

SEAD Electric Motor Awards Competition

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Webinar Panelists

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This Transcript

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Sean Esterly

Clean Energy Solutions Center and the Super-Efficient Equipment and Appliance Deployment. We're very fortunate to have Mia Forbes Pirie, Dr. Chad Gallinat, Dr. Hugh Falkner and Debbie Karpay Weyl joining us. These outstanding speakers will focus on the SEAD Electric Motor Awards Competition.

And so, one important mention before we begin our presentation is that the Clean Energy Solution Center does not endorse or recommend specific products or services. Information provided in this webinar is featured in the Solution Center's resource library as one of many best practices sources reviewed and selected by technical experts.

Now before we begin, I just want to go over some of the webinar features. For audio, you have two options. You may either listen through your computer over your telephone. If you choose to listen through your computer, please select the mic and speakers option in the audio pane. Doing so will eliminate the possibility of feedback and echo. And if you select the telephone option, a box on the right side will display the telephone number and audio pin you should use to dial in. Panelists, we just ask that you please mute your audio device when you're not presenting. And if anyone has technical difficulties with the webinar, you may contact the GoToWebinar's helpdesk at (888) 259-3826.

And we encourage anyone from the audience to ask questions at any point during the webinar. You may do so by submitting your questions in the question pane in the GoToWebinar panel. If you are having difficulty viewing the materials through the webinar portal, you can find PDF copies of the presentation at the links on the slide, and that is cleanenergysolutions.org/training, and then you may follow along as the speakers present. Also, an audio recording of the presentations will be

posted to the Solution Center training page within a day or two of the webinar.

Now, our agenda today, we have a good one prepared for you that is focused on 4th SEAD Global Efficiency Medal Competition for electric motors. And before our speakers begin their presentations, I just want to provide a short informative overview of the Clean Energy Solution Center initiative. And then following the presentation, we'll have question-and-answer session, and then wrap up with any closing remarks; and then a very brief survey.

So this slide provides a bit of background in terms of how the Solution Center came to be. The Solution Center is the initiative of the Clean Energy Ministerial and is supported through a partnership with UN Energy. It was launched in April of 2011 and is primarily led by Australia, the US and other CEM partners. So some outcomes of this unique partnership includes support of developing countries through enhancement of resources and policies relating to energy access; no cost expert policy systems; and peer-to-peer learning and training tools such as the webinar you're attending today.

And there are four primary goals of the Solution Center. It serves as a clearinghouse of clean energy policy resources; also serves to share policy best practices, data and analysis tools specific to Clean Energy policies and programs; and the Solution Center delivers dynamic services that enables expert assistance, learning and peer-to-peer sharing of experiences; and then, lastly, the center fosters dialogue on emerging policy issue and innovation from around the globe.

So our primary audience is energy policymakers and analysts from government and technical organizations in all countries, but and also strive to engage the private sector, and NGOs and civil society. In this slide, just to give an overview of one of our marked key features for this Solution Center and that is the Ask an Expert. So Ask an Expert is a valuable service offered at zero cost to those submitting requests. So we have established a broad team of over 30 experts around the world the globe who are available to provide remote policy advice and analysis to all countries. So for example, in the area of low emission vehicles, we are very pleased to Ted Sears, who is Senior Project Leader of the U.S. National Renewable Energy Laboratory, serving as our expert. If you have a need for policies difference [ph] on low emission vehicles or any other clean energy sector, we do encourage you to use this useful service. Again, it's provided free of charge. So to request the systems, you simply submit your request by registering to our Ask an Expert feature at cleanenergysolutions.org/expert. And so, we also invite you to spread the word about this service to those in your networks and organizations. So in summary, we encourage you to explore and take advantage of the solution Center resources and services, including the expert policy assistance and subscribe to our newsletter and participate in webinars like these.

And so with that brief overview of the Clean Energy Solutions Center, I'd like to go ahead and turn the webinar over our first analyst today who is Mia Forbes Pirie.

Mia Forbes Pirie

Hi. I'm Mia Forbes Pirie from the Policy Partners. Welcome to the second of two webinars on the SEAD Global Efficiency Medal Competition for electric motors. This session is going to be recorded and available for download on the Clean Energy Solutions website. Having two webinars is designed to ensure true global coverage, not only of the competition, but also of the webinar. And the timing of this webinar is designed to be more convenient for our Asian participants, whereas the previous one was more convenient for US and European participants. But I noticed we have people from many different places so welcome to everyone from all over the world and thank you for attending. The idea here really is that everyone gets a chance to hear the information live and to ask and have questions answered in pretty much in real time. So as John said, please to ask questions either during the webinar or at the end.

Let me take a moment to briefly introduce the presenters and the people who are going to answer the questions. So all the people that you'll hear speak today. They're all involved in different ways in SEAD and in the Motors Competition. Dr. Chad Gallinat and Debbie Karpay Weyl are court members of the SEAD team. They drive both the competition and the program, forwards and the competition spans across a number of products.

Chad is currently a scientist and technology fellow at the U.S. Department of Energy. He has a really solid foundation in Science at the highest level and has worked both the private sector and at the US national laboratory. Chad's going to talk to you about SEAD and the Clean Energy Ministerial. So he's going to really be giving you the big picture.

Debbie is an associate at CLASP, the operating agent for SEAD. One of her key roles there is to provide programmatic support for SEAD's Global Medal Awards across all of the products. Beforehand, Debbie consulted for the U.S. Department of Energy in energy efficiency programs and she also has a Master's degree in Environmental Policy and International Development. Debbie's really familiar with the rules of the competition and how it's worked across a number of different products. So she's going to be a really great asset in answering questions about how this works in real life. Both Dr. Hugh Falkner and I are part of the Atkins, the Policy Partner team providing outreach and support on the competition. Huge is a recognized world-leading expert on energy efficiency and rotating machinery. He has over 20 years of experience in this sector and has worked both in industry and then as an expert consultant. He recently returned from Brussels where he was negotiating final stakeholder meeting for the EUP proprietary study on pumps; and he's going to be involved in the next one on motors on February 10. Hugh was involved in the development of the SEAD Global Efficiency Medal Competition for electric motors, which I understand was an intense and complex process.

So he's best placed to answer any detailed questions about why things were decided the way that they were, and also to provide details about how the competition is structured.

I'm a mediator and a facilitator, as well as consultant on energy policy and strategy with the policy partners. I've had the privilege of working on both sides of the ocean on the U.K. market transformation program, and as a Program Manager at Lawrence Berkeley National Laboratory on the U.S. Department of Energy rule making. Today, I'm chairing the call and may also chip in on answering questions on the competition with my outreach hat on.

So Chad's now going to give you an overview of SEAD and the competition and he will delve a little bit deeper into the rules of how this exciting competition works. Please ask plenty of questions. Over to you, Chad.

Chad Gallinat

Hello. Thanks. Thanks so much, Mia. Yes, so we're here to talk about our Global Efficiency Medal Competition for Electric Motors put on by SEAD and really sort of the focus of today's webinar is to talk about that the motor competition, sort in the perspective of the Clean Energy Ministerial and the SEAD initiative. So I hope to introduce the SAM [ph] and the SEAD initiative; and then show you how the awards activity works within SEAD; and then Huge will talk a little more specifically about the competition itself.

So first of all, yes, let's start out. What is the Clean Energy Ministerial? Well, it's a high-level global forum, sharing best practices to promote policies and programs to help the globe transition to a clean energy of comping. There's 23 member governments representing 90% of the global clean energy investment, 80% of global greenhouse gas emissions. And these 23 governments come together every year to really push these clean energy problems. So what the ministerial sort of focuses on is a yearly meeting. In this yearly meeting, the SAM, as I'll call it, really pushes all of the work being done here. So it's an annual ministerial meeting. So energy secretaries, energy ministers get together with industrial representatives and talk about energy efficiency and clean energy problems. It really looked to push these public private engagements to build industrial and government cooperation to push, to scale up clean energies around the globe. And how that's done is through these 13 initiatives. They're all listed here within four different blocks energy efficiency, clean energy, integration and human capacity. And what we really focused on is energy efficient appliances. And so our initiative is the SEAD initiative and SEAD stands for the Super-Efficient Equipment and Appliance Deployment initiative; 16 member countries including China as an observer; and there are seven countries that participate in the SEAD Awards working groups. So that's the U.S., U.K., Sweden, Japan, India, Canada, and Australia. And these are the countries

who have representatives that really put together the rules for the competitions and come up with the scope to the competitions.

So that's the membership of the SEAD. A little bit more about SEAD, as I said, it's an initiative under the Clean Energy Ministerial and also under the International Partnership for Energy Efficiency, Cooperation IP. We have a strong collaborator in 4E, so the International Energy Agency Efficient Electrical and Used Equipment implementing agreement. And specifically, with this motors competition, we work very closely with the electric motor system annex 4E EMSA. CLAPS serves as the SEAD operating agent and administrator for the Global Efficiency Medal Competition. So that sort of gives you an idea what the SEAD is.

So SEAD really looks to accelerate the pace of market transformation for this energy-efficient products. It engages governments and the private sector to transform global markets for appliances and equipment. And there's three objectives really. To drive demand for super-efficient products, to facilitate information exchange through product-specific collaborations and to establish common foundations for technical dialogue. So it does that through this list of activities here, awards, incentives, activities, procurements, standards and labeling and finally, a crosscut in technical analysis. Now the SEAD Global Efficiency Medal Competition encourages the production and sales of super-efficient equipment, appliances and electronics by identifying the most efficient products in each category within four regions as well as overall global winner, really to showcase leadership and energy efficiency and to talk about energy efficiency in the appliance space. It seeks to advance efficiency improvements by recognizing products amongst best energy efficiency to help guide early adopter consumers want to purchase the most energy-efficient models by demonstrating the levels of efficiencies that are achievable with both commercially available and emerging technologies. The competition goals are listed here. We want to realize that greatest energy savings potential and that's ultimately the goal of SEAD. By increasing the market share of highly efficient products, we want to spur innovation among manufacturers. We want to support test "harmonization" activities by providing and matching a comparable and transparent test results. We want to help build test lab capacity for countries that don't have it. And we hope to also compliment standards and labeling policies around the globe.

We've done these competitions in the past. We've run two competitions so far, TVs and computer monitors. The TVs was the first of its kind global competition launched in 2012. It's now complete. We're sort of analyzing the effects of the competition and looking to can see how the winners are doing in the market. Computer monitor competition recently wrapped up, so we're currently working with the winners on the marketing strategies and also starting the analysis of what the winners are up to. The electric motors competition is ongoing and we're still working on some future competitions. But I want to point out a few things here and just say that

the competitions and the winners received pretty significant media coverage. You can see the Times Square billboard on the left talking about the winning televisions. And in SEAD really, we work with the marketing team to optimize this media coverage whether it's a your trade journals, press releases, advocacy groups for energy efficiency. We also have a big awards ceremony at the Clean Energy Ministerial meeting. So again, these are the meetings with energy secretaries, energy ministers leading to pretty high visibility within—yes, amongst all the participating governments and I want to point out that during the last ministerial meeting, the award ceremony is held on the first day and it really generated a lot of buzz. So we actually had the U.S. DOE Secretary chew—among—along with some of the Indian sec ministers, energy efficiency minister talk about the winners, present awards to the winners. And this generated a lot of hype around the winners and a lot of talk around energy efficiency throughout the rest of the meeting. So that was one thing that the awards activity was really happy about. And one of the benefits of participating within the competition. SEAD electric motors competition looks to identify the most efficient products within the subcategory and region. We look to—we hope to recognize both established and emerging technology products. Once we establish the regional winners, we will identify a global winner by comparing all the regional winners. And I want to point out, the winners are selected from self-manufacturing nominations, which are then subject to verification testing. So it's a completely voluntary nomination process. It's completely up to the manufacturer to nominate their awards or to nominate their motors. To all motor manufacturers, the nomination period ends in nine days, on January 31. There's 18 available awards and the winners will be announced in September of this year, 2014. So why should you participate? Well, entries are confidential so only the award organizers will know who has entered. The entry form is simple; it should only take you a few minutes to complete. There's no need to submit your products now. So only, the presumed winners are asked to provide samples for testing. So if we get 10 nominations for a specific product in a category, we only—we identify the most efficient claim and only ask for those motors. We don't ask for all 10 nominated motors. It's—bragging rights is always a thing, so the winners can claim to have the most efficient products or among the most efficient products in the world. And finally, we feel that this is an opportunity for companies to get some free marketing. So SEAD, we really want to promote the competition and the winners and we work with the winners to try to adopt the optimum marketing strategies. And finally, I just want to point out that we recently invited to the Motor Summit 2014 in Zurich, to have an award ceremony and present these awards to the winners. And we will work with the conference organizers and the winners to determine the best way to do this award ceremony. And with that, I'm going to hand it over to Huge and who's going to talk more specifically about the competition rules.

Hugh Falkner

Hi. I'm Huge Falkner and thanks, Chad. I'm going to be talking through to two areas, really. Firstly, looking at the different motor award categories,

what sort of motors are eligible to enter. And secondly, just taking you through very quickly that entry process and what happens if your motor is nominated as being the winner.

So we have two competition categories. The first is for the induction motor. Now, induction motor is the motor you find everywhere. It accounts for 95% or so of all motor energy use. So it was a particular product of interest. Now, what I'm going to do is just look at the matrix and it just explain why we're then, that with so many different categories and just why a particular category. Firstly, question of region. There are four regions: Australia, Europe, India and North America. And these reflects the membership of SEAD. These SEAD regions are particularly keen to have a motor competition in the area. I should emphasize that this relates to where the motor is sold, not where it's made. So if you make a motor in, say, Mexico, you can enter in any of all of these regions where you sell it. And then, the fifth category international, that is one that will be awarded to the most efficient motor found in all the different regions. Now, looking on the left of the slide, you'll see, there's a first category of three IEC induction motors. IEC induction motors are standard in much of the world as you can see from the matrix. Now, we've got three sizes down there. The first two sizes are 3.7 kW and 4 kW. And these sizes are picked on because in India and North America, 3.7 kW is a common size, whereas in Australia and Europe, it tends to be 4 kW in that particular kind of side. So that's why there are different power ranges from the different markets. And I mean it's also class for 11 kW. Now, the reason we've gone for this 3.7 kW and 11 kW size is firstly, these types are commonly found so they're the sort that you're most likely to buy. Also, a very important practical consideration is that motors are heavy and if we'd have asked for 50 kW or 110 kW motors, they would have been big and expensive and difficult to ship around. So that's why we've gone for these relatively small sizes. And then underneath, you'll see the NEMA induction motor, and this is a style that's really sort of used just in North America. And here, we've asked the 5 HP and 50 HP, and just about 15 HP is equivalent to 11 kW; and seemingly, 5 HP is about equivalent to the 3.7 kW size. So that's how we've arrived to all these different competition categories. And just to reemphasize, it's all about where motors are sold, not where they're made.

So we'll now move to the next slide where we can look at the new technology motor categories. Now, to the new technology motor category, what we're asking for is those motors that are line, start and run and what that critically means is they can be—nearness drop-in replacement for an induction motor. So for many people, they may be thinking, "Well, I've got an induction motor but I'd like to do even better." And so the new technology motor is likely to be the answer. Now, there are, again, the four regions and they're, again, split into two, 1 kW from 1 HP. What this actually means is that what is the kW, so like it's 50 Hz and the horsepower is as 60 Hz version. Now, you may wonder well, why we're

asking for something up to 75 kW, and the reason for this is that we know that in terms of the current IE levels, these are the efficiently standard. It's technically harder to make a small motor very efficient. So what we've said is, look, we are looking for the most motor that just exceeds the IE for efficiency level which is the internationally agreed and understood efficiency classification, whereas the motor that just meets that in a smaller size, if possible, we know that, that's, if you like, the most advanced new technology motor. So we are surely not expecting to have a motor of 75 kW or 100 HP, that's going to be a very, very big motor. We're expecting something much smaller, but we want to put in a backstop. A couple people have asked, you know, we've got a motor that's really efficient but need to control as we run it can reenter and we did originally once have a category to capture this but unfortunately, there's not yet a single recognized test standard in place for this motor and controller combination. And particularly for quite an international competition like this, it was felt that without a robust test standard, it could lead to all sorts of problems later on. So there's not a category for those motors. The new technology motor category is just for line start motors.

Okay, we'll now go on to the next slide. The next two slides, just look at—in more detail, the eligibility for the motors that can enter. For the NEMA induction motors manufactured and people with a real interest in motors will notice that actually, were not asking for anything special and that's very deliberate. We're after a common motor, so it's a thing called 4-pole motor continuously rated. So it's a standard motor we're after for induction motors. And if we at now go into eligibility two, for the IEC induction motors, this is again—we see exactly the same thing. And so we're after standard induction motors. The new technology motor is slight hair ahead. It shouldn't be synchronous motors, commutated motors; it is only motors that are capable of line starts and then operation. And again, they have to be continuous duty. So the test methods, and we spent a long time just sorting these out. Obviously, being an international competition, we wanted to make sure that some of the, say, the motors in, say, India competition. They test the motor. When it's shipped to an independent test lab, the results should be the same. So getting the test methods right were absolutely critical. And we've nearly done that. You see, for IEC, we've got fairly new test standard. The U.S. is using, actually, a NEMA standard but it's practically identical. And then, just moving on. Okay. What we were keen to do is to ensure that the motors entering the competition were those that are really going to hit the market and make a difference. What we didn't want to happen is manufacturers putting as one off they've locked up in the development lab that there wasn't any real intention of marketing in the near future. And so to you give some sort of assurance of that, some minimum sales thresholds have been stated in this table. Obviously, nobody can predict the future so it's very much the manufacturer's best. We need somewhat of an estimate as to what they can do in terms of sales. So that's why we've got these shipment thresholds. So if it's not the nomination process. Firstly, all the manufacturers are

encouraged to nominate their products. It has been made actually quite simple to enter. The former is about one size and that's about it. So it's really isn't hard to enter.

What you have to do is submit a declaration of performance form, which you can find on the website, and there's also more supporting information as well but the actual entry process is very simple. Okay? So the selection of the winners, this will be based on nominations form received by January 31. Okay? So you do need to check your entries in before then, otherwise, it can't be considered. And CLASP will be reviewing all the performance, and for each of the categories and regions, it will identify which motor is claimed to be the most efficient. And if you're that lucky manufacturer, you will receive a notice from CLASP and you'll be asking—you'll be then asked to select sample product within two days—I'm sorry, within 30 days. Now as we get going to the final slide about this and that will take us through in a bit more detail how it's all going to work your. So if you do receive a note from CLASP saying that they believe your motor is the winner, you'll be asked to supply a list of at least 10 products of which CLASP will select two of those units. The reason we're asking for two is avoid delays that could happen if one motor gets damaged in transit or lost in transit. Those occasionally happen. So what will happen is that the independent test lab will take one sample at random and it will test it. And then the second motor is available, it's if, if that motor is damaged or if the first sample fails to verify the claim. So hopefully, all is well. The actual test that is done confirms the efficiency claim of the manufacturer and in which case, that manufacturer is then deemed to be the winner. If the motor does not—should be—be showing to have efficiency that the manufacturer has claimed, then the next best entry will be asked to submit a motor or two motors, and a verification process will begin again. So just to sort of emphasize again, the entry process is deliberately made very, very simple and you don't have to submit a product unless you are deemed to be the winner. In terms of announcement of the winners, only winning products will be announced in September 2014. And there's a presentation ceremony being arranged for this Swiss Motor Summit this autumn. There will also be a whole range of communication options and marketing options available to the manufacturer of the winning motors. And then going in to 2015, there's a global award ceremony being planned April which will be a much bigger ministerial level event. So the actual prize for winning is quite considerable. Okay? So that's it. So Chad, can I just hand it back to you now.

Chad Gallinat

Yes, great. Thanks—thanks so much. So I guess we're going to open it up to questions and I will throw wait back to Mia and Sean who will moderate the question period. Thanks.

Sean Esterly

Again, thank you to everyone for the presentations. We do have a few questions that I'll ask, so panelists, if you want to answer the questions, just go ahead and speak up. The first question that we have is, "Why don't

you have a category for really high-efficiency motors such as permanent magnet or synchronous reluctance that need a controller?"

Mia Forbes Pirie Hugh, do you want to answer that? Hello?

Hugh Falkner Yes, originally, there was quite a lot of keenness to include this category, not only this motor in combination is particularly efficient, but also you get the big energy savings from speed reduction of the fan or the pump and so on. There was hope that IEC would have good test standard in place for the product but that just—it was clear it wasn't going to be ready in time, and without test standard, we really couldn't have a competition. So that's sadly, why there isn't a category for those for those products in the competition. But note there is still the new technology category for a need of line start high-technology product such as line start permanent magnet motors. Okay?

Sean Esterly All right, thank you, Hugu. And the next question, and just to remind everyone before I do say the next question, if you have any questions, if anyone in audience have any questions, you may submit that through the question pane which is in the GoToWebinar window. So the next question is could you please explain the purpose of 75 kW limit for new technology motors?

Hugh Falkner Yes. For the new technology motors, it's been known that it's much harder to make a small motor to be really efficient. And so the rules are set up to say, "Well, we're after the smallest motor that meets the IE4 efficiency level. The 75 kW, 100 HP limit, they're just there as an absolute backstop but, you know, if get a 75 kW motor to test, that is a big motor. It's a heavy motor. The expensive motor and shipping it around is going to be difficult. So we're really hoping not getting anything that big.

Mia Forbes Pirie Great, thank you, Hugh.

Sean Esterly Great. And the next question that we have is, "How are the regional category supposed to be used given that many motors are marketed and sold globally?" So in other words, what region should or can an entry be made?

Hugh Falkner Yes. It's Hugu here again. Yes. The competition is very much about where products are sold. So we really don't mind at all where the motor is manufactured. It's all a question of where it's sold. You need to make sure that you enter your motor in every region where you are selling it, okay?

Sean Esterly Great. Thanks again, Hugh. And the last question that I have at this point, unless we receive another, is "How do you prevent manufacturers from supplying motors that have maybe been altered from the originals to be more efficient and the competition?"

Hugh Falkner Yes, I mean, we sort of trust the owner or motor manufacturers but in line with existing verification testing procedure do you find government. We've asked for serial number of at least 10 products, okay? And these serial numbers are on the nameplates that are bolted on to the motor of the manufacturer. So these serial numbers will be supplied to SEAD, and then it will up to SEAD to identify at random two of those serial numbers to be produced. So, you know, it's quite—I think it's quite a good way of checking there isn't any sort of fine-tuning of products.

Sean Esterly Great. And we did receive another question from the audience and that question is, "Other than line start PM motors of which there are only a couple of manufacturers, what other technologies would qualify for the new category?" And also, what happens if the line start PM motor suppliers don't enter?

Mia Forbes Pirie I think that's probably one for Hugh and Debbie.

Hugh Falkner Okay, so Debbie, if I take the technical one, okay?

Debbie Karpay Weyl Sounds good.

Hugh Falkner Yes, so the competition is deliberately sort of technology-neutral in the new technology category, and that's sort of followed on from the way the market's moving, you know. Motor buyers kind of, they care too much what's inside the motor as long as it does the job. So we're saying new technology is, if you like, not an induction motor. And that's very much going to be a permanent magnet motor, a line start permanent magnet motor. We're not closing the door to any other types but as the question has sort of inferred, we're not aware of any other types of that, you know, could enter because the types of new technology motor require some sort of controller.

So Debbie, over to you for the second part of the question about what happens if the permanent magnet manufacturers don't enter?

Debbie Karpay Weyl Sure, thank you, Huge. If there are no entries in the category such as the new technology category, I suppose that is essentially something that we will decide exactly how to proceed if it happens. We have, however, actually received quite a bit of interest from a variety of manufacturers around the world about the new technology category in particular. So I don't anticipate that, that will happen. And if it does happen, then we will decide from there. I mean, if there are no motors nominated, then we won't give an award, but again like I said, there has been quite a bit of interest so our expectation is that, that won't be a problem. Thank you.

Mia Forbes Pirie Thank you. Chad, is there anything you wanted to add?

Mia Forbes Pirie No, I just wanted to thank all the panelists and thank Sean and Heather for organizing this webinar and thank the audience for attending and get your nomination forms in. You've got about a week left.

Mia Forbes Pirie Yes, thank you everyone.

Sean Esterly Great. Yes, I just want to echo the thank you's and unless anyone else has any closing remarks that they want to make?

Debbie Karpay Weyl Sean, this is Debbie. I just wanted to thank everyone for coming and I also wanted to add that if there are any additional questions that come up, you can please email them to SEAD. There is an email address, it's awards@superefficient.org. We'll make sure that's up on the webinar page. And if you decided you have additional questions with the nomination forms and about the competition in the next 10 days as we collect nominations, we encourage you to send emails to that address.

Mia Forbes Pirie I think we have actually one question, one additional question that's come in just now so maybe we can take that before we close finally. Do you want to read that out, Sean?

Sean Esterly Sure, yes definitely. So the question is, "You have said that motors manufactured outside the region also can persist if they're in other regions. So that manufacturer receives an award but he does not meet criteria of the 1400 Nos for 3.7 kW, will you take back the award?"

Mia Forbes Pirie Hugh, I think that's maybe one for you.

Hugh Falkner Yes, I'm just trying to make sure I understand that. So it's saying that if—say, can you read out the last part of that question again? It's...

Sean Esterly Yes, definitely. So if the manufacturer receives an award but he does not meet criteria of the—it says 1400 Nos for 3.7 kW, would you take back the award?

Debbie Karpay Weyl Hugh, this is Debbie.

Mia Forbes Pirie Go ahead Debbie.

Debbie Karpay Weyl I think the question is whether the awards will be taken back if manufacturers do not meet the shipment thresholds.

Hugh Falkner Okay, Debbie, do you want to answer that question from your wider SEAD experience?

Debbie Karpay Weyl Sure. So SEAD is not set up to have detailed market monitoring mechanism and so if we know that an award—if we know that a manufacturer is not offering a product in the market in which they have received the award, then we'll take steps to work with that manufacturer to figure out what the barriers are first and whether we can help in any way

to relieve those to help them meet the shipment threshold. However, there's only so much that you can do. Again, our experience has been that manufacturers in the first two competitions for televisions and displays has really submitted products that are being shipped and fold in the competition region and if something comes up that enables us to make that now possible, then we'll work with the manufacturers to deal with that on a case-by-case basis, but I think the intent, as you said earlier is really for these three products that are sold in the market are read, and our plan to be pulled in the market in the future. And so we asked the manufacturers to submit a shipments plan that shows when they're planning to ship these within a 12-month time frame and we do check of it to make sure that products are being offered in those market.

Mia Forbes Pirie Thank you, Debbie. So it sounds like we're looking for as shipment plan and the products are definitely being offered in the market. Those seem to be the important criteria. Yes. Thank you very much for your questions. I don't think we have any other questions but as Debbie mentioned before, if we do, please submit them by email and thank you all for attending and asking so many great questions. And Chad said, we look forward to receiving your entries.

Sean Esterly Yes, thank you. And at this point, I'd just like to ask the audience to complete a very brief survey, just three questions that we have. And you can answer those questions through the GoToWebinar. So Heather, if you want to go ahead and display that first question. And that is the webinar content provided me with useful information and insight?

Sean Esterly Great, and then, next question, Heather? The webinar's presenters were effective?

Sean Esterly And, the last question, Heather? Overall, the webinar met my expectations.

Sean Esterly Great. Thank you very much for completing that survey and thank you again to the panelists. We really appreciate you coming out for the webinar. And on behalf of the Clean Energy Solutions Center, just like to thank the audience. We've had some great questions out of those mentioned, and we very much appreciated your time. I do invite our attendees to check Solution Center website over the next day or two if you'd like to view the slides and listen to a recording of today's presentation, as well as any previously held webinars that the Solution Center has hosted. Additionally, you'll find information on the upcoming webinars and other training events. And we also invite you to share, inform your colleagues and those in your networks about Solution Center resources and services including the no-cost policies report. We hope that everyone has a great rest of your day and we hope to see you again at a future Clean Energy Solutions Center events and this concludes our webinar.