

# POWER NEWS

Better technology for a cleaner world

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### A Milestone For Our CFB Technology - The Lagisza CFB Power Plant Begins Commercial Operation

The world's largest circulating fluidized-bed (CFB) steam generator - which is also the world's first supercritical CFB - has successfully started operation at the Lagisza power plant, owned by the Polish utility company Poludniowy Koncern Energetyczny SA (PKE).

We provided the turnkey supply of the boiler, including engineering and design, erection, civil work, start-up, and commissioning. The new CFB replaces the 1960-era pulverized-coal units at the power plant.

This CFB produces 460 MWe of electricity at an efficiency level well above that of typical coal plants. The unit incorporates a number of advanced design features such as compact solid separators, INTREX™ super heaters, and low-temperature flue-gas heat recovery that captures valuable heat that would otherwise be lost.

The unit incorporates - for the first time ever in any CFB - highly efficient BENSON vertical-tube supercritical steam technology, which is more efficient and reliable than conventional supercritical technology prevalent in the market today.



**Commercial Operation Begins at the Lagisza Power Plant  
460 MWe Supercritical OTU CFB Boiler**

## Foster Wheeler Signs License Agreement for Advanced Pulverized-Coal Technology in India

Pending approval by the Government of India, we have entered into a 20-year agreement with BGR Boilers Private Limited to provide an advanced technology license for wall-fired subcritical and supercritical pulverized-coal (PC) steam generators to be sold in India.

The two companies have also agreed to cooperate on multiple prospective projects under separate contracts within the next five years, with Foster Wheeler providing the engineering and design along with selected major components.



From left: BGR's Ramesh Kumar, V. R. Mahadevan, B. G. Raghupathy, Foster Wheeler's Nancy Qiu, David Parham, Jim Utt, Ceasar Hussain

## Second Successive Order of Distinction by UK's Royal Society for the Prevention of Accidents Awarded

Foster Wheeler Limited has been awarded the prestigious Order of Distinction Award for Occupational Health and Safety by the UK's Royal Society for the Prevention of Accidents (RoSPA). The Order of Distinction Award is only presented to companies which have achieved at least 15 consecutive RoSPA Gold Awards for outstanding health and safety performance on projects in the UK and around the world. The 2009 Award follows Foster Wheeler's achievement of the Award in 2008.



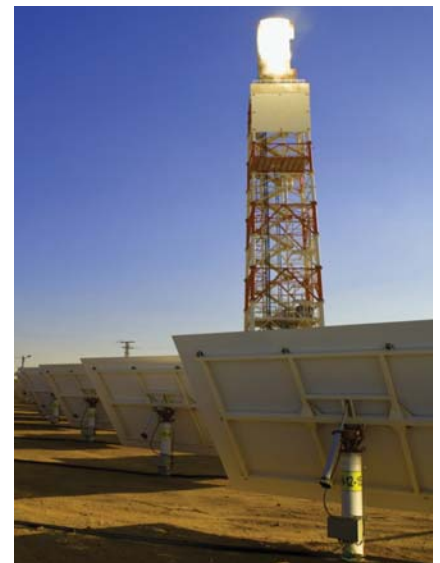
Lord Brougham & Vaux CBE (left), vice president, The Royal Society for the Prevention of Accidents, presents the RoSPA Order of Distinction Award for Occupational Health and Safety to Jon Nield (right), Director, Operations and Tony Banks, Construction & Commissioning HSE Operations Manager, both from Foster Wheeler Energy Limited.

## Contracts Won for Solar Steam Generation Equipment in Spain

We were awarded a contract by SENER-AMSA JV to design and supply the steam generating equipment for the new Gemasolar Project tower-type concentrated solar power (CSP) plant in Seville, Spain. We were also awarded the feedwater heater equipment contract for the facility.

The CSP plant, as designed by SENER-AMSA, utilizes the SENER Central Receiver System (CRS) design with molten salt heat storage, which provides higher efficiency and utilization factors than units without storage.

The salt is heated by concentrated solar light reflected by heliostat mirrors toward a tower-mounted receiver. Once heated, the salt is then circulated through the equipment to produce high quality steam for electricity generation.



Initial operation of the solar plant is expected in 2010.

## A Milestone For Our CFB Technology - The Lagisza CFB Power Plant Begins Commercial Operation (Continued from page 1)

Our CFB technology is a clean-coal platform with a unique low-temperature combustion process that cleanly and efficiently burns both traditional fuels and carbon-neutral fuels; typical fuels can include biomass, waste coals, tires and processed waste materials. The CFB unique multi-fuel capability can utilize opportunity and carbon-neutral fuels to significantly reduce CO<sub>2</sub> emissions in relation to conventional PC boilers while improving the economics of the power generation.

Our CFB technology does not have burners or a flame within its furnace. It uses fluidization technology to mix and circulate fuel particles with limestone as they burn in a low-temperature combustion process.

The limestone captures the sulfur dioxides as they are formed, while the low burning temperature minimizes the formation of nitrogen oxides. The fuel and limestone are recycled over and over back to the process resulting in high efficiency for burning fuel, capturing pollutants and transferring the fuel's heat energy into high-quality steam to produce power.

### Congressman Lance Visits Foster Wheeler's Perryville Office

On May 18th, Congressman Leonard Lance (who serves NJ's Seventh District, which includes parts of Hunterdon, Middlesex, Somerset and Union counties) paid a visit to our Perryville Office. Gary Nedelka and Bob Giglo presented an overview of our Global Power Group business and technology. Other FW executives present were Peter Ganz, Scott Lamb, Beth Sexton and Dick Lively.

We discussed the development of balanced energy, and environmental policy and how Foster Wheeler is advancing power generation technology to provide clean solutions for the future with our carbon flexible CFB technology, highly efficient vertical tube supercritical steam generator technology, Flexi-burn® and solar thermal power technology, which offer solutions to both existing and new power plants.

The Congressman moved to our Model Room where Don Kawecky showed him our state-of-the-art 3-D design program used to design our steam generators.

A question and answer period followed, attended by many employees who reside in the Congressman's district, where several questions were asked including the subjects of social security and health care.





We offer a full range of steam generator equipment, aftermarket products and services to the power, industrial, and waste-to-energy sectors. Our global manufacturing and engineering network can deliver cutting-edge products and expertise, quickly and cost competitively with best-in-class quality. Established in 1891, our experience comes from over a century of designing, servicing, and continually improving steam generating equipment.

#### Utility Steam Generators

- Circulating Fluid Bed
- Pulverized Coal
- Oil & Gas
- Supercritical Steam
- Solar Power

#### Industrial Steam Generators

- Package
- Grate & MSW
- Metallurgical Waste Heat
- Heat Recovery Steam Generators

#### Auxiliary Equipment

- Feedwater Heaters
- Condensers
- Biomass Gasifiers

#### Steam Generator Services

- SCR and SNCR Systems
- Low NO<sub>x</sub> Combustion Systems
- Replacement/Upgraded Parts
- Construction Services
- Modernizations

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#### Visit us at these Upcoming Events:

**COAL-GEN,**  
Charlotte, NC USA  
August 19 - 21, 2009

**COAL-GEN Europe**  
Katowice, Poland  
September 1 - 3, 2009

**POWER-GEN Asia**  
Bangkok, Thailand  
October 7 - 9, 2009

**POWER-GEN International**  
Las Vegas, Nevada USA  
December 8 - 10, 2009

Watch our CFB video on: [www.fwc.com](http://www.fwc.com)