



न्यूक्लियर पावर कॉर्पोरेशन  
ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
**NUCLEAR POWER CORPORATION  
OF INDIA LIMITED**  
(A Govt. of India Enterprise)

विक्रम साराभाई भवन, Vikram Sarabhai Bhavan,  
मध्य मार्ग, अणुशक्तिनगर, Central Avenue Road,  
मुंबई-400 094. Anushaktinagar,  
Mumbai - 400 094.  
दूरभाष / Phone : +91-22-2550 7773, 2599 1205  
फैक्स / Fax : +91-22-2599 1208  
ई-मेल / E-mail : nnagaich@npcil.co.in



नलिनीश नगाइच  
उत्कृष्ट वैज्ञानिक एवं  
अधिकासी निदेशक (सी पी एवं सी सी)  
**NALINISH NAGAICH**  
Outstanding Scientist &  
Executive Director (CP & CC)

April 19, 2013

## Press Release

### Safety and Quality over Expediency

A section of press has recently raised certain issues regarding quality of components and equipment at upcoming Kudankulam Nuclear Power Project (KKNPP) in Tamilnadu.

It is well known that nuclear power plants are designed with diverse, failsafe, and redundant systems. The reliability of components and systems are ensured to meet the design intent. A multi tier review by the specialists and regulatory body is in place for ensuring the safety and quality requirements in nuclear power plants. This process of review has been strengthened in the country over time and that the very purpose of having a 'procedurally detailed' commissioning phase is to ensure fine-tuning of the systems and to obtain the reference data for future essentially to ensure safety .

For NPCIL, Safety comes first and above all other considerations, and so does quality. NPCIL reaffirm that a comprehensive quality assurance program is in place for all the jobs undertaken. Likewise, for the components supplied to KKNPP from the Russian Federation, a multi-tier quality program is in place. The elements of quality assurance program necessarily consist of a quality plan (procedures, test reports followed acceptance etc).

Before the commencement of manufacturing of components and equipment for KKNPP, a detailed Quality Assurance Plan (QAP) was prepared by the manufacturer which was reviewed by the Russian designers and other Russian organizations and finally the same was approved by NPCIL. The QAP elaborates the stage-wise inspections to be carried out, the procedural and testing requirements including the agencies authorized for witnessing the stage-wise inspections during manufacture of components. This is essentially to ensure, that the design intent of the component(s) has been established.

पंजीकृत कार्यालय : सेन्टर-1, 16 वाँ तल, विश्व व्यापार केन्द्र, कफ परेड, कुलाबा, मुंबई-400 005.  
Regd. Office : Centre-1, 16th Floor, World Trade Centre, Cuffe Parade, Colaba, Mumbai - 400 005.

The manufacturing and testing of components pertaining to nuclear safety has been in accordance to QAP. After completion of manufacturing and verification of the final documentation, NPCIL issues the final shipment clearance for the components and then only these are dispatched. Hence, the entire process ensures total quality management.

NPCIL ascertains that by means of establishing systems for controlling the manufacturing process, there is no compromise in the quality of the components supplied to KKNPP from Russia.

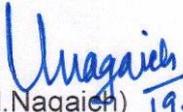
The news items in some of the print media projects as if there are undue delays taking place in approach to criticality / operation. We would like to share outline of the road map of the process which is on course. It is to bring out that, the commissioning phase follows the erection of equipment, at site. Indeed, the different equipment/components are constituent parts of various systems. These constituent parts of intricate systems are all brought together to form various systems during erection, and are tested during commissioning to ascertain that the process requirements as per design intent are met. During this process, there could be some requirements, calling fine tuning for achieving trouble free operation of the plant subsequently.

The test results of the above are reviewed at various stages by specialists. These are further reviewed by regulatory body at each stage. The criticality (start of fission chain reaction for the first time) followed by Phase – B Physics experiments are taken up after successful commissioning. After successful completion of this phase, the operation at various power levels is undertaken for collecting several important scientific data before moving on to full power operation. At present Kudankulan unit -1 has entered phase leading to Criticality.

Contrary to press reports, the PHRS system has worked during the integral testing as designed. What is to be realized is that commissioning of systems also involves data collection and fine-tuning.

The normal visits of DAE and NPCIL officials to Russian Industry, as mentioned, in the press, are misleading and speculative.

DAE/ NPCIL as a responsible safety conscious organization will certainly not take any shortcuts to safety.

  
(N. Nagaich) 19.04.2013