives, and how you're on their radar. I think that's very important. So having that letter is absolutely critical. In terms of commercial availability, that's terrible. I tried to paste in the small one certification banner, and I got this half of a link at the top left.

So I apologize for that, but commercially available, that's pretty easy these days. There's this clean energy states alliance. There's a small wind certification council. These things weren't around when this program first came out, and we had to look to California for their list of sort of quote unquote "approved turbines."

Well now we've got organizations like these two here that identify which turbines have actually crossed those hurdles in terms of actually producing what they say they're going to produce and having the safety and function that

they say they're going to have, and that aren't too loud, et cetera. So that's really important to choose the right equipment that has a proven track record.

We used to say, you know, we have these sort of squishy thresholds about the turbine being out in the field for at least a year with data and an equivalent environmental resource so that if you were going to put a turbine that had only been in Florida and you were going to put it in Alaska, you couldn't do that kind of thing, but it became too tricky, because somebody could easily enough put one in a low-wind area and anything will last in a no-wind area.

Anything works fine in a cave. So that's important, to choose the right equipment, and ask for that five-year warranty. Technical merit, Andy talked about this, but I think the important thing is in this—in bold below that says if the description has no significant weaknesses, so if it says tell me about the project team, and you say, okay. This is (Fred), he's going to be doing my resource assessment, he has this much experience or this is what (Fred) has recommended. Here's his bio. It's in the back.

Here's the person who's going to be doing the geotechnical survey. I have to do a geotechnical survey for these reasons, and on down the list, and you have no significant weaknesses and you exceed the requirements of the subparagraph and you get your full score, why shouldn't you score 100% This isn't—you should be able to nail that one, I think, if you do it right. If something is—it's not unlike asking for financial aid.

When you're asking for financial aid for anything, you never leave a text block blank. You always put something in there so no omissions without explanation. What I mean is if they ask for a building permit and you're in Harding County somewhere or if you're—not Harding County, that's in Ohio. That does have a building permit, but if you're in Lake Western, Kansas,

where there's no building permit required in that county, then say why there's no building permit required and demonstrate that it is.

Environmental coordination, this—that's an entire presentation in itself, but suffice to say that fish and wildlife has worked hard on their tiered approach. It's in harmony with the section 7 informal consultation and fish and wildlife in USDA, they know—they're good friends, they know how to run this program. So they'll help you through that.

(Unintelligible), we can talk about that if we have time as well, but ask a question if you've got a question about that, but there's details on that that you'll want to understand as well. Financial readiness—so supporting documentation is really important here, but it can be contingent. So in other words, the bank can say listen, we see this project cash flows in the event that farmer John gets this grant.

Absent the grant, we can't see the cash flow happening for us, so we'll only promise these funds if they get the grant. That's okay, but if you don't have the word commit in there, that we are committed to providing this fund at this rate, then it's not going to have the same weight. So you want to make sure the wording of your financial readiness documentation is out there. Large projects, they just—it's tough.

And they don't need my help on this call, frankly, because they know a lot more than I do, but that—just suffice to say I tried to finance a lot of—well, a number of projects below 40 megawatts, and they—those are much harder than projects over 80, I've found. Very small ag producer, again, this is the one that either you are or you aren't, so we won't talk about this very much.

Simplified application, if you are less than 200 grand total project costs, then use the simplified application process. Why wouldn't you want the five points? You need them for sure. Previous grantee or borrower, to a degree it's untenable. If you got an award last year, how are you going to say that you didn't? On the other hand, there's something out there called the limited liability corporation, and so there are ways around this.

But again, be cautious with that. You don't want to, you know, do it over and over ten times a year or something like that, that is too blatant. Simplified payback, this is somewhat untenable, and—but you're trying to hit a ten-year hurdle, and how do you do that? Well, one way on a small project just for example is sweat equity. So if you're a farmer and you happen to have an—you know, not excavator, but a JCV or a John Deere back hoe, there's nothing that says you can't go ahead and trench that at your own cost with sweat equity, as long as it's done correctly.

So there are ways to bring the cost down. When I think about a small 2.4 kilowatt wind turbine, that thing could be what, \$12,000—11, \$12,000, something like that? And installment could be twice that, so you can certainly bring those costs down. And then the state directors, awfully nice to hear Andy say this, this is a big deal. Ten extra points, that makes a difference between the deficit that we've seen historically for wind versus other technologies.

So this is a really important one, but you're probably going to have to ask for it. So you want to work closely with your USDA rep to make sure that that gets on their radar. Final conclusions, I think that scoring is actually, it's not just necessary, but it's very helpful. It helps you to organize your project, makes it a little—your documentation, allows you to be more clear, and when

you are more clear so they can score you better, you've got an easier to read submittal.

And easier to read submittals just inherently are more fun for people to review and score and award. The criteria is out there. Andy mentioned Iowa. That is the go-to spot for additional information. They have one of the best sites out there and nobody's ever really bothered to mimic it because why would you want to? It's so good.

And then finally I think when you go to self-score and you find that you can't justify a higher score in an area, that should be a nice little highlight to you that oh I think I need to work on that part of my application in general. So I think that covers it, Ian, and I'm sorry to run us so close to the witching hour.

Ian Baring-Gould: No problem, Charles. Thank you so much for the presentation. We've got a number of questions here. We'll start off with one for Andy, give Charles a chance to catch his breath. From (Pestern Boone)—I'm sorry, (Preston) excuse me, no pumps of any kind are eligible in 2014, is that accurate?

Andy Olsen: No pumps? Yes, you mean water pumpers?

Ian Baring-Gould: He just says no pumps. So you were talking about the fuel blend pumps.

Andy Olsen: Oh, oh, I'm sorry, yes. No, those are history in the reprogram. The OPC opposed that. We didn't think it was an appropriate use of the program funds or actually even allowed under the legislation, and that all questions input the rest and flexible fuel blender pumps are no longer eligible.

Ian Baring-Gould: But not—so pumping systems or power for other types of pumping systems?

Andy Olsen: No—the legislation says no retail dispensing.

Ian Baring-Gould: Okay.

Andy Olsen: So if you have a fleet and you're—like say you might have an EV fleet, or something along those lines, and it's not for retail, you might want to try to make the case to the USDA and see how far you can get with that, and you know, that might yet make the cut.

Ian Baring-Gould: Great, thank you. I have a question from (Mark Snyder), does energy efficiency get the ten extra points from the administrator, or can energy efficiency get that?

((Crosstalk))

Andy Olsen: Well, energy efficiency has done exceedingly well under the program since about 2005 when we made some really significant changes to it, so it's not an underrepresented technology. It's used all across the country, and it's really—it is the single most dominant technology in the program, so I don't know for a fact if it does get the 10 points, but I don't expect that it would.

Ian Baring-Gould: Okay, great. A similar—or a question along those similar lines, potentially going to winds representation from (Heather Rhoades-Weaver), if you could pull up slide 18, and (Tessa), if you could do that so Andy could focus on the questions, so slide 18 of his presentation, my understanding is that the wind received less than 2% of 2013 and only 5% of awards since 2003. Any ideas on how wind might increase our slice of the pie? And that could also be for you, Charles, since you had a lot of experience there as well.

Andy Olsen: Yes, I'd be happy to address that, and I've actually been looking into that. I'm not sure if those percentages are exactly right, I'm not saying they're not, but we have seen wind fall in the share, and we've been concerned about that, so that's why we've been urging them to get the extra ten points. And also you know, what I've seen looking over the data that we have received from USDA in terms of where the awards went, there are a lot of projects that get very low scores, a lot of wind projects where they applied.

They still got funding like in some states that don't have a high participation, they've got to go to pretty low scores to fund them from the state allocation, so it's really—you know, it comes down to the score. And so what people need to do is they need to put together good applications. They need to pay attention to all these details that we've covered, and make sure that they're going to score high, and that should give them the best chance they can.

And then you know, also we see a couple things this year where there's going to be less competition, less from feasibility studies, which wasn't really major but the flexible fuel blender pumps were a fair amount of competition as well, so I hope that that addresses some of the concerns there. But you know, we did see in 2013 all the awards went to small wind projects, and not really for large wind projects. And I don't think there's any one answer for that.

Ian Baring-Gould: Small wind as in...

Andy Olsen: As in kind of...

Ian Baring-Gould: Community scale projects, or...?

((Crosstalk))

Andy Olsen: ...rather than the utilities side, utilities tail.

Charles Newcomb: So Ian, this is Charles. What I would speak to on that is that it probably to a degree comes down to the environmental side of things, because many of the other technologies get a cat ex. I won't say the digester gets a categorical exclusion, but solar does and many EE projects get categorical exclusions, whereas even a small wind turbine has to do the class one environmental and the larger ones require class two.

And it's hard to get that done in a couple of months. And so my advice on that would be start very early. I mean, there's nothing that says you can't start your environmental review in the fall for the next spring, and it doesn't cost you anything.

All you're asking for is the landscape level, and then the—landscape level information in terms of what species should we be worried about, and then doing a project level that says okay, here's why we don't need to worry about those species, because we're putting in a parking lot, or something like that. And so the environmental doesn't have to be the end of the world at all. It's not—it doesn't have to be that hard unless you're in Hawaii for example where everything's endangered, right?

So I think that's a big piece of it, and so having people understand better how to manage the environmental timeline I think is one. Also recognizing that the state officers have many, many, many projects, and they're always working extremely hard, late hours, weekends, nights, kind of thing to get these things out the door.

So when you've got a project that needs—oh, they haven't done their public whatever, posting of the project per class two, they're—you're going to put that on the back shelf and you're going to lose days. We don't want to deal with that.

Ian Baring-Gould: Great. Thank you. Clarification for you, maybe not clarification, Andy, but in New York state we have been told by our local USDA that only solar projects that cost under 2000K will be funded. Do you know if this is accurate? And then is it only the portion of the 200K that could be submitted, or what are the details about that?

Andy Olsen: That is news to me, and I'm kind of surprised that they would say that, because there are rules and laws governing the program. I wasn't aware that they had that authority, so I'm going to follow up with the national office myself and look into that. The person who raised it wants to contact me directly, I'd be interested in checking that out more.

Ian Baring-Gould: Okay. And that's (Dan Monte Ne), I believe, so we'll get you to give your email addresses again at the end. Let's see, another question from (Jim Rapp), I believe I heard that the energy audit energy development assistance category is not available until 2015. Is that accurate? And then is energy development assistance in advance of capital development under the renewable energy, energy efficient program in '14?

Andy Olsen: Yes, the renewable energy development assistance is not available in 2014 because the funding announcement came out after the statutory deadline for you know, awarding those funds. So national office told me that it will be available in 2015 and they hope to get their notice out for 2015 well in advance in that, so people seeking those funds can plan now.

In terms of—now those funds, the eligible recipients for that are basically state governments, maybe some county governments, rural electric co-ops and the like, not individual project developers, and that funding I think was the feasibility study funding, and that has now gone from the program, I'm sorry to say.

Ian Baring-Gould: Great, thank you. A question in regards to what elements of the project can an installation company, so this is from (Laura Waterman), we are a solar PV installation company with several clients who might qualify. What parts of the application can we take care of and—without the applicant, and then what parts does the applicant have to do? And I think this is more general to all wind projects, or all projects under way.

Charles Newcomb: Andy, I think you had a great example of an EE system where you had somebody running around, they were developing almost the entire grant. Can you share that?

Andy Olsen: Well, yes. What we've seen under the program and what actually caused us a fair amount of heartburn for a number of years was that the grain dryer industry set up a cottage industry of grant writers, and they created a lot of reusable parts of the application for their various systems. So some of the technical documentation, and a lot of the stuff that was just repeated over and over again on the same application.

They set it up. They have like an efficient system. And they also hired like a couple of retired English teachers in Iowa who were writing these things to help farmers, and so they really showed up in 2010 to be a pretty major chunk of the funding of the program, and that got to be a problem within Congress who were calling it a grange writer program. And so the USDA made some changes after that. I think that was 2009.

And so you know, that's the sort of thing that the industry can do to look at multiple applications. Once you get into the details of the application, I'm going to just kind of suggest people consult with their USDA representative, the energy coordinators, to the details of that question. There are a lot of site-specific parts to it and applicant-specific. So you'll just have to take a look at the notice of funding availability and how they outline what should be in the application, then consult with the USDA representative for that.

Ian Baring-Gould: Great. A question from (Travis), would you lose on eligibility if it took longer than a year to complete your NEPA? Are you required to have it done in advance of the program—of I guess application for program compliance?

Charles Newcomb: It does not need to be complete prior to application, but it does need to be complete prior to obligation, so that happens in September. If you can't have it done by September, that's a definite no-go. If you can have it done by you know, mid, late summer, you're making a lot of people's life difficult, which is why you want to do it sooner than later.

Ian Baring-Gould: Great. Would non-dairy or non-swine biodigesters be considered underrepresented? Does that give you the ten points?

Andy Olsen: Well you know, I think that they might have a case to make there. I doubt at this point in time that that's been considered. You know, the dairy industry is working right now very energetically to reduce their carbon footprint by 25% by 2020. They signed an agreement with the USDA in 2009 in Copenhagen to do that.

They're putting significant resources towards that and digesters are a big part of that. So you know, it might be that the USDA has used their discretion

to say that this is something that we need to support. And I just don't have the answer to that question, but it's certainly something people can take up with the agency.

Charles Newcomb: But I wouldn't say that a specific type of digester would qualify. That would be like saying a solar—or sorry, a vertical access wind turbine would be underrepresented, so they would be lumped in with all digesters. If all digesters were suffering programmatically, then yes, then I would suggest they'd be underrepresented, but if it's just because they're non-swine or non-dairy, I don't think that that would—I think that would be hard to justify.

Andy Olsen: Yes, and you know, they don't publish where they're putting the administrator points towards that I've seen quite yet, but I know about the wind because I've been having a number of conversations with them about wind and how it can do better in the program.

Ian Baring-Gould: Great. Would you really recommend trying to keep the total project cost under 200K to take advantage of the simplified application?

Charles Newcomb: Every point counts, so if you're on the edge and you can do—so it's like any wind project, right? It's a balance of trying to maximize access to a good wind resource while minimizing cost, so putting it on top of a hill at great interconnection costs, maybe that's not such the right idea. So if you can put it out by your set of (unintelligible) irrigation for example and share that line and back feed along that line, that would be an example of yes, if you can do that, do that to get yourself under the 200K number.

Ian Baring-Gould: And then what happens if when push comes to shove and you put the project in, you're at \$201,000?

Charles Newcomb: That's a good question.

Ian Baring-Gould: Do they take you out and shoot you?

Andy Olsen: Then you're one step over the line, sweet Jesus.

Ian Baring-Gould: Yes.

Andy Olsen: I couldn't resist, I'm sorry. I'm an old timer. No idea what happens then.

Charles Newcomb: I don't think you'd—I don't know. I would think that—I would hope that there'd be some—that they wouldn't claw it back. I mean, no, because the thing is that that cash comes late in the project, right? The last 10% comes after everything is said and done, right, and the thing is up and running. So when is that accounting going to happen? At the very—I don't know. I think it's about intent. Let me just say it that way.

So if you're \$2001, your intent was to get to \$2000, something out of your control happened, you had to use a little bit more copper, whatever, that—your intent was and the design was justifiable, that's reasonable. And that was for scoring purposes and as long as it meets the engineering requirements of that type of technology under those certain circumstances, then that's intent in my mind.

Andy Olsen: Yes, and in terms of you know, 201 versus 199, I mean there is a cut-off and if you're over the cut-off then you'll need to do a full application, you know, or the third tier will not come second round this year. So you know, it's a judgment call that each project developer's got to look at and consider and you know, it's a question of how far over you are.

And if you're doing a very large project where you would like to get \$500,000, then you know, I would say go for the large application, but that's a judgment that you need to make and you should probably pick the brain of the energy coordinator that you're working with in the given state that you're working in.

Ian Baring-Gould: Great, here's a question that I don't necessarily understand, but I think it's— (Rebecca Rush) used to use, if I'm filling in the words here, RD4280-B in the past as an instructional guide. Will this be updated to reflect the new details about the three tier and simplified, middle, full applications?

((Crosstalk))

Andy Olsen: Yes, and I'm glad that person mentioned that, and again that document's available at the Web sites previously mentioned. And the USDA was going to come out with the final rule last year, and with the new farm bill they kept pushing it back, so when they do that, that guidance document will be updated, and then thank you to the person that brought that up, because that's an important document to also follow.

Ian Baring-Gould: Okay, so since you...

((Crosstalk))

Ian Baring-Gould: Yes, since you teed that up, what are your emails and that Web site again?

((Crosstalk))

Andy Olsen: Okay, my email is aolsen, that's A-O-L-S-E-N, at ELPC.org, and the Web site is farmenergy.org.

Ian Baring-Gould: Great, and Charles?

Charles Newcomb: And I am cnewcomb, which is Charles, right,
cnewcomb@endurancewindpower, one word, dot com.

Ian Baring-Gould: Great, and then Andy, what are the deadlines for the applications that you have?

Andy Olsen: Yes, the deadlines for grants are July 7 for grants and grant loan guarantee combinations, and for loan guarantees alone you have until July 31st, and you can also find that information in the notice of funding availability and at farmenergy.org.

Ian Baring-Gould: Great. Thank you. So we don't have any other questions. As always, the presentations are not made available on our Web site, but the recordings of the webinar are. Though if you specifically want a copy of the presentation, contact any one—or either of these two individuals and I would imagine they would have no issue with providing them.

So I can only put some words in you guys' mouth. So do that and it takes about a week for us to get the recordings of the webinars up on the Web site, so certainly go there to look at them again or if you have colleagues that were not able to make this, but think that—and you think this would be advantageous, please go ahead and do so.

The webinar for next month is a couple of presentations that were made at the wind power conference two weeks ago that have specific deployment related kind of information and expertise on grid systems and things like that.

So we're going to provide those three overviews and check out the e-newsletter for kind of more details about those three presentations.

And then as you can see we're filling in the agenda for the rest of the summer, so always on the third Wednesday of the month. Want to thank again both Andy and Charles for doing a fabulous webinar on the REAP program. Once again, also thanks to the department of energy for making these available. You have our emails there if you want to reach out and ask any questions or provide more information to us about potential future webinars.

Thanks again, Andy and Charles, for your time. Thanks again, all of you, everybody enjoy the summer, or the spring I should say, and we'll look forward to talking to you in a month if not sooner. Take care, everybody, and thanks.

Andy Olsen: Thank you.

Charles Newcomb: Thank you.

Coordinator: That concludes today's conference. Thank you for participating. You may disconnect at this time.

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