

NCSLI 132 Measurement Comparison Program Committee 2016 Meeting Minutes, 26 July 2016 St. Paul, Minnesota

Attendance

Elizabeth Auden, Sandia Primary Standards Lab
Sylvain Berube, Hydro Quebec
James Cares, Boeing South Carolina
Richard Chance, Indiana Standards Lab
Stefan Cular, NIST
Mike Duncan, Oak Ridge National Laboratory
Brian Dunlap, Army Primary Standards Lab
Ben Fuller, Bionetics Corp.
Russel Geisthardt, Keysight Technologies
Ron Ginley, NIST
Jim Goza, Lockheed Martin

Jon Harben, Keysight Technologies
Jay Klevens, Ohm-Labs
Rob Knake, A2LA
Frank Liebmann, Fluke Calibration
Rick Martin, Lockheed Martin
Alain Mathieu, Hydro Quebec
William Miller, Lockheed Martin
Cred Payne, Oak Ridge National Laboratory
Yi-hua Tang, NIST
Larry Tarr, Army Primary Standards Lab
Kai Wendler, National Research Council Canada

Sign-in & Intro

Introductions – Went around the room and gave brief introductions

Charter and Goals Reviewed – Charter and goals projected and discussed. The goals are to remain the same but there should be more focus on our efforts related to NCSLI ILC efforts.

IMIS Website for ILC activities – Frank L. Volunteered to work with Mike at the office to develop a true ILC page to promote our ILC activities and to work as a holding place for our current and past ILC efforts.

Action Item 1 – Frank L. to work with office to improve and develop a true ILC website to support our current committee goals. Due 12/31/16

General Committee Info

RP-15 Discussion – The committee had reviewed RP-15 and there were no comments that would require change so the committee will put forward the document to be reaffirmed as is to the BoD.

Action Item 2 – R. Knake to provide recommendation to NCSLI BoD to reaffirm RP-15 with no changes. Due 08/31/16

Sub-Committee Updates

JVS ILC Discussion

Y. Tang presented the current efforts related to the JVS and PJVS ILC efforts. See presentation A.

The next round robin for the JVS ILC is planned for 2017. Discussion was had regarding the need for the ILC in 2017 and what would be the protocol and the logistics related to the comparison. Things that need to be decided included the pivot lab, the protocol and scheduling. The committee was in favor of supporting another ILC in 2017 and not to wait until 2018 to conduct the ILC.

Y. Tang to contact the following people to further investigate the scope and protocol volunteers to be contacted are:

- Richard Martin – Lockheed Martin – rick.martin@lmco.com
- Michael Duncan – ORNL – duncanml@ornl.gov
- Yi-hua Tang – NIST – yi-hau.tang@nist.gov
- Mark Pridgen – Bionetics – mark.pridgen.ctr@us.af.mil

North American 1 Ohm ILC

K. Wendler – Discussed the status of the 100 Ampere ILC. It is completed and Kai hopes to have the report presented to the committee chair in September.

Action Item 3 – Send report to committee chair

High Voltage ILC

J. Klevens – Discussed the intent to sponsor a High Voltage ILC with through the 132 committee. Jay indicated that NRC has volunteered to provide reference measurements and Dilip Shah has volunteered to provide analysis of the ILC results. Jay Klevens has volunteered to provide the artefact and to be the pivot laboratory. He has drafted some protocol that he will submit that to the committee and the current roster of approximately 12 participants and the target to completion is 12 months.

Action Item 4 – Send protocol to committee

New Action Items

RF/Microwave ILC Discussion – R. Ginley at NIST indicated that they would be interested in an ILC and the committee in general seemed to have interest depending on the parameters. Parameters of interest varied widely but there was definite interest for an ILC in the RF/Microwave area.

Action Item 5 – J. Smith to reach out to the committee to determine what parameters would be of interest in the committee and then report back to the group to arrange an ILC in this area.

Future ILC Considerations that were of interest to the committee:

- 1 teraOhm -2018
- Quantum Hall Resistance ILC -2018
- AC/DC Difference – NIST could provide multi junction standards – 2017/18??
- Air Velocity – ORNL is working with NIST – 2017
- Optical Density
- Pressure Vacuum, Low Pressure
- Sound/Acoustics
- Angle Blocks
- Gage Blocks
- Gas Flow
- Laser Power/Energy
- Morehouse 4215/Transducer