ES&H Executive Board Meeting Notes August 3, 2015

In attendance:

Members in attendance: Adam Cohen (Chair), Jerry Levine (Secretary), John DeLooper, Kristen Fischer, Rich Hawryluk, Hutch Neilson, Stewart Prager (ex-officio), Masa Ono

Resource members in attendance: George Ascione, Virginia Finley, John Lacenere, Judy Malsbury, Bill Slavin

ACC members in attendance: Leif Dietrich, Tracy Estes, Charlie Gentile, Stefan Gerhardt, Tony Indelicato, Jerry Levine, Al von Halle

Others in attendance: Jamie Dunnigan, Jim Hirsch, Joel Hosea, Bob Kaita, Jon Menard, Keith Rule, Dorothy Strauss, Mike Zarnstorff

Presentation Materials

The NSTX-U Activity Certification Committee (ACC) was charged by A. Cohen to reevaluate NSTX-U readiness following the electrical arc event that occurred April 24, 2015. The committee was asked to:

- 1. Confirm that the reassembly of the NSTX-U has been completed appropriately and has not impacted their recommendation for the Safety Certificate
- 2. Evaluate the new items designed and installed and confirm they do not impact their recommendation for the Safety Certificate
- 3. Confirm that the appropriate actions have been taken to establish and install electrical grounding prior to energizing the coils, and
- 4. Assess the start-up process to confirm needed checks-and-balances are in place to ensure proper conduct of operations.

The ACC walked down the system, reviewed documentation including mechanical prints, electrical drawings, run copies of procedures, etc., and confirmed the integrity of collateral systems such as interlocks. The ACC affirmed the reassembly of NSTX-U has not impacted their recommendation for the Safety Certificate.

The ACC evaluated NSTX-U's new components and found them to be well engineered, robust, and within the original parameters of the Safety Certificate.

The committee found an appropriate grounding strategy in place and noted a well-qualified system engineer for the center stack and collateral (FCPC) areas has been identified. The ACC was satisfied with the analysis and documentation done in support of this system and determined that it, too, is within the boundaries of approved operation procedures and the Safety Certificate.

The ACC reviewed OP-AD-56, the procedure governing chain-of-command, and found it had been strengthened by revision and now includes more descriptive verbiage regarding who has to be in the control room based on certain off-normal events. OP-AD-39, which addresses conduct of operations, was reaffirmed through training with an emphasis on stop-work authority to ensure that staff members know to use it for potential equipment damage as well as worker safety.

The Board expressed concern that the chain-of-command wasn't clear and referenced seemingly conflicting NSTX-U organizational charts, each with a different emphasis and/or application, which could lead to confusing interpretations

of the chain-of-command for NSTX-U under normal operations and for off-normal occurrences. The Board agreed that the NSTX-U management (M. Ono and J. Menard) is responsible for the safe operation of the project, and specified that this should be made very clear in conduct-of-operations training and the upcoming pre-job briefing for the Integrated System Test Procedure (ISTP). The Chief Operating Engineer (COE) is in charge in the control room, and the COE can then determine appropriate additional contacts and actions as needed for any off-normal situation.

Board members also expressed concern that stop-work authority as it relates to potential equipment damage was not being articulated clearly enough in the conduct of operations training. Workers must understand they are not only authorized but expected to speak up when they perceive a potential problem, be it human injury, equipment damage, or a negative environmental impact. The Board and ACC agreed that this should be communicated during the training and at the pre-job brief. An idea was put forward to create a stop-work authority document for signature, indicating understanding and acceptance of responsibility.

The ACC agreed with the refinements suggested above. They confirmed the Safety Certificate remains valid, asserted that no new capabilities were added and that the safety envelope remained the same as it was when the previous ACC recommendation to the Board was made on April 10, 2015, and recommended that NSTX-U proceed to CD-4. **The Board accepted this recommendation.**

There being no further business, the meeting was adjourned.

Meeting notes submitted by: Dorothy Strauss