

# Chinese suppliers gain Gen-III qualification



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**Ten Chinese enterprises have become the first batch of suppliers to be qualified to supply equipment for third-generation nuclear power plants, the State Nuclear Power Technology Company (SNPTC) has announced.**

The ten equipment manufacturers were selected after strict evaluation and review. Their selection is a measure adopted by SNPTC to accelerate China's development strategy for the deployment of domestically-developed third-generation nuclear power technology. The move also aims to reinforce the safety and quality of Chinese nuclear power equipment.

The qualified suppliers are: Harbin AC/DC Motor Co; Harbin Power Equipment (Qinhuangdao) Co; Shanghai Electric Nuclear Power Equipment Co; Shanghai First Machine Tool Works; Dongfang Electric (Guangzhou) Heavy Machinery Co Ltd; China First Heavy Industries (CFHI); Deyang Heavy Equipment Co; Dalian Heavy Industry and Crane Co; Taiyuan Heavy Industry Co Ltd; and, Shenyang Turbo Machinery Co.

SNPTC was set up in 2004 to take the technical lead in China's mass deployment of nuclear power plants. It is directly under China's State Council and closely connected with it. SNPTC initiated a tender for the latest nuclear power plant designs, which resulted in Westinghouse and Areva gaining contracts for their AP1000 and EPR designs respectively.

An important factor for SNPTC in the contracts was technology transfer. Westinghouse agreed to allow Chinese engineers to master the AP1000 technology, adapt it to a standardised design for use in China and then build the units unaided. Using AP1000 and CPR-1000 reactors (developed after earlier technology transfer from Areva), China aims to have a nuclear capacity of 120-160 GWe by 2030.

Demonstration of a Chinese AP1000 derivative moved a step closer in December 2009 with the formation of a joint venture project company. Construction of the first CAP1400 at a site near Weihei in Shandong Province is scheduled for April 2013. SNPTC will take the lead with 55% of the project company. The other stakeholder will be Huaneng Nuclear Power Development Corp, a subsidiary China Huaneng Group, one of China's largest power companies. The partners hope their first CAP1400 will begin operation in December 2017.

CAP1400 is expected to be deployed on a scale never before seen in the nuclear industry, with Chinese manufacturing firms establishing module factories amounting to production lines for their fast construction. Beyond CAP1400 could come a further 1700 MWe variant.

*Researched and written  
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