

Competent R&D capabilities ensured that AQUA was chosen to supply Heavy duty, abrasion resistant, Submersible slurry pumps when it was time to ensure a bullet proof drainage & dewatering system after failure of swiss make pumpsets.

Bullet Proof Handling of Ultra Critical Drainage & Dewatering Duty

at Nathpa Jhakri Hydroelectric Power Plant, Shimla, Himachal Pradesh, India.



• Satluj Jal Vidyut Nigam Limited :

(A joint Venture of Govt. of India & Govt. of H.P.)

The 1500 MW Nathpa Jhakri Hydroelectric Power Plant is located between Nathpa (*Distt. Kinnaur*) and Jhakri (*Distt. Shimla*) in the State of Himachal Pradesh.

The water of Satluj river is very silty composed of quartz, mica etc of up to 300 microns. Silt levels remain well above 5000 ppm for more than 4 months and may reach up to 50,000 ppm. Reliability of the pumps in silt laden water is of critical importance. The bottom of drainage pit (*Where pumps are installed*) has substantial silt depositions up to one feet.

• Pumps would be used for dual purpose of :

- Regular dewatering of the underground power house (Vertical Installation at bottom of drainage)
- In case of emergency flooding, to dewater the underground power house (Horizontal Installation)





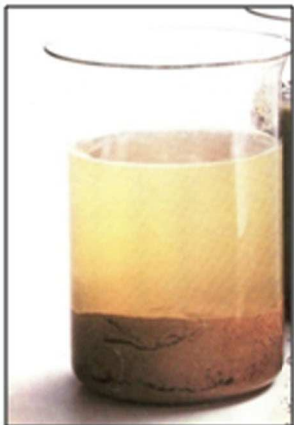
Pump Data : 10 Nos. of ASS HE 2063 MM 300 each having flow of 432 m³/hr, 80 m Head & 300 hp.

Project Data : NJHPS, SJVNL Jhakri, distt. Shimla (H.P.)

Aqua is India's pioneering manufacturer of hermetically sealed (*air filled*) submersible motor pumps & has successfully substituted (& in some case, *bettered the performances of*) many imported pumps. The "HE" (*Hydro Electric*) series of submersible & amphibious pumps are specially designed (*using proven Aqua models as basis*) to perform reliably under the arduous conditions prevalent at Indian Hydro Electric Power Stations;

- Can tolerate higher silt levels
- Can remove settled silt (*ADS HE models*)
- Are portable & compact
- Are flood proof & cavitation resistant
- Can be commissioned quickly & simply
- Require no routine maintenance
- Operate silently & smoothly
- Require no special pump house/ civil structures

They are typically used for drainage, dewatering, cooling water, fire fighting, lubricating & feed water, raw water intake, water harvesting, etc.



◀ Water Sample from Drainage Sump



Earlier Swiss V.T. pumps



Now, AQUA Submersible Slurry Pumps



SJVN Limited/एसजेवीएन लिमिटेड
6X250 मेगावाट नाथपा झाकड़ी जल विद्युत परियोजना
Office/कार्यालय
Power House Mechanical Maintenance Dept./विद्युत गृह यांत्रिक अनुरक्षण
NJHPS, Jhakri, Teh Rampur Br./एन जे एच पी एस झाकड़ी तह रामपुर बुशहर
Dist. Shimla H.P.-172201/ज़िला शिमला हिमाचल प्रदेश-172201
Ph. no. 1782-275237, Fax no. 1782-275834 / फोन 1782-275237, फ़ैक्स 1782-275834
www.sjvn.nic.in CIN L40101HP1988GO1008409

No. : SJVN/NJHPS/PHMM./2016-1224-B

Dated: 23 September 16

Performance Certificate

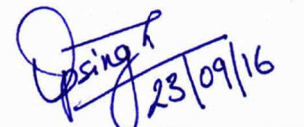
Name of Manufacture: M/s Aqua Machineries Pvt. Ltd. 3821, G.I.D.C. Phase-4,
Vatva, Ahmedabad, Gujarat.

Subject: Submerged Centrifugal Pumps, Capacity – 120 LPS at 80
MT head Motor 300 HP/1500 RPM along with Control
Panel and 35mt. Cable.

Qty: 10 Nos.

LOA No. SJVN/NJHPS/DGM/P&C/Pkg-014 (O&M)/2007/244-50
Dated: - 18/04/2007.

The above installed materials by the manufacturer in year 2008 are working satisfactory till date.


(O. P. Singh)
Sr. Manager (PH-100)

Aqua's Solution :

AQUA's unique combination of R&D & Engineering passion was recognized by BHEL, who awarded AQUA with the Prestigious "Best Quality Pump Vendor Award". A tribute to the reliable service rendered by AQUA to D&D duties of Indian Hydroelectric Power Stations.