As on 31st July, 2011

COOPERATION WITH NEPAL

As per the studies carried out by the Department of electricity, Ministry of Water Resources, HMG Nepal in 1971, the theoretical hydro electric potential based on the average flow is estimated as above 83000 MW. The river basin-wise distribution of the above hydro potential in Nepal is given as under:-

River Basin	Power Potential (MW)		TOTAL (MW)
	Major	Small	
Kosi	18750	3600	22530
Gandak	17950	2700	20650
Karnali (Ghagra)	28840	3170	32010
Mahakali (Sarda)	3840	0320	4160
Southern rivers	3070	1040	4110
Total:	72450	10830	83280

India has been assisting Nepal in the development of its hydro power potential and four HE schemes viz. Pokhra (1 MW), Trisuli (21 MW), Western Gandak (15 MW) and Devighat (14.1 MW) have been implemented with Indian Assistance.

Presently, three major water resources projects in Nepal viz. Pancheshwar (5600 MW), Sapta Koshi (3300 MW) and Karnali (10800 MW), are under discussions at various levels as mutual interest projects.

The matter relating to the development of Water Resources of Common Rivers with Nepal (except Karnali Multipurpose Project) are being coordinated by MOWR.

Institutional Mechanism

The matter relating to the development of Water Resources of Common Rivers with Nepal are under the purview of Nepal-India Joint Committee on Water Resources (JCWR) which is headed by Secretary, MOWR, Govt. of India from the Indian side. However, during the **3rd Meeting of JCWR** held on 29.9.2008, it was decided to recommend a three-tier bilateral mechanism as detailed below :

a) Joint Ministerial level Commission on Water Resources (JMCWR) headed by the Ministers of Water Resources of India & Nepal, Joint Secretary(Hydro), MOP and Chairman, CEA being one of the Members.

b) Joint Committee on Water Resources (JCWR) headed by Secretary, MOWR, Govt. of India from the Indian side, Member(Hydro), CEA being one of the Members and

c) Joint Standing Technical Committee (JSTC) to rationalize technical committees and sub-committees under JCWR that are existing between India & Nepal related to flood management, inundation problems and flood forecasting activities besides project specific committees on hydro power, headed by Chairman(GFCC), Patna from the Indian side, Joint Secretary(Hydro), MOP and Chief Engineer(HP&I), CEA being one of the Members.

JCWR also decided to empower the Joint Committee on Koshi and Gandak Project (JCKGP) and to constitute a Joint Committee on Inundation and Flood Management(JCIFM) which will replace the earlier Bilateral Committees in this regard.

Brief of the various hydro / multi-purpose projects in Nepal and their present status are discussed below:

1. Pancheshwar Multipurpose Project (5600 MW)

Pancheshwar Multipurpose Project is proposed on river Mahakali known as Sarda which forms international boundary between India and Nepal. Development of Pancheshwar project, a mutual interest project between the two countries, is covered under integrated Mahakali Treaty signed between HMG, Nepal and India in Feb., 1996.

The project envisages a 315 metre high dam across the river Mahakali (known as Sarda in India) at about 2.5 Km. downstream of the confluence of river Sarju and Mahakali.

Field investigations for Pancheshwar Project were initially carried out by India jointly with HMG/ Nepal, and a Project with 2000 MW capacity was envisaged. Subsequently, HMG/ Nepal suggested a Project with 6480 MW installation at Main Dam Power Houses and a re-regulating structure downstream at Rupaligad with an installation of 240 MW.

In order to carry out additional investigations and studies required for finalisation of Detailed Project Report (DPR), a Joint Project Office (JPO) of HMG, Nepal and GOI was established in Kathmandu in Dec., 1999 which has since been closed w.e.f. July, 2002. Draft DPR to be finalized jointly by the Indian and Nepalese experts for consideration by both Governments.

The following two alternative schemes for development of downstream re-regulating dam for Pancheshwar Multipurpose Project have been considered by Joint Project Office:

i) Pancheshwar (5600 MW) with re-regulating dam at Rupaligad (240 MW) (Energy Benefits – 9304 MU)
ii) Pancheshwar (5600 MW) with re-regulating dam at Purnagiri (1020 MW) (Energy Benefits – 13609 MU)

The project would have two similar sized power houses each at Pancheshwar and Rupaligad to be located on the either side of the river.

Based on the power absorption studies carried out by Central Electricity Authority in Dec., 2004 for absorption of Pancheshwar power in Indian system, it has been proposed that the project may have installed capacity of 2800 MW in initial phase, which could be increased to ultimate installed capacity of 5600 MW at a later date depending on the system requirements at that time.

Cost Estimate Details :

As per the Draft DPR prepapared by Indian Side, the Project Cost at March, 2002 price level and the Levelised Tariff in alternative scenarios viz. Pancheshwar (2800/5600 MW) with Rupaligad (240 MW) has been estimated as under :

Alternative Scenario	**Total Cost (Rs. Crs.) (Mar., 2002 price level)**
Pancheshwar (5600 MW)+Rupaligad (240 MW)	17482
Pancheshwar (2800 MW)+Rupaligad (240 MW)	14342

The above cost has been updated considering an annual escalation of 5%. Accordingly the Project cost Chargeable to Power incl. Interest during Construction (IDC) (for 75 : 25 Cost Apportionment Scenario) has been worked out as under :

Alt.-1 - Pancheshwar (5600 MW) & Rupaligad (240 MW)

Total Project Hard Cost (at 3/02 Price Level) - Rs. 17482 Crs
Project Hard Cost (at 09/08 Price Level) - Rs. 24006 Crs
(considering 5% escalation per annum compounded annually)
Project Cost chargeable to Power (75%) - Rs. 18005 Crs
IDC - Rs. 5726 Crs
Total Cost chargeable to Power incl. IDC - Rs. 23731 Crs

Alt.-2 - Pancheshwar (2800 MW) & Rupaligad (240 MW)

Project Hard Cost (at 3/02 Price Level) - Rs. 14342 Crs
Project Hard Cost (at 09/08 Price Level) - Rs. 19694 Crs
(considering 5% escalation per annum compounded annually)
Project Cost chargeable to Power (75%) - Rs. 14771 Crs
IDC - Rs. 4697 Crs
Total Cost chargeable to Power incl. IDC - Rs. 19468 Crs

iii) **Funding Pattern : CPSU (70% Loan & 30% Equity)**

iv) **Royalty :** No royalty is payable since the project being a joint project on the international boundary of the two countries.

Free Power : 12-13 % (to be shared equally by Nepal & Uttarakhand)

v) **Issues regarding supply of Free Power to Nepal or Uttarakhand**

The Hydro Policy provides for 13% free power (including 1% for local area development) to the home state where the project is located in order to compensate for the distress caused. However, CERC guidelines provides for 12% free power. Therefore, we may consider allowing free power of the order of 12-13% to be shared equally by Nepal and Uttarakhand.

vi) **Tariff (at Bus-bars)**

Levelised Tariff

Scenario	Levelised Tariff (Rs./ kWh)	
	Single Stage (5840 MW)	Two Stage (3040 MW in the first Stage)
Free power - 13% & RoE - 14%	4.51	3.70
Free power - NIL & RoE - 14%	3.92	3.22

First Year Tariff

Scenario	First Year Tariff (Rs./ kWh)	
	Single Stage (5840 MW)	Two Stage (3040 MW in first Stage)
Free power - 13% & RoE - 14%	6.08	4.99
Free power - NIL & RoE - 14%	5.29	4.34

Assumptions:

Debt : Equity	:	70 : 30
Cost Apportionment (Power : Irrigation)	:	75 : 25
Intt. on Loan	:	12.5 %
Intt. on Working Capital	:	12.75%
Intt. on IDC	:	12.75%
Return on Equity	:	14%
Construction Period	:	10 Years
Free Power	:	13%
Discount rate (considered for Levellised Tariff)	:	10.49%
Repayment of Loan	:	12 Years

vii) **Modalities for Sale of Power**

- Nepal should provide a fixed percentage of power out of its share (as there could be surplus power) since the power evacuation system would need to be designed taking into account the India's share plus traded capacity.
- Long-term Power Purchase Agreement with Nepal is proposed since considerable investment would be required in evacuating the power to India.
  - The rate of power would be determined based on cost plus approach (on the cost of project and associated power evacuation system) and shall remain unchanged for the first 5 years period.
  - Cost plus approach shall consider tariff ex station bus-bars plus wheeling charges payable to the intermediary with a reasonable return added to it.
  - There could be separate tariff for energy supplied during peak and off-peak period. Similarly, there could be distinction between primary and secondary energy viz. the energy supplied to the Indian System beyond the committed/ agreed quantum of power exchange.
- The above tariff shall be reviewed periodically (5 years or so) on the basis as below:
  - The expenditure for O&M exceeding the normative value.
  - Other additional expenditure incurred on account of unforeseen events.

Present Status:

Based on additional investigations and studies carried out by JPO, a draft DPR has been prepared by Indian side in 2002 which is yet to be agreed to by HMG, Nepal pending resolution of issues like location of re-regulating structure i.e. Purnagiri or Rupaligad, water availability downstream of Pancheshwar, installation and unit size and assessment of power benefits, apportionment of cost between power and irrigation and between India and Nepal. Efforts are being made to resolve the outstanding issues with Nepal and prepare a mutually acceptable Detailed Project Report. For resolution of the pending issues listed above, a Joint Group has been constituted in Oct. 2004 to address these issues. First meeting of the **Joint Technical Group** was held in Dec., 2004 at Kathmandu wherein the pending issues were discussed and following action points were identified.

Water Availability: To reconcile figures in the next meeting.

Evaluation of Re-regulating Sites: To present both the

alternatives in the next meeting of JTE.

Project benefits: To discuss in the next meeting.

Evaluation of Power Installation & Phased Development: Indian Team to carry out System Study and discuss in the next meeting.

Cost Apportionment: To discuss in detail in the next meeting.

Project Evaluation: To discuss the issue further in the next meeting.

During the **Second Inter-Ministrial Meeting** taken by Secretary (WR) on 01.10.2007, a **New Approach** has been suggested to expedite implementation of the project which includes :

i) India should agree to Single Stage Development of Pancheshwar with installed capacity as 5600 MW
ii) India should agree to locating Re-regulating structure at Rupaligad
iii) India should agree to pay extra-cost toward Irrigation as requested by Nepal
iv) Establish 'Pancheshwar Development Authority' as per the Letters exchanged with the Mahakali Treaty to go into details of funding of the project

During the **5th meeting of JCWR held from 20-22 November, 2009**, the Terms of Reference (TOR) for establishment of PDA was finalised and it was agreed that TOR of the authority shall be approved by the respective governments by the end of Jan., 2010.

During the **1st meeting of JSTC held on 8-9 Dec. 2008**, JSTC decided to direct concerned officials from both sides to refurbish the Hydrological stations at Pancheshwar and Rupaligad sites and to start joint observation at these sites and to undertake necessary investigations at proposed re-regulating dam at Rupaligad (alternative dam site). Subsequently, during the **2nd meeting of JSTC held on 30-31 Mar. 2010**, it was decided to prepare a definite work plan along with the cost estimates to undertake the identified field works within two months so that decision regarding funding could be taken.

2. Sapta Kosi High Dam Multipurpose Project (3300 MW) and Sun Kosi Storage cum Diversion Scheme

Sapta Kosi High Dam Multipurpose Project would afford irrigation and flood control benefits in Bihar and power generation of which major portion would be available to India. In addition, development of Inland Waterways through Kosi and Ganga rivers is another important component of the project.

Earlier investigations for the Sapta Kosi High Dam were carried out during forties by the erstwhile Central Water, Power and Navigation Commission. A feasibility report on the project was prepared by Central Water Commission in 1981. Based on above, project envisaged construction of 269 m high dam across the river Kosi, about 1.6 km upstream of Barakhshetra, to provide an effective storage of 9370 Mcum, a dam toe P.H. with an installation of 3000 MW (6x500 MW) and three canal power stations with total installation of 300 MW. The project would afford annual energy generation of 15730 MU. The project also envisaged a re-regulating structure near Chatra about 8 km downstream of Barakshetra. Based on the above report, cost of the project has been estimated as Rs. 3220 Crs. at 1980 price level.

As per inception report for the project which was agreed to in the 4th meeting of India-Nepal Joint Team of Experts (JTE) held in Kathmandu in Oct., 2001, Sun Kosi Storage cum Diversion Scheme forms an integral part of the project. The proposal involves construction of a diversion structure across the river Sunkosi near Kurule to divert waters by means of a 16.6 km long diversion tunnel to a power house near Chisapani, upstream of the existing Kamala Barrage.

Present Status:

A Joint Project Office has been established at Birat Nagar on 17.8.2004 for carrying out detailed investigations/ field works and preparation of DPR in a period of 30 months including 3 months for mobilisation activities.

Subsequently, due to prevailing Law & Order situation in Nepal, the progress of works has been affected. MoWR vide their order dated 18.02.2011 has conveyed the administrative approval and expenditure sanction of the President of India for carrying out field investigations, studies and preparation of Detailed Project Report (DPR) of the Sapta Kosi High Dam Multipurpose Project and Sun Kosi Storage cum Diversion Scheme jointly with Government of Nepal at a revised estimated cost of Rs. 8763.28 lakh for the project, with a time frame for completion of all works by 28th February,2013. Further, MoWR vide their order dated 18.02.2011 has conveyed the approval of the competent authority for extending the tenure of the office of JPO-SKSKI and the Sub-Divisional Offices (one each) at Chatra and katari upto 28th February, 2013. Division Offices would continue at Dharan & Janakpur upto 30th September, 2011 and thereafter, these offices would be relocated at Biratnagar.

During the **9th meeting of JTE held on 1-2 Aug. 2010**, it was informed by Nepalese side that necessary security arrangements

have been provided by them at the project area by establishing security posts and mobile security as agreed during 5th JCWR and 2nd JSTC Meetings. JPO-SKSKI has prepared a revised work plan of 30 months for completion of balance works of drilling, drifting and EIA studies. The cost for the balance investigations is to be re worked out by JPO-SKSKI.

3. Karnali Multi-Purpose Project (10800 MW)

Feasibility report of Karnali Multi-Purpose project, proposed to be located on Karnali river in Nepal known as the Ghaghra in India, was got prepared by HMG, Nepal from foreign consultants, M/s Himalayan power consultants (HPC), a joint venture of three Canadian consulting companies (Acres International Limited, SNC Inc., Shawinigan Engineering Co. Ltd.), in 1989. Based on the above, the project envisages construction of a 270 m high embankment dam to provide a live storage capacity of 16200 Mcum and an underground power house on the left bank for installation of 18 units of 600 MW each (total 10800 MW) operating under an average head of about 185 m for power generation. The project is estimated to provide a firm power benefit of 1713 MW continuous (15,007 MU annually).

Based on the above report, cost of the project has been estimated as US $4890 million at 1988 price level. The project is expected to cost about Rs. 28000 Crs. at 2006 price level with tentative first year tariff as Rs. 3.50/ kWh.

Present Status:

As per the arrangements agreed to between India and Nepal, two Committees namely Committee on Karnali (CK) and Karnali Coordinating Committee (KCC) have been constituted to look into the various aspects of the feasibility study. The Committee on Karnali (CK), on which Indian side is led by Secretary (Power), is to look into the various policy related matters. The Karnali Coordinating Committee (KCC), consisting of technical officers from both Nepal and India and on which Indian side is led by Member (HE), Central Electricity authority was set up by Ministry of Power vide letter No. 4/1/83-NCP&UT dated 7th April, 1983 inter-alia, to oversee the technical work of the consultant and advise the CK on the various technical matters.

Discussions have been held in the past between GOI & HMG, Nepal on various parameters of the project, however, key parameters including Probable Maximum Flood (PMF), Height of the Dam, Sedimentation rate, need for re-regulating structure, Inflows of Mohana river, Re-generation as percentage of irrigation

supplies, Size of generating units, Irrigation and flood benefits and Evaluation of Power/ Energy benefits are yet to be mutually agreed. The last meeting of KCC (9th) was held at Kathmandu from March 12-14, 1992 to review the action plan, finalization of project parameters and benefit assessment. Further meetings of KCC could not be held.

HMG, Nepal, in the past, have also explored the possibility to develop the project through M/s. Enron Renewable Energy Corporation (EREC) who have since withdrawn from the project, as per report published in the Indian Express edition of 15th April' 98.

During **2nd Meeting of Joint Committee on Water Resources** between India and Nepal, held in Oct., 2004, it was decided to initiate consultations between India and Nepal regarding development of Karnali Multipurpose Project. Accordingly, CEA took up the matter with MOP/ MEA for initiation of discussions on the project in Nov. 2004. However, Indian Embassy in Nepal, vide letters dated 22.3.2005 and 25.7.2005, recommended against holding a meeting with Nepal at that stage in view of political developments in Nepal at that time.

Subsequently, during the **Third Inter-Ministerial Meeting** taken by Secretary (WR) on 29.8.2008, JS (North) opined that we should concentrate at Pancheshwar and Saptakosi projects first.

4. Upper Karnali H.E. Project (300 MW)

Upper Karnali HE Project is a run-of-the river project proposed to be located in Surkhet, Dailekh and Achham districts in Western part of Nepal. The project envisages construction of a diversion weir across the river Karnali to provide a live storage of about 4.8 Mcum. The diverted water from the weir would be led to a surge shaft by means of 2.2 km. long 11.3 m dia. HRT and further to an underground Power House by means of 9.5 m dia. inclined shaft. The Power House would have an installation of 5 units of 60 MW each operating under a net head of 141 m. The project would afford annual energy benefits of 1915 MU on an average basis.

Feasibility Study Report for Upper Karnali Hydro-Electric Project was earlier prepared by Canadian International Water and Energy Consultants (CIWEC). The Report was received in CEA from MEA in March, 2002 and observations of CEA were sent to MOP in April, 2002. The Upper Karnali Project was prima facie, considered to be an attractive project. As per the above report, the project had been estimated to cost US$ 454.3 million at Jan.,1998 price level, in case the project is proposed to serve domestic market only and US$ 468.6 million in case of both domestic and export sales are envisaged. The cost of project excluding cost of transmission works

would be about US $ 362 million. Based on the above, levelised unit cost of generation from the project and the sale rate for export of power from the project in the first year of operation have been estimated as 2.63 US cents and around 5 US cents respectively. Subsequently, NHPC had estimated the cost of project as Rs. 2500 Crs. (at Nov., 2003 Price Level) considering installed capacity as 480 MW with annual energy generation of 2353 MU, to be firmed up after conducting Survey & Investigation and preparation of Detailed Project Report.

Present Status:

Govt. of Nepal invited Expression of Interest (EOI) in Dec. 2006 for the execution of the Upper Karnali project. As per the available information from websites, **Government of Nepal has awarded Upper Karnali hydropower project to a consortium consisting of GMR Group companies and Italian-Thai Development Project Co of Thailand** on build-own-operate-transfer basis and a Memorandum of Understanding (MoU) has been signed in this regard in Kathmandu on January 24, 2008. According to the MoU, the GMR, Energy would provide **12 percent of free power** (36 MW) to Nepal. In addition, GMR Energy would also pay **27 percent free equity** to the Nepal Government.

5. Burhi Gandaki H.E. Project (600 MW)

Burhi Gandaki H.E. Project is proposed to be located in mid-western Nepal near Benighat about 79 kms. from Kathmandu on Prithvi highway linking Kathmandu and Pokhra. The project envisages utilisation of the hydro-electric potential of the Burhi Gandaki river, a tributary of Gandak for power generation in a storage type development. As per the pre-feasibility study report prepared by HMG, Nepal in April'84, the project would involve construction of a 225 m high earth and rock-fill dam across the river Burhi Gandaki, about 2 km. downstream of its confluence with Trisuli river at Benighat to create a reservoir with an effective storage capacity of 2755 Mcum. The waters from the reservoir would be led to an underground power house with an installation of 4 units of 150 MW operating under a rated net head of 185 m for power generation. The project would afford annual energy generation of 2495 MU.

Based on the feasibility report prepared by HMG, Nepal, the project has been estimated to cost US$ 770 million at Dec., 1984 price level. The project is expected to cost about Rs. 4525 Crs. at 2006 level with tentative first year tariff as Rs. 3.46/ kWh.

Present Status:

Burhi Gandaki H.E. Project which was initially envisaged as a mutual benefit project was later on withdrawn in the Secretary level meeting held in Nov'96. Subsequently, Govt. of Nepal invited Expression of Interest (EOI) in Dec. 2006 for the execution of Burhi Gandak (600 MW). However, no bids have been received probably due to likely large scale rehabilitation problems involved even though Govt. of Nepal again invited Request for Proposals in Jan., 2008 as well. Further information in this regard is not available.

During the **Third Inter-Ministrial Meeting** taken by Secretary (WR) on 29.8.2008, JS (North) intimated that private sector companies in India are not interested in the hydel projects in Nepal involving major R&R implications.

6. Naumure Storage cum Hydro Electric Project (207 MW)

The project is proposed to be located in Pyuthan distt. on West Rapti river, about 2 Kms. downstream from the confluence of its two main tributaries namely Jhimruk Khola and Mari Khola. The project will store the excess flow during monsoon which would be utilized during the lean flow months. The project is linked to the Sikta Irrigation Project in Nepal.

As per Pre-feasibility studies carried out by Nepal in 2001, the project comprises of a 169 m high earth rockfill dam with live storage capacity of 350.8 MCM and an underground power house for power generation. The annual energy generation from the project would be 844.4 MU. The project is estimated to cost 324.42 million US$ at 2000 price level and the cost of energy is 5.43 US cents. There will be approximate displacement of 460 households.

A team comprising officers from MoWR, CEA, CWC & U.P. Irrigation Deptt. visited Nepal from 18.1.2007 to 22.1.2007 and held discussions with the Nepalese officers regarding geological and geotechnical investigations at the proposed dam site and other studies required to workout the cost and wherein it was agreed that detailed field investigations will have to be conducted for finalization of the project parameters and preparation of DPR in order to facilitate investment decisions on the proposed project. It was also agreed that the Nepalese side will carry out hydrological and sedimentation studies within three months and prepare the project scope and Terms of Reference for undertaking the field investigations and studies required and send the same to the Indian side for preliminary estimation of the cost of field investigations and studies which will be borne by the Government of India.

Present status :

During the **Third Inter-Ministrial Meeting** taken by Secretary (WR) on 29.8.2008, it was informed that recently Govt. of Nepal has proposed two more irrigation projects to be included in the scope of the study of Naumure Project and as such there may not be any water left for existing downstream projects in Uttar Pradesh.

During the **3rd meeting of JCWR held on 29.9.2008**, it was informed by India to implement the Naumure project under Grant Assistance. The Indian side also agreed to undertake a Pre-feasibility study to be completed within the three months, subject to availability of hydrological data and topographical details to be furnished by the Nepalese side within a month.

Pre-Feasibility Report of Naumure project, as prepared by India, has been handed over to Nepalese side during the **2nd meeting of JSTC held on 30-31 Mar. 2010.** Response of Nepalese side in this regard is awaited.

7. ARUN - 3 HE PROJECT

Arun-3 HEP is a run-of-river type development, proposed to be located in Arun River Valley (Sankhuwasabha district) in Eastern Nepa1, about 170 km. east of Kathmandu. Of the three projects deemed feasible in the Arun River Valley, Arun-3 was the first project considered for implementation. The other two projects are the Upper (335 MW) and the Lower (308 MW) Arun Hydroelectric projects that are located respectively upstream and downstream of the Arun-3 project. The feasibi1ity study for the project was carried out earlier by NEA with technical assistance from JICA in June, 1987.

As per PFR, the project envisages construction of a 68 m high concrete dam across the river Arun (a principal tributary of Kosi River). The water would be led from the reservoir by means of Water Conductor System comprising 4 Nos. underground desilting chambers, an 11.6 km. long, 10 m dia Concrete lined HRT and 23.4m dia & 97m high Orifice type surge tank to an underground Power House, to be located on the left bank of the river, with an installation of 402 MW (6x67 MW) operating under a gross head of about 304 m (Net Head - 286 m). The project would afford an annual energy generation of about 2891 MU and would also provide peaking benefits.

The power generated from the project is likely to be evacuated by means of about 432 km. long, 220 kV, Double circuit transmission line to Kathmandu via Duhabi & Dhalkebar along existing East-

West Highway (120 km from Arun Duhabi) with a 220kV/ 132 kV sub-station at Duhabi and a 220 kV switching station at Dhalkebar.

The proposal of Arun-3 also includes construction of about 117 km long road (Hile-Leguwaghat-Tumlingrar-Pukhwa-Num).

Present Status :

Govt. of Nepal invited Expression of Interest (EOI) on International Competitive Basis in Dec. 2006 for the execution of the Arun-3 Project. **Government of Nepal has awarded Arun-3 hydropower project to Sutlej Jal Vidyut Nigam Ltd. (SJVNL)** on build-own-operate-transfer basis for a period of 30 years and a Memorandum of Understanding (MoU), in this regard, have been signed between Government of Nepal and SJVNL on 2.3.2008. According to the MoU, the SJVNL would provide 21.9 % of power (88 MW) to Nepal free of any charge. Further, as per the available information from websites, the SJVNL would also be required to pay 7.5 % of its total income as royalty to the Nepal Government. In addition, 0.5 % export tax would also be payable.

SJVNL have established G&D sites and Silt Lab. in Nov., 08. Transmission line licence issued on 28.05.09. A Coordination committee has been formed at project site with the help of District Administration and Major Political Parties, to ensure public support and active participation of public. Work for conducting survey for transmission line from Diding (Power House) to Dhalkebar in Nepal and upto Muzzaffarpur in India has been awarded on 24.12.09.

Pre Feasibility Report (PFR) for the project with an installed capacity of 990 MW got prepared by SJVNL through WAPCOS was examined by CEA and considered to be “commercially viable”. SJVNL was advised to proceed with the preparation of DPR keeping in view, the observations of CEA on various aspects. The DPR for the project for 990 MW submitted by SJVN Ltd. has been taken up for examination by CEA in June, 2011.