Abstract Submitted for the DPP15 Meeting of The American Physical Society

Lasnex Simulations of Axial Power Diagnostic for ZR HEIDI MOR-RIS, Los Alamos National Laboratory — The dynamics of energy loss through diagnostic and/or laser entrance holes with or without shine shields is of inertial con-

finement fusion experiments envisioned for the National Ignition and ZR Facilities. 2-D radiation-hydrodynamic simulations using Lasnex for power diagnostic experiments using a secondary gold hohlraum fielded at the ZR facility are discussed. The axial radiation exiting the aperture of the dynamic hohlraum is modeled as time and spectrum-dependent 1-D and 2-D sources. Hohlraum energy balance and implications for the measured power are discussed.

> Heidi Morris Los Alamos National Laboratory

Date submitted: 27 Jul 2015

Electronic form version 1.4