Joe,

After yesterday's meeting I was passed these comments concerning the meeting. I told Perry I would pass them on, since he was unable to interject during the meeting.

Perry worked cyber security in NSIR before branching out.

Bob Caldwell, Deputy Director
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From: Pederson, Perry A [mailto:perry.pederson@pnnl.gov]
Sent: Tuesday, February 28, 2017 5:44 PM
To: Caldwell, Robert <Robert.Caldwell@nrc.gov>
Subject: [External_Sender] Re: Meeting on Modernization Plan #4, Regulatory Infrastructure

Bob,

Life is good out west, but the work continues.

I sat through (online) the IAP MP4 meeting today. I tried to ask a question and then tried to type a question, but did not get a response. My question is related to the concept of 'performance-based.' In my view, the elephant in the room is the call to strive for so called performance-based regulations and guidance without first deciding how you intend to measure performance? I think this is the perineal problem of cyber security. But, during the 4-hour meeting nobody addressed this issue. Perhaps the issue has been fully addressed and everybody understands it but me. This is entirely possible.

Another thing I made note of was the lack of discussion concerning the threat. On the physical side, there is the DBT, but on the cyber side, it's not so clear.

One last thing, I would like to see, perhaps on a future agenda, is a discussion about the validity of the assumptions that the so-called fundamental I&C design principles such as independence and redundancy add any value at all from a cyber perspective.

Just my .02

Regards,
Perry

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Pacific Northwest National Laboratory
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E-Mail: perry.pederson@pnnl.gov

From: Robert Caldwell <Robert.Caldwell@nrc.gov>
Date: Wednesday, February 22, 2017 at 3:09 PM
To: "Pederson, Perry A" <perry.pederson@pnnl.gov>
Subject: RE: Meeting on Modernization Plan #4, Regulatory Infrastructure

Perry,

Hope you are well. Say hello to Sherrie Cross and Al Garrett (both PNNL and former NRC folks and good people.) DI&C is certainly keeping me busy – short and long term. Eventually we will get to cybersecurity by design, but we aren't there yet, as you can see.

How's the desert? Keep in touch.

Bob Caldwell, Director (Acting)
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From: Pederson, Perry A [mailto:perry.pederson@pnnl.gov]
Sent: Wednesday, February 22, 2017 2:41 PM
To: Caldwell, Robert <Robert.Caldwell@nrc.gov>
Subject: [External_Sender] Meeting on Modernization Plan #4, Regulatory Infrastructure

Bob,

You can guess from my email and signature block, who I am working for now.

I just noticed your name on the email distribution for the subject meeting and thought I would just reach out and say hello.

In preparing for this upcoming meeting, I also reviewed the Third Discussion Forum minutes on Digital I&C Implementation in NPPs that was held in the Bethesda Marriott in March of last

year. If anything was clear from reading that document, it's a clear lack of consensus on the issue of the role of digital (i.e., software based systems) in the nuclear power industry. Nonetheless, I do agree that this is a rather important discussion, regardless of how many NPPs are being taken out of service.

Hope all is well.

Regards,
Perry

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