

July 29, 2009  
Electric Power Development Co., Ltd.  
The Chugoku Electric Power Co., Inc.

## Establishment of Osaki CoolGen Corporation

Electric Power Development Co., Ltd. (President, Masayoshi Kitamura; Headquarters, Chuo-ku, Tokyo; “J-POWER”) and The Chugoku Electric Power Co., Inc. (President, Takashi Yamashita; Headquarters, Naka-ku, Hiroshima) today established a new company, Osaki CoolGen Corporation, through joint investment to undertake a large-scale demonstration test of oxygen-blown coal gasification combined cycle technology (oxygen-blown IGCC) and CO<sub>2</sub> separation and recovery technology.

To date both companies have positioned coal, which offers both stable supply and economic efficiency, as an important energy source, and have worked toward improving its efficiency through high-temperature, high-pressure steam conditions in coal-fired generators.

Amid growing demand for measures to mitigate global warming, and with assistance from the government and the New Energy and Industrial Technology Development Organization (NEDO), J-POWER is researching multi-purpose coal gas manufacturing technology (EAGLE) as an innovative coal-fired thermal technology which is suitable for carbon reduction. Using results obtained through EAGLE, J-POWER and The Chugoku Electric Power Company commenced a joint study of the development of oxygen-blown IGCC technology in 2006, and since deciding to proceed with a large-scale demonstration test at the Osaki Power Station (Kamijima-cho, Toyota-gun, Hiroshima), have been moving ahead with preparations.

(Press information previously released on May 31, 2006 and June 2, 2008)

Osaki CoolGen Corporation will be responsible for construction of the 170MW-class large-scale demonstration test facility for oxygen-blown coal gasification technology. Once constructed, the facility will proceed with testing to verify the reliability, economic efficiency, and operability of an oxygen-blown IGCC system. In the second phase, the company will proceed with the testing of the application of the latest CO<sub>2</sub> separation and recovery technologies. As the demonstration tests move steadily forward, the results will also have implications for integrated coal gasification fuel cell (IGFC) technology which, through the combined use of large-scale fuel cells, has the potential to raise efficiency even higher.

Osaki CoolGen Corporation will undertake an environmental assessment in August 2009, with plans to begin construction in March 2013 and demonstration testing in March 2017.

The above technologies have been cited as important technological developments in high-efficiency coal gasification and CO<sub>2</sub> capture and storage in the road map indicated in the

government's *Cool Earth-Innovative Energy Technology Program*. These technologies also aim to achieve the *Cool Gen Project* proposed in a report of a government deliberation council of the Ministry of Economy, Trade and Industry (METI).

\* *Cool Gen Project*: a plan proposed by the Clean Coal Subcommittee, Mining Committee of the Advisory Committee for Natural Resources and Energy (METI) for promoting experimental research projects aimed at the realization of zero-emission electric power generation through coal gasification using a combination of IGCC, IGFC (aimed at ultimate coal gasification power generation), and CO<sub>2</sub> capture and storage (CCS)

IGCC: Integrated Coal Gasification Combined Cycle

Technology for generating electricity combining a gas turbine powered by gasified coal and a steam turbine

IGFC: Integrated Coal Gasification Fuel Cell Combined Cycle

Technology for enhancing power generation efficiency combining IGCC and fuel cells

### Outline of the Company

Company name	Osaki CoolGen Corporation
Established	July 29, 2009
Paid up capital at the time of establishment	980 million yen (capital funds: 490 million yen, capital reserve: 490 million yen)
Capital contribution	Chugoku Electric 50% J-POWER 50%
Location	4-33, Komachi, Naka-ku, Hiroshima, Hiroshima Prefecture
Directors	Director & President: Shigeru Ashitani (nominated from Chugoku Electric) Director & Vice President: Yoshikazu Noguchi (nominated from J-POWER)
Description of business	Construction and testing of a large-scale demonstration test facility for oxygen-blown integrated coal gasification combined cycle (IGCC) and coal separation and recovery technology

## 2. Schedule

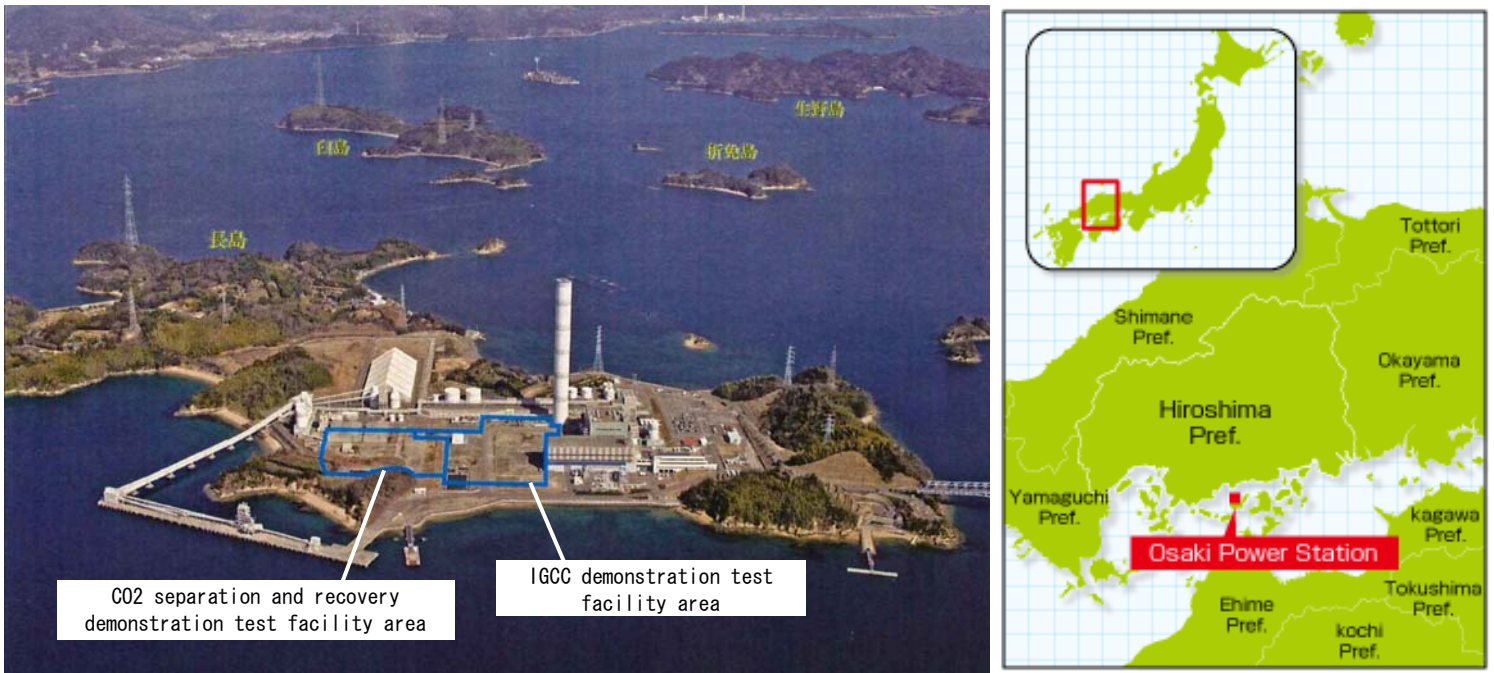
Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Optimization Survey Research		Preparation	Optimization											
Environmental Assessment		Preparation	Environmental Assessment											
Construction & Demonstration Test					Design & Construction ▲ Construction starts				Demonstration Test					
											CO <sub>2</sub> separation & recovery			
											Modification of IGCC test plant			
											Design & Construction			
													Demonstration test	

< Attachments >

Site of the Demonstration Test

Outline of the Demonstration Test System

## <Site of the Demonstration Test>



## < Outline of the Demonstration Test System >

