0:0:0.0 --> 0:0:1.290
Gregory Shannon (CyManII)
We'll get started in just a minute.

0:0:1.300 --> 0:0:3.590
Gregory Shannon (CyManII)
We're admitting everyone into the webinar.

0:0:40.780 --> 0:0:45.780
Howard Grimes (CyManII)
OK, there's probably gonna be a few people coming in.

0:0:45.790 --> 0:0:50.720
Howard Grimes (CyManII)
Just a few minutes late, but it is 3:00 o'clock, so we'll go ahead and get started.

0:0:52.410 --> 0:0:54.620
Howard Grimes (CyManII)
So I am Howard Grimes.

0:0:54.630 --> 0:1:12.110
Howard Grimes (CyManII)
I'm the CEO of the cybersecurity Manufacturing Innovation Institute, and we want to welcome all of you to this uh webinar focused on, you know, our recently announced request for proposals or RFP's.

0:1:12.970 --> 0:1:31.900
Howard Grimes (CyManII)
Our chief scientist is going to go through the background material, that of explanation of context and uh, you know, some of the thinking and rationale behind you know why we landed on these particular topic areas for the RFP's.

0:1:32.710 --> 0:1:33.110
Howard Grimes (CyManII)
Umm.

0:1:33.230 --> 0:1:37.20
Howard Grimes (CyManII)
Brian Luffy is our director of engineering.

0:1:37.30 --> 0:1:42.940
Howard Grimes (CyManII)
Brian is going to be collating in real time all of your questions.

0:1:43.370 --> 0:1:46.260
Howard Grimes (CyManII)
Please put those questions into the chat.

0:1:47.70 --> 0:1:52.980
Howard Grimes (CyManII)
Our our goal here is to get through a lot of it, of broad information in about 40 minutes.

0:1:53.910 --> 0:2:10.630
Howard Grimes (CyManII)
So once I hand the baton to Greg, he will own the floor, so to speak, and we'll try to get through all the basic information and you know, about 40 minutes and leaving about 20 minutes for Q&A.

0:2:11.140 --> 0:2:16.950
Howard Grimes (CyManII)
If there are extended needs for that, our plan is to, you know, put.

0:2:17.40 --> 0:2:30.980
Howard Grimes (CyManII)
You know, we've already developed a an FAQ for the RFP, the and we plan to add to that FAQ based on your questions and and our responses to those.

0:2:30.990 --> 0:2:36.530
Howard Grimes (CyManII)
So we'll we'll take all of that and get that up and running as as soon as possible.

0:2:37.410 --> 0:2:40.840
Howard Grimes (CyManII)
Again, thank you all for your interest in this RFP.

0:2:41.370 --> 0:2:52.760
Howard Grimes (CyManII)
We are really excited to, you know, hear from you and and your ideas on on how to approach, you know, some technically daunting challenges.

0:2:52.770 --> 0:2:57.780
Howard Grimes (CyManII)
So and with that, I'll go mute and turn my camera off and turn it over to Greg.

0:3:3.550 --> 0:3:5.580
Gregory Shannon (CyManII)
Thank you very much, Howard, and welcome everyone.

0:3:5.590 --> 0:3:7.730
Gregory Shannon (CyManII)
I'm delighted to see many people here.

0:3:8.550 --> 0:3:9.530
Gregory Shannon (CyManII)
I know many of you.

0:3:9.540 --> 0:3:10.480
Gregory Shannon (CyManII)
We know many of you.

0:3:10.490 --> 0:3:13.920
Gregory Shannon (CyManII)
You've worked been working with us and many of you are new.

0:3:13.930 --> 0:3:14.660
Gregory Shannon (CyManII)
So welcome.

0:3:15.390 --> 0:3:16.920
Gregory Shannon (CyManII)
Hope you'll find this engaging.

0:3:16.930 --> 0:3:19.40
Gregory Shannon (CyManII)
It's a wonderful community that we've been built.

0:3:19.530 --> 0:3:26.120
Gregory Shannon (CyManII)
We started in the in the middle of the early in the pandemic in September of 2020 and we've come a long way.

0:3:26.130 --> 0:3:29.950
Gregory Shannon (CyManII)
So this is our second RFP and we'll go through this.

0:3:30.40 --> 0:3:37.550
Gregory Shannon (CyManII)
A lot of this will be material that's already in the RFP document itself, but will be highlighting particular elements.

0:3:38.280 --> 0:3:40.150
Gregory Shannon (CyManII)
Hopefully make sure you understand some of these.

0:3:40.220 --> 0:3:41.550
Gregory Shannon (CyManII)
The the important aspects here.

0:3:42.830 --> 0:3:44.430
Gregory Shannon (CyManII)
So with that, that's our agenda.

0:3:44.440 --> 0:3:48.600
Gregory Shannon (CyManII)
It matches pretty much the the the contents in the RFP.

0:3:49.370 --> 0:3:56.90
Gregory Shannon (CyManII)
So just as a quick overview, you know, so I man is one of these 18 manufacturing innovation institutes that the US government has stood up.

0:3:57.800 --> 0:4:11.530
Gregory Shannon (CyManII)
We are $111 million public public private partnership and that's a really key element of this approach that the government DOE is taking to this, this Mii.

0:4:11.620 --> 0:4:24.510
Gregory Shannon (CyManII)
It's about the the the private sector and the public sector coming together, sharing costs, creating outcomes that benefit US competitiveness and that US competitiveness is also an really important aspect here.

0:4:24.920 --> 0:4:35.0
Gregory Shannon (CyManII)
We do want to improve cybersecurity in energy efficiency across all manufacturing, but a particularly as it applies to US manufacturers and making them more competitive.

0:4:35.290 --> 0:4:48.260
Gregory Shannon (CyManII)
And that's really a central theme of these manufacturing innovation institutes in general in terms of the benefit and it certainly is why Congress allocated the generous funds that they have to these institutes as investments.

0:4:50.160 --> 0:5:14.870
Gregory Shannon (CyManII)
Our goals are to you know, sustain, secure and sustain American leadership in global manufacturing and the contribution this institute makes is focused on that energy efficient, securing energy efficient innovations, securing the supply chains and being able to track carbon, reduce carbon, optimize the energy and essentially create a more sustainable manufacturing environment.

0:5:15.770 --> 0:5:22.250
Gregory Shannon (CyManII)
When we stood up the the Institute, we had kind of four big goals.

0:5:22.520 --> 0:5:23.750
Gregory Shannon (CyManII)
Big hairy goals.

0:5:24.340 --> 0:5:32.90
Gregory Shannon (CyManII)
One was to save a quad of energy, which is a quadrillion BTU, to mitigate a trillion vulnerability instances.

0:5:32.600 --> 0:5:37.10
Gregory Shannon (CyManII)
And you know, there's vulnerabilities that you might see and CVE, but these are about instances.

0:5:37.60 --> 0:5:47.800
Gregory Shannon (CyManII)
The actual instance of something in a system, and if you have 1000 systems then it means you may have 1000 vulnerability instances of that particular pull.

0:5:47.810 --> 0:5:50.50
Gregory Shannon (CyManII)
The ability type that particular CVE.

0:5:50.60 --> 0:6:13.170
Gregory Shannon (CyManII)
So it's really about that's why we believe we can scale if we have systemic approaches to make getting VULNERABILITIES, we want to train a million workers, which is currently an audacious goal, given that there's about 13 million manufacturing workers, we want to make them aware of the cyber security issues and how they can help mitigate that, mitigate them and make their enterprises more robust and resilient to adversaries.

0:6:13.580 --> 0:6:25.120
Gregory Shannon (CyManII)
And of course, we want to save money if we save the energy, if we save the the downtime from attacks and the lost and waste from attacks, we believe that's an achievable goal.

0:6:25.330 --> 0:6:33.260
Gregory Shannon (CyManII)
Long term I will achieve these goals by securing the digital thread, building a strong workforce in developing a system of trusted partners.

0:6:33.270 --> 0:6:41.570
Gregory Shannon (CyManII)
That's why this membership model that these, these PPP, these II's have are are very important and the number of our Members are here.

0:6:43.240 --> 0:6:46.810
Gregory Shannon (CyManII)
I know our our listening to that webinar here to see how they can propose.

0:6:48.450 --> 0:6:56.620
Gregory Shannon (CyManII)
So our approach that we emphasize in the RFP is that you have to take a look at the road map to understand kind of how we look at the manufacturing challenges.

0:6:57.690 --> 0:7:1.260
Gregory Shannon (CyManII)
If you're a member, then you have access to the private copy.

0:7:1.270 --> 0:7:6.80
Gregory Shannon (CyManII)
If you're not a member of the Institute, then you have an access to the to the public copy.

0:7:6.210 --> 0:7:8.440
Gregory Shannon (CyManII)
You can find the public copy on on the website.

0:7:10.170 --> 0:7:19.670
Gregory Shannon (CyManII)
The another important aspect is that we want to focus on engagement with industry and we use an agile development methodology.

0:7:19.680 --> 0:7:29.240
Gregory Shannon (CyManII)
We've been doing that from the start in terms of running sprints, having product owners having integrated teams that are integrated across the Institute.

0:7:29.690 --> 0:7:33.140
Gregory Shannon (CyManII)
So that integrated collaborating team is really important aspect of what we do.

0:7:35.90 --> 0:7:45.340
Gregory Shannon (CyManII)
You know, this is a diagram from our road map and I just want to highlight that this is material that's not directly in the RFP, but it's in the road map and just want to emphasize it.

0:7:45.350 --> 0:7:53.900
Gregory Shannon (CyManII)
So you can understand kind of how this integrated approach kind of our principles of how we've organized the technical approach here for symmetry.

0:7:54.170 --> 0:8:4.460
Gregory Shannon (CyManII)
So a key concept, the cornerstone concept, the North Star is is many referred to is epsilon pure and the epsilon is for energy efficient carbon reduction.

0:8:4.770 --> 0:8:9.860
Gregory Shannon (CyManII)
It's about that energy footprint, energy impact that we want to reduce.

0:8:9.870 --> 0:8:14.360
Gregory Shannon (CyManII)
We want to optimize the pure is about cyber security.

0:8:14.370 --> 0:8:18.170
Gregory Shannon (CyManII)
It's about pervasive, unobtrusive, resilient and economical.

0:8:18.620 --> 0:8:20.280
Gregory Shannon (CyManII)
So you can think of what?

0:8:20.340 --> 0:8:27.370
Gregory Shannon (CyManII)
What do we often have today where we have solutions that are not pervasive, they're of obtrusive.

0:8:27.380 --> 0:8:28.340
Gregory Shannon (CyManII)
They're hard to use.

0:8:28.800 --> 0:8:37.510
Gregory Shannon (CyManII)
Umm, things are getting better there fortunately, but still there's there's challenges, especially in in the OT IT ICS environment and then they're resilient.

0:8:37.520 --> 0:8:38.270
Gregory Shannon (CyManII)
They actually work.

0:8:38.280 --> 0:8:43.710
Gregory Shannon (CyManII)
They make it harder, you know, they today sometimes the solutions don't work.

0:8:44.480 --> 0:8:48.430
Gregory Shannon (CyManII)
They're not resilient, and then they're not economical.

0:8:48.780 --> 0:8:59.600
Gregory Shannon (CyManII)
And so we're trying to flip that around and that's an important aspect about how we look at solutions and how we consider technologies that partners want to incorporate into the solutions that were producing.

0:9:0.640 --> 0:9:2.570
Gregory Shannon (CyManII)
The important part is about working together.

0:9:2.880 --> 0:9:9.410
Gregory Shannon (CyManII)
We have a shared secure environment, so in the RFP we talk about this trusted technical infrastructure.

0:9:10.160 --> 0:9:21.190
Gregory Shannon (CyManII)
This is the notion where we can work together, which is important because we're distributed and we're diverse Community in terms of working with industry, with academia, with nonprofits, with the national labs.

0:9:21.550 --> 0:9:34.840
Gregory Shannon (CyManII)
And so we have to have a trusted environment in which we can all work instead of sitting off in our own silos where it's hard to share information and do that fast iteration that you get with this agile scrum approach.

0:9:35.110 --> 0:9:36.410
Gregory Shannon (CyManII)
And that's been a core aspect.

0:9:36.420 --> 0:9:39.810
Gregory Shannon (CyManII)
So we bring people together from all these different organizations to build teams.

0:9:40.550 --> 0:9:59.160
Gregory Shannon (CyManII)
Uh, they may have different priorities and different slightly different funding profiles and models and objectives, but ultimately we're working together as a team and then we're producing a secure, defensible architecture and the key aspects of this architecture is that it integrates automation and supply chain security.

0:9:59.170 --> 0:10:4.440
Gregory Shannon (CyManII)
This is straight from the original request from DOE in terms of what they want us to integrate.

0:10:4.670 --> 0:10:9.730
Gregory Shannon (CyManII)
We integrate the notion of securing the cyberspace, the physical space and the energy.

0:10:11.590 --> 0:10:37.830
Gregory Shannon (CyManII)
The energy aspects, especially the, the, the digitalization of those physical and energy aspects, because that's where a lot of innovations are getting implemented and that's where a lot of uh, so attack service is being created by that digitization and then we want to integrate formal methods for security and you might scratch your head in under wonder why particular formal methods if you're not familiar with it, it's but way of using automated.

0:10:39.840 --> 0:10:40.990
Gregory Shannon (CyManII)
Mathematical logic.

0:10:41.0 --> 0:11:6.510
Gregory Shannon (CyManII)
It's actually a branch of artificial intelligence that today is not as quite as in vogue, but it's relevant here because we want to have certainty about various properties that our systems have or don't have a nice key aspect of formal methods is that often can help you find counterexamples if you think something secure can help you find a counterexample you that you might not have considered given the scale and complexity of systems that we're trying to protect.

0:11:7.370 --> 0:11:10.150
Gregory Shannon (CyManII)
Further details on this man is in in the road map.

0:11:12.550 --> 0:11:19.200
Gregory Shannon (CyManII)
A key part of our approach is these foundational tasks that we've been working on for the last two years.

0:11:19.210 --> 0:11:24.800
Gregory Shannon (CyManII)
One is on energy emission and emissions quantification and this really is getting out.

0:11:24.810 --> 0:11:27.720
Gregory Shannon (CyManII)
How do you collect the data so you can quantify the energy that you're using?

0:11:27.730 --> 0:11:38.440
Gregory Shannon (CyManII)
And that's an important part of the using machine learning or optimization techniques to improve the efficiency and reduce emissions.

0:11:39.450 --> 0:11:40.360
Gregory Shannon (CyManII)
And that's a.

0:11:40.450 --> 0:11:58.860
Gregory Shannon (CyManII)
That's what that's the basis of many of these new innovations that the DOE has identified, not work that we've done, but work that the DOE is identified as important for US industry to adopt, to improve competitiveness, the secure defensible architecture is about this overarching approach dealing with automation and supply chain networks.

0:11:59.170 --> 0:12:5.400
Gregory Shannon (CyManII)
And how do we all fit it together in a way that's practical and applicable into a manufacturing environment?

0:12:6.380 --> 0:12:10.610
Gregory Shannon (CyManII)
Or SRDI is secure research and development infrastructure is about building that.

0:12:10.900 --> 0:12:23.260
Gregory Shannon (CyManII)
It's a part of this trusted environment that we work in, but it's really about how do you deal with the fact that we're distributed, yet we wanna deal with physical systems and we need to be able to interact with those.

0:12:23.270 --> 0:12:47.940
Gregory Shannon (CyManII)
And so we've been able to integrate systems across the labs and with industry and academia to remotely access securely, remotely access those environments and demonstrate and understand how our technologies are applying the Court of coordinated vulnerability awareness was about really, what's the role for this Mii to increase awareness of vulnerabilities and what you can do about them.

0:12:48.420 --> 0:12:55.390
Gregory Shannon (CyManII)
Our current approach is to look at common weakness enumeration CWE S as a key aspect.

0:12:56.220 --> 0:13:1.590
Gregory Shannon (CyManII)
On the website, you'll see that there's a recent paper in IEEE that talks about some of the work we've been doing there.

0:13:1.880 --> 0:13:5.310
Gregory Shannon (CyManII)
And last but not least is trust works, which is our workforce development.

0:13:5.480 --> 0:13:8.130
Gregory Shannon (CyManII)
This is where you know to train a million workers.

0:13:8.720 --> 0:13:23.980
Gregory Shannon (CyManII)
It's going to take a coordinated effort with many partners to be able to reach the workforce where they are, whether they're currently operating in the workplace, whether they're new to the workplace or whether they're students training to be in the workplace.

0:13:24.310 --> 0:13:27.320
Gregory Shannon (CyManII)
So for all four, all five of those see the roadmap.

0:13:27.330 --> 0:13:28.30
Gregory Shannon (CyManII)
Further details.

0:13:30.240 --> 0:13:39.830
Gregory Shannon (CyManII)
We have three use cases in the in this RFP and this is really our our focus on really integrating with industry.

0:13:40.220 --> 0:13:53.20
Gregory Shannon (CyManII)
We have to be able to integrate with use cases that are specific enough that we really have to deal with the challenges and the constraints that are in those use cases, but we want the use case to the application to be generalized.

0:13:53.30 --> 0:13:53.900
Gregory Shannon (CyManII)
Generalize.

0:13:54.350 --> 0:13:54.840
Gregory Shannon (CyManII)
Excuse me?

0:13:55.170 --> 0:13:59.310
Gregory Shannon (CyManII)
Generalizable because it can't be just for that particular use case.

0:13:59.320 --> 0:14:12.250
Gregory Shannon (CyManII)
It has to expand across for US 8 sectors ultimately, but ideally across all of manufacturing that is applicable relative to the particular IT OT and ICS platforms that are being used.

0:14:13.190 --> 0:14:30.210
Gregory Shannon (CyManII)
So the three we'll get to the three, but it's really about then advancing our technology readiness levels across those in each use case, you've got, the institute operates at the TRL TRL levels two to six.

0:14:30.720 --> 0:14:39.780
Gregory Shannon (CyManII)
Much of our work the last couple of years has been in the two to four range and this RFP is about really upping that game and moving it into the the four to six range.

0:14:41.610 --> 0:14:44.920
Gregory Shannon (CyManII)
The IUC will these use cases will provide actual industrial environments?

0:14:44.930 --> 0:14:52.320
Gregory Shannon (CyManII)
Like I said, with the constraints and in such that you always have and we do want this to align with the NIST cybersecurity framework.

0:14:54.200 --> 0:14:57.470
Gregory Shannon (CyManII)
So the topic areas we have are industrial control systems.

0:14:58.20 --> 0:15:9.400
Gregory Shannon (CyManII)
You'll notice in the uh in the fall, in the RFP that sometimes it refers technical, this this first topic area is referred to as energy controllers.

0:15:9.950 --> 0:15:12.700
Gregory Shannon (CyManII)
It should have been tight, changed to industrial control systems.

0:15:13.750 --> 0:15:15.400
Gregory Shannon (CyManII)
But you know they're similar.

0:15:15.410 --> 0:15:24.980
Gregory Shannon (CyManII)
I mean, energy controllers are a subset of ICS and that's the focus of 1 use case focused on the autumn.

0:15:24.990 --> 0:15:36.370
Gregory Shannon (CyManII)
This is really connection of automation and this connection of supply chain for the production of industrial these control systems that operate our critical infrastructure.

0:15:36.900 --> 0:16:8.910
Gregory Shannon (CyManII)
The secure digitalization use case is about really helping to secure the smart manufacturing enterprise and identify good practices that are relevant to the to, to and supported by a business case because we know that demonstrating that return on investment is an important aspect of what these, you know, MI's like cymanii have to do for additive manufacturing is about securing the provenance and tracking of products digital thread to ensure its integrity through the supply chain and provide traceability.

0:16:9.120 --> 0:16:23.150
Gregory Shannon (CyManII)
This is kind of tied to a software bill of materials that you may have heard of, but it's really about full product, full component bill of materials in a secure, traceable way that is efficient to access and is more than just a paper exercise.

0:16:23.160 --> 0:16:28.30
Gregory Shannon (CyManII)
In terms of documenting who The Who the suppliers are and where they're components come from.

0:16:28.910 --> 0:16:29.340
Gregory Shannon (CyManII)
Uh.

0:16:29.450 --> 0:16:43.690
Gregory Shannon (CyManII)
It turns out that many, many manufacturers don't really understand the complexity of components that have coming in, and they can be off by many orders of magnitude in terms of the Fidel in terms of the number of different components that ultimately went into their system.

0:16:46.160 --> 0:16:50.40
Gregory Shannon (CyManII)
This diagram is meant to convey how the technical areas are interrelated.

0:16:50.380 --> 0:16:57.850
Gregory Shannon (CyManII)

So on the bottom there you see you have the industrial environment, which is a foundation for how we're putting together this.

0:16:57.980 --> 0:17:4.750
Gregory Shannon (CyManII)
Our current work building on top of that in the middle there you have the technical area, two of the industrial solutions.

0:17:4.760 --> 0:17:9.370
Gregory Shannon (CyManII)
So what's the what's the solution that we want to integrate into this industrial environment?

0:17:10.60 --> 0:17:12.310
Gregory Shannon (CyManII)
TA3 is about actually doing that integration.

0:17:12.840 --> 0:17:16.840
Gregory Shannon (CyManII)
TA4 is about resource that's relevant to that particular industrial environment.

0:17:16.870 --> 0:17:26.610
Gregory Shannon (CyManII)
Some of the challenges and you'll notice in the RFP that we lay out specifics for each use case about what topic research topics we'd like to see pursued in those use cases.

0:17:27.120 --> 0:17:48.190
Gregory Shannon (CyManII)
And then technology five is general capabilities, which includes not only sound project management and coordination that's in collaboration with the broader Institute, but also if there's available resources like subject matter experts or software developers that might be available for that use case.

0:17:50.960 --> 0:18:1.480
Gregory Shannon (CyManII)
Here's a CHEAT SHEET if you will, to kind of summarizes for each use case the technical area request that we're making.

0:18:2.120 --> 0:18:12.200
Gregory Shannon (CyManII)
So, you know, look at the RFP for the full details, but this kind of gives you a map and one of the common questions has been you know, do you have to provide a full solution for a given use case?

0:18:12.210 --> 0:18:12.990
Gregory Shannon (CyManII)
And the answer is no.

0:18:13.0 --> 0:18:17.910
Gregory Shannon (CyManII)
You can either respond to all 5 technical areas or eliminate some of them.

0:18:17.920 --> 0:18:20.390
Gregory Shannon (CyManII)
I would say remind you that you do need to reply.

0:18:20.580 --> 0:18:29.460
Gregory Shannon (CyManII)
You do need to propose something in technical area 5 because that needs to be 10% of your total budget, but for the other four you can pick and choose what makes sense.

0:18:29.840 --> 0:18:35.240
Gregory Shannon (CyManII)
You you can apply to multiple use cases, but you have to file separate proposals for each use case.

0:18:38.400 --> 0:18:45.680
Gregory Shannon (CyManII)
Here is the basic award information of notionally what we plan to do 15 months of work start no sooner than the 1st November.

0:18:46.440 --> 0:18:48.500
Gregory Shannon (CyManII)
Umm, we'll come back to it.

0:18:48.510 --> 0:18:49.690
Gregory Shannon (CyManII)
Start dates and such in a minute.

0:18:51.90 --> 0:19:0.860
Gregory Shannon (CyManII)
For eligibility you must the entity, the organizations that are proposing the organizations that are participating must be domestic entities.

0:19:0.870 --> 0:19:2.190
Gregory Shannon (CyManII)
So I'm not talking about the staff.

0:19:2.200 --> 0:19:11.760
Gregory Shannon (CyManII)
That's a separate issue, but the organizations must be domestic in in entities, because of course the DOE wants us to impact US manufacturing.

0:19:12.250 --> 0:19:14.260
Gregory Shannon (CyManII)
And so their focus is on US manufacturing.

0:19:14.270 --> 0:19:15.670
Gregory Shannon (CyManII)
All work must be done in the US.

0:19:18.500 --> 0:19:20.130
Gregory Shannon (CyManII)
Key component is cost share.

0:19:20.200 --> 0:19:34.140
Gregory Shannon (CyManII)
So as I mentioned before, this is a public private partnership and that means that the government is providing DOE is providing a substantial amount and they expect at least 20% cost share.

0:19:34.700 --> 0:19:37.400
Gregory Shannon (CyManII)
Now you can have higher cost here.

0:19:37.900 --> 0:19:42.280
Gregory Shannon (CyManII)
So, umm, you know, you could potentially have 100% cost share.

0:19:42.290 --> 0:19:45.190
Gregory Shannon (CyManII)
The one thing I'll note though is in terms of technical evaluation.

0:19:45.200 --> 0:19:53.810
Gregory Shannon (CyManII)
The technical evaluators will not be aware of the cost share, so you can't quote like buy your way into a project by proposing 100% cost share.

0:19:54.720 --> 0:20:15.840
Gregory Shannon (CyManII)
We appreciate the efficient use of government funds, of course, and we encourage higher cost share amounts, but you must have at least 20% in the example in the bottom is just to help you with some of the math that sometimes it's misinterpreted is not 20% on top of what you think the cost is, it's 20% of the total cost.

0:20:16.820 --> 0:20:22.30
Gregory Shannon (CyManII)
So for $100,000 proposal, 202020 K must be cost share.

0:20:24.820 --> 0:20:26.300
Gregory Shannon (CyManII)
Let's see how we're doing on time.

0:20:26.310 --> 0:20:30.190
Gregory Shannon (CyManII)
OK, we're doing doing fine submission requirements.

0:20:30.200 --> 0:20:35.280
Gregory Shannon (CyManII)
You know, this one's fairly standard in terms of don't send us tiny print.

0:20:36.660 --> 0:20:37.810
Gregory Shannon (CyManII)
There was page limits.

0:20:37.880 --> 0:20:38.760
Gregory Shannon (CyManII)
Please respect those.

0:20:38.770 --> 0:20:39.620
Gregory Shannon (CyManII)
I'll get to those in a minute.

0:20:40.460 --> 0:20:43.370
Gregory Shannon (CyManII)
Non compliance may prevent technical review.

0:20:45.430 --> 0:20:57.30
Gregory Shannon (CyManII)
What we do plan to do is we will, as you submit your proposals, we'll look them over if the deadline has not passed and we see something that we believe should be corrected, we will get back to you.

0:20:57.710 --> 0:21:6.310
Gregory Shannon (CyManII)
Uh, if we have time, we can't guarantee that, but that's what we've done in the past, you know, because of course, we want to consider as broad and as deep.

0:21:6.920 --> 0:21:18.270
Gregory Shannon (CyManII)
Uh select set of proposals as we can, so we don't want small small mistakes to prevent that from a submission requirement.

0:21:18.440 --> 0:21:23.540
Gregory Shannon (CyManII)
The probably one of the big constraints is the technical volume limited to five page 5 pages.

0:21:26.120 --> 0:21:28.780
Gregory Shannon (CyManII)
You you know, there's been concerns about.

0:21:28.790 --> 0:21:32.850
Gregory Shannon (CyManII)
Well, I'm, you know, if I'm applying to all 5 technical areas, that sounds like a challenge.

0:21:33.840 --> 0:21:49.900
Gregory Shannon (CyManII)
The IT is a challenge to be concise, yes, but given that we anticipate a number of responses to this RFP, we the Technical Review Committee needs to have needs to have a concise, concise proposal.

0:21:50.680 --> 0:21:57.490
Gregory Shannon (CyManII)
You do need to have the cost share commitment letters that include that, and that's for the whole.

0:21:57.580 --> 0:22:8.270
Gregory Shannon (CyManII)
That's for the your total cost, so not each member has to contribute 20%, but in total relative to the total cost, 20%, at least 20% needs to be caution share.

0:22:9.200 --> 0:22:16.750
Gregory Shannon (CyManII)
Similarly for the 10% minimum for technical error 5, you need to allocate at least 10% of the total budget total budget.

0:22:16.760 --> 0:22:22.800
Gregory Shannon (CyManII)
So total budget includes funds from DOE and cost share needs to be for technically or five.

0:22:23.350 --> 0:22:25.850
Gregory Shannon (CyManII)
Again, non compliance may prevent technical review.

0:22:28.460 --> 0:22:36.930
Gregory Shannon (CyManII)
Our technical criteria are fairly typical in terms of technical merit, alignment and capabilities and capacity.

0:22:39.530 --> 0:22:40.420
Gregory Shannon (CyManII)
You know in other.

0:22:42.690 --> 0:22:45.80
Gregory Shannon (CyManII)
RFP's Technical Mirror might be weighted higher.

0:22:45.830 --> 0:22:58.850
Gregory Shannon (CyManII)
Uh, but it's really important that there be in alignment and it really be important that, you know, the work can actually get done in the right people are working on the project in terms of their expertise they bring to the table and that's why it's weighted.

0:22:58.860 --> 0:23:0.260
Gregory Shannon (CyManII)
That's why it's weighted so heavily.

0:23:1.0 --> 0:23:5.50
Gregory Shannon (CyManII)
So this evaluation will be done by the science and Technology Advisory Committee.

0:23:5.60 --> 0:23:12.330
Gregory Shannon (CyManII)
That stack has that Cymanii has and again they will only be looking at the technical criteria.

0:23:12.340 --> 0:23:14.620
Gregory Shannon (CyManII)
These technical criteria, they will not be looking at.

0:23:16.860 --> 0:23:18.370
Gregory Shannon (CyManII)
But they might.

0:23:18.380 --> 0:23:25.610
Gregory Shannon (CyManII)
I guess I'll probably see the top line budget, but they won't see the breakdown beyond that, the selection criteria.

0:23:25.620 --> 0:23:28.740
Gregory Shannon (CyManII)
So once the proposals are evaluated, then there'll be a selection.

0:23:31.370 --> 0:23:44.940
Gregory Shannon (CyManII)
Discussion that goes on between Cymanii and DOE to identify which projects to select, and these are the components that we use to make that selection.

0:23:45.320 --> 0:23:49.520
Gregory Shannon (CyManII)
I do want to go back here, to the technical areas.

0:23:49.950 --> 0:23:53.630
Gregory Shannon (CyManII)
You know, you may if you say you apply to all 5.

0:23:55.250 --> 0:24:9.630
Gregory Shannon (CyManII)
Technical area is in a given proposal, we may decide that we've got a better solution, say for the research part compared to what you proposed or maybe the research part is the one that we really think fits well and want to use that.

0:24:9.640 --> 0:24:15.500
Gregory Shannon (CyManII)
So we may ask as part of the selection, we say we've selected your work in technical area for but not your working.

0:24:15.510 --> 0:24:31.50
Gregory Shannon (CyManII)
The other technical areas and then we can have a discussion about whether or not that breaks the

proposal and you want to withdraw or you like that, that's sufficient and you want to proceed, but that's a discussion that goes on as we go through that selection process ultimately be awe must approve.

0:24:31.960 --> 0:24:32.170
Gregory Shannon (CyManII)
That.

0:24:32.180 --> 0:24:42.590
Gregory Shannon (CyManII)
Sorry, do we must approve our the selections as part of the cooperative agreement cooperative arrangement we have between cymanii and the Department of Energy.

0:24:44.830 --> 0:24:50.140
Gregory Shannon (CyManII)
Key dates here, so the due date right now is 7:00 PM Eastern on the 29th.

0:24:52.280 --> 0:25:1.570
Gregory Shannon (CyManII)
There's been requests about finding commitment letters in a timely manner in the RFP, in the RFP, in the FAQ.

0:25:2.0 --> 0:25:3.750
Gregory Shannon (CyManII)
That question has come up in.

0:25:3.760 --> 0:25:13.830
Gregory Shannon (CyManII)
Our response has been if you need to make a contingent element like you haven't gotten a commitment letter, but you think you can get it within, you know a week or two weeks after submission.

0:25:13.840 --> 0:25:23.580
Gregory Shannon (CyManII)
Feel, you know, go ahead and put that in the proposal and we'll consider that we anticipate notification of selection October 31st.

0:25:24.50 --> 0:25:29.900
Gregory Shannon (CyManII)
So your project could start as soon as November 1st, but that would probably almost certainly be at risk.

0:25:30.10 --> 0:25:32.200
Gregory Shannon (CyManII)
It takes a while for DOE to do their paperwork.

0:25:32.810 --> 0:25:44.660
Gregory Shannon (CyManII)
The approved to do the final approval update our cooperative agreement and for us to issue the several awards, but we have many performers who often start you know, working at risk.

0:25:44.670 --> 0:25:49.390
Gregory Shannon (CyManII)
Again, that's up to the individual organizations about what what works for that.

0:25:53.480 --> 0:25:54.480
Gregory Shannon (CyManII)
Yeah, that's like my notes say.

0:25:54.490 --> 0:25:58.450
Gregory Shannon (CyManII)
OK, so I think that brings us to the end here.

0:25:58.760 --> 0:26:0.560
Gregory Shannon (CyManII)
There is that FAQ page I put the.

0:26:2.820 --> 0:26:5.370
Gregory Shannon (CyManII)
The link to that in at the start of the webinar here.

0:26:5.380 --> 0:26:8.450
Gregory Shannon (CyManII)
So you can take a look at that, cause some of your questions may already be answered there.

0:26:8.460 --> 0:26:8.730
Gregory Shannon (CyManII)
There's.

0:26:8.740 --> 0:26:10.520
Gregory Shannon (CyManII)
I think there's 29 questions in there right now.

0:26:11.470 --> 0:26:18.240
Gregory Shannon (CyManII)
We do plan to respond to each of the questions that are showing up in the chat.

0:26:20.360 --> 0:26:24.180
Gregory Shannon (CyManII)
We'll figure out you know how to let you know if it's already been asked or not.

0:26:25.870 --> 0:26:29.990
Gregory Shannon (CyManII)
But with that first I want to ask Howard, is there anything you'd like to add to what I've said?

0:26:37.290 --> 0:26:38.620
Gregory Shannon (CyManII)
Maybe Howard, if.

0:26:38.750 --> 0:26:41.160
Howard Grimes (CyManII)
No, there's not anything to add, Greg.

0:26:41.170 --> 0:26:46.70
Howard Grimes (CyManII)
I think that was a very thorough coverage, so thank you.

0:26:47.150 --> 0:26:47.420
Gregory Shannon (CyManII)
OK.

0:26:48.890 --> 0:26:52.410
Gregory Shannon (CyManII)
So Brian, let's have the let's have the first question.

0:26:53.480 --> 0:26:54.30
Brian Luffy (CyManII)
All right.

0:26:54.40 --> 0:26:57.490
Brian Luffy (CyManII)
So the first one from uh Howard Cho is in the TA.

0:26:57.500 --> 0:27:0.670
Brian Luffy (CyManII)
Four of the RFP there are four research topics.

0:27:0.880 --> 0:27:6.830
Brian Luffy (CyManII)
Should the proposal address all four topics, or can we select any of the four for the proposed effort?

0:27:9.350 --> 0:27:11.660
Gregory Shannon (CyManII)
You can select any four for the proposed effort.

0:27:11.670 --> 0:27:20.390
Gregory Shannon (CyManII)
Yes, those are guidance that we have as to what you know, it's up to you to interpretate interpret what would make a viable proposal.

0:27:21.990 --> 0:27:29.540
Gregory Shannon (CyManII)
Again, you know, we expect it will be making trade all sorts of trade offs as we try and make our selections.

0:27:30.720 --> 0:27:32.770
Gregory Shannon (CyManII)
So it's not a requirement.

0:27:33.440 --> 0:27:36.650
Gregory Shannon (CyManII)
Someone who's got a more complete research plan?

0:27:36.660 --> 0:27:44.710
Gregory Shannon (CyManII)
Sure, that might have advantages, but presumably if you're focusing on one you you feel you have particular strengths, then that works too.

0:27:45.530 --> 0:27:50.940
Gregory Shannon (CyManII)
Uh, we anticipate that we may not be able to fund research across all all of these aspects.

0:27:51.510 --> 0:27:59.40
Gregory Shannon (CyManII)
You know, again that will depend upon the technical quality of submissions as well as availability of funds and priorities across the other technical areas.

0:28:2.310 --> 0:28:2.690
Brian Luffy (CyManII)
OK.

0:28:2.380 --> 0:28:2.900
Gregory Shannon (CyManII)
Next question.

0:28:3.660 --> 0:28:3.800
Brian Luffy (CyManII)
Yep.

0:28:4.170 --> 0:28:5.190
Brian Luffy (CyManII)
Our next one's from Henry.

0:28:5.200 --> 0:28:8.220
Brian Luffy (CyManII)
What specific TRL's are acceptable for funding?

0:28:10.320 --> 0:28:13.300
Gregory Shannon (CyManII)
Umm, the.

0:28:13.600 --> 0:28:17.800
Gregory Shannon (CyManII)
Let's see, in trying to remember, you know, the the goal, the goal of.

0:28:19.980 --> 0:28:27.170
Gregory Shannon (CyManII)
The goal of there RFP is to improve the TRL level in the technical in the use case.

0:28:28.380 --> 0:28:34.990
Gregory Shannon (CyManII)
So really anywhere from 2/2 to six, the goal is to show that you're increasing the.

0:28:35.0 --> 0:28:37.640
Gregory Shannon (CyManII)
The work will increase the technical readiness level.

0:28:39.940 --> 0:28:40.430
Gregory Shannon (CyManII)
Next question.

0:28:50.730 --> 0:28:50.940
Gregory Shannon (CyManII)
Brian.

0:28:54.650 --> 0:28:56.350
Brian Luffy (CyManII)
And on video, I've lost the mute button.

0:28:56.780 --> 0:28:57.150
Gregory Shannon (CyManII)
OK.

0:28:56.360 --> 0:29:1.70
Brian Luffy (CyManII)
Apologies from from Richard Donovan, how will the review panels for the RFP be formed?

0:29:2.430 --> 0:29:6.630
Gregory Shannon (CyManII)
They're part of the membership agreement and there's a charter for them that members have access to.

0:29:7.540 --> 0:29:16.590
Gregory Shannon (CyManII)
Umm, that we've reached out to appropriate VPR's and points of contact for farming that technical advisory committee.

0:29:17.680 --> 0:29:18.0
Brian Luffy (CyManII)
Great.

0:29:19.130 --> 0:29:24.370
Brian Luffy (CyManII)
Umm, can cost share be a combination of Labor materials and experimental hardware?

0:29:25.370 --> 0:29:25.550
Gregory Shannon (CyManII)
Yes.

0:29:27.510 --> 0:29:27.870
Brian Luffy (CyManII)
OK.

0:29:33.620 --> 0:29:34.220
Brian Luffy (CyManII)
All right.

0:29:34.300 --> 0:29:39.390
Brian Luffy (CyManII)
Next one a couple from Brendan is the $4.7 million a one time total grant amount.

0:29:39.450 --> 0:29:41.510
Brian Luffy (CyManII)
Work in that amount be awarded multiple times.

0:29:42.860 --> 0:29:44.760
Gregory Shannon (CyManII)
It's for this, for this RFP.

0:29:44.770 --> 0:29:47.500
Gregory Shannon (CyManII)
It's the the total RFP amount there.

0:29:47.550 --> 0:29:51.890
Gregory Shannon (CyManII)
There will be additional RFP in coming months and years.

0:29:54.320 --> 0:29:54.710
Brian Luffy (CyManII)
Yep.

0:29:55.620 --> 0:29:56.470
Brian Luffy (CyManII)
Follow one question.

0:29:56.480 --> 0:29:59.880
Brian Luffy (CyManII)
Could the same company and or consortium be awarded multiple grants?

0:30:3.330 --> 0:30:19.550
Gregory Shannon (CyManII)
Yeah, I mean, presumably it'd be combined into one sub award, but yes, multiple if they submitted multiple proposals, uh, there's no preclusion of that though diversity of effort, diversity of our teams and collaborations is important to us.

0:30:21.90 --> 0:30:21.640
Brian Luffy (CyManII)
OK.

0:30:21.950 --> 0:30:33.760
Brian Luffy (CyManII)
Last last of the sub questions are the awards intended to increase OT cybersecurity offerings in the US marketplace and drive jobs in the space or industrial company adoption.

0:30:35.0 --> 0:30:35.400
Gregory Shannon (CyManII)
The latter.

0:30:36.690 --> 0:30:36.870
Brian Luffy (CyManII)
OK.

0:30:36.740 --> 0:30:40.880
Gregory Shannon (CyManII)
It's really about identifying solutions that are relevant to the manufacturers.

0:30:42.720 --> 0:30:50.830
Gregory Shannon (CyManII)
You know, I've worked in the security industry many decades and it's one thing to produce a product that you can make money off of as a security vendor.

0:30:51.140 --> 0:30:59.370
Gregory Shannon (CyManII)
It's another thing to actually improve the level of security for your customers in a way that is noticeable and enhances competition.

0:31:0.990 --> 0:31:4.880
Brian Luffy (CyManII)
All right, I'll take the next couple to give your your points a a break.

0:31:4.970 --> 0:31:15.0
Brian Luffy (CyManII)
So then you can ask would the 20% cost share for the project contribute towards the $25,000 a year in kind cost share for the required collaborative membership at CYMANII?

0:31:15.630 --> 0:31:15.810
Gregory Shannon (CyManII)
Yes.

0:31:17.960 --> 0:31:18.230
Gregory Shannon (CyManII)
Yeah.

0:31:15.250 --> 0:31:19.660
Brian Luffy (CyManII)
The answer to that is it does from Doctor Canetta.

0:31:19.670 --> 0:31:25.740
Brian Luffy (CyManII)
Is it possible to get a draft copy of the CRADA sighted in the intellectual property provisions section of the RFP?

0:31:26.10 --> 0:31:27.360
Brian Luffy (CyManII)
Yes, that's possible.

0:31:27.370 --> 0:31:34.820
Brian Luffy (CyManII)
If you could send an email to the RFP at cymanii.org address, we will be able to respond to you with the appropriate paperwork.

0:31:35.730 --> 0:31:37.380
Brian Luffy (CyManII)
Next question from Brandon.

0:31:37.390 --> 0:31:46.890
Brian Luffy (CyManII)
What is the expectation at the end of 15 months with the results need to be ready to be published or could it still be a work in progress implementation ongoing?

0:31:48.430 --> 0:31:48.920
Gregory Shannon (CyManII)
Umm.

0:31:50.10 --> 0:31:52.60
Gregory Shannon (CyManII)
Take a look at it.

0:31:52.70 --> 0:31:53.630
Gregory Shannon (CyManII)
I mean it could be, but it needs to achieve.

0:31:54.480 --> 0:31:57.880
Gregory Shannon (CyManII)
You know I what we're looking for is that advancement of TRL level.

0:31:59.160 --> 0:32:7.240
Gregory Shannon (CyManII)
So we want to see progress in that 15 months that the Tiara level in terms of applicability to manufacturers has has improved.

0:32:8.660 --> 0:32:21.890
Gregory Shannon (CyManII)
If you look at it, I don't have the text here in in the chart, but if you look at the text for technical area 5, it is about creating artifacts that can be disseminated and shared as part of the work.

0:32:21.970 --> 0:32:32.590
Gregory Shannon (CyManII)
And so that's an important aspect is that there's something produced tangible as a demonstration and or documentation which could be a paper.

0:32:35.40 --> 0:32:35.800
Gregory Shannon (CyManII)
Of of the work.

0:32:38.770 --> 0:32:39.70
Brian Luffy (CyManII)
OK.

0:32:40.750 --> 0:32:46.0
Brian Luffy (CyManII)
Next question is from Paulo RFP page 8, TA 4 research.

0:32:46.70 --> 0:32:49.780
Brian Luffy (CyManII)
The project should showcase the following new innovations, he said.

0:32:49.790 --> 0:32:51.780
Brian Luffy (CyManII)
Is this an and or an org gate?

0:32:51.790 --> 0:32:57.390
Brian Luffy (CyManII)
That is, should we showcase all of the four innovations to be successful or a subset or one of them?

0:32:58.750 --> 0:33:4.800
Gregory Shannon (CyManII)
Again, it's going to be a trade off, just like the the research question of, umm, more is better but.

0:33:6.170 --> 0:33:7.300
Gregory Shannon (CyManII)
Better is better.

0:33:7.730 --> 0:33:15.610
Gregory Shannon (CyManII)
So if if you have, if you have a, you know if you feel you can really nail it in in one of those, do it.

0:33:16.170 --> 0:33:18.290
Gregory Shannon (CyManII)
Umm you feel you can hit all four?

0:33:18.300 --> 0:33:18.890
Gregory Shannon (CyManII)
Then do that.

0:33:18.900 --> 0:33:20.0
Gregory Shannon (CyManII)
I mean it's it's a trade off.

0:33:22.60 --> 0:33:22.300
Brian Luffy (CyManII)
OK.

0:33:23.800 --> 0:33:25.390
Brian Luffy (CyManII)
Eric asked IUC's.

0:33:25.400 --> 0:33:41.560
Brian Luffy (CyManII)
One and three both refer to the incorporation of semantic technologies in TA23, and four is there interest in awarding to vendors with additional cybersecurity technologies to be integrated with Cymanii's current technologies, such as SDA, CPP and SYNC.

0:33:42.760 --> 0:33:43.240
Gregory Shannon (CyManII)
Absolutely.

0:33:45.250 --> 0:33:45.390
Gregory Shannon (CyManII)
Yes.

0:33:46.420 --> 0:33:48.290
Brian Luffy (CyManII)
OK, I'm from Jeff.

0:33:48.760 --> 0:33:54.530
Brian Luffy (CyManII)
Can you further explain what you mean by production level environment in some of the fact answers?

0:33:54.780 --> 0:34:0.930
Brian Luffy (CyManII)
Could you could this be production level manufacturing equipment in a lab instead of a manufacturing facility?

0:34:2.860 --> 0:34:4.360
Gregory Shannon (CyManII)
It it's gonna, it's gonna vary.

0:34:4.370 --> 0:34:12.110
Gregory Shannon (CyManII)
I mean, it's a matter of being able to, umm, have realistic constraints, so maybe you could have that in a lab.

0:34:12.540 --> 0:34:22.260
Gregory Shannon (CyManII)
It may be impractical to be on a operational production floor because someone is producing widgets in can't afford to have interruptions, so there's a variety of in between.

0:34:22.270 --> 0:34:25.690
Gregory Shannon (CyManII)
There's integration labs that one could use.

0:34:25.700 --> 0:34:28.150
Gregory Shannon (CyManII)
There's demonstration environments that one could use.

0:34:28.640 --> 0:34:37.580
Gregory Shannon (CyManII)
There's full mockups that manufacturer might have, or a equipment provider might have, so it could be any one of those.

0:34:37.590 --> 0:34:48.760
Gregory Shannon (CyManII)
The the key aspect is incorporate the realism and the constraints that are part of what's inhibiting and making it difficult for security and energy and innovations to be adopted by US manufacturers.

0:34:52.130 --> 0:34:52.780
Brian Luffy (CyManII)
OK.

0:34:53.50 --> 0:34:59.660
Brian Luffy (CyManII)
And from Martin, what is the role of cymanii within each IUC project in regards to collaboration?

0:35:0.980 --> 0:35:3.690
Gregory Shannon (CyManII)
So umm, collaboration will be.

0:35:5.260 --> 0:35:22.640
Gregory Shannon (CyManII)
Across the board, we expect to create integrated teams that you know as I mentioned, you know if you propose in say TA one on the industrial control system and someone else can proposes on TA2 and three, you will be part of the same team.

0:35:23.90 --> 0:35:26.40
Gregory Shannon (CyManII)
So the idea is that we have integrated teams that work together.

0:35:27.0 --> 0:35:30.420
Gregory Shannon (CyManII)
They're not, they're not separate teams that go off and work by themselves.

0:35:30.890 --> 0:35:32.390
Gregory Shannon (CyManII)
We'll have essentially 3 teams.

0:35:33.640 --> 0:35:35.350
Gregory Shannon (CyManII)
You know one team for each use case.

0:35:35.360 --> 0:35:40.760
Gregory Shannon (CyManII)
Roughly, you know, conceivably we might have two for one use case.

0:35:40.770 --> 0:35:43.370
Gregory Shannon (CyManII)
It just, you know, kind of depends, but we do want to have integrated.

0:35:43.580 --> 0:35:49.300
Gregory Shannon (CyManII)
So in terms of Cymanii involvement, we want full cymanii involvement in in all projects.

0:35:53.600 --> 0:35:53.920
Brian Luffy (CyManII)
OK.

0:35:53.810 --> 0:35:56.290
Gregory Shannon (CyManII)
Let me the Mac actually let me digress for a minute.

0:35:56.440 --> 0:36:1.370
Gregory Shannon (CyManII)
I mean, that's part of the, that's one of the things that Cymanii brings is the access to the lab resources.

0:36:1.840 --> 0:36:23.330
Gregory Shannon (CyManII)
So we've got Sandia, Oakridge, INL, we've got NREL now as members and they have funding that brings staffed to the table here that working with CYMANII executive leadership, we decide where to allocate those those lab resources into the projects that we have.

0:36:23.340 --> 0:36:29.670
Gregory Shannon (CyManII)
So those become extra resources to ensure that the overall use cases is successful.

0:36:30.750 --> 0:36:31.220
Gregory Shannon (CyManII)
Next question.

0:36:32.760 --> 0:36:37.60
Brian Luffy (CyManII)
Alright, you mentioned that the bidding organization must be a US entity.

0:36:37.110 --> 0:36:38.850
Brian Luffy (CyManII)
Can the research be done in Europe?

0:36:39.650 --> 0:36:39.870
Gregory Shannon (CyManII)
No.

0:36:41.950 --> 0:36:45.840
Gregory Shannon (CyManII)
The DOE requires all funds be done.

0:36:45.890 --> 0:36:53.190
Gregory Shannon (CyManII)
I'll I'll research be done in the US it can be done by a subsidiary of the European Company, but it must be done in the US.

0:36:53.720 --> 0:36:56.80
Gregory Shannon (CyManII)
I looked that up yesterday just to be sure.

0:36:57.130 --> 0:37:5.380
Brian Luffy (CyManII)
And skipping a a little bit ahead, Carol had a very similar question saying if we're foreign owned with US locations and are currently members, can we bid to do work in the US?

0:37:5.390 --> 0:37:10.50
Brian Luffy (CyManII)
And I believe the answer would be as long as the work is done in the US, that would be acceptable.

0:37:11.270 --> 0:37:14.240
Gregory Shannon (CyManII)
It has to be US subsidiary that's proposing.

0:37:14.620 --> 0:37:21.750
Gregory Shannon (CyManII)
I mean, it has to go through US subsidiary as what the the the requirements are that we the the DOE put on us.

0:37:24.570 --> 0:37:24.950
Brian Luffy (CyManII)
All right.

0:37:28.190 --> 0:37:35.170
Brian Luffy (CyManII)
If cymanii technologies are required to be incorporated, I may have already just asked this well, so many insured resources to help do so.

0:37:37.80 --> 0:37:38.510
Gregory Shannon (CyManII)
That's part of the coordination.

0:37:38.520 --> 0:37:45.620
Gregory Shannon (CyManII)
We do want to do if it's an onerous amount of research resources that might affect the, you know, selectability of the proposal.

0:37:46.710 --> 0:37:46.930
Brian Luffy (CyManII)
OK.

0:37:48.510 --> 0:37:53.80
Brian Luffy (CyManII)
And the next question is, is there a minimum amount or project size required?

0:37:53.90 --> 0:37:58.130
Brian Luffy (CyManII)
For example, can we make a proposal amounting to 100,000, or would that be too small?

0:37:59.670 --> 0:37:59.960
Gregory Shannon (CyManII)
No.

0:37:59.970 --> 0:38:2.100
Gregory Shannon (CyManII)
You can make a proposal for $0.00.

0:38:2.110 --> 0:38:2.700
Gregory Shannon (CyManII)
Well, no.

0:38:2.910 --> 0:38:4.600
Gregory Shannon (CyManII)
Shouldn't say zero DOE dollars?

0:38:4.610 --> 0:38:8.680
Gregory Shannon (CyManII)
I was thinking in terms of DOE dollars and do all cost share.

0:38:8.770 --> 0:38:10.190
Gregory Shannon (CyManII)
No, there's not really a too small.

0:38:11.610 --> 0:38:18.380
Gregory Shannon (CyManII)
There's paperwork involved so that that might, you know, there's a diminishing return there, of course.

0:38:21.550 --> 0:38:22.100
Brian Luffy (CyManII)
OK.

0:38:22.230 --> 0:38:30.180
Brian Luffy (CyManII)
Next question from Marty, do you have manufacturing facilities already identified for any IUC TA1?

0:38:32.260 --> 0:38:35.260
Gregory Shannon (CyManII)
Umm, we have.

0:38:35.450 --> 0:38:45.210
Gregory Shannon (CyManII)
I mean, we had so one thing is we have our C4M, which is our manufacturing demonstration facility down in the Port San Antonio area.

0:38:45.220 --> 0:38:48.380
Gregory Shannon (CyManII)
So we we have those as proxies potentially.

0:38:51.730 --> 0:38:59.280
Gregory Shannon (CyManII)
But I mean we're, you know, what we want to have is a realistic we want to have a realistic environment where we can make advances.

0:38:59.290 --> 0:39:9.890
Gregory Shannon (CyManII)
I mean so for example, if you don't have a environment accessible and you want to propose, say, in TA2, that's acceptable.

0:39:10.690 --> 0:39:17.380
Gregory Shannon (CyManII)
Where we're where it's so many responsibility then to kind of marry that up with a a TA1 responder.

0:39:20.90 --> 0:39:20.460
Brian Luffy (CyManII)
OK.

0:39:20.510 --> 0:39:21.100
Brian Luffy (CyManII)
Thank you.

0:39:21.270 --> 0:39:22.170
Brian Luffy (CyManII)
I'll take the next one.

0:39:22.180 --> 0:39:25.390
Brian Luffy (CyManII)
The question was, do we have to be a member to participate in the RFP?

0:39:26.620 --> 0:39:45.780
Gregory Shannon (CyManII)
No, you do have to be a member to be awarded as a selectee so that in order to get the sub award you would and as as well as any sub awardees, any, any country, any one on your team would also have to become a member.

0:39:47.680 --> 0:39:48.60
Brian Luffy (CyManII)
OK.

0:39:51.600 --> 0:39:53.430
Gregory Shannon (CyManII)
And when I say member, I mean organization.

0:39:55.160 --> 0:39:56.810
Gregory Shannon (CyManII)
Individuals aren't members per se.

0:39:56.820 --> 0:40:1.90
Gregory Shannon (CyManII)
They're we're or technical technical team members and so on.

0:40:1.990 --> 0:40:2.340
Brian Luffy (CyManII)
Right.

0:40:2.350 --> 0:40:11.20
Brian Luffy (CyManII)
So it is not a requirement to submit a proposal, but it will be a requirement to be awarded in the proposal or awarded correct.

0:40:12.170 --> 0:40:12.470
Gregory Shannon (CyManII)
Correct.

0:40:11.30 --> 0:40:13.820
Brian Luffy (CyManII)
OK, so want to clarify that next question.

0:40:13.130 --> 0:40:14.100
Gregory Shannon (CyManII)
Correct. Yeah.

0:40:15.200 --> 0:40:19.520
Brian Luffy (CyManII)
Do all researchers and project members have to be U.S. citizens?

0:40:23.600 --> 0:40:26.90
Gregory Shannon (CyManII)
It has turned out that we have very few non U.S.

0:40:26.100 --> 0:40:27.370
Gregory Shannon (CyManII)
Citizens on our technical team.

0:40:32.490 --> 0:40:32.650
Brian Luffy (CyManII)
OK.

0:40:34.810 --> 0:40:42.690
Brian Luffy (CyManII)
Next question from Michael, if our headquarters is in the US, are we able to have workers in the EU to manage the project?

0:40:46.300 --> 0:40:49.450
Gregory Shannon (CyManII)
Offhand, kind of no, because.

0:40:53.680 --> 0:40:55.720
Gregory Shannon (CyManII)
Yeah, I mean, all work must be performed in the US.

0:40:56.930 --> 0:41:1.700
Gregory Shannon (CyManII)
Uh, because the the only way that could happen is if there was part of cost.

0:41:1.710 --> 0:41:11.670
Gregory Shannon (CyManII)
Share maybe, but I think that would be, I mean that's a question we can put the DOE, but I suspect they would be hesitant, but but maybe not, I mean that's not outside the realm.

0:41:11.680 --> 0:41:15.570
Gregory Shannon (CyManII)
I think they're just doing project management, not technical work that might be possible.

0:41:15.960 --> 0:41:17.290
Gregory Shannon (CyManII)
Ohh actually here's the problem.

0:41:17.440 --> 0:41:28.300
Gregory Shannon (CyManII)
We don't know allow foreign X we don't allow access to our trusted environment outside of the US so

no, that would I I can't see how that would work unless they're flying over every time they want to do project management.

0:41:29.470 --> 0:41:29.900
Brian Luffy (CyManII)
OK.

0:41:30.150 --> 0:41:35.500
Brian Luffy (CyManII)
And for those on the call, please don't worry about taking drastic notes in real time.

0:41:35.810 --> 0:41:41.640
Brian Luffy (CyManII)
All of these will be published to our fact as well as this recording as well as the slides onto the RFP page.

0:41:41.650 --> 0:41:49.440
Brian Luffy (CyManII)
So you know, and Michael dancer, your question if it's TA 5 resources for project management Simon, he can help you with that too if it's required.

0:41:50.380 --> 0:41:50.540
Gregory Shannon (CyManII)
Yes.

0:41:50.370 --> 0:42:0.730
Brian Luffy (CyManII)
Umm, so the next question for all IUC's is it required that the awardee specifically implement in a small or medium manufacturers production environment?

0:42:2.230 --> 0:42:5.410
Gregory Shannon (CyManII)
We will have a strong bias towards relevance for SMS.

0:42:10.770 --> 0:42:10.950
Brian Luffy (CyManII)
OK.

0:42:16.430 --> 0:42:20.650
Brian Luffy (CyManII)
And the next question is, can you please elaborate on the US citizenship answer a bit more?

0:42:22.350 --> 0:42:23.360
Brian Luffy (CyManII)
That's from Ed Vasko.

0:42:28.90 --> 0:42:29.610
Gregory Shannon (CyManII)
Yeah, go ahead.

0:42:29.620 --> 0:42:30.740
Gregory Shannon (CyManII)
Take out Howard, by the way.

0:42:26.300 --> 0:42:30.830
Howard Grimes (CyManII)
Yeah, Greg, why don't you let me handle that one, if you don't mind.

0:42:31.130 --> 0:42:40.340
Howard Grimes (CyManII)
And so, umm, on a technical level, do you really does not preclude foreign nationals?

0:42:40.960 --> 0:42:43.20
Howard Grimes (CyManII)
However, the membership agreement.

0:42:43.30 --> 0:43:3.790
Howard Grimes (CyManII)
I'm sorry, the cooperative agreement that we have with the DOE to operate the Institute does absolutely declare that every person who's granted access to our infrastructure must be approved by the Department of Energy.

0:43:5.100 --> 0:43:15.0
Howard Grimes (CyManII)
We have, you know, for 2 1/2 years now had a list of foreign nationals at 4 DOE to approve.

0:43:16.930 --> 0:43:19.280
Howard Grimes (CyManII)
And that list is is quite lengthy.

0:43:21.880 --> 0:43:22.220
Howard Grimes (CyManII)
Do you?

0:43:22.230 --> 0:43:28.180
Howard Grimes (CyManII)
We has only approved one foreign national, so that goes back to Gregg's comment earlier that.

0:43:29.970 --> 0:43:36.780
Howard Grimes (CyManII)
That, you know our technical teams and you know and and our executive teams tend to be U.S.

0:43:36.790 --> 0:43:37.400
Howard Grimes (CyManII)
Citizens.

0:43:37.670 --> 0:43:47.490
Howard Grimes (CyManII)

And that's fundamentally, you know, the reason why you can propose uh for a foreign national to be on the team.

0:43:47.500 --> 0:43:57.940
Howard Grimes (CyManII)
But our experience, umm, demonstrates that DOE is not inclined to approve said for nationals.

0:43:59.30 --> 0:44:5.700
Howard Grimes (CyManII)
We have pushed this issue with DOE to an extreme level.

0:44:6.270 --> 0:44:18.50
Howard Grimes (CyManII)
We even have one national lab member who's a technical lead on, you know, for the for their national lab, who is a green card holder.

0:44:18.60 --> 0:44:35.880
Howard Grimes (CyManII)
And he even although he he works for DOE, he has not yet been approved by DOE, you know, to work on cymanii where you know we're we're pushing that one hard for obvious reasons but but that is if you will the bottom line.

0:44:41.660 --> 0:44:42.150
Gregory Shannon (CyManII)
Thanks Howard.

0:44:43.610 --> 0:44:45.170
Gregory Shannon (CyManII)
To the challenging topic for us.

0:44:48.310 --> 0:44:49.110
Gregory Shannon (CyManII)
Brian, next question.

0:44:50.10 --> 0:44:55.50
Brian Luffy (CyManII)
We we have reached the end of the the questions in the Q&A.

0:44:55.100 --> 0:45:1.420
Brian Luffy (CyManII)
So maybe we pause here for another 60 seconds or so, which is to see if someone's working on something that they'd like to ask.

0:45:4.150 --> 0:45:4.820
Gregory Shannon (CyManII)
Sounds good.

0:45:4.830 --> 0:45:6.760
Gregory Shannon (CyManII)
Yeah, I've OK.

0:45:6.770 --> 0:45:11.790
Gregory Shannon (CyManII)
Let's see if I can want to reemphasize anything that let's see.

0:45:20.420 --> 0:45:21.870
Gregory Shannon (CyManII)
Yeah, take a look at the road map.

0:45:21.880 --> 0:45:34.310
Gregory Shannon (CyManII)
I mean, I think that's a key component of where there's, you know, tells you how we're looking at the problem, tells you how we, what we consider some of the challenges, the hardest challenges.

0:45:36.360 --> 0:45:38.510
Gregory Shannon (CyManII)
You know the technology field is fast evolving.

0:45:39.410 --> 0:45:44.550
Gregory Shannon (CyManII)
Umm, but we want to have certainty about, you know, protecting manufacturing.

0:45:45.850 --> 0:45:47.980
Gregory Shannon (CyManII)
Can you propose a use case that is not on your list?

0:45:52.730 --> 0:45:53.710
Gregory Shannon (CyManII)
It would. Yeah.

0:45:54.440 --> 0:45:56.850
Gregory Shannon (CyManII)
You know you have to check one of the boxes of the three.

0:45:58.180 --> 0:46:3.510
Gregory Shannon (CyManII)
Umm, so I think it would be difficult to you know you could maybe.

0:46:6.300 --> 0:46:17.850
Gregory Shannon (CyManII)
Not modify but interpret a use case, maybe in a creative way, but right now these use cases are what's approved by between cymanii and DOE.

0:46:18.180 --> 0:46:24.390
Gregory Shannon (CyManII)
For this RFP, I would expect that we will, we may take that as information for a future RFP.

0:46:24.400 --> 0:46:29.850
Gregory Shannon (CyManII)
If you have a particular compelling use case, but for this RFP, we really need to stick to these use cases.

0:46:35.200 --> 0:46:36.80
Gregory Shannon (CyManII)
Any other questions, Brian?

0:46:37.430 --> 0:46:41.500
Brian Luffy (CyManII)
Next one is how many projects do you expect to award as part of this RFP?

0:46:43.460 --> 0:46:43.710
Gregory Shannon (CyManII)
Yeah.

0:46:43.720 --> 0:46:59.350
Gregory Shannon (CyManII)
If you go to the selection criteria, I mean that's kind of gives you a sense of what that might mean if we're mixing and matching projects, you know, I could imagine 20 or 30 entities being involved at the end of the day depending upon how cost share is is done.

0:47:1.310 --> 0:47:5.290
Gregory Shannon (CyManII)
And how things are split out or could be it could be, you know half that or 1/3 of that.

0:47:7.770 --> 0:47:12.960
Gregory Shannon (CyManII)
It's really about how well you know we the the goal of the deal we is to have the strongest team possible.

0:47:13.190 --> 0:47:15.720
Gregory Shannon (CyManII)
The goal of Cymanii is to have the strongest team possible.

0:47:16.130 --> 0:47:21.950
Gregory Shannon (CyManII)
We've been successful with that model for the last two years, last three years and this RFP is part of continuing that.

0:47:25.670 --> 0:47:26.270
Brian Luffy (CyManII)
OK.

0:47:26.320 --> 0:47:26.640
Brian Luffy (CyManII)
And.

0:47:26.710 --> 0:47:27.480
Brian Luffy (CyManII)
Holly asked.

0:47:27.490 --> 0:47:31.140
Brian Luffy (CyManII)
Could you elaborate on the shared secured environment?

0:47:32.600 --> 0:47:41.930
Gregory Shannon (CyManII)
Yeah, I mean the basic approach is that your issued asymmetric credential that allows you to remotely access the infrastructure we're using.

0:47:43.930 --> 0:47:44.570
Gregory Shannon (CyManII)
Is it dual?

0:47:45.300 --> 0:47:49.790
Gregory Shannon (CyManII)
Yeah, we use duo as part of our authentication mechanism to get into the infrastructure.

0:47:50.150 --> 0:47:59.580
Gregory Shannon (CyManII)
So we have, you know, our team environment, our Microsoft environment, that's separate from the UTSA, you know?

0:47:59.590 --> 0:48:0.410
Gregory Shannon (CyManII)
So people with UTSA.

0:48:2.0 --> 0:48:5.660
Gregory Shannon (CyManII)
Credentials cannot access the cymanii infrastructure.

0:48:6.430 --> 0:48:11.240
Gregory Shannon (CyManII)
Uh, we have a way of, you know, we have a remote git, git lab.

0:48:11.250 --> 0:48:12.720
Gregory Shannon (CyManII)
We've got Azure.

0:48:13.190 --> 0:48:14.0
Gregory Shannon (CyManII)
Yeah, get that.

0:48:14.10 --> 0:48:15.130
Gregory Shannon (CyManII)
We've got Azure we've got.

0:48:17.240 --> 0:48:18.170
Gregory Shannon (CyManII)
You know the wiki.

0:48:18.180 --> 0:48:20.320
Gregory Shannon (CyManII)
We got the what was it?

0:48:21.810 --> 0:48:22.220
Gregory Shannon (CyManII)
Save me.

0:48:22.230 --> 0:48:29.690
Gregory Shannon (CyManII)
Anyhow, we've got the number of components that are typical collaborative environment that we're able to share and do so securely.

0:48:31.780 --> 0:48:32.410
Gregory Shannon (CyManII)
Hope that helps.

0:48:32.420 --> 0:48:39.920
Gregory Shannon (CyManII)
So that's a virtual environment and then, like I said, the SRDI is how we integrate a physical environment, physical elements into that secure environment.

0:48:43.660 --> 0:48:44.640
Brian Luffy (CyManII)
And this questions from.

0:48:47.310 --> 0:48:54.190
Brian Luffy (CyManII)
Michael, who says to add to the question for selection where does software development and research fit in?

0:48:56.30 --> 0:48:56.790
Gregory Shannon (CyManII)
Well, it's part of this.

0:48:58.520 --> 0:49:0.630
Gregory Shannon (CyManII)
I mean, the varsity are all levels.

0:49:0.640 --> 0:49:4.200
Gregory Shannon (CyManII)
Presumably there's there's a software development that needs to be done.

0:49:5.70 --> 0:49:6.500
Gregory Shannon (CyManII)
Umm, that's part of the.

0:49:8.190 --> 0:49:12.90
Gregory Shannon (CyManII)
Balance that cymanii is is dedicated to figuring out.

0:49:13.850 --> 0:49:20.910
Gregory Shannon (CyManII)
Some some proposals may be bring bring some important software development resources to the table.

0:49:20.920 --> 0:49:24.610
Gregory Shannon (CyManII)
We say many may have to provide those or.

0:49:25.10 --> 0:49:27.60
Gregory Shannon (CyManII)
Yeah, I mean, so it can go either way.

0:49:27.570 --> 0:49:43.90
Gregory Shannon (CyManII)
But clearly software development is an important part of this for creating, you know, repeatable transmit transferable solutions least at least at least on the demonstrations that then can be productized by others.

0:49:47.530 --> 0:49:47.870
Brian Luffy (CyManII)
Thank you.

0:50:3.30 --> 0:50:4.710
Brian Luffy (CyManII)
We're looking at about 9 minutes left.

0:50:6.130 --> 0:50:9.500
Gregory Shannon (CyManII)
So, Richard, I'll answer your question about the membership agreement.

0:50:9.950 --> 0:50:12.480
Gregory Shannon (CyManII)
The membership agreement is between the institutions.

0:50:12.490 --> 0:50:16.30
Gregory Shannon (CyManII)
You need to contact your institutional complaint of contact.

0:50:18.220 --> 0:50:19.450
Gregory Shannon (CyManII)
That is it.

0:50:20.640 --> 0:50:20.970
Gregory Shannon (CyManII)
Yeah.

0:50:21.30 --> 0:50:26.420
Gregory Shannon (CyManII)
For that information, we provide that information on an institution by institution basis, not to individuals.

0:50:36.80 --> 0:50:37.620
Gregory Shannon (CyManII)
Yes, the 2023 road map.

0:50:41.240 --> 0:50:44.130
Gregory Shannon (CyManII)
One of the FAQ questions has how to access the road map?

0:50:45.780 --> 0:50:46.400
Gregory Shannon (CyManII)
The hill?

0:50:52.520 --> 0:50:56.100
Gregory Shannon (CyManII)
So the question about validation and test of any software development.

0:50:58.60 --> 0:51:7.320
Gregory Shannon (CyManII)
That is part of what we it would be helpful to see that in proposal, but it's also part of cymanii's general approach in terms of validating.

0:51:9.710 --> 0:51:11.340
Gregory Shannon (CyManII)
Validating approaches as well.

0:51:11.350 --> 0:51:28.610
Gregory Shannon (CyManII)
You know our particular criteria is relevant to Matt small manufacturers and has a degree of integrity that will prove more resilient to adversarial attack and and does also implement some energy savings and or carbon reduction.

0:51:37.810 --> 0:51:41.660
Gregory Shannon (CyManII)
There's no restriction on the type of organization that's awarded.

0:51:42.530 --> 0:51:44.200
Gregory Shannon (CyManII)
You can do be a nonprofit.

0:51:44.210 --> 0:51:47.180
Gregory Shannon (CyManII)
You can be a educational institution.

0:51:47.190 --> 0:51:48.170
Gregory Shannon (CyManII)
You can be a corporation.

0:51:52.730 --> 0:51:54.790
Gregory Shannon (CyManII)
And does development happen in the secured right?

0:51:55.950 --> 0:51:57.900
Gregory Shannon (CyManII)
No, you can't use your own labs.

0:51:57.910 --> 0:52:4.420
Gregory Shannon (CyManII)
That's part of the agreement that your your your organization makes is that the work will be done in our environment.

0:52:21.690 --> 0:52:22.460
Brian Luffy (CyManII)
OK, we're coming up.

0:52:22.70 --> 0:52:22.520
Gregory Shannon (CyManII)
Anything.

0:52:23.810 --> 0:52:25.290
Brian Luffy (CyManII)
Uh, coming up on 7.

0:52:24.830 --> 0:52:25.350
Gregory Shannon (CyManII)
Anything else?

0:52:26.680 --> 0:52:27.470
Gregory Shannon (CyManII)
I'll 7 minutes, yeah.

0:52:28.410 --> 0:52:28.770
Brian Luffy (CyManII)
We're good.

0:52:36.370 --> 0:52:37.990
Gregory Shannon (CyManII)
I'm going to go ahead and close out Brian.

0:52:39.350 --> 0:52:43.420
Brian Luffy (CyManII)
OK, before you do I, I would like to take a moment to thank everyone for attending.

0:52:43.850 --> 0:52:49.430
Brian Luffy (CyManII)
We're really excited to get as many proposals as we can to this.

0:52:49.440 --> 0:52:51.680
Brian Luffy (CyManII)
We're excited with all the collaboration with industry.

0:52:51.690 --> 0:52:57.750
Brian Luffy (CyManII)
We're excited to see small and medium businesses participating, so thank you very much for your attendance.

0:52:57.760 --> 0:53:6.170
Brian Luffy (CyManII)
I hope this was important and educational to you and we would also like to remind you that this will all be posted on the fact and so with that, I'll turn it over to Greg.

0:53:7.620 --> 0:53:7.910
Gregory Shannon (CyManII)
Yeah.

0:53:7.920 --> 0:53:10.870
Gregory Shannon (CyManII)
Thank you for your participation and great questions.

0:53:11.480 --> 0:53:16.850
Gregory Shannon (CyManII)
Hope you have a sense that we, you know, we're trying to create an advantage for the US here.

0:53:17.140 --> 0:53:24.630
Gregory Shannon (CyManII)
We're trying to benefit small, medium manufacturers are trying to increase US competitiveness, but it's a strategic obligation.

0:53:24.700 --> 0:53:42.350
Gregory Shannon (CyManII)
Strategic opportunity we feel and combining the areas of security, secure automation and secure supply chains, secure digitalization and optimization of the manufacturing environment, especially for high, for high, for energy intensive domains.

0:53:43.190 --> 0:53:45.300
Gregory Shannon (CyManII)
So with that, thank you everyone.

0:53:45.670 --> 0:53:56.480
Gregory Shannon (CyManII)
If you have additional questions, send them to RFP at cymanii.org and we'll be burning the midnight oil to answer your questions, but that every good evening.

0:53:56.490 --> 0:53:57.100
Gregory Shannon (CyManII)
Thank you very much.