

**NAME OF COMPANY : APGENCO**

**NAME OF POWER STATION : SRISAILAM RIGHT BANK POWER STATION**

**SALIENT FEATURES OF HYDROELECTRIC PROJECT**

**I. GENERAL**

1. Location : **Sunnipenta, Srisailam Kurnool Dist. A.P.**
2. Category : **Hydro Power Project**
3. Capacity : **7 x 110 MW = 770 MW**
4. Designed capacity : **7 x 112.2 MW**
5. River : **KRISHNA**
6. Dam : **Srisailam Dam, across Krishna River in Nandi Kotkur, Kurnool District, Andhra Pradesh.**
7. No. of Units : **SEVEN**
8. Design Energy( in Mu) : **1752 MU**

**II. HYDROLOGY:**

1. Reservoir : **Srisailam**
2. Catchment Area : **2,03,597 Sq. K.M (79,530 Sq. Miles)**
3. Max. flood discharge : **30,316 Cumecs**
4. Live Storage : **247.79 TMC Ft.**
5. Gross Storage : **308.06 TMC Ft.**  
(Between FRL: 885 Ft. and MDDL: 805 Ft)
6. Dead Storage : **60.3 TMC Ft. (2122 MCM) at 805 Ft.**
7. Generation per TMC : **5.5 MU**
8. Design Head : **91.44 Mts.**
9. Max. gross head : **104.85 Mts.**
10. Design Net Head : **91.44 Mts.**
11. Net Head Max/Min : **104.85 / 72.5 Mts.**
12. Full Reservoir level (FRL): **885 Ft. (269.75 M)**
13. Min. Draw Down Level (MDDL) : **805 Ft. (245.37 M)**
14. Design Disch. through Machine : **137.5 M<sup>3</sup>**

**III. COMMISSIONING DETAILS**

- Unit – 1 : 30<sup>th</sup> August' 1982**
- Unit – 2 : 14<sup>th</sup> December' 1982**
- Unit – 3 : 19<sup>th</sup> November' 1983**

<b>Unit – 4</b>	<b>: 27<sup>th</sup> August' 1984</b>
<b>Unit – 5</b>	<b>: 31<sup>st</sup> March' 1986</b>
<b>Unit – 6</b>	<b>: 30<sup>th</sup> October' 1986</b>
<b>Unit – 7</b>	<b>: 19<sup>th</sup> March' 1987</b>

## **V. TECHNICAL:**

### **1. TURBINE**

a) Type	<b>: Francis RA 115/697 –VM - 3600</b>
b) Make	<b>: BHEL</b>
c) Net Head Max./Min	<b>: 104.85 / 91.44 Mts.</b>
d) Design Net Head	<b>: 91.44 Mts.</b>
e) Rated Output	<b>: 112.2 MW</b>
f) Output Max./ Min	<b>: 123.5 MW/72.5 MW</b>
g) Normal Speed	<b>: 187.5 RPM</b>
h) Runway speed	<b>: 375 RPM</b>
i) Disc. Through Machine	<b>: 137.5 M<sup>3</sup></b>

### **2. GENERATOR - MOTOR**

a) Type	<b>: SV 857 / 180 – 32 SUSPENSION</b>
b) Make	<b>: BHEL</b>
c) Rated Voltage	<b>: 11000 V</b>
d) Rated Out put	<b>: 122000 KVA</b>
e) Current	<b>:</b>
f) Speed	<b>: 187.5 RPM</b>
g) Power Factor	<b>: 0.90 Lagging</b>

### **3. GENERATOR TRANSFORMER**

a) Make	<b>: TELK</b>
b) Capacity	<b>: 3 X 42.5 MVA</b>
c) Voltage Ratio	<b>: 11 / 220</b>