# SOAPP-CT Version 6.0 Released

## Powerful Tool Integrates Technical and Financial Decision Making

Palo Alto, January 8, 2002: EPRI has announced the release of SOAPP-CT Version 6.0.  SOAPP-CT provides integrated technology evaluation/selection, conceptual design, and financial analysis of combustion turbine based power and cogeneration plants. SOAPP-CT automates the plant conceptual design process, generating heat/material balances, equipment selection and sizing, drawings and 3D models, cost estimates, construction schedules, and financial analysis.  As the premier power project development software, SOAPP-CT breaks new ground with Version 6.0 by reflecting the current state of deregulating the energy industry.

New Features in Version 6.0 include:

- Addition of several new gas turbine models, increasing the total number of specific combustion turbines modeled by SOAPP-CT to 94.
- Updated performance and emissions data, based on manufacturer's input.
- Updated capital cost models and commodity estimates, including all balance of plant equipment, based on recent data from actual projects, commodity indices, and market considerations.
- A periodic analysis has been implemented that allows the user to specify up to 12 periods in one year.  Various key inputs have been made "periodic" in order to capture a more seasonal or time-of-day representation of plant performance, revenue and costs.  For instance, duct burners can be taken out of service for specified periods.  For cogeneration and combined-cycle configurations, these periodic cases incorporate off-design HRSG performance approximations referenced to the primary fuel design run.  The calculations for consumables, including fuel, and net electrical generation have been modified to include the seasonal variances throughout the year.
- A user-specified duct burner fuel feature has been added which allows the user to specify the fuel constituents of any fuel for the duct burner.  The users will be given an option to select natural gas, distillate fuel oil, a user-specified gas or user-specified oil on a periodic basis.  If a user-specified duct burner fuel is selected, the user must then enter the fuel's constituents, the fuel's Lower Heating Value (LHV) and HHV/LHV ratio.

- A fogging option for inlet air-cooling was added. The performance and cost of inlet air fogging was added to the existing inlet air-cooling technologies for CT capacity enhancement. When used with the periodic analysis feature, the user will be able to model the fogging technology (as well as any other cooling technology) periodically, taking the cooler out of service during certain periods of the year.
- Modeling of forced-circulation vertical HRSGs has been added. Recirculation pumps for this configuration have been added to the equipment list, resulting in a slightly higher auxiliary load. HRSG dimensions will also reflect the vertical design; however, arrangement drawings have not been updated to reflect this configuration.
- A single-shaft combined cycle configuration option has been added. The modeling of this configuration incorporates plant performance, equipment selection, and capital cost; however, general arrangement drawings have not been updated to reflect this configuration.
- A user preference has been added to the interface that allows the user to select the three-letter currency symbol and exchange rate per US dollar. The user-preferred currency will be displayed in both the input worksheets and output reports.
- An automatic recognition of international date/number format feature was added that automatically detects the date and number settings selected by the user. The WorkStation converts non-U.S.A. settings to the U.S.A. format for program execution and reports.
- The CT Performance Results have been modified to include periodic data.
- The Performance Summary Results have been modified to include periodic information, and a second report (for secondary fuel, if applicable) has been added.
- The Water Balance Diagram will now be represented by two reports, one for the primary fuel and another for secondary fuel.
- Design performance within Advanced Analysis now includes CT performance downstream of the inlet air cooler if a cooling technology is specified in the design.

All SOAPP software products are designed for Microsoft Windows™. SOAPP-CT operates under Windows 95, Windows 98, Windows ME, Windows NT, and Windows 2000.

EPRI and EPRIsolutions provide power generation technologies, products and services focused on providing clients with a competitive edge in a rapidly evolving energy industry. The SOAPP Team develops and markets the award-winning SOAPP family of commercial software products and consults with clients around

the world to identify and evaluate strategies, evaluate new power generation and repowering alternatives, and provide risk mitigation for applying advanced competitive technologies.

The SOAPP Team at EPRIsolutions developed SOAPP-CT. The award-winning SOAPP® products, originally developed by Sargent & Lundy of Chicago, IL. incorporate technology developed for the electric power industry under the sponsorship of the Electric Power Research Institute (EPRI), based in Palo Alto, CA. All commercial SOAPP products are developed, supported, and maintained by the SOAPP Team.

For more information on SOAPP-CT Version 6.0, please contact us by phone at 1.650.855.2666 or by e-mail at info@soapp.com.

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