



6450-P-01

DEPARTMENT OF ENERGY

Notice of Public Meeting of the Supercritical CO₂ Oxy-combustion Technology Group

AGENCY: National Energy Technology Laboratory, Office of Fossil Energy, Department of Energy

ACTION: Notice of public meeting.

SUMMARY: The National Energy Technology Laboratory (NETL) will host a public meeting via WebEx August 29, 2018, of the Supercritical CO₂ Oxy-combustion Technology Group, to address challenges associated with oxy-combustion systems in directly heated supercritical CO₂ (sCO₂) power cycles.

DATES: The public meeting will be held on August 29, 2018, from 1:00 p.m. to 3:00 p.m. EDT.

ADDRESSES: The public meeting will be held via WebEx and hosted by NETL.

FOR FURTHER INFORMATION CONTACT: For further information regarding the public meeting, please contact Seth Lawson or Walter Perry at NETL by telephone at (304) 285-4469, by email at Seth.Lawson@netl.doe.gov, Walter.Perry@netl.doe.gov, or by postal mail addressed to National Energy Technology Laboratory, 3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV, 26507-0880. Please direct all media inquiries to the NETL Public Affairs Officer at (304) 285-0228.

SUPPLEMENTARY INFORMATION:

Instructions and Information on the Public Meeting

The public meeting will be held via WebEx. The public meeting will begin at 1:00 p.m. and end at 3:00 p.m.

Interested parties may RSVP, to confirm their participation and receive login instructions, by emailing

Seth.Lawson@netl.doe.gov.

The objective of the Supercritical CO₂ Oxy-combustion Technology Group is to promote a technical understanding of oxy-combustion for direct-fired sCO₂ power cycles by sharing information or viewpoints from individual participants regarding risk reduction and challenges associated with developing the technology.

Oxy-combustion systems in directly heated supercritical CO₂ (SCO₂) power cycles utilize natural gas or syngas oxy-combustion systems to produce a high temperature SCO₂ working fluid and have the potential to

be efficient, cost effective and well-suited for carbon dioxide (CO₂) capture. To realize the benefits of direct fired SCO₂ power cycles, the following challenges must be addressed: chemical kinetic uncertainties, combustion instability, flowpath design, thermal management, pressure containment, definition/prediction of turbine inlet conditions, ignition, off-design operation, transient capabilities, in-situ flame monitoring, and modeling, among others.

The format of the meeting will facilitate equal opportunity for discussion among all participants; all participants will be welcome to speak. Following a detailed presentation by one volunteer participant regarding lessons learned from his or her area of research, other participants will be provided the opportunity to briefly share lessons learned from their own research. Meetings are expected to take place every other month with a different volunteer presenting at each meeting. Meeting minutes shall be published for those who are unable to attend.

This meeting is considered “open-to-the-public;” the purpose for this meeting has been examined during the planning stages, and NETL management has made specific determinations that affect attendance. All information presented at this meeting must meet criteria for public sharing or be published and available in the public domain. Participants should not communicate information that is considered official use only, proprietary, sensitive, restricted or protected in any way. Foreign nationals, who may be present, have not been approved for access to DOE information and technologies.

Dated: July 23, 2018

Heather Quedenfeld

Associate Director, Coal
Technology Development &
Integration Center
National Energy Technology
Laboratory