ABSTRACT (Arial, 12Pt, Bold)

The Generic Test Plate Assembly matrix flow tests at Oregon State University’s Hydro-Mechanical Fuel Test Facility have concluded. A summary of the test matrix and preliminary results will be presented. Additionally, an overview will be provided of the various process improvements that were implemented to ensure expeditious and accurate collection of high resolution plate deformation data. Discussion will cover the LUNA system: a real-time laser interferometer that provides deflection data along a continuous path on the plate, the bend tester: an apparatus used to both verify the quality of the strain gauge and collect strain sensitivity readings to be used during flow tests, and the plate scanner: a translated profilometer used to collect pre- and post-flow surface information for post-processing the deformed shapes of the plates. The response of the various surrogate fuel plate types will be compared and discussed.