701189/2021/Pen Riv Section

Public Works Department,
Secretariat, Chennai – 9.

Letter No. 40715 / C.Spl.1 / 2008-65, dated 27.4.2021

From

Dr. K. MANIVASAN, I.A.S.,
Principal Secretary to Government

To

The Secretary to Government of India,
Ministry of Jal Shakti,
Department of Water Resources, River Development and Ganga Rejuvenation,
Shram Shakti Bhawan, Rafi Marg,
New Delhi – 110 001. (w.e.)

Sir,

Sub: Cauvery Water Dispute – Karnataka commenced preliminary activities like laying road near the proposed Mekedatu Dam site – Request to advise Karnataka not to initiate any activity with reference to Mekedatu Project – Regarding.

Ref: 1.From the Chief Engineer, Cauvery Neeravari Nigama Niyamita Ltd., Irrigation (South), Letter No.CE / CNNL / WSB / Mekedatu /2019 – 2020, dated 20.6.2019 (addressed to the Director and Member Secretary, River Valley and Hydroelectric Projects, MOEF & CC.)
2.From the Hon'ble Chief Minister of Tamil Nadu D.O. Letter dated 24.6.2019 addressed to Hon'ble Prime Minister.
3. Minutes of the 25th Meeting of the Expert Appraisal Committee for River Valley and Hydroelectric Projects held on 19.7.2019.

I am directed to state that a news item appeared in Times of India, Chennai edition on 15.4.2021, wherein it was reported that the State of Karnataka has commenced preliminary activities, like laying road, which is reported as a project road, collection of construction materials, etc., for the proposed Mekedatu dam across Cauvery river just upstream of Karnataka – Tamil Nadu border. This has caused anguish among the farmers of Tamil Nadu, especially in Delta.

2. On the proposal of construction of Mekedatu project by the State of Karnataka, State of Tamil Nadu has filed a Miscellaneous Application (MA) in the Hon'ble Supreme Court on 30.11.2018 being M.A.No.3217 of 2018 and also filed a Contempt Petition (CP) being No.96, dated 05.12.2018, for having accorded permission to the project authorities of Karnataka to go ahead with the preparation of DPR. Both the Applications are pending before the Hon'ble Supreme Court. However, the State of Karnataka submitted an Application to the Ministry of Environment, Forest and Climate Change, for obtaining the Terms of Reference for Environmental Impact Assessment (EIA) study. This was also opposed by Tamil Nadu and the Hon'ble Chief Minister of Tamil Nadu wrote a letter to Hon'ble Prime Minister on 24.06.2019 requesting to direct the Ministry of Environment, Forest and Climate Change not to consider the Mekedatu proposal. Subsequent to that, the Expert Appraisal Committee of Ministry of Environment, Forest and Climate Change directed Karnataka to have an amicable solution on this issue with the State of Tamil Nadu and thereafter put up for consideration, vide, minutes of the meeting held on 06.08.2019. But, Karnataka did not approach the State of Tamil Nadu for any amicable solution. It has taken a stand that the consent of riparian States is not needed and the matter stands there.

3. The State of Tamil Nadu had also strongly objected to an agenda on this issue, put forth for a discussion in the 3rd, 4th, 5th, 6th and 7th meetings of the CWMA and based on Tamil Nadu's objection the item was not discussed and deferred.

4. The State of Karnataka cannot suo-moto take any action to commence the construction of the proposed Mekedatu project across the Inter-State Cauvery river. Further the matter is sub-judice.

5. In the above circumstances, I request you to advise the State of Karnataka not to initiate any activity with reference to the Mekedatu Project as the matter is sub-judice.

Yours faithfully,

27/4/2021

For Principal Secretary to Government

27/4/2021

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Cauvery Neeravari Nigama Niyamita

CHIEF ENGINEER
Irrigation South Zone
Mysore

Government of Karnataka Enterprise

Off : 0821-2442752 (P)
☎ : 0821-2443900
Fax : 0821-2520477

Ref No: CE/CNNL/WSB/MEKEDATU/2019-2020 Date: 20.06.2019.

To,
The Director & Member Secretary,
River Valley and Hydroelectric Projects,
Ministry of Environment, Forests
and Climate Change,
Indira Paryavaran Bhavan,
Lodhi Road, New Delhi - 110003.

Sir,

Sub: Mekedatu Balancing Reservoir and Drinking Water Project in Ramanagaram and Chamarajanagar Districts of Karnataka - Submission of project documents for ToR approval - reg.,

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Mekedatu Balancing Reservoir and Drinking Water Project is a multipurpose project aiming at providing drinking water facilities to Bangalore Metropolitan area and surroundings and also generation of 400 MW hydro-electric power. Karnataka being the eighth largest State in India with a population of 6,10,95,297 as per 2011 Census is blessed with major perennial Rivers such as Krishna and Cauvery besides 13 West flowing Rivers. However, the State is still under drought and facing drinking water scarcity besides facing acute power shortage.

As a measure to conserve water, preventing energy shortage and provide drinking water facilities to Bangalore cities and surrounding areas in Cauvery basin, Cauvery Neeravari Nigam Ltd., Government of Karnataka is planning to build a balancing reservoir across River Cauvery near Mekedatu which will utilize the natural bed slope of the river from Shivanasamudra to State border. The project on successful implementation will enable in regulating the flow and ensuring that the downstream commitment of allowing 177.25 TMC which includes 10 TMC towards environmental flow to Tamil Nadu is met along with the drinking water facilities to the areas deprived of drinking water needs in Karnataka.

Mekedatu Balancing Reservoir and Drinking Water Project involves construction of a balancing reservoir across River Cauvery near Mekedatu for harnessing nearly 400 MW of hydroelectric power annually. The total cost of the project is worked out to be Rs. 9000.00 Crores aiming to provide drinking water facilities to Bengaluru Metropolitan region and its

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surrounding areas. The project requires a total land of 5252.40 Ha. Out of which, 4996 ha is submergence and remaining 256.40 ha is required for other construction activities. The submergence also includes 3181.9 Ha of land belongs to Cauvery Wildlife Sanctuary and 1869.5 Ha of Reserve Forest land, 201 Ha of Revenue land.

Since, the proposed project involves harnessing of 400 MW of hydroelectric power annually and the project components falls within Cauvery Wildlife Sanctuary and interstate boundary of Tamil Nadu is at a distance of 3.90 Km. Hence, the proposed project is considered as Category 'A' as per EIA notification, 2006 and its subsequent amendments on 14th August 2018. Therefore, the project requires Environmental Clearance from Ministry of Environment, Forests and Climate Change, Govt. of India, New Delhi.

In view of the above, filled in Form-I, Pre-feasibility report and Draft ToRs along with necessary drawings and maps are herewith enclosed for your kind perusal and onward consideration for issue of ToRs.

Encl: a/a

Yours faithfully,

Chief Engineer
CNNL, Irrigation (South)
Mysore – 570 024

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Edappadi K. PALANISWAMI
Chief Minister

SECRETARIAT
Chennai - 600 009

Date 24.6.2019

Dear Prime Minister,

I write this letter seeking your urgent personal intervention to deny permission to the proposal of Cauvery Neeravari Nigama Niyamita of Karnataka for grant of Terms of Reference for Environmental Clearance for Mekedatu Balancing Reservoir and Drinking water project. This action of Karnataka in seeking Environmental Clearance for Mekedatu Project is in utter violation of the Final Order of the Cauvery Water Disputes Tribunal and the judgment of the Hon'ble Supreme Court dated 16.2.2018. I request you to direct the Ministry of Environment, Forest and Climate Change to reject outright the proposal of Karnataka.

The Government of Tamil Nadu has been conveying its strong objections and has been urging the Government of India to reject outright and return the Detailed Project Report of the Mekedatu Balancing Reservoir Project of Karnataka. The proposed Mekedatu Project is not in conformity with the Final Order of the Tribunal and the judgment of the Supreme Court, since the Project is not a designated reservoir for the release of water from Karnataka to Tamil Nadu in terms of the Final Order of the Tribunal as modified by the Hon'ble Supreme Court. Further, Karnataka has not obtained the prior concurrence of the Government of Tamil Nadu and other co-basin States. Cauvery being a deficit Basin, construction of Mekedatu or any project in any place by upper riparian States will drastically affect the lower riparian States in getting due share of water as per the Final Order of the Tribunal as modified by the Hon'ble Supreme Court. Moreover, the matter is pending before the Supreme Court. I have brought these facts to you in the Memorandum I presented on 15.6.2019.

In the circumstances, I request you to direct the Ministry of Environment, Forest and Climate Change to issue instructions to the Authorities concerned not to consider the proposal of Cauvery Neeravari Nigama Niyamita for grant of Terms of Reference to obtain Environmental Clearance for Mekedatu Balancing Reservoir and Drinking water project. Further, the Ministry of Jal Shakthi may be directed to advise the Central

Water Commission to reject outright and return the Detailed Project Report of the Mekedatu Balancing Reservoir Project of Karnataka and also not to accord any clearance to the above project without obtaining the prior concurrence of the Government of Tamil Nadu and of other co-basin States.

I shall be thankful for your immediate response in the matter.

with kind regards

Yours sincerely,

K.PALANISWAMI

To

Shri Narendra Modi,
Hon'ble Prime Minister of India,
New Delhi.

Minutes of the 25th Meeting of the Expert Appraisal Committee for River Valley and Hydroelectric Projects held on 19.07.2019 at Teesta Meeting Hall, 1st Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi–3.

The 25th meeting of the re-constituted EAC for River Valley & Hydroelectric Projects was held on 19.07.2019 under the Chairmanship of Dr. S. K. Jain in the Ministry of Environment, Forest & Climate Change at Teesta Meeting Hall, 1st Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-3. The following members were present.

1.	Dr. S.K. Jain	-	Chairman
2.	Shri Sharvan Kumar	-	Representative of CEA
3.	Dr. J.A. Johnson	-	Representative of WII
4.	Shri N.N. Rai	-	Representative of CWC
5.	Dr. A.K. Sahoo	-	Representative of Director of CIFRI
6.	Dr. D.M. More	-	Member
7.	Shri Chetan Pandit	-	Member
8.	Dr. S.R. Yadav	-	Member
9.	Dr. J.P. Shukla	-	Member
10.	Dr. (Mrs.) Poonam Kumria	-	Member
11.	Dr. S. Kerketta	-	Member Secretary

Dr. Vijay Kumar, Prof. R.K. Kohli and Dr. Govind Chakrapani could not present due to pre-occupation. The deliberations held and the decisions taken are as under:

Item No. 25.0 Confirmation of the minutes of 24th EAC meeting.

The Minutes of the 24th EAC (River Valley & Hydroelectric Projects) meeting held on 27.05.2019 were confirmed. Some members opined in the minutes of the 23rd EAC (River Valley & Hydroelectric Projects) meeting held on 23.04.2019, the following:

"As per S.O. 648 (E) dated 03.03.2016 of the Ministry, the project seeking for grant of ToR/Scoping Clearance could only be appraised in the EAC meeting provided the PP is present along with NABET approved Consultant. In this regards, some members expressed that presence of NABET approved Consultant be relaxed because the project implemented by the State Government/PSUs would have difficulty in hiring the Consultant at the initial stages. The Member Secretary clarified that as this is a policy issue of the Ministry, presence of the Consultant is necessary at the time of appraisal of the project for preparation of EIA/EMP report."

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Item No. 25.1 Lakhwar Multipurpose Project in the district of Dehradun in Uttarakhand by M/s UJVN LTD - Regarding Fresh ToR.

Proposal No. IA/UK/RIV/107946/2019, File No. J-12011/11/2019-IA-I (R)

Earlier, the project was discussed in the EAC meeting held on 28.01.2019 based on the order vide dated 10.01.2019 **(OA No. 431 of 2015 by Manoj Mishra Vs. Union of India and Others)** of the Hon'ble NGT, Principal Bench, New Delhi. The EAC had recommended for a site visit by a Sub-Committee of the EAC to the project site for any additional study, if any, to be taken up based on the standard ToR for River Valley Projects. A Sub-committee consisting 7 members was constituted and the Sub-committee visited the project site on 22.04.2019. The Sub-committee made the following observations:

i. In the EAC meeting, it has been recommended that as the base line data of the EIA/EMP report submitted in 2007 was found more than three years old, once again 3 seasons baseline data to be collected and the same be incorporated in the previous EIA/EMP report. However, the Sub-committee during visit found at the site that till 1992, a substantial construction work had been done on the project, viz. 40 km Road infrastructure, Dam stripping on both banks, Diversion tunnel, Intake, Underground power house, Adit for Control Room, Adit to erection bay, Tail race tunnel, etc. The sub-committee considered a colossal loss to state's exchequer. Therefore, it was suggested that baseline data for pre-monsoon and monsoon be collected and the same be incorporated in the previous EIA/EMP report. An amount of more than Rs. 400.00 crores had been invested and the said Public money is blocked for more than 27 years.
ii. Vyasi HEP, which is in advanced stage of construction, is a ROR scheme, located at 5 km downstream of Lakhwar HEP. Both the projects were approved as early as 1986-87. During that period concept of minimum free flow stretches was not in place. Therefore, minimum distance from FRL of Vyasi HEP to TRT of Lakhwar HEP has been kept only 100 m. After detailed deliberation, it has been opined that as the FRL for the downstream project shall be maintained at FRL and MDDL and further there would be a continuous flow of water through a pondage area. Further, both the proposals are integrated one and have been planned long back, minimum distance of 100 m from FRL of Vyasi HEP to TRT of Lakhwar HEP be allowed.
iii. Social Impact Assessment report to be prepared. The EMP and other aspects of the study are to be revised/updated accordingly.
iv. Due to this project, 22 km upstream of Yamuna river and 4 km of Agalar river will be submerged. Every year, the locals celebrate a mass fish catch in Agalar river which is a traditional festival for them. Further, Mahaseer do migrate from Yamuna river to Agalar river for spawning as this river is relatively calm and undisturbed. Therefore, a separate *in-situ* conservation plan to be prepared as a part of fish management plan.
v. As the proposed project falls in Yamuna River Basin and its CIA & CCS is already complete, the recommendation of CIA & CCS to be also part of the Project.

The above issues were discussed in detail in the EAC meeting held on 23.04.2019 and the EAC agreed with the observations of the Sub-committee. It has also been mentioned that this project has been declared as the National Project. Therefore, special consideration be given for early resumption of the project work. The *status quo order* given by the Hon'ble NGT has stalled all the activities on the field. The Sub-committee is inclined to get the mitigation measures complied as shall be suggested in the revised EIA/EMP report. At the same time the EAC recommended partial vacation of the *status quo* so that activities such as tendering, etc. (which do not impact environment) could be under taken by the Project Proponent.

Construction work on the project had been initiated long ago and 30% work has already been completed. During the last 27 years, impact of the project components on environment is already taking place. After a discussion on this aspect, the EAC in its meeting agreed with the suggestion of the Sub-committee and recommended that two seasons data be collected and analyzed along with the previous EIA/EMP report. Any unexpected behaviour and important finding be highlighted. After deliberation on the site visit report, the EAC recommended for the grant of **fresh TOR** for preparation of EIA/EMP report with the same recommendation of the Sub-committee.

Thereafter, the PP applied for grant of ToR online on 17.06.2019 afresh. The PP along with M/s R.S. Envirolink Technologies Pvt. Ltd., Gurgaon, Consultant made the detailed presentation on the project and *inert-alia,* provided the following information to the EAC:

Combined Lakhwar Vyasi project was accepted by NITIAYOG (erstwhile Planning Commission) in its Fifth five-year plan with an estimated cost of Rs. 140.97 crores on 09.01.1997. Lakhwar Vyasi project had three major components viz., Lakhwar dam, Vyasi dam and Katapathar barrage in the district of Dehradun, Uttarakhand. The Ministry granted the Environmental Clearance (EC) to this combined project in February, 1987. The then U.P. Irrigation Department started the major works of the project in 1987 and continued up to 1992. Till 1992, substantial construction work has been done on the project such as 40 km Road infrastructure, Dam stripping, Diversion tunnel, Intake, Underground power house, Adit to control room, Adit to erection bay, Tail race tunnel, etc. MoU between Uttar Pradesh, Haryana, Rajasthan, Himachal Pradesh and National Capital Territory of Delhi on allocation of surface flow of Yamuna was signed on 12.05.1994. As per MoU, 11.983 BCM water has been assessed as an annual utilizable flow of river Yamuna and has been allocated to the five beneficiary states.

After formation of Uttarakhand State, the project was handed over to M/s NHPC for its early completion through a MoU signed on 01.11.2003. The above project was bifurcated into two hydel components viz., Lakhwar HEP (300 MW) and Vyasi HEP (120 MW) (Hathiari Power Station) 5 km downstream of Lakhwar HEP and construction of a barrage at Katapathar about 3 km downstream of Vyasi HEP. Thereafter, a fresh environmental clearance to Vyasi HEP (120 MW) was accorded on 07.09.2007. Due to certain reason, NHPC could not implement the project and then the project was transferred to M/s UJVNL on 23.06.2008 including the EC of Vyasi HEP vide dated 22.04.2010. After review of the request of UJVNL, validity of Environmental Clearance of Lakhwar Multipurpose Project had been extended vide dated 10.01.2011. The revised DPR of Lakhwar Multipurpose Project has been prepared with an estimated cost of Rs. 3966.51 Crore. The total cost of irrigation/ drinking water component was worked out to be as Rs 2578.23 crores (65% of total cost) and the cost of power component was worked out to be as Rs. 1388.28 crores (35% of the total cost).

Lakhwar Multipurpose Project (300 MW) is a peaking power station proposed on river Yamuna near Lohari village in the district of Dehradun in Uttarakhand and is being developed by Uttarakhand Jal Vidyut Nigam Ltd. (UJVN Ltd). The Dam site of Lakhwar Multipurpose Project is located on the Yamuna river near Lohari village, in Dehradun district, 72 km away from Dehradun and approachable by National Highway 123. It is located at latitude $30^0$31'03" N and longitude $77^0$56'58" E. As approved by CWC and CEA in May, 2018, the total cost of project (RCE PL July, 2018) has been revised to Rs. 5747.17 Crores and the revised DPR of Lakhwar Multipurpose Project has been prepared with an estimated cost of Rs. 5747.17 Crore. The total cost of irrigation/ drinking water component was worked out to be Rs 3735.6605 crores (65% of total cost) and the cost of power component was worked out to be Rs. 2011.5095 crores (35% of the total cost).

Project Component:

1.	Concrete Dam	Height	:	204.0 m
		Length at Top	:	481.5 m
2.	Diversion Tunnel	2 Nos.	:	5 m dia. Horse Shoe Shaped
		Length	:	i. 567 m, ii. 596 m
3.	Reservoir	FRL	:	El. 796.00 m
		MDDL	:	El. 752.00 m
		Area at FRL	:	9.57 km^2
4.	Power House Complex (Underground)	Size of Cavern	:	165x20x48.05 m, D-shaped (Finished)
5.	Tail Race Tunnel	Diameter	:	8.25 m

		Length	:	240.49 m

The catchment area up to the dam site is 2,080 km² and 9.57 km² area will be submerged at FRL. A total of 927.0822 ha land is to be acquired, of which 158.927 ha is private/Govt. land and 768.15 ha is forestland. As informed, an area of 105.422 ha of private land has already been acquired by UP Irrigation Department and has been transferred to UJVNL. Balance, 53.505 ha of private land is to be acquired. Approval of diversion of 868.08 ha forestland (total forest land for Lakhwar-Vyasi Multipurpose Project in favor of Uttar Pradesh Irrigation Department was accorded by MoEF vide dated 31.10.1986. MoEF & CC vide dated 31.01.2014 accorded the approval for transfer of the lease in favour of UJVNL in respect of 768.1552 ha of forestland already diverted during 1986 in favour of Irrigation Department, U.P. for construction of Lakhwar Project. Binog Wildlife Sanctuary and Mussoorie Ecosensitive Zone are located at 3.1 km and 1.99 km, respectively from Lakhwar project.

The annual expected generation of electricity is 572.54 MU. A total of 78.83 MCM water is to be used for domestic/Industrial use. 19.03 MCM (1,90,30,000 KL) water is available as drinking water for Delhi. Besides, the project will also be used as flood control measures of the area. A total of 1,700 people (Technical and Non-technical) will be engaged during construction of the project.

The EAC deliberated on the proposed project in detailed based on the information provided by the PP and, **recommended for grant of fresh ToR/Scoping clearance** with the following additional conditions:

i. All the statutory clearances required for the project shall be obtained and incorporated in the EIA/EMP including Wildlife Clearance from the National Board of Wildlife as per the Wildlife (Protection) Act, 1972.
ii. Private land acquired for the project shall be suitably compensated for in accordance with the law of the land with the prevailing guidelines. Private land shall be acquired as per provisions of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
iii. Appropriate Biodiversity Conservation and Management plan for the Native, Rare & Endangered floral and faunal species getting affected due to the project shall be prepared.
iv. All the tasks including conducting public hearing (as per the provisions of EIA Notification, 2006 as amended from time to time) be completed and PP will submit the application for final environmental clearance within the stipulated time.
v. Baseline data for pre-monsoon and monsoon be collected and the same be incorporated in the previous EIA/EMP report.
vi. Social Impact Assessment report to be prepared. Similarly, the EMP and other aspects of the study are to be revised/updated accordingly.
vii. Due to this project, 22 km upstream of Yamuna river and 4 km of Agalar river will be submerged. Every year, the locals celebrate a mass fish catch event in Agalar river which is a traditional festival for them. Further, Mahaseer do migrate from Yamuna river to Agalar river for spawning as this river is relatively calm and undisturbed. Therefore, a separate *in-situ* conservation plan be prepared as a part of fish management plan.
viii. As the proposed project falls in Yamuna River Basin and its CIA & CCS is already complete, the recommendation of CIA & CCS to be also part of the Project.

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Item No. 25.2 **Mekedatu Balancing Reservoir and Drinking Water Project in Ramanagara and Chamarajanagar Districts of Karnataka by M/s Cauvery Neeravari Nigam Limited - Regarding Fresh ToR.**

Proposal No. IA/KA/RIV/108673/2019, File No. J-12011/10/2019-IA-1 (R)

PP applied for grant of ToR online on 22.06.2019 afresh. The PP along with M/s Environmental Health and Safety Consultants Pvt. Ltd., Bengaluru (Consultant), made the detailed presentation on the project and *inert-alia,* provided the following information to the EAC:

Mekedatu Balancing Reservoir and Drinking Water Project is located at Latitude $12^0$16'20"N Longitude $77^0$26'25"E in Muguru and Mekedatu villages, Kanakapura and Kollegal Taluks of Ramanagara and Chamarajanagar Districts. It involves construction of balancing Reservoir near Mekedatu in the downstream of confluence point of River Cauvery and Arkavathy called "Sangama". The proposed project aims at providing drinking water facilities (4.75 TMC) to the Bengaluru Metropolitan City and its surrounding areas along with construction of 400 MW (3x120 MW+1x40 MW) (650.28 MU of renewable energy annually @90% dependable year) of hydropower project by utilizing the natural bed slope. As per CWDT Award, the committed utilization is 270 TMC water by the Karnataka State and additional allocation as per Hon'ble Supreme Court judgement dated 16.02.2018 is 14.75 TMC. The project also ensures that the downstream commitment of allowing 177.25 TMC (including 10 TMC towards e-flow) to Tamil Nadu state is met. The proposed project falls within Cauvery Wildlife Sanctuary. The interstate boundary of Tamil Nadu is located at a distance of 3.90 km. The total catchment of Cauvery at Mekedatu Dam site is 34,273 km^2. A total of 4996 ha area at FRL 440 m will be submerged due to this project, of which 2925.5 ha is Cauvery Wildlife Sanctuary and 1869.50 ha is Reserved Forest. Application for diversion of Forest and wildlife land is yet to be submitted. Five villages viz., Sangama, Kongedoddi, Mdavala, Bommasandra and Muthathi are coming under submergence area. The total cost of the project is Rs. 9,000 Crores.

Project components:

1. Construction of Concrete Gravity dam (Balancing Reservoir) at Mekedatu referred to as Mekedatu site with FRL at RL 440.00 m having a Gross Storage Capacity of 67.16 TMC (1901.97 MCM) of water, bridge, underground Powerhouse and Tailrace Tunnel.
2. The Concrete Dam (of height 99 m at El. 350.00 m) will have a central spillway with radial gates to effectively discharge the design flood with suitable energy dissipating arrangement (Flip bucket) on the downstream side.
3. Intake structure with water conducting system consisting of required number of penstocks, pressure shafts, etc. which will be embedded partly in the body of the dam and the rock mass to feed the water continuously to the generating units.
4. Construction of Jack well cum pump house on the foreshore of the reservoir to lift the required quantum of water along with raising main and Delivery chamber at the identified location to plan for further transportation and distribution.

Land requirement:

Sl. No.	Type of land	Area (ha)	Remarks
1	Cauvery Wildlife Sanctuary	2925.5	Area under submergence
2	Forest land	1869.5	
3	Revenue land	201.0	
	Total (A)	**4996.0**	

4	For seating of Dam, Construction of intake tunnel, Underground power house and TRT	150.0	-
5	For construction of approach road to Sangama	80.4	-
6	Colony	26.0	-
	Total (B)	**256.4**	-
	Total land to be acquired	**5252.4**	-

Expected Project benefits:

Socio-economic benefits:

1. Provides drinking water facilities to Bengaluru Metropolitan City and its surrounding areas.
2. 400 MW of hydropower is generated thereby meeting the local energy demand.
3. Creation of reservoirs offers a variety of recreational opportunities, notably fishing and boating thereby increasing tourism potential.
4. Local Area Development.
5. Project related infrastructures such as roads, health facilities, education facilities, etc. will help the local people as well as project affected people. There will be net improvement in community health.
6. Improvement in living standard of local people.
7. Generation of employment opportunities locally.

Ecological benefits:

1. Increased water surface creates habitat for aquatic life in or near the reservoir.
2. Receiving waters create dry mudflats, which provide feeding sites for migratory birds and breeding habitat for resident species.
3. Improved groundwater table enhancing greenery all around.
4. Availability of drinking water to wildlife during summer seasons.
5. Creation of new habitats.
6. Modification of microclimate due to storage and regulation of water.
7. Enhances proliferation of fishes.

The EAC deliberated on the proposed project in detail based on the information provided by the PP and representation received from the Tamil Nadu State. The EAC didn't **recommend for grant of fresh ToR/Scoping clearance** to the present proposal and sought the following additional information/clarification:

1. While doing the study on the Analysis of Alternatives, there is no consideration of alternate sites and rather two options at one location of different dam height have been considered. It requires to be revisited and the best alternative be decided after a detailed study.
2. The forestland and wildlife area will be diverted as per the provisions of Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972, respectively. However, a total of 4,996 ha (WLS and RF) area will be involved and this seems to be very high. Once again, optimization of the land required to be attempted.
3. The private land to be acquired as per the Right to Fair Compensation and Transparency in Land Acquisition Act, 2013.
4. As there are couple of representations received from the Tamil Nadu State Government requesting not to grant ToR to the present proposal. The EAC opined that

an amicable solution be arrived at between the two states and put up for reconsideration for grant of ToR.

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Item No. 25.3 Jakhol Sankri Hydro Electric Project (44 MW), in district Uttarkashi, Uttarakhand by M/s SJVN LIMITED- Regarding Fresh Environmental Clearance.

Proposal No. IA/UK/RIV/41642/2016, File No. J-12011/07/2016-IA-1 (R)

Project proponent along with the consultant M/s WAPCOS, Consultant presented the proposal before the EAC and *inter alia,* provided the following**:**

The Jakhol Sankri Hydro Electric Project (44 MW) is proposed on river Supin (a tributary of River Tons), near village Jakhol in District Uttarkashi of Uttarakhand. The project envisages construction of a 7.2 m high (from average river bed level) barrage which will divert through a 6.6 km long 3.0 m dia. HRT to an underground power house with two units of 22 MW each shall be installed for generation of 166.19MU per annum. This is a run-of-the-river scheme. The catchment area of the project is 268.20 sq.km.

At present JSHEP is the only hydropower project proposed under development on river Supin. Since, there is no project proposed upstream of this project, there is no impact on the flow volume or the flow pattern as far as JSHEP is concerned. Downstream of the proposed JSHEP is Naitwar Mori HEP (60 MW) on river Tons which is presently under construction. Hydrological analysis has been conducted on the basis of water years. The JSHEP catchment is a part of the bigger catchment of Tons at Tuini located downstream. The proportion of snow bound area is higher in case of the upper catchment (JSHEP). Some of the flow figures characterizing the flow pattern of the river at the project site are given in the table below:

Characteristic Flow	Value in Mm^3
Average annual flow	359.72
Maximum annual flow	667.96 - Year 1990-91
Minimum annual flow	214.07 - Year 2000-01
Av. monsoon flow (July-Oct.)	205.98
Av. Non-monsoon flow (Remaining months)	153.74
Maximum 10-daily discharge	65.24 m^3/s
Minimum 10-daily discharge	1.56 m^3/s

Total land requirement is 39.088 ha, out of which 24.317 ha is forest land including Civil Soyam land and 14.771 ha is private land. Total submergence area is about 3 ha. An underground powerhouse is proposed with 2 units of 22 MW capacities each. About 216 families (average size 6 persons per family) in 4 villages are likely to be affected by this project. The total cost of project is about Rs. 477.15 crores. Forest Clearance, Stage I is under process.

Presently file is with RO, MoEF & CC, Dehradun. There are no families losing homesteads & 216 families losing land only. There are 6 project affected villages in Tehsil Mori of District Uttarkashi namely Dhara, Jakhol, Sunkundi, Pawn Malla, Pawn Talla and Sawani. Whereas the private land is to be acquired in four villages, in village Jakhol & Sawani entire land to be acquired is Government Land. The R&R plan has been devised in line with