

**BEFORE THE NATIONAL GREEN TRIBUNAL (SZ), SITTING AT
CHENNAI**

O.A No.229/2020

BETWEEN:

Tribunal on its own Motion

... **APPLICANT**

AND

Ministry of Environment & Forest
and Ors.

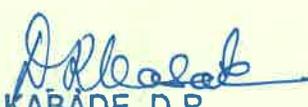
... **RESPONDENTS**

AFFIDAVIT FILED ON BEHALF OF RESPONDENT NO.5
REGARDING COMPLIANCE WITH THE RECOMMENDATIONS OF
THE EXPERT COMMITTEE CONSTITUTED BY WAY OF ORDER
DATED 20.10.2020

I, Mr. D.R.Kabade aged 50 years, S/o R.Y Kabade, working as Assistant General Manager (Law), Office of the Head (Legal Services) and authorised signatory of Karnataka Power Corporation Limited, having office at Shakthi Bhavan, Race Course Road, Bangalore- 560 001, do swear and state on oath as under:

1. I am the Assistant General Manager (Law) of Karnataka Power Corporation Ltd., the 5th Respondent in the present proceedings, and as such I am well aware of the facts of the case and competent to swear to this affidavit.
2. It is submitted that the Response to the Newspaper report dated filed by the Respondent No.5 on 22/06/2021 and the Response to the recommendations of the Expert Committee be read as part and parcel of the instant Affidavit for the sake of brevity.
3. Recommendations of the Expert Committee and Steps taken towards compliance:




KABADE. D.R.
Asst. General Manager (Law)
Karnataka Power Corporation Ltd.
No. 3, Ground Floor, Green Building,
(Drugs Control Department Premises)
Palace Road, Bengaluru - 560 001.

- a) The unit is to comply with all the recommendations of the RCA report in a time bound manner: All recommendations of the RCA report are being complied with.
- b) The safety protocols shall be strictly maintained, and dedicated exit paths and safe assembly area shall be identified in case of any emergencies: The vital safety tools such as Safe Assembly Point and Emergency Exit Path depicting pictorial view of the plant has been displayed at conspicuous places at the plant site to create awareness on safe evacuation measures in case of fire or other emergencies. The boards displaying emergency exit paths and safe assembly points have been installed at all required locations in the plant.
- c) The onsite emergency plan shall be revisited and based on the experience of the fire incident, additional safety protocols and control measures shall be incorporated.
- i. Onsite Emergency plan with regard to Gas Booster Compressor (GBC) (which is meant to supply Natural Gas to the Gas Turbine at the required pressure and quantity) has been revisited and additional mitigation measures have been incorporated consequent to installation of Acoustic Enclosures for the said equipment.
 - ii. Additional safety protocols, such as, Do's & Don'ts in case of fire occurrences, inside and outside the Gas Turbine enclosure and other fire prone locations of the Plant, have been added to the On-site Emergency Plan.
 - iii. Awareness has been created among all working staff at the Plant about the "Onsite Emergency plan" and safe evacuation measures in case of fire by giving training. Safety Training has been given to all employees to tackle the situation in case of fire emergencies by conducting onsite emergency evacuation mock drills.
 - iv. Standard protocols and pre-checks will be implemented prior to restart of pre-commissioning and commissioning of the Gas Turbine and its




 KABADE. D.R.
 Asst. General Manager (Law)
 Karnataka Power Corporation Ltd.
 No. 3, Ground Floor, Green Building,
 (Drugs Control Department Premises)
 Palace Road, Bengaluru - 560 001.

accessories as per original equipment Manufacturers (OEM) recommendations.

- v. Standard Operation Procedure (SOP) for all types of operations pertaining to the Gas Turbine as per the recommendations of GE and BHEL will be implemented.
 - vi. The vital safety tools such as safe assembly point and emergency exit path depicting in pictorial view of plant has been displayed at conspicuous places at plant to create awareness on safe evacuation measures in case of fire.
 - vii. Standard Maintenance Procedure (installed SMP) is being implemented as per the recommendation of Original Equipment Manufacturer (OEM).
 - viii. Only specially trained operating staff will be deployed for regular operation of the Plant.
 - ix. Access control has been at specified places such as the Gas Turbine, Gas Booster Compressor, Gas Conditioning skid, Turbine Generator Hall and the Control Room. Mobile phones will be restricted at the above areas.
 - x. Workers have been trained in handling firefighting equipment.
 - xi. The hazards assessment document containing identification of major accident hazards and mitigation measures to be taken at the Plant has been prepared and circulated to all the site staff to prepare for and prevent any major accidents and to limit their consequences to persons and to the Environment as per rule 4 of MSIHC rules.
- d) The locking arrangement for the enclosure doors provided to the turbine and generator compartments shall be reviewed and modified, if required to ensure that the doors cannot be opened by unauthorized personnel from the outside during unit operation to ensure minimum manual interference affecting the system performance. All the Turbine doors have been provided with latch and lock and will be locked during normal continuous operation of the turbine to prevent unauthorised persons from opening of the door. The Turbine is



(Handwritten signature in green ink)

(Handwritten signature in blue ink)

KABADE. D.R.
Asst. General Manager (Law)
Karnataka Power Corporation Ltd.
No. 3, Ground Floor, Green Building,
(Drugs Control Department Premises)
Palace Road, Bengaluru - 560 001.

operated only by authorised personnel who are familiarised with operations. Restricted Access entry control for each area is formulated to avoid unauthorised personnel entry in the area by implementation of work permit system such as lock out tag out permit.

- e) The possibilities of technical modifications in the lube oil circulation system, ensuring more leak and temperature detectors for early detection of such oil leaks shall be explored in consultation with the design team, so as to minimise the damages caused by such mishaps: The possibilities of technical modifications in the lube oil circulation system, ensuring more leak and temperature detectors for early detection of such oil leaks have been explored in consultation with the design team, so as to minimise the damages caused by such mishaps. The Gas Turbine Lube Oil System has been provided with local Lube Oil indicators, which monitor the Lube oil levels regularly and notify the alarm at Unit control Room in case the Lube Oil level drops below the desired level due to any leakage.
- f) During the visit, the Committee members observed that the exit path from the gas turbine chamber enclosure are not obstruction free and some pipelines are passing across the same. An obstruction free exit path shall be identified by the unit for all such major installations where fire hazard is identified.: An obstruction free exit path has been identified and the obstruction caused due to the passing of pipelines in the Exit path in the Gas Turbine area has been removed. Exit Paths in Gas Turbine area have been made obstruction free.
- g) Advanced Electronic Control Management system should be adopted in the plant including CCTV cameras and voice recording system: The Gas Turbine is provided with advanced and state of art speedtronic Mark VIe control system (Proprietary design of GE) for automatic control and protection of Gas Turbine. The CCTV cameras and public address systems have been installed at important locations of the plant including Gas Turbine, Steam Turbine and Gas Booster compressor areas for constant surveillance.



Handwritten signature in green ink.

Handwritten signature in blue ink.
 KABADE, D.R.
 Asst. General Manager (Law)
 Karnataka Power Corporation Ltd.
 No. 3, Ground Floor, Green Building,
 (Drugs Control Department Premises)
 Palace Road, Bengaluru - 560 001.

h) Unit shall explore feasibility in consultation with the design team to make provisions and install the necessary lube oil leakage sensors adjacent to all the bearings including the bearing no. 2, where the leakage occurred presently: The lube oil is presently circulating to bearings and other auxiliaries in a closed loop system. Any leakage in the system will result in the reduction in the level in the lube oil tank. The lube oil tank is provided with level gauge and level transmitter for monitoring the level in the local and alarm is provided in the control system for level monitoring. Hence, adequate protection and monitoring for any leakage is available.

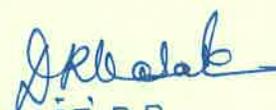
i) KPCL shall be asked to provide thick green belt consisting of tall growing trees (preferably Miyawaki method) towards residential areas around the plant to arrest sound nuisance/ any hazard including proving permanent high range sprinklers towards residential area all along the periphery of the plant.

The plantation works of tall growing trees of species like Mahogany, Neem, Akashmallige, Kadamba, Ficus, Ashoka towards residential areas have been completed. External Fire Hydrant system as per Tariff Advisory Committee (TAC) rules and conforming to IS standards has been installed along the periphery of the Plant towards residential areas. Adequate number of single headed external hydrant points have been provided along with the 200 NB underground hydrant pipe lines in the peripheral area between residences and plant. These hydrant points can produce water jet with discharge pressure of 8.8 kg/Cm² and capacity of 410 M³/hr, which can generate considerably high range sprinklers systems. These hydrant systems are fed from the dedicated fire water pump house, having source at a raw water reservoir of a capacity of 57000 Cubic Meter to provide an uninterrupted supply of water.

j) Re Compensation details in respect of deceased employees and employees injured in the Fire Accident that occurred on 02.10.2020 at Yelahanka Combined Cycle Power Plant:

i. The Respondent No.5 has completely covered the medical expenditure of all 11 of its personnel who were injured in the accident. The total




 KABADE, D.R.
 Asst. General Manager (Law)
 Karnataka Power Corporation Ltd.
 No. 3, Ground Floor, Green Building,
 (Drugs Control Department Premises)
 Palace Road, Bengaluru - 560 001.

medical expenditure met by the Respondent No.5 in respect of all its affected employees till date is around Rs. 56,62,990/-.

- ii. With respect to the dependents of its two deceased staff, the Respondent No.5 has provided employment on compassionate grounds as per KPCL Service rules. The dependants of the deceased employees have been employed as regular Employees at the Kali Hydro Power Project, Ambikanagar, Uttara Kannada district, Karnataka.
- iii. With respect to *ex-gratia* payment to the two deceased staff of Respondent No.5, a recommendation has been sent to the Energy Department, Government of Karnataka for its consideration by way of a Letter dated 11/02/2021(Annexure R4). Upon the advice of the Energy Department, the same is presently being placed before the Board of the Respondent No.5 for its approval. Once the approval is granted, the *ex-gratia* payment will be released to the families of the deceased employees.

k) Regarding whether any policy which has been taken under Public Liability Insurance Act,1991 and whether any steps have been taken for getting payment from the insurance company in regard to the affected employees covered under the scheme:

- a. It is submitted that the repair works (of the damage caused by the fire) at the Plant have just been completed and the commissioning works are yet to commence. The construction and commissioning works of the Plant were awarded to M/s. BHEL on Engineering, Procurement and Construction (EPC) basis. It is submitted that only once the Plant has been commissioned, will the functioning of the Power Plant be handed over to the Respondent No.5 by M/s BHEL. During the construction and commissioning stages of the Power Plant, as per the clauses of the EPC Contract, M/s BHEL and their sub-contractors, have taken several insurance policies including the Storage cum Erection Insurance Policy and Third Party Insurance Policies which covers material, equipment and workers /labours at site.



(Handwritten signature in green ink)

(Handwritten signature in blue ink)
 KABADE. D.R.
 Asst. General Manager (Law)
 Karnataka Power Corporation Ltd.
 No. 3, Ground Floor, Green Building,
 (Drugs Control Department Premises)
 Palace Road, Bengaluru - 560 001.

- b. Once the Plant has been commissioned, the Respondent No.5 will take over the Power Plant from BHEL for regular operation and maintenance, as is being done in its other projects and will obtain the required insurance policies required under law. The Respondent No.5 will also be taking a Mega Risk Insurance Policy which will cover risks of all the Material/equipment and building of the plant including third party liability in case of any accidents.

Wherefore, it is prayed that the instant Affidavit be taken on record and the instant matter be disposed of accordingly.

Place: Bangalore

Date: 15/02/2022

J.R. Kabade
KABADE. D.R.
 Asst. General Manager (Law)
 Karnataka Power Corporation Ltd.
 No. 3, Ground Floor, Green Building,
 (Drugs Control Department Premises)
 Raichur Road, Bengaluru - 560 001. (deponent)
 for the Respondent No.5



SWORN TO BEFORE ME

10009 25-2-22
G.B. TURAMARI
 ADVOCATE & NOTARY
 # 46/1, Behind Binny Mill
 1st Main Road, Ganganagar Extn
 BENGALURU 560 032