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**EMBASSY SUITES CHICAGO DOWNTOWN MAGNIFICENT MILE HOTEL**

**CHICAGO, IL USA**

**ATR LEU Conversion Update**

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**ABSTRACT**

The ATR LEU conversion project made significant progress in 2017 on the fuel element design. The conceptual design review for the LEU elements is currently in process. The analysis done to date shows the fuel performing well, and we are beginning to find the limits of when blistering may occur on a power vs burnup plot. More thermal conductivity data has been requested to improve the accuracy of these calculations.

New analysis software is needed to create a safety basis for the element tests and for full conversion. The INL Lab Wide Procedure “Managing Information Technology Assets” ensures that all quality level 1 safety software that is developed or acquired meets the requirements of NQA-1. Upcoming work in 2018 will rely on safety software being fully qualified to perform calculations that will support SAR addendums for tests in ATRC and ATR.