

NASPI OITT
Call Minutes
September 17, 2009

Participants

Terry Bilke –MISO	Jim Dyer - EPG
Mahendra Patel – PJM	Henry Wysocki – Con Ed
Jim Viikinsalo – Southern	Clifton Black - Southern
Douglas Jeser - ?	Dave Akins - KEMA
Tom Rizy – ORNL	Mark Albright – MidAmerican Energy
Dave Furman? – FERC	? -ICS
? – SEL	Others?

Updates

Included in the call agenda are the notes of our last call. There is the synchrophasor map, however a couple of errors have been pointed out to Terry. **AI:** If you see something that needs updating the map, please email Jeff Dagle.

WI

Tony Johnson was not able to be on the call. There is no report at this time although Jim Dyer pointed out they are waiting to see what happens in regards to DOE Stimulus funding grants.

EI

The DOE stimulus grant funding opportunities sparked a lot of interest in the community. In the MISO, their members' piggy backed to submit a grand proposal; it was worded to accommodate a number of sites. Their proposal includes the addition of twenty FNET devices as part of the VA Tech initiative. American Transmission Company (ATC) has installed about ten PMUS over the last couple of months and has them up and running and communicating with a local concentrator. They plan for more in Northern Wisconsin. Other members are planning to install their own PMUs and network separate from the stimulus funding. We could be looking at over 100 PMUs showing up in the MISO footprint alone.

Terry has heard from other ISOs that have similar efforts going on. Assuming that the stimulus effort goes forth, the synchrophasor map should quite look different in the near future with a much larger number of PMUs showing up.

ERCOT

There was no one from ERCOT on the call so no report. Members from ERCOT have been on past calls and were present at the last NASPI WG Meeting. **AI:** Terry will take an action item to reach out to them to get them back involved. ERCOT has also gone after stimulus funding for major PMU deployment and infrastructure.

RTDMS

RTDMS was originally started with funding by DOE and developed by CERTS and EPG. A new version (version 6) of RTDMS has been released via the RTDMS website, however it is currently only for the east. The WECC version 6 will be installed at the CAISO by mid October, we are not sure with regards to ERCOT getting the update. RTDMS is available to any signatory to the NERC NDA. The new version of RTDMS is a significant upgrade and has some new useful functionality. Version 6 is available from the RTDMS Users Group web site (Members Forum) - <http://www.rtdmsusersgroup.org/>

RTDMS Users Group

From the last call, Clifton had the action item to follow up with NERC regarding the new confidentiality agreement. The old NDA will be invalid soon and there was a question about the transition from it to the new one and if there would be a gap in access to RTDMS until it was signed. Clifton was happy to report that no one will lose their access during this transition. There was also the issue of what other vendors are doing in regards to synchrophasors. As a result, the users group has a webinar planned for September 28th at 3PM ET. Space Time Insight will be giving a webinar on their software application. **AI (done):** Clifton will be sending additional info to Jim afterwards for inclusion in the notes **(See attachment)**. The webinar will be archived and Clifton is working with Steve Lee at EPRI to get it archived on the NASPI website. **AI (done):** Clifton will be sending out a notice to the user group regarding the webinar and Terry can send it to the broader NASPI WG members to see if any of them are interested. One role of the webinars is to grow the NASPI synchrophasor infrastructure and community so if anyone has ideas for future webinars, in particular operations type applications or tools, **AI:** please raise the topic by sending Terry an email.

The next meeting of the users group will be at the upcoming NASPI WG during the OITT breakout session. **AI:** Clifton will be sending out a notice on the next meeting.

PMU Registry (new item raised by Allison Silverstein)

Terry indicated that Allison had raised the issue of possibility having a registry for synchrophasors. The registry would address such things as: what is the device, where is it located, what is the point of contact, what is its classification (i.e., is production grade), data quality, does it have high reliability, who saves the data and where etc. Terry emphasized how we are still in the mode that we never saw a PMU that we didn't like. Allison came up with a set of questions in regards to the registry.

The issue was brought up that some of the data and/or PMUs are critical infrastructure information and has to be protected. Also, we need to be careful of not creating a data monster. Placing the registry data on the TVA site was suggested and would be an excellent site location for it. In terms of where we will be six-months from now, there could be hundreds of new PMUs showing up. Another issue is project management of PMUs in terms of keeping up with the steps of getting the PMU up and networked. The registry could address the current status of a planned PMU and identify what step it is in such as installation, streaming of data, networking, etc.

The issue was brought up that maybe some operators don't want to share all of their PMUs such as only 1 or 2 out of 10. The continued discussion of the registry was suggested as a great topic for the upcoming OITT breakout session at the NASPI WG meeting. Also, it was suggest that we not get overburdened in regards to speculative devices and that we should only focus on those PMUs that are coming on line or about to.

The daily report from RTDMS gives information on individual PMU performance so how much beyond this information will the registry include? Those PMUs in the report have been networked and are streaming data to the SuperPDC but the registry will cover PMUs not yet in the SuperPDC. Also, as the PMU network grows, we may be moving to regional concentrators and toolsets which will be different from interconnection toolsets. There may be common mode events, etc. of interest in a region and if we don't have a real-time data stream than we don't have input to the toolset.

There was a question as to how different the registry is from the datasets that the RITT is working on. These datasets will provide safe harbor for the synchrophasor data being put together captured events. In regards to the registry, it will be basic information on new PMUs to be deployed at the very least which is different from the RITT datasets. **AI:** Please send any comments that you have regarding the creation of a PMU registry to Terry and he will pass them on to Allison.

NDA - There is a new NERC nondisclosure agreement and a draft for a new synchrophasor NDA. The draft synchrophasor NDA is being circulated among some individuals for their review. It should be coming out in the next few months for signature.

Outreach

AI: Are there any ideas for new webinars and if so please let Terry know. An issue that was mention was in regards to anything that we might be missing in getting more operators involved or getting RTDMS out to them.

Goals and deliverables

We are in good shape in regards to goals and deliverables. We have completed every goal except for creating more training documents using the six 6C template. We do have some in the works including analysis of an event (by ATC), analysis of an islanding event (Terry) and small signal analysis (Jim and

Manu). The documents need to address: symptoms (what are the signs of an event), corrective action (how to get out of the situation), etc. It was suggested that Terry contact Entergy to have them do one on their islanding during the Gustav Hurricane. For the one Terry is doing for the Northwest islanding event, he has snapshots from RTDMS. **AI:** Terry is looking for volunteers to write up some additional training documents. It was suggested that Clifton engage the RTDMS users group.

2010 Goals

The highlight of the upcoming OITT breakout will be what we work on for 2010.

One suggestion is to come up with the steps of suggested actions for an event scenario seen by an operator. An example is when there is a significant phase angle difference occurring; the operator could check var support and look at topology to see why this is occurring and how severe it is. Maybe come up with a decision tree. Maybe we can work on a tool to guide them along. Maybe have a decision tree tool as a future functionality for RTDMS.

We need to focus on the baseline of what is acceptable for operationalizing the RTDMS tool. The baselining needs to determine what is good/bad in regard to parameters.

We have some capability for messaging when there is an event and should take the next step in terms of coming up with measures of consequence. Although we have the capability to generate a message 30 times a sec, we need to focus on information that is useful and not overloading the operator. Is there some merit in working on a global stress ("pucker") measure? This measure could be based on when some angle separation or modal oscillations occur.

Are there additional tools that operating engineers need that we should be developing for them? It was mentioned that the PITT team is looking at some type of stress factors using WECC data and that Mahendra is using EI data. Terry thinks that the work is based on SE snapshots not PMU data. OITT's efforts related to baselining will be to support the PITT's team effort.

Another goal should be seeing how many are using RTDMS in their EMS or some other PMU tool in their EMS. Does RTDMS have a knowledge base from the daily report for an event of interest? In regards to daily report archiving, EPG is putting in the infrastructure. Currently, we do have the ability to go back to a historical event. We need to be tracking users and what they are learning from the use of the tool. Terry has users in the MISO footprint using the tool.

Another goal can be reaching out to get more vendors involved with the OITT.

AI: Please send Terry your list of goals for 2010 and we will discuss them at the Chattanooga meeting. We should have firm goals coming out of the breakout session discussion.

NERC Operating Committee (OC)

NERC has a new task force looking at synchrophasor tools and applications. The NERC OC raised the need for it last week and thus formed the task force. Tony and Terry have offered to assist the task force. The task force has the charter of developing a summary report on how synchrophasors can be used in the future for operations such as what is available right now. **AI:** Anyone interested in participating can let Terry know or send an email to Stan Johnson of NERC. The task force will come up with recommendations and the OITT can help them in this endeavor. This is a great opportunity to (1) tie these efforts together and (2) tell the task force the tools that we have, what we are working on and what help is needed.

There was a question about NERC having a new smart grid task force (sponsored by their planning committee). The task force is focused on reliability impacts and what else needs to be considered. NERC looking at initiatives and NIST looking at standards could be a driver too for the new task force.

Upcoming meetings

Upcoming meetings include the Space Time Insight webinar that was mentioned earlier, the NAPI WG meeting on October 7-8 in Chattanooga and the OITT breakout session at the WG meeting. A draft agenda for the NASPI WG has been included in the agenda for this call. In regards to registration for the NASPI WG, the leadership team wants everyone to register by September 25. In regards to the OITT breakout session at the next WG, Terry has not yet heard if the PITT or RITT teams want to do it jointly with OITT. There is a template for the task team report due the end of September. It addresses accomplishments and what is ahead of us in the next few months. Future NASPI WG meetings will be February 2010 in Austin and July 2010 in Vancouver.

Notes for the Executive Steering Group's last meeting are included in the call agenda.

Next Call

The next call is October 15 at 12:30PM ET. It will be right after the WG meeting so we may want to make it a shorter call or delay it.