

Participation in the Poland Workshop of the  
“Global Superior Energy Performance Partnership (GSEP)”  
- Contribution to improving global energy efficiency  
through international cooperation -

October 24, 2013

Federation of Electric Power Companies

Members of the Federation of Electric Power Companies (FEPC) participated in the second workshop of the Power Working Group (WG) of the “Global Superior Energy Performance Partnership (GSEP)<sup>\*1</sup>”, held from October 14 to 16 in Poland.

The GSEP was established in July 2010 under a public–private partnership as a successor of APP<sup>\*2</sup>, to promote energy saving in industry and construction. The organization consists of six WGs, each of which represents a sector. The Power WG promotes energy saving and reducing CO<sub>2</sub> emissions on a global level by proposing improvements in operation and maintenance technologies for better maintaining the heat efficiency of coal-fired thermal power plants, and by sharing best practices and know-how in the areas of electricity generation, transmission and distribution.

At the Belchatow Power Station which they visited, the FEPC led the discussions from a technical perspective by presenting their knowledge on the operations management, facility maintenance, and environmental facilities of coal-fired thermal power stations. The participating countries also presented their efforts for addressing global warming and energy saving, and actively exchanged opinions, sharing various experiences and know-how.

The Workshop provided a valuable opportunity for the countries to share the wealth of experience and know-how on the operation and maintenance of Polish coal-fired thermal power plants. It is important for saving energy and reducing CO<sub>2</sub> emissions on a global level that Poland, which produces approximately 90% of its electricity from coal, continues to use appropriate operation and maintenance technologies.

The results of the Workshop will be reported at the Clean Energy Ministerial meeting which will be held in May 2014 in South Korea.

Through this initiative, in cooperation with other participating countries, the FEPC will continue

to help promote energy saving and reducing CO<sub>2</sub> emissions in the electric power sector.

\*1 Global Superior Energy Performance Partnership (GSEP)

- Established in July 2012 under the joint initiative of Japan and the US. In addition to these two countries, India, Canada, Mexico, South Africa, Europe, South Korea, Australia and Russia have announced that they will join.
- Comprises six Working Groups: the Steel, Power and Cement Working Groups, which were migrated from the APP Task Force, and the three newly-established Working Groups, namely Combined Heat and Power (CHP), Licensing, and Cities & Energy Saving.
- In the Power Working Group are Japan (the Ministry of Economy, Trade and Industry (METI) and the FEPC), the US, Europe, Australia, China and Indonesia.

\*2 Asia-Pacific Partnership on Clean Development and Climate

- A public-private regional cooperation partnership established in January 2006 to address the increasing demands for energy, energy security, and climate change in the Asia-Pacific region.
- Attended by the six countries of Japan, the US, Australia, China, India and South Korea (Canada officially joined in October 2007).
- Closed in April 2011 after all of its main activities were migrated to GSEP.

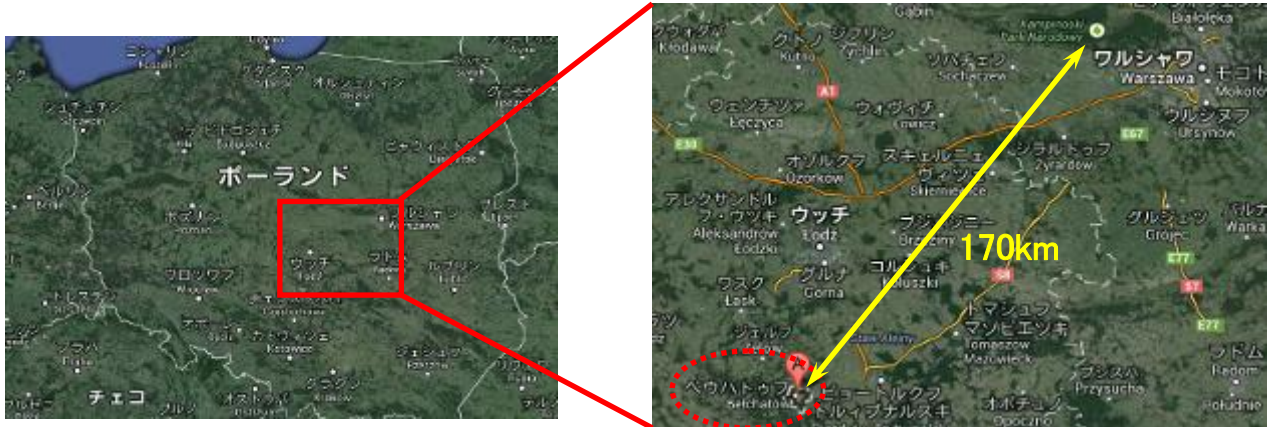
\*3 Clean Energy Ministerial (CEM) meetings

- A meeting of energy ministers aimed at achieving international policy collaboration in the development and expansion of clean energy technologies.
- Attended by the officials of 23 governments, including Japan, the US, China and the European Commission.

## 1. Overview of the Poland Workshop

Organizers	Ministry of Economy, Trade and Industry (Japan), Ministry of Economy (Poland)	
Participants (40 in total)	<ul style="list-style-type: none"> <li>- Japan: 20 participants (METI, FEPC, Tohoku Electric, Chugoku Electric, J-POWER, etc.)</li> <li>- Europe: 18 participants (Ministry of Economy of Poland, the state power company of Poland PGE, EURELECTRIC, etc.)</li> <li>- Indonesia: 2 participants (Ministry of Energy and Mineral Resources, the state power company of Indonesia PLN)</li> </ul>	
Schedule	Oct. 14 (Mon.)	<ul style="list-style-type: none"> <li>- Opening ceremony</li> <li>- Presentations by the participating countries on electricity generation (in Warsaw)</li> </ul>
	Oct. 15 (Tue.)	<ul style="list-style-type: none"> <li>- Plant diagnosis and exchange of opinions on operation and maintenance at the Belchatow Power Station (in Belchatow)</li> </ul>
	Oct. 16 (Wed.)	<ul style="list-style-type: none"> <li>- Overall conclusion (in Warsaw)</li> </ul>
Exchanging views and sharing experiences at the Belchatow Power Station	<p>The power generation technicians of the participating countries exchanged views on operation and maintenance at the Belchatow Power Station.</p> <ul style="list-style-type: none"> <li>- The participants confirmed the efforts for maintaining the heat efficiency being made under appropriate operations management by the PGE. They further confirmed the efforts to improve the heat efficiency and comply with the strict environmental standards of the EU through the partial upgrading (retrofitting) of facilities for aged units, considering economic efficiency.</li> <li>- The technicians learned the importance of maintaining the heat efficiency through O&amp;M of the plant, and that improving heat efficiency through retrofitting is effective for reducing CO<sub>2</sub> emissions.</li> <li>- Japan presented the case of corrosion of the first-stage nozzle of an intermediate pressure turbine that occurred in a supercritical unit, and explained the issues requiring future attention to be shared..</li> </ul> <p>[Belchatow Power Station]  Approx. 370 MW x 12 units (Units 1 to 12: constructed and started operation between 1982 and 1988)  858 MW x 1 unit (Unit 14: started operation in 2011)</p>	

Location:



## 2. Scenes from the Workshop



Workshop



Belchatow Power Station



Checking the operation status in the main control room (Belchatow Power Station)



Discussion on improving the heat efficiency (Belchatow Power Station)



Group photo (Belchatow Power Station)



FEPC's presentation in the overall conclusion session