

Hydroelectric Power Plants in India

Hydroelectric Power Plants in Bihar



Power Plants Around the World

Agnoor

Location: Bihar

Operator: Bihar State Hydroelectric Power Corp Ltd

Configuration: 2 X 50 kW S-Turbine

Operation: 2006

T/G supplier: Boving Foures

EPC: Alternate Hydro Energy Center, Nippon Power Ltd

Quick facts: The Agnoor project is built on the Patna Branch Canal near its confluence with Sone Eastern Main Canal and has a head of 3.37m. The Sone Canal System is one of the oldest canal systems in India dating to 1874.

Photograph courtesy of Bihar State Hydroelectric Power Corp Ltd

Posted 5 Mar 2006



Power Plants Around the World

Dhelabagh

Location: Bihar

Operator: Bihar State Hydroelectric Power Corp Ltd

Configuration: 2 X 500 kW Semikaplan

Operation: 2006

T/G supplier: HPP

EPC: AHEC

Quick facts: Completion of this project ran 25mos over schedule. The budget was Rs 6.70cr.

Photograph courtesy of Alternate Hydro Energy Center
Posted 27 Dec 2008



Power Plants Around the World

Eastern Gandak Canal (Valmikinagar)

Location: Bihar

Operator: Bihar State Hydroelectric Power Corp Ltd

Configuration: 3 X 5 MW bulb

Operation: 1995-1997

T/G supplier: Fuji

EPC: Central Electricity Authority, Central Water Commission, Hindustan Steel and Construction Ltd
Quick facts: The Gandak Barrage at Valmikinagar uses water from a catchment which lies partly in Nepal and partly in India. The governments of India and Nepal entered into an agreement in Dec 1959 (somewhat modified in 1964) for the purpose of the construction of the barrage and water sharing. The barrage was built in 1968/69. The hydro project includes a bypass channel for power generation plus a low-head hydro plant. The scheme was funded with a Dec 1984, ₹1,630mn loan from JICA.

Photograph courtesy of Bihar State Hydroelectric Power Corp Ltd

Posted 11 Mar 2006



Power Plants Around the World

Sone Eastern Link Canal (Barun)

Location: Bihar

Operator: Bihar State Hydroelectric Power Corp Ltd

Configuration: 2 X 1.65 MW bulb

Operation: 1996

T/G supplier: Neyrpic, Alstom-Jumont

EPC: BHEL, Mednani Construction

Photograph courtesy of Bihar State Hydroelectric Power Corp Ltd



Power Plants Around the World

Sone Western Link Canal (Dehri)

Location: Bihar

Operator: Bihar State Hydroelectric Power Corp Ltd

Configuration: 4 X 1.65 MW bulb

Operation: 1993

T/G supplier: Neyrpic, Alstom-Jumont

EPC: Central Electricity Authority, Central Water Commission, BHEL, National Projects Construction Corp Ltd

Quick facts: This small hydro utilizes 3.87m of head near the confluence of the Sone Western Link Canal with Sone Western main canal. The power channel is 798m long and the tail face channel is

Hydroelectric Power Plants in Kerala & Tamil Nadu



Power Plants Around the World

Chembukadavu I

Location: Kerala

Operator: Kerala State Electricity Board

Configuration: 3 X 900 kW Francis

Operation: 2004

T/G supplier: ??

Quick facts: Chembukadavu I&II were constructed with Chinese equipment and assistance in Kozhikode Dist to improve power supply to the north Malabar area.

Photograph courtesy of Alternate Hydro Energy Center
Posted 27 Dec 2008



Chettipeda

Location: Andhra Pradesh

Operator: Andhra Pradesh Power Generation Corp Ltd

Configuration: 2 X 500 kW Semikapan

Operation: 1989

T/G supplier: ESAC, Compton Greaves

EPC: Avant-Garde Engineers and Consultants

Quick facts: Chettipeta was commissioned on 10 Jan 1991 at a cost of Rs 0.88cr. The plant is on the Godavari Barrage reservoir.

Photograph courtesy of Alternate Hydro Energy Center
Posted 27 Dec 2008



Power Plants Around the World

Kundah II

Location: Tamil Nadu

Operator: Tamil Nadu Electricity Board

Configuration: 5 X 35 MW Pelton

Operation: 1960-1988

T/G supplier: Dominion Engineering Works, Canadian General Electric

Quick facts: The Kundah project is the largest hydroelectric plant in the state and was developed per the Canada India Colombo Plan of 1956. It was the first large-scale, cascade-type development in the country and utilizes the Bhavani River catchment area in the Nilgiris Mountains.

Photograph courtesy of Tamil Nadu Electricity Board
Posted 27 Jul 2008



Power Plants Around the World

Lower Meenmutty

Location: Kerala

Operator: Kerala State Electricity Board

Configuration: 2 X 1.5 MW, 1 X 500 kW Francis

Operation: 2006

T/G supplier: VA TECH, TD Power Systems

EPC: VA TECH, Asian Techs

Quick facts: In Jul 2003, this small hydro was contracted to Asian Techs-VA Tech Joint Venture at a cost of Rs 12.38cr. The initial schedule called for completion by Feb 2005 but in the event, the first unit was not synchronized until 12 Mar 2006. Average output is expected to be 7.6 GWh/yr.

Photograph courtesy of Alternate Hydro Energy Center
Posted 29 Dec 2008



Power Plants Around the World

Maravakandy Dam

Location: Tamil Nadu

Operator: Tamil Nadu Electricity Board

Configuration: 1 X 750 kW Semikapan

Operation: 1993

T/G supplier: Fouress, Kirloskar

Quick facts: Maravakandy Dam is near Masinagudy and the Mudumalai Wildlife Sanctuary.

Photograph courtesy of Alternate Hydro Energy Center
Posted 1 Jan 2009



Power Plants Around the World

Mettur Dam

Location: Tamil Nadu

Operator: Tamil Nadu Electricity Board

Configuration: 4 X 12.5 MW Francis

Operation: 1937-1948

T/G supplier: English Electric, Williams Works, Metropolitan Vickers

EPC: Sir M Visweswaraiyah, Government Engineering College

Quick facts: The multipurpose Mettur Dam was built where the River Kaveri enters the plains. The dam is one of the oldest large-scale dams in India having been built in 1934 to provide hydroelectricity and irrigation water to Salem, Tiruchirappali and Thanjavur districts. The 1700m dam creates Stanley Reservoir and supports a hydropower complex including the dam-based power station.

Photograph by vvenka1 (wikipedia)
Posted 12 Nov 2008



Parson's Valley

Location: Tamil Nadu

Operator: Tamil Nadu Electricity Board

Configuration: 1 X 30 MW

Operation: 2000

T/G supplier: Punjab Power Generation Machines

EPC: ITD Cementation India Ltd

Quick facts: This plant was commissioned in Mar 2000 and represents Stage VI of the Kundah scheme. The site is in the Nilgiris Mountains not far from the Ooty Hill Station.

Photograph courtesy of Tamil Nadu Electricity Board
Posted 27 Jul 2008

Hydroelectric Power Plants in India - Mizoram



Kau-Tlabung

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 2 X 1.5 MW Turgo
Operation: 2005

T/G supplier: Eastern Overseas Corp

Quick facts: This is a run-of-the-river SHP in scheme on the Kau-Lui River in Lunglei district. Components include a 70m long diversion dam, gated Intake structures, a 1.4km water conductor system, a 382m steel penstock, and a surface powerhouse. The plant cost Rs32.5cr.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010

Khawiva

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 3 X 350 kW Turgo
Operation: 1988

T/G supplier: Jyoti

Quick facts: Khawiva is 10km from Lunglei town. The project has a small reservoir and 186m long power channel.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010

Serlui-A

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 2 X 250 kW, 1 X 500 kW Turgo
Operation: 1984
T/G supplier: Jyoti

Quick facts: Serlui-A is run-of river scheme near Aizawl town. It has a diversion weir in Zawngkawt Lui stream, a 3.4km headrace water conductor into a forebay located on the top of a hillock at an elevation of 280 m. The powerhouse is foot of the of the hill. Power is evacuated via a 5km, 11kV line to Aizawl.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010



Serlui-B

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 3 X 4 MW Kaplan
Operation: 2008

T/G supplier: BHEL

EPC: Patel Engineering, Aarti Infra-Projects, Mecon

Quick facts: This is the largest hydro plant in Mizoram. The site is near Bilkhawthlir Village in Kolasib district. The DPR was approved in Feb 1999 and a turnkey contract was awarded to BHEL and Mecon in Dec 2003. Serlui-B has a 293m long, 51m high earthfill dam a 415m headrace tunnel, a 135m pressure tunnel, and a semi-underground powerhouse. The project cost Rs 191cr.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010

Teirei

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 3 X 1 MW Francis
Operation: 1999

T/G supplier: ??

Quick facts: Teirei is in W Phaileng village, Mamit district.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010

Tuipui

Location: Mizoram

Operator: Mizoram Power & Electricity Dept
Configuration: 2 X 250 kW Francis
Operation: 1991

T/G supplier: ??

Quick facts: This hydro plant is 10.5km fro Champhai.

Photograph courtesy of Mizoram Power & Electricity Dept
Posted 10 Jun 2010

Hydroelectric Power Plants in India - Punjab



Anandpur Sahib

Location: Punjab

Operator: Punjab State Electricity Board

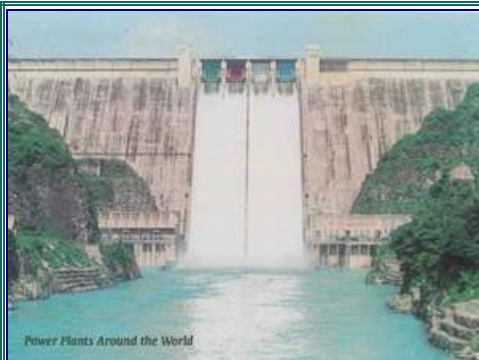
Configuration: 4 X 33.5 MW Kaplan

Operation: 1985

T/G supplier: BHEL

Quick facts: This project is 32km downstream from Bhakra Dam near the historic town of Anandpur Sahib, birthplace of Khalsa. The plant was constructed to take advantage of additional waterflows from the Beas and Sutlej rivers. A new 34km canal was built from Nangal Reservoir on the Sutlej River. Two identical powerhouses were built at Ganguwal and Nakkian, each connecting to the Punjabi 132kV grid. Peak generation to date was 1,072 GWh in 1998/99.

Photograph courtesy of Punjab State Electricity Board
Posted 6 Dec 2008



Bhakra

Location: Punjab

Operator: Bhakra Beas Management Board

Configuration: 5 X 108 MW (left), 5 X 157 (right)

Francis

Operation: 1960-1968

T/G supplier: Hitachi, GEC, LMZ, Electrosila

EPC: Hydropower Institute

Quick facts: This was the first large multipurpose hydro project in Punjab. Excavation of the diversion tunnels started in 1948 and Prime Minister Jawaharlal Nehru placed the first bucket of concrete for the dam in Nov 1955. The facility uses the Sutlej River to supply drinking and irrigation water for portions of six states. The 226m high dam has a crest length of 518m.

Photograph courtesy of Ministry of Water Resources
Posted 9 Mar 2006



Chupki

Location: Punjab

Operator: Punjab Energy Development Agency

Configuration: 2 X 750 kW Semikaplan

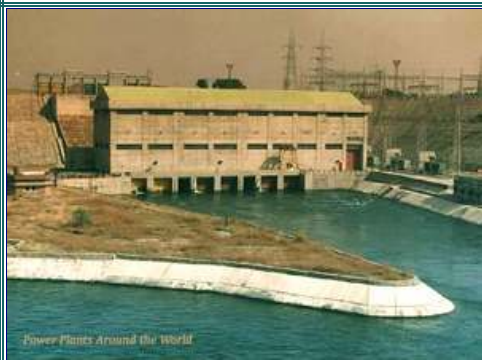
Operation: 1989

T/G supplier: Triveni, Compton Greaves

EPC: Avant-Garde Engineers and Consultants

Quick facts: This is one of four minihydel plants on the Abohar Branch Canal. Development started in 1994/95 making PEDA an early adopter of canal falls power plants in India.

Photograph courtesy of Alternate Hydro Energy Center
Posted 27 Dec 2008



Mukerian

Location: Punjab

Operator: Punjab State Electricity Board

Configuration: 6 X 15 MW, 6 X 19.5 MW Kaplan

Operation: 1983-1989

T/G supplier: BHEL

Quick facts: Mukerian is one of the main hydel stations in northern Punjab and consists of four powerhouses, each with three identical sets. These are built on a 37km canal originating at the Shah-Nehar Barrage downstream of Pong Dam on the River Beas.

Photograph courtesy of Punjab State Electricity Board
Posted 6 Dec 2008



UBDC

Location: Punjab

Operator: Punjab State Electricity Board

Configuration: 3 X 15 MW, 3 X 15.45 MW Kaplan

Operation: 1932-1982

T/G supplier: AEI, HEL, BHEL

Quick facts: The Upper Bari Doab Canal project (UBDC) is near Pathankot in Gurdaspur Dist. The multipurpose UBDC draws water from River Ravi downstream of the Ranjit Sagar Dam at Thein. Each of the two stages has three machines located at various locations along the main channel.

Photograph courtesy of Punjab State Electricity Board
Posted 7 Dec 2008

Hydroelectric Power Plants in India - Punjab



Anandpur Sahib

Location: Punjab

Operator: Punjab State Electricity Board

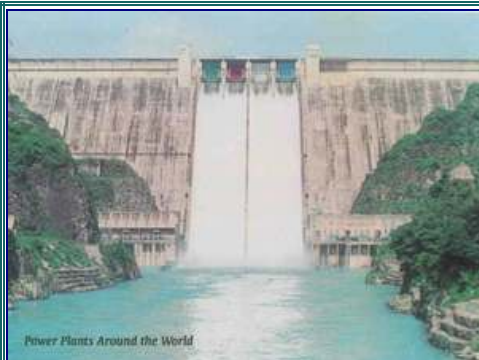
Configuration: 4 X 33.5 MW Kaplan

Operation: 1985

T/G supplier: BHEL

Quick facts: This project is 32km downstream from Bhakra Dam near the historic town of Anandpur Sahib, birthplace of Khalsa. The plant was constructed to take advantage of additional waterflows from the Beas and Sutlej rivers. A new 34km canal was built from Nangal Reservoir on the Sutlej River. Two identical powerhouses were built at Ganguwal and Nakkian, each connecting to the Punjabi 132kV grid. Peak generation to date was 1,072 GWh in 1998/99.

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Posted 6 Dec 2008



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Operation: 1960-1968

T/G supplier: Hitachi, GEC, LMZ, Electrosila

EPC: Hydropower Institute

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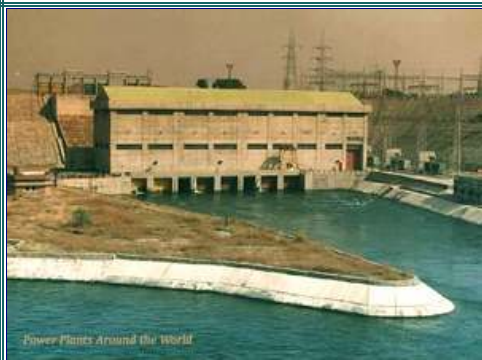
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T/G supplier: Triveni, Compton Greaves

EPC: Avant-Garde Engineers and Consultants

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Photograph courtesy of Alternate Hydro Energy Center
Posted 27 Dec 2008



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Operation: 1983-1989

T/G supplier: BHEL

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Photograph courtesy of Punjab State Electricity Board
Posted 6 Dec 2008



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Location: Punjab

Operator: Punjab State Electricity Board

Configuration: 3 X 15 MW, 3 X 15.45 MW Kaplan

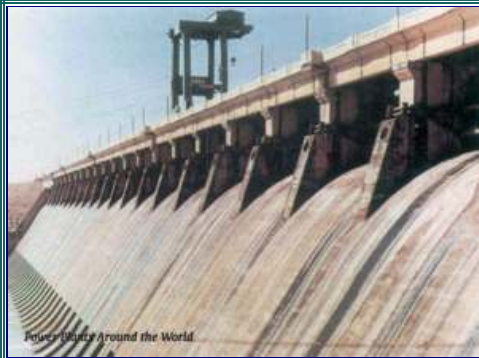
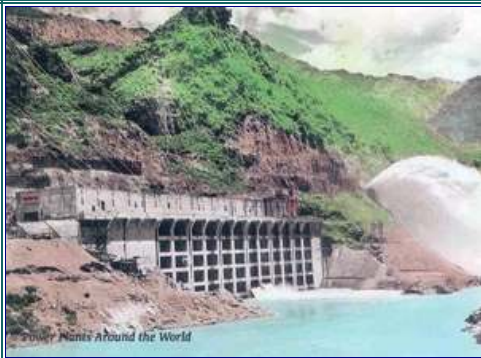
Operation: 1932-1982

T/G supplier: AEI, HEL, BHEL

Quick facts: The Upper Bari Doab Canal project (UBDC) is near Pathankot in Gurdaspur Dist. The multipurpose UBDC draws water from River Ravi downstream of the Ranjit Sagar Dam at Thein. Each of the two stages has three machines located at various locations along the main channel.

Photograph courtesy of Punjab State Electricity Board
Posted 7 Dec 2008

Hydroelectric Power Plants in India - Madhya Pradesh & Rajasthan



Dehar

Location: Rajasthan
 Operator: Bhakra Beas Management Board
 Configuration: 6 X 165 MW Francis
 Operation: 1977-1983
 T/G supplier: BHEL, GEC-Alstom
 EPC: Beas Construction Board
 Quick facts: Dehar is on the right bank of River Sutlej upstream of Slapper bridge. The water coming out of Sundernagar Sutlej Tunnel enters into a surge shaft. At the exit end, the tunnel is trifurcated into 8ft steel outlet pipes.

Photograph courtesy of Ministry of Water Resources
 Posted 11 Mar 2006

Hirakud (Burla)

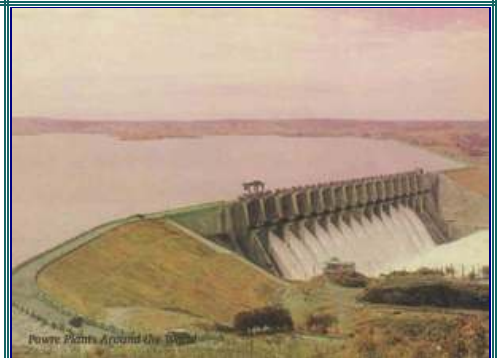
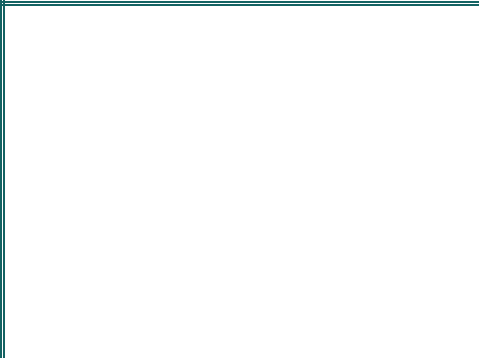
Location: Rajasthan
 Operator: Orissa Hydro Power Corp Ltd
 Configuration: 2 X 49.5 MW Kaplan, 2 X 32 MW Francis, 3 X 37.5 MW Kaplan
 Operation: 1956-1990
 T/G supplier: English Electric, Voith, Siemens, Hitachi
 Quick facts: The Hiraakud Dam is on the River Mahanadi 15km upstream of Sambalpur town and was the first post-independence major multi purpose river valley project in the country. Pandit Jawaharlal Nehru laid the foundation stone in 1948. The Burla powerhouse is on the right bank at the dam and there is a second smaller powerhouse at Chiplima 22km downstream. Units 3&4 were rebuilt and uprated to 32 MW by Voith Siemens.

Photograph courtesy of Ministry of Water Resources
 Posted 11 Mar 2006

Jawahar Sagar

Location: Rajasthan
 Operator: Rajasthan Rajya Vidyut Prasaran Nigam Ltd
 Configuration: 3 X 33 MW Francis
 Operation: 1973-1974
 T/G supplier: AC, CGE
 EPC: Beas Construction Board
 Quick facts: Part of the Chambal River hydroelectric scheme owned in equal shares by Madhya Pradesh and Rajasthan. Jawahar Sagar dam is the third dam in the series of Chambal Valley projects, located 29km upstream of Kota and 26km downstream of Rana Pratap Sagar dam. The concrete gravity dam is 45m high and 393m long

Photograph courtesy of Ministry of Water Resources
 Posted 11 Mar 2006



Maheshwar

Location: Madhya Pradesh
 Operator: Shree Maheshwar Hydro Power Corp Ltd
 Configuration: 10 X 40 MW Kaplan
 Operation: 2010
 T/G supplier: BHEL
 EPC: BHEL, SEW Construction, Prasad & Co
 Quick facts: In 1993, the government awarded the concession for the 400-MW Maheshwar project to the Indian textile company S Kumars. The site in Nimad District 2km upstream from the town of Mandleshwar had been in development since 1978. After years of delay and numerous changes in

Mahi Bajaj

Location: Rajasthan
 Operator: Rajasthan Rajya Vidyut Utpadan Nigam Ltd
 Configuration: 2 X 25 MW, 2 X 45 MW Francis
 Operation: 1986-1989
 T/G supplier: BHEL
 Quick facts: Development of the multistate Mahi Bajaj Sagar Project started with laying of the foundation stone in 1960. The project is named after national leader Shri Jamnala Bajaj. Major construction activities started in 1972 and the project was dedicated by Prime Minister Indira

ownership, the project is now controlled by Shree Maheshwar Hydro Power Corp Ltd, 68.7% owned by Entegra Ltd. Entegra in turn is controlled by MW Corp Pvt Ltd, a company that was formed as part of the reorganization of S Kumnars Group in December 2006. Work restarted in November 2005 and the plant is scheduled for start-up by year-end 2010 at a final cost of Rs 27.6bn.

Photograph courtesy of Entegra Ltd
Posted 17 Feb 2010

Gandhi in Jan 1983. Releases from Mahi Reservoir are to Power House I (2 x 25 MW), 8km from Banswara town, for sale into Rajasthan. The share of Gujarat state is routed to Power House II (2x45 MW) 40km from Banswara town on the bank of the Anas River, a major tributary of the Mahi.

Photograph courtesy of Ministry of Water Resources
Posted 9 Apr 2006

Hydroelectric Power Plants in India - Karnataka



Power Plants Around the World

Akkihebbal

Location: Karnataka

Operator: Cauvery Hydro Energy Ltd

Configuration: 2 X 2.75 MW

Operation: 2007

T/G supplier: ??

Quick facts: Akkihebbal SHP is on the River Hemavathi, a tributary to the River Cauvery. The station was commissioned in Aug 2007.

Photograph courtesy of Cauvery Hydro Energy Ltd
Posted 15 May 2010



Power Plants Around the World

Almatti Dam

Location: Karnataka

Operator: Karnataka Power Corp Ltd

Configuration: 5 X 55 MW, 1 X 15 MW Kaplan

Operation: 2005

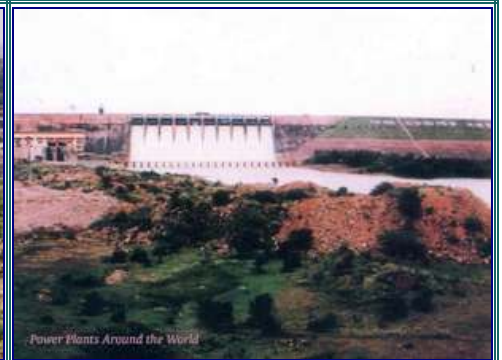
T/G supplier: Kvaerner, Siemens

EPC: Kvaerner, Siemens, Gammon

Quick facts: The Almatti Dam power house was built on the toe of an existing dam on the Krishna River in Bagalkot Dist. The power station was in development for years as part of the Upper Krishna multipurpose project. The 1,500m long dam was built by Gammon from 1991-1998, but operation of a hydro project necessitated increase water storage.

This was contested by Andhra Pradesh and not finally settled until Apr 2000 by Supreme Court order. Power station development dates to 1992 when the state government signed an MOU with Asia Power Corp Ltd. The project then went to a joint venture consortium under Chamundi Power Corp Ltd, which eventually came up with a revised project report after the Supreme Court judgment for setting up the power house at an estimated cost of Rs 1469.8cr. This proposal was rejected by the CEA and the project was turned back to KPCL and approved by CEA in Mar 2002 at an estimated cost of Rs674cr including financing. Construction and commissioning thereafter was to schedule.

Photograph courtesy of Gammon India Ltd
Posted 15 Nov 2008



Power Plants Around the World

Ghataprabha

Location: Karnataka

Operator: Karnataka Power Corp Ltd

Configuration: 2 X 16 MW Kaplan

Operation: 1992

T/G supplier: BHEL

Quick facts: This dam across the Mahi River, a major tributary of the Krishna River, was completed for irrigation purposes in 1979. The powerhouse is located on the right bank of the dam headworks.

Photograph courtesy of Ministry of Water Resources
Posted 9 Apr 2006



Power Plants Around the World

Hemavathy Left Bank

Location: Karnataka



Power Plants Around the World

Kabini Dam

Location: Karnataka

Operator: Subhash Projects and Marketing Ltd

Configuration: 2 X 10 MW Kaplan



Power Plants Around the World

Kadamane

Location: Karnataka

Operator: Paschim Hydro Energy Pvt Ltd

Operator: Hemavathy Power & Light Pvt Ltd
 Configuration: 4 X 4 MW S-Turbine
 Operation: 2001
 T/G supplier: Flovel, BHEL
 EPC: Madhucon Projects

Quick facts: The Hemavathy Left Bank Canal project consisted of an intake channel and pond, intake structure, power house, tailrace channel and pond. The original developer and owner was Sandur Manganese & Iron Ores Ltd, but the plant was sold in Mar 2004.

Photograph courtesy of Madhucon Projects Ltd
 Posted 26 Jul 2008

Configuration: 2 X 10 MW Kaplan
 Operation: 2003
 T/G supplier: BHEL
 EPC: Subhash Projects

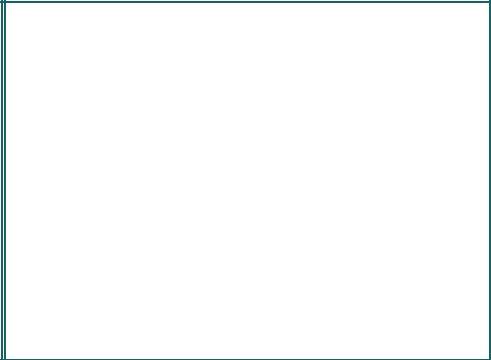
Quick facts: The River Kabini is one of the major tributaries of the River Cauvery and the backwaters area about 200km from Bangalore is a noted wildlife refuge. A 29m dam across the Kabini was built for irrigation near Bidarahalli and Beechanahalli villages in Heggadevana Kote Taluk, Mysore Dist. The power scheme was developed by extending an existing single penstock to a new surface powerhouse and building a 100m tailrace channel, and an outdoor switchyard to connect to the KSEB grid. Annual power output is 53 GWh on a 90% dependable year.

Photograph courtesy of Alternate Hydro Energy Center
 Posted 28 Dec 2008

Operator: Kadamane Hydro Energy Pvt Ltd
 Configuration: 2 X 4.5 MW Pelton
 Operation: 2007
 T/G supplier: VA TECH, Sanelec Excitation Systems
 EPC: Subhash Projects

Quick facts: The Kadamane minihydel scheme includes a small diversion weir across Kadamane stream, a head race tunnel, surge shaft, penstock tunnel and buried penstock connecting to the two generating units. The first unit became operational in Apr 2007 and the second in Jun 2007. KVK Energy has a 20% stake in the plant, which has a PPA with Karnataka Power Transmission Corp Ltd.

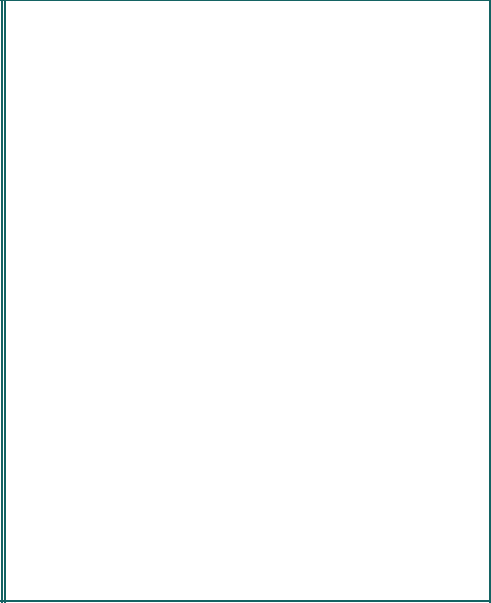
Photograph courtesy of Alternate Hydro Energy Center
 Posted 28 Dec 2008



Mahatma Gandhi Tai Race
 Location: Karnataka
 Operator: Ambuthirtha Power (P) Ltd
 Configuration: 2 X 11 MW Kaplan
 Operation: 2007
 T/G supplier: Fouress, Resita
 EPC: TCE, Asian Tech, Coastal Projects

Quick facts: Development and construction of MGHETRS was managed by Soahm Renewable Energy. The project is near Jog Falls, Shimoga, and features a 25m diversion dam and a 3.2km, 4.5m dia headrace tunnel. It was one of the first Indian projects commissioned under the Indian Electricity Act 2003 to be classified as a "Captive Power Project" by Praxair India (P) Ltd and also one of the first registered as a CDM project. Financing was by a consortium, led by Housing and Urban Development Corp Ltd (HUDCO) and including Rural Electrification Corp and Syndicate Bank. Equity partners are India Clean Energy Ltd and Praxair India Pvt Ltd.

Photograph courtesy of Soham Renewable Energy Pvt Ltd
 Posted 17 May 2010



Shiva
 Location: Karnataka
 Operator: Cauvery Hydro Energy Ltd
 Configuration: 2 X 1.5 MW Kaplan
 Operation: 1998
 T/G supplier: Jyoti

Quick facts: Shiva was built across a power channel drawn from the River Cauvery. The station went into operation in Sep 1998.

Photograph courtesy of Cauvery Hydro Energy Ltd
 Posted 15 May 2010



Hydroelectric Power Plants in India - Uttarakhand



Galogi

Location: Uttarakhand

Operator: Uttaranchal Jal Vidyut Nigam Ltd

Configuration: 2 X 1 MW, 2 X 500 kW Pelton

Operation: 1907-1914

T/G supplier: Boving

Quick facts: This plant on the Bhatta River in Dehradun District is considered India's second oldest hydroelectric plant. In 1998, SCP and Alternate Hydro Energy Centre (AHEC) University of Roorkee completed mechanical, civil and electrical repairs for the power station. Funding for the project was from CIDA. Further rehabilitation efforts are in train.

Photograph courtesy of Gestion Conseil SCP
Posted 26 Aug 2007

Dhaultiganga

Location: Uttarakhand

Operator: National Hydroelectric Power Corp Ltd

Configuration: 4 X 70 MW Kaplan

Operation: 2005

T/G supplier: Alstom

EPC: Electrowatt, Kajima, Daewoo, Samsung, Hindustan Construction

Quick facts: This project is a run-of-the-river scheme on the Dhaultiganga River, a tributary of the Kali on the Indo-Nepal border. It was authorized in Apr 1991 at a cost of Rs 602 crore and construction started in Feb 2000. Civil works include a 56m concrete face rock-fill dam, a 5.29km headrace tunnel, and an underground powerhouse, all built in very difficult terrain in the Indian Himalayas. The project is designed to generate 1,134 GWh/yr with grid connection via a 300km, double-circuit 220kV transmission line to Bareilly set up by Power Grid Corporation Ltd.

Photograph courtesy of National Hydroelectric Power Corp
Posted 19 Apr 2006

Sobla

Location: Uttarakhand

Operator: Uttaranchal Jal Vidyut Nigam Ltd

Configuration: 2 X 3 MW Francis

Operation: 1999

T/G supplier: Kvaerner

Quick facts: This plant is on the Dhaultiganga River in Pithoragarh District. It is scheduled for overhaul and modernization by 2009.

Photograph courtesy of Gestion Conseil SCP
Posted 26 Aug 2007



Tehri Dam

Location: Uttarakhand

Operator: Tehri Hydroelectric Development Corp Ltd

Configuration: 4 X 250 MW Francis

Operation: 2006-2007

T/G supplier: Kharkov, UETM

EPC: Hydropower Institute, National Projects Construction Corp Ltd

Quick facts: The two-stage, Tehri dam and hydroelectric project is on the Bhagirathi River. The 260.5m rockfill dam is the largest in Asia and one of the tallest in the world. The scheme was first

contemplated in 1949, but development took over 50yrs and was the target of extended protests by local citizen groups. Final approvals for construction were in 1990. In 1996, the protests forced the Indian Prime Minister to appoint an expert committee to review the project, but the results were inconclusive and final appeals were dismissed in the fall of 2003. The second phase consists of a pumped-storage power plant with four more 250-MW sets.

Photograph courtesy of eUttaranchal
Posted 29 Jul 2006