2025-10-09 ITV Pre-Recorded OSS Transcript

Carla Heron 0:03

ENERGYWERX and the Department of Energy would like to welcome everyone to this virtual recording of the Objective Strategic Session for the <u>Industrial Technology</u> <u>Validation Program</u> that we refer to as ITV.

Before we get going, we have a few things to note. One, you can reach out to the ENERGYWERX team where you will see the e-mail listed here: info@energywerx.org Another thing of importance, a teaming partner list (password: ITVTEAM) established for this opportunity.

This will allow you to find others that have signed up. You will need to have your teaming partner established for the application that will be discussed in more detail as we get into talking about this opportunity with John O'Neill and Prakash Rao.

There are two other Office Hours webinars that are scheduled down the road. The first one is scheduled for October 23rd, 2025 at 2:00 PM EST, the second one is on November 13th, 2025 at 3:00 PM EST and the third Office Hours that's listed right now that is January 8th 2026 at 2:00 PM EST. There has been an extension to the deadline, which is now January 29th, 2026, at 3:00 PM EST.

Please visit the <u>opportunity page</u> available to you, which provides extensive details that are listed as far as eligibility criteria and artifacts that will help you as you move through this process.

This is a Partnership Intermediary Agreement (PIA) that is established between the Department of Energy and DEFENSEWERX doing business as ENERGYWERX. This may be a slightly different mechanism than you may be familiar with. That being said, because this is a Business-to-Business agreement between ENERGYWERX and Selectee, there is a different process when it comes down to how the overall award is handled, which is a firm fixed price award.

Again, this is not run like a FAR-based contract. This is a firm fixed price award. This

will allow for a very streamlined application process as well as what we hope is a more straightforward Statement of Effort (SOE) which is included in the Business-to-Business agreement.

With a firm-fixed price award, it is a Net30 payment in arrears. This can be explained in further detail after this briefing, but we want to make this very clear as we move into this that this is a different type of opportunity than you may have been familiar with in the past.

We'll move into the briefing for the Industrial Technology Validation Program, and with us we have John O'Neill. He's going to provide most of the details during this webinar. We have also received questions via the Slido link that was sent out earlier, and we will be going through those questions and providing answers.

Not only will this recording be available to you, but you will also find a transcript of this in case you want to do a keyword searching after the fact, if you want to find anything specific. John, thank you for being with us and I will hand the virtual mic over to you.

O'Neill, John 4:23

Thank you very much, Carla. My name is John O'Neill. I am a technology manager in the Department of Energy's Energy Efficiency and Renewable Energy Office (EERE). I work in a sub office that's focused on industrial technologies.

Today I'm going to talk to you about the Partnership Intermediary Agreement (PIA) that we've set up for the Industrial Technology Validation Program, or ITV as we'll use it from now on and talk through a few of the details here.

Our office is focused on developing and commercializing the technologies as well as the best practices that can help the U.S. industrial sector become more efficient, competitive, reduce costs, all those great things to ensure a strong, robust manufacturing sector in the United States.

First, I'm going to give a little bit of context for this solicitation. The Industrial Technology Validation Program is something that has existed for a few years now,

but the Partnership Intermediary Agreement, or PIA, is a new element. The funding opportunity is a new part of this program that we're excited to introduce here, so then we'll get into the details of that funding opportunity and then finally we'll have the Q&A session.

ITV is a field validation program. What that means is we are talking about demonstrating and validating the performance of technologies, not just in a lab scale setting, but physically in a live manufacturing plant, a real-world application for that technology. The reason being, that it helps provide valuable data that can prove out technology claims and helps bring innovative technologies to the market. This approach accelerates commercialization by mitigating technology adoption risks that are faced by both first movers as well as for second movers that look to field validations for information about how technologies perform, and it improves industry confidence. One of the challenges in adopting innovative technologies is that there are significant information asymmetries that exist. Companies that are developing technologies have a different set of information than the end users that would be potential eventual customers and users of that technology.

This program aims to address some of those information asymmetries, which really lead to better trusted relationships and accelerates the deployment of new promising technologies that can have a positive impact on the industrial sector.

ITV, the way this works is, technology developers and host sites apply with **a single application**. They apply together to test a specific emerging technology at a specific host site, a specific manufacturing or industrial site. So that could be a manufacturing plant, a data center, water or wastewater treatment utility, etc. The service that ITV provides that is essentially expertise from DOE's National Lab system, in this case Lawrence Berkeley National Lab or LBNL to provide onsite testing and measurement and verification analysis of the performance of that technology in the field.

The benefit of this is that LBNL is a third party, an unbiased relative to the host site or the technology developer, that provides trusted expert analysis of this technology. That information is then shared broadly with American industry so that others can learn from this validation and understand how a particular technology performs in a particular context.

Once that is done, we publish it and that goes on our validation report library, and the QR code will take you there if you're interested. This is where we house all the reports from previous validations.

We have a little bit more detail about some of those. These are the validations that we've completed to this point in the ITV program. There are a number of really great partners that we've worked with on a range of technologies. We've had some related to electrochemical water treatment for a cooling tower loop, a couple of water treatment processes, so black liquor concentration in the pulp and paper industry, electrocoagulation treatment for oily wastewater, a switch reluctance motor for package rooftop units in that fourth column there, and then finally a technology to convert waste heat into electricity through a thermoelectric generator system, and listed here are great technology developers and host sites that we've worked with in the past.

Those different participants have seen a number of different benefits depending on which party or which role they fill within an ITV validation. On the technology developer side, the benefit of participating in ITV is that you can come out on the other side with a report in hand that is published by DOE and by LBNL that shows unbiased confirmation of your technology performance, and you can take that into a pitch meeting or a meeting with a potential customer, and say, "You don't have to take my word for it, take DOE's word for it. This is how well this technology can perform, and here's the energy that it can save you and the cost it can save you."

The other benefit to the technology developer is that over the course of engaging with the host site, and doing the validation, that can sometimes generate additional insights into the needs of industry potential future developments for the commercial that can help better position you for commercialization of your technology, understanding what a particular market really needs and looks for in a technology. And of course, mitigating the risk for future partners and future customers, giving them confidence in the ability of your technology to do what you say it does.

On the host site side, ITV helps you reduce the risk of adopting emerging technologies. One obvious way that happens is the financial support provided through this opportunity that we'll talk about in a minute, but also the process of

engaging with the technology developer with DOE and with LBNL understanding really in a detailed way how you're going to do this installation, what you're going to learn from it. That's valuable as you think about not just an individual installation, but what you want to learn from that installation, perhaps to roll it out to other facilities, other sites across your portfolio, other processes within your portfolio, things like that. We're talking about technologies that have some positive impact on your productivity, your energy spends, maybe it reduces water use or waste generation at your facility. Any of these things could be something that ITV technologies would focus on, and this helps you by adopting these technologies you gain a competitive edge and can improve your operations even further.

We have a quote here from one of our former participants on the technology developer's side. Jonathan Candy of ATS said that "The DOE's ITV program demonstrated how quickly thermovoltaic technology like ours can be integrated into real world operations, to generate power from industrial waste heat, improve the converting waste heat to power can rapidly cut costs for American manufacturers and improve US energy security", so certainly a positive experience for that partner. We look forward to additional technology developers and host sites seeing similar benefits from this next round.

I'm going to turn it over to my colleague Prakash Rao. Prakash is with Lawrence Berkeley National Lab. I will let him fully introduce himself, but he's going to talk to you a little bit about the details of what M&V is, and then a little bit about roles and responsibilities for the different parties in these projects, go ahead Prakash.

Prakash Rao 13:47

Thanks, John. As John mentioned, I'm Prakash Rao. I'm at LBNL where I am the lab lead for the ITV program, and to follow on what John has mentioned the previous slide, to realize the benefits of the program at the center of it is a robust measurement and verification procedure.

For those unfamiliar with M&V, it applies accepted statistical methods to better understand and isolate the impact on energy use from an intervention, like installing new technology. Rather than simply measuring energy consumption before and after installation of the technology, the impact from externalities that would also impact

energy consumption over that time are corrected.

For example, if a new piece of equipment is installed on a new production line, M&V methods would correct the operating hours, before and after installation, to ensure an apples-to-apples comparison and eliminate the impact of one period having, for example, more operating hours than the other. And the graph on this slide visually describes the impact of M&V.

Energy consumption data collected before the installation of an energy cost saving measure, which is shown on the blue line to the left. The portion of the blue line continuing after the installation of the measure is a prediction of the energy consumption had the measure not been taken, and the gap between the green and the blue line on the right hand side shows the actual energy savings, correcting for things that really weren't part of the technology.

The M&V process is a key enabler for program success. Through its data-driven process and use of tried-and-true statistical methods, it ensures rigor in verifying resource impacts, reduces and quantifies the uncertainty in the estimated resource impacts, adjusts for things not related to installation technology but impacting resource consumption, and allows to correct changes at the facility or process on which the technology is installed during the data collection periods.

As we all know, the one constant industry is change. Therefore, making M&V processes is a key tool towards understanding the impact of technology in industrial setting.

Now to be successful, what do we require? A successful M&V requires cooperation between the host site, technology provider, and DOE National Lab team and with data at the crux of the M&V process, good communication, access to information and data quality, these are all success factors.

In order to achieve these success factors, each party participating in ITV has general and more specific roles and responsibilities that are important to consider before applying. All participants can expect roughly a 24-month engagement period and

should be able to provide a project point of contact for that duration.

As mentioned, access to data is key and a responsibility for all parties. Also, financial commitment and proper resource allocation to the project by all parties ensures it can be seen through to completion. In addition to the POC engagement, key personnel from each party providing project support are needed throughout the ITV process.

Since ITV is intended to help the broader US manufacturing community, and as John mentioned, reports generated, review and permission of this publication is imperative towards ITV achieving its broader and overall goals.

Now to be a little more specific for the technology developers, some of their specific responsibilities include ensuring proper installation of the technology. If there's issues of technology while it's undergoing testing, providing troubleshooting support, monitoring the performance of technology and providing feedback as needed, and ensuring data is collected and transmitted to the project team.

For the host site, specific responsibilities include ensuring adequate space and resources for the timely installation of the technology, providing updates on the system being tested as needed, helping to overcome any technical challenges that may arise, and finally coordinating the M&V process at the site. That's a little bit about the roles and responsibilities. With that, I'll turn it back to John. Thank you, John.

O'Neill, John 17:50

Thanks Prakash. We're going to talk now about this solicitation, some of the details about how it's structured and eligibility for it. As we mentioned before, it's important to reiterate that the technology developer and the host site submit one single application together. They create and develop the content for that application in concert, working together with one another, in one single submission for that application for unique technology at a specific host site.

The technologies of interest are those that improve operations in the industrial sector, reducing costs, improving efficiency, improving productivity and overall enhancing competitiveness for the industrial sector in the United States.

Technologies must be ready for installation and evaluation. If something is not at the stage where it's ready to be installed at a at a live manufacturing facility, then this is not the right opportunity for technology like that.

All technologies must fit into one of those four listed categories here: Pre- and early commercial technologies are self-explanatory, but technologies that are either not quite market-ready, maybe there's a first of kind prototype or something like that but not necessarily sort of a commercial widget to install. Similarly, early commercial technologies that maybe do have that but aren't necessarily fully established as a supply chain haven't really been installed in many, if any, industrial facilities yet, then we'd also expand it just a little bit broader than that to these second or these last two categories, the first being new applications. That could be technologies that are commercially available but are perhaps being deployed in a new use case, so a different application of that technology, or maybe a different sector, a different process that's not been demonstrated before, but significant potential exists for or underutilized, which would be technologies that are commercialized have low industry adoption in the United States. Technologies that may be in other markets are well established and implemented but underutilized in the United States specifically. That's what we're looking for, for underutilized technologies.

Because we have a bit of a range in terms of the specific technology readiness level that technologies might be to be eligible for this solicitation, there's no specific scale or size requirement. You can imagine if something is a new application or perhaps an underutilized application, you might be able to be looking at something that's a fuller scale and maybe a permanent validation, so you're installing a technology with the intent of that equipment staying in place as it is after the validation is complete.

If you're talking about something like a first of kind prototype, maybe it's not quite full scale. Maybe it's sort of a side stream, a side stream installation setup that's maybe a partial scale and intended to be sort of validated, removed at the end of the validation, but then perhaps to inform the development of a full-scale system down

the road. Technology developers could be a number of different entities. It could be innovators, small businesses, incubators, labs, equipment manufacturers, OEMs.

One party that specifically is not eligible is DOE National Labs. Technologies that have been developed at National Labs could be eligible. If there's a company that has come out of that, but the national lab itself as an entity would not apply as a technology developer for this program.

On the host site side, again, this is for industrial technologies, so we're looking at industrial sites. This could be a manufacturing plant, a water or wastewater treatment facility or a data center. There are no specific sectors of interest or sectors that are included, but we are looking for industrial facilities.

Each validation project that comes through the program can be broken down into 3 phases: planning, installation and analysis.

In the planning phase, that's when all parties get together, review the details of the technology in the site and develop an M&V plan that everybody agrees upon. The M&V plan is really important and we'll talk a little bit more about that on the next slide, but that informs how the installation phase takes place. The data that is collected and the manner in which the technology is installed in the installation phase, that's all based on specifics that are outlined in the M&V plan in the first phase. After that's completed and all data has been submitted to DOE and LBNL for the sake of the report generation, LBNL does that analysis. There's some review that's expected of the host head and the technology developer, and then finally review and an approval to publish the final report.

The way we've structured these awards, which are up to \$400,000 total per project, which is split between the host site and the technology developer in a specific way that we'll get into more detail on the next slide, those are all distributed in chunks after each phase. There are specific milestones that parties will be expected to complete in the planning, the installation and the analysis phases, and each phase has a certain amount allocated to it that is dispersed to awardees after those milestones are completed to satisfaction.

Here is the detailed layout of the structure for these awards. We're going to spend a little bit of time on this slide because there's a lot of information here. You'll see at the top that those same 3 phases that we just discussed on the last slide are listed with the key milestones that are expected for each of those project phases. On the right two columns are the amount of the award for that phase for each party in the projects of the host site and then the technology developer.

For the planning phase, once these key milestones are met, there's up to \$10,000 available to both the host site and the technology developer after the installation phase is complete and each of these will go into the key milestones in a little bit more detail in subsequent slides. Once those milestones are achieved for the installation phase, there is an up to \$300,000 award available to the host site for that portion of the project, and up to \$10,000 available for the technology developer.

I will note that that the second phase, the installation phase is the only one of the three phases that requires cost share. 50% cost share is required for the installation phase. However, it is not required for the planning or the analysis phase.

In the analysis phase, after the completion of all those milestones, there's \$40,000 available to the host site at that stage, and then another \$30,000 available to the technology developer at that host stage. If you're keeping track at home, the total is up to \$350,000 available to the host site and up to \$50,000 available to the technology developer. A brief note that I'll also say is we have structured the awards in this way.

DOE and ENERGYWERX do not get involved in whatever the business arrangement is between the host site and the technology developer. In many cases that relationship may be very simple. It may be just that of a customer and a vendor. The host site is buying a piece of equipment from the technology developer and it's as simple as that. There may be more complicated arrangements. There may be a lease to own. Maybe the technology developer, because they want to be involved in this program, is offering it at a discount or a prototype for a certain time bound use for.

Whatever that arrangement is, that's not something we get involved with. We stick to the award structure that's in this table, and however that works with the two parties involved, that's up to you guys to figure out and determine on your own. Going into the bottom half of the slide here, one thing I really want to emphasize is the expectations around data. This program is not simply a program to provide grants to manufacturers to install energy efficient technologies. It is much more than that. It is intended to be validation of those technologies, and what comes along with that is an expectation, a requirement really, to provide raw data to DOE and to LBNL to do that third party, unbiased validation analysis of the technology's performance. If that is not something that a company is comfortable with, then again, this is not the program for you. I will say that there is nothing that will be published in that final report that is not reviewed and approved by both parties.

But it is important to note that what we're asking for is technologies that are going to be installed. We're going to submit data on how that technology performs or how that system performs before and after that technology is installed. It may be, for example, that the claim is an improvement in energy intensity, which calculate energy intensity that might be energy spent per product produced and that may require some production data to be shared with us.

That's not something that we would generally publish, the raw, in the final report, but it's something that's important that the people know that the information is going to be submitted and some analyzed version of that data will be presented in that public report in the end.

It is critical that that's clear to everybody from the beginning that this is an expectation.

Next is more detail on the cost share requirements. As I said, the 1st and 3rd phases have no cost share requirements once those milestones are met, then the awards listed in that table are dispersed to the host site and the technology developer. For phase 2, however, 50% cost share is required. What that means is DOE will pay 50% of the total project costs for installing that technology up to the limits described in that table, which is up to 300,000 to the host site and 10,000 to the technology developer. With that being 50%, if the total costs of the project are \$620,000 or greater, than the awards disbursed would be \$300,000 and \$10,000.

If it is less than that amount, then we would proportionally scale the share of our

contribution to the host site and the technology developer at that same ratio of sort of 300 to 10 to the host site and the technology developer.

Finally, Prakash alluded to this before, but it's critical to the success of all these projects is regular engaged participation from both parties to pick up the phone and answer DOE and LBNL when we when we call, and there are going to be regular check-in calls. Please be responsive to questions throughout the project. It's very rare that one of these projects goes perfectly, or as exactly intended, when we first lay it out. Things happen in the real world, in a manufacturing environment. Sometimes things don't go the way we expect. Maybe we need to make some changes to the validation plan. Maybe we need to modify how long we're collecting data for. Maybe a sensor goes bad, something like that. We just really need every party to be involved and ready to address those issues as soon as they come up so that we keep the timeline for these projects within a reasonable range.

Within the first phase, the host site and the technology developer have the same expectations. There's an onboarding interview with both parties and with DOE and LBNL. Then with LBNL, that M&V plan that I mentioned is developed. This spells out exactly what data is going to be collected, when, how the technology is going to be installed, and what instrumentation is needed.

We'll finalize the expected budget and a project timeline. The project timeline is also very important because that's going to inform the subsequent analysis phase and is going to be used to determine whether projects are proceeding on schedule and that will potentially impact eligibility for that that phase two payment.

Once that M&V plan, budget and project timeline have been settled for all parties, sign off and agree that they are committing to carrying that plan out to the best of their ability. This process is expected to take place over the span of a few months. It may take 1-3 months depending on the complexity of the project, some of them may be quicker and easier to develop an M&V plan for than others, but that's the range we're expecting.

In phase two, there is a significant divergent between the two parties and what is expected. On the host site side, the first thing is providing the required baseline data

on the incumbent technology to LBNL and to DOE. Following that, we perform the actual installation of the technology. The equipment that is provided is physically installed at the plant. Finally, there's a data collection period after that installation has taken place where we get performance data for the process after that new technology intervention has been installed.

The technology developer's main role in this phase is to provide the equipment that they said that they're going to provide, when they said they were going to provide it and of course, being responsive, supportive of the installation. There's certainly going to be some expertise that the technology developer will have in how that should work. So that's going to be a partnership, but that's generally the requirement there. Again, up to \$300,000 for the host site in this stage and then up to \$10,000 for the technology developer in this phase. The estimated duration for this one is hard to be particularly precise on. This is going to vary significantly depending on the project. One of the things that could be one of the biggest variables, let's say, is in some cases plants might already have a data historian that from a SCADA system that has the required baseline data right away. We don't need to wait to collect baseline performance data if that data already exists. But in some cases, there may be a data collection period at the front end before the installation itself can take place.

Another variable is depending on the nature of the technology, maybe a few weeks or a month is a sufficient period of time to create to collect data afterwards, but if it's something where for example, weather data might be a significant variable impacting the performance, then it might be necessary to have a full year of data on the pre and the post installation side. We don't want that to take more than 24 months. In many cases that may be shorter, but it's just going to be project dependent.

And then in phase three, the bulk of the work phase three is done by Lawrence Berkeley National Lab. Once we have all the data that's needed, we will do the analysis, as spelled out in that M&V plan. We'll draft the analysis, run that by both parties and create the report. Each party is expected to provide a formal review and comments on M&V report and finally sign off on approval for publication of that final report. Some projects may be very straightforward. In some cases, there might be suggestions for improvements to the analysis, and that could require some back and forth, but ultimately once the sign-off is given from both parties to publish the

final report, it concludes the project and the final phase funding is awarded - \$40,000 for the host site and \$30,000 for the technology developer.

Next are the scoring criteria that we're looking for in these applications. There's more detail on the <u>opportunity page</u> about these, but we're looking for four things: first is suitability for validation. We want to make sure that we're selecting projects that we think are feasible to not only complete in a timely fashion, but that we think the signal is strong enough in the noise of the data that we think we will have a successful M&V to get statistically sound and rigorously computed savings out the other end and confirming that the site is suitable.

Next up, we're looking for technologies that have significant impact. We're looking for things that are truly innovative and significant improvements over or incumbent technologies, both at that specific site and relative to industry current standard practices. In addition to that, we're looking for technologies that are highly replicable, so technologies that have potential for wide adoption option that have potential for broad impact. These could be technologies that are maybe unique to a particular sector, but maybe it's an energy intensive sector for example, and there's a lot of impact available there, and it could also be technologies that just have very broad application across many different sectors of the broader industrial sector.

Finally, we're looking for projects where the intervention of the ITV program has a significant impact. Projects where the findings that are uncovered in the validation are useful to the technology developer in terms of further refining and improving their technology. Benefits to the host site in terms of understanding more about that technology to inform their future plans for using it or not using it. Any new technical information that comes out of it and projects also that might have a hard time taking place without the funding impact of this program as well.

The solicitation timeline. Again, this is all on the <u>Opportunity Page</u>, so make sure to reference it there. We will have Office Hour sessions to provide open Q&A on the 23rd of October, the 13th of November and then the 8th of January next year. The solicitation will close on January 29th and then participants will be notified in Spring 2026. I will remind you one more time that that application deadline of the

29th requires a joint application with both technology developer and host site applying together.

We have a <u>teaming partner list</u> that Carla mentioned at the beginning of the call that helps companies find potential partners. So, if you are, for example, a technology vendor who is looking for a host site, you can put your contact information and a description of your technology on that teaming partner list and help find somebody that way. However, there's no guarantee of that being of anything coming of that. DOE has no endorsement or review of the participants on that teaming partner list. It's a purely voluntary optional thing and again it needs to be utilized in far enough advance to enable you to find and work on an application with your partner to submit it in completion by January 29th.

I want to call out all the team that's associated with ITV. Crystal and Sheel are my counterparts in DOE that support this program. You met Prakash earlier, who's the lead at LBNL and then Amy, Shankar, Paul, Bumni, Peter, Alex and Juzel, who are all also supporting from the LBNL side and it's a really great team, and excellent group to work with. You would be in great hands if you were to be a part of this program.

I just want to restate the key dates we covered just a minute ago. I encourage you to get started soon on applications and get your name on that teaming partner list if you're looking for a partner as soon as possible and if you have any questions, you can route those through ENERGYWERX using the e-mail below here, info@energywerx.org and we will get you an answer to any questions you might have as soon as possible. With that, we're transitioning to Q&A next.

Carla Heron 43:22

That is correct.

Grace is going to be changing this over to move into Slido. I want to thank you, John, for the details you've brought to this opportunity. They are certainly helpful and for anyone looking to get more information that you would like to read, you can see the Opportunity Page on www.energywerx.org we have the opportunities there. All the details are listed as well as the slide deck and the transcript from this presentation. And Grace, I see you have Slido up, so I will turn it back over to you.

Grace Zona 44:02

I do. Thank you, Carla. First question:

Are the new technologies restricted to hardware/equipment only? Can software solutions be qualified as "technology"?

O'Neill, John 44:16

Not restricted just to hardware and equipment. Software could be qualified as well. Again, we are looking for technologies where there's a very clear signal, a very clear improvement that can be extracted from the noise in the data.

Depending on the application, software would certainly be potentially eligible for this solicitation.

Grace Zona 44:46

Perfect. Thank you. Next question.

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 44:58

The answer the first part is yes. A host site may team with several technology developers, and a technology developer could partner with several different host sites provided each team submits a separate unique self-contained application for a specific technology at a specific technology developer is discouraged from submitting multiple applications that propose validation of the same or substantially similar technology at different sites. We would only award one application for the same technology. We wouldn't do multiple sites, so we encourage technology developers to really focus on a site where you think that there will be a high likelihood of success in the program.

Grace Zona 45:57

Do we have to apply as a complete team, or can one party submit 1st and add a partner later?

O'Neill, John 46:05

You absolutely must apply as a complete team, and you may not submit alone as an

individual party and then add your partner later. You need to have both parties involved and on the application from the beginning by that January 29th deadline.

Grace Zona 46:22

Next question.

How is the 50% phase two cost share calculated?

O'Neill, John 46:30

Phase two is the only one of the three phases that requires A cost share. In this phase, the host site is eligible to receive up to 300,000 and the technology developer is eligible to receive up to \$10,000, so \$310,000 total is the maximum award that DOE would award.

The 50% cost share is 50% of total project costs, whatever those project costs are, if they are \$620,000 or greater, then we would provide the maximum of \$310,000, split 300,000 and 10,000 to the host site and technology developer respectively. If it's less than that, we would scale proportionally the total award to the technology developer and the host site.

Grace Zona 47:26

What counts as acceptable in-kind cost share? What documentation is needed?

O'Neill, John 47:35

It must come from non-federal sources. You cannot use other grant programs from DOE, for example, as cost share for this program.

Acceptable sources include contributions from project partners, state or local programs, private financing. Those are all fine, but DOE loan guarantees, other federal awards, discounts, foregone fees or profits, and any other any costs incurred inferred before selection do not count towards cost share. There are more details on the Opportunity Page. I encourage you to check out which gives even greater detail. Typical cash contributions could include direct labor costs, fringe costs, materials, equipment, travel, things like that.

Grace Zona 48:39

Thank you, John.

Can a single project have the same entity serve as the host site and tech developer, i.e., could a company validate its own technology in one of its facilities?

O'Neill, John 48:51

No, to ensure that we're preventing both the reality of and the appearance of a potential conflict of interest with a host site validating its own technology. We've chosen not to allow that, so the technology developer and the host site must be different entities for these projects.

Grace Zona 49:22

Thank you.

Can a large research campus serve as both industrial facility and technology developer in an ITV proposal?

O'Neill, John 49:31

No, it must be a different entity for the host site and the technology developer.

Grace Zona 49:43

Thank you.

What does the Lawrence Berkeley National Laboratory team fill?

O'Neill, John 49:49

LBNL is a critical partner in this opportunity. Every single awardee is going to be expected to work directly with LBNL, required to work with LBNL and they fill the role of the unbiased third-party evaluator of technology performance.

They performed the technical evaluation of all the technologies that would be awarded. They developed the M&V plan and the project timeline in concert with the host site and the technology developer they crunched the numbers, assist with installation as needed to execute the M&V plan properly, and then preparing the

technical report at the end. They are absolutely a close project partner for each one of these individual projects. They're a critical group to work with.

Grace Zona 50:50

Can technology developers or host sites submit individual applications and subsequently add a partner post award?

O'Neill, John 50:58

No, this is not allowed. You must have your application fully together with both host site and technology developer involved from the beginning give a little bit more detail on how that works. There's one submission, so one of the two parties is physically filling out the form and hitting submit, but whichever party is not doing that, the other partner is expected to provide a letter of commitment that very clearly spells out what their expectation is; that that they understand the requirements of this program on data collection, on responsiveness and things like that need to be submitted. It's a required portion of the application.

Make sure that you build in time for that part as well. We do have a template commitment letter that can be used if you like. You can certainly write your own, but there's a template commitment letter available on the Opportunity Page that you can use as an example as you as you create that.

Grace Zona 52:12

Thank you.

What is the expected time frame for completing a technology validation process?

O'Neill, John 52:21

This will depend quite a lot on the specific technology and the specific data that we need to complete. On average, most of them are probably going to take between 18 to 24 months.

A more precise timeline for each individual project is developed during those first couple of months during the planning phase. That may be shorter, may stretch a little bit longer, just depending on the specifics.

Grace Zona 52:54

Is EERE expecting to receive raw data files from the analysis?

O'Neill, John 53:02

Yes. When you submit the application itself that shouldn't contain any proprietary or sensitive business information. This is a field validation program it requires participants to submit performance data on a particular system, both before and after a new technology is introduced into the process. That data needs to be submitted to DOE and to LBNL or this project can't be successful. It can't be completed.

If that's not provided then then you won't be eligible for the phase two award, so it is absolutely critical during those first few months, we lay out exactly what the expected data is going to be, and what, when and how frequently you're going to collect that. And so that that's a process with everyone involved, but that's absolutely something that we will be expecting to receive from our partners.

Grace Zona 54:16

Our last question for right now.

How does invoicing work if I'm selected?

O'Neill, John 54:24

I'm going to pass that question to Carla.

Carla Heron 54:24

All right. Thank you, John. As I mentioned earlier, this is a firm fixed price award. It is designed in such a way that all the invoicing will happen, as they say, in arrears, on a Net30 schedule. This means that the selectee who is in the Business-to-Business agreement with DEFENSEWERX doing business as ENERGYWERX is going to be responsible for all the tasks that are laid out in the Statement of Effort.

Those tasks are going to have a specific timeline for expectations to complete each of those milestones, as well as a time frame for the invoicing of when those milestones should be completed, and the product, the deliverable, submitted in

combination with the invoice. Since the process is Net30, there is an internal review process by the DOE sponsoring office as well as DOE, and other offices along the way before that funding is remitted back to DEFENSEWERX and then remitted and paid out to the selectee. But all of it is for in arrears of the work that was successfully performed, completed and the required deliverables being submitted.

This is not a case where we are going to be asking for any type of time and materials type of reporting that you would see in some of the traditional FAR-based contracts. While there are elements that may be used to substantiate your cost share, as John mentioned, those are going to be clearly mapped out and defined and that will be part of the form that comes in as well as any of the required deliverables, be it data, reports, whatever it might be for that particular milestone and the associated invoice.

If there are questions, once the selectees are notified at the end of this application and down selection process, we have an Operations Team that stands ready to help you through the initial setup to get you into our invoicing portal and then the process that supports it.

Again, if there are questions at that stage, not only is info@energywerx.org available to you for general inquiries, but we have a dedicated account as well strictly for payments and that is invoicing@energywerx.org. We've tried to set this up in a very user-friendly format that hopefully will make this a very straightforward process to move forward with this award if you are selected.

Thank you.

Grace Zona 57:39

Thank you, Carla. That looks like that's all the questions for right now.

Carla Heron 58:05

Because of what we're going through right now, there is a third Office Hours webinar That was added that was mentioned earlier. All those dates can be found on the opportunity page, as well as links to everything you need and highlighting the fact that the application window closes on Thursday, January 29th, 2026, 3:00 PM Eastern Time. And one reason it is 3:00 PM Eastern Time is because we use a tool called Submittable. It is a very user-friendly portal for doing the applications, but they

operate on the East Coast and if you are experiencing technical difficulty, we want their team to still be available to help you navigate that. If you are experiencing anything beyond a normal technical difficulty, infrastructure issues, we have had hurricanes, we have had wildfires, we have had mass outages, we have had a fire at a building, and they have had to depart and not complete their application. We will coordinate that with DOE to determine if an extension is allowed, but ideally you are not waiting until the last minute to apply. You don't get brownie points for applying early, but you certainly don't have the stress of being up against the deadline and the potential for something hindering you from getting it in on time.

O'Neill, John 1:00:12

I will also just remind folks that applications require a joint application between both a technology developer and a host site. If you don't have a partner lined up already, we recommend you begin that process immediately by identifying that person or that organization that you're going to work with. We have a <u>teaming partner list</u> that can support you in potentially finding a partner, but that January 29th deadline requires not just you but also your partner to be involved to generate that application together. So, the sooner you get started the better position you'll be in.

Carla Heron 1:00:54

Yes. I encourage everyone to go to the <u>opportunity page</u>, review the details there. There are many things laid out as well as artifacts you can get to and review the application ahead of time so that you're prepared to work with your partner and provide the information you need. That's key to this. The ENERGYWERX team is here to help you as we can to provide information, but we can neither tell you if you are a good candidate nor complete the application for you.

And with that, I will turn this to John and see if you have any final words before we wrap this up.

O'Neill. John 1:01:39

Thank you for listening. We are very excited to see the applications start rolling in. One more reminder to get started early on identifying that partner. We are very much looking forward to reviewing these applications and excited to see what comes out of it and get started on the projects once we make selections. Thanks for your attention and hopefully we'll hear from you soon.

Carla Heron 1:02:02

Yes, and hopefully we'll see you at one of the Office Hours that are coming up again. That is October 23rd, November 13th and January 8th. All of them are Thursdays.

October 23rd and January 8th are at 2:00 PM Eastern Time, November 13th, 3:00 PM Eastern Time. Thank you for your time and we hope to see you at one of the Office Hours.

O'Neill, John 1:02:33

Thanks very much.