Telegram : PARYAVARAN,
NEW DELHI
दूरभाष :
Telephone :
टेलेक्स :
Telex : IV 66185 DOE IN
Fax : 360678
भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स
PARYAVARAN BHAWAN, C.G.O. COMPLEX
लोदी रोड, नई दिल्ली-110003
LODI ROAD, NEW DELHI-110003

No. J-14011/6/89/IA-I

January 15, 1993

To

The Managing Director
Nuclear Power Corporation
World Trade Centre
Cuffe Parade
Bombay - 400 005

Subject : Environmental Clearance to Rajasthan Atomic Power Project Units 5-8 (4x500 MW) to be set up at Rawatbhata, Rajasthan.

Sir,

Reference is invited to the above proposal which has been examined and accorded environmental approval subject to effective implementation of the following conditions:

i) All the stipulations of Atomic Energy Regulatory Board (AERB) pertaining to safety and related aspects shall be implemented and it will also be ensured that:

a) The liquid effluents emanating from different plants of the power station are treated to conform to the standards stipulated by Central/State Pollution Control Boards and International Commission for Radiological Protection (ICRP)/AERB.

b) Radio-active wastes (solid and semi-solid) generated during various operations are properly treated and disposed off after proper containment in accordance with the standards/guidelines prescribed by ICRP/AERB.

c) Radio-active emissions, fugitive or otherwise are maintained within the safety standards prescribed by AERB.

d) For transportation of radio-active fuel/wastes, adequate precautions are taken in accordance with the guidelines prescribed by ICRP/AERB.

Contd on page...2...

e) Adequate steps are taken to prevent ground water pollution and sufficient number of water quality monitoring stations are set up for periodic monitoring.

ii) Action Plans included in the approved environmental Management Plan relating to air, water including ground water, land , noise, solid wastes, socio-economic aspects, green-belt development, forest management and environmental surveillance during as well as post-construction phase shall be implemented as per schedule and reported to the Ministry every six months. Non-compliance may even result in revoking of approval.

iii) The modelling studies in progress regarding mixing of thermal discharges taking into consideration biological aspects should be completed early and the report submitted to MOEF.

iv) Epidemiological/toxicity studies to be undertaken within 20 Kms of the project site to determine baseline status and to ascertain any epidemiological changes arising out of the project. These studies should be completed within one year preceded by a well planned community awareness programme. The report should be furnished to the Ministry of Environment & Forests and the exercise to be repeated periodically.

v) a) For risk assessment, studies at level I, II & III will be carried out taking into consideration available Indian data. Subsequently, data generated from epidemiological/toxicity studies should also be suitably incorporated in risk assessment studies. The report should be submitted to MOEF within one year.

b) Taking into consideration the results of risk assessment at level I, II & III, Disaster Management and Emergency Preparedness Plans will be prepared and submitted to MOEF within one year.

vi) Studies on the decision making and evaluation in environmental impact assessment for minimising ambiguities and uncertainities need to be continued on the basis of recent systems of evaluation including fuzzy set theory and result communicated to Ministry of Environment & Forests within six months.

vii) Close circuit system of cooling shall only be used. The temperature differencial between condenser water at the discharge point and the ambient temperature of the receiving water body shall under no circumstances be more than 5°C and this differential should get dissipated within a thermal wedge of 200 m.

viii) The project authorities shall give a firm commitment about use of make up water which constitutes 2.8%

of originally envisaged withdrawal from Rana Pratap Sagar Reservoir alongwith the water balance figure of the Reservoir including competing commitments during lean months within 45 days.

ix) Reasons for abnormal increase in Tritium levels in lake water during 1982 and 1988 need to be investigated and report incorporating remedial measures should be submitted to MOEF within 2 months.

x) The location and arrangements of the control room should be so planned that in the event of any abnormal leakages of Hydrogen Sulphide Gas from Heavy Water Plant, its habitability is not adversely affected.

xi) Periodical environmental surveillance covering all major parameters and monitoring for radio-active emissions should be undertaken for measuring radio-activity and records maintained.

xii) All the vacant lands within the project zone should be afforested with indigenous species and sufficient tree density.

xiii) Periodic monitoring of the health studies of the workers to assess occupational hazard as well as of the local population in the surrounding areas of the power plant should be carried out and records maintained for taking additional safety measures if so dictated.

2. There should be an environmental cell with suitable personnel and a laboratory at site.

3. Adequate financial provisions should be made itemwise for implementation of the above provisions and there must be no diversion of such specified funds.

4. A Monitoring Committee be set up with the representatives of AERB, State Pollution Control Board, State Department of Environment and atleast two prominent public persons/NGOs of the area to oversee effective implementation on the suggested safeguards and suggest mid-course corrections, if any.

5. NPC will prepare a note on the details of the studies to be undertaken alongwith time-frame for their completion and implementation keeping in view that implementation of the studies has to be done before commencement of the plant. The note should be submitted to MOEF within 45 days.

6. The stipulations will be implemented among others, under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986.

Yours faithfully,

(S.K. Aggarwal)
Joint Director

Contd,...4....

Copy to :

1. Secretary, Department of Atomic Energy, Government of India, Anushakti Bhawan, Chatrapati Shivaji Maharaj Marg, Bombay - 400 039.

2. Secretary, Department of Environment, Government of Rajasthan, Secretariat, Jaipur.

3. Scientist Incharge, Regional Office (Western Zone), Ministry of Environment & Forests, E-3/240, Arera Colony, Bhopal - 462 016.

L.W.P
15/11/93

BY SPEED POST

No. J-14011/6/89.IA-I
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan.
CGO Complex, Lodi road,
New Delhi-110003

Dated: 2nd April, 2007

To

Shri S.K. Agrawal
Director (Projects)
Nuclear Power Corporation of India Limited
Nabhikiya Urja Bhawan
Anushaktinagar, Mumbai - 400 094
Maharashtra

Subject: **Change of Capacity of Units 7&8 of Rajasthan Atomic Power Project (RAPP 7&8) at Rawatbhata, Rajasthan by M/s Nuclear Power Corporation of India Limited (NPCIL) - Regarding.**

Sir,

Reference is invited to your letter no. NPCIL/Director(Projects)/RAPP-7&8/M/2006/167 dated 20.12.2006 requesting for amendment in capacities of units 7&8 of the above mentioned project.

2. It is noted that the environmental clearance for installation of four units 5-8 of 500 MWe each at RAPP was accorded vide this Ministry's letter of even no. dated 15th January, 1993. NPCIL had subsequently obtained approval for downsizing of units 5 & 6 from 500 MWe to 220 MWe each vide Ministry's letter of even no. dated 1st March, 2002. NPCIL has now proposed to install units 7 & 8 of 700 MWe PHWR instead of 500 MWe each. Thus the total capacity for units 5-8 after the proposed change of unit size will be 1840 MWe as compared to 2000 MWe for which environmental clearance was granted in 1993. Further, it is noted that the units 5 & 6 of 220 MWe PHWR each are under advance stage of construction and are likely to be made operational in the year 2007. It is further noted that:-

(i) There will be net reduction in land and water requirements as also the radiological releases except $Argon^{41}$ for units 5- 8 put together as now proposed as compared to earlier projections for units 5 – 8.

(ii) The radiological release limits, radiological burden in public domain, solid radioactive waste for burial within the boundary and radioactive waste management will be regulated by the AERB and its stipulations will be strictly complied with.

(iii) Existing facilities would take care of the requirements of management of radioactive waste arising from these units.

(iv) The land required for the project and its exclusion zone is already available.

3. Keeping in view the above, the Ministry of Environment & forests has no objection to the change in capacity of units 7 & 8 from 500 MWe to 700 MWe each subject to implementation of safeguard measures stipulated in the environmental clearance letter dated 15th January, 1993. Further, the environmental clearance accorded by this Ministry vide letter of even no. dated 15.01.1993 remains valid for commissioning of these units.

Yours faithfully;

(Dr. S.K. AGGARWAL)
DIRECTOR

Copy to :

1. The Chairman and Managing Director, Nuclear Power Corporation of India limited, Vikram Sarabhai Bhawan, Central Avenues, Anushkati Nagar, Mumbai 400 094.
2. The Secretary, Deptt. of Forests & Environment, Government of Rajasthan, Secretariat, Jaipur.
3. The Chairman, Rajasthan Pollution Control Board, 4, Institutional Area, Jhalana, Doongri, Jaipur.
4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar,Delhi-110032.
5. The Chief Conservator of Forests, Regional Office (CZ), B- 1/72, Sector-K, Aliganj, Lucknow-226020, Uttar Pradesh.
6. The Director (EI), MOEF.
7. Guard file.
8. Monitoring file.

(Dr. S.K. AGGARWAL)
DIRECTOR