

Lee R. Pedowicz

From: Bertagnolli, David
Sent: Friday, October 11, 2013 1:21 PM
To: paul.difilippo@HydroOne.com
Cc: tfsp-members; Quoc; jpearson@iso-ne.com; LaForest, Dean; Lee R. Pedowicz
Subject: RE: Request for Clarification for R16.1 in PRC-002-NPCC-1

Paul,
Below is an issue we would like clarified to help us specify DDR equipment capability and configuration.
Please let me know if you have any questions.
Thanks,
Dave Bertagnolli
ISO New England

For DDRs with continuous recording capability, the requirement to save data based on a trigger seems to be redundant. ISO New England is seeking confirmation/clarification on the need for both of these requirements from PRC-002-NPCC-1, Section B...

B. Requirements

*R8. Each Reliability Coordinator shall specify that DDRs installed, after the approval of this standard, function as **continuous recorders**.*

R9. Each Reliability Coordinator shall specify that DDRs are installed with the following capabilities...

9.1 A minimum recording time of sixty (60) seconds per trigger event.

9.2 A minimum data sample rate of 960 samples per second, and a minimum data storage rate for

RMS quantities of six (6) data points per second.

*R9.3 Each DDR shall be set to **trigger** for at least one of the following (based on manufacturers' equipment capabilities)...*

9.3.1 Rate of change of Frequency.

9.3.2 Rate of change of Power.

9.3.3 Delta Frequency (recommend 20 mHz change).

9.3.4 Oscillation of Frequency.

*R11. Each Reliability Coordinator shall document additional settings and deviations from the required **trigger** settings described in R9 and the required list of monitored quantities as described in R10, and report this to the Regional Entity (RE) upon request.*

*R12. Each Reliability Coordinator shall specify its DDR requirements including the DDR setting **triggers** established in R9 to the Transmission Owners and Generator Owners.*

Lee R. Pedowicz

From: paul.difilippo@HydroOne.com
Sent: Friday, January 03, 2014 9:01 AM
To: Lee R. Pedowicz
Cc: Guy V. Zito; Gerard J. Dunbar; Michael R. Lombardi; Scott A. Nied; weghgp@nu.com; paul.difilippo@HydroOne.com
Subject: RE: ISO-NE Request for Clarification - PRC-002-NPCC-01

Hi Lee

Happy New Year.

This was discussed at TFSP in our meeting in November. However from our understanding, a clarification cannot change a standard which limits the clarifications usefulness at times. This could have been corrected by the insertion of “non-continuous recorder” between Each and DDR in R9.3 however the clarification cannot make that happen. In fact, I recall this was discussed during our DT meeting but we decided to leave it in with the understanding that most recorders even if continuous in nature, could still mark these triggers on the record so a user could easily see where in the continuous record, a trigger violation occurred. However the reality is that this feature is a “nice- to- do” not a “shall”, and some members do not have continuous recorders with this capability.

With the requirement worded the way it is, TFSP feels that those with continuous recorders will be in non-compliance with the present wording in the standard if they do not have such triggering set up, which may not even be possible with certain recorders.

The clarification statement in this case would have to overstep the boundaries that have been established for this instrument. It was felt the best way to handle this is through a CGS which would give members more assurance that they will be not be found in non-compliance with R9.3 even though they have a continuous recorder deployed.

Regards

Paul DiFilippo

Paul DiFilippo P. Eng.
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From: Lee R. Pedowicz [mailto:lpedowicz@npcc.org]
Sent: Thursday, December 19, 2013 8:15 AM
To: DIFILIPPO Paul
Cc: Guy V. Zito; Gerard J. Dunbar; Michael R. Lombardi; Scott A. Nied
Subject: ISO-NE Request for Clarification - PRC-002-NPCC-01

Good morning, Paul.

I discussed your concerns with Compliance over ISO-NE's request for a clarification of PRC-002-NPCC-01 Requirements R8 and R9 which deal with Dynamic Disturbance Recording. Requirement R8 states:

R8. Each Reliability Coordinator shall specify that DDRs installed, after the approval of this standard, function as continuous recorders.

Continuous recorders do not need triggering, and there are probably non-continuous (triggered) recorders that were in service prior to the standard's approval. Based on that triggering characteristic, including the phrase "non-continuous" in Parts 9.1, 9.3, Requirements R11 and R12 would provide clarification. Also, in ISO-NE's request shouldn't "trigger" in Part 9.1 have been highlighted?

It is not felt that a CGS is required. Adding an explanation to the TFSP response to the clarification request of the full relationship between continuous and non-continuous recorders, and the need for triggering is all that is required.

Lee

From: paul.difilippo@HydroOne.com [<mailto:paul.difilippo@HydroOne.com>]
Sent: Wednesday, December 11, 2013 2:30 PM
To: Guy V. Zito
Cc: weghgp@nu.com; Quoc; Lee R. Pedowicz
Subject: FW: draft response letters to requests for clarification

Hi Guy

Attached are the clarifications TFSP worked on during a conference call last Friday. The only one we are unsure on how to proceed with is the clarification for ISO-NE. We have recommended in our letter that perhaps we may need to work with Compliance to issue another CGS since our interpretation without the use of a CGS could be construed as a change to the standard. We are not sure whether this statement belongs in the official response or not, however TFSP stands by the recommended action of engaging Compliance on this matter to ensure clarity.

Let me know if you are ok with the three clarifications and how best to proceed with the ISO-NE clarification.

Regards

Paul DiFilippo

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From: Quoc [<mailto:quoc@npcc.org>]
Sent: Tuesday, December 10, 2013 6:15 PM
To: DIFILIPPO Paul
Subject: draft response letters to requests for clarification

Paul,

Attached, please find the draft response letters to the requests for clarification. Let me know if you have any additional comments/changes.

I can forward this to Guy tomorrow if you are ok with these.

Thanks,
Quoc

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To: NPCC Registered Entities

From: Stanley E. Kopman, Assistant Vice President – Compliance Registration and

Subject: Clarification - Dynamic Disturbance Recording (DDR) in PRC-002-NPCC-01

Date: February 12, 2014

This clarification is being issued to document the NPCC position on Requirement 8 (R8) and Requirement 9 (R9) of PRC-002-NPCC-01:

- All DDRs installed after October 20, 2011:
 - Must function as continuous recorders
 - Must only meet sub-requirement R9.2
 - Do not have to meet sub-requirements R9.1 and R9.3
- Continuous DDRs installed prior to October 20, 2011 must only meet sub-requirement R9.2.
- Non-continuous DDRs installed prior to October 20, 2011:
 - Must meet all three sub-requirements: R9.1, R9.2, and R9.3
 - Do not have to be upgraded to function as continuous recorders

This clarification related to PRC-002-NPCC-01 can be found on the NPCC website under: “Standards”, “NPCC BOD Approved Standards”.

Sincerely,

Stanley E. Kopman

Stanley E. Kopman
Assistant Vice President, Compliance Registration and Enforcement
NPCC, Inc.