

## न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड

## **Nuclear Power Corporation of India Limited**

(भारत सरकार का उद्यमGovernment of India Enterprise)

कैगा बिजली उत्पादन केंद्र 1 व2 Kaiga Generating Station 1& 2

जलील बारगीर JalilBargir प्रभारीअधिकारी(इन्फ्रा-सिविल) Officer in-Charge (Infra-Civil)

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## **JUSTIFICATION NOTE**

NAME OF WORK: Construction of an alternate stretch of road to connect NPCIL Kaiga Site and Mallapur village, Karwar Taluk, Uttarkannada District.

Nuclear Power Corporation of India Limited (NPCIL) has four units of 220 MW (e) capacity at Kaiga Site. All the four units are operating safely and reliably supplying electricity to the southern grid. Government of India had accorded in principle approval for setting up of 2 x 700 MWe (expansion at existing site) PHWRs at Kaiga. Accordingly, pre project activities are underway. Atomic Energy Regulatory Board (AERB) has accorded siting consent during November 2020. Approximately 1600 permanent employees and 2000 contract workers are deployed for smooth operation of Plant and residential colony which is located in left bank of River Kali downstream of Kadra Dam.

The Karwar-Ilkal state highway runs along the left bank passing through the Kaiga Township and connects Kaiga site through the Full reservoir level road developed by KPC after submergence of the old road due to Kadra reservoir.

The access road from Kadra dam to plant site is the only road to transport essential commodities like fuel, HSD, gases and other consumables required for reliable operation of Kaiga units.

The region experiences heavy rainfall averaging from 3.5 M to 4.5 M during monsoon. During the incidents of heavy rainfall in the Kali river basin, Heavy showers, run off from nearby streams increased water input to the Kadra reservoir and in turn caused the release of water from the dam. This resulted in spread of the river water released from the dam gates beyond the river banks and caused inundation of low lying areas of Kaiga township, Kurnipet village and also access road connecting Mallapur village (SH-6) at several locations resulting in unavailability of road access from Plant site to Mallapur village.

Road from township gate to junction point near Kadra dam was submerged at three locations. Depth of submergence was 6 to 9 feet during 2019 and about 8 to 12 feet during 2021. Submergence was due to low road level at these locations. Submergence of road was limited to initial 2 km length of road. Due to this, road connectivity between township and plant site was affected. Boats were used for personnel

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## न्यूक्लियर पावर कार्पोरेशन ऑफ इंडिया लिमिटेड NUCLEAR POWER CORPORATION OF INDIA LIMITED

कैगाबिजली उत्पादन केंद्र,कैगा स्थल.

Kaiga Generating Station, Kaiga Site.

movement from township to plant site at these locations Alternate arrangements by means of boats were made to cross the stretches of road submerged in water to reach the junction point between at Kadra dam site from township to plant site (about 2-3 km). Departmental vehicles plied between Kadra dam site and Kaiga Plant Site to ferry the essential staff during the entire period. Adequate departmental vehicles were ensured at plant site to meet any exigencies, if any. The access road on the upstream side of Kadra dam being FRL (Full Reservoir Level) road

During the review meeting of flood situation with District administration and NPCIL management, it was deliberated to develop an independent alternate approach road to plant site connecting SH-6 to Plant site and township at higher elevation.

Accordingly, survey was carried out to find out possible pathways that are at elevation higher than the existing road between Mallapur and Kadra reservoir that can connect SH-6 between Mallapur and Kadra reservoir as an alternate road. The following stretches were identified.

- The pathway between the road junction at Kadra cross near Kurnipet to E –type area (Phase-I colony) passing through steep slope hilly and rocky terrain through dense forest.
- 2. The existing cart road in front of Hotel Subhadra at Kurnipet to E type area. (This stretch was submerged during the recent floods.
- 3. The existing cart road connecting SH-6 near Kadra dam on one side to E-type passing through the NPCIL land (survey number 77 and 78 of virje village) is proposed as an alternate road.

The proposed layout for construction of approach road is found to be feasible and meeting the requirements.

(जलील बार्गीर JalilBargir)

प्रभारीअधिकारी हन्फ्रामसिक्लि RGIR Officer in Charge (Infra-Civil) FRA

On behalf of Nuclear Power Corporation of India Ltd., Kaiga.

केगा विजेशी उत्पादन केंद्र Kalga Generating Station

The 28/8/2021