

2020 HIGH PERFORMANCE MATERIALS PROJECT REVIEW MEETING Virtual Agenda Tuesday, September 1, 2020

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Introduction - Patricia Rawls, NETL

1:10 PM Keynote

Advanced Ultra-Supercritical Component Testing

Robert Purgert, Energy Industries of Ohio, Inc., and Horst Hack, Electric Power Research

Institute

Alloy Manufacturing Panel Discussion

Moderator: Mark Render Facilitator: Vito Cedro

1:30 PM High Performance Particle Based Modeling of Damage Nucleation from Forging Flaws in

Fossil Power Generation Rotor Components

Kai Kadau, Siemens Energy, Inc. Los Alamos National Laboratory

1:40 PM Integrated Process Improvement using Laser and Friction Stir Processing for Nickel Alloys

used in Fossil Energy Power Plant Applications

Glenn Grant, Pacific Northwest National Laboratory (PNNL)

1:50 PM Physics-based Creep Simulation of Thick Section Welds in High Temperature and

Pressure Applications

Thomas Lillo, Idaho National Laboratory, (INL)

2:00 PM Compact Diffusion Bonded Heat Exchanger Fatigue Life Simulations

Carl Schalansky, Vacuum Process Engineering, Sandia National Laboratory

2:10 PM Low-Cost Hip Fabrication of Advanced Power Cycle Components and PM/Wrought

IN740H Weld Development

Shenyan Huang, General Electric Company

2:20 PM Facilitated Discussion

3:00 PM Adjourn