

परमाणु ऊर्जा नियामक परिषद



Atomic Energy Regulatory Board

#### भारत सरकार

उपाध्यक्ष

## **GOVERNMENT OF INDIA**

VICE CHAIRMAN

No. VC/AERB/KK-1, 2/199/2014/252

January 24, 2014

<u>Sub</u>: Clearance for Raising Reactor Power upto 75% FP of Kudankulam Nuclear Power Project Unit # 1

Refs: 1.

- No. CH/AERB/KK-1, 2/199/2013/3196, dtd. 14.8.2013
- No. NPCIL/KKNPP/O&M/TSS/2014/27, dtd 9.01.2014
- 3. No. AERB/NPSD/KK12/403(SG-COMM)/2014/165, dtd. 16.1.2014
- 4. No. AERB/NPSD/199(a)/SG-RP/2014, dtd. 15.1.2014
- 5. No. AERB/NPSD/403/(SG-6)/2014/205, dtd. 17.1.2014
- 6. No. AERB/NPSD/199(a)/KKNPP/SG-7/2014/169, dtd. 16.1.2014
- 7. No. AERB/NPSD/KK/403(SG-15)/2014/131, dtd. 15.1.2014
- No. AERB/NPSD/199(a)/KK-NPP/ IHRG-PSI-ISI/2014, dtd. 17.1.2014
- 9. No. AERB/NPSD/KKNPP/IHRG-S-10 /2014/166, dtd.17.1.2014
- 10. No. AERB/NPSD/199(a)/ACPSR-LWR/2014/246, dtd.24.1.2014
- 11. No. AERB/NPSD/304/2014/253, dtd. 24.01.2014

AERB had earlier granted Clearance for Reactor Power Raise up to 50% FP and Synchronization of Generator for KK Unit # 1 with certain stipulations (Ref.1)

Site started Phase C1 stage of commissioning which involved raising reactor power in steps and conduct of various tests at different power levels. Successful synchronization of the Generator with the Grid was done on October 22, 2013 at around 33 % FP (150 MWe) and thereafter upon reaching 40 % FP further tests were conducted and stable operation of the reactor at 40 % FP was demonstrated and data obtained was reviewed by relevant SGs and ACPSR. Subsequently power was raised upto 50 % FP and various remaining tests were conducted and results were submitted to AERB, thus completing the Phase-C1 stage of commissioning.

Subsequently, as part of the next stage of commissioning, Site submitted Application for Raising Reactor Power Upto 75% FP for KK NPP # 1 on January 9, 2014 (Ref. 2). This Application along with Review Reports of respective SGs/TFs [viz. SG-COMM (Ref. 3), SG-RP (Ref. 4), SG-6 (Ref. 5), SG-7 (Ref. 6), SG-15 (Ref. 7), TF-PSI/ISI (Ref. 8) and IHRG S-10 (Ref. 9)] were discussed in ACPSR Meeting # 161 held on January 18, 20, 21 & 22, 2014. Based on detailed review of the same, ACPSR has submitted its Report of Recommendations for Phase-C2 (Ref. 10).

Committee for Reviewing Security Aspects of Nuclear Facilities (CRSANF) has also reviewed the relevant Nuclear Security aspects of KK NPP Unit # 1 for Phase C2 stage and has submitted its recommendations (Ref. 11).

Based on the above, Clearance for Raising Reactor Power upto 75% FP for KK NPP Unit # 1 (i.e. Phase C2 Stage) is granted subject to compliance with various stipulations as brought out in Annexure.

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After completion of Phase-C2 stage activities, Application for next Phase (i.e., for Phase-C3) along with detailed technical report of results and along with observations of various tests conducted during this stage should be submitted and further raising of reactor power beyond 75% FP shall be taken up only after satisfactory review by ACPSR and Clearance by AERB.

This Clearance is valid upto July 31, 2014.

This is issued with consent of Chairman, AERB.

(S.Duraisamy)

Chairman & Managing Director, Nuclear Power Corporation of India Ltd, Nabhikiya Urja Bhavan, Anushakti Nagar, Mumbai-400 094

#### Copy to:

AERB

Vice-Chairman, AERB
Secretary, AERB
Director, NPSD
Director, OPSD
Director, IPSD
Chairman, ACPSR-LWR # 1
Member-Secretary, ACPSR-LWR # 1

**NPCIL** 

Director (O)
Director (T)
Executive Director (Operations)
Executive Director (Engg-LWR)

Site Director, KK NPP Station Director, KK NPP-1&2

### Annexure

# Clearance for Raising Reactor Power Upto 75% FP for Kudankulam Nuclear Power Project Unit # 1

- Recommendations of ACPSR-LWR (Ref. 10) relevant to this stage shall be complied with.
- Recommendations of SG-COMM (Ref. 3), SG-RP (Ref. 4), SG-6 (Ref. 5), SG-7 (Ref. 6), SG-15 (Ref. 7), TF-PSI/ISI (Ref. 8) and IHRG S-10 (Ref. 9) relevant to this stage shall be complied with and all required Reports are to be submitted.
- All Industrial & Fire Safety requirements as per Atomic Energy (Factories) Rules, 1996 shall be strictly adhered to.
- 4. All the relevant recommendations with regard to Nuclear Security aspects as brought out by CRSANF (Ref. 11) shall be complied with.
- Compliance report to the above recommendations reports as applicable to the stage of Phase-C2 should be submitted
- All other statutory clearances should be obtained, as necessary.
- Site should submit an undertaking that all Phase-C2 tests would be conducted by trained and qualified personnel as per approved procedure and they have sufficient knowledge about the tests, its pre-requisites and safety impact before raising power.