

# **SATLUJ JAL VIDYUT NIGAM LIMITED**



**COMMENTS ON THE DRAFT TARIFF REGULATIONS FOR  
THE PERIOD 2009-2014**

# **SATLUJ JAL VIDYUT NIGAM LIMITED**

- **SJVN IS A MINIRATNA , SCHEDULE-A JOINT VENTURE COMPANY OF GOI & GOHP.**
- **PRESENTLY ENGAGED IN THE EXECUTION AND OPERATION OF HYDRO POWER PROJECTS.**

# PROJECT PROFILE



| Sr. No.  | Project Details                             |                  | Capacity (MW) |
|--|---|------------------|---------------|
| <b>A. <a href="#">Under Operation</a></b>                  |   |                  |               |
| 1  | Nathpa Jhakri Hydro Power Station           | Himachal Pradesh | 1500          |
| <b>B. <a href="#">Under Construction</a></b>               |   |                  |               |
| 1  | Rampur Hydro electric Project**             | Himachal Pradesh | 412           |
| <b>C. <a href="#">Under Survey &amp; Investigation</a></b> |   |                  |               |
| (C-1)  | <b><a href="#">Projects in India</a></b>    |                  |               |
| 1  | Luhri Hydro electric Project                | Himachal Pradesh | 776           |
| 2  | Khab Hydro electric Project                 | Himachal Pradesh | 1020          |
| 3  | Devsari Hydro electric Project (Stage- I)** | Uttarakhand      | 252           |
| 4  | Naitwar Mori Hydro electric Project**       | Uttarakhand      | 43.5          |
| 5  | Jakhol Sankri Hydro electric Project**      | Uttarakhand      | 45            |
| (C-2)  | <b><a href="#">Projects Abroad</a></b>      |                  |               |
|  | Arun - 3 Hydro electric Project #           | Nepal            | 402           |
|  | <b>Sub-total (C)</b>                        |                  | <b>2538.5</b> |

**\*\* Project allocated to SJVN for execution on BOOM Basis.**

**# Project allocated to SJVN on BOOT basis.**

# **SATLUJ JAL VIDYUT NIGAM LIMITED**

- **SINCE SJVN IS PRESENTLY IN HYDRO BUSINESS.**
- **THE COMMENTS ON DRAFT TARIFF REGULATION WOULD BE MAINLY HYDRO-SECTOR FOCUSED:**

## COMMENTS ON BASIC PARAMETERS

- **THE NATIONAL ELECTRICITY POLICY MANDATES MAXIMUM EMPHASIS ON FULL DEVELOPMENT OF HYDRO POTENTIAL OF THE COUNTRY.**
- **THE TARIFF POLICY MANDATES THAT RETURNS SHOULD BE ABLE TO ATTRACT INVESTMENTS AT PAR WITH, IF NOT SUPERIOR TO OTHER SECTOR.**

## COMMENTS ON BASIC PARAMETERS

- **HYDRO POTENTIAL STUDIES OF THE COUNTRY ARE GOT CONDUCTED BY MOP, GOI THROUGH CEA FROM TIME-TO-TIME.**
- **THE ASSESSMENTS ARE BASED ON THE LOAD FACTOR OF 16-18% FOR ROR WITH PONDAGE STATIONS AND 40-60% FOR RESERVOIR BASED STATIONS.**
- **CEA ACCORDS TEC AND FIX THE INSTALLED CAPACITIES ACCORDINGLY.**

## COMMENTS ON BASIC PARAMETERS

- THIS PRINCIPLE IMPLIES HIGHER INSTALLED CAPACITIES OF THE HYDRO STATIONS VIZ-A-VIZ THEIR FIRM CAPACITIES.
- THIS AIMS AT EXPLOITATION OF OPTIMUM POTENTIAL AND MAXIMIZING THE PEAKING CAPACITIES.

## COMMENTS ON BASIC PARAMETERS

- **THE DRAFT REGULATIONS WOULD NECESSITATE SCALING DOWN OF THE INSTALLED CAPACITIES TO ACHIEVE FINANCIAL VIABILITY.**
- **THE CAPACITY REDUCTION IS NOT POSSIBLE WITH THE HYDRO STATIONS ALREADY IN OPERATION AND STATIONS AT ADVANCE STAGE OF EXECUTION.**
- **THUS, THE FINANCIAL VIABILITY OF SUCH HYDRO STATIONS WOULD WORSEN.**



## COMMENTS ON BASIC PARAMETERS

- THE EXISTING TARIFF REGULATIONS 2001 AND 2004 ARE ALMOST ON SIMILAR LINES. WHEREAS SAME IS PROPOSED TO BE REPLACED WITH NEW REGULATIONS OF ENTIRELY DIFFERENT CONCEPTS/METHODOLOGIES.
- THE NEW REGULATIONS ASSUMES AS IF THE INFLOWS ARE GUARNATEED WHEREAS ITS AVAILABILITY IS PROBABILISTIC RATHER THAN DETERMINISTIC AND IS BASED ON HISTORICAL DATA OVER WHICH GENERATOR HAS NO CONTROL.

## COMMENTS ON BASIC PARAMETERS

- THE COMPLETE REPLACEMENT OF HYDRO TARIFF REGULATIONS WHICH WERE BEING PREVALENT FOR ALMOST 8 YEARS WOULD DEPICT UNCERTAINTY IN POWER PRICING OF HYDRO SECTOR.
- THE TOTAL RISK OF HYDROLOGY ARE BEING PASSED ONTO THE GENERATOR THOUGH IT WAS COVERED AND RECOGNIZED IN MOP, GOI'S POLICY NOTIFICATION DTD. 30.3.1992 AND WAS ACCOUNTED FOR IN THE EXTANT REGULATIONS.

## COMMENTS ON BASIC PARAMETERS

- MAJOR INVESTMENTS ARE MADE/COMMITTED BASED ON THE EXTANT REGULATIONS. SHIFTING HYDROLOGY RISK TO GENERATORS WOULD INTRODUCE REGULATORY UNCERTAINTY.

## COMMENTS ON TARIFF COMPONENTS

### (A) RETURN ON EQUITY:

- THE CONFIRMATION OF ROE @ 14% P.A. IS INADEQUATE COMPARED TO THE RISKS ASSOCIATED WITH THE SECTOR AND MARKET EXPECTATIONS.
- IT SHOULD BE INCREASED TO MINIMUM 18% P.A. ON THE FOLLOWING REASONS:-
  - I) HYDRO STATIONS HAVE LONG GESTATION PERIODS AND NIL COST BEARING FUNDS ARE LYING BLOCKED TILL THE PROJECTS COMMISSIONING.

## COMMENTS ON TARIFF COMPONENTS

- ii) THE TENTATIVE WORKING OF POST TAX ROE BASED ON CAPITAL ASSET PRICING MODEL, WHICH IS MORE SCIENTIFIC, SHOWS MINIMUM 18% P.A. RETURN.
  
- III) IF LINKED TO SBI PLR, ROE @ 14% P.A. ALLOWED WHEN SBI PLR WAS 10.25%. LINKED THE SAME TO PRESENT SBI PLR OF 13.75%, THE CORRESPONDING ROE WORKS OUT TO MORE THAN 18% P.A.

# COMMENTS ON TARIFF COMPONENTS

## A). DEPRECIATION:

- THE PROPOSED DEPRECIATION RATE OF @ 4.67% P.A. FOR FIRST 15 YEARS IS INADEQUATE TO SERVICE THE LOANS.
- HYDRO PROJECTS GENERALLY HAVE GESTATION PERIOD OF 7-8 YEARS.
- ON AN AVERAGE LOAN WILL REMAIN FOR AT LEAST 5 YEARS BEFORE COMMISSIONING OF PROJECT WITH THE GENERATOR.

# COMMENTS ON TARIFF COMPONENTS

## A). DEPRECIATION:

- **SPREADING DEPRECIATION FOR ANOTHER 15 YEARS AMOUNTS TO TOTAL LOAN PERIOD OF 20 YEARS.**
- **LOANS OF BEYOND 10-12 YEARS REPAYMENT PERIOD ARE NOT AVAILABLE.**
- **DEPRECIATION RATE AS PER COMPANIES ACT, 1956 @ 5.28% MAY BE ADOPTED.**

## COMMENTS ON TARIFF COMPONENTS

- A). INTEREST ON LOANS:**
- **LONG TERM LOANS OF 20 YEARS (GESTATION 5 YEARS+15 YEARS REPAYMENT) ARE NOT AVAILABLE.**
  - **GENERATOR HAS TO RESORT FOR REFINANCING TO MEET THE REPAYMENTS.**
  - **SUCH REFINANCING COSTS SHOULD BE BORNE BY THE BENEFICIARIES.**
  - **BENEFITS OF SWAPPING OF COSTLY LOANS SHOULD BE SHARED WITH THE GENERATORS.**



## COMMENTS ON OPERATIONAL NORMS

- AFC BROKEN INTO CAPACITY CHARGES AND ENERGY CHARGES ON 50:50 BASIS BOTH INDEPENDENT.
- ENERGY CHARGES BASED ON DESIGN ENERGY AND CAPACITY CHARGES ON NAPAF.
- NAPAF PROPOSED FOR NATHPA JHAKRI-82% I.E. 4.5% INCREASE OVER AVERAGE AVAILABILITY OF 77.5%. HOWEVER FOR MOST OF OTHER HYDRO PLANT'S NAPAF IS FIXED AFTER REDUCING 4-5% FROM AVERAGE AVAILABILITY.

## COMMENTS ON OPERATIONAL NORMS

| Sr. No. | Name of the Plant    | Type    | Capacity | Plant Availability Factor Achieved in Actual | Plant Availability Factor - Normative |
|---------|----------------------|---------|----------|--|---------------------------------------|
| 1.      | CHAMERA - I          | PONDAGE | 540      | 95.0%  | 90%                                   |
| 2.      | BIARASUL             | PONDAGE | 180      | 91.7%  | 85%                                   |
| 3.      | CHAMERA-II           | PONDAGE | 300      | 93.1%  | 90%                                   |
| 4.      | DHAULIGANGA          | PONDAGE | 280      | 88.0%  | 85%                                   |
| 5.      | DULHASTI             | PONDAGE | 390      | 95%  | 90%                                   |
| 6.      | URI                  | ROR     | 480      | 62.7%  | 60%                                   |
| 7.      | TANAKPUR             | ROR     | 94.2     | 58.2%  | 55%                                   |
| 8.      | TEHRI                | STORAGE | 1000     | NA   | 77%                                   |
| 9.      | <b>NATHPA JHAKRI</b> | STORAGE | 1500     | 77.5%  | 82%                                   |

## COMMENTS ON OPERATIONAL NORMS

- Thus, NAPAF of NJHPPS may be set at 72%.

# COMMENTS ON OPERATIONAL NORMS

**•FOURTH DAY ENERGY ADJUSTMENT SHOULD BE DISCONTINUED AS THESE NORMS:**

➤ PENALISE GENERATOR FOR GENERATING ADDITIONAL ENERGY FROM EXTRA INFLOWS.

➤ RLDC SCHEDULE AND DEMAND ENERGY AND MW BEYOND MAXIMUM PLANT CAPACITY, WHICH IS NOT ACHIEVABLE.

➤RLDC DOES NOT ACCEPT ENERGY REVISION AFTER 8.00 HRS. AND NOT BELOW +/- 15% VARIATION EVEN ON ACCOUNT OF VARIATION IN WATER INFLOWS, OVER WHICH GENERATOR HAS NO CONTROL.

➤RLDC SHOULD ACCEPT ALL REVISIONS WITHOUT TIME AND PERCENTAGE RESTRICTION INVOLVING VARIATIONS OF 0.5 MU OR ABOVE ON ACCOUNT OF INFLOWS.

## COMMENTS ON OPERATIONAL NORMS

- Thus, Energy and Peaking should be integrated and hydrology risk should be borne by the beneficiaries.
- Existing system of Energy rate of lowest variable charge of the thermal stations of the region should be retained otherwise there will be a serious despatch risk for hydro stations.
- Hydro stations should be given priority as must-run-stations and deemed generation in the event of transmission constraints may be allowed.

## COMMENTS ON MISC. ISSUES

- **ADDITIONAL CAPITALIZATION FOR ANY ADDITIONAL WORKS/SERVICES REQUIRED FOR EFFICIENT AND SUCCESSFUL OPERATION OF HYDRO PLANTS BUT NOT INCLUDED IN ORIGINAL SCOPE SHOULD BE ALLOWED.**
- **EVERY HYDRO STATION IS SITE SPECIFIC AND THEIR DESIGNS VARY FROM SITE TO SITE DEPENDING UPON CAPACITIES.**

## COMMENTS ON MISC. ISSUES

- **REPLACEMENT OF UNDERWATER COMPONENTS FOR PLANTS SUCH AS NATHPA JHAKRI WHICH ARE OPERATING UNDER HIGH SILT CONDITIONS SHOULD BE ALLOWED AS ADDITIONAL CAPITALIZATION AFTER EVERY 5 YEARS.**
- **CUT-OFF DATE SHOULD BE REMOVED FOR ADDITIONAL CAPITALIZATION AS PER ORIGINAL SCOPE.**
- **BENEFITS OF HEDGING FOREIGN LOANS SHOULD BE SHARED WITH THE GENERATORS.**

## COMMENTS ON MISC. ISSUES

- TIME ALLOWED FOR MAKING PAYMENT BY BENEFICIARY AND DAYS OF RECEIVABLE SHOULD BE SAME. AS PER FINANCIAL PRINCIPLES, BOTH SHOULD BE EITHER 45 DAYS OR 60 DAYS.
- FY. 2007-08 SHOULD BE TAKEN IN CONSIDERATION WHILE FIXING BASELINE FOR O&M OF 2009-14 PERIOD.
- TAX ON INCENTIVE AND UI INCOME SHOULD ALSO BE PASS THROUGH AS THESE ARE ACCRUED FROM GENERATION ONLY.





**THANK YOU**

