

# MISSION ACCOMPLISHED: SGS COMPLEX SERVICES FOR CHINESE NUCLEAR POWER TECHNOLOGY TEST FACILITY

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In June of 2011, SGS entered into an agreement to provide comprehensive third-party services for a large-scale nuclear power technology test facility in China. The groundbreaking project involved a facility testing the passive-core cooling system of CAP1400 technology, the Chinese version of the advanced Westinghouse AP1000 pressurised water reactor. For the five-month period of August until December of 2011, a team of SGS nuclear power experts provided technical support in assessing equipment vendor bidding and conducted inspection and expediting services.

### SGS NUCLEAR SERVICES CHOSEN FOR CHINESE NUCLEAR POWER TECHNOLOGY TEST FACILITY

Due to increasing concerns regarding climate change, air quality and shortages of fossil fuels, China looked to nuclear power as an alternative to its dependence on coal. China's National Development and Reform commission intends to increase the percentage of nuclear-produced electricity by 5 percentage points to reach 6% by 2020. But, such rapid growth may fall prisoner to a lack of equipment, qualified staff and trained safety inspectors.

In the aftermath of the nuclear disaster in Fukushima, Japan, China announced a freeze on all nuclear plant construction approval and mandated full safety checks for all existing reactors. China takes pride in being self-reliant in its nuclear reactor technology design and manufacturing, but realises that

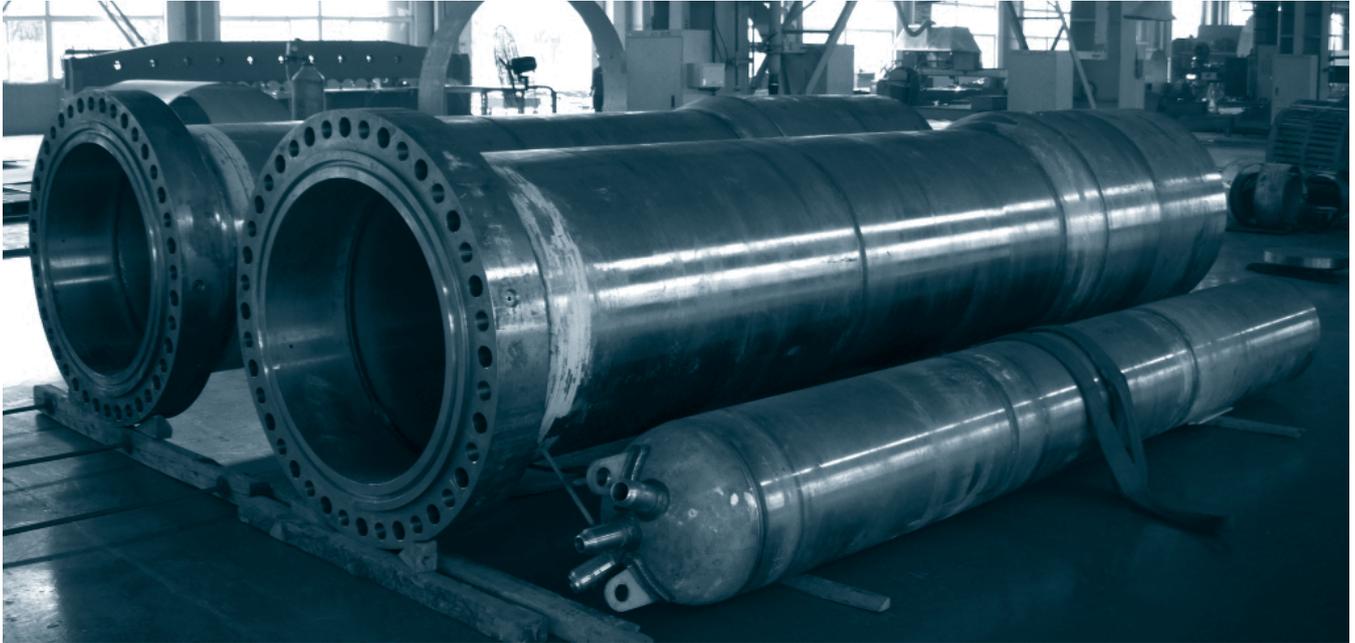
international cooperation and technology transfers are needed. After all, advanced pressurised water reactors like the AP1000 are the mainstream technology of the future.

Officials for the CAP1400 testing facility looked for a reliable partner with expertise and practical experience within the nuclear sector to assist with the complex inspection, verification, testing and certification services needed for this project and found SGS. SGS was explicitly chosen because of its extensive knowledge and tangible experience in providing the nuclear industry complex services which ensure the mitigation of risk and the compliance of installations, material, equipment and facilities with all quality and performance regulatory requirements.

### GLOWING REPORT: SGS SUCCESSFUL EXECUTION OF SERVICE

In the Chinese project, highly-skilled SGS professionals assisted with quality control and assurance affecting equipment, expedition services and budgetary strategies. SGS experts were sure to fulfill all national and international standards and requirements in all areas and during all phases of the project.

A team of SGS nuclear power experts conducted extensive equipment inspections at the test facility on components which included the reactor pressure vessel (RPV), the steam generator (SG), regulators (PRZ), core-fill water tank (CMT), accumulator-safety injection tank (ACC) and the main



coolant pump (RCP) to ensure all met national and international regulatory requirements and specifications.

SGS acted as liaison in the execution of expediting services throughout the project monitoring suppliers and sub-suppliers to make sure all regulatory requirements were being met. SGS expeditors also identified potential delays and undertook all necessary action to guarantee the delivery of material or equipment on or before dates agreed to in the delivery terms

or purchase orders. In addition, SGS obtained and reaffirmed supplier delivery promises, fully investigated supplier scheduling and provided the client with periodic status reports.

Furthermore, SGS China supported the project with technical support in the assessment of equipment vendor bidding ensuring top-quality from global nuclear equipment suppliers and protecting the SGS client interest when buying to positively affect budgetary strategies.

### **SGS RADIATES IN CHINA**

SGS was selected to provide complex services for the Chinese nuclear power technology testing project because of its expert knowledge collected from over thirty-five years of experience within the nuclear power industry sector. SGS provided the project inspection, verification, testing and certification in accordance with all national and international regulatory standards and requirements.

SGS was extremely proud to be involved with this distinguished project striving to safely supply abundant and clean energy to the citizens of China.

### **CONTACT**

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