Water Availability for 1320MW Thermal Power Plant, Mirzapur

Introduction-

Welspun Energy UP Pvt. Ltd (WEUPPL) is putting up 1320MW Thermal Power Plant in Dadri Khurd, Mirzapur District, UP. The plant is located in the vicinity of the Upper Khajuri Dam and is at 6.86Kms distance. The River Ganga is located at a distance of 24.0kms from the plant.

Preliminary Water Availability Study-

- In order to fulfil the water requirement of Power Plant, Preliminary Water Availability Study was carried out by M/s WAPCOS.
- The objective of the study was to identify the reliable water source for the said project of 36MCM requirement.
- After due diligence and meetings with the Irrigation dept. UP at Mirzapur and Varanasi and concern field officials, the relevant data were collected regarding the probable water sources & existing dams.
- The site visit was done by M/s Wapcos and the findings of the study are listed below-

1. River Sone and River Ganga was studied for the source of water.
2. Bansagar Dam is near completion on river Sone and the water will be made available to some reservoirs & irrigation purpose of Mirzapur district. There is no possibility of water allocation for the Thermal Power Plant.
3. River Ganga identified as the source of water for Thermal Power Plant.
4. Major earthen dams in the Mirzapur district were considered for the study like Sirsi Dam, Meja Dam, Dekhwa Dam, Upper Khajuri Dam & Jergo Dam.
5. Upper Khajuri Dam was then identified as the storage for water.
6. The proposal was submitted to UP Irrigation and CWC and the in-principle clearance was conveyed by the committee.

- Approval for withdraw of water from river Ganga and storing in the Upper Khajuri Dam was conveyed by UP Irrigation dept. wide letter dated 09.09.2011 (Annexure-A) and Govt. Of India CWC wide letter dated 12.10.2011 (Annexure-B).

Draft Water Use Agreement between UP Irrigation & Welspun Energy (Annexure-C) -

- Water use agreement was in-principle signed between Irrigation dept. Govt. Of UP and Welspun Energy which states that *' WEUPPL has proposed to use of Upper Khajuri Dam for storing water for meeting the project's requirement and as well as to provide storage of 9.5Million Cubic Meter (MCM) per year of water for meeting the irrigation requirement of GoUP during the lean season when no pumping is allowed from the River Ganga and GoUP has accepted the proposed scheme for mutual benefit and agreed that Water abstraction*

scheme shall be developed by WEUPPL considering pumping of additional quantum of water for Irrigation Department.'

- Thus the water requirement for both, proposed WEUPPL project and irrigation for the lean period can be fulfilled by pumping of water from River Ganga and storing it in Upper Khajuri Dam and the local villagers can be benefited by the approved scheme.
- The condition is put forth by UP Irrigation dept. keeping in view the shortage of water for irrigation during lean season and the un-utilized capacity of the Upper Khajuri Dam.
- The water shall be withdrawn only during monsoon season for the period 1st June to 31st December.
- The pumping station along with the De-silting chamber shall be installed at the Ganges to minimize the siltation of Upper Khajuri Dam and improve the quality of the withdrawn water.
- Another pumping station shall be installed in the vicinity of Upper Khajuri Dam to supply the water to the Power project site.

Upper Khajuri Dam & its Utilization -

- The construction of upper Khajuri Dam was started in the year 1957 and completed in 1962.The dam is situated in village-Kotwa, Tehsil- Sadar, District- Mirzapur in the state of Uttar Pradesh with the estimated cost for this project at 1956 prices was Rs. 8.665 Lacs.
- The Dam is constructed across river Chaudari and Sibatai.The dam was built to supply water for irrigation purposes and store the excess water drained during rainy season.
- The dam is an earthen embankment and composed of the materials i.e. compacted earth and pitched with stone on the water side. The stone filling has also been provided at the toe on the downstream side.
- The dam consists of two feeder canals, right and left. Right Canal is 3.2 KM long and has one minor known as Majhwari Minor. The Left canal is 11.3 KM long and has two minor known as Haraura Minor and Bahuti Minor.
- The length of dam is 2.313 KM, the maximum height of dam is 24.084 M and the top width is 7.62 M. The dam has 11 gates for releasing of water.
- The live storage capacity of Upper Khajuri Dam is 42.28MCM.
- Power Plant and Irrigation requirement of water during lean season is 18MCM +9.5MCM= 27.5MCM.
- Considering 20% for loses due to evaporation, water requirement is 33MCM.
- It will be ensured that water of 33MCM shall be stored in the Upper Khajuri Dam by 31st December of every year to cater the requirement for the lean season.
- Thus, the water requirement for both power plant and irrigation during lean period can be fulfilled by utilizing the Upper Khajuri Dam.

ANNEXURE-A

संख्या–3613/11–27–सिं0–4–174(डब्लू)/11

प्रेषक,

जय विलास,
संयुक्त सचिव,
उत्तर प्रदेश शासन।

सेवा में,

प्रमुख अभियन्ता,
सिंचाई विभाग, उ0प्र0,
लखनऊ।

सिंचाई अनुभाग–4 लखनऊः दिनांकः 9 सितम्बर, 2011

विषयः मे0 वेलस्पन द्वारा जनपद मिर्जापुर में प्रस्तावित 1320 मेगावाट की तापीय विद्युत परियोजना हेतु 36 एम0सी0एम जल उपलब्ध कराये जाने के संबंध में।

महोदय,

उपर्युक्त विषयक मुख्य अभियन्ता (जल संसाधन) कार्यालय प्रमुख अभियन्ता, सिंचाई विभाग, उ0प्र0 के पत्र संख्या–236/अनिमं–8/डू0–6/पी0–20(ता0) दिनांक 05.09.11 के संदर्भ में मुझे यह कहने का निदेश हुआ है कि मे0 वेलस्पन द्वारा जनपद मिर्जापुर में प्रस्तावित 1320 मेगावाट की तापीय विद्युत परियोजना हेतु 36 एमसीएम जल उपलब्ध कराये जाने हेतु निम्नलिखित शर्तों के अधीन सैद्धान्तिक सहमति प्रदान की जाती हैः–

(1) मे0 वेलस्पन द्वारा जनपद मिर्जापुर में प्रस्तावित 1320 मे0वा0 की तापीय परियोजना हेतु 36 एम0सी0एम0 जल देने के लिए यह आवश्यक है कि अपर खजुरी जलाशय तथा गंगा नदी स्थित पम्पिंग स्टेशन के मध्य उचित स्थान पर सेटलिंग पौण्ड का निर्माण किया जाये, जिसमें गंगा नदी का जल सीधा डालने के उपरान्त पुनः पम्पिंग के द्वारा अपर खजुरी जलाशय में डाला जाये, जिससे जलाशय के अन्दर अपेक्षाकृत कम सिल्ट की मात्रा आये। इस पर होने वाला सम्पूर्ण व्यय भार विकासकर्ता द्वारा वहन किया जायेगा।

(2) गंगा नदी से जल उठाने, अपर खजुरी बांध तक लाने एवं अपर खजुरी बांध से तापीय परियोजना तक ले जाने तथा बांध के पुनर्स्थापना हेतु प्रस्तावित समस्त कार्य संबंधित समस्त पूंजीगत व्यय, परिचालन एवं अनुरक्षण व्यय विकासकर्ता द्वारा वहन किया जाना होगा।

(3) सिंचाई विभाग के शासनादेश संख्या–2953/11–27–सिं0–4–8(जल)/82, दिनांक 15–7–2011 के अनुसार अकृषि कार्य हेतु जल की रायल्टी एवं जल मूल्य की यथा संशोधित दर से देय होगा।

(4) उक्त तापीय परियोजना हेतु गंगा नदी से जल उठाये जाने के संबंध में भारत सरकार के जल संसाधन मंत्रालय, केन्द्रीय जल आयोग एवं अन्य मंत्रालयों की अनापत्ति भी विकासकर्ता द्वारा प्राप्त की जायेगी।

भवदीय,

(जय विलास)
संयुक्त सचिव।

संख्या एवं दिनांक तदैव।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित–

1– सचिव, ऊर्जा विभाग, उत्तर प्रदेश शासन।
2– अध्यक्ष एवं प्रबन्ध निदेशक, उत्तर प्रदेश पावर कार्पोरेशन लि0, शक्ति भवन, अशोक मार्ग, लखनऊ।
3– महाप्रबन्धक, वेलस्पन एनर्जी लि0, नई दिल्ली।
4– मुख्य अभियन्ता (सोन) सिंचाई विभाग, उ0प्र0 वाराणसी।

आज्ञा से,

(जय विलास)
संयुक्त सचिव।

ANNEXURE-B

7/2/18/UP/2008/IP (N)/ 804
Government of India
Central Water Commission
Irrigation Planning (North) Dte.

204 (S), Sewa Bhavan
R.K. Puram, New Delhi-66
Dated: 12.10.2011

To

The Special Secretary
Government of Uttar Pradesh
U. P. Sachivalaya
Lucknow - 226001

Sub: Clearance for Withdrawal of 36 MCM water from River Ganga during non-restrictive period for proposed 1320 MW Thermal Power Project to M/s Welspun Energy U.P. Pvt. Ltd. at Mirzapur, Uttar Pradesh – reg.

Ref: Govt. of UP Lr. no. no. 3763/11-27-Sin-4-174(W)/11 dated 16.09.2011.

Sir,

Please refer to Government of Uttar Pradesh letter under reference above vide which request for clearance for Water Allocation from River Ganga to M/s. Welspun Energy U.P. Pvt. Ltd. for 1320 MW Thermal Power Project at Mirzapur, Uttar Pradesh has been made. The proposal envisages storing water in Upper Khajuri Dam by pumping water from River Ganga to fulfil the requirement of proposed Thermal Power Plant.

The proposal has been examined and I am directed to convey the 'No Objection' of MoWR for allocation of 36 MCM of water for this project, to be withdrawn from River Ganga to M/s Welspun Energy U.P. Pvt. Ltd. at Mirzapur, Uttar Pradesh subject to the following conditions:

1. At present, except for Sone basin and some project - specific agreement, there is no agreement for sharing of Ganga water between co-basin States. Hence in future, if any agreement is reached for sharing of water of River Ganga, the consumptive use for this project would be counted against the share of U.P.

2. The Government of Uttar Pradesh shall ensure that there is no withdrawal of water from Ganga River during the lean season (1st January to 31st May) and there is sufficient storage available in Upper Khajuri Dam for the monsoon water to be stored for utilization during the lean season by proposed Thermal Power Project at Mirzapur.

3. Government of U.P shall ensure that during the lean season, the releases downstream of the existing dam remain unaffected.

Yours faithfully,

12/10

Director, IP (N)

Copy to:

1. Sr. Jt. Commissioner – I (Ganga), Ministry of Water Resources, Block No-11, 8th Floor, CGO Complex, Lodhi Road, New Delhi-110003 w.r.t MoWR letter no. 7/24/2010-Ganga/3821-23 dated 03.10.2011.

2. Shri M.S. Puri, Chief Engineer, TP&I Divn., Central Electricity Authority, 9th floor, Sewa Bhawan, R.K. Puram, New Delhi.

3. Welspun Energy U.P. Pvt. Ltd. 3rd Floor, PTI Building, 4, Parliament Street, New Delhi – 110001.