

# Transcript for NPDES eRule Phase 2 Implementation Overview Webinar

March 26, 2019

Good afternoon. My name is Randy Hill, I am with the Environmental Protection Agency (EPA) Office of Compliance. I am the director of the Enforcement Targeting and Data Division. I want to welcome you all today to our EPA State webinar on the National Pollutant Discharge Elimination System (NPDES) electronic reporting rule. We will be talking today about Phase 2 of the rule. I have a number of folks here from EPA with me. I will first introduce Carey Johnston who is the leader of the eRule implementation team, and I will be principally presenting today's webinar. Carey?

Thank you, Randy. What I'll be doing today is talking very briefly about the logistics of today's webinar. We have well over 200 people, close to 300 people participating so we're muting all lines but we want to get feedback from you. So, on your go to webinar connection is a question box, please use that question box to send in any questions you might have. We have staff here who are reviewing those questions. We will be reserving time throughout the webinar to stop and take questions as well as allotting time at the end presentation to engage in with your questions. For those staff who are not able to participate in today's webinar we are recording the webinar, we will be providing a transcript as well and after the webinar if you have any questions or comments on any of these electronic recordings, we have a general email box, [NPDESeReporting@epa.gov](mailto:NPDESeReporting@epa.gov), and also a phone number that you can call. And with that I will turn it back to Randy.

Thank you, Carey. And I just wanted to say we are joined in the room by a number of members of the staff of the Office of Compliance, we also have with us today, John Dombrowski, who many of you know. He is the deputy director of the Office of Compliance and he will say a few words to wrap us up. John if you just want to introduce yourself so people will recognize your voice. Hello, this is John Dombrowski, I just want to welcome everyone to the webinar. Thank you, John. We also have representatives from our colleagues in the NPDES program in the Office of Water here in headquarters, Sally Gutierrez and Adam Klinger who are the director and deputy director of the Water Permits Division in the Office of Wastewater Management.

What I want to do now is give you a brief overview of what we are going to try to be accomplishing in today's webinar. You can see on your screen the agenda. We have divided this webinar into six parts. We are actually on part one right now which is just the introductions and overview. We will after each of the other sections stop and take questions from the audience and if you would like to ask a question, please submit it to the chat box. We will take a few minutes of questions after each section but then we will move on. Our expectation is we will have at least 30 minutes or so left over at the end for general questions and to pick up the questions we could not get to throughout. You will not have to wait until the end of a couple of people talking at you for an entire hour or hour and a half before you get a chance to provide input.

We will review very, very briefly the electronic reporting rule and the Phase 1 implementation for those who may not have as much familiarity. We are assuming this audience does have a lot of familiarity so we will move through that pretty quickly. We'll then talk about the Phase 2 part of the rule and first we

will give you a broad overview of our plans for Phase 2 implementation. The next two sections we'll break that down to focus first on Phase 2 for those states that have their own electronic systems to collect NPDES data and to transfer those data to EPA electronically. We will then focus in on the development of electronic reporting tools for facilities regulated by EPA or for those States that have chosen in their Phase 2 implementation plan to use EPA tools to collect this information. The last section we'll talk about where we would like to go from here after this webinar. We've had a lot of conversations with you all in a variety of settings. I want to continue that collaboration and also describe for you the forth step that we will be able to offer to you.

This slide is entitled Webinar Objectives but really another title for it could be kind of what are the key messages of what we hope to accomplish today. And it kind of echoes what I said about the agenda. After we give you an update on the implementation, we're going to talk about the challenges that we see in finishing the Phase 2 implementation. For those states that are going to be providing the data to us from their own systems, we have already developed a series of technical papers to better define these so-called appendix A data elements, those that are specified in the rule. And we will describe for you today our interim approach for electronic data transfer. We will, as I will explain, provide a new electronic data transfer schema very soon that will allow States to flow those data to EPA. For those States that where the Phase 2 data (sorry, there's a minor technical difficulty). With respect to the States that will be using EPA's NPDES eReporting Tool (NeT) to collect the information. As you will see, we are developing electronic reporting tools for literally hundreds of different general permits as well as program reports, 6 different program reports plus the one we have already completed. We will complete most of those electronic reporting products by December of 2020 which is when the Phase 2 is supposed to be implemented. We will not however be able to complete all of them. We will talk about that in a lot more detail. We will need going forward as we have in the past regular engagement with NeT States on, in order to develop these electronic reporting tools. Finally, as I said, we'll talk at the end about what our on-going collaboration and outreach will be both for NeT States and for those states that will be providing data through Electronic Data Transfer (EDT).

Then without further ado, I'll move into the next section of the webinar which just gives a very brief review of Phase 1. For each section of the webinar we have created this slide that you see now which is kind of the key messages for this section of the webinar. It echoes some of the key messages that I just gave for the webinar as a whole, but it is designed to kind of be the executive summary of what we are going to talk about in this part of the webinar. The message here is that we think the e-Reporting rule is already showing great benefit in terms of making implementation of the NPDES program more efficient and more effective. We are already seeing benefits in terms of cost savings for the regulators and frankly the cost savings for the regulated community as well. We are continuing to track our implementation of Phase 1 and the data we are collecting through Phase 1. Carey will go into all of these things for you in more detail.

Great, thank you Randy. As Randy noted, we are going to go quickly through this section, but we wanted to provide high level review of the NPDES Electronic Reporting rule for those webinar participants who may be new to this topic. The NPDES Electronic Reporting rule was published in 2015 and came after many years of collaboration and work from states. Its goal is to help states and EPA clean up the nations water by shifting from paper to electronic reporting, save time and resources for the regulated community and the states, improve transparency and use technology to obtain more current, accurate, complete and consistent information about the NPDES program.

This slide shows the scope of the NPDES program, most areas that are covered by the NPDES program. That small slice that is labeled Majors, that's a sector where EPA and the state had very good information over many decades on who's out there, what they are limited for, what their permit is, what they are discharging. It provides less information and frankly many of these of these other sectors were managed on paper. All the notices, reports, all of that was mainly managed on paper.

Next slide. So, what the rule did is it went through the NPDES regs and identified reports that were critical in understanding and managing the NPDES program. In particular from permittees, the reports we are looking to switch from paper to electronic are Discharge Monitoring Reports (DMRs), general Permit Reports, which are the notices of intent, termination NODs, exposure certifications and low-level city waivers which are for industrial and construction stormwater permittees, in particular, biosolids annual reports, Concentrated Animal Feeding Operation (CAFO) annual report and urban stormwater report. Two pretreatment reports, one for the program and one for SIUs and CIUs, those are industrial dischargers where EPA or the state is the control authority, sewer overflows and bypasses reporting as well as a report that relates to threatened or endangered species which is required under section 316b of the Clean Water Act (CWA). Those data are coming in electronically and those have schedules for when they come in electronically as outlined in the rule. In addition to the data from permittees, there are data that are generated by the states. State generate data when they create permits, take enforcement actions or inspections. Those data are listed in the rule and identified for data sharing with EPA.

The rule laid out a schedule for when this conversion would take place. Phase 1 was one year after the effective date of the rule that was December of 2016. That focused on DMRs and the Biosolids Annual Report for EPA and that was the program. And that's most states, that's 42 of the 50 states. Phase 2 is everything else. Those are all of the General Permit Reports, the Notice of Intent (NOI) as well as the other six program reports that Randy mentioned.

We thought we'd also start the webinar today by showing some of the early benefits we are seeing with electronic reporting. On the left you can see one of our regional offices, Region 7, were all the Biosolids Annual Reports went to. Every year this regional office would receive over 2,000 reports. It was quite an effort to read and review all those reports. In the first year of electronic reporting we were able to drop the number of paper filings from over 2,000 to under 700. Second year we were drop that down even further to 94 paper submissions and last month I am happy to report we are down to 95 paper submissions; sorry 25. Even better. And I mention this because not only does our regional office have more complete data and can quickly identify non-compliances as opposed to having to read through all those paper reports, it is now the case that this information is now, will be made available shortly to the public which is important from a transparency standpoint. I also show these slides because it shows that electronic reporting is not instantaneous, it's not automatic, it's not 100% and that what EPA is looking for is good and steady measured progress to eliminating the paper reporting. So that's been our mantra all along and that's what we are looking for when we go in to Phase 2. Probably more impressive is the success we are having with NetDMR. You can see that from 2015, which is when the rule was published, to last year, we have tripled the number of NetDMR users. And again, that is the result of a lot of people, EPA and states doing a lot of hard work. NetDMR is for those of you not familiar, NetDMR is EPA's electronic reporting tool for collecting DMRs and this is part of Phase 1. The main message here that we are sharing with you is that through good and hard work being done by EPA and states we are making a difference.

In addition to switching people over to electronic reporting is getting ready for Phase 2. What we have done over the past 2 ½ years is work with states, sector by sector, in work groups to better define the data elements that are in the electronic reporting rule. We created work groups on Biosolids, Pretreatment, Sewer Overflows, CAFOs, Stormwater, Section 316b and General Permits. The recommendations and decisions made by these work groups are documented in what we call technical papers. There are nine of these technical papers and they are all posted on EPA's website; the link is provided on the slide.

We recommend that you review these papers to better understand the structure of the new compliance monitoring data that will come in electronically and the linkages between these new compliance monitoring data and data from permit applications. These papers also provide recommendations, again these are EPA - state recommendations on the revised sector for specific violation codes and violation detection from the new compliance monitoring data. We will be coordinating with states prior to deploying these new violation codes and business rules.

The NPDES Electronic Reporting Rule, as Randy noted, allows states to pick how they would like to collect the data. EPA does not dictate which tools a state must use. Rather, EPA sets performance requirements and states can use those performance requirements to build their own tools if they so wish. States also have the option of using EPA tools. Earlier I just mentioned about NeT DMR, NetDMRs a tool EPA manages and is used for collecting DMRs. NeT is the other tool that is used for collecting all other data. In terms of understanding which approach is best for which, each state, EPA's rule includes a requirement that States create a Phase 2 implementation plan. This plan includes a description of the authorized programs process for reviewing, for building the tools, all the tasks, necessary milestones as well as their review and approval of waivers. We posted these implementation plans on our website. These plans are really important because EPA needs to have an accurate count of the permits and program reports that will be using NeT.

At this time, I will be pausing and looking to my colleagues to see if there are any questions. Again, let me emphasize that that completes that section of the webinar and we will at least take a few questions at this time, maybe 5 minutes' worth and then if there are more than that, we will save those questions for the end. We have a moderator that is keeping track of questions for us. Let me ask the moderator if there are any questions at this time.

Hi, so we do have three questions. The first is in particular to slide 11.

*What about the Appendix A data elements that are collected from individual permit applications that are not in ICIS-NPDES (for example, Publicly Owned Treatment Works (POTW) treatment info, MS4 Phase I application data elements, cooling water intake structure application data elements, etc.)? When is the work going to be done on those to put them in ICIS-NPDES or the next system? Are they considered Phase 2 data?*

So, let me answer the last question first because it kind of dictates the rest. Yes, they are considered Phase 2 data. And we will talk in more detail States that are flowing data via EDT will work on that prior to December 2020. We will discuss in greater detail in an upcoming section how we intend to address these data and how we would like to collect them from the states, but we consider that to be a Phase 2 requirement. States that are going to flow from their system will be working on that prior to December 2020.

The next comment not a question is a comment only and it pertains to slide 15.

*While the technical papers are a helpful reference, they do NOT address all Appendix A data elements, nor do they give an EDT state the certainty needed to change their systems. The technical papers are the equivalent of a plan, and when it comes time to put that plan into production in a data system, there may be changes or additions needed. States don't want to retrace their steps in implementing the Appendix A data elements.*

Thank you for that comment. We absolutely recognize that the technical papers are not specific requirements or a data transfer protocol or schema and were not intended to be. They were intended to basically give a little more specificity to what the data elements were designed to collect as we'll talk about in an upcoming section. We will be working on giving much more specific requirements to address the concerns that were raised.

Do we have anything else at this time? There are some questions being added as you answer them.

*Will the new fields required by the eRule, but not currently supported in the ICIS schema v5.9, be added to the new version of the existing ICIS schema?*

I'll answer that question in more detail later. The simple answer is that will actually be officially devising a scheme that is unique to Phase 2 for the type of data elements you are describing. We will get into a lot more detail on this in a little bit.

*The next question is, how many states are going to use NeT?*

Our current statistic suggests that there are 13 states that will be using NeT for to collect general permit related information. Two states that will be using NeT to collect program reporting information. Most of the 13 states will also be using it for program reports. Our current analysis, count based on what we have seen on the implementation plans and updates we have received from the states, currently there are 15 states that will be using NeT in one form or another.

I am going to go ahead and delay further questions on this section until the end. And it also sounds like some of the stuff we cover in upcoming sections may be helpful to answer some of the questions that we have received.

The next section we are as I said is kind of an overview the two following sections. We have just mostly talked about Phase 1 and we have gotten a fair number of questions about Phase 2. Now we are going to kind of give you an overview of Phase 2 but then we will be breaking that down into more specific pieces. The question that was just asked, one of our key messages, is we are indeed developing electronic reporting tools in NeT for EPA General Permits for program reports that need to be submitted to EPA and for general permits and program reports in 15 states. We do expect that the vast majority of that work will be completed by December of 2020. Our most conservative estimate would be that we will have written electronic reporting tools covering roughly 65% of the facilities that are covered by one of these general permits issued by EPA or these 13 states. We should complete if not all of the program reports, all but one of the program reports. That is our current estimate. We are not going to complete all of it. Therefore, in fact we are prioritizing the completion of tools that are related to general permits and program reports covering the largest number of regulated entities. We'll get into the implications of that. We are continuing to seek input especially from the 15 states on the best way to coordinate and

collaborate on that additional work and we will be building on the approach that we have already initiated to develop NeT applications. You may have heard that we have been working with the state of Rhode Island to implement a NeT general permit tool for the Rhode Island multisector general permit that is based on the tool. The tool is based on the tool we developed for the EPA multisector general permit. This concept of reusability should actually speed up the process before we get into it. I am now going to let Carey go into more of the details.

Great, thank you Randy. In thinking through all the work that is before us in Phase 2, we tried to come up with a more logical streamlined way to gather information in a way that works for both us and the states. What we did is we took all of the general permits that are out there, EPA permits and states permits, and we used NeT and we put them into 27 categories. These are categories that are roughly based around what that facility is doing. We have categories on industrial stormwater, categories on construction stormwater, aquaculture, mining and quarries, the list goes on. It's 27 categories and then we go on and group them into seven groups. The groups and the categories are generally organized first with generally capturing the most number of general permit covered facilities. The categories in Group A are industrial stormwater, construction stormwater, those are some of the biggest, those are some of the categories with the largest number of general permit covered facilities. We are also focusing on program reports that also cover the largest number of facilities. When thinking over the high level of steps we need to take, we've created the technical papers that we have mentioned, that's a good first step. We are engaging with the states and talking to them, calling them, understanding what their requirements are for these general permit program reports. Our plan is to gather, after we gather this initial information, we gather even more detailed requirements so that we can start building tools. In addition to working with the NeT states, we need an interim data flow structure that will help EDT states with the electronic data transfer states so that they can share data with us. That is to be proposed. As Randy noted, we will not be able to finish all the work by December 2020. We are first focusing on the general permit categories in Group A and B and the related program reports. We are also starting work on gathering information on the Group C general permits. If you are interested in looking and seeing what those categories are, if you register for today's webinar, in the appendix is a table showing all the categories and that's slides 49 and 50. They are all part of one slide deck, the slides after, I think is 46 or 47 are an appendix, but the list is right there.

EPA has collected basic information for all the states industrial and construction stormwater permits and aquaculture permits. Soon we will be finishing collecting basic information on the Group B permits. As Randy noted, we have been working with Rhode Island for several months, many months and we are in the final stages of deploying their industrial stormwater permit. We started discussions with Utah and Illinois regarding their industrial stormwater permits. We have done a number of improvements to our Net Biosolids applications. This is the report that collects the annual report. We have done something similar the EPA's construction general permit. We just today right before this webinar kicked off our initial sprint for the aquaculture category where we are capturing permits from Region 10 as well as Utah and Maine. There is a lot of work remaining and we have close to 300 general permits in these 27 categories. It's about a 50/50 split between EPA and the states. As Randy noted, 13 states will utilize EPA's NeT and we have two states that are using NeT for their program reports. We still have to build, built the Biosolids Program Report but we have to build the six other program reports and as Randy noted, we need a way to help states that are building their own tools to flow that data to us through EPA.

To help keep track of this and it can seem a little overwhelming, we have created a dashboard. This dashboard provides greater detail on the general permits that we will be using there as well as our progress. Here on the slide you can see a list of all the permits, the general permits that are out there, ones that are issued by EPA, that's a yes, and ones issued by the state, that's the no. You can see the expiration date for all these general permits. This dashboard is available through our Enforcement and Compliance History Online (ECHO) gov data visualization gallery. There's a link there on the slide. If you have an ECHO gov login, you can use that. If you have any trouble, we have a help desk to help you get access to that. You go to [ECHO.EPA.gov](https://echo.epa.gov), click on the ECHO gov login button, once you have done that, find the data visualization gallery which is under Analyze Trends and this is the second or third one down.

The dashboard: there still are some minor kinks but either today or tomorrow we are going to be rolling out these new status pie charts. These pie charts show you the status on our progress in working the states on gathering information requirements for tool development. This is on a permit by permit basis. The first pie chart shows you where we have made those initial first calls to the states. We want to in those first calls confirm that a state is intending to use NeT, when the state would like to use NeT, are there any particular details that we need to know. Very high-level information, that's that first pie chart. As we get more information, we update the second pie chart to show when we finished requirements gathering, when we have started it, if it's paused, perhaps maybe a state would like to wait until reissuance. The bottom chart shows the schedule for our initial information gathering with the states. This is a good tool that you can use to understand when we are going to reach out to you on let's say your general permit on drinking water. That's in group C, so you can use this chart to figure out when you would like us to touch base with you. Let me add just one thing if I might Carey, it is important also to realize that both the overall pie charts and the more specific pie charts are giving you statistics based on the number of general permit IDs which is for instance, the EPA construction general permit is actually 10 different permit IDs but this is showing by number of permits, it is not showing by number of covered facilities, as I said before, it shows the 25% of the permits are done but that actually covers almost half of the total number of facilities that will be arguably reporting in through NeT. We are continuing to prioritize as much as possible in dividing up the groups to get the most facilities covered earliest. Thank you. With that, we will pause and see if there are any questions.

We do have one question about this section.

*Can EPA discuss how it will approach or consider requests from states to "customize" NeT programs for their use?*

We can certainly talk about it. The only reason I am struggling is that I know that we are not set up to do this very well, but it depends on the customization request. Clearly there are a number of states that have data elements that are essentially appendix A but for instance they use a slightly different format that may have been laid out in the technical paper, or it may be that they are requiring some non-appendix A data elements that is frankly relatively simple to program. We are going to look at those requests from a NeT state on a case by case basis and we will work through those. We are going to try to balance the state needs with our need to sort of keep the pipeline moving along. We have already had some experience with this in our work with Rhode Island. I have been asked in other settings, "are you only going to collect appendix A or are you going to collect more than appendix A". The answer that I have often given is yes. There is not one single answer to that question. That is part of the reason and

we will get into this process in a little more detail in the section after the next section. That interchange with the state and its data needs is an important part of the process.

The next question was submitted in the previous section.

*Does EPA feel confident in the total amount of resources needed to complete all the state NeT/NeTDMR work?*

Yes, always feel confident. As we have said we think we are going to complete the vast majority of the work, at least as measured by number of facilities and we think we think we will be able to implement if not all, all but one of the program reports by the deadline. How long it will take to complete all of the work for all of the net permits will depend on resources. We do have a plan in place right now, but that plan will be subject to future appropriations.

The next question was also specific to the previous section.

*It referred to slide 16, you talked about revised sector specific violation codes - are all sectors getting revised violation codes? Or can you name any sectors specifically?*

Randy, if you could go to slide 15; I am showing slide 15 because we worked with the states on a sector by sector approach and we did develop new violation codes for the Biosolids sector, pretreatment, sewer overflows and bypasses, CAFOs, stormwater – that is industrial, urban and construction. We did not develop any violation codes for the 316b data. That program report doesn't collect any data that would generate a violation. Those are the new violation codes that we developed.

We have one more question.

*How long has your first trial with Rhode Island taken? Is it to the stage we can see a demonstration?*

I am going to let Cindy Hobus who is chief of our Operations, Maintenance and Modernization Section who is leading the development work directly answer that question. It took us six months and that was working very close with the Rhode Island team. A lot of iterative steps and I believe we probably could do a demo if we coordinated with Rhode Island. If you would like to send me information to get in contact with you. We and Rhode Island are very close to making the tool available in production, that is to say were the regulation community could use it. I know Rhode Island is probably on the line but let us coordinate with them but I think that is actually a very good idea.

I am going to move on to the next section and that is to talk about our planned approach for electronic data transfers of Phase 2 data for those states using their own system. We will continue to work collaboratively with states to build this new data sharing protocol. The idea behind the data sharing protocol is to essentially deal with what needs to come in through Phase 2 which is the Biosolids annual report for the 8 states to run the biosolids program, all of the Phase 2 program reports and general permit related information and certain other Phase 2 data which sort of harkens back to Phase 1. I am not saying that very elegantly but that will be a part of it as well. We are going to show you a sort of "straw" proposal for how we intend to deal with this.

The data sharing approach we are currently looking at as a straw, essentially it is going to; all of the EDT states are currently flowing all of the required information for Phase 1 into ICIS-NPDES. We have an existing schema that works primarily through the data exchange to make that possible. We will as we



develop new tools in NeT will link NeT to ICIS and ultimately make those data available. We realized though that we couldn't wait for completion on all of the NeT products to provide a solution for the EDT states. We are essentially going to establish a new data flow that we really worked hard on this one. We are going to call it ICIS-NPDES2. Which actually is nice to correspond to Phase 2. We will continue of course to provide support for Phase 1 data and the ICIS Tool Suite. At some point we do hope that we will be able to integrate all of ICIS and NeT into a single architecture. That is a longer-term plan we have and once we do so we will integrate those schemas. That is some years out at current planning. We are recommending this approach because it will provide a path for EDT States to meet the obligation in the eRule to provide us with the Phase 2 data and allow, obviously this is of great interest to many of you as we have already gotten several questions about it today. We will be able to fund this work through the contract that we have for this type of data flow. We are going to have a more targeted schedule for you in the next few weeks. We will be coordinating through the NPDES Integrated Project Team (IPT); Joe Carriotti of Cindy's staff sits on that team. We realize there is more work to do on this, but we wanted to give you this preliminary showing.

This slide simply is a very high-level diagram that shows that in essence there will be two transfers. One that is going into ICIS today and then ultimately into Legacy ICIS. And one that will be residing in its own location. We are already working to, we have similar data division with the data that is going into NeT, for instance the Biosolids annual report data. We have already been working here at EPA on how to integrate these. Part of the plan will absolutely be to integrate these two systems. The idea is that this will give the states a solution that will work for our states to provide Phase 2 data for some time to come.

There is a lot more we could say about this, just wanted to give a very high-level overview. I expect there will be questions and I expect there will be follow up on that. We realize in preparing for this webinar that we would have a lot of questions from EDT states and we wanted to give you our preliminary thoughts on how we are going to proceed. Let me go ahead and ask if there are any questions on this section.

We have questions that are coming in right now. We will give it a moment.

*We have one that is what is ICIS NPDES 2? Is it a new database?*

When we get to technical questions, I am going to defer them to Cindy. That will be a repository of data. Eventually we will incorporate it with rearchitected ICIS but initially it is a repository of the collected data.

*The next question is, if this dataflow will not be ready until the end of this year, how long will the state have to develop our node?*

The simplest answer to that is we hope to say we will be able to develop it as quickly as possible. We would like to be consistent with the rule, start having that data flow by the end of next year. We recognize that this is, we are having a challenge collecting all this data that may pose a challenge for some states. We will be working with you all in the weeks and months to come to maintain what is as reasonable schedule as we can. We think that there are some great advantages, longer term to electronic reporting which is why we want to ensure both we and the states are continuing to implement Phase 2 on an expeditious schedule.

*The next question is, will data flowed to ICIS-NPDES2 be available/queryable to ICIS Business Intelligence?*

We need to be able to verify data we upload. The answer to the question, will it be available to Business Intelligence is I don't know. That's not probably how it is going to work but part of what we will be providing is an alternate way to query those data so that we understand that will be a key requirement.

*Another question, how soon can EDT states expect to get the information that will allow them to develop their tools?*

What I can say is that, let me be very candid with you. This was a bit of a shift in approach for us. We were originally planning to do this all through NeT and now we are doing something different. This is something we have been working on in the last couple of months. We are talking to our contractors and our technical team is working on this and I would say I can't give you the date we will be able to put the schema into your hands, but we will be able to give you a schedule for it in the next few weeks. It would be helpful for us to get input as to what would be, obviously soon as possible is the answer, but in terms of state development schedules it would help to have a sense of if there are aspects of the schema that we need to prioritize or whatever, we would love to get more feedback on that through the IPT and other methods.

We are getting some more questions submitted right now.

*Will data in ICIS-NPDES2 be available via ECHO/ECHO Gov?*

That is our intent.

There are some questions that are still being submitted. For the data going into ICIS-NPDES2 (this person has multiple questions):

*Will EPA be providing training on the new system?*

We would like to hear what the training needs are. I think the idea is that again if we set, it's really just to be kind of a parallel flow. If the question is going to reporting or data verification queries, I am going to be honest and say we haven't worked out all those details yet but obviously when we come up with that aspect in the system, we would provide training and customer support on them.

*Related to that, when will the new system be available for testing or training purposes?*

We will get back to you on the answer to that. That is what will be coming.

I will move and we will come back. I know there are a lot of questions about this, not all of them are we going to be able to answer today anyway but these are helpful for us to hear so that we understand we are certain we understand what we need to think through.

Carey and I have been talking about in the last section EDT of Phase 2 data. I want to spend some more time talking about in detail about the process of developing the electronic reporting tools in NeT for EPA programs and the 15 states that we eluded to before. I said this, Carey has said this, Cindy has said it, I think we are all saying that and some of the questions anticipate this that the key to this process will be active engagement from staff of the authorized state as well as the EPA region that is involved. We found that Rhode Island's willingness and availability to work with us on a regular basis has been critical

to the success that we've had. Somebody was asking earlier about other data elements. It is really the states that are going to be using NeT, you all are going to have to take the lead to tell us what you need collected, what you would like collected. It is also helpful to know how you intend to process those data because while we can't promise complete customization we are trying to figure out where we can customize in a way that takes advantage either the EPA tool that has already been developed. There are other state tools that are already have been developed and so it's not off the shelf but it's not completely custom. The states will need to tell us where that is. Similarly, what we found with Rhode Island is that we are probably end up having to have to talk on a weekly basis when we are deep in the throws of the development process. Finally, as Carey said earlier, we are going to use the General Permit Dashboard that is available in ECHO Gov for basically up to the minute review of where we are at.

Carey is going to describe this process for you now on a little more detail. Great, thank you Randy. You heard us say again and again but it bears repeating that our approach relies on regular collaboration and communication with states that have elected to use NeT. For those states that have not chosen to use NeT, that's fine, we actually have a work group that meets monthly. We are restarting in April. That is an opportunity for you to touch base with us to see where we are progressing, see some of the questions we are answering, as these questions and answers might actually be helpful for you to build your own tools. We have said it a couple times but again it bears repeating that these two dashboards available through ECHO.gov to provide an overall schedule for gathering an overall schedule for gathering initial information on each general permit and program report. After that initial information gathering when we identify permits and program reports for development, we will likely need more frequent meetings likely weekly with states and regions to gather requirements and these requirements will facilitate development in our tool called NeT. So that we have a clear delineation of roles and responsibilities, it's our plan to work with the 15 NeT states to create a Memorandum of Understanding, (MOU). This is not a legal document, but it allows EPA and states to clearly understand who is responsible for what and when.

This slide shows an overall conceptual high-level approach for NeT development. If you heard me say our first step is to reach out to the states who are using NeT and what we call information gathering. This is collecting basic information; what permits are going from paper to electronic, what facilities are covered, the timeline for when the NeT permit will be issued or modified, other details that might help us in developing a schedule. This information gathering is shown in the Phase 2 Dashboard. After that, EPA's development team figures out which permits should go next, where do we get the most bang for our buck. We work with states in developing that list and then we will memorialize the roles and responsibilities with these state through the MOU. This MOU helps ensure that we are getting to the NeT states what they need and vice versa and that we are getting the collaboration we need from the NeT states. During actual development role, we are working very hard to make sure we clearly understand the requirements. It is our goal to measure twice and cut once is often said in carpentry. We need to make sure we understand quite clearly what the permit is meant to do, what the reporting is supposed to do, how to process the data. This will likely require more intense feedback. During actual development, we are constantly meeting with the state, usually weekly, for feedback and testing. The key elements for successful deployments are regular and timely feedback from states, documenting roles and responsibilities of the MOU, and that we recommend that all states periodically review the Phase 2 Dashboard to make sure the information in there is correct.

I mentioned the MOU a couple of times, let me pause and talk about that a little more. EPA would like to document the roles and responsibilities in the MOU. The primary focus is to describe requirements, development, customer support and training and change management. This is really the life cycle of the permit so that we know what the states are going to be doing and the state knows what EPA is going to be doing. The MOU also identifies what happens with what we call non-appendix A data. This is data that is not listed in the 2015 electronic reporting rules. The MOU recommends that EPA and the states work together to discuss the best approach to collecting the data. This might be in the form of additional fields on the electronic form or as attachments, pdf attachments or Excel spreadsheets or that non-Appendix A data may continue to come in on paper. These are all things we would discuss with the state during the MOU discussions. In short, the MOU helps set the level of collaboration needed between EPA and states. We recommend that it is signed by a State Water Division Director or someone who can allocate anticipated resources. And with that we will pause and take questions.

*Will the MOU cover all the program reports the state intends to use the NetTool for or will a MOU be needed for each?*

That's a great question, which is what someone usually says when they don't know the answer, so that is what I am going to say. We were assuming that it would be kind of product by product, since products may be developed at different times. If the state is on board with this, we could cover all of the products that will be developed. We are still working on our first MOU and it is with Rhode Island. We have generally heard from some of the NeT states that they would prefer to do it on a sort of development, product development by product development basis. But we are not adverse to doing it for all the products if that may be more efficient.

*The next question, who is the lead for developing MOU? EPA Headquarters or EPA Regions?*

The answer to that is that we generally have been doing them here in EPA Headquarters because most of the development work is with EPA Headquarters staff. We would be working with the region on that, but the agreement is really between the people who are doing the development work on behalf of the state and the state. We do plan to solicit regional input

*The next question; you had indicated that EPA anticipates that the flows to legacy and NPDES2 will be in parallel. You had also indicated that all of the Phase 2 data will be sent to the ICIS-NPDES2 repository and the Phase 1 data will continue to be submitted to legacy. Since the information that will be submitted as part of Phase II will be linked to the information in Phase I, how will the Phase 2 data be correctly associated with Phase 1 repository data? Will some/all of the data in the Phase 1 repository have to be submitted in duplicate into the Phase 2?*

We recognize that is an issue and that is one of the things that our development team is working through right now.

We have a question relating to funding for Open Node 2.

*National Environmental Information Exchange Network (NEIEN) grants are due 4/8/19 for FY20. Any other funding mechanism available for states who are not on Open Node 2?*

We will be covering that in more detail in the next section of the webinar.

*The last question we have is do you envision a similar MOU process for EPA regions with non-delegated states?*

I am laughing because that is a question I truly did not anticipate. I think the answer is that I would hope, I would assume for that is an EPA region that asked the question. I think we can use slightly more informal means to document our collaboration, but I would emphasize that, for instance when we developed the Gulf of Mexico general permit tool, we worked very closely with Region 6 in a fashion that is similar to what is laid out in a MOU with the state.

We don't have any other questions right now. Thank you for that.

This is the last formal section of the webinar and again we have described for you today what we need to do moving forward for to assist EDT states with meeting Phase 2 and also for those states that are going to be using NeT. As I said earlier and I will lay this out in more detail, we have had a lot of conversations with a lot of you in a variety of forums. The purpose of this webinar today was not to be sort of a big announcement and then we are going away or that we haven't been talking to you before now. We did think it was important to sort of deliver some key messages as to where we are in terms of Phase 2 implementation. We will continue to collaborate, we will continue to provide those financial and technical resources that are available to us to implement Phase 2. We do recommend and encourage in Treat states to continue to move forward with implementation of both Phase 1 and Phase 2 of the rule. Something we haven't talked about in much detail but for those NeT states for who maybe we have not completed an electronic reporting tool, if the general permit for which that tool does not exist as of 2020 mandates electronic reporting and by our count there are only less than 10 such permits right now, there is a provision in the existing regulations to give a waiver from the electronic reporting requirement for the regulated community and that's how we recommend dealing with that small number of permits that may mandate reporting with an electronic tool that has not yet been developed and we will be working on states with that.

We have mentioned before we do maintain a contract currently with Windsor Solutions to help states that have their own NPDES data system. This support has been used in the past to help states share data with ICIS-NPDES. We intend to continue to provide those services with Windsor Solutions or another contractor to work with states or provide data to ICIS-NPDES to. Somebody just asked about the Exchange Network Grant Program. That program is available and yes, we do encourage states to apply for FY2020 for assistance with work on Phase 2 implementation. My office has created the role of "Data Quality Advocate". Currently our Data Quality Advocate is Eric French and he works in our customer support section. His job is to serve as a liaison between state agency staff and staff here in OECA to ensure that that the data that is flowing in ICIS-NPDES is doing so properly, that data quality concerns are addressed, identify where there are on-going issues, formulate recommendations for means for addressing those issues. Some of you may be familiar that Eric used to be kind of our on goods person to work with states on cryometric compliance now he is responsible for looking not just at ICIS-NPDES but also all of the state data that are flowing in the EPA systems but he is spending a lot of time right now working on ICIS-NPDES issues that arose because of Phase 1 transfers. If you or your staff are not yet familiar with Eric, please feel free to give him a call if you are running into any difficulties with data quality or data transfer.

As I said before, one of the messages today is that although we are going to complete most of the NeT tools for EPA and the 15 states, we are not going to complete all of them by the end of next year. We've

done an analysis of the permits that are not in Group A, stop me Carey, or Group B. These are general permits in Groups B through G, any group other than Group A. We have looked at all of the permits that are on that list from states and most of them don't explicitly at present require some form of electronic reporting for either NOIS or program reports. For those that do, the state does have the option of modifying the permit. But the other option that is available under the regulation is just essentially provide a waiver from the electronic reporting requirement that would otherwise be available. By our estimate, there are fewer than 10 permits right now that are to be developed in NeT that explicitly require electronic reporting covering not more than about 600 facilities total. We are talking about a relatively small universe, but we think that this is probably the most efficient way of addressing those. EPA, both the Office of Compliance, will be working with the Office of Water to provide guidance, assistance, tracking, and making information available to the public if you are one of the states that issued one of those permits and want to use that route. You may want to go through if you are in a NeT state and look whether there are other general permits or state regulations that require reporting Phase 2 data that you want to address. If you want specific assistance on waivers and the like, there's an email address listed on the slide.

We do of course rely on on-going frequent collaboration. We have a number of different workgroups that are we are conducting that mostly at the staff level are available to you get status of the on-going work. This slide lists them for you. We have our large eRule regional workgroup that is for EPA. We also have all of the other groups are specifically focused on primarily the program reports and the development of papers. Some of these groups we are looking to perhaps put back into place, most notably, if you do not have somebody on your staff participating on the EPA state general permit workgroup, that will be a place we will provide a lot of on-going information. I also alluded to earlier that we have the exchange network NPDES IPT that is under EPA's IT government structure where we will be working with you more closely on development of this, of the Phase 2 data sharing prototype that I mentioned earlier. You can certainly feel free to email me at anytime if you have any questions and I will provide it to the right person. Carey Johnston, [Johnston.carey@epa.gov](mailto:Johnston.carey@epa.gov) is a key person to reach. We have an ICIS user monthly call where we can continue to provide information. We do participate on the NPDES Permitting and Enforcement Managers monthly calls. We have been using all of these channels. Previously we had not, we had been talking little bits and pieces about what we were doing on Phase 2 but part of the reason we thought we need to have this webinar was to give a comprehensive overview. I would imagine that we will do this webinar again probably roughly in about 6 months or so and probably on-going until and after December 2020. We do also work with Aqua to get information out about other current status of the rule. Finally, I would say if there are other channels that you are aware of or if you think there are other modes of communication that you think we need to be using as we continue with our Phase implementation that would be of great use to me personally.

That concludes the main part of today's webinar. Let me first ask if there are any questions specific to this section, we just had on communication collaboration and then we will have plenty of time for questions about any topic that we have talked about today.

*We do have a few questions, the first is can a temporary waiver be granted by an EDT state for a general permit where the eReporting tool is not ready by the Phase2 deadline?*

Yes, the state can grant that to the facilities in that state.

*We just got done working with Windsor on a gap analysis, and on several occasions, they said that if a document is sent in via PDF through an email then we have fulfilled the Phase 2 requirements. Is that correct?*

The simple answer is that wasn't my understanding, it sounds like we probably need to circle back with Windsor.

*Comment relating to slide 42; 40 CFR §127.15(b)(1) clearly states that "Authorized NPDES programs cannot grant a temporary waiver to an NPDES-regulated entity without first receiving a temporary waiver request from the NPDES regulated entity." EPA's contention that states can grant temporary waivers to its regulated facilities due to the delay in development of eReporting tools does not mention that the regulations require that the facilities first submit a request that contains the information required in 40 CFR §125.17(b)(2). As presented, isn't EPA endorsing that states contravene federal regulations if EPA is saying states can grant a wholesale temporary waiver for specific reports.*

The answer to that question is probably longer than we have in our webinar but that is something we have been in conversations with our own legal staff about and we believe there is a way that can be addressed. We will be happy to provide more detail along that in the coming weeks and months.

*Some states have requested an extension to the December 2020 deadline, does EPA plan to extend this deadline?*

At present time we, the strategy that we have laid out for you today does not contemplate taking any regulatory action to amend the deadline. We candidly don't think that is necessary given frankly at least what is in respect to the NeT states, the number of facilities that would for instance need a waiver. We also think that it is important to maintain our focus on implementation of the rule and we want to encourage the state to do the same.

*After this call will you post all the questions asked via chat including those that were not chosen to be answered on the call?*

Post them, sure. We can make that part of the materials along with the recording.

*What is the benefit of separating Phase 1 and 2 schemas over just incorporating Phase 1 in to Phase 2?*

Looking at my folks, I think the benefit from our point of view is that, actually I am going to be honest with say we will have to get back to you on that. I think that we were trying to develop a straw approach that we thought would actually be comparatively easy for EDT states to implement. We can do a little more thinking about what the comments are suggesting.

The next question is regarding slide 30.

*What is the rationale for asking EDT states to meet the 2020 deadline when EPA may not?*

EPA is going to do everything we can to meet the deadline, we may expect that we will probably fall short. We expect that EDT states should do what they can to meet the deadline as well and if that poses a challenge to particular EDT states then we should have private conversations about that.

We are getting some questions incoming right now.

*What were some of the made from the collaboration with Rhode Island? For example, the number of resources, response time between parties or other considerations to have the work completed within 6 months.*

Some of the assumption or what was the level of effort, maybe that is what the question is going to, Cindy maybe you can speak to that a little bit. What I can speak to is the process, which is an agile methodology, which is a term of how we iteratively create and process business requirements and translate them into development functions that get implemented. I'm not quite sure if I understood the question right. The amount of time would be what, 25%. It wasn't a time percentage, it was we had weekly meetings, weekly meetings would be an established resource. Also, at the weekly meetings there were artifacts that were produced and worked through Rhode Island for their adherence. It very iteratively, we processed iteratively. We had the meetings, we'd review what we had done, we'd get the feedback, we'd go back, and it was back and forth and at the end the result was what the product was everybody agreed to; it was a product that would go out with first. So, I'm not sure if I answered question but I was trying to explain the process by which we did the development and I don't think we could probably give you an exact amount of time that you would spend. I guess it would be dependent on the requirements of each state.

The other thing again that is worth adding is that, for instance, the general permits are contained in Groups A or B, we have an EPA tool in most cases for those already are developing it and yet either prior to or in concert with the state. We haven't talked much about this today, but we are trying to use code reuse, and use other services, to try to streamline the development process. I want to publicly thank Rhode Island for essentially being our pilot, our guinea pig if you will, in this process but we would actually expect it to be more efficient for other states that are going to be developing their tools in NeT.

We are trying to unmute Crystal Charbonneau from Rhode Island who is on the phone. If we can unmute her, she can provide a little bit of Rhode Island perspective. I just don't know if we are able to unmute her right now. I believe Rhode Island is slated to give a perspective during an upcoming – there is actually a webinar that is being planned. I think it is probably for later in April or even early in May but the Environment Council of States, ECOS, is sponsoring the webinar on eEnterprising uses.

This is Joe Haberek, not Crystal obviously. As far as resource demands to answer that question, we basically had weekly conferences with EPA and their contractors CGI, it was probably a little longer than 6 months, probably more like 9 months. That was every Thursday afternoon, for say 3 hours, kind of our development team which is 3 of us here at the state level and probably, typically a couple of EPA people, EPA headquarters people, some contractors and generally a person from the region would chime in. That was the weekly call, weekly kind of meetings and then beyond that I would say it was almost daily communications on development, there would be particular deliverables that we would be working on for each sprint. They kind of broke them into sprints and so it was a significant resource demand. On the state side, total program side, we have 9 people and there were 3 of us working on it off and on; myself, a supervisor, another engineer kind of more the permit expert, and then we have our data steward who basically handles our electronic reporting. Crystal is probably the one that spent the most time on it. Crystal, do you want to estimate how much time you spent?

You pretty much summed it up. We all were included on the weekly calls and there was a good amount of back and forth, commentary between CGI and EPA and myself. As development continued and the availability to test the product was there, that was really the opportunity to be able to provide some



comments not only to the application and how it would be usable for our permittees but also development parts that required some debugging. It sounds very simple, we will just take EPA's application and adopt it for our own. It's not that simple because once you start digging into it each state has some specific requirements that they want to implement. For Rhode Island, we are actually, the timing was perfect for us because we are reissuing our MSGP, actually it is probably going to be signed today. We had some additional requirements in the sense that we included benchmarks for, our permit was a little different from EPAs. In that we have certain benchmark parameters for all categories. We want to do a no discharge certification. When we go into those, we had to do some significant changes from EPAs template and then also EPA was in the process of updating their NeT applications. We were working kind of parallel at times and certainly the shut down didn't help either because we were right in the full swing of things and then we lost some time there and it took a little bit to get started back up.

I don't want to keep going on but certainly I'd be happy to answer any questions. As mentioned, there is a webinar that is being putting on, I think it is April 4<sup>th</sup> and I agree for ECOS I agree to do a presentation on Rhode Island's perspective, and certainly offline, if someone had any questions they can certainly feel free to give me a call and I'd be happy to discuss it; again it's Joseph Haberek at the Rhode Island Department of Environmental Management (DEM).

Joe and Crystal, thank you so much for that and I will say that I think that the webinar will probably; I just literally got an email about this this morning. I think the webinar will be postponed from April 4<sup>th</sup>, they haven't set a new date yet. We will actually take it upon ourselves to notify whoever is on today's webinar about it. I know ECOS will be getting out the word as well.

Let me ask if anybody has submitted any questions specifically for Rhode Island and otherwise we will move on to other questions.

I don't think we have any questions specific to Rhode Island.

Thank you for being willing to chime in on that. What else do we have?

*The next question is, the EDT states are dependent upon EPA to even start our projects. With procurement processes the clock is ticking. When can EDT states expect a finalized schema for the Integrated Compliance Information System (ICIS)-NPDES2?*

We will be working over the next few weeks, I can't tell you precisely today when it will be done, but we will be working over the next few weeks to figure out exactly how long it will take to do. It probably won't be a month, but it won't be several months. And some of the input we got today on certain design questions related to it we would be happy to get to, but after this call.

*The next question is to in regard to section 316(b), which refers to cooling water intakes, how in depth of information will states be required to submit to EPA?*

I am going to turn that over to Carey because he was the primary author of all the technical papers. I am happy to answer that question. Go to technical paper #8 which is available off of our website. It provides a very good overview of that part of the Clean Water Act, the reporting that comes in on the permit application as well as the annual report. We even have national mock ups of the permit application data and the program report. These are ways in which you can see the interconnection

between the two sets of data and how the data might be collected through user interface. We are not going to build from these mock ups, but they do help explain in more detail for each data element. Is it a pick list, is it a pick 1, check all that apply, is it a free text field, are there reference values that should be used; those are all in the technical papers.

*The next question is, does NeT work with all types of permits, or only certain ones, i.e., stormwater?*

The simple answer is all, but the applications within that are permit-specific, so I'm not sure exactly what, maybe the questioner could provide a follow-up, because I am not sure exactly what; if you are asking because you are thinking of adding or signing up to be a NeT state, it would be based upon either that you have a general permit that needs an electronic tool or you want to use one of EPA's program reports.

*Another question says, how many states will be in development at the same time for the NeT tools?*

I am going to let Cindy answer that question. The question is a little bit hard to answer, we've got multiple states at multiple points discussing with us though we are trying to have 3 teams of developers and will be working at that pace. I would say what 3 to 4 at a time. As we move forward, things will get much easier because we will have more experience and tools that other states can use, and we can do more with the states. Let me just add that as Carey talked about what we were talking about sort of that the NeT development process, we have tried to group all of these into different categories. Some of those groups may include permits or a NeT state that aren't going to expire for a couple of years, maybe not several years, we have already had this happen in one situation where a state might well say come back to us. That is why we would really encourage the states that are already on the list of using NeT or thinking about it to take another look at your implementation plan and compare it to what is in the dashboard. If you want to make adjustments in terms of when you are ready, willing, able to work with us, we are going to have to do a lot of sort of shifting around a little bit depending on the availability and the needs of the state. Cindy was there one more thing you wanted to add on that? I did want to stress that as we move forward, services and reusable parts are going to facilitate completing states in a more expedient manner. We are using not only code that we develop for the states, but also services that are provided by other support groups within EPA.

*We have another question that says, will Phase 2 EDT be integrating to the same back end database at EPA or will the data be routed to a separate reporting system?*

We are working on the answer that right now. We understand we need to have a reporting solution for ICIS-NPDES2. We have not made a final decision on how it will integrate.

*Another question is why is EPA spending time building an "interim" system instead of building it into the Integrated Compliance Information System (ICIS) from the start?*

That is not an easy question to answer. The simplest answer I can give is that in order to provide a solution for those EDT states that are interested in getting us the Phase 2 data by the deadlines, this struck us as the way to most expeditiously do that. There is a lot of detail associated with the programming and quite candidly with some of the challenges with legacy ICIS, I could have Cindy and her staff wax on this for a long period of time. The simplest answer is that we were trying to find a way we thought would be most helpful on the current schedule for the EDT states.

*Another question says do you intend to keep this a high topic of discussion at the Exchange Network conference this year?*

A high topic of discussion, we will absolutely work with the folks at the Exchange Network Conference and try to make this a topic.

That is all the questions we have right now.

In the spirit of we've all got a lot of work to do, I will take this opportunity to give everybody time back. If you do have questions that you have thought of that either we didn't get to or you think of later, Melinda, how do they submit those? Probably the best way would be to send to [NPDESeReporting@epa.gov](mailto:NPDESeReporting@epa.gov), which you can find in the slides.

Before we wrap up, I want to ask John Dombrowski whether there was anything you wanted to say based on what you heard today. Thanks Randy. I just want to thank Randy and Carey and all the EPA staff for the hard work they have done on the implementation of this rule and I would like to especially thank our state partners for being with us all the way there and for joining us in today's webinar. We have come a long way with eReporting for the NPDES program. This rule and this effort has definitely blazed a lot of trails and I think it is going to do so moving forward. I think our journey to this point has been exciting especially how we are seeing the benefits of just Phase 1 alone and how that's benefiting the implementation of the NPDES program and the protecting of our waterways. We didn't get here just by EPA's effort alone, it's been through the collaborative efforts with the states and I really hope that we can continue with this. On reflecting on the development of the rule, that wasn't easy, and we never thought the implementation would be easy for any of us. I want to encourage us all to move forward together to continue to make progress on implementing NPDES reporting. Thank you again for joining us. Thank you, John.

Just to remind folks, we are going to post a tape of today's presentation and/or transcript, I not sure which one or the other and we also said we would post a list of the questions that we did receive today plus those questions that weren't able to answer. Where will that information be available? The transcript, recording, the questions and our answers will be available on our website, which is on slide 15; [www.epa.gov/compliance/NPDES-eReporting](http://www.epa.gov/compliance/NPDES-eReporting).

I want to thank all of you for sitting with us almost 2 hours. This is not the last time we will do this, and we will also be using our existing network. I appreciate, we got a lot of very helpful questions, input and advice today. I look forward to talking further with those NeT states and EDT states as we continue to implement the approach we tried to lay out for you today.

And with that I will say to the moderator unless there is anything else, I think we can declare the webinar concluded.

*We do have one more question that was submitted. Is it optional for EDT states to do the interim data flow?*

The way that I will answer that question is that the interim dataflow is what we are proposing to do to allow EDT states to provide Phase 2 data to EPA by the December 2020 deadline. We recognize that we may not be able to provide electronic tools for EPA and NeT states. We understand that EDT states may have challenges meeting that deadline as well. The data sharing approach we laid out today is how we

are proposing to assist EDT states to meet the 2020 deadline that is spelled out. I think that is a really nice place to end.

No more questions. Again, thank you all very much and we will be talking more I'm sure.