DOE Meeting Memorandum: Ex Parte Communications

Date: September 17, 2014

DOE Attendees: Ashley Armstrong, EERE

Outside attendees: Bob Sullivan, Ormat Technologies and Janie Wise, Cassidy & Associates

Meeting Contact: Janie Wise – jwise@cassidy.com / 202-585-2553

Subject: Request for Information on Efficiency Standards for Natural Gas Compressors

Summary: Ormat Technologies is headquartered in Reno Nevada and designs and manufactures waste heat recovery units that are commonly applied on natural gas pipeline compressor stations. Ormat met with DOE to discuss the recent RFI on Efficiency Standards for Natural Gas Compressors and how waste heat recovery solutions could be a potential compliance pathway. Ormat described its WHR technology and the potential scope of applications across the United States. Ormat also shared a paper from ASHRAE which described a project demonstration of waste heat on compressor stations and provides metrics for calculating the efficiency improvements they achieved. ASHRAE profiled a recovered energy generation (REG) system on a 35,000 horsepower gas turbine and found that it improved the overall energy efficiency of the system by 28%, from 32% simple cycle efficiency to 41% for the combined system.

Leslie, Neil, et al. *Recovered Energy Generation Using an Organic Rankine Cycle System.* Report CH-09-024. 2009.
http://www.elmiraohio.com/Organic%20Rankine%20Cycle%20Docs/Recovered_Energy_ORC.pdf.