2025-12-11 Industrial Technology Validation (ITV) Office Hours 2 Transcript

December 11, 2025, 8:00PM

Christi Pezzone 0:03

Hello everybody and welcome to the Office Hours for the Industrial Technology Validation program. We will get started here in a couple of minutes, I'm going to give everybody some time to come in from the lobby and get settled. Just give us a couple of minutes and we will get started.

Let's go ahead and get started. Good afternoon again, everyone, and welcome to the Office Hours for the Industrial Technology Validation Program. My name is Christi Pezzone; I am the Deputy Director here at ENERGYWERX. I want to let you know that we are going to have a short briefing from the Program Office to provide an overview of the ITV Program and then there will be some time to answer questions after the briefing.

This webinar is being recorded and will be published on the <u>Opportunity Page</u> along with the slides that were presented today tomorrow. The responses from the Q&A will be posted as well once DOE has time to review and finalize sometime next week.

We will be removing any note takers from the call per DOE policy. We do use Slido for any questions that you might have. You can either go to slido.com and enter the hashtag there or scan the QR code that should give you access. We do ask that you ask all questions through Slido and reserve use for the chat for technical assistance. We will not be answering any questions that come in through the Teams chat.

I wanted to let everybody know about a few upcoming key dates. There's a final Office Hour scheduled for January 8th, 2026 at 2:00 PM Eastern Time. That Office Hours will be another opportunity for people to ask questions. Applications do close on **Thursday, January 29th at 3:00 PM Eastern Time**.

If you have any application issues or any questions before the next Office Hours, you can reach out to info@energyworks.org.

Moving on to the overview portion of the Office Hours, I'd like to turn it over to John O'Neill from the Office of Critical Minerals and Energy Innovation.

O'Neill, John 3:23

Good afternoon, everybody. My name is John O'Neill. I am in DOE's Office of Critical Minerals and Energy Innovation, and I'm the Program Manager for ITV. Thank you so much for your interest in the program. I'm going to talk a little bit about the opportunity that we have here, and then we'll have some time for Q&A. Whatever we don't get to, we will make sure we capture and answer later. Without further ado, let's go ahead to the next slide.

I'll give a bit of an overview of the ITV program. This is a program that's existed for a few years now, but what's new is this funding opportunity that you are all here to learn more about. I'm going to give a little bit more some context of the program then talk about the specifics of this opportunity, then we'll go into the Q&A.

The ITV program, the way this works is to have technology developers and host sites applied jointly to test emerging technologies. We're trying to do field validation of the performance of emerging innovative technologies in the industrial sector.

Because we know that this is a really important strategy for the commercialization of these promising technologies, what we do is an industrial host site applies alongside a technology developer to test a specific emerging technology and we send a team of national lab experts to work with both parties to perform measurement and verification analysis of the performance of that technology, which we then share with the market by publishing an M&V report to increase transparency and improve the information available to manufacturers as they make decisions about what technologies they want to implement in their own facilities.

The benefits of participation in the program depend on who you are and which role you would be filling as a partner in ITV. For the technology developer, involvement in ITV helps you gain market credibility for the performance of your technology, rather than you having to go convince a potential customer of how well your technology performs, you can come armed to a conversation with a DOE report that proves it that says here's a third party's unbiased assessment of how our technology performed in a manufacturing site and that goes a long way towards improving your credibility in the marketplace. The process of engaging with ITV also helps you gain additional insights about the specific needs and details of what would

be useful to industry partners and that can help you drive further product development and inform your commercialization strategy for your technology and again it mitigates risk for your future partners. It improves credibility but also helps you show to your potential future customers that they're not taking quite the risk that they might initially think that they're taking.

For the host site, the benefits include a reduced risk of adopting emerging technology. If you're looking to try something out at one facility before rolling it out to the rest of your facilities across your portfolio, something like ITV is really valuable. It helps the actual implementation of these innovative technologies, assuming they work as intended, helps you gain a competitive edge by optimizing your operations and that also helps you offset the cost of operational improvements.

By the funding mechanism that we'll talk about here today, we've got a quote here that I won't read out loud, but this is from one of our partners who saw a lot of value from the technology developer side about what ITV meant for them in terms of demonstrating the value proposition for their technology.

The crux of this program is measurement and verification, or M&V. The goal of this process is to provide a rigorous and detailed validation of the performance of any given technology.

The goal is to reduce the uncertainty around performance to a reasonable level so that others can make informed decisions when they are deciding what they want to implement in their own facilities, which also accounts for varying operating conditions, varying levels of production, varying environmental variables such as weather, temperatures, humidity, things like that, if those are relevant to the performance of a technology.

M&V, it takes those into account to get a really genuine comparison between a pre installation period of performance, which we call the baseline, and the post installation period where we're actually measuring the performance of the new technology relative to that incumbent technology.

In order for this process to be successful, it requires really close communication

throughout the process from all parties. Sensors go down; things change. It's crucial that all parties are ready to be active participants in this process, in the case that problems arise, they can be quickly mitigated and help us develop a reliable and trustworthy validation at the end of this process.

Access to information is critical as well. There is an expectation that host sites will be ready and willing to provide the necessary data to validate fully the performance of that technology, that is going to include some operational variables that will need to be provided to DOE to do that analysis. Finally, data quality is paramount in coming up with a trustworthy validation, and that really gets back to communication as well. We'll be monitoring that and asking for periodic data dumps so that we can make sure that there's no issues with data as we go and address them as soon as possible.

A bit more detail about the specific roles and responsibilities of the two project partners in this process. The technology developer's role is primarily to provide the technology that's going to be validated. They're really going to be crucial in ensuring that it's installed and commissioned properly so that it operates as they expect it will, providing some technical support and troubleshooting the equipment if it isn't operating as expected; helping to monitor and provide feedback on the system and also helping collaborate with everybody on data management, making sure that we have accurate information on the host site side. The primary responsibility is they are providing this space and the facility where this technology is going to be validated, which is any operational industrial site in the United States.

Their responsibility is to ensure access to that space as needed, adhere to project timelines that get set out at the onset of each project, provide regular updates on how things are going, report any issues as they arise, and coordinate across all the moving parts, schedules for installation, data collection, all of that good stuff.

All participants are expected to have the responsibilities on the left-hand side here, engaging actively throughout the entire duration of the project, not something that we set it and forget it. The expectation is that each organization would have active participation throughout data management, providing us with the data that we need to perform our validation committing to the costs that you commit to your portion of project costs, committing to upholding those supporting throughout the project and

of course at the very end, once we have our validation report in hand, providing permission to publish that data and results once we get to that point.

The details of the solicitation is what we'll go through next. ITV has existed for a while, but we haven't until this point offered a DOE cost share to help offset the cost of making these improvements. We always did the M&V portion of it, but this funding opportunity is a new addition to the program. As I mentioned briefly earlier, there's one application per technology developer and host site pairing. In other words, the expectation is that both of those entities are working together to submit one application together. Whichever entity submits the application, the other one is expected to provide a letter of commitment that clearly delineates an understanding of what their role in the process is.

We have provided some support in helping match up technology developers and host sites. We have a <u>Teaming Partner list</u>. If you go to the <u>Opportunity Page</u>, you can add your information, your contact information to that public <u>Teaming Partner list</u>. If you've got a technology that you would like to validate, but you don't have a host site, you could put a little bit of information about what that technology is, some contact information, and then you can follow up separately. Someone else can also reach out to you separately to follow up and create a joint application.

It's important to note that any technologies or host sites that include their information on the <u>Teaming Partner list</u>, that doesn't carry any endorsement or recommendation from DOE. That's purely self-selected. We do not filter that for technologies that we think will be promising for ITV. That's up to everybody to make their determination about who they want to work with and then apply jointly.

Technologies that we're interested in are pre-commercial, early commercial, new applications or underutilized. There's a little bit more detail here on each of those pre-commercials and early commercial, which is straightforward. New applications specifically refer to technologies that are well commercialized. However, they're being validated in a new sector or use case where they aren't routinely employed. Underutilized refers to technologies that are well commercialized in other markets but are not necessarily widely adopted in the United States. There is no specific requirement for technology readiness level for scale or size of installation.

We will accept a range, but what is important is whatever the technology is, it must be ready for installation and evaluation in an industrial setting. We're not talking about conceptual technologies designs where there's maybe only been a very, very early-stage demonstration of the potential for that technology. It needs to be developed to the point where there is an actual thing to install, an actual product essentially.

That can be tested through this program's host sites. We're looking for industrial sites, so that's manufacturers, water and wastewater treatment facilities and data centers from our perspective, and then technology developers could be a wide range of organizations that are generating new and innovative technologies. DOE national labs are explicitly not allowed to participate as technology developers in this program.

Each award is structured in a specific way where there are three milestones, and in each milestone there's a certain amount that is allocated to the host site and the technology developer independently. The first Phase of each project is the planning Phase. At this stage we will be working with Lawrence Berkeley National Lab, who is our third-party verifier. They perform the M&V support for this program. You'll be working with them to finalize a measurement and verification plan and sign an agreement that outlines a commitment to following through on that M&V plan, adhering to the schedule and process that's laid out in that plan. Once that Phase is completed and each party meets their requisite milestones for that Phase \$10,000 each for the host site and technology developer are awarded.

Following that comes the installation Phase, and that's when we put the technology into place and we collect the necessary data. That's first the baseline data collection, collecting information about how the system is performing without the new technology installed and installing the technology and then the post retrofit data. After the new technology is in place, collecting the data necessary to compare it to the incumbent and at this stage, this is where the bulk of the funding comes in. Up to \$300,000 is the DOE contribution to those projects for the host site, and up to another \$10,000 for the technology developer once those milestones have been met. It is important to note that in this Phase we require a 50% cost share. Whatever the total project costs that are accrued for installation of the technology, DOE can pay up

to 50% of those costs or up to \$300,000, whichever is the lesser of those two amounts.

Finally, the analysis Phase comes in, and this is a lighter lift from the host site and the technology developer. This is when the Lawrence Berkeley National Lab, our team supporting this program come in. They generate the final report. There will likely be some back and forth with the host site and technology developer to ensure we have all the information we need, but ultimately they generate the report, provide it to both parties for review and approval and then once it's approved and published, the awards for the host site are another \$40,000 and \$30,000 for the technology developer. In total, depending on the actual installation costs of Phase 2, there's a maximum of \$350,000 available for the host site and a maximum of \$50,000 available to the technology developer for participation in this in this program.

Requirements for data, cost share and participation are listed below here. On the data side, it is important that we emphasize that the expectation is whether the sensors are owned by the host site or by the technology developer, depending on the exact setup, the expectation is that DOE will receive raw data files, things like temperatures, pressures, flow rates, concentrations, whatever the relevant information that helps us provide that M&V analysis, whatever is needed for that, the expectations that will be provided to us and there there's an agreement to share some of that data in the final report.

I'll clarify there that for the final report, we don't generally publish raw data tables of those process variables, but we do analyze those variables and then provide summary statistics and trends and analysis of that data in the final report. It's important that that's clear upfront and everyone's aware of the transparency that's expected there. There is no desire to disclose any proprietary information, so we will absolutely work with all our project partners to ensure that nothing sensitive makes its way into that final report, but we are going to need access to raw data on performance of that system to provide an actual trustworthy measurement verification.

I alluded to the cost share already, but Phase 2 is the only Phase that requires a cost share and that's 50%. You will be required to provide documentation of the costs

that you've incurred so that we can know what was actually incurred. Finally, I can't emphasize it enough; responsiveness and active participation from all parties is critical for these projects to be successful.

I've got a slide on each of the three Phase s that talks through the anticipated milestones that each party will be expected to meet. For Phase 1, it's essentially the same for both the host site and the technology developer. You'll complete an onboarding interview with DOE and the Lawrence Berkeley National Lab. Alongside LBNL, you will develop and approve a final M&V plan, which includes a budget and a project timeline. Once that's all agreed upon, you'll sign a participation agreement confirming your commitment and confirming an understanding of what that M&V plan entails.

This might also include visits from our LBNL team to review the site, understand how the technology is going to be installed, things like that. Once those are met, those award amounts on the right-hand side are released to the awardees.

In Phase 2, most of this is going to fall on the host site's responsibility, providing the requisite data both on the front end for the baseline period of performance and on the back end for the post retrofit period of performance, as well as physically completing the installation, providing the necessary space, staff support, time, you know, if shutdown time is needed to install technology, following that what's lined out in the M&V plan.

On the technology developer side, providing the equipment when you know is in working order and sort of according to the agreed timelines that we lay out in that M&V plan.

In the analysis Phase, the expectation is that both parties will provide a formal review on that M&V report drafted by LBNL and then provide signed approval for publication of that final report.

There is more detail on this at the <u>Opportunity Page</u>, so I won't go through this in great detail, but the four criteria that we're scoring applications on are suitability for validation, technology impact, technology replicability and importance of program

participation. Going one by one, very briefly, suitability for validation just means, can we do a validation that we can stand behind? Do we know that there's going to be an ability to collect the data we need, etc.

For technology impact, is this something that has a very significant performance improvement for manufacturers? That we want to demonstrate. Third, is technology replicability. Is this something that can be rolled out across industry at scale to provide broad benefits to Americans? Finally, importance of program participation. Does the application demonstrate how ITV participation will lead to new insights for the host site or for the technology developer that inform commercialization and roll out of this technology? What is the impact of the funding that we would be providing? Things like that.

Here's some key dates. These are also all on the <u>Opportunity Page</u>, but <u>January 8th is our next and final Office Hour session</u>. If we don't get to your question today, you can jump back on that one. Our solicitation closes at the end of January. We will be anticipating sometime in early 2026 making announcements and notifying those selected participants.

That's about all I've got for this portion of the agenda. I think from here we can probably open it up to Q&A and see what questions you guys have for me.

Christi Pezzone 27:06

Perfect. We'll give Grace a second to get the Slido pulled up. Remember, you can ask questions over in Slido. The link is in the chat, and you can upvote questions there too. If you see a question that you would like to answer, that you have the same question, please feel free to go ahead and give that a thumbs up.

Grace Zona 27:28

Thank you, Christi. I'll get started. The first question we have is:

Do both the host site (main applicant) and the technology developer need to register with SAM.gov & have a UEI number? I only see 1 entry box in the application.

O'Neill, John 27:47

I'm going to see if someone on the ENERGYWERX side has an answer to that one.

Christi Pezzone 27:52

It's not required. That's just for the applicant. We're trying to collect that information, it's required to answer the question, but it is not required to apply for the opportunity.

O'Neill, John 28:04

I will also maybe make one minor clarification there. The first part of this question implies that the host site is the main applicant. That's not required. Either party could be the one formally filling out and submitting the application.

But the other party is required to provide a letter of commitment so that we are sure and confident that both parties are fully committed to the program.

Grace Zona 28:38

Is there any flexibility on the 12-month installation timeline if supply chain delays impact procurement/installation of the technology?

O'Neill, John 28:51

If we are aware of going in on challenges that would prevent a project from proceeding at that timeline, that's probably not something that that we would select. We are looking for technologies that are ready to go.

However, if something unexpected comes to light over the course of the evaluation, we will certainly work with both parties to come up with a reasonable solution and try to work around that. I would say as much as possible; applicants should anticipate those risks and try to mitigate them as much as possible and have a plan in place for some redundancies or some alternatives as much as feasible.

Grace Zona 29:54

Perfect.

If the technology developer is a small firm with, can a single employee be listed for multiple roles in the application (e.g., executive lead, technical lead)

O'Neill, John 30:10

Yeah, that's fine. We just want to make sure that it's clear that those roles need to be filled by somebody, and we want to know for different aspects of communication, who we should be reaching out to directly.

Grace Zona 30:28

Perfect.

Does the Cost Share have to be identified at the time of the application or can it be done at a later time i.e Phase 2?

O'Neill, John 30:38

You will provide a budget template that outlines the expected costs to be incurred for this as part of your application. However, the process within Phase 1 is to create that final M&V plan, that final budget. The application is not necessarily the end all be all, but you are required to submit information about the expected costs that will be associated with this.

Grace Zona 31:19

What happens in an instance where Phase 1 results are not favorable?

O'Neill, John 31:27

If I'm interpreting that correctly, maybe there is a disagreement around what the appropriate course of action for the M&V plan is, maybe a technology developer disagrees with the M&V plan that LBNL helps draft, I would say that ultimately at the end of the day, we require these projects to go through an M&V process that we are confident in and can stand behind. If it becomes apparent during Phase 1 that either the host site or the technology developer isn't comfortable with the what they would have to do to meet that level of rigor either from a data privacy concern or maybe they want to do a simpler or different analysis than LBNL plans to perform; If an agreement can't be reached at that point then then the projects wouldn't progress past Phase 1. That would be certainly unfortunate. Our goal is for all of our all of the projects that we award to provide enough information in the application that we

have confidence that that won't happen, but ultimately if that is the case then that's a possibility that the projects are structured in that phased approach with the intent of ensuring that before we put a bunch of money towards the installation, we know that that we have that data that we need to provide the requisite validation.

Grace Zona 33:28

Thank you.

Can all or most funds go to the tech developer for this project? We have a research agreement with a town wastewater treatment site but no money is exchanged.

O'Neill, John 33:40

The funding amounts that we showed in that table are set. We cannot change those so that more of the money goes to the technology developer.

In Phase 2, for example, what I will say is that whatever arrangement a technology developer and host site have between one another, that's something that is for them to determine to come to an agreement on and it is something that DOE and ENERGYWERX are not directly involved in.

In many cases, you might expect the relationship between those two parties to be that of vendor and customer, a technology developer is selling some piece of equipment to the host site for them to install. In such a case, it may be that the reality is we pay the \$300,000 in Phase 2 to the host site and maybe most of that ends up in the pockets of the technology developer, if that's the costs that they incur. That's not something that we are involved with though at all.

We provide those amounts based on the milestones that each party reaches and whatever that relationship is, is up to the parties. It could be that they could have energy as a service model or a lease to own model or something else entirely. I'm not sure what the nature of this particular agreement is, but we just don't get involved in that. The amounts from our perspective are set, they go to those parties as defined in that table.

Grace Zona 35:37

Thank you, John.

May a Host Site or Technology Developer appear on more than one application, and can the same technology be submitted at multiple sites?

O'Neill, John 35:47

Yes. However, we will not award the same technology or substantially the same technology for multiple validations. If a technology developer applies with five different sites for the same product or the same technology, or even a substantially similar technology, we will not validate that five times, It's not the goal of this program. There's nothing stopping you from submitting multiple applications. However, it is in your best interest to focus on one application where you think you have the highest chance of success, where it's the most suitable application, maybe the most engaged potential host site that you have and spend your time really making sure that that application is high quality rather than spreading it amongst several when we'd ultimately only award one in the end for the same technology.

Grace Zona 37:08

Awesome.

Some benefits of the technology may manifest and be measured after several years (long-term performance benefit). Can this be included in the cost share?

O'Neill, John 37:19

This is a pretty context-dependent question. That said, our intention is for these projects to have a defined validation period that fits within those 18-24 months, depending on the details of the technology and the host site. If it is something that requires multiple years of data collection before any performance improvement becomes apparent, that's probably not a good fit for ITV. If it is something where you may be able to demonstrate energy savings in the span of the 18-24 months that we're looking for, but there are other additional benefits that may take longer to manifest, maybe something like reduced maintenance requirements or something like that compared to an incumbent technology, that wouldn't be part of the scope of our validation in that case. We would not be looking for projects where the benefit requires that much time to be utilized.

Grace Zona 38:52

Thank you.

Would a district energy system serving a range of loads on a campus be an eligible host site?

O'Neill, John 39:01

Depending on what we mean by campus, we require the host site to be an industrial facility. If we mean a college campus, then no. If it's an industrial park or something, where they are industrial in nature, then I would say then yes, that that would be a potentially eligible host site.

Grace Zona 39:36

how many projects will be awarded funding?

O'Neill, John 39:39

We are expecting 8-10. The limiting factor is the amount of money that we currently have allocated to the program. It depends somewhat on the size of those projects, if they all are the full \$400,000.

Due to the expected cost in Phase 2, then that would limit us to 8 I believe. If they are a little bit smaller, we might see a few more than that.

Grace Zona 40:10

Can an offshore operations facility within a research institution serve as the 'host site' if the developer is another group in the same institution?

O'Neill, John 40:25

I'll take some components of this that I think I can answer independently. I'm not entirely understanding the specific arrangement being asked for here. The 1st is that the host site and the technology developer cannot be the same institution, they cannot be the same entity. We want to avoid both the appearance of and the reality of any conflict of interest in those validations. They should be two separate entities for the sake of participating in this program.

The offshore part is perhaps beyond my understanding; I don't know how to answer

that one necessarily right now. Let's punt on that one for now. The requirement in general for a host site is that it is located within the United States.

That may be a legal distinction that I'm not entirely sure I want to weigh in on without, some specific context here.

Grace Zona 41:53

Seems like we don't have to submit the detailed work plan for the proposal package. It will be developed and approved under phase 1 when project starts?

O'Neill, John 42:06

Components of what will go into the M&V plan will be submitted as part of the application. We are asking you questions in the application that will be the backbone of that work plan. Ultimately, LBNL will be working closely with awarded parties over the course of Phase 1 to finalize that work plan.

You should anticipate providing a pretty good level of detail in your responses to these questions so that going into that process before we make award decisions, we have a good sense for which ones are going to be suitable for measurement verification through this program.

Grace Zona 42:58

Can cost share be "in kind" and valued at the MSRP of the technology evaluated?

O'Neill, John 43:09

Felipe or anybody with ENERGYWERX, do you have a response to this one? There is more detail about what is eligible for cost share in the application is the short answer.

Barcia, Felipe 43:26

Yeah, that information can be found on ENERGYWERX website. We'll also make sure to clarify any additional details around cost share.

O'Neill, John 43:34

Thank you.

Grace Zona 43:36

Thank you both.

Can you put something in a more commercial/industrial setting? Like a supermarket has industrial cooling systems, could that be considered industrial?

O'Neill, John 43:47

The example of a supermarket specifically, we would not consider that industrial load. We're generally looking at manufacturing sites, water and wastewater treatment facilities and data centers for the purposes of this program.

Grace Zona 44:08

are there qualification requirements for the host site?

O'Neill, John 44:12

Yes. The host site physically has to be located in the United States, and there are additional qualifications as well that I just outlined on the type of the host, what type of institution that host site is, and those are the big things, location and nature of the facility, but there's a little bit more detail and information in the Opportunity Page as well.

Grace Zona 44:47

Thank you.

Is applicant the developer/host site?

O'Neill, John 44:52

It could be either one. I covered that one earlier, but that could be either party. Whichever party is not physically completing the application and submitting it, the other one is required to provide a letter of commitment at the very least for it. The technology developer and host site should actively be working together to develop the content for the application. This should not be a case where the

technology developer fills out the application generically and then manages to wrangle a form letter from a host site. The intent is that these applications are bespoke. They're looking at a particular installation at a particular host site, and both parties are actively involved in generating the content for that application.

Grace Zona 46:00

Perfect.

Can host site funding be used to acquire the technology from the technology developer? (funding and/or cost share)

O'Neill, John 46:09

As I mentioned, we don't get into the specifics of the relationship between the technology developer and the host site. We provide based on accomplishment of the milestones in the program.

We provide the amounts that we provide to the two parties as outlined in that table and whatever happens from there is not something we get into.

Grace Zona 46:38

Thank you.

Can we bring a new partner on the teaming partner list? I would like UT Austin's to test my technology.

O'Neill, John 46:48

So I think the question here might be sort of a misunderstanding about what the <u>Teaming Partner list</u> is. You are not restricted from working with an entity that is on the <u>Teaming Partner list</u>. If you have a relationship with UT Austin, and you want to work with them to submit an application, you're welcome to do that. Neither of you must put any information on the <u>Teaming Partner list</u>. The <u>Teaming Partner list</u> exists solely to help facilitate connections between organizations that don't have a host site or a technology developer already lined up, they can put a little bit of information about who they are and their organization, and then other interested parties can reach out to them. There's no requirement to be involved in the <u>Teaming Partner list</u> at all. You can just apply with UT Austin directly.

I will say again about the host site requirements; it needs to be an industrial facility. I

don't know if there is any kind of industrial facility, maybe a water treatment facility or something at UT Austin that that would be eligible, but I will just clarify that maybe I was speaking sort of generally about UT or specifically about UT Austin in this case because that was that was the request. But again, the host site does need to be an industrial facility.

Grace Zona 48:21

Thank you. Application question about previous funding received from DOE: We are not aware of previous DOE grants. Not 100% sure that we have never received funding.

Christi Pezzone 48:34

You can just answer it to the best of your ability. If based on your knowledge you have not received funding, then you can just answer no to that question.

O'Neill, John 48:45

Thank you.

Grace Zona 48:47

Thank you, Christi.

For the \$300K max given to the host site, can they use some of that money to pay for the purchase of the equipment, or only for the installation costs?

O'Neill, John 48:58

Both of those are eligible expenses that that you could use for the money that could be considered eligible costs that we could share up to 50%.

Grace Zona 49:11

What is the total budget of this program and how many projects are you expected to reward?

O'Neill, John 49:18

We're expecting to award 8-10 of these.

Grace Zona 49:23

Thank you. Can the host site be a not for profit research organization?

O'Neill, **John** 49:30

If that not-for-profit resource organization has an industrial facility of some kind, that's the requirement. But for-profit versus non-for-profit is not a distinction we necessarily care about.

Grace Zona 49:47

How long does it take for a new host site to become listed?

Christi Pezzone 49:55

Is this about the <u>Teaming Partner</u> list? I assume if it is, as soon as they fill out their information it's available in the report. So as soon as the host site hits submit on that form then it'll show up.

O'Neill, John 49:55

Yes, there's no vetting process, which is important to know. If you're looking at the <u>Teaming Partner list</u>, there's no recommendation or implicit endorsement from DOE of any of those technologies. It's purely a self-selection. As soon as you put that information in, it shows up.

Grace Zona 50:31

Thank you. How closely must the technology's use case use align with the host site's industrial activity? Is broad relevance acceptable?

O'Neill, John 50:45

I'm not sure I understand this one. Maybe we can table that one and perhaps you can try resubmitting it with slightly different wording. I'm sorry, I don't entirely understand this question. Maybe we'll just go to the next one and try again.

Grace Zona 51:09

Could you elaborate on the TRL level(s) that are required for this RFP?

O'Neill, John 51:17

No specific TRL levels. We anticipate there may be some projects that we'll award that are perhaps earlier stage TRL first of kind validations for pre commercial technologies, we may also have other examples where if it falls in the underutilized or new applications, those are going to be pretty advanced TRL's, but you're going to be using them in a new application, so we may have a range from early to late stage. We have not put a definition or boundary on that as a requirement.

Grace Zona 52:03

Would a solar recycling technology for the extraction of critical minerals and create more renewable power be a good fit for the program ?

O'Neill, John 52:13

I'm not going to get into specific technologies and whether they would be good fits or not. We've put some information in the solicitation and in this in this presentation about what we're looking for regarding the classes in technologies that we're looking for. I don't think it's a good idea to get any recommendation from us about what would or wouldn't be a good fit.

Grace Zona 52:46

Thank you.

Are industrial cybersecurity technologies that enable safe use of AI, data sharing, and related connectivity in scope for this program?

O'Neill, John 52:58

Again, without getting into a particular technology, one thing that I will clarify in response to this question is a software could be eligible for this. It does not necessarily have to be physical hard equipment. It could be an algorithm. It could be a piece of software that performs some function for a manufacturing site. That said, what's important is that any technology that we validate in this process must have a measurable and attributable improvement in performance. Some technologies may have benefits that are sort of diffuse or difficult to quantify. That would probably be very difficult for us to do the rigorous statistical analysis that's part of M&V. So again,

without getting into the details of a particular technology or a particular application, that's something I believe is important to note.

Grace Zona 54:08

Thank you.

Can the host site be an industrial-level energy-use laboratory?

O'Neill, John 54:16

Generally speaking, a laboratory space is not what we're looking for. We're looking for active industrial facilities.

Grace Zona 54:30

What's the flexibility on project timeline? Does it need to conform to the Template suggested timeline?

O'Neill, John 54:39

Every project is going to look a little bit different. Some of the things that might look a little bit different in many cases, a facility that already has performance data from a data supervision system, a SCADA system or something that has historical data for how their system has performed, they may be able to basically skip the baseline data collection period if we have what we need already, and then the installation can happen right away and then we just need to do the post installation data collection. That could significantly shorten the length of a validation.

Some technologies might need, for example, something that requires to do like a true statistically significant analysis. Maybe we need to get six months of data analysis. Maybe we need to get six months of data on either side so that we can account for variations in weather, for example. It's going to depend on project to project, but again, we want to make sure that these are technologies that are ready to be installed within that year of being selected and overall proceed at a pace with roughly the timeline that we've laid out there.

Grace Zona 55:58

For the planning phase, the funds are awarded at the end after the agreement is signed. Is it the same for the other phases?

O'Neill, John 56:16

Yes, those milestones that we showed on the slides there, we're going to define those milestones as part of the negotiation process for each award. Once the milestones are completed that triggers the release of those additional funds. The short answer is yes.

Grace Zona 56:38

What counts as an "industrial site?" We make cooling tech that can be used for data centers, but we may want to deploy in less mission critical place first

O'Neill, John 56:55

We want to see validations at industrial sites. We would not be looking for technologies that could potentially have applications for industrial sites. We're not looking for just the technology being relevant to industrial applications. We're looking to do validations on those industrial applications. I would say the answer is no to deploying in a non-industrial site as part of ITV.

Grace Zona 57:41

When do you expect to make decisions on applications?

O'Neill, John 57:47

We don't have an exact timeline, but early in 2026 the application closes and it will be sometime in early 2026.

Grace Zona 58:00

Perfect. Thank you so much.

O'Neill, John 58:03

I will just say, for the remaining questions, thank you so much for all the questions. We see lots of interest, which is great. We will post the answers to the rest of these that we didn't get to. They may already also be answered on the FAQ page on the opportunity announcement, so check there as well. You might be able to find what you need immediately. Otherwise, wait about a week and we'll get that posted.

Christi Pezzone 58:31

All right. Thanks so much, John. Again, please reach out to info@energyworks.org if you have any questions before the upcoming Office Hours that is on January 8th at 2:00 PM Eastern Time. And remember that applications are due on January 29th at 3:00 PM Eastern Time. I want to thank everyone for your time today. Thank you, John and his team, for being here and thank you to the ENERGYWERX team as always for your support. John, did you have any closing word?

O'Neill, John 58:58

Nothing beyond what I dropped in the chat, which is just thank you so much for your interest in the program. I am looking forward greatly to seeing what you guys submit.