India/Koodankulam: Complaint to AERB

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June 16, 2012

The People's Movement Against Nuclear Energy (PMANE) Idinthakarai & P.O - 627 104 Tirunelveli District Tamil Nadu koodankulam yahoo.com

The Chairman Atomic Energy Regulatory Board Niyamak Bhavan Anushaktinagar Mumbai 400 094

Dear Sir:

Greetings! We, the members of the People's Movement Against Nuclear Energy and people of southern districts of Tamil Nadu and Kerala, write to demand immediate halt of the Koodankulam Nuclear Power Project (KKNPP) at Koodankulam in Tirunelveli district, Tamil Nadu, and a thorough scrutiny of the following issues before AERB (Atomic Energy Regulatory Board) gives a green signal to the commissioning of the Koodankulam project.

The KKNPP reactors from Russia are being set up without sharing the Environmental Impact Assessment (EIA), Site Evaluation Study and Safety Analysis Report with the people, people's representatives or the press. After a 23-year-long struggle, we obtained a copy of the outdated, incomplete and erroneous EIA only a few months back. No public hearing has been conducted for the first two reactors either. The KKNPP project has been imposed on an uninformed and unwilling population throwing all democratic precepts and values of our country to the wind.

The Central Information Commissioner (CIC) has ordered "to provide an attested photocopy of the Safety Analysis Report and Site Evaluation Report after severing any proprietary details of designs provided by the suppliers to the appellant before 25 May, 2012." But the NPCIL refuses to share these two public safety reports by arguing that the Safety Analysis Report (SAR) "is a 'third party document' and therefore, without the prior consent of the third party, the same cannot be shared with anyone." Obviously, the NPCIL is more interested in the safety of the Russian company and the Russian benefactors but not in the safety of the people of India.

NPCIL has informed the CIC in their recent letter dated May 18, 2012 that "the 'Site Evaluation

Report' for Reactor I & II at Koodankulam could be made available to the Appellant. Accordingly, a copy of the said 'Site Evaluation Report' has been sent to the Appellant." On May 17, 2012 we received a letter and a bunch of 12 lose papers without any head or tail as the 'Site Evaluation Report.' When we questioned the validity and integrity of this so called SER, Dr. S. K. Jain, the chief of the Nuclear Power Corporation of India Ltd. (NPCIL), claimed that it was the executive summary and not the whole report.

The KKNPP and the NPCIL officials have not conducted any mock drills and evacuation drills in the 30 km or even the 16 km radius of the project. On June 9, 2012, the Tirunelveli district administration and the NPCIL officials conducted a haphazard safety drill in a remote hamlet called Nakkaneri of hardly 300 people and claimed that the mock drill was a great success. If we organize fire drills in all the schools and movie theatres all over the country, should we not conduct nuclear safety drills in all villages and towns in the project area?

More than 1.5 million people live within the 30 km radius of the KKNPP which far exceeds the AERB stipulations. It is quite impossible to evacuate this many people quickly and efficiently in case of a nuclear disaster at KKNPP.

According to AERB instructions of 1998, the Koodankulam project requires two sources of water from the reservoirs of Pechiparai and Upper Kodayar in Kanyakumari district to ensure adequate supply in the event of a loss-of-coolant accident. Since water from Pechiparai and Kodyar is ruled out, four desalination units, each producing 106,000 litres of water an hour, are provided for the first two units of KKNPP. The desalination plants that are close to each other and vulnerable to accidents and terror attacks cannot be the reliable sources of fresh water. However, the Site Evaluation Report clarifies that Pechiparai dam water will be taken for the KKNPP reactors. There are so many conflicting and contradictory reports about the fresh water needs of KKNPP and its fulfillment.

The issue of liability for the Russian plants has also not been settled yet. Defying the Indian nuclear liability law, Russia insists that the Inter-Governmental Agreement (IGA), secretly signed in 2008 by the Indian and Russian governments, precedes the liability law and that Article 13 of the IGA clearly establishes that NPCIL is solely responsible for all claims of damage. If the Russian reactors are the best in the world, as claimed by Russians, why do they refuse to offer any liability?

Most importantly, the VVER reactor under commissioning at Koodankulam nuclear power project differs from the one featured in the inter-governmental agreement between Russia and India. According to documents published in 2006, there was no weld on the beltline (middle portion) of the reactor pressure vessel (RPV). NowAERB says that there are two welds on the beltline of the RPV installed at KKNPP. This is a breach of the contract by the supplier in Russia. NPCIL officers who have known this are guilty of installing an unsafe machine with high risk of RPV failure leading to offsite radiological contamination besides causing financial loss to the company in case of premature retirement of the reactors. By consenting to its erection, AERB has also reneged on its responsibilities. If the reactor is hot-commissioned, it will be virtually impossible to subject the vessel to a detailed inspection. This will lead to destruction of evidences of the crimes. From a safety perspective, the IAEA-mandated study of pressurized thermal shock (PTS) has to be done before commissioning the reactors at Kudankulam.

The people of Tamil Nadu and Kerala are deeply concerned about our safety and wellbeing as the KKNPP reactors pose grave and serious threats. The actual siting of the reactors, the quality of construction and the pipe work and the overall integrity of the KKNPP structures have been called into question by the very workers and contractors who work there in Koodankulam. Our own Expert Team has identified several serious safety issues with regards to the geology, hydrology,

oceanography and seismology issues of the KKNPP project such as Karst, geysers and sub-volcanic intrusions in our locality; slumps in our sea and possible tsunamis; recurrent huge earthquakes in the Indian Ocean and so forth. Our Expert Team's findings and our long struggle against the KKNPP are completely ignored by the concerned authorities and the governments ignoring our safety and wellbeing completely.

In the light of the above situation, we would very much like to request you to intervene in the KKNPP matter, halt its commissioning immediately and order a thorough enquiry into all of the above issues.

Looking forward to hearing from you soon, we send you our best regards and all peaceful wishes.

Cordially,

S.P.Udayakuamr, Ph.D. M. Pushparayan M. P. Jesuraj Fr. F. Jayakumar Coordinator

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_Kudankulam Nuclear Power Plant commissioning should be deferred

It is famously said: "In public domain, truth is not the truth, perception is the truth". This adage could be related to the discourse on the Kudankulam Nuclear Power Plant (KKNPP). While the arguments in favour of the plant is that it will generate electric power essential for 'development', People's Movement Against Nuclear Energy (PMANE) say that the plant will be 'destructive' to the life and livelihood of the Project Affected People (PAP).

While the touted 'truth'-that the plant is the safest in the world- is couched in utmost secrecy, public 'perception'-serious misgivings on the safety of the Plant is out in the open. As the nuclear establishment is racing towards the commissioning of the plant this perception among the PAP is increasing and not diminishing. And there are several reasons for this.

First and foremost, the project is being commissioned without any legal Environmental Impact Assessment (EIA), a fact admitted by the Ministry of Environment & Forests in a sworn affidavit filed in the Madras High Court. According to this affidavit, environmental clearance for Units 1 and 2 was given 'as early as 9th May 1989' and renewed on 6th September 2001. Since EIA Notification under Environmental Protection Act came into existence only on 27th January, 1994 and provision for public hearing was introduced only on 10th April, 1997 there was no need for KKNPP to go through these critical processes.

Nuclear establishment has taken shelter behind this fig-leaf to ram a 2000 MW nuclear power plant down the throat of over 1.5 million PAP without even going through the most basic process of EIA and public hearing. What is more, Nuclear Power Corporation Limited (NPCL) has been consistently

refusing to share the Site Evaluation (SE) and Safety Analysis Report (SAR) with the PAP.

This forced PMANE to appeal to the Central Information Commission who in turn ordered NPCL "to provide an attested photocopy of the SAR and SE Report after severing any proprietary details of designs provided by the suppliers to the appellant before 25 May, 2012." But the NPCIL has refused arguing that SAR 'is a third party document belonging to a Russian company' and therefore 'cannot be shared with anyone.' NPCIL even threatened to take CIC to court. Obviously NPCL is more interested in protecting a Russian company (third party) than safeguarding the PAP (first party)!

In the face of such persistent stone-walling, the humble PMANE scientists dug deep and did some quality research. Result is the startling revelation that there has been a serious breach of contract and perhaps deceit in that the VVER reactor under commissioning at KKNPP differs from the one featured in the inter-governmental agreement between Russia and India. According to documents published in 2006, there was no weld on the beltline (middle portion) of the reactor pressure vessel (RPV). Now AERB says that there are two welds on the beltline of the RPV installed at KKNPP exposing it to high failure risk that could lead to offsite radiological contamination. If the reactor is hot-commissioned, it will be virtually impossible to subject the vessel to a detailed inspection and remediation. From a safety perspective, the IAEA-mandated study of pressurized thermal shock has to be done before commissioning the reactors at Kudankulam.

Pure fresh water is a critical input for KKNPP during operation as well as safety of the spent fuel. While approval for the plant was given in 1989, AERB mandated accessing of fresh water-from two reservoirs through pipelines with an on-campus reserve of 60,000 cubic meters, sufficient to maintain the spent fuel pool and the reactor cores (under shutdown mode) for 30 days. These sources are not available and have been replaced by four imported seawater desalination plants with a reserve of 12,000 cubic meters of water i.e. just 20% of what was stipulated by AERB and that too from artificial source. This is serious breach of safety, because fresh water is the only remedy in the event of a nuclear emergency.

All these takes us to an essential pre-requisite before the plant is commissioned-mock evacuation drills in the 30 km or at least the 16 km radius of the project. This has not been done. On June 9, 2012, the Tirunelveli district administration and the NPCL officials went through some motions in the remote hamlet of Nakkaneri of hardly 300 people and claimed that the 'mock drill' was a great success. According to a fact-finding team that went to the village subsequently, on that day revenue officials accompanied by a large posse of policemen came to the village, got some papers signed and announced it as 'mock-evacuation drill'. The district administration as well as NPCL has been extremely secretive in the matter!

No EIA, no public hearing, no sharing of Site Evaluation and Safety Analysis, no natural fresh-water, no evacuation drill and to cap it all breach of contract and installation of low quality Pressure Vessel. By all accounts it is 'no-go' for the project. The least the nuclear establishment should do is to defer the commissioning process and undertake a comprehensive review and analysis of all the fears expressed. While doing so the two cataclysmic events-2004 Tsunami and 2011 Fukushima nuclear disaster-that rocked this part of the world since KKNPP was given 'environmental clearance' should be factored in.

Heavens are not going to fall if a few hundred megawatts of nuclear power are not added to the grid in a mad hurry. Much more important is the safety of the plant in the perception of the PAP.

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_Dangerous Reactor Pressure Vessel (RPV) Fraud at Koodankulam

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Press Release

The VVER reactor under commissioning at Koodankulam nuclear power project differs from the one featured in the inter-governmental agreement between Russia and India. According to documents published in 2006, there was no weld on the beltline (middle portion) of the reactor pressure vessel (RPV). Now AERB says that there are two welds on the beltline of the RPV installed at KKNPP.

VVER beltline welds are one of main causes of accelerated ageing of RPV, known as neutron embrittlement, which may damage the vessel and lead to a major accident. Other known cause of accelerated RPV ageing is the impurities and alloying elements in the base metal and weld metal. Beltline welds have been eliminated in the recent versions and the newest RPVs have lower concentration of ageing-elements. This is a breach of the contract by the supplier in Russia. NPCIL officers who have known this are guilty of installing an unsafe machine with high risk of RPV failure leading to offsite radiological contamination besides causing financial loss to the company in case of premature retirement of the reactors. By consenting to its erection, AERB has also reneged on its responsibilities. Incidentally, according to the existing compensation regime, the supplier has no liability. These legal issues will have to be investigated and decided upon by appropriate national and international agencies.

If the reactor is hot-commissioned, it will be virtually impossible to subject the vessel to a detailed inspection. This will lead to destruction of evidences of the crimes. From a safety perspective, the IAEA-mandated study of pressurized thermal shock (PTS) has to be done before commissioning the reactors at Kudankulam.

The People's Movement Against Nuclear Energy (PMANE) wants the Government of India, the Department of Atomic Energy (DAE) and the Nuclear Power Corporation of India Ltd. (NPCIL) to halt all the work at KKNPP immediately and order an enquiry into the RPV scam. They should also explain if the RPV installed at Koodankulam have come from Croatia and that is why Croatian technicians are here at Koodankulam right now. The Government of Tamil Nadu should ask the central government about the RPV fiasco and start supporting the people of Tamil Nadu in their struggle for life and livelihood.

The Absurd "Offsite Emergency" Drama and Unanswered Questions

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Press Release

The Koodankulam Nuclear Power Project along with Tirunelveli district administration has carried out an "offsite emergency exercise."

The following is the Scenario: June 9th early morning the shift charge engineer at KKNPP declared a Plant Emergency; then the Site Director rushed to the plant and declared Site Emergency Exercise. Alert messages were sent to all the relevant officials including the District Collector who declared an offsite emergency and carried out three-stage counter measures (which, according to newspaper reports, are): announcements that asked people to stay indoors, distribution of iodine tablets and evacuation.

This absurd "Offsite Emergency" drama gives rise to a few uncomfortable questions:

- [1] At least 44 people, mostly precious little children, have been killed in a Dengue epidemic in the past few weeks here in Tirunelveli district. The district administration has been helplessly watching people die and had done nothing to prevent this shameful and criminal loss of life. Who would console all these mothers and fathers who have suffered the ultimate loss in life? Who is responsible for all these unwanted deaths? What does the district administration have to say about this?
- [2] The district administration that could not maintain basic sanitation in the district and prevent this completely avoidable death and destruction now wants us to trust them with the management of a nuclear accident. How convincing it is!
- [3] Why was Nakkanery village with hardly 300 people chosen for this absurd drama when Koodankulam, Idinthakarai, Vairavikinaru, Chettikulam, Sriranganarayanapuram, S.S.Puram, Perumanal and Koottapuli with thousands of people are much closer to the nuclear plant? Is Nakkanery chosen because most of the daily wage laborers would have gone to work and there would be hardly 100 illiterate women and infants at Nakkanery during the drill and they could be easily manipulated?
- [4] If 100 Nakkanery villagers are trained, how do millions of other people in the 16 km or 30 km radius and beyond get the necessary information and experience to face a nuclear disaster?
- [5] Even after undergoing the exercise, how come people of Nakkanery say they have no idea what happened in their midst and what all the authorities did. The local Panchayat president has told the media that the officials came to deal with the Dengue epidemic. Some villagers have claimed that the officials were there to ask them what they wanted for their village. The authorities claim one thing but the poor and illiterate people seem to be completely confused. Why don't the authorities release photos, names of the participants and their feedback to the media?
- [6] If the Collector claims in the Press Release dated 9.6.2012 that "exercise of counter measures

were carried out in three stages, as prescribed in the Emergency Plan" how come the Press Release does not even list the "three stages"? Is it because the authorities want to hide the stages from the larger public and keep us all in continued ignorance and avoid any further debate?

- [7] If "the Emergency Preparedness Plan (EPP) Manual of KKNPP-1&2 has been reviewed/concurred/approved as appropriate by AERB and District Authorities...in June 2011" (according to Mr. R. Bhattacharya of AERB in his letter No. AERB/SEC/46/2012/1643 dated April 17, 2012) why did the Collector, Dr. R. Selvaraj, IAS, not give us a copy of the emergency manual when Dr. S. P. Udayakumar of PMANE applied for it under RTI on April 2, 2012? Why did the Collector's PA (General) forward that RTI request to the Public Information Officer at KKNPP, Koodankulam for suitable reply? Why haven't we received a copy of the Manual even after writing to the Assistant Public Information Officer, KKNPP?
- [8] According to the Collector's Press Release, the "exercise was observed by the representatives from AERB, NPCIL HQ and other officials of NPCIL." Why were the local public representatives such as MP, MLA, local civil society members, prominent citizens and the local media not invited? Why was the whole exercise a quick and hush-hush affair that lasted only for an hour?
- [9] Do nuclear disasters affect a large area around the plant or just one or two specific villages? How come the exercise is carried out in an isolated village and not throughout the project affected area?

Our dear Fellow Tamils and Malayalis, PMANE wishes you, your children and grandchildren all the very best with your future. May God/Nature/Great Spirit bless you and protect you! We don't know what else to say (Or come and join the struggle).