

Gasification Users Association (GUA)



(Clockwise Top Left) Polk, Wabash, Buggenum and Puertollano IGCC plants

The Gasification Users Association (GUA) provides users and potential users of gasification technology with a network to exchange non-confidential information on the practice and operation of gasification and its associated technologies, including air separation, gas cooling and clean up, gas separation and power generation.

Gasification-based plants can provide for high efficiency, reliable and environmentally benign generation of electricity, and the production of other types of energy and chemicals. EPRI has helped advance the development of gasification processes through its RD&D program and continues its efforts in helping the industry apply the results of the work it has sponsored as well as related work.

Value

The gasification and related technologies industry needs an avenue to exchange information regarding utility requirements, safety, training, reliability and power generation considerations in order to assure optimum

- Interact with other gasification technology users or potential users and share information, experiences, and best practices to advance the state of the industry
- Gain access to information that could assist with the planning and/or consideration of adding a gasification plant to asset mix
- Participate in a forum to identify and participate in research, development, engineering, demonstration, and commercial utilization of gasification for the production of electricity and other forms of energy and chemicals

development. For more than 20 years, the GUA has helped meet this need and continues today in serving as an industry group complementing the RD&D roles of EPRI, individual organizations, and government. The GUA provides a forum in which members are able to reach substantial agreement on policies regarding gasification and related technologies. It also serves as a focal point for expanded industrial and commercial involvement, such as coal-to-chemical applications as well as coal-to-power operations.

Drivers and Trends

Over the past few years, several major power companies have been conducting detailed design studies of commercial-sized, coal-based Integrated Gasification Combined Cycle (IGCC) plants. Concern over the continued availability of natural gas at competitive prices has led many power companies to seriously consider clean coal technologies as a strategic hedge against over-reliance on natural gas alone to provide future power needs.

However, deployment of clean coal technologies has recently faced increased opposition from many environmental groups. Although the technology for CO₂ capture exists for gasification plants, there is ongoing concern over the uncertainty of CO₂ emissions requirements and associated cost implications.

While several demonstration projects are underway to address the technical viability of sequestration in various geological formations and CO₂ legislation is being drafted, the industry continues to research, develop, demonstrate, and deploy clean coal technologies with carbon capture and sequestration.

Project Summary

The GUA is an international organization that meets two times a year, usually in association with gasification or IGCC plant visits in the U.S., Europe, or Asia. The annual meeting is usually held in conjunction with the Gasification Technologies Conference (sponsored by EPRI and the Gasification Technologies Council (GTC)). EPRI staff provides technical and management support for the GUA. EPRI arranges the meetings and agenda in cooperation with the members and provides an overview of the status of the technology in addition to its applications and economics. An annual report is prepared that includes comparisons of IGCC to other competing power generation technologies such as Ultra Supercritical (USC) Pulverized Coal (PC), Fluidized Bed Combustion (FBC), and natural gas combined cycles (NGCC) as well as updates on gasification technology development activities and commercial projects.

The GUA originally was started by EPRI in 1982 and was called the Utility Coal Gasification Association (UCGA). In response to members' interest in other fuels such as

petroleum residuals, wastes and biomass, the title was changed to the Utility Gasification Association (UGA) in 1992. In 1996, the GUA emerged to reflect the ongoing changes in industry and to better serve a wider group of gasification users and potential users.

Deliverables

- GUA Annual Report on Gasification Technology Status and interim summary update report on latest status of gasification and related technologies
- Quarterly Newsletters on gasification and related technology and commercial developments
- Two meetings and technology tours per year, one in the U.S. and one outside of North America along with published minutes.

Price of Project

GUA membership is priced at \$5,000 per year.

Who Should Join

The GUA is a member-driven organization. Any industrial organization is eligible to apply for GUA membership provided that it is not currently active in the commercial development and licensing of proprietary gasification technology.

Contact Information

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