

RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LTD.

Annual Plan 2010-11(Revised) & Annual Plan 2011-12(Proposed)

I. XI Plan Outlays

1. The Planning Department, Govt. of Rajasthan vide letter no.F.17(23)Plan/Gr IV/2006 dated 24.11.2006 had informed total revised tentative outlay for XI Five Year Plan for all power sector companies as Rs.25205 crores. This outlay was inclusive of Rs.2000 crores towards Transition support (FRP) from State Govt. Later on, while finalizing the Annual Plan 2008-09 the XI Plan outlay of Power Sector Companies was increased to Rs.25590 crores. After deducting Rs.2000 crores towards transition support, the outlay for capital works remained Rs.23590 crores. Out of total of Rs.23590 crores outlay for capital works, an outlay of Rs.4600 crores was fixed for RVPN. The year wise break-up of Rs.4600 crores is as under:

Rs.in crores

	2007-08	2008-09	2009-10	2010-11	2011-12	Total
RVPN						
Transmission	612.00	815.00	1113.00	1010.00	970.00	4520.00
Generation (Shared Generating Projects)	10.00	10.00	20.00	20.00	20.00	80.00
Total	622.00	825.00	1133.00	1030.00	990.00	4600.00

2. Against above outlay of Rs.4600 crores, looking to the requirement of budget for completion of various evacuation schemes and other works by RVPN the State Govt. has allocated the budget outlay for first four years of XI Plan as under:

S.No.	Year	Rs. in Crores Outlay
(i)	2007-08	622.00
(ii)	2008-09	825.00
(iii)	2009-10	1233.00
(iv)	2010-11 (Tentative)	2550.00*
	Total	5230.00

* The likely expenditure during 2010-11 is Rs.2000 Crores which has already been informed to the State Government.

3. Besides above the State Government had to provide Rs.2000 crores as transition cash support towards FRP in XI Five Year Plan. From 2008-09, the transition cash support is being provided directly to Discoms by State Govt.

II. Annual Plan 2010-11(Revised)

1. Plan Outlays

1.1 For execution of evacuation schemes for forth coming generation projects and system strengthening schemes and Augmentation works the tentative proposal of Annual Plan 2010-11 with requirement of outlay of Rs.2550 crores were sent to Planning Department, Govt. of Rajasthan vide letter no.875 dated 29.9.2009.

1.2. The State Govt. considered the above requirement of RVPN and the Planning Department vide letter no.F.10 (25) Plan/ Gr.V/2009 dated 18.12.2009 had intimated the tentative outlays for RVPN for 2010-11 as Rs.2550 crores (Outlay- Rs.510 crores + IEBR Rs.2040 crores). Accordingly the Plan proposals for the same were sent to Planning Department, GoR, vide letter No.1264 dated 30.12.2009.

1.3 Looking to the pace of expenditure and likely expenditures from new orders to be placed in 2010-11, it seems that RVPN will not be able to book expenditure upto Rs. 2550 crores. This is mainly because of time consumed in finalization of technical specification for 765kV works which will be executed first time in the state, repeated requests from bidders for extension in time for submission of bids, intension of Airport Authority to acquire land under possession of RVPN for 400kV GSS Ajmer for International Airport, non-availability of coal linkage for Banswara Super Critical TPS from Govt. of India, slow progress of generation projects of RVUN etc. It is expected that during 2010-11 RVPN will be able to make expenditure upto Rs. 2000 crores only against outlay of Rs. 2550 crores.

1.4 The Break ups of outlay of Rs.2550 crores, expenditure upto Nov., 2010 and likely expenditure upto March, 2011 for Capital works are given below:

(Rs.in crores)

S.No.	Head	Plan Outlay 2010-11	Expenditure upto Nov.,10	Likely Expenditure upto Mar, 11
I.	Generation (Shared Generating Projects)	20.00	7.63	20.00
II	Transmission works (Ongoing & New works)	2530.00	656.56	1980.00
	Total	2550.00	664.19	2000.00

2. Resources

The details of tentative resources proposed for financing above anticipated expenditure of Rs.2000 crores are under:

A.	Direct	-	(Rs. in crores)
(i)	Bond	-	350.00
(ii)	LIC	-	250.00
(iii)	REC	-	700.00
(iv)	PFC & Commercial Banks/ NCRPB	-	300.00
	Total (A)	-	1600.00
B.	Through State Government		
(i)	State Government Equity	-	400.00
	Total (B)	-	400.00
	Total (A+B)	-	2000.00

3. Works Position

The detailed works position for RVPN is given as under:

3.1 Generation (Shared Generating Projects)

3.1.1 Survey, Investigation and Preliminary Expenses of New Projects

A provision of Rs.1.00 crores has been kept during the year 2010-11 for making payment for S&I Works and for preliminary expenses for interstate new projects.

3.1.2. Bhakra Beas Complex & Other shared projects

A total provision of Rs.19 crores for up rating of Bhakra Left Bank, other shared projects and for other Capital Works of BBMB is kept during the year 2010-11. This provision is for the Rajasthan's Share in Modernization works. This provision may be utilized for purchase of 11kV/132kV Generator Transformers for RPS/JS Hydel Power stations also.

3.2. Transmission

3.2.1 As against, total provision of Rs.2530 crores proposed for Transmission works during the year 2010-11, the likely expenditure is Rs. 1980 crores. During 2010-11 the work on evacuation schemes of Chhabra Super Critical TPS, Kalisind TPS, Suratgarh Super Critical TPS and

Ramgarh GTPS shall start. Under composite evacuation system of Chhabra Super Critical TPS & Kalisindh TPS, 2 Nos of 765 kV GSS at Phagi (Jaipur South) & Anta (Baran) along with their associated lines and one 400 kV GSS at Ajmer with associated lines are proposed to be constructed. Under evacuation system of Suratgarh Super Critical TPS 400kV GSS at Babai (Jhunjhunu) alongwith associated lines will be constructed. 220kV GSS at Dechu alongwith associated lines is proposed to be constructed under evacuation of Ramgarh TPS (Stage-III). Above all schemes shall be commissioned matching with commissioning of Generation projects. The finalization of NITs/Placement of work orders for above schemes are under process. LOA/ orders for 2xS/C 765kV lines from Anta to Phagi and 400kV D/C lines from Chhabra TPS to 765kV Anta GSS and Kalisindh TPS to 765kV Anta GSS have been placed.

3.2.2. RVPN has also approved evacuation scheme for Banswara Super Critical TPS (2x660 MW). Looking to the delay in allocation of coal linkage for this project RVPN has decided to advance the construction of 400kV GSS at Jodhpur & Chittorgarh alongwith associated lines under normal development work.

3.2.3. As on 1.4.2010 schemes for 2 Nos of 765 kV, 12 Nos 400 kV, 31 Nos 220 kV and 81 Nos of 132 kV GSS were under execution, out of which 4 Nos. of 400kV GSS namely Alwar, Deedwana, Udaipur & Jaipur (North) and one no. 220kV GSS at Nawalgarh are proposed to be constructed through private sector. During 2010-11 till date more new schemes for construction of 6 Nos. of 220kV GSS and 9 Nos. of 132kV GSS have been approved which have been included in Annual Plan as New Start Schemes. More transmission schemes relating to forthcoming generating stations and for expansion of transmission system may be approved in balance period of 2010-11 for execution, which will be included in Annual Plans of RVPN for execution at the time of revision.

3.2.4. With the above works in sight, the following physical targets are proposed for the transmission works to be undertaken. The achievements upto Nov., 2010 are also shown.

S. No.	Works	Unit	Target 2010-11 (Proposed)	Achievement upto Nov., 10
i.	Lines & S/S			
	- 400 kV Lines	kM	750	686.394
	- 400kV S/S	MVA/ Nos.	630/2	630/2
	- 220 kV Lines	kM	600	120.329
	- 220 kV Substations	MVA/ Nos.	800/8	500/5
	- 132 kV Lines	kM	500	310.043
	- 132kV Substations	MVA/ Nos.	550/20	375/12
ii.	Augmentation	MVA	1200	1188
iii.	Capacitor Banks	MVAR	150	152.04

3.2.5. The scheme wise provisions / expenditure and working targets of transmission works are shown in Annexure-A.

4 Government Support during 2010-11

4.1 The State Govt. is giving highest priority to the Power Sector and emphasis on timely construction of forthcoming generation projects in the state. To expedite the work and for timely completion of work for various evacuation schemes and system strengthening schemes, the funds are being arranged by RVPN form Financial Institutions viz. PFC, REC, NCRPB, Commercial Bank etc. The new approved schemes shall also be posed to these institutions for loan assistance. The counter-part fund for such loan assistance is required to be met from plan fund and assistance from State Government is required to meet such demand. For all these works an equity support of Rs.400 crores shall be required from State Govt., on the basis of likely expenditure during 2010-11.

III Annual Plan 2011-12 (Proposed)

1. Plan Outlays

1.1 The Planning Department ,Govt. of Rajasthan vide letter No. F.10 (10) Plan Gr. V/ 2010 dt. 25.8.2010 had advised to frame up plan proposals for 2011-12 for the amount equivalent to the Budget Estimates for the current financial year 2010-11 i.e. for Rs.2550 Crores. Since the work on evacuation schemes related to Chhabra Super Critical TPS, Kalisind TPS, Suratgarh Super Critical TPS, Kawai Super Critical TPS & Ramgarh GTPS (Stage – III) will be in full swing during 2011-12, therefore RVPN have proposed Outlay of Rs. 2820 Crores as against current year Outlays of Rs.2550 Crores. The tentative plan proposals for Rs.2820 Crores were sent to State Govt. vide letter No.1661 dated 23.9.2010.

1.2 The Pr. Secretary, Planning, Govt. of Rajasthan vide letter No.F.10 (Plan)/Gr.V/2010 dated 27.12.2010 have intimated the tentative outlays for 2011-12 for RVPN as under:

	Rs. in crores
(i) Proposed outlay 2011-12	- 565.00
(ii) IEBR	- 2255.00

	2820.00

As per directions of the State Government proposals for Annual Plan 2011-12 for above outlay have been prepared.

1.3 The breakup of tentative Outlay of Rs. 2820 Crores for capital works is proposed as under :

		Rs. in Crores
S.No	Head	Plan Outlay 2011-12
I.	Generation (Shared Generating Projects)	
	1. S&I Preliminary Exps. (New works)	1.00
	2. Renovation & Modernization/ Uprating of shared generating stations. (Ongoing works)	
	a. Uprating of Bhakra Left Bank b. Other Capital works of BBMB c. Purchase of equipments for RPS/JS	} 19.00
	Total (I)	20.00
II	Transmission:	
	1. On going works 2. New works	} 2800.00
	Total (II)	2800.00
	Total (I + II)	2820.00

2. Resources

The details of tentative resources proposed for financing the above outlay of Rs.2820 crores are as under:

(A) Direct -	(Rs. in crores)
(i) Bonds	- 400.00
(ii) LIC	- 250.00
(iii) REC	- 1200.00
(iv) PFC/Commercial Banks/NCRPB etc.	- 405.00
Total (A)	- 2255.00
 (B) Through State Govt.	
(i) State Govt. Equity	- 565.00
Total (B)	- 565.00
Total (A+B)	- 2820.00

3. Works Position

The detailed works position for RVPN is given as follows:

3.1 Generation (Shared Generating Projects)

3.1.1 Survey, Investigation and Preliminary Expenses of New Projects

A provision of Rs.1.00 crores has been kept during the year 2011-12 for making payment for S&I Works and for preliminary expenses for interstate new projects.

3.1.2. Bhakhra Beas Complex & Other shared projects

A total provision of Rs.19 crores for up rating of Bhakhra Left Bank, other shared projects and for other Capital Works of BBMB is kept during the year 2011-12. This provision is for the Rajasthan's Share in Modernization works. During 2011-12 5.47 MW capacity is likely to be added from Rajasthan's share from uprating of 2 units of Bhakhra Left Bank. This provision may be utilized for purchase of 11kV/132kV Generator Transformers for RPS/JS Hydel Power stations also.

3.2. Transmission

3.2.1 A total provision of Rs.2800 crores is proposed for Transmission works during the year 2011-12. During 2011-12 the work on evacuation schemes of Chhabra Super Critical TPS, Kalisind TPS, Suratgarh Super Critical TPS, Kawai Super Critical TPS and Ramgarh GTPS will be in full swing. Looking to the delay in allocation of coal linkage for Banswara Super Critical TPS (to be constructed in Pvt. Sector) and requirement of strengthening the system it has been decided to advance construction of 400 kV GSS at Jodhpur and Chittogarh alongwith associated lines which have been approved under evacuation of Banswara Super Critical TPS. These works will now be constructed under normal development work. The works on these schemes shall also be carried out during 2011-12 and these GSS are likely to be commissioned during 2012-13. More transmission schemes related to forthcoming Generation stations and for expansion of transmission system are likely to be approved in balance period of 2010-11 and 2011-12. which will be included in Annual Plans at the time of revision.

3.2.2 During 2011-12 major expenditure will be on construction of evacuation schemes which includes 765 kV and 400 kV transmission systems. The commissioning of 765 kV and 400 kV works covered in evacuation schemes will start in 2012-13 matching with commissioning of generation unites.

3.2.3 Besides above looking to the load growth the expansion in transmission system and augmentation of capacity of existing EHV GSS is required. During 2011-12 RVPN has planned to commission 10 Nos. of 220kV and 20 Nos. of 132kV GSS alongwith their associated lines. An

addition of 1500MVA transformer capacity under augmentation programme is also proposed during 2011-12.

3.2.4 The following physical targets are proposed for the transmission works to be under taken during 2011-12:

S. No.	Works	Unit	Target 2011-12 (Proposed)
i.	Lines & S/S - 220 kV Lines - 220 kV Substations - 132 kV Lines - 132kV Substations	kM MVA/ Nos. kM MVA/ Nos.	600 1000/10 450 500/20
ii	Augmentation	MVA	1500
iii.	Capacitor Banks	MVAR	150

3.2.5 The scheme wise provisions & working targets of transmission works are shown in Annexure -A.

4. Government Support during 2011-12

4.1 The State Govt. is giving highest priority to the Power Sector and emphasis on timely construction of forthcoming generation projects in the state. To expedite the work and for timely completion of work for various evacuation schemes and system strengthening schemes, the funds are being arranged by RVPN form Financial Institutions viz. PFC, REC, NCRPB, Commercial Bank etc. The new approved schemes shall also be posed to these institutions for loan assistance. The counter-part fund for such loan assistance is required to be met from plan fund and assistance from State Government is required to meet such demand. For all these works an equity support of Rs.565 crores shall be required from State Govt., which has been shown in tentative resources for Annual Plan 2011-12 of State Govt.

IV. Status of Physical Progress at the end of 2009-10 and 2010-11

The details of system at the end of 2009-10, targets /likely achievement during 2010-11 and likely system at the end of 2010-11 are

as under:

S. No	Particulars	Unit	System at the end of 2009-10	Target/likely Achievement 2010-11	Likely system at the end of 2010-11
1	400 kV Lines	ckM	1945	750	2695
2	400 kV S/S	MVA/ Nos	3900 7	630 2	4530 9
3	220 kV Lines	ckM	10067	600	10667
4	220 kV S/S	MVA/ Nos	12955 66	800 8	14355 74
5	132 kV Lines	ckM	13193	500	14293
6	132 kV S/S	MVA/ Nos	15871 292	550 20	16421 310*
7	Augmentation	MVA	Inclusive in above	1200	Inclusive in above

* Due to upgradation of 132kV GSS Nokha and Chirawa to 220kV GSS.

V. Major Initiative/ Innovations.

(i) RVPN have approved scheme for creation of 765kV System first time in the State. 2 Nos. of 765kV GSS at Anta (Baran) and Phagi (Jaipur) alongwith 2x S/C, 765kV lines from Anta to Phagi are proposed to be constructed under composite evacuation of Chhabra Super Critical TPS and Kalisindh TPS. Orders for 765 kV lines have already been placed and tenders for 765kV GSS have been opened and techno commercial evaluation is under process:

(ii) RVPN have already commissioned one Hybrid 132kV GSS at SMS Stadium during 2008-09. One 220kV GSS at Indira Gandhi Nagar (Hybrid) and two 132kV GSS at New Jhotwara (GIS) and PWD- Bungalow, Jaipur (GIS) are under constructions which are likely to be commissioned in 2010-11. Besides these more Hybrid/ GIS Sub-Stations i.e. 220kV GSS at Mansarovar, Nallah Power House and Puranaghat and 132kV GSS and MNIT Jaipur, Pratapgarh (Jodhpur), Engg. College (Jodhpur), Old Power House (Jodhpur) and Kuri -Bhagtasani (Jodhpur) have been approved which are being taken up for execution.

(iii) 220kV XLPE cables and 220kV GIS sub-station are being introduced in urban areas. In 1st Phase 220kV GIS Mansarovar and NPH will be awarded for execution with associated cables.

VI. Projects being developed through private sectors in infrastructure.

(i) Case-1 Procurement of 1000 MW base load + 1000 MW season load power for Discoms in 12th five year Annual plan.

RERC have approved 1000 MW base load power round the year 1000 MW seasonal load i.e. October to March. Based on the approval of RERC, competitive bidding process was carried out in accordance with GoI guidelines for procurement of power under Case-1 & PPA has been signed between M/s Adani Power Rajasthan Ltd. & Discoms of Rajasthan for 1200 MW power. RERC vide order dt. 31.5.2010 has conveyed the approval for adoption of the tariff discovered through competitive bidding process which is Rs. 3.2383/ kWh & approved additional 200 MW power.

For procurement of 1000 MW base load power in place of 1000 MW seasonal load power an Energy Assessment Committee (EAC) has been formed by GoR and Demand forecast & availability analysis of power for the State have been approved in its meeting held on dt 23.11.2010. The report of EAC have been submitted to RERC.

(ii) Case – 2 1320 MW Banswara Thermal power project (2*660 MW)

The State Govt. has approved for setting up of 2*660 MW Supper Critical Thermal Power Project at Banswara under Private Sector. For installation of 1320 MW Super Critical Thermal power project at Banswara, application for long term coal linkage has been submitted to Ministry of Coal & Mines, Govt of India on dated 16.4.09. Water allocation of 2000 MCFT from Mahi Project has been allocated by GoR on dt. 1.5.09. The Terms of Reference for environmental appraisal has been approved by the expert appraisal committee of MOE & F on 2.6.2009. The possession of 444.50 acres Govt. land & 862.56 acres of private land has been taken by RVPN. Public hearing by pollution control board of Rajasthan took place on 11.3.10. Final report submitted to MoEF. For coal linkage MoP,GoI vide their office memorandum dt.20.8.10 has recommended the case of allotment of coal linkage during 12th Plan for this project to MoC,GoI .

RERC has ordered to issue fresh RFQ after having coal linkage in place.

(iii) Case – 2 70 MW Gurha Thermal Power Project

A lignite based generation station with 70MW capacity is proposed to be built at Gurha (West) based on competitive bidding process under Private Sector. It is 70km (approx.) South West of Bikaner (Rajasthan). Land for this Project shall be provided by RSMML. The lignite for the project shall be supplied by M/S. RSMML from Gurha West mines. Water has been

allocated by GoR from Indira Gandhi Canal . RFQ was issued on 7.7.09 & opened on 13.10.09. First pre-bid conference for FRQ was held on 21.5.2010 & 2nd pre-bid conference was held on 1.9.2010. Evaluation for RFQ and selection of qualified bidders has been finalized on 26.3.10. FRP issued on 7.4.10 and scheduled to be opened after one month from the date of issue of final FSA , which is under finalization.

(iv) Case-2 Giral Unit 3 & 4 Power Plant (2x125 MW):

Work order for consultancy assignment to M/s PFCL has been placed on 30.6.2010 and SPV in the name of Barmer Thermal Power Co. Ltd. has been registered on 5.7.2010. Water for the project has been allocated by GoR vide their letter dt. 2.9.2009. Transfer of RVUN's 44.506 hectare land amounting to Rs. 31.28 lac (tentatively) is under process and additional 56.48 hectare land for ash dyke have been allotted by GoR. RSMML has given in-principal approval to Supply the fuel (lignite) on dt. 23.9.2010. Member Secretary (SEAC) requested for transfer of ToR in the name of Barmer Thermal Power Company Ltd. vide letter dt. 3.11.2010. RFQ issued and tenders opened on 15.12.2010.

(iv) Case-2: 1000 MW Gas based Thermal Power Plant at Keshoraipaton:

Govt. of Rajasthan vide letter dated 19.7.2010 has conveyed the approval for setting up of 1000 MW gas based power project at Keshoraipaton and appointed RVPN as Nodal Agency. Co-operative Department, GoR has given in principle approval to hand over the 458 bigha land of Shri Keshoraipatan Co-operative Sugar Mill Ltd. to RVPN at cost of Rs. 56.25 crore.

M/s PFCL has been appointed as Consultant. Registration of SPV in the name of Keshoraipatan Gas Thermal Power Company Ltd. on 17.9.2009 have been done with ROC. Water allocation of 10 cusec (315 mcft) for 330 MW has been made by Water Resources Department (WRD). Secretary (Energy) vide his letter dt.3.8.2010 has requested to Principal Secretary Water Resources Department (WRD) GoR to allot 30 Cusec (945 mcft) water for 1000 MW instead of 10 cusec for 330 MW. GAIL in principle has agreed to supply the required quantity of gas for the project at market driven prices.

(vi) Jalipa Kapurdi Lignite Mining cum Power Generation Project (Rajwest)

Under private sector 8x135MW TPS is under construction by M/S. Rajwest Power Limited. As per information provided by M/S. Rajwest Power Limited, First two units have been commissioned on 26.11.2009 and on

4.10.2010. Balance Six units are likely to be commissioned from Jan.2011 to July 2011.

(vii) Transmission Projects to be developed through Private Sector Participation undertaken by RVPN as BPC

(a) The Govt. of Rajasthan constituted a State Level Empowered Committee (SLEC) with a view to encourage competition in private sector participation for development of transmission projects in State. The SLEC decided on dt.16.1.2009 that three transmission projects (two 400 kV and one 220 kV) to be implemented through competitive bidding process and authorized Rajasthan Rajya Vidyut Prasaran Nigam Limited to act as Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP).

LoI have been issued on 30.9.2010 in favour of M/s. GMR Energy Ltd. for two of the three projects i.e 1. 400 kV S/C Bikaner- Deedwana – Ajmer line with 400 kV/220 kV GSS at Deedwana and Associated schemes/work 2. 400 kV S/C Hindaun- Alwar line with 400 kV/220 kV GSS at Alwar and Associated schemes/work .

(b) The State Level Empowered Committee on 10.9.2010 have identified two more projects to be developed through tariff based competitive bidding under private sector detailed as under:

(i) 400kV D/C Babai (Jhunjhunu) - Jaipur (North) line alongwith 400kV/220kV GSS at Jaipur (North).

(ii) 400kV D/C Jodhpur (New)- Udaipur line alongwith 400kV/220kV GSS at Udaipur.

The preliminary actions for selection of developer for above project have been started by RVPN.
