

Bill Ferris, TechWerx: Hey, good afternoon, or good morning, everyone, depending on where you're joining from today. Thanks so much for being here, for this Office Hours session. I just have a few quick announcements before we begin. If you need any assistance today throughout today's event, please use the Q&A function, and I'll be happy to address any technical needs you might have or need in there.

Bill Ferris, TechWerx: The Q&A is the best place to place questions that you have for our presenters today and our panelists, and we'll try to get as many, get to as many questions as possible. And as you see questions submitted, you're able to upvote those questions, and that'll help us understand which of those questions are most interesting to all of you.

Bill Ferris, TechWerx: Today's Office Hours is being recorded and will be posted for archival viewing, and you'll get an email about that when it's ready.

Bill Ferris, TechWerx: So, lastly, if you would like to use the caption function on your screen for today's webinar, click on the CC button on the toolbar, and click on Show Subtitles. And each of you can individually manage that for your own screen.

Bill Ferris, TechWerx: So, without further ado, I'd love to hand things over to our panelists and presenters to get us going.

Garrett McKeown Wessler, TechWerx: Great. Thanks, Bill. Hello, everyone. We're excited to host this Office Hours session for the FY26 Space PV R&D program. This opportunity is being funded by the U.S. Department of Energy's Critical Minerals and Energy Innovation Office. As a very brief intro, my name is Gary McKeown Wessler, and I'm a part of the TechWerx Hub.

Garrett McKeown Wessler, TechWerx: And so a couple of housekeeping items. The majority of this session will be dedicated to a Q&A that is using that function, as Bill just

mentioned. Please, upvote questions that you, would like to have answered, and we will get to the ones, as many as we can during the call today. And if you...

Garrett McKeown Wessler, TechWerx: don't have a question you'd prefer to ask offline, you can send it to info at TechWerx.org, which is on the slide that you see there.

Garrett McKeown Wessler, TechWerx: And we will get to as many questions as we can today, but if we do not get to them, we will make sure that they are answered and posted to the FAQ section of the Opportunity page, which you can get to on the QR code on the screen currently.

Garrett McKeown Wessler, TechWerx: With that, I'll add a couple more housekeeping items. We can go to the next slide.

Garrett McKeown Wessler, TechWerx: Just a brief note that we, like, per DOE guidance, no artificial intelligence bots, agents, note takers, or other tools are allowed in this meeting, and they will be removed if, they are seen... they enter, and you should not need them. We will post a transcript and recording of these calls and the slides to the Opportunity page a few business days after today.

Garrett McKeown Wessler, TechWerx: And then lastly, just a disclaimer that all content in this presentation, is for informational purposes only, and is always superseded by the opportunity page.

Garrett McKeown Wessler, TechWerx: Wonderful. With that, I believe we're jumping into the background, which, DOE Tim Siegler will share.

Timothy Siegler, DOE IESO: Yeah, thanks, Garrett. So, as, you may already know, two weeks ago, we did a webinar series that... or a webinar that gave the full suite of detailed

information that any applicant may need to be able to submit a PIA opportunity application, so we won't go into that, repeat that there, but just very briefly, IESO is pursuing this opportunity to respond to the rapidly growing space economy, which, as it grows and increases both the number and size of rockets launched, will... has increasing demands for space-based power delivery, where photovoltaic panels have a unique opportunity to contribute.

Timothy Siegler, DOE IESO: However, as the economy grows and demand for space-based, space-qualified PV panels increases, there are supply chain constraints and cost and durability challenges, as the requirements also grow for these technologies that are, that need to be addressed on the R&D scale, and that's what this opportunity is targeting. Next slide.

Timothy Siegler, DOE IESO: So at the webinar, which is recorded in its entirety and posted onto the Opportunity Page website, you can see it as an embedded link and view on demand there. The... It was mentioned that the Space PV workshop that we hosted in June detailed a lot of these challenges and, provided recommendations from the community to DOE. And I'd like to I'm pleased to announce that as of this morning, we did publish summary reports and full reports based on the recommendations that were given to DOE. As you read those, please keep in mind and be very well aware that these are simply fact factual reporting documents for the general community that you know was maybe not able to attend due to the limited number of seats that were available for the Space PV workshop.

Timothy Siegler, DOE IESO: This, there are recommendations in that report and technical targets. These are not targets that are necessarily adopted by DOE. This is not communicating DOE policy or strategy necessarily, but again, it's just a service to show what the, actual recommendations and, issues identified by the community were as part of the Space PV workshop.

Timothy Siegler, DOE IESO: But since we posted that this morning, I wanted to give you both, give you all links to that to use as references if you so chose.

Timothy Siegler, DOE IESO: I'll then pass it back off to Garrett to get us kicked off on the Q&A.

Garrett McKeown Wessler, TechWerx: Great. Thanks, Tim.

Garrett McKeown Wessler, TechWerx: Bill, we can go to the next slide.

Garrett McKeown Wessler, TechWerx: Wonderful. Just to briefly recap, the opportunity, as Tim mentioned, this is.

Garrett McKeown Wessler, TechWerx: through the DOE IOSO office. And this is an opportunity to accelerate U.S. leadership in next-generation space PV. And this PIA, you know, aims to support R&D innovations that advance the state of the art in, you know, all the aspects that Tim mentioned, but durable, high-power space PV technologies. And just a high level of the funding opportunity, the goal is... there will be approximately 9 awards of up to \$1.5 million each.

Garrett McKeown Wessler, TechWerx: under topic area one, and then up to three awards of up to \$2 million each in topic area two, with a total of \$12 million of funding available. Those awards will begin for projects up to three years in length.

Garrett McKeown Wessler, TechWerx: Yes, a brief, hit on the timeline. You know, we are currently at Office Hours session number 1 on September 29th. We'll have another Office Hours session a week from today at the same time, and then the application deadline is October 8th at midnight, or 11:59 p.m. Eastern.

Garrett McKeown Wessler, TechWerx: Then after the applications are received, there will be a review and selection period in October, November, an optional replied reviewer comment sec period in early November or mid-November.

Garrett McKeown Wessler, TechWerx: And then selectees are anticipated to be announced in mid-December, with negotiations happening after that time, and activities estimated to... or program... project activities estimated to begin in March of 2027.

Garrett McKeown Wessler, TechWerx: Just, we're going to highlight this briefly, that, if you decide not to apply, we are, recruiting technical reviewers here, for this program, and you have an opportunity to be compensated for that part.

Garrett McKeown Wessler, TechWerx: You know, you can send either an email to reviewers at TechWerx.org, or you can scan the QR code on the screen to submit your interest there.

Garrett McKeown Wessler, TechWerx: And then we will turn it over into Q&A, and...

Garrett McKeown Wessler, TechWerx: Bill, we can go to the next slide.

Garrett McKeown Wessler, TechWerx: Yep. So yeah, like we said, please post your section your questions in the QA function in Zoom, and we will get to them as we as we can through the rest of the session today.

Garrett McKeown Wessler, TechWerx: Wonderful. We...

Garrett McKeown Wessler, TechWerx: Tim, we have a few questions on support letters. One, whether they are required or if they're optional, and, you know, based... and a

question to sort of provide some nuance to the statement of You know, that support letters cannot, you know, provide, or basically be extensions of the project narrative. And so, you know, how can those support letters be contributing to the success of the application while being seen as extending the, project narrative, page count.

Timothy Siegler, DOE IESO: Yeah, thanks for that question. So, as detailed in the application, if you click through it, you can, will see that letters of support are very much optional and not required at all.

Timothy Siegler, DOE IESO: This is at your discretion to identify if you think it would be useful to show subrecipient cost share commitments, letters, support for certain activities or resources. If you think reviewers may find this useful, you may optionally elect to add the letter of support.

Timothy Siegler, DOE IESO: Regarding how it doesn't support the main narrative, we just, you know, this will be something that will be at our discretion to decide if.

Timothy Siegler, DOE IESO: The, the supplemental material is, meant to just have a new thing, like an actual letter of support for something specific, or if it is

Timothy Siegler, DOE IESO: directly tailored and targeted to overcome a word count limit that has been set elsewhere in the document. So let's take a kind of absurd example. Let's say that, you know, in the project narrative, there is a narrative section, that is 10 pages, and then there's a, budget or milestone table that's recommended to be about 3 pages in length.

Timothy Siegler, DOE IESO: Let's say that your project narrative runs long, and it's, let's say, 14 out of the 15 pages, and you, decide that you want a letter of support. When the letter of support, you get your cost share provider to put the milestone table, budget

milestone table, in the letter of support, and send that out for review. That, we would not accept that, because that's circumventing, like, the word count requirements, right?

Timothy Siegler, DOE IESO: This... when I say that you shouldn't be supplementing the application with those, I'm not saying it's not going to augment and provide a new piece of information that will be helpful. What we are saying is that it shouldn't be used to directly circumvent, like, you know.

Timothy Siegler, DOE IESO: material that's addressed elsewhere that's subject to a strict page limit requirement. Yeah.

Timothy Siegler, DOE IESO: Hope that's helpful.

Garrett McKeown Wessler, TechWerx: Thanks, Tim. Wonderful. And then to bundle a couple together. This is on

Garrett McKeown Wessler, TechWerx: And for an involvement, under this program, we can say strictly that the prime awardee, or... the question is, you know, there's several questions, but basically, universities in Canada or other, countries be, perform... performers on this work. And I'll start that by saying, the prime awardee must be a domestic entity, and the... any foreign involvement as a sub-awardee or subcontractor or, you know. collaborator on the work is up to, you know, a review by the DOE, and up to their discretion on selecting that project. Tim, would you like to add any context to that?

Timothy Siegler, DOE IESO: Yeah, I believe there is an FAQ on this topic. To reiterate it, all applicants and subrecipients will need to adhere to DOE internal review processes to be selected, ultimately. During the down selection process, applicants may be asked to provide additional documentation for the application, and any foreign involvement in the proposed project should be outlined specifically in the project narrative and budget.

Garrett McKeown Wessler, TechWerx: Yes, perfect.

Garrett McKeown Wessler, TechWerx: Wonderful. And, we've got a question, whether for, proposals in Topic Area 1, which is the earlier stage topic area. If proposals that span multiple identified technology focus areas will be at a disadvantage versus those that are targeting a single technology area only, or if there's a preference between those two approaches to the proposal.

Timothy Siegler, DOE IESO: Yeah, so, please, you know, in the general case, there are no secret hidden preferences or dis-preferences for or against any specific technology. What's listed on the opportunity page is supposed to be comprehensive and cover all of the particular areas of interest, and if you're outside of that, still the general, areas of which we are exploring applications in. I do not believe that we have said that, and so I... this is... that is not, you know.

Timothy Siegler, DOE IESO: Because it is not on that page, if it is not on that page, then that is not going to be advantage or disadvantage unless it says so in the opportunity page itself.

Garrett McKeown Wessler, TechWerx: Question on budget justifications. If there's any additional budget justification that is required, beyond the project... the milestone and budget table, that is included in the project narrative template.

Timothy Siegler, DOE IESO: Yeah, no, there... that's a good question, thank you for that. No, there is not. PIAs, are unlike, you know, if you're familiar with our financial assistance agreements, those are, on a reimbursement basis. These are on a milestone-based payment basis. This means that, in order to hopefully save you some time, and because it's not part of the mechanism. We don't have specific budget tables, specific budget documents at the detail that we have.

Timothy Siegler, DOE IESO: Or, please just use the budget and milestone table that's part of the project narrative. And, remember, when you're filling that up, that is the only opportunity that you'll have to show, what your budget looks like across the different tasks to reviewers.

Timothy Siegler, DOE IESO: We may, request more information later, as with most of this stuff, but for now, it's just, yeah.

Garrett McKeown Wessler, TechWerx: Great, thanks, Tim.

Garrett McKeown Wessler, TechWerx: Oh, this is a question that I think actually, the nuance is key here. So the part of the application is you have to record most, most recent awards or, you know, awards, that have been received from the DOE recently. And the question is whether these are... if... this is only for awards that you were the prime recipient on, or if you could...you also need to list awards that you are the subrecipient on. And then also, when you record the office, do you record updated names, such as CMEI, or would you record CETO as it was during... when the award was, active?

Timothy Siegler, DOE IESO: So, please, I think for what the program office is, like, the, for DOE, like, all these project names have transferred, so please use IESO, the IE Integrated Energy Systems Office. Garrett, the most recent DOE project thing, I believe, is a requirement for TechWerx, so could you speak to that, about exactly what that means, or do we need to get back in the FAQ section?

Garrett McKeown Wessler, TechWerx: We might need to get back. In my head, it was, it was a requirement from you, Tim. So, I will, we, TechWerx will get back. I believe that's just, you know, if... if it's... it might just be a, like a posterity or tracking, piece of the application, but we'll get back to you on whether it is only prime awards or sub-awards, that need to be listed on that, on that section of the application.

Garrett McKeown Wessler, TechWerx: We have a quick question on resumes. No, there is not a specific format or page limit for resumes, but we do ask that all resumes that are list... or that are included for key personnel are, incorporated into a single PDF and uploaded as a single, supplemental document, instead of listing them as including them as separate PDFs themselves.

Garrett McKeown Wessler, TechWerx: There's a question on, given the budget format in the template, based on tasks, how do we include budget for if we would like to hire a postdoc for getting, or for performing tasks? How does that be formatted?

Garrett McKeown Wessler, TechWerx: I believe I can, say here that these are, business to... these, the format of these awards will be business-to-business agreements between TechWerx and the, selectees, and so we do not need... you all do not need to separate out cost categories, into... into this budget. These will be fixed price agreements and milestone driven, and so just those, any personnel just needs to be incorporated into those, payments, or those planned, milestones. It does not need to be separated into its own category. Hopefully that answers the question there.

Garrett McKeown Wessler, TechWerx: And then we have a question on whether the entire proposal is considered proprietary, or if specific pages are required to be marked as such?

Garrett McKeown Wessler, TechWerx: I believe we added an FAQ that you all are... applicants are... can label either specific pages or the entire proposal as confidential, and regardless, the plan is to... for all application materials, besides the public abstract that is requested, will be treated as confidential and only used for evaluation purposes.

Garrett McKeown Wessler, TechWerx: So, please feel free to mark anything confidential, but the plan is for them to be treated as confidential, even without marking.

Timothy Siegler, DOE IESO: Yeah, there's a place on the cover page of the project narrative to mark all your project narrative information confidential. I do recommend stating as much in writing.

Timothy Siegler, DOE IESO: So that, you know, it's perfectly clear, for anything that might come up. But as Garrett said, all things will be treated as such by default, but it's always good to have that written down. There... I think the one exception is we are requesting, a, like, a summary paragraph of the project that we may wish to use at announcements if you are awarded an award. And so, and even with that, we have an opportunity to, provide both, confidential and public-facing, publicly acceptable, project descriptions in the application itself.

Garrett McKeown Wessler, TechWerx: Great, thanks, Tim. So we have another question just to spilt, or provide some nuance to the question, or the fact that people are allowed to submit more than one application, or potentially receive more than one award. This says, we plan to submit one application to Topic Area 1 and one application to Topic 2, with distinct aims, activities, and tasks.

Garrett McKeown Wessler, TechWerx: And they're asking whether they are required to add explicit descriptions within the project narrative to distinguish the two applications, or if it's just... or going to be DOE's assessment based on the scope.

Garrett McKeown Wessler, TechWerx: And then the second part of the question is, whether they are okay to cite

Garrett McKeown Wessler, TechWerx: The same previously background data and information, or if that would automatically dis... or assume... make it assume that those are the same scope.

Timothy Siegler, DOE IESO: Yeah, so, For the narrative, I mean, I don't, because these applications will go to other reviewers, you know, it's a good question about whether or not you'd want to reference your other application in your first application. I will say for this that it should be pretty clear from the actual scopes of work themselves that the technical aims are different. We'll have milestone tables that have different, you know, milestones and different goals, and you know, obviously, please refer to like, the technical maturity in each topic area, if you're sort of doing this, and I would say, for... And so that, that will, I think, I mean, hopefully that's, that's, you know, going to allow us to be able to, clearly identify them as separate scopes.

Timothy Siegler, DOE IESO: And I think the, the same back... like, shared background data is not going to trigger this necessarily, especially if the actual scope and proposed project itself is quite distinct. And so, I would say that's not, please cite the relevant background data for your projects, regardless of whether or not it has been cited in a different application.

Garrett McKeown Wessler, TechWerx: Okay. There's a couple...technical, relate... technical-related questions I would like to get to. One is... it says, if end-of-project milestones are demonstrated at either 20 or 100 centimeters squared per the stated... or between 20 and 100 centimeters squared per the stated range, is the larger area scale viewed more favorably, or... or, like, is scale up beyond that 100 centimeters squared viewed favorably, or would that fall outside of the scope of, the award?

Timothy Siegler, DOE IESO: Yeah, so as always, please refer to the actual opportunity page for the specific language, but I believe, and again, if the op... this is the one where the disclaimer with the opportunity page, you know, contradicts, please go to the opportunity page, that's more authoritative than what I'm thinking now. But I... to my memory and recollection, that requirement is, not a strict requirement. It's a kind of table setting, if you'll say that.

Timothy Siegler, DOE IESO: Right now, it's a suggestion of rough size. It's impossible for me to determine competitiveness, and I won't make competitive determinations based on

incomplete information and also based on individual asks. I will say that it is not ineligible to go larger or smaller than that size range. That was a suggestion, and that's true of Topic 1 as well with the one-inch substrate suggestion.

Garrett McKeown Wessler, TechWerx: Thanks, Tim. I will mark the other one with the 1 inch requirement on.

Garrett McKeown Wessler, TechWerx: Okay, there was a couple questions related to, Ownership of... Equipment... after... The...Yeah, it says, who will own the test rig out for the project, especially if I have a, if we have a for-profit small business partner. I believe there was another one, but I can't seem... it might have been answered, by text. But we just added FAQ language to that effect.

Garrett McKeown Wessler, TechWerx: This morning, and I cannot find it, yes, I am... Rapidly scrolling to the FAQ.

Timothy Siegler, DOE IESO: Okay.

Garrett McKeown Wessler, TechWerx: No, you can go ahead and answer it, Tim, if you have the tech stuff.

Timothy Siegler, DOE IESO: Yeah, so we've just added an FAQ question if you go to our website on this today, so it's, you know, very, very recent. But in short, the non-federal entity must comply with the property use, maintenance, and insurance, and disposition requirements from the financial assistance controlling regulations to CFR 200, specifically sections 310 to 316, unless explicitly directed otherwise in writing by the intermediate per direction from the DOE Agreements Officer.

Timothy Siegler, DOE IESO: So, yeah.

Garrett McKeown Wessler, TechWerx: Good.

Garrett McKeown Wessler, TechWerx: There's a question here on, that I'll just state, about regarding what kind of information should be closed on pending funding or support from DOE. I believe we will get back to, we'll post the FAQ on this point on regarding both former and pending DOE support and what information is required. I believe that it's just in the application, there should just be forms, but.

Garrett McKeown Wessler, TechWerx: we will... I'll make sure that we have an FAQ to that effect, regarding what information is required, and if it's only primary or also sub... or secondary, or sub-awardees, sub-awards as well.

Garrett McKeown Wessler, TechWerx: There's a question on whether individuals are qualified or eligible to apply, and whether, if not, if it's okay to just register a new company at the time of the award. To meet the eligibility requirements.

Timothy Siegler, DOE IESO: Yes,

Timothy Siegler, DOE IESO: Yeah, I think, please review the eligibility criteria and the opportunity page.

Timothy Siegler, DOE IESO: this might, you know, this might be worth a bit of clarification, so maybe we can get back to you on this, unless, Rylie, do you have an answer right this second?

Rylie Yaeger, DOE OTC: We'll confirm internally, and we'll get back to you.

Timothy Siegler, DOE IESO: Yep.

Garrett McKeown Wessler, TechWerx: Wonderful. We have a question on... whether...cost-sharing commit... letters of commitment are required to be uploaded, or if it is, yeah, I think we'll just, to confirm the cost share commitments.

Timothy Siegler, DOE IESO: You, do not need specific cost share, letters of commitment. That's not a required part of the application.

Timothy Siegler, DOE IESO: However you are, in the project narrative, going to be asked about cost share, and as you submit, you'll have to attest that everything is accurate to the best of your knowledge, so through that process, that will be how

Timothy Siegler, DOE IESO: cost share it is. Yeah, so please check the project narrative page where you'll be reporting your cost share by task, and please, read carefully the attestation that will go along with your application when you submit it.

Garrett McKeown Wessler, TechWerx: Thanks, Tim.

Garrett McKeown Wessler, TechWerx: Okay, we have a technical question, that I think I can probably provide your answer to, but it's, is space-grade packaging and encapsulation eligible as a primary innovation topic area 2? The answer to all technical, technology focus area-related questions in their eligibility is that if the... we... this is open to all PV-relevant technologies, as long as they meet the objective of the program, and will not make eligibility determinations based on technical area or technology innovation type at this time.

Timothy Siegler, DOE IESO: Yep.

Garrett McKeown Wessler, TechWerx: Tim, is there anything to add to that?

Timothy Siegler, DOE IESO: Yeah, no, and yeah, just to be clear, we don't, you know, and we will not make specific determinations about eligibility at this time. We have written everything that is eligible and, you know, what is of specific interest within that larger subset of eligibility in the opportunity page, but without knowing the full context and having the full application in front of us is also impossible, as well as, like, kind of, you know, challenging in other ways, to do, case-by-case determination of eligibility on these office hours or otherwise, so...

Garrett McKeown Wessler, TechWerx: Wonderful. Thanks, Tim. Okay, and so we've got a question regarding the milestones, that there's a common milestone, Task 1, kickoff meeting between DOE and the performer, that... does this require a federal budget, and if there's a typical amount that should be requested for this milestone?

Garrett McKeown Wessler, TechWerx: Don't necessarily know if this is one we have an easy answer for.

Timothy Siegler, DOE IESO: So...I will, say that, you know, this is entirely your decision, but milestone-based payments means... and Rylie, please correct me if I say anything slightly incorrect.

Timothy Siegler, DOE IESO: Milestone-based payments is the mechanism that you will get reimbursed for this opportunity. And so if you have, at the beginning of award, you have completed no milestones, so that means that you will not have any payments due, necessarily, right? So I think this is something to keep in mind as, and yes.

Timothy Siegler, DOE IESO: The, whether it requires a federal budget or not, I'm not 100% sure, but, you know, as you're filling out the milestone table, remember that the... this is a

reimbursement basis, based on whether you meet the milestone as listed. And that's... and that's, like, the way that reimbursement happens, so...

Rylie Yaeger, DOE OTC: That is correct, Tim. These are firm fixed price payments. We pay for outcomes and deliverables, so in your plan, you should address how you're getting to those outcomes and deliverables. However, the payment will be attached to that deliverable, rather than that reimbursement potential, like, cost categories, which I think is what this question is also addressing. So you're correct, Tim.

Garrett McKeown Wessler, TechWerx: Wonderful. Thanks, Tim and Rylie.

Garrett McKeown Wessler, TechWerx: We have, three-part question on...supporting documents. Okay, so which supporting documents can be uploaded? Resumes, letters of support. So, regarding supporting documents, these can be any documentation that supports the project narrative and the summary slide, but does not extend

Garrett McKeown Wessler, TechWerx: Or does not act as if it's an extension of the project narrative. So yes, there is a requirement for resumes incorporated into a single PDF of key personnel. Letters of support or commitment are encouraged, but not required. And also, equipment quotes are also optional.

Garrett McKeown Wessler, TechWerx: And all of the other, listed, types of form or supplemental documents are optional as well, but if they support your application, they are... you can upload them.

Garrett McKeown Wessler, TechWerx: And there are... I think it's, like, a limit of, like, 8 supplemental documents by just, like, there's... that's the number, but if you wish to, you know, incorporate similar documents into single PDFs, you can may do that. You know, if you want to incorporate all of your support letters into a single PDF, that is, definitely doable.

Garrett McKeown Wessler, TechWerx: And then regarding the... there's a question... the second part of this question is the...page limit on the project narrative. So that includes all of the required information in the project narrative, should be within that 15-page document, excluding the cover page.

Garrett McKeown Wessler, TechWerx: So, the budget milestone table, the, project... the core... the text of the project narrative, all of that should be within that 15-page limit.

Garrett McKeown Wessler, TechWerx: And, references, I don't have it at the top of my head.

Timothy Siegler, DOE IESO: Very necessary. Yeah, references are not included in that 15-page limit, and the cover page is also excluded, but the cover page is limited to one page in length, so 16 pages is part of the required parts, and yeah, references are separate. And similar to the supporting documents, the references should be references, not really footnotes. Like, footnotes should be part of the 15 pages as well.

Garrett McKeown Wessler, TechWerx: And then the last part of this question is if a budget and milestone... whether the budget milestone table is sufficient, or if a detailed budget justification is required. We covered this a few minutes ago, but yes, or... but no, a detailed budget justification is not required.

Garrett McKeown Wessler, TechWerx: You should include all relevant information in the budget milestone table within the project narrative, but you may be asked for additional information after or during the review and selection process if requested by the DOE.

Garrett McKeown Wessler, TechWerx: Wonderful, okay, a few more questions have come in.

Garrett McKeown Wessler, TechWerx: I can quickly knock this out. Yes, the budget and milestone table can be 10-point font. I believe it says that in... that all tables can be down to 10-point font in the, project narrative.

Garrett McKeown Wessler, TechWerx: Can many... question I'll ask and read it live, because I haven't read it yet, but can manufacturing process data be designated not essential or protected for up to 5 years? Do you request them in the application or during negotiation?

Rylie Yaeger, DOE OTC: We can work with, our general counsel internally, to get you an answer. An easy answer would be, please detail that in the application, but we'll work to get you an FAQ, for the actual legal answer.

Garrett McKeown Wessler, TechWerx: Thanks, Rylie.

Garrett McKeown Wessler, TechWerx: And then, is the cost share requirement stated anywhere in the solicitation document, or only included in the FAQs?

Garrett McKeown Wessler, TechWerx: I believe that is solely in the FAQs at the moment. I don't believe we updated the opportunity page.

Rylie Yaeger, DOE OTC: But I would note that, you should show the pacing of your federal funding in that budget table, and along with that, it would be the pacing of, your plan to meet the cost share requirement, which, Tim, correct me, is a minimum of 20%.

Timothy Siegler, DOE IESO: Yes. Yes, that's right. So, yeah, we have also, in the webinar and elsewhere, stated the 20% cost share requirement.

Garrett McKeown Wessler, TechWerx: Wonderful. And then actually, oh, another question just came in.

Garrett McKeown Wessler, TechWerx: The first one regarding accelerated stress testing equipment, whether the rig would be shared or shipped back to DOE.

Timothy Siegler, DOE IESO: Yeah, so, for... regarding the... the ship back to DOE, right, the... you know, if you... if you look at, the questions about testing requirements, or sorry, equipment requirements and disposition, that's going to be controlling for all of that.

Timothy Siegler, DOE IESO: So, refer to 2 CFR 200, for disposition, but, I mean, that's never been, like, a requirement for anything that is controlled by the 2 CFR 200 regulations as listed. Oh, I was trying to get the... That was answered too quickly. What was the other half of that?

Garrett McKeown Wessler, TechWerx: Whether it would be, whether we would be expected to share the test rig with the PV community, or ship it back to DOE. What's the rest of the question?

Timothy Siegler, DOE IESO: Okay, and so the reg I talked about, for the actual, the sharing of here's, like, shipping back to you, I covered, but the sharing part, you know, there's no strict requirements on that, but please read the opportunity page for the goals for that section, the enabling goals for Section E as part of our particular areas of interest for identifying

Timothy Siegler, DOE IESO: How you want to, how you'd want to elect to do that.

Garrett McKeown Wessler, TechWerx: Okay, and then just quick question on whether the October 8th deadline, can be extended.

Timothy Siegler, DOE IESO: Yeah, we have, we are not planning on extending the deadline at this time.

Garrett McKeown Wessler, TechWerx: And then, actually, the last question that is currently submitted is, I think...throwing some nuance on, like, which, topic area would a technology fall under. So it says, is a proposal focused primarily on low-cost testing methods?

Garrett McKeown Wessler, TechWerx: Technical Focus Area E, using perovskite cells as the test article is fully in scope for Topic 1, and does combined thermal, vacuum, and illumination testing count as combined accelerated stress testing.

Timothy Siegler, DOE IESO: Yeah, so as I mentioned before, we don't want to make specific determinations about, applications, and, and, you know, eligibility and applicability requirements, but, so please, look at the objective part of the opportunity page to understand what the bounds on those are. One other, thing I will just say, though, is that there all, you know, all topic areas and, all specific areas of interest are, you know, combined. So, you know, in principle, one could be in Area E and apply in Topic 1.

Garrett McKeown Wessler, TechWerx: I... I don't know the answer. I don't know what online documents you're referring to.

Timothy Siegler, DOE IESO: So, yeah, to this question of, like, can I get the online documents, everything will be posted on the opportunity page. So we won't be sending it to anyone specifically by email, but if you go to the opportunity page, it will be uploaded shortly.

Garrett McKeown Wessler, TechWerx: Is the opportunity technology agnostic, and does it cover CIGS? There is a topic, or a technical focus area, I believe it's D, that is other, PV technologies, or other thin-film PV technologies that, incorporates any, other photovoltaic technology can fall into that category.

Timothy Siegler, DOE IESO: Yeah, like I said, please look at the opportunity page for the full scope and bounds on what is and is not eligible.

Garrett McKeown Wessler, TechWerx: Wonderful.

Garrett McKeown Wessler, TechWerx: Well, at this time, Tim, we don't have any open questions.

Timothy Siegler, DOE IESO: Alright, excellent. I will stick around until time, just in case there are, because in true Office Hours fashion, to try to make sure... see if there's any other last-minute questions, but yeah, absent that, thanks for attending today, appreciate all of your time.

Garrett McKeown Wessler, TechWerx: Alright, we got an answer, or a question come in. It says, to clarify, no money comes in if a milestone is not met. I am at a university, and I'm unsure if this is allowed.

Timothy Siegler, DOE IESO: Yeah, Riley, could you take this one?

Rylie Yaeger, DOE OTC: Jumping in, so yes, you would have to provide the outcome or deliverable, as outlined in your statement of effort, which is basically your scope of work that you agree upon, if you are selected. DOE will work with you on what you might need to do for your particular university or your particular situation. But it is set up in that way, where you'd have to provide that first milestone to get that first payment, that first invoice.

That is why in the, example structure, I believe it said kickoff call, or something to that effect, where it's, like, that easy first milestone, that could be something... that could be a way you set it up.

Timothy Siegler, DOE IESO: Yeah, and, you know, for those who might have been familiar with some of our negotiations during our financial assistance agreements that we set up, we like to say that we don't like effort-based milestones. That doesn't necessarily apply to a payment reimbursement system like this. There can be some effort-based milestones.

Timothy Siegler, DOE IESO: Can I repeat my answer regarding the October 8th deadline? Yes, we are not... we are not, considering extending the October 8th deadline at this time.

Garrett McKeown Wessler, TechWerx: Question on whether the... does the DOE expect particle radiation to be necessarily included? And a second part of that question, for the milestone requirement on statistical sample size in the minimum aperture area, are research cells on roughly 1 inch substrates acceptable for testing for a testing-focused proposal?

Timothy Siegler, DOE IESO: Yeah, so this goes back to my general point of not, trying not to make specific determinations on specific technology types. So, please go to the opportunity page to identify, what the answers to these questions. And as, I guess, the one point of clarification that I talked about in Topic 2, the one-inch, substrate was, like, a general kind of, right-sizing, like, in terms of just getting in the right headset was not a strict requirement or eligibility requirement of any kind.

Garrett McKeown Wessler, TechWerx: Wonderful. Thanks, Tony. I'll answer this one. Says, not sure if you found out if individuals are allowed to apply. We will take that offline and make sure to post an FAQ. And if you would like to separately reach out and submit that question offline, you could do email us at [info @ TechWerx.org](mailto:info@TechWerx.org). It's all... that email is also accessible on our... on the website, or the opportunity page, and you can submit your question there, and we'll make sure to get it, can respond directly to you, offline, if that's it.

Garrett McKeown Wessler, TechWerx: There's a question that says, the certification needing to attest to before submitting states certify that the information contained in the submission does not contain confidential proprietary or privileged information. What does... what if the application does contain that confidential proprietary or privileged information?

Garrett McKeown Wessler, TechWerx: If there's a conflict between what we've said here or in the application, we can clarify that.

Timothy Siegler, DOE IESO: Yeah, this is... this is a good flag. We will get back to you based on that. We certainly don't want to be limiting in this way, necessarily, so we will work on getting an answer to that question to you shortly.

Garrett McKeown Wessler, TechWerx: It's a, can the milestones be changed during the negotiation stage?

Garrett McKeown Wessler, TechWerx: I believe, yes. Like, the milestones and budget is, is not confirmed until a award is actually made, and an agreement is made between TechWerx and the awardee, or selectee.

Timothy Siegler, DOE IESO: Yeah. No, that is the primary point of the negotiation, and I will also note that, though, you know, selected to negotiate does not mean selected for award, necessarily, and so if there is, You know the

Timothy Siegler, DOE IESO: When in negotiation, both parties have the right to walk away from that negotiation.

Garrett McKeown Wessler, TechWerx: If multiple principal investigators request less money, let's say less than \$1 million, does this mean that the number of funded projects in Topic Area 1 could be greater than.

Timothy Siegler, DOE IESO: I believe the wording we said was anticipated. This is also why, if you multiply the number of awards by the award size, it's greater than the total number for this, you know, to try to anticipate some, awards that are less than the maximum total.

Timothy Siegler, DOE IESO: the, but, but, yeah, please, refer to the language and the, the, the PIA.

Garrett McKeown Wessler, TechWerx: A question, and I can answer this one, it says, who is expected to be listed as the alternate point of contact? Would the agreements officer or the contracting officer be the most useful point of contact? I don't think there is any requirement on who this alternative point of contact is. It's just a part of the application to have two points of contact for each.

Garrett McKeown Wessler, TechWerx: A primary and a secondary, or an alternate point of contact for each application.

Garrett McKeown Wessler, TechWerx: Is there any, additional clarification for that?

Timothy Siegler, DOE IESO: Yeah, I think the general idea is to mimic the technical and business POC. If they're the same person.

Timothy Siegler, DOE IESO: But yeah, anyway, I think that's generally how it is meant to be, but it's not limiting, necessarily. If the main person is both, then just having a backup in case someone's on vacation or something is what we're looking for there.

Garrett McKeown Wessler, TechWerx: So, the next question is, does a U.S. company have to have greater than 51% U.S. ownership and or control to be qualified to apply?

Garrett McKeown Wessler, TechWerx: I don't know if Tim or Rylie, you have...

Timothy Siegler, DOE IESO: So this is directly stated in the, opportunity page, and so in the interest of not accidentally contradicting the legal language that's in there, please refer to the third, footnote in the opportunity page.

Garrett McKeown Wessler, TechWerx: And then, last question is whether the Q&As will be shared, and yes, what we will do is we will post the transcript, the webinar slides, and the recording on the Opportunity page a few business days after this call.

Garrett McKeown Wessler, TechWerx: And we will essentially generalize any questions that are not already incorporated in the FAQs and post them to the FAQ table that is already on the opportunity page.

Garrett McKeown Wessler, TechWerx: With that, we have no more open questions at this time.

Timothy Siegler, DOE IESO: Okay.

Timothy Siegler, DOE IESO: I'll stick around for 10 more minutes, just to see if anyone has anything else.

Garrett McKeown Wessler, TechWerx: We've got a question of whether it's possible to schedule an offline call to discuss further.

Timothy Siegler, DOE IESO: We don't do one-on-one meetings. This is the point of these office hours to, you know, for specific, we're specifically talking about, like, any open solicitations, right? Like, the open solicitations are things that we either talk about publicly so that everyone can hear about it, or not at all. And so we won't be able to discuss any details about any pending applications, any pending solicitations, or other activities in any one-on-one meetings we have.

Timothy Siegler, DOE IESO: That said, if you want to schedule one-on-one meetings with us, we're open to hearing about it, but in a general sense, about general topics, not anything specific. And that's DOE/TechWerx talking.

Garrett McKeown Wessler, TechWerx: Yeah, and just to add on, if you have questions that you would like to answer, but you don't want to, like, post or ask them in this forum, you can submit them to info at TechWerx.org, but more than likely, if it is a question that will apply to more than one applicant, we will generalize it and post an answer to the FAQ when we have that, so that everyone has access to that same information that would be shared back with you.

Garrett McKeown Wessler, TechWerx: Excellent.

Meghan Camello, TechWerx: In addition to the email address that Garrett mentioned, I'll also just surface that we have another Office Hours for this opportunity scheduled for October 6th at 3pm, so if questions come up that you'd like answers to, feel free to sign up for that session on the opportunity page. And then... and if you want answers to your questions between now and then, like Garrett said, reach out to us at info at TechWerx.org.

Garrett McKeown Wessler, TechWerx: And Bill, we can move to the next page. It has the QR code back to the opportunity.

Garrett McKeown Wessler, TechWerx: Page as where all of that information will be, collected.

Timothy Siegler, DOE IESO: Yeah, answering the question that popped up.

Timothy Siegler, DOE IESO: Effort-based milestone, I mean, I think the... having the kickoff meeting is the one that we were talking about at the time. If you don't understand what effort-based milestone is, I was... then don't worry about it, it's not critical for being able to have a successful application.

Timothy Siegler, DOE IESO: But in general, when we say effort-based milestone, we mean one that it does not, like, is based on whether or not you've done something, rather than, like, achieved a metric. You know, something that, you know, has no chance of failure if you just work hard enough, I guess, is a good heuristic.

Timothy Siegler, DOE IESO: We would get back, so how would you get back to us regarding whether an individual is qualified to apply?

Timothy Siegler, DOE IESO: That question will be posted with all the other questions in the FAQ section of the TechWerx Opportunity page.

Garrett McKeown Wessler, TechWerx: Yes, and again, if you want to submit the question regarding eligibility to the info at TechWerx.org, you can, and we can reply directly, but we'll also post it as an FAQ.

Timothy Siegler, DOE IESO: Yeah, so, is the truth... The truth for only the first milestone or annual milestones, like, yeah.

Timothy Siegler, DOE IESO: So we make no sort of determination and, call out, no specific form of, like, the milestones that may or may not be impactful or successful, in, in your, task and milestone table. I will say that, you know, you want to do, and we said this is part of the tips for a successful application, right? You want to make sure, you know, your milestones are meaningful, and advance the state of the art, right? And I think as you're crafting milestones, and identifying whether you want it to be effort-based or metric-based, you should be considering, how meaningful the milestone is in accomplishing the overall goal that your application is, considering.

Garrett McKeown Wessler, TechWerx: We got a question on what this funding will... this will be funded under. So this will be a firm fixed price contract, between TechWerx and the selectee. And so that will be our... this will be a business-to-business contract.

Garrett McKeown Wessler, TechWerx: So yes, it will not be a cost reimbursable, it would be fixed price.

Timothy Siegler, DOE IESO: For minimum conversion efficiency, please. There, there's, please reach out, look at the opportunity page to identify any program requirements and restrictions. There are a few targets at various points listed. There are no minimums required per my memory of the opportunity page.

Garrett McKeown Wessler, TechWerx: Alright, I think we could... And then last minute remaining.

Garrett McKeown Wessler, TechWerx: Tim, are you okay if we wrap it up, or... okay. Wonderful. Well, thank you all, for attending today. We will close this session, but a reminder that there's an Office Hours a week from today at the same time, and the deadline for submission is October 8th at 11:59pm Eastern.

Garrett McKeown Wessler, TechWerx: Excellent.

TechWerx FY26 Space Photovoltaics (PV) Research & Development (R&D) Office Hours #1
Transcript – 09/29/2026

Garrett McKeown Wessler, TechWerx: Thank you all.

Timothy Siegler, DOE IESO: Thanks, everyone. Appreciate your time.