

## **BORAS HEP (3x18.33 MW)**

### INTRODUCTION

This project having a installed capacity of 55 MW is located in Raisen District near village Chouras 10 Km. from Udaipura. The project has a estimated cost of Rs. 498.17 Crores and will generate 248.43 MU energy on completion.

### **SALIENT FEATURES (AS PER PFR)**

<b>Sl. No</b>		
<b>1</b>	<b>LOCATION</b>	
	State	Madhya Pradesh
	District	Raisen
	River	Narmada
	Location of Barrage Site	Near Village Chauras, 10 Km. from Udaipura
	Nearest Rail Head	Bhopal
	Nearest Airport	Bhopal
	Barrage / Power House Longitude, Latitude	78 <sup>0</sup> 33'E, 23 <sup>0</sup> 01'N
<b>2</b>	<b>HYDROLOGY</b>	
	Catchment Area (Sq. Km.)	30000 Sq. Km.
	Design Flood	32000 cumecs
<b>3</b>	<b>BARRAGE</b>	
	Top of Barrage	319.00
	Deepest River Bed Level	293.40 m.
	Max. Height of Barrage from deepest foundation level	24.0 m.
	Length of Barrage	422.0 m.
	Nos. of Gate & Size	23 Nos. 15.0 M. wide x 10.0 m. high.
<b>4</b>	<b>RESERVOIR</b>	
	Full Reservoir Level	316 m.
	Minimum Draw Down level	313 m.
<b>5</b>	<b>INTAKE</b>	
	Number	3 Nos.
	Invert Level	301.0 m.
<b>6</b>	<b>HEAD RACE CHANNEL</b>	
	Size	60 m. wide x 19 m. deep
	Length	147 m.
<b>7</b>	<b>PENSTOCK</b>	
	Design discharge	366 cumecs

	Number	3
	Type	Circular, Steel lined.
	Diameter & Thickness	5.0 m. & 14 mm.
<b>8</b>	<b>POWER HOUSE</b>	
	Type of Power House	Surface
	Type of Turbine	Kaplan
	Generating unit	55 MW (3 x 18.33 MW)
	Gross Head	18.0 m.
	Rated Net Head	17.5 m.
	EL of C/L of Spiral casing.	EL 292.15 m.
	EL of bottom of Draft tube	EL 280.65 m.
	Unit Discharge	122 Cumecs
	Power House Size	80 m. long x 20 m. wide
<b>9</b>	<b>TAIL RACE CHANNEL</b>	
	Size	60m x 19 m.
	Length	108 m.
<b>10</b>	<b>POWER GENERATION</b>	
	Installed Capacity	55 MW
	Energy generating in 90% dependable year	248.43 MU & 155.48 MU for initial and final phase respectively
	Firm Power	170.68 MU for initial phase.
<b>11</b>	<b>ESTIMATE COST OF PROJECT</b>	<b>498.17 Crores</b>
<b>12</b>	<b>CONSTRUCTION PERIOD</b>	<b>4 YEARS</b>

## **PRESENT STATUS**

The work of Survey & Investigation, Preparation of DPR and execution of Boras HEP has been awarded to NHDC. The work of preparation of Draft DPR of Boras HEP is in progress and his expected to be submitted shortly by NHDC.