

## Energy Sector Division Power Transmission

Erlangen, Dortmund, August 15, 2008

Press information from Siemens and RWE

### **Siemens to install an extra-high voltage line for RWE at Frankfurt Airport consisting of a buried, double gas-insulated line**

**Siemens Energy has been awarded an order by RWE Transportnetz Strom GmbH in Dortmund, Germany, to install an approximately one kilometer-long section of an existing extra-high voltage overhead line at Frankfurt Airport as a buried, gas-insulated extra-high voltage line (GIL). The 380-kV transformer substation has already been constructed to a compact design using gas-insulated technology for the planned runway in the northwest of the airport. The 380-kV overhead lines routed to this substation have to be laid underground for the last kilometer. RWE Transportnetz Strom will implement this line section with two systems in the form of buried 380-kV GILs. Each system has a transmission capacity of about 1800 MVA. The GIL link consisting of two three-tube units will be connected to the supply system in the spring of 2010.**

“We see this order as a milestone in the area of gas-insulated extra-high voltage lines and expect increased business with GIL technology due to signs of steady growth in global demand for buried, high voltage transmission systems,” said Dr. Udo Niehage, CEO of the Power Transmission Division in the Siemens Energy Sector.

Dr. Klaus Kleinekorte, Technical Director of RWE Transportnetz Strom explained: “What we want to do with the pilot project is to try this transmission technology as an alternative to cable solutions. We have already carried out joint tests with Siemens on a prototype which have provided convincing proof of its technical feasibility.”

GIL technology is a further development of tube conductor technology. A gas-insulated extra-high voltage transmission line consisting of an aluminum conductor tube and an aluminum enclosing tube can transmit power capacities of up to 3000 MVA. The GIL is suitable for connecting load

1 / 2

centers and urban and industrial centers, generally over a transmission length of a few kilometers as well as for longer distances. No measures are required for reactive power compensation. Transmission losses from a GIL line are lower than for cables or overhead lines. They can be routed over any terrain including steep inclines or vertical sections. GIL technology is also suitable for laying underground or in tunnels. Siemens is currently installing another GIL high-voltage link in China as an outgoing line from a cavern power plant.

The **Siemens Energy Sector** is the world's leading supplier of a complete spectrum of products, services and solutions for the generation, transmission and distribution of power and for the extraction, conversion and transport of oil and gas. In fiscal 2007 (ended September 30), the Energy Sector had revenues of approximately EUR20.3 billion and received new orders totaling around EUR28.5 billion and posted a profit of EUR1.8 billion. The Energy Sector had a work force of 73,500 at the beginning of fiscal 2008. Further information is available at: [www.siemens.com/energy](http://www.siemens.com/energy)

**RWE Transportnetz Strom GmbH** bundles all RWE Group activities related to the extra-high voltage grid. With some 11,300 kilometres, the company owns Germany's longest extra-high voltage grid. Access to the grid is open to all players in the power market - without discrimination and at competitive and transparent terms. The company also coordinates interconnected system operation in Germany and serves as the coordination center for the northern sector of the joint European network.

Press contacts:

Siemens AG  
Pressestelle Power Transmission and Distribution  
Dietrich Biester  
Tel.: +49-9131-7-33559  
Mobil: 0171-55 074 52  
E-Mail: [dietrich.biester@siemens.com](mailto:dietrich.biester@siemens.com)

RWE Transportnetz Strom GmbH  
Presse  
Julika Gang  
Tel +49 (0)231 438 – 2248  
Mobil: 0172 236 13 12  
E-Mail [julika.gang@rwe.com](mailto:julika.gang@rwe.com)