

अध्यक्ष
CHAIRMAN

No. CH/AERB/KK-1, 2/199/2013/3196

August 14, 2013

Sub: Clearance for Raising Reactor Power upto 50% FP & Synchronization of Generator of Kudankulam Nuclear Power Project Unit # 1

- Refs:
1. No. CH/AERB/KK-1, 2/199/2013/2601, dtd. 4.7.2013
 2. No. AERB Team Compliance Check Report for FAC, dtd. 11.7.2013
 3. No. AERB/NPSD/181/2013/2473, dtd. 11.7.2013
 4. No. NPCIL/KKNPP/O&M/CS/2013/58, dtd. 14.7.2013
 5. Site Report on FAC of KK Unit # 1, dtd. 14.7.2013
 6. No. NPCIL/KKNPP/O&M/CS/2013/59, dtd. 14.7.2013
 7. AERB Observer Team Report on FAC of KK Unit # 1, dtd. 14.7.2013
 8. No. AERB/NPSD/199(a)/ACPSR-LWR/2013/2758 dtd. 14.7.2013
 9. No. NPCIL/KK NPP/O&M/TSS/2013/529, dtd. 30.7.2013
 10. No. AERB/NPSD/KK12/403(SG-COMM)/, dtd. 7.8.2013
 11. No. AERB/NPSD/KK12/403(SG-COMM)/, dtd. 12.8.2013
 12. No. AERB/NPSD/KK-NPP/199(a)/SG-RP/2013, dtd. 8.8.2013
 13. No. AERB/NPSD/403(SG-6)/2013/3099, dtd. 7.8.2013
 14. No. AERB/NPSD/199(a)/KKNPP/SG-7/2013/, dtd. 7.8.2013
 15. No. AERB/NPSD/KK/403(SG-15)/2013/3116, dtd. 8.8.2013
 16. No. AERB/NPSD/KK/403(SG-15)/2013/3171, dtd. 13.8.2013
 17. No. AERB/NPSD/KKNPP/TF-PSI-ISI/2013, dtd. 9.8.2013
 18. No. AERB/NPSD/199(a)/ACPSR-LWR/2013/3193, dtd. 14.8.2013
 19. No. AERB/NPSD/304/2013/3175, dtd. 13.8.2013

AERB had earlier granted Clearance for First Approach to Criticality (FAC) & Phase-B Low Power Physics Experiments (LPPE) for KK Unit # 1 (Ref. 1) with certain stipulations. AERB Observers Team (AOT) stationed at KK Site had reviewed the status of compliance of various stipulations and found them acceptable (Ref. 2). Based on the same, Permission was granted for proceeding with FAC for KK Unit # 1 (Ref. 3).

As part of first approach to criticality, Site started withdrawal of control rods on July 11, 2013 at 23:49 hrs and boron dilution was started on July 12, 2013 at 04:50 hrs. The first criticality of KK NPP Unit # 1 was achieved on July 13, 2013 at 23:05 hrs. ACPSR in its Meeting # 154 held on July 14, 2013 reviewed the Site request for

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taking up Phase-B LPPE and related submissions (Refs. 4, 5, 6) along with Report of AOT (Ref. 7). Based on review, ACPSR granted concurrence for conduct of Phase-B LPPE for KK Unit # 1 (Ref. 8) as per approved procedure. Site started Phase-B LPPE on July 14, 2013 and completed all the experiments on July 26, 2013. AOT had observed these experiments and checked compliances. Test results related to the experiments were submitted by Site. This submission along with AOT reports were reviewed in AERB.

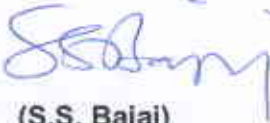
Site had submitted Application for Raising Reactor Power Upto 50% FP and Synchronization of Generator of KK NPP # 1 on July 30, 2013 (Ref. 9). This Application along with Review Reports of respective SGs/TFs [viz. SG-COMM (Ref. 10 & 11), SG-RP (Ref. 12), SG-6 (Ref. 13), SG-7 (Ref. 14), SG-15 (Ref. 15 & 16) & TF-PSI/ISI (Ref. 17)] were discussed in ACPSR Meeting # 155 & 156 held on August 8, 10 & 13, 2013. Based on detailed review of the same, ACPSR has submitted its Report of Recommendations for Phase-C1 (Ref. 18).

Committee for Reviewing Security Aspects of Nuclear Facilities (CRSANF) has also reviewed the relevant Nuclear Security aspects of KK NPP Unit # 1 for Phase C1 stage and has submitted its recommendations (Ref. 19).

Based on the above, Clearance for Raising Reactor Power upto 50% FP and Synchronization of Generator of KK NPP Unit # 1 at appropriate power level (i.e. Phase C1 Stage) is granted subject to compliance with various stipulations as brought out in Annexure.

After completion of Phase-C1 stage activities, application for next stage (i.e. for Phase-C2) along with detailed report of results and observations of various tests conducted during this stage shall be submitted and further raising of reactor power beyond 50% FP shall be taken up only after satisfactory review by ACPSR and Clearance by AERB.

This Clearance is valid upto January 31, 2014.


(S.S. Bajaj)

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**Clearance for Raising Reactor Power Upto 50% FP & Synchronization of
Generator of Kudankulam Nuclear Power Project Unit # 1**

1. Recommendations of ACPSR-LWR (Ref. 18) relevant to this stage shall be complied with.
2. Recommendations of SG-COMM (Ref. 10 & 11), SG-RP (Ref. 12), SG-6 (Ref. 13), SG-7 (Ref. 14), SG-15 (Ref. 15 & 16) & TF-PSI/ISI (Ref. 17) relevant to this stage shall be complied with and all required Reports are to be submitted.
3. 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. 19) shall be complied with.
5. Compliance report to the above recommendations reports as applicable to the stage of Phase-C1 should be submitted.
6. All other statutory clearances should be obtained, as necessary.