Bradley Jenkins General Manager Portland General Electric 541.481.1211 Bradley.Jenkins@pgn.com Spike Ford Reliability Analyst Portland General Electric 503.464.2992 spike.ford@pgn.com

Biography Bradley Jenkins

Brad has been with PGE since February 2012. He started at the Boardman Coal Plant as the Operations Manager and in September 2012, assumed the role of Plant General Manager. In September of 2013, Brad assumed the role of General Manager of Diversified Plant Operations, overseeing the Boardman Coal Plant, Carty Generating station (new 440MW CCCT) and Wind Generation in Eastern Oregon and Washington. Prior to joining PGE, Brad has served in various capacities in the utility industry including over 20 years in large generating facilities, both nuclear and fossil. Brad's positions have included; Plant General Manager, Maintenance Manager, Operations Manager, Control Room Supervisor, Reactor Maintenance Project Manager, Operations Liaison and Auxiliary Operator.

Brad has a B.S. in Industrial Engineering from Southern Illinois University at Carbondale, Project Management Professional (PMP) Certification and Utility Management Certification from Willamette University.

Biography Spike Ford

Eric "Spike" Ford is a Reliability Analyst, specializing in Root Cause Analysis, in the Generation Engineering Department of Portland General Electric Company. In this role, he performs and supports analysis of events that occur at the generating plants in Portland General Electric's fleet. The fleet includes coal, natural gas combined-cycle, hydro and wind generating plants. Prior to his current assignment, Mr. Ford worked in the nuclear power industry in licensing, operations and maintenance. He holds a Bachelor of Science degree in Biology from Lewis and Clark College in Portland, Oregon. Mr. Ford lives in St. Helens, Oregon.

Abstract - Thermal Transient Event & Solution at Boardman Coal Plant

On July 1, 2013, the Boardman Coal Plant sustained substantial damage to the cold reheat piping, its supports and hangers, plant structural members and other plant components during a thermal transient event. The damage was inflicted by the nearly 100 ft. long, 36 in. diameter cold reheat line crashing down upon equipment and structures as it pulled loose from its supports and fell to lower levels of the plant. This presentation will discuss the energetic relocation of the reheat steam line, the cause of the event, plant damages incurred and bringing the plant back into operation in 30 days.