

## RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LTD.

### **1. XI FIVE YEAR PLAN (Review)**

#### **1.1. XI Plan Outlay and Investment**

1.1.1. In the report of working group for XI Five Year Plan (2007-12), the Plan outlay of Rs.18146 crores (inclusive of Rs.3525 crores for RVPN) was proposed for all the 5 companies of Power sector, whereas the Planning Department, Government of Rajasthan approved the XI Plan outlay of Rs.25205 crores, which included transition cash support of Rs. 2000 crores from State Govt. in terms of FRP for distribution companies. Thus the total outlay for capital works for 5 companies of Power Sector was as Rs. 23205 crores (Rs.25205 crores minus Rs. 2000 crores Transition cash support).

1.1.2. Out of above outlay an outlay of Rs. 4600 crores was proposed for capital works of RVPN. However looking to the requirement of budget for completion of various evacuation schemes and other works, the State Govt. have allocated Rs. 6800 crores Plan outlay (Revised) to RVPN for capital works during XI Plan (2007-12). The year wise details of outlays as per working group report, approved outlays, outlays allocated by State Govt. and investment made by RVPN are as under:-

Rs.in crores

	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>Total</b>
(A) Outlay as per Working Group Report	670.00	665.00	840.00	740.00	690.00	3525.00
(B) Outlay approved by State Government	622.00	825.00	1133.00	1030.00	990.00	4600.00
(C) Outlay (Revised) allocated by State Government (Plan)	622.00	825.00	1233.00	2000.00	2000.00	6680.00
(D) Investment Plan	619.89 (Actual)	821.53 (Actual)	1233.00 (Actual)	2026.32 (Provisional)	2000.00	6700.74
Outside Plan	93.03	696.51	149.70	-	-	939.24
Total Investment (Plan + Outside Plan)	712.92	1518.04	1382.70	2026.32	2000.00	7639.98

## 1.2. Physical Targets & Achievements during Eleventh Five Year Plan.

The details of Physical targets proposed in XI Plan viz-a-viz achievement in first four years and targets / likely achievements during 2011-12 are as under:-

S. No.	Head/ schemes	Unit	XI Plan Target	Achievement during first four years (2007-11)	Target 2011-12 / likely achievements	Likely achievement XI Plan (5+6)
1	2	3	4	5	6	7
A.	Transmission :					
I	- 400kV Lines	kMs	2445	2039.80	343	2382.80
II	- 400kV S/S	MVA Nos.	2205 7	1890 5	- -	1890 5
III	- 220 kV Lines	kMs	2950	2243.65	600	2843.65
IV	- 220 kV S/S	MVA Nos.	2600 26	2150 21	1000 10	3150 31
V	- 132 kV Lines	kM	1750	1834.70	450	2284.70
VI	- 132 kV S/S	MVA Nos.	1875 75	1900 61	600 20	2500 81
VII	Augmentation	MVA	5000	7294	3800	11094
VIII	Capacitor Banks	MVAR	-	450.69	222.63	673.32
B.	Generation (Shared Projects)	MW	13.698	-	-	-

The overall performance of RVPN is quite satisfactory. Under generation head the 5 units of Bhakhra Left Bank were proposed to be up rated in XI Plan. Due to delay in execution of work this benefit is now likely to be available in 12<sup>th</sup> Plan.

## 1.3 Transmission System at the end of XI Plan

At the end of Eleventh Five Year Plan the likely level of Transmission System will be as under:

### Transmission System at the end of 2011-12 (End of XI plan)

S. No.	Head schemes	Unit	As on 31.3.2011	Target 2011-12	Likely level on 31.3.2012
i.	- 400kV Lines - 400kV S/S	kM MVA Nos.	2660 4845 9	343 - -	3003 4845 9
ii.	- 220 kV Lines - 220 kV S/S	kM MVA Nos.	10662 15405 74	600 1000 1800(Aug.) 10	11262 18205 84
iii.	- 132 kV Lines - 132 kV S/S	kM MVA Nos.	13852 18174 310	450 600 2000(Aug.) 20	14302 20774 330

## 2. ANNUAL PLAN 2011-12 (Revised)

### 2.1 Introduction

2.1.1 The Planning Department, Government of Rajasthan vide letter no.F.10(10)Plan.Gr.V/2010 dated 27.12.2010 and dated 7.1.2011 had intimated the outlays for 2011-12 for RVPN as under:

		<u>Rs.in crores</u>
(i) Outlay 2011-12	-	565.00
(ii) IEBR	-	2255.00
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Total	-	2820.00

The Plan proposals for above outlay were prepared as per directions of State Government and were submitted to Planning Department.

2.1.2 On the basis of above allocation by State Government a petition for approval of Investment Plan for Rs. 2820 crores was submitted in RERC by RVPN. However, the RERC after going through the details of schemes under execution have approved investment plan for Rs.2470 crores only against proposal for Rs.2820 crores.

2.1.3 Recently the Planning Department, Govt. of Rajasthan vide letter no.F.10(20) Plan/Gr.V/11 dated 3.1.2012 have circulated the revised outlays for Annual Plan 2011-12 and the outlay for RVPN has been revised as Rs. 2000 crores.

2.1.4 The breakup of Outlay of Rs. 2000 Crores for capital works viz.a viz expenditure upto Dec., 2011 are as under:

		Rs. in Crores	
S.No	Head	Plan Outlay 2011-12 (Revised)	Expenditure upto Dec., 11
I.	Generation (Shared Generating Projects)		
	1. S&I Preliminary Exps. (New works)	1.00	0
	2. Renovation & Modernization/ Uprating of shared generating stations. (Ongoing works)		
	a. Uprating of Bhakra Left Bank	} 19.00	7.88
	b. Other Capital works of BBMB		
	c. Purchase of equipments for RPS/JS		
	<b>Total (I)</b>	<b>20.00</b>	<b>7.88</b>
II	Transmission:		
	On going & new works	1980.00	999.88
	<b>Total (II)</b>	<b>1980.00</b>	<b>999.88</b>
	<b>Total ( I + II)</b>	<b>2000.00</b>	<b>1007.76</b>

## 2.2 Resources

The details of revised resources for financing the above outlay of Rs.2000 crores are as under:

<b>(A) <u>Direct -</u></b>	(Rs. in crores)
(i) Bonds	- 400.00
(ii) LIC	- 250.00
(iii) REC	- 700.00
(iv) PFC/Commercial Banks/NCRPB etc.	- 250.00
<b>Total (A)</b>	<b>- 1600.00</b>
<b>(B) <u>Through State Govt.</u></b>	
(i) State Govt. Equity	- 400.00
<b>Total (B)</b>	<b>- 400.00</b>
<b>Total (A+B)</b>	<b>- 2000.00</b>

## 2.3. Works Position

The detailed works position for RVPN is given as follows:

### A. Generation (Shared Generating Projects)

#### A.1 Survey, Investigation and Preliminary Expenses of New Projects

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

#### A.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.

### B. Transmission

B.1 A total revised provision of Rs.1980 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 is under progress. 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 are now proposed to be constructed under normal development work. The work on 400kV GSS at Chittorgarh has already been started and this GSS is likely to be commissioned during 2013-14.

B.2 During 2011-12 major expenditure will be on construction of evacuation schemes which includes 765 kV and 400 kV transmission systems. Work on 765kV transmission lines and major 400kV lines associated with evacuation schemes is under progress. Work orders for construction of 765kV GSS at Anta and Phagi have been placed and construction work will start soon.

B.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 was also planned but till Dec., 2011 the achievement in augmentation has already exceeded the target.

B.4 The details of physical targets proposed during 2011-12 viz-a-viz their achievement upto Dec., 2011 are as under:-

S. No.	Works	Unit	Target 2011-12 (Proposed)	Achievement upto Oct.,11
i.	Lines & S/S			
	- 400 kV Lines	Ckt.kM	-	244.82*
	- 220 kV Lines	Ckt.kM	600	322.57
	- 220 kV Substations	MVA/ Nos.	1000/10	100/1
	- 132 kV Lines	Ckt.kM	450	338.56
	- 132kV Substations	MVA/ Nos.	500/20	575/19
ii	Augmentation	MVA	1500	3668.00
iii.	Capacitor Banks	MVAR	150	211.77

\*Slipover works

B.5 The scheme wise provisions & working targets of transmission works are shown in Annexure -A.

## **2.4. Government Support during 2011-12**

2.4.1 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 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 has been agreed by State Govt.

### **3. XII FIVE YEAR PLAN (2012-13 TO 2016-17)**

3.1 The working Group on Power & energy for preparation of 12<sup>th</sup> Five Year Plan, in its report has proposed a plan outlay of Rs.12600 crores for Capital Works of RVPN for 12<sup>th</sup> Five Year Plan. The details of requirement of allocation of Rs. 12600 crores have been sent to Planning Department separately also. The Year wise break up of Rs.12600 crores is as under:

	2012-13	2013-14	2014-15	2015-16	2016-17	Total
RVPN						
Transmission	2780	2530	2430	2380	2380	12500
Generation (Shared Projects)	20	20	20	20	20	100
<b>Total</b>	<b>2800</b>	<b>2550</b>	<b>2450</b>	<b>2400</b>	<b>2400</b>	<b>12600</b>

3.2 Above outlay has been proposed mainly for execution of EHV Transmission schemes related to evacuation systems for forthcoming generation projects in the state, system strengthening schemes and Augmentation works required to meet the peak demand and requirement of Distribution Companies. Besides this the above outlay will be utilized for installation of capacitor banks, RMU schemes, IT works, SCADA and other Capital works. Outlay for Generation head is proposed for RMU and miscellaneous capital works in shared projects and new interstate shared projects.

3.3 The Planning Department, Govt of Rajasthan vide letter no. F.1(32) Plan/Gr.IV/TFYP/2011 dated 2.1.2012 have informed about the tentative outlays for 12<sup>th</sup> Five Year Plan and Annual Plan 2012-13. As proposed by RVPN and working Group an allocation of Rs. 12600 crores has been made for RVPN for capital works during 12<sup>th</sup> Five Year Plan

#### **3.4 Resources for XII Five Year Plan.**

For above outlays the assessment of resources likely to be available for funding XII Five Year Plan are as under:

		(Rs.in crores)
S.No.	Source	Amount
A	Direct	
1	Bonds	2770.00
2	LIC	1500.00
3	REC	4880.00
4	PFC/NCRPB/Comml. Banks	930.00
	<b>Total A</b>	<b>10080.00</b>
B	Through State Govt.	
1	State Govt. Equity	2520.00
	<b>Total (B)</b>	<b>2520.00</b>
	<b>Grand Total</b>	<b>12600.00</b>

### 3.5 Transmission Works

3.5.1. Looking to the Generation capacity likely to be added during XII Five Year Plan, the main emphasis of RVPN will be on construction of Evacuation System of Generating Projects. The work on evacuation system for Chhabra Super Critical TPS (Unit 5 &6), Kalisindh TPS (Unit1&2), Suratgarh Super Critical TPS (Unit7&8), Kawai Super Critical TPS, and Ramgarh GTPS is under progress. The work for New Solar and Wind Power projects shall also start soon. Commissioning of these works will be matching with the commissioning of Generating Projects. The evacuation schemes of other generation projects envisaged in 12<sup>th</sup> Plan shall also be identified and approved on finalization of commissioning dates by RVUN.

3.5.2 Besides above, the construction of 220kV & 132kV Sub-Stations and its associated lines and augmentation of capacity of existing GSS on the basis of load growth and requirement of Discoms shall also be carried out during 12<sup>th</sup> Plan. RVPN have adopted new technology i.e. use of EHV cables, Construction of GIS/ Hybrid GSS and Automation/ SCADA system in construction of Grid Sub-Stations in XI Plan, which will continue in 12<sup>th</sup> Plan. In XII Plan, installation of capacitor banks, expansion in IT activities, R&M of existing Grid Sub-Stations will also be carried out by replacing obsolete/ old equipments.

3.5.3. With the above works in sight, the following physical targets for transmission works have been proposed for XII Five Year Plan:

#### **XII Plan Physical Targets (Proposed)**

S. No.	Head/ schemes	Unit	Target XI Plan
A	Transmission : - 765kV Lines - 765kV S/S	kMs MVA Nos.	426 7500 2
B	Transmission : - 400kV Lines - 400kV S/S	kMs MVA Nos.	5800 5040 8
C	- 220 kV Lines - 220 kV S/S	kMs MVA Nos.	3650 4600 40
D	- 132 kV Lines - 132 kV S/S	kM MVA Nos.	2150 2875 100
E	Augmentation :	MVA	7500

For all above works a provision of Rs.12500 crores has been proposed during XII Plan.

### 3.6 Generation (Shared Projects)

(i) **BBMB works** - During XII Five Year Plan, the RM&U of shared project in BBMB will continue. Rajasthan has to keep provision for Rajasthan share in Modernization work. During XII Plan, uprating of five units of Bhakra Left Bank earlier scheduled in XI Plan are proposed to be uprated from 108 MW (existing) to 126 MW. Rajasthan will get its 15.22 per cent share i.e. total 13.698 MW in XII Plan.

(ii) **Chambal Development Plan Phase-II (Rahu Ghat Hydro Electric Project)** - In the 12<sup>th</sup> meeting of MP-Rajasthan inter State Control Board held on 3<sup>rd</sup> June 1999 at Jaipur, the proposal regarding construction of Rahu Ghat Hydro Electric Project down stream of Kota Barrage was discussed and it was decided to take up the survey and investigation of the following four Hydel Projects:

S.No.	Name of the Dam Site	FRLs (Meter)	Firm Power (MW*)
1	Devipura (Rahu ka Gaon) (Rajasthan)	182.5	31
2	Gujjapura (MP)	143.0	10
3	Jiatpura (MP)	131.0	10
4	Barsala (MP)	119.0	16
	<b>Total</b>		<b>67</b>

*\* Firm power subject to change after detailed survey and investigation*

Ministry of Environment & Forest (MOE&F) accorded "Site clearance" for carrying out S&I works and conducting EIA studies for preparation of comprehensive EIA report and management plans etc. for obtaining environment clearance. MPPGCL was designated deputed as nodal authority for conducting S& I works and EIA studies. Subsequently MPPGCL after consultation with RVPNL, awarded work of S&I AND EIA studies to CWC and WAPCOS respectively, with Rajasthan / RVPNL sharing 50% of the estimated expenditure on these works.

Further, it was informed that according to Wild Life Sanctuary Act permission of State Wild Life Board and National Wild Life Board is essentially required because the project area is falling under Ghadial Sanctuary before proceeding for EIA studies and S&I works. The matter has been processed by Govt. of Rajasthan to Govt. of India (MOEF) to convey permission for Survey and Investigation. The clearance is awaited.

In view of un-certainty about clearance for caring out S&I works and conducting EIA studies from MOE &F (GoI), it has been decided to close the contract awarded to CWC and M/s. WAPCOS, to avoid blocking of funds. The fresh contract may be awarded after projects are cleared by MOE&F (GoI). The RVPNL will provide its share for above project from time to time.

For above works and other miscellaneous work in BBMB a provision of Rs.100 crores is proposed during XII Plan.

#### 4. Annual Plan 2012-13

##### 4.1 Plan Outlays

4.1.1. On the basis of RVPN, request and report of Working Group the Planning Department, Govt. of Rajasthan vide letter F.1(32) Plan/Gr.IV/TFYP/2011 dated 2.1.2012 have intimated the tentative outlays for 2012-13 for RVPN as under:

	Rs. in crores
(i) Proposed outlay 2012-13	- 560.00
(ii) IEBR	- 2240.00
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<b>Total</b>	<b>- 2800.00</b>
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As per directions of the State Government proposals for Annual Plan 2012-13 for above outlay have been prepared.

4.1.2. The breakup of tentative Outlay of Rs. 2800 Crores for capital works is proposed as under :

		Rs. in Crores
S.No	Head	Plan Outlay 2012-13
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	} 19.00
	<b>Total (I)</b>	<b>20.00</b>
II	Transmission:	
	5. On going works 6. New works including SCADA	} 2780.00
	<b>Total (II)</b>	<b>2780.00</b>
	<b>Total ( I + II)</b>	<b>2800.00</b>

##### 4.2. Resources

The details of tentative resources proposed for financing the above outlay of Rs.2800 crores are as under:

(A) <u>Direct -</u>	(Rs. in crores)
(i) Bonds	- 450.00
(ii) LIC	- 250.00
(iii) REC	- 1200.00
(iv) PFC/Commercial Banks/NCRPB etc.	- 340.00
<b>Total (A)</b>	<b>- 2240.00</b>

**(B) Through State Govt.**

(i)	State Govt. Equity	-	560.00
	<b>Total (B)</b>	-	<b>560.00</b>
	<b>Total (A+B)</b>	-	<b>2800.00</b>

**4.3. Works Position**

The detailed works position for RVPN is given as follows:

**4.3.1 Generation (Shared Generating Projects)**

**(i) Survey, Investigation and Preliminary Expenses of New Projects**

A provision of Rs.1.00 crores has been kept during the year 2012-13 for making payment for S&I Works and for preliminary expenses for interstate new projects.

**(ii) 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 2012-13. This provision is for the Rajasthan's Share in Modernization works.

**4.3.2. Transmission**

(i) A total provision of Rs.2780 crores is proposed for Transmission works during the year 2012-13. During 2012-13 the work on evacuation schemes of Chhabra Super Critical TPS, Kalisind TPS, Suratgarh Super Critical TPS, Kawai Super Critical TPS & Solar and Wind Power will be in full swing. The work on evacuation scheme of Ramgargh GTPS (160 MW) is likely to be completed during 2012-13. More transmission schemes related to forthcoming Generation stations and for expansion of transmission system are likely to be approved in 2012-13. which will be included in Annual Plan at the time of revision.

(ii) During 2012-13 major expenditure will be on construction of evacuation schemes which includes 765 kV and 400 kV transmission systems covered under various evacuation schemes.

(iii) Besides above looking to the load growth the expansion in transmission system and augmentation of capacity of existing EHV GSS is required. During 2012-13 RVPN has planned to commission 8 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 2012-13.

(iv) The following physical targets are proposed for the transmission works to be under taken during 2012-13:

S. No.	Works	Unit	Target 2011-12 (Proposed)
i.	Lines & S/S		
	- 400 kV Lines	ckt.kM	20
	- 220 kV Lines	ckt.kM	700
	- 220 kV Substations	MVA/ Nos.	920/8
	- 132 kV Lines	ckt.kM	425
ii	- 132kV Substations	MVA/ Nos.	550/20
	Augmentation	MVA	1500
iii.	Capacitor Banks	MVAR	150

(v) The scheme wise provisions & working targets of transmission works during 2012-13 are shown in Annexure -A.

#### **4.4. Government Support during 2012-13**

4.4.1 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 various 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.560 crores shall be required from State Govt., which has been shown in tentative resources for Annual Plan 2012-13.

### **5. Private Sector Projects :**

#### **5.1 Generation Projects**

##### **5.1.1 Jalipa kapurdi lignite Mining cum power Generation project (Raj West)**

Under private sector 8x135 MW TPS is under construction by M/s Raj West Power Limited. As per information provided by M/s Raj West Power Limited COD of First four units is as under:

(i)	Unit - 1	26.11.2009
(ii)	Unit - 2	4.10.2010
(iii)	Unit - 3	7.11.2011
(iv)	Unit - 4	4.12.2011

Subsequent units as intimated by M/s Raj West Power Ltd. are expected as under.

- Unit-5 Feb. 2012
- Unit-6 March. 2012
- Unit-7 May. 2012
- Unit-8 April. 2012

RERC have determined provisional tariff for Unit-1 to 4.

### **5.1.2 Case-1 Procurement of 1200 MW power from Kawai Super Critical TPS in Dist Baran.**

For procurement of 1200 MW power LoI placed to L-1 firm M/S Adani power Rajasthan Ltd on 17.12.2009. PPA for 1200 MW signed with M/s. Adani Power Rajasthan Ltd. and three Discoms on 28.1.2010. Tariff got adopted from RERC on 31.5.10 through competitive Bidding process @ Rs 3.2383 per unit (levelised). Commencement of supply of power (as per schedule 4.1 of PPA): 31.8.2013

### **5.1.3 Case-2 (i) Gurha Thermal Power Plant (70 MW)**

The GoR approved the Project in December 2008 and SPV in the name of 'Gurha Thermal Power Company Ltd'. Incorporated on 16.4.2009. RFP was issued on 7.4.2010. EC granted by State Environmental Impact Appraisal Authority (SEIAA) on 29.12.2011. RFP (non-financial bids) opened on 27.6.2011. Evaluation report (non-financial bids) approved by BoD on 26.3.2010. Financial bids opened on 23.8.2011. The evaluation committee finalized the financial report in consultation with M/s PFCCCL on 26.08.2011. The report approved by BoD of RVPN in its meeting held on 2.12.2011. RERC have approved the time extension of bidding process for selection of developer upto 31.12.2011. LoI issued to L-1 bidder M/s SPML consortium on 15.12.2011. The PPA and handing over of SPV to SPML consortium is to be taken place shortly. The power availability is expected within 36 months of signing of PPA (between successful bidder and three Discoms).

### **5.1.4 Case-2 (ii) Giral Unit 3 & 4 Power Plant (2x125 MW)**

The GoR approved the Project on 15.1.2010 and SPV in the name of Barmer Thermal Power Co. Ltd. was got registered with the RoC, Rajasthan, Jaipur on 5.7.2010. Land for power plant has been acquired. Additional land for ash dyke (56.48 hectare) got allotted by GoR to RVPN. Application for EC submitted to RSPCB on 3.11.2010. Public hearing is scheduled on 8.2.2012 by RSPCB Jodhpur.. Fuel (lignite) 16.0 Lac MMT/Annum for Unit 3&4 is to be supplied by RSMML from Grial/Sonari Lignite reserves. Model FSA is being finalizes by RSMML. For selection of developer RFQ stage has been completed and RFP has been issued to qualified bidders on 10.5.2011. RFP bids are to be opened on 12.3.2012. The power availability is expected within 36 months of signing of PPA (between successful bidder and three Discoms).

### **5.1.5 Case-2 (iii) 1000 MW Gas based Thermal Power Plant at Keshoraipaton**

The GoR approved the Project on 19.7.2010 and SPV in the name of 'Keshoraipatan Gas Thermal Power Company Ltd.' has been incorporated on

17.9.2010. Cooperative Department, GoR allotted 458 Bigha(70.44 Hactare) land of Sugar Mill for the project and payment for this land has been made. Possession of the same has been taken. Nagar Palika Keshoraipatan have also been requested for allotment of 150 Bigha additional land (Matter under consideration). Form No. 1 submitted to MoE&F, GoI on 25.10.10 for issuing ToR for EC. ToR issued on 20.4.2011. For allotment of gas on administered price, application submitted to CEA on 26.10.10. Term Sheet for supply of gas at market driven price has been signed with M/s GAIL on 7-6-11.

RERC vide order dt. 23.3.2011 approved procurement of 1000 MW power through Case-1 or Case-2. Co-ordination committee in its 150<sup>th</sup> meeting held on 15.9.2011 decided to initiate process for procurement of 1000 MW power under Case-1 and also advised that efforts may be continued for setting up of 1000 MW gas based power project under Case-2. Accordingly process for procurement of 1000 MW power under case-1 has been initiated for which appointment of consultant is underway.

#### **5.1.6 Case-2 (iv) Banswara power project (2x660 MW)**

The GoR approved the Project on 13.1.2009. SPV in the name of 'Banswara Thermal Power Company Ltd.' has been incorporated on 13.4.2009. Water allotment (2000MCFT/63 cusec) committed by GoR from Mahi Project on 1.9.09. Possession of 444.50 acre Govt. land and 862.56 acre private land has been taken. For EC final report submitted to MoE& F on 5.10.2010. MoP, GoI vide their office memorandum dt. 20.8.10 has recommended the case of allotment of coal linkage to MoC, GoI. CEA and MoC, GoI have requested for allotment of coal linkage and coal block respectively on 29.12.2011. The state Govt has given its consent on 7.12.2010 to Ministry of Railway for sharing 50% (Approx.1200 Crores) of the Final project cost (Excluding the cost of land acquisition) for construction of broad gauge rail link from Ratlam to Dungarpur via Banswara. Out of this, 50% cost is to be recovered from the developer and rest is to be borne by RVUN. MoU between Ministry of Rail, GoI and GoR signed on dt. 31.5.2011. For construction of railway line a meeting was held on 19.12.2011 under the chairmanship of CS, GoR wherein a decision was taken to expedite the above work through CMD RVUN, Collector Banswara and Railway authorities. The power generation from this project is expected within 48 months from signing of PPA (between successful bidder and three Discoms).

## **5.2 Transmission Projects**

5.2.1 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 on dt.16.1.2009 decided 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).

(i) Orders have been placed in favour of M/s. GMR Energy Ltd. for following two projects and SPV (M/S Maru Transmission Service Co. Ltd.) has been handed over to successful bidder.

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.

Petitions for adoption of tariff and grant of transmission licence have been rejected by RERC. Appeal has been filed by M/S Maru Transmission Service Co. Ltd (SPV) against this decision in Appellant Tribunal, Delhi.

(ii) Order for third scheme i.e. for 220 kV S/C Nawalgarh – Deedwana line with 220 kV Sub-station and associated scheme work has been placed on M/S EMCO Ltd.

5.2.2 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). Date of opening of RFQ bid is on 12.1.2012.

(ii) 400kV D/C Jodhpur (New) - Udaipur line alongwith 400kV/220kV GSS at Udaipur. Date of opening of RFQ bid is on 24.4.2012.

□□□□

**Transmission - Details of Plan Provisions & Physical Targets for Annual Plan 2011-12 (Revised) & 2012-13 (Prposed)**

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Rs. in lakhs					
							Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
<b>I</b>	<b>765kV SCHEMES</b>											
<b>A</b>	<b>ON GOING SCHEMES</b>											
	<b>Composite Power Evacuation System {Chhabra Super Critical TPS (2x660MW) &amp; Kalisindh TPS (2x600 MW)}</b>											
1	765/400 kV GSS at Phagi(Jaipur South) alongwith 2 sets of 765kV, 3x80 MVAR (single phase) Line Reactors and 400kV, 1x125 MVAR Bus Reactor at Phagi (Jaipur South)	ES		2x1500	83285.06	2013-14	4500			12500		
2	400/765 kV GSS at Anta(Baran) Pooling Station alongwith 2 sets of 765kV, 3x80 MVAR (single phase) Line Reactors.	ES		2x1500	50463.53	2013-14	3500			10000		
3	765 kV, 1X S/C Anta- Phagi(Jaipur South) ckt - I	ES	214		68161.38	2013-14	15000			3500		
4	765 kV, 1 X S/C Phagi(Jaipur South)- Anta ckt -II	ES	212			2013-14	14500			10000		
	<b>Evacuation system for Kawai Super Critical TPS (2x660MW)</b>											
5	Additional 1x1500 MVA, 765/400 kV transformer (3rd transformer) at 765/400 kV pooling station Anta (Baran)	ES		1x1500	16161.12	2013-14	Incl in I.2			Incl in I.2		
	<b>TOTAL ( 765kV )</b>						<b>37500</b>	<b>0</b>	<b>0</b>	<b>36000</b>		
<b>II</b>	<b>400kV SCHEMES</b>											
<b>A.</b>	<b>ON GOING SCHEMES</b>											
	<b>Normal Development Works</b>											
1	400 kV S/C Jodhpur - Merta line (Second ckt.)	BPTS,LR	98		8332.12	2011-12	50	98		-		
	<b>Chhabra TPS Evacuation System (Stage-I) (Phase-I)</b>											
2	400kV S/C Dahra - Bhilwara line with 400 kV GSS at <b>Bhilwara</b> (with 50 MVAR line reactor at Bhilwara)	ES	187	315	19254.45	30.09.10	300			-		
3	400kV S/C Chhabra - Hindaun line with 400 kV GSS at <b>Hindaun</b> (with 50 MVAR line reactor at Hindaun)	ES	341	315	29557.01	7.7.10						
	<b>STPS Evacuation System (Unit-6)</b>											
4	400kV S/C STPS - Bikaner line with 400 kV S/S at <b>Bikaner</b> (with Switchable reactor)	ES	162	315	18371.43	31.3.10	100			-		
	<b>RAJ WEST LTPS Evacuation System (Phase-II)</b>											
5	400 kV D/C Raj West - Jodhpur line and 400 kV line bays at Jodhpur with Reactor on each line	ES	417		40365.13	31.3.10	500			-		
6	400 kV D/C Raj West - Barmer line with 400 kV bay at Barmer	ES	31		3308.11	28.3.11						
	<b>WIND POWER Evacuation in Jaisalmer/Barmer area (Phase - I)</b>											
7	400 kV S/C Akal (Jaisalmer) - Jodhpur line (charged on 220 kV)	ES	245		20156.15	26.11.11	800	245		700		
8	400 kV S/C Akal(Jaisalmer) - Barmer line (charged on 220 kV)	ES	143		12191.00	7.10.10	200			-		
	<b>WIND POWER Evacuation in Jaisalmer/Barmer area (Phase - II)</b>											
9	400 kV GSS at Akal(Jaisalmer) with 1x50 MVAR line Reactor & 1x50 MVAR Bus Reactor	ES		2x315	10712.74	14.08.10	100			-		
10	400 kV GSS at <b>Barmer</b>	ES		315	6093.23	21.3.10	100			-		
11	1 No. 400 kV bay with line Reactor at 400 kV GSS Jodhpur	ES			1596.44							
	<b>Composite Evacuation System [Chhabra Super Critical TPS (2x660MW) and Kalisindh TPS (2x600 MW)]</b>											
12	400/220 kV GSS at Ajmer	ES		2x315	12334.01	2013-14	2200			3500		
13	Terminal 400 kV Bays at existing 400 kV Substation at Heerapura	ES			996.09	2013-14						

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
14	400 kV D/C (Quad Moose) Kalisindh TPS -Anta(Baran) Pooling Station Line (For Kalisingdh TPS )	ES	200		18948.83	2013-14	3500			8000		
15	400 kV D/C (Quad Moose) Chhabra SCTPS - Anta(Baran) Pooling Station Line (For Chhabra TPS )	ES	200		24632.16	2013-14	3200			8000		
16	400 kV D/C (Twin Moose) Phagi (Jaipur 765 kV)-Ajmer Line	ES	210		11603.74	2013-14	4000			4500		
17	400 kV D/C Phagi (Jaipur ) - Heerapura line	ES	86		3716.19	2013-14						
<b>Power Evacuation of Banswara Super Critical TPS</b>												
18	400/220 kV GSS at Jodhpur (New) alongwith 400kV, 1x80 MVAR Bus Reactor and 2x50MVAR Line Reactors at Jodhpur end of 400kV D/C Udaipur -Jodhpur (New) line.	ES	-	2x315	14790.96	2014-15	400			5000		
19	400/220 kV GSS at Chittorgarh alongwith 400kV, 1x80 MVAR Bus Reactor, and 2x50MVAR Line Reactors at Chittorgarh end of 400kV D/C Banswara TPS- Chittorgarh line.	ES	-	2x315	13834.05	2013-14	3500			5000		
20	Terminal 400 kV Bays at existing 400kV Substation Bhilwara	ES	-		2440.86	2013-14						
400kV Interconnecting Lines (Banswara Evacuation) :												
21	400 kV D/C Banswara TPS- Udaipur (Quad Moose) Line	ES	320		30315.48	12th Plan	-			400		
22	400 kV D/C Banswara TPS- Chittorgarh (Quad Moose) Line	ES	360		34104.37	12th Plan	-			400		
23	400 kV D/C Chittorgarh-Bhilwara (Twin Moose) Line	ES	100		4644.14	2013-14	1000			1500		
24	400 kV D/C Bhilwara-Ajmer (Twin Moose) Line	ES	300		13923.6	2014-15	-			600		
25	400 kV inter-connections at 400/220 kV GSS at Jodhpur(New) by LILO of nearby 400 kV S/C lines (20 kms, 2xD/C)	ES	80		3716.19	2014-15	-			300		
<b>Power Evacuation Scheme of Suratgarh Super Critical TPS</b>												
26	400/220 kV GSS at Babai (Jhunjhunu) alongwith 400kV, 1x80 MVAR Bus Reactor and 2x80MVAR Line Reactors at Babai end of 400kV D/C Suratgarh TPS- Babai (Jhunjhunu) line.	ES	-	2x315	14388.31	2013-14	2000			5500		
27	Terminal 400 kV Bays at existing 400 kV Substation Bikaner (with 400kV, 1x50 MVAR Shunt Line Reactor at Bikaner end of 400kV S/C Bikaner-Merta line.)	ES	-		2760.19	2013-14	1800			400		
28	Terminal 400 kV Bay at existing 400 kV Substation Mertacity with 400kV, 1x50 MVAR Shunt Line Reactor at Merta end of 400kV S/C Bikaner-Merta line.	ES	-		1387.99	2013-14						
400kV Interconnecting Lines (Suratgarh Super Critical TPS Evacuation) :												
29	400 kV D/C Suratgarh TPS- Babai (Jhunjhunu)(Quad Moose) Line	ES	480		43576.58	2013-14	12000			13000		
30	400 kV D/C Suratgarh TPS- Bikaner (Twin Moose) Line	ES	340		15779.49	12th Plan	-			400		
31	400 kV S/C Bikaner- Merta (Twin Moose) Line	ES	200		11899.74	2014-15	-			800		
<b>Evacuation system for Kawai Super Critical TPS (2x660MW)</b>												
32	(i) 400 kV D/C (Quad Moose) Kawai SCTPS-765/400 kV Anta (Baran) line	ES	140		14944.75	2013-14	1500			6000		
	(ii) 3 nos. 400 kV bays at 765/400 kV Anta(Baran) Pooling Station	ES			Incl. in I.A.5	2013-14	Incl. in I.2			Incl. in I.2		
<b>Transmission System for New Solar and Wind Power Plants in Jaisalmer, Barmer &amp; Jodhpur Districts</b>												
33	400/220 kV, 3 X 500 MVA and 220/132kV, 3x160 MVA with 132/33kV, 2x40/50 MVA Pooling Sub-Station GSS at Ramgarh (Jaisalmer) alongwith 400kV, 1x125 MVAR, 400kV Shunt Reactor (Bus type) and 2x50 MVAR Shunt Reactor (line type) for 400kV D/C Ramgarh-Bhadla line	ES	-	3x500	24838.26	2014-15	400			5000		
34	400/220 kV, 3 X 315 MVA and 220/132kV, 3x160 MVA with 132/33kV, 2x40/50 MVA Pooling Sub-Station GSS at Bhadla (Jodhpur) alongwith 400kV, 1x125 MVAR Shunt Reactor (Bus type) and 4x50 MVAR, 400kV Shunt Reactors (Line type) for Bhadla ends of 400kV D/C Bhadla-Bikaner line, 400kV LILO Jodhpur-Merta at Bhadla line and 400kV D/C Ramgarh-Bhadla line.	ES	-	3x315	27091.55	2014-15	400			5000		

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)			
							Provision	Physical Targets		Provision	Physical Targets		
								Proposed			Proposed		
								Plan	Ckt Km.		MVA	Plan	Ckt Km.
35	Augmentation of 400kV GSS Akal by installation of 400/220 kV, 1 X500 MVA Transformer alongwith 400kV, 1x125 MVAR Bus Reactor and 400kV, 2x50 MVAR Shunt Reactor (line type) for proposed 400kV Akal-Jodhpur (New) line.	ES	-	1x500	7118.12	2014-15	Incl in Sr. no.II.33			Incl in Sr. no.II.33			
36	Augmentation of 400kV GSS Jodhpur (New)												
	(i) 2x50 MVAR, 400kV Shunt Reactor (line type) at 400kV GSS Jodhpur (New) for 400kV D/C Akal-Jodhpur(New) line	ES	-		2982.96	12th Plan	Incl in Sr. no.II.18			Incl in Sr. no.II.18			
	(ii) 400kV bays at Jodhpur (New) for LILO of one ckt. of 400kV D/C Raj West LTPS-Jodhpur line.	ES	-			12th Plan							
37	Augmentation at 400kV GSS Barmer												
	(i) 1x125 MVAR, 400kV Shunt Reactor (Bus type) at 400kV GSS Barmer	ES			2560.76	12th Plan	-			200			
	(ii) 400kV bays for 400kV D/C Barmer-Bhinmal (PG) line	ES				12th Plan							
38	Augmentation at 400kV GSS Bikaner												
	(i) 1x125 MVAR, 400kV Bus Reactor at 400kV GSS Bikaner GSS	ES			4003.90	12th Plan	Incl in Sr. no.II.34			Incl in Sr. no.II.34			
	(ii) 400kV Bays for 400kV D/C Bhadla-Bikaner line and 400kV D/C Bikaner-Sikar (PGCIL) line at Bikaner end of the lines	ES				12th Plan							
39	400kV Interconnecting Lines ( New Solar & Wind Plants) :												
	(i) 400 kV D/C Ramgarh(Jaisalmer)-Akal (Jaisalmer) line (Twin Moose)	ES	100		8004.00	2014-15				600			
	(ii) 400 kV D/C Ramgarh-Bhadla line (Twin Moose)	ES	180		14404.00	2014-15				1200			
	(iii) 400 kV D/C Bhadla-Bikaner line (Quad Moose)	ES	180		34322.80	2014-15				3000			
	(iv) 400 kV D/C line from 400/220kV Pooling Station Bhadla to LILO point at 400kV S/C Jodhpur-Merta line (Twin Moose)	ES	160		12804.00	2014-15				1000			
	(v) 400 kV D/C Bikaner-Sikar (PGCIL) line (Twin Moose)	ES	210		16804.00	12th Plan				1400			
	(vi) 400 kV D/C Barmer-Bhinmal (PGCIL) line (Twin Moose)	ES	140		11204.00	2014-15				1000			
	(vii) LILO of one circuit of 400kV D/C Raj West-Jodhpur line at 400kV GSS Jodhpur (New) (Twin Moose)	ES	50		4004.00	12th Plan				300			
	(viii) 400kV D/C Akal-Jodhpur (New) line (Quad Moose)	ES	240		45762.40	12th Plan				3500			
<b>B</b>	<b>NEW START 2011-12</b>												
40	<b>Inter- connect RVPN's 765/400 kV Anta GSS to PGCIL's 400/220 kV Kota GSS</b>												
	(i) LILO of 2 <sup>nd</sup> circuit of 400 kV D/C Chhabra TPS-Dahra section at 765/400 kV Anta GSS (1kM, D/C)	ES	2		92.65	2013-14				30			
	(ii) 400kV bay equipments work at 765/400kV Anta GSS	ES			1811.54	2014-15				200			
	(iii) 400 kV S/C line extension from 765/400 kV Anta GSS to PGCIL's 400/220 kV Kota GSS (45kM S/C)	ES	45		2686.80	2014-15				200			
41	Construction of 400kV S/C line between 400kV Chhabra TPS and Kawai SCTPS to provide start up power to M/s Adani Power Rajasthan Limited for its Ist unit at Kawai TPP	ES	20		1053.00	2012-13				1000	20		
42	<b>Supplementary Transmission System for Power Evacuation Scheme of Solar Power Projects in Jaisalmer, Barmer, Jodhpur and Bikaner Districts</b>												
	(i) 400/220 kV, 2 X 500 MVA GSS at Jaisalmer-2 alongwith 1x125 MVAR , 400kV Bus Type Reactor	ES		2 X 500	19379.76	12th Plan				500			
	(ii) 400 kV D/C Jaisalmer-2 -Barmer line	ES	260		13498.12	12th Plan				1000			
	(iii) 400 kV S/C Akal(1)- Jaisalmer-2 line	ES	50		3518.61	12th Plan							
	(iv) 400kV Terminal Bay Equipment at 400/220kV GSS Barmer (for termination of 400 kV D/C Jaisalmer 2 - Barmer line at Barmer end)	ES			3619.21	12th Plan							
	(v) 400kV Terminal Bay Equipment at 400/220kV GSS Akal 1 (for termination of 400 kV S/C Akal 1 - Jaisalmer 2 line at Akal 1 end)	ES			1820.11	12th Plan							
	<b>TOTAL (400kV)</b>							<b>38050</b>	<b>343</b>	<b>0</b>	<b>89130</b>	<b>20</b>	<b>0</b>

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
	<b>TARGET 400 kV (Spill over work)</b>											
	- WORKING											20
	- ARCHIVEABLE											20
<b>III</b>	<b>220kV SCHEMES</b>											
<b>A.</b>	<b>ON GOING WORKS</b>											
	<b>CHHABRA TPS Evacuation System (Stage-I, Phase-I)</b>											
1	220kV S/C Chhabra TPS (400kV GSS RVUN) - Jhalawar (220kV GSS) line	ES	102		2115.22	25.7.11	200	102			-	
	<b>RAJ WEST LTPS Evacuation System (Phase - I)</b>											
2	220 kV S/C RajWest - Dhorimanna line (with one 220 kV bay at Dhorimanna end) (Turnkey)	ES	90		2318.68	2011-12	700	90			-	
	<b>Normal Development Works</b>											
3	220 kV S/C Bhiwadi (400 kV PGCIL) - Neemrana line (Financed by NCRPB) (52kM charged)	LC,LR	58		1270.80	10.12.11	50	6			-	
4	LILo of one ckt. of 220 kV D/C Bassi-Heerapura line at Indira Gandhi Nagar (Jagatpura ) with 220 kV Hybrid GSS at <b>Indira Gandhi Nagar</b> (Turnkey)	LC	18	2x100	6377.93	12.2.11	200				-	
5	220kV S/C line Dhorimanna - Sanchore with 220kV S/S at <b>Sanchore</b> (Jalore) for Narmada Canal Project ( Line comm.2010-11)	LC	64	100	3096.65	18.4.11	200		100		-	
6	220 kV S/C Bhiwadi (PG) - Bhiwadi (RVPN) line	SS	10		215.69	-	50				50	
7	LILo of 220 kV Duni-Heerapura line to SEZ -I with 220 kV GSSSEZ-I at <b>Mahindra's SEZ, Jaipur</b> (Phase - I)	LC	18	100	2978.49	1.4.10	50				-	
8	<b>Jaipur City EHV network strengthening scheme-1</b>											
(a)	220kV, 2x160 MVA capacity GIS Substation at Mansarovar (Jaipur) alongwith associated lines and allied works											
i.	220 kV GIS Substation at existing 132 kV Substation at Mansarovar (Jaipur)	SS		2x160	7476.20	2012-13	5000				1000	160
ii.	Up-gradation of existing 132 kV D/C Line to 220 kV D/C Lines Between 220 kV Sanganer to 220 kV Mansarovar (Proposed)	SS	14		723.52	2012-13						14
iii.	2 Nos. 220 kV Terminal Bays at 220 kV Substation at Sanganer	SS			236.83	2012-13						
iv.	220 kV S/C Tapping Line on Tubular Pole/Narrow base Tower (1.5 Km), 220 kV D/C Composite Portion on Tubular Pole/ Narrow base Tower (2 Km) by conversion of existing 132 kV S/C Heerapura-Sanganer Line & 220 kV XLPE Cable S/C (2.5 Km) from Tapping Point.	SS	9		4387.28	2012-13						9
v.	1 Nos. 220 kV Terminal Bays at 400 or 220 kV Substation at Heerapura	SS			118.41	2012-13						
vi.	132 kV Terminal Bay at existing 132 kV Substation at Chambal	SS			59.54	2012-13						
(b)	220kV GIS Substation at Nallah Power House (Jaipur) alongwith associated lines and allied works											
i.	220 kV GIS substation at existing 132 kV Nallah Power House, Jaipur	SS		2x160	6933.93	2013-14	1200				1800	
ii.	Up-gradation of existing 132 kV (S/C & D/C Sections) Line to 220 kV D/C Line Between 220 kV Heerapura to 220 kV Nallah Power House (Proposed)	SS	10		854.81	2013-14						
iii.	2 Nos. 220 kV Terminal Bays at 400 kV Heerapura/ 220 kV Substation at Heerapura	SS			236.83	2013-14						
(c)	Up-gradation of existing 132 kV Line											
i.	Up-gradation of existing 132 kV D/C Line to 220 kV D/C Lines (to be charged on 132 kV for present) between 132 kV Kunda-Ki- Dhani to 132 kV Purana Ghat	SS	14		789.51	2013-14	100				400	
9	LILo of 220 kV S/C Bassi-Phulera line with 220kV GSS at <b>Bagru I/A (Jaipur)</b>	LC,LR	9	100	3228.61	15.05.10	50				-	
10	LILo of 220kV S/C Jodhpur- Balotra line with 220kV GSS at <b>Boranada I/A (Jodhpur)</b>	LC,LR	0.11	100	3032.22	28.7.10	50				-	
11	LILo of 220 kV Debari - Banswara line for 220 kV Madri with 220 kV GSS at Madri (Udaipur)	LC,LR	33	2X100	3412.72	2011-12	800	33	100		150	

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
12	i) LILO of existing 220 kV S/C Badarpur - Alwar line at proposed 220 kV GSS <b>MIA Alwar</b>	LC,LR	5	100	2889.63	8.2.11	550			300		
	ii) 220 kV S/C Mandawar -AlwarMIA line (Turnkey)	LC,LR	58		899.91	2012-13					58	
13	(i) 220 kV S/C Khushkhera - Neemrana line ( Turnkey)	SS	53		1651.87	2011-12	750	53		50		
	(ii) 220 kV D/C Neemrana - Kotputli line (87.734ckM commissioned in 2010-11)	SS	0.40			9.7.11		0.40				
14	LILO of one ckt. of existing 220 kV D/C Bhiwadi - Alwar line at proposed 220 kV GSS Kishangarh Bas with 220 kV GSS at Kishangarh Bas	LC,LR	6	100	2123.25	2011-12	900	6	100	100		
15	(i) LILO of 220 kV S/C Hissar - Khetri line with 220 kV GSS at <b>Chirawa</b> (Line-Turnkey)	LC,SS	38	100	3116.54	27.11.10	750			-		
	(ii) 220 kV S/C Bhadra - Chirawa line (Turnkey)	SS	109		2812.23	25.8.11		109				
16	LILO of 220 kV S/C Bikaner - Nagaur line at proposed 220 kV GSS Nokha with 220 kV GSS at <b>Nokha</b> ( Bikaner )	LC,LR	6	100	2463.16	18.10.10	100			-		
17	<b>Interconnections for 400 kV GSS Deedwana (RVPN Scope)</b>											
	(i) LILO of proposed 220 kV S/C Kuchamancity - Dhod line at proposed 400 kV GSS Deedwana	SS	80		1849.58	2013-14	-			200		
18	<b>Interconnections for 400 kV GSS Alwar (RVPN Scope)</b>											
	(i) LILO of existing 220 kV S/C Dausa-Alwar line at proposed 400 kV GSS	SS	20		673.31	2013-14	-			150		
	(ii) LILO of 220 kV S/C Mandawar - Alwar (MIA) line at proposed 400 kV Alwar GSS	SS	20		673.31							
19	<b>220 kV Interconnections at PGCIL's 400/220 kV GSS at Bhinmal</b>											
	(i) 220 kV S/C line from PGCIL's 400/220 kV Bhinmal GSS to RVPN's 220 kV GSS Bhinmal.	SS	14		407.00	30.7.11	100	14		-		
20	220 kV D/C line to connect the LILO of 220 kV S/C Heerapura-Khetri line(second ckt.) to LILO of one ckt. of 220 kV D/C Neemrana- Kotputli line	SS	125		2004.65	2012-13	600			1000	125	
	<b>Composite Power Evacuation System [Chhabra Super Critical TPS (2x660MW) and Kalisindh TPS (2x600 MW)]</b>											
21	LILO 220kV Ajmer-Beawer Line at 400kV Ajmer GSS	ES	20		408.5	2013-14	50			400		
22	LILO 220kV Ajmer-Kishangarh Line at 400kV Ajmer GSS	ES	20		408.5	2013-14						
23	220kV D/C Kalisindh-Jhalawar Line	ES	19		653.92	2012-13	100			500	19	
	<b>Power Evacuation System of Banswara Super Critical TPS (2x660 MW)</b>											
	<b>220kV Interconnecting Lines :</b>											
24	220 kV Interconnections at 400/220 kV GSS Udaipur	ES	50		2043.68	2014-15	50			800		
25	220 kV Interconnections at 400/220 kV GSS Chittorgarh	ES	50		2043.68	2013-14						
26	220 kV Interconnections at 400/220 kV GSS Jodhpur (New)	ES	50		2043.68	2014-15						
27	220 kV D/C Banswara TPS- Banswara (220 kV GSS) Line	ES	20		409.62	12th plan						
	<b>Power Evacuation System of Suratgarh Super Critical TPS</b>											
	<b>220kV Interconnecting Lines :</b>											
28	220 kV Interconnections at 400/ 220 kV GSS Babai(Jhunjhunu)	ES	50		2044.79	2013-14	50			500		
29	220 kV Terminal Bays at varios 400/220 kV Substations (6 No.)	ES			1078.12	2013-14				300		
30	220 kV Interconnections at 400/ 220 kV GSS at Jaipur (North)	ES	60		2453.3	2014-15				100		
	<b>Power Evacuation System of Ramgarh GTPS (Stage-III) :</b>											
31	220/132kV GSS at Dechu (New location)	ES		2x100	4307.69	2011-12	2000		100	150		
32	220 kV D/C Ramgarh GTPP-Dechu line	ES	420		8655.07	2012-13	1000			2500	420	
33	220kV S/C Dechu -Tinwari line (12kM D/C at Tinwari end and 3kM D/C at Dechu end)	ES	71		1931.89	4.10.11	1100	71		-		
34	220kV D/C Dechu -Phalodi line	ES	71		967.05	2012-13	200			500	71	

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
35	<b>JAIPUR CITY EHV NETWORK STRENGTHENING SCHEME-III [JENSS-</b>	SS,LC										
(a.)	220 kV GSS at Sitapura (New) and associated lines.	SS,LC										
	(i) 220 kV Substation at Sitapura (Jaipur)			160	2769.07	2013-14	100			1500		
	(ii) Up-gradation of existing 132 kV S/C Line to 220 kV D/C Lines Between 220 kV Sanganer to 220 kV Sitapura (Proposed)	SS	16		704.72	2013-14						
	(iii) 1 No. 220 kV Terminal Bays at 220 kV Substation at Sanganer	SS			118.37	2013-14						
	(iv) Up-gradation of existing 132 kV S/C Line to 220 kV D/C Lines Between 220 kV Indira Gandhi Nagar to 132 kV Sitapura (Charged on 132 kV)	SS	18		741.72	2013-14						
	(v) 2 Nos. 132kV Terminal Bays at 132 kV S/S Sitapura.	SS			123.50	2013-14						
	(vi) 220 kV D/C Interconnection between 220 kV Sitapura (Proposed) and 132 kV Sitapura (Existing) [Charged on 132 kV]	SS	1		85.73	2013-14						
	(vii) Up-gradation of existing 132 kV S/C Line Sanganer-Chaksu Line to 220 kV D/C Line [for future connectivity to 400 kV Jaipur South (PG) (approx. 34kM)] 20 kM line on 220 kV D/C narrow base towers and balance 14 kM on 220 kV D/C conventional towers.	SS	68		2321.22	2013-14						
(b.)	<b>220 kV GSS at Kunda Ki Dhani (up-gradation) and associated lines</b>	SS,LC										
	(i) 220 kV substation at Kunda ki Dhani at existing 132 kV Kunda Ki Dhani, Jaipur	SS		160	3126.45	2011-12	1800		160	1400		
	(ii) LILO 220 kV D/C Bassi (PG)-Kukas Line at KKE	SS	8		353.48	2011-12		8				
	(iii) Up-gradation of existing 132 kV S/C Line to 220 kV D/C Lines Between 132 kV Purana Ghat to 132 kV Bassi (Charged on 132 kV)	SS	40		1594.08	2012-13				40		
(c.)	220 kV S/C XLPE Cable System from 400 kV Heerapura to 220 kV Nala Power House	SS	10		8554.36	2012-13	2800			1000	10	
36	<b>JODHPUR CITY EHV NETWORK STRENGTHENING SCHEME-I</b>	SS,LC										
(a.)	(i) 220 kV GSS at Barli (Distt. Jodhpur)	SS		2x100	5098.42	2012-13	200			2000		100
	(ii) LILO of 220kV Jodhpur (400kV GSS)-Jodhpur (220kV GSS) interconnector-II at Barli	SS	6		102.15	2012-13					6	
(b.)	(i) 220 kV GSS at Jhalamand (Distt. Jodhpur)	SS,LC		2x100	4351.64	2013-14	100			1000		
	(ii) LILO of 220kV Jodhpur (400kV GSS)-Jodhpur (220kV GSS) interconnector-I at Jhalamand	SS	2		35.52	2013-14						
(c.)	(i) 220 kV GSS at Karwad/Bhawad (Distt. Jodhpur)	SS,LC		2x100	4887.92	2012-13	1200			2000		100
	(ii) 220kV D/C Jodhpur (400kV GSS)-Karwad/Bhawad-Bhopalgarh line	SS	152		2534.36	2012-13					152	

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
(d.)	(i) 220 GSS at Bhadwasia (Distt. Jodhpur)	SS,LC		2x100	4324.37	2013-14	50			800		
	(ii) 220kV D/C Jodhpur (400kV GSS)-Bhadwasia line (on Narrow base towers with one ckt. on 220kV & other on 132kV)	SS	22		915.3	2013-14						
(e.)	Strengthening scheme of existing 132kV Chopasani Housing Board (CHB) GSS	SS										
	(i) Upgradation of existing 132 kV S/C Jodhpur-CHB-Soorsagar Line to 220 kV D/C Narrowbase Towers (to be charged on 132 kV) (12kM)	SS	24		969.47	2012-13	100			600	24	
37	(i) 220 kV GSS at Bundi (New location) (Distt. Bundi)	SS,LC		1x100,	3143.42	2011-12	1600		100	150		
	(ii) LILO of one ckt of 220kV D/C KTPS- Beawar at proposed 220 kV GSS Bundi	SS	8		202.11	2011-12		8				
38	(i) 220 kV GSS at Gajner (New location) (Distt. Bikaner)	SS,LC		1x100	3430.74	2011-12	2200		100	500		
	(ii) 220 kV D/C Bikaner (400kV GSS)-Gajner line	SS	116		1668.10	2011-12		116				
39	(i) 220 kV GSS at Manoharpur (Upgradation) (Distt. Jaipur)	SS,LC		1x100	2758.31	2012-13	700			1500		100
	(ii) 220 kV D/C Kotputli-Manoharpur line	SS	100		2001.28	2012-13					100	
40	(i) 220 GSS at Padampur (Upgradation) (Distt. Sri Ganganager)	SS,LC		1x100	2535.60	2011-12	2200		100	1500		
	(ii) 220 kV S/C Suratgarh-Padampur line.	SS	55		1096.24	2012-13					55	
	(iii) 220 kV S/C Padampur-Udyogvihar line	SS	43		797.87	2011-12		43				
	(iv) 220 kV S/C Udyogvihar-Hanumangarh line	SS	60		1228.75	2012-13					60	
41	(i) 220 GSS at Sawa (Upgradation) (Distt. Chittorgarh).	SS,LC		1x100	2338.10	28.3.11	100			-		
	(ii) LILO of existing 220 kV S/C Chittorgarh-Nimbahera line at proposed 220 kV GSS Sawa.	SS	5		35.52	5.1.11						
42	(i) 220 GSS at Gangapurcity (New location) (Distt. Sawai Madhopur)	SS,LC		1x100	3610.37	2012-13	700			1800		100
	(ii) 220 kV D/C Hindaun (400 kV GSS) - Gangapurcity line	SS	100		1668.10	2012-13					100	
43	(i) 220 GSS at Kuchera (New location) (Distt. Nagaur)	SS,LC		1x100	3145.95	2013-14	200			1000		
	(ii) LILO of 220 kV Nagaur - Merta line at proposed 220 kV GSS Kuchera	SS	24		400.56	2013-14						
44	(i) 220 GSS at Aspur (New location) (Distt. Dungarpur )	SS,LC		1x100	3374.78	2011-12	1800		100	600		
	(ii) Stringing of IInd circuit of 220kV D/C Banswara-Debari line from Debari to Salumber	SS	77		755.30	2012-13					77	
	(iii) LILO of IInd circuit of 220kV D/C Banswara-Debari line at proposed 220 kV GSS at Aspur	SS	2		168.80	2011-12		2				
	<b>Transmission System for New Solar and Wind Power Plants in Jaisalmer, Barmer &amp; Jodhpur Districts</b>	ES										
45	220/132kV, Transformer at Pooling Sub-Station GSS at Ramgarh (Jaisalmer)	ES		3x160	Incl. in 400kV scheme	2014-15	Incl. in 400kV Ramgarh			Incl. in 400kV Ramgarh		
46	220/132kV, Transformer at Pooling Sub-Station GSS at Bhadla (Jodhpur)	ES		3x160	Incl. in 400kV scheme	2014-15	Incl. in 400kV Bhadla			Incl. in 400kV Bhadla		
47	(i) 220/132kV GSS at Bap (Distt. Jodhpur)	ES		2x160	6583.53	2012-13	600			3000		160
	(ii) LILO of 220kV Barsingsar LTPS-Phalodi line at at Bap	ES	50		955.14	2012-13					50	
	(iii) 220kV D/C Bap-Bhadla line	ES	180		3438.51	2012-13					180	



S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
64	(i) 220/132kV GSS at Lakhesara (Distt. Jaipur)	LR,SS		160	5329.71	2013-14	100			1200		
	(ii) 220 kV D/C Lakhesara-Indira Gandhi Nagar line	LR,SS	12		205.59	2013-14						
	(iii) LILO of both circuits of 220kV D/C Bassi-Kukas line at 220kV Lakhesara GSS	LR,SS	40		685.30	2013-14						
	(iv) Up-gradation of existing 132 kV D/C Line to 220 kV D/C Line between 132 kV Purana Ghat to 132 kV Jawahar Nagar	LR,SS	14		602.54	2013-14						
	<b>Power Evacuation System for Proposed Wind Project in Banswara and Pratapgarh area.</b>											
65	(i) 220kV Switching Station at Banswara	ES			2575.74	12th Plan	100			1000		
	(ii) 2 Nos bays at 220kV GSS Banswara	ES			181.16	12th Plan						
	(iii) 220 kV D/C line between 220 kV Switching Station at Banswara & 220 kV GSS Banswara	ES	20		343.53	12th Plan						
	(iv) Termination of approved 220 kV D/C Banswara SCTPS-Banswara (220 kV GSS) line at 220 kV Switching Station Banswara.	ES	-		-	12th Plan						
66	(i) 220/132kV GSS at Pratapgarh (Up-gradation) with 2 Nos bays at 220kV GSS Chittorgarh & 2 Nos bays at 220kV GSS Nimbahera	LR,SS		100	2635.20	12th Plan	100			1500		
	(ii) 220 kV D/C Banswara (switching station)-Pratapgarh line	LR,SS	140		2398.56	12th Plan						
	(iii) 220 kV D/C Pratapgarh-Chittorgarh (400 kV GSS) line with one circuit via 220 kV GSS Nimbahera	LR,SS	240		4111.82	12th Plan						
67	<b>Jaipur City EHV Network Strengthening Scheme-IV (Phase-I)</b>											
(a)	(i) 220 kV GIS Substation at Chambal (Jaipur)	LR,SS		2X160	10859.74	2013-14	100			4000		
	(ii) 2 Nos. 220 kV Terminal Bays at 400/ 220 kV Substation at Heerapura	LR,SS			231.51	2013-14						
	(iii) 1 No. 220 kV Terminal GIS Bay at 220 kV Substation at Mansarovar	LR,SS			471.44	2013-14						
	(iv) 220 kV D/C Cable System between 400 kV Heerapura and 220 kV Chambal	LR,SS	14		8681.82	2013-14						
	(v) 220 kV S/C Cable System between 220 kV Mansarovar and 220 kV Chambal	LR,SS	5		3177.88	2013-14						
(b)	(i) 220/132kV, 1x160MVA & 220/33kV, 1X50MVA GIS Substation at PWD Bungalow (Jaipur)	LR,SS		1x160 1x50	4795.95	2013-14						
	(ii) 1 No. 220 kV Terminal Bay at 220 kV Substation at VKIA	LR,SS			114.22	2013-14						
	(iii) 220 kV S/C Cable System between 220 kV Chambal and 220 kV PWD Bungalow	LR,SS	6		3761.12	2013-14						
	(iv) 220 kV S/C Cable System between 220 kV VKIA and 220 kV PWD Bungalow	LR,SS	15		9163.47	2013-14						
68	(i) 220kV GSS at Bamantukda (Distt. Rajsamand)			100	3273.50	2012-13				2000		100
	(ii) LILO of existing 220 kV S/C Bhilwara (400 kV GSS)-Bali line at proposed 220 kV GSS Bamantukda 14ckm		14		242.06	2012-13	250				14	
	(iii) LILO of existing 220 kV S/C Kankroli (220 kV GSS)-Bali line at proposed 220 kV GSS Bamantukda 10ckm		10		173.53	2012-13					10	
69	220 kV S/C Sirohi- Pindwara with 1 no.bays at 220kV GSS Sirohi & 1 no.bays at 220kV GSS Pindwara		25		736.38	2012-13	50			600	25	
	<b>Supplementary Transmission System for Power Evacuation Scheme of Solar Power Projects in Jaisalmer, Barmer, Jodhpur and Bikaner Districts</b>											
70	220kV GSS at Badisid (near Bap) (Jodhpur Distt.):	ES					200					
	(i) (a) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Badisid	ES		1 X 160	4953.69	2014-15				200		
	(b) 2 Nos. 220kV bays at 220kV GSS Bap	ES			224.14	2014-15						
	(ii) 220 KV D/C Badisid-Bap (U/C 220 KV GSS) line	ES	30		698.37	2014-15						
	(iii) 220 KV D/C Badisid-Aau (Proposed 220 KV GSS) line	ES	100		2327.91	2014-15						
71	220kV GSS at Aau (New loc.) (Jodhpur Distt.):	ES										
	(i) (a) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Aau	ES		1 X 160	5087.87	2014-15				200		
	(b) 2 Nos. 220kV bays at 220kV GSS Baithwasia	ES			224.14	2014-15						
	(ii) 220 KV D/C Aau-Baithwasia (U/C 220 KV GSS) line	ES	80		1862.33	2014-15						

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
								Plan	Ckt Km.		MVA	Plan
72	220 KV GSS at PS_1(New location other than PHED s/s) / Bajju (New location) (Bikaner Distt.):	ES										
	(i) (a) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at PS_1(New location) / Bajju (New location)	ES		1 X 160	4921.26	2014-15				200		
	(b) 2 Nos. 220kV bays at 400/220kV GSS Bhadla	ES			224.14	2014-15						
	(ii) 220 KV D/C PS_1 / Bajju -Bhadla (U/C 400 KV GSS) line	ES	40		931.16	2014-15						
73	220 KV GSS at Ramdev Nagar (Near Phalodi) (Jodhpur Distt.):	ES										
	(i) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Ramdev Nagar (Phalodi)	ES		1 X 160	4696.80	2014-15				200		
	(ii) LILO of one circuit of U/C 220 KV D/C Dechu-Phalodi line at proposed 220 KV GSS Ramdev Nagar	ES	10		232.79	2014-15						
74	220 KV GSS at Chatrail (Jaisalmer Distt.):	ES										
	(i) (a) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Chatrail (Jaisalmer)	ES		1 X 160	4741.94	2014-15				200		
	(b) 2 Nos. 220kV bays at 220kV GSS Ramgarh (400kV GSS)	ES			224.14	2014-15						
	(ii) 220 KV D/C Chatrail-Ramgarh (U/C 400 KV GSS) line	ES	120		2793.49	2014-15						
75	220 KV GSS at Pokaran (New loc.) (Jaisalmer Distt.):	ES										
	(i) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Pokran (New loc.)	ES		1 X 160	5133.01	2014-15				200		
	(ii) LILO of both circuits of U/C 220 KV D/C Ramgarh GTTP – Dechu line at Pokaran (5km D/C each x 2 = 10km D/C)	ES	20		465.58	2014-15						
76	220 KV GSS at Kolayat (New loc.) (Bikaner Distt.):	ES										
	(i) (a) 220/132 KV, 1x160 MVA and 132/33kV, 1x20/25 MVA GSS at Kolayat (New loc.)	ES		1 X 160	4921.26	2014-15				200		
	(b) 2 Nos. 220kV bays at 220kV GSS Gajner	ES			224.14	2014-15						
	(ii) 220 KV D/C Gajner (U/C 220 KV GSS)-Kolayat line	ES	30		698.37	2014-15						
77	LILO of both circuits of 220kV D/C Ramgarh GTPS- Dechu line at 400kV Ramgarh (1km D/C each for both circuits i.e. total 2km D/C)	ES	4		641.81	2014-15				100		
78	Optical Fibre Cable System for 220kV & 132kV Schemes already approved under Main Transmission System for New Solar & Wind Power Plants & Smart Grid Applications.	ES										
	(i) 220kV Transmission Lines already approved under Main Transmission System for Solar & Wind Power Plants (Total Route length 140km)	ES	140		902.54	2014-15				200		
	(ii) Software Development for Integration/Innovation, Smart Grid Applications etc.	ES			128.93							
<b>C</b>	New 400 kV & 220 kV Schemes (to be identified)						500			4000		
<b>D</b>	220 kV Bus Bar Protection Scheme						350			400		
<b>E</b>	Carried Over Liabilities (Civil works & Bal.Elect. Works - 220kV & 400kV)of Sub Stations & Lines Commissioned in last 3 years only						700			700		
	<b>III TOTAL (220kV )</b>						<b>40230</b>	<b>696.4</b>	<b>1160</b>	<b>64420</b>	<b>1821</b>	<b>1220</b>
	<b>TARGET 220 kV - WORKING</b>							<b>696.4</b>	<b>1160 / 11</b>		<b>1821</b>	<b>1220/11</b>
	<b>- ARCHIVEABLE</b>							<b>600</b>	<b>1000/10</b>		<b>700</b>	<b>920/8</b>
<b>IV</b>	<b>132kV SCHEMES</b>											
<b>A.</b>	Carried Over Liabilities (Civil works & Bal.Elect. Works - 132kV) of Sub Stations & Lines Commissioned in last 3 years only						700			700		
<b>B.</b>	<b>ON GOING SCHEMES</b>											
	<b>Normal Development Schemes</b>											
1	132kV GIS Substation at PWD Bunglow, Station Road, Jaipur						700			50		
	(i) underground cable from 132kV GSS Nallah Power House - PWD Bunglow	LC,LR	8		11682.70	14.10.11		8				



S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
23	132 kV LILO Jodhpur-Pali line at 220 kV GSS Boranada I/A (Jodhpur)	LC,LR	11		170.76	2011-12	100	11		20		
24	132 kV S/C Dhod - Losal line (Line- Turnkey)	SS	15		285.92	15.6.11	100	15		-		
25	132 kV Dhod - Kachhawa line (Line- Turnkey)	SS	20		204.23	15.6.11	100	20		-		
26	132 kV D/C Nokha - Jasrasar line (Line- Turnkey)	SS	76		951.23	9.8.11	150	76		-		
	<b>132kV normal development works</b>											
27	132kV S/C Buhana-Mahpalwas with 132 kV GSS at Mahpalwas (Jhunjhunu) (Line- Turnkey)	LC,LR	16	25	1423.7	2013-14	50			400		
28	132kV S/C Surajgarh- Dulaniya with 132 kV GSS at <b>Dulaniya (Jhunjhunu)</b> (Line- Turnkey)	LC,LR	14	25	1355.62	9.1.11	100			-		
29	LILO 132kV Bhilwara-Pali line for 132 kV Karera with 132 kV GSS at <b>Karera (Bhilwara)</b>	VR,LR	4	25	1181.9	24.10.10	50			-		
30	132kV S/C Kishangarh (220 kV)-Roopangarh with 132 kV GSS at <b>Roopangarh (Ajmer)</b>	LC,LR	22	25	1450.92	22.7.10	50			-		
31	LILO 132kV Khetri-Gudha Gorji for 132 kV Nangli with 132 kV GSS at Nangli (Jhunjhunu) ( <b>Line comm. 31.5.11</b> ) (1.01 ckm)	LC,LR	1	25	1158.12	1.10.11	550	1	25	50		
32	LILO 132kV Bhilwara-Rayla line for 132 kV Danta with 132 kV GSS at <b>Danta (Bhilwara)</b>	VR,LC	9	25	1229.46	10.9.10	50			-		
33	LILO 132kV Khinwsar-Soyla line for 132 kV Narwa with 132 kV GSS at <b>Narwa (Hanuman Nagar)</b> (Nagaaur)	LC	23	25	1467.26	18.1.11	100			-		
34	LILO 132kV Dhaurimanna-Sawa line for 132 kV Ranasar with 132 kV GSS at <b>Ranasar (Barmer)</b>	LC	10	25	1253.24	3.11.10	100			-		
35	132kV S/C Reodar- Badgaon line with 132 kV GSS at <b>Badgaon (Jalore)</b>	LC,LR	35	25	1546.23	6.7.10	50			-		
36	LILO 132kV Suratgarh-Anoopgarh line for 132 kV Sri Vijaynagar with 132 kV GSS at <b>Sri Vijaynagar (Sriganganagar)</b>	VR,LR	21	25	1467.26	21.1.11	100			-		
37	132kV S/C line from 220kV Phalodi-Bap line with 132 kV GSS at Bap (Jodhpur) (Line- Turnkey)	VR,LR	38	25	1519.00	13.10.11	550	38	25	50		
38	132kV S/C Hanumangarh (220kV GSS)- Guluwala line with 132 kV GSS at Guluwala (Hanumangarh)	LC,LR	26	25	1450.92	2012-13	500			650	26	25
39	132kV S/C Dechu-Sanwreej line with 132 kV GSS at <b>Sanwreej</b> (Jodhpur) (Line-Turnkey)	LC,LR	25	25	1437.31	14.3.11	100			-		
40	LILO 132kV Alwar-Mandawar line for 132 kV Pinan with 132 kV GSS Pinan (Alwar) ( <b>Line comm. on 2.4.11</b> )	LC,LR	4	25	1181.9	2011-12	500	4	25	100		
41	132kV S/C line from 220kV Dholpur-Roopwas with 132 kV GSS at <b>Roopwas</b> (Bharatpur) (Line- turnkey) (Line comm in 2010-11)	VR,LR	45	25	1791.29	2.4.11	200		25	-		
42	132kV S/C Phulera-Dudu line with 132 kV GSS at <b>Dudu</b> (Jaipur)	VR,LC	22	25	1450.92	26.3.11	150			-		
43	132kV S/C Balawala-Phagi line with 132 kV GSS at <b>Phagi (Jaipur)</b>	VR,LC	22	25	1382.85	5.7.10	50			-		
44	LILO 132kV Hindaun-Gangapur line for 132 kV Baroli with 132 kV GSS at Baroli (Sawaimadhopur)	VR,LC	15	25	1300.8	2011-12	300	15	25	100		
45	LILO 132kV Hingonia-Heerapura line for 132 kV Champapura with 132 kV GSS at <b>Champapura</b> , Kalwar Road, Jaipur (Jaipur) (Line comm. In 2010-11)	LC,LR	5	25	1229.46	7.5.11	250		25	50		
46	LILO 132kV Kota-Modak line for 132 kV Mandana Town with 132 kV GSS at Mandana Town (Kota) (Line comm. In 2010-11)	LC,LR,VR	10	25	1300.8	6.9.11	250		25	50		
47	LILO 132 kV Bundi-Kota line for 132 kV Talera with 132 kV GSS at <b>Talera</b> (Bundi) (Line comm. In 2010-11)	LC,LR,VR	4	25	1300.8	9.6.11	250		25	50		
48	132kV S/C Baseri -Sarmathura line with 132 kV GSS at Sarmathura (Dholpur)	VR,LR	31	25	1587.07	2012-13	100			600	31	25
49	132kV S/C Zawarmines - Rishabdeo line	SS	32		671.02	2011-12	150	32		-		
	<b>Interconnections for 400 kV GSS Deedwana (RVPN Scope)</b>											
50	132 kV D/C interconnecting line between proposed 400 kV Deedwana GSS and existing 132 kV Deedwana GSS	SS	20		734.64	2013-14	-			150		

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
<b>Interconnections for 220 kV GSS Nawalgarh (RVPN Scope)</b>												
51	LILO of existing 132 kV S/C Koodan - Nawalgarh line to proposed 220 kV Nawalgarh GSS	SS	8		283.87	2013-14	50			400		
52	132 kV S/C Nawalgarh(220 kV) - Kumawas line	SS	22		489.43	2013-14						
53	132 kV S/C Nawalgarh(220 kV) - Gudagorji line	SS	34		653.58	2013-14						
54	132 kV S/C Nawalgarh(220 kV) - Udaipurwati line	SS	30		598.86	2013-14						
<b>Power Evacuation System of Ramgarh GTPS (Stage-III) :</b>												
55	LILo of existing 132kV S/C Dechu-Pokran line at proposed 220kV Dechu GSS (Ist ckt charged in 2010-11)	ES	2		26.03	6.4.11	Incl. in 220 kV scheme	1		Incl. in 220 kV scheme		
56	LILo of existing 132kV S/C Dechu-Phalodi line at proposed 220kV Dechu GSS	ES	5		100.80	6.4.11		5				
<b>Normal Development Works</b>												
57	LILo of 132 kV Hindaun-Todabhim line with 132 kV GSS at <b>Daula Kunwa (Bada Khora) (Dausa) (Line comm. on 9.7.11)</b>	LC,LR,VR	6	25	1364.19	20.7.11	400	6	25	50		
58	LILo of 132 kV Kishangarh Bas-Khushkhara line with 132 kV GSS at PUR, Kotkasim(Alwar)	LC,LR,VR	30	25	1725.59	2012-13	100			800	30	25
59	LILo of 132 kV Alwar-Bansur line with 132 kV GSS at Vijay Mandir, Alwar City(Alwar)	LC,LR,VR	3	25	1426.49	2012-13	100			800	3	25
60	LILo of 132 kV Todabhim-Sikandra line with 132 kV GSS at <b>Sikrai (Dausa) (Line comm. on 30.4.11)</b>	LC,LR	4	25	1426.49	13.7.11	350	4	25	50		
61	132 kV S/C Shri Mahaveerji GSS-Nangal Sherpur line with 132 kV GSS at Nangal Sherpur (Karauli)	LC,LR,VR	15	25	1642.71	2012-13	200			700	15	25
62	LILo of 132 kV Mandawar-Todabhim line with 132 kV GSS at Mahuwa (Dausa) (Line comm. In 2010-11)	LC	2	25	1401.57	2011-12	400		25	50		
63	LILo of 132 kV Jamwa Ramgarh-Rajgarh line with 132 kV GSS at Andhi (Jaipur) (Line comm. In 2010-11)	LR,VR	3	25	1426.49	12.9.11	500		25	50		
64	LILo of 132kV Heerapura-VKIA-Rampura Dabri line with 132 kV GSS at RIICO, Sarna Doongar (Jaipur)	LC,LR,VR	4	25	1401.57	2011-12	650	4	25	50		
65	132 kV S/C Sapotra -Kaila Devi line with 132 kV GSS Kaila Devi (Karauli)	LC,LR,VR	22	25	1642.71	2012-13	200			750	22	25
66	132 kV S/C Karauli -Mandrayal line with 132 kV GSS Mandrayal (Karauli)	LR,VR	45	25	2006.46	2012-13	100			800	45	25
67	LILo of 132 kV Jodhpur-Bilara line with 132 kV GSS at SEZ, Kaparda	LC	10	25	1476.34	2013-14	-			200		
68	LILo of 132 kV Padampur-Sri Ganganagar line with 132 kV GSS at Telewala (Sri Ganganagar)	LC,LR,VR	12	25	1501.27	2013-14	50			400		
69	132 kV S/C Momasar-Patlisar Fanta line with 132 kV GSS Patlisar Fanta (Churu)	LC,LR,VR	13	25	1569.96	9.7.11	600	13	25	50		
70	LILo of Sawa-Sata line with 132 kV GSS at Sedwa (Barmer)	LC,LR,VR	8	25	1401.57	2012-13	150			700	8	25
71	132 kV Padroo-Junameetha Khera-Sindhari line with 132 kV GSS at Junameetha Khera (Barmer)	LC,LR,VR	40	25	2117.09	2012-13	100			800	40	25
72	132 kV S/C Sanchore ( 220kVGSS )- Paladar line with 132 kV GSS at Paladar (Jalore)	LC,LR,VR	17	25	1569.96	2012-13	100			800	17	25
73	132 kV S/C Riri-Upani line with 132 kV GSS at Upani (Bikaner)	LC,LR,VR	13	25	1540.86	11.8.11	550	13	25	50		
74	132 kV S/C Sri Karanpur - Kaminpura line with 132 kV GSS at Kaminpura (Sri Ganganagar)	LC,LR,VR	25	25	1715.46	2012-13	150			700	25	25
75	LILo of 132 kV Neem Ka Thana-Khetri line with 132 kV GSS at <b>Babai (Jhunjhunu)</b>	LC,LR,VR	2	25	1476.34	18.3.11	100			-		
76	LILo of 132 kV MDSU-Bherunda line with 132 kV GSS at Pushkar (Ajmer)	LC,VR	21	25	1551.12	2011-12	700	21	25	100		
77	LILo of 132 kV Beawar-Nasirabad line with 132 kV GSS at Kharwa (Ajmer)	LR,VR	10	25	1476.34	2012-13	100			700	10	25
78	132 kV S/C Kankroli (220kV) -Sapol line with 132 kV GSS at Sapol (Rajsamand)	LC,VR	23	25	1686.36	2012-13	100			700	23	25
79	LILo of 132 kV Banswara-Sagwara line with 132 kV GSS at Partapur(Banswara)	LC,LR,VR	19	25	1625.89	2012-13	100			700	19	25
80	132 kV S/C Mavli - Sanwad line with 132 kV GSS at Sanwad (Udaipur)	LC,LR,VR	17	25	1642.71	2012-13	100			700	17	25
81	132 kV S/C Shri Madhopur - Thoi line with 132 kV GSS at Thoi (Sikar)	LC,LR,VR	22	25	1657.26	2011-12	700	22	25	100		

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
82	132 kV Jhunjhunu (220kV GSS) - Malsisar line with 132 kV GSS at Malsisar (Jhunjhunu) (12kM D/C + 18kM S/C)	LR,VR	34	25	1980.67	2011-12	700	34	25	100		
83	LILO of 132 kV line Laxmangarh-Fatehpur line with 132 kV GSS at Antroli (Sikar) (Line comm.in 2010-11)	LC,LR,VR	19	25	1650.82	6.4.11	250		25	-		
84	LILO of 132 kV Bhilwara-Hamirgarh line with 132 kV GSS at RIICO, Bhilwara (Bhilwara)	LC,LR	4	25	1576.04	2012-13	250			650	4	25
85	132 kV S/C Beegod- Kachola line with 132 kV GSS at Kachola (Bhilwara)	LC,LR,VR	20	25	1642.71	2012-13	200			700	20	25
86	132 kV S/C Deoli-Jahajpur line with 132 kV GSS at Jahajpur (Bhilwara)	LC,LR,VR	18	25	1642.71	30.6.11	400	18	25	50		
87	132 kV S/C Chittorgarh- Nimbeheral line with 132 kV GSS at Rasoolpur (Chittorgarh)	LC,LR,VR	4	25	1322.77	2011-12	600	4	25	100		
88	132 kV S/C Ajoliya-ka-khera-Bassi line with 132 kV GSS at Bassi (Chittorgarh)	LC,LR,VR	13	25	1613.61	2012-13	250	13		700	13	25
<b>JAIPUR CITY EHV NETWORK STRENGTHENING SCHEME-III [JENSS-</b>												
90	(i) 132 kV GIS Substation at MNIT (Jaipur)	SS,LC		2x50	3751.11	2012-13	1200			1200		50
	(ii) 132 kV S/C Cable system between 220 kV IGN and 132 kV MNIT	SS,LC	9		4442.67	2012-13	1500			600	9	
<b>JODHPUR CITY EHV NETWORK STRENGTHENING SCHEME-I</b>												
91	(a) 132/33 kV Transformer at 220 kV GSS Barli.	SS,LC		2x50		2012-13	Incl. in 220kV			Incl. in 220kV		
	(b) Lines associated with 220 kV GSS Barli.	SS,LC					Incl. in 220kV			400		
	(i) LILO of existing 132 kV S/C Jodhpur-PS8 line at Barli	SS,LC	4		42.20	2012-13					4	
	(ii) LILO of existing 132 kV CHB-Soorsagar line at Barli	SS,LC	14		144.97	2012-13					14	
	(iii) LILO of existing 132 kV S/C Tinwari-Soorsagar line at 400kV GSS Jodhpur	SS,LC	50		514.91	2012-13					50	
92	(a) 132/33 kV Transformer at 220 kV GSS Jhalamand.	SS,LC		2x50	Incl. in 220kV	2013-14	Incl. in 220kV			Incl. in 220kV		
	(b) Lines associated with 220 kV GSS Jhalamand.	SS,LC										
	(i) LILO of existing 132 kV S/C Jodhpur(220kV GSS)- Bilara line at Jhalamand	SS,LC	10		103.86	2013-14				40		
93	(a) 132/33 kV Transformer at 220 kV GSS Karwad/Bhawad.	SS,LC		2x50		2012-13	Incl. in 220kV			Incl. in 220kV		
	(b) Lines associated with 220 kV GSS Karwad/Bhawad.	SS,LC										
	(i) LILO of existing 132 kV S/C Jodhpur (220kV GSS)-Jhalamand-Baori line at Karwad/Bhawad	SS,LC	16		165.52	2012-13				120	16	
	(ii) 132 kV S/C Karwad/Bhawad-Mathania line	SS,LC	15		184.00	2012-13				130	15	
94	(a) 132/33 kV Transformer at 220 kV GSS Bhadwasia.	SS,LC		2x50	Incl. in 220kV	2013-14	Incl. in 220kV			Incl. in 220kV		
95	(i) 132 kV GIS Substation at Engineering College	SS,LC		2x50	3947.07	2012-13	300			2300		50
	(ii) 132 kV S/C Cable system between 132 kV OPH and 132 kV Engineering College	SS,LC	4		1925.10	2013-14	2800			1700		
	(iii) 132 kV D/C Cable system between 132 kV NPH and 132 kV Engineering College	SS,LC	12		3938.30	2012-13					12	
96	(i) 132 kV Hybrid GIS Substation at Kuri Bhagtasani	SS,LC		2x50	3405.61	2012-13	1500			700		50
	(ii) LILO of 132 kV S/C Jodhpur (220 kV GSS)- Banar Line at Kuri Bhagtasani	SS,LC	3		150.07	2012-13					3	
97	(i)132 kV Hybrid GIS Substation at Pratap Nagar	SS,LC		2x50	3394.61	2012-13	1400			1000		50
	(ii)132 kV D/C Cable system between 132 kV CHB and 132 kV Pratap Nagar (Proposed)	SS,LC	12		3965.82	2012-13	3000			500	12	
98	(i) 132 kV GIS Substation at OPH	SS,LC		2x50	4058.32	2012-13	3500			300		50
	(ii) 132 kV D/C Cable system between 132 kV Banar and 132 kV OPH	SS,LC	14		4570.60	2012-13					14	
	(iii) 3 No. Terminal 132 kV Hybrid GIS Bays at 132 kV GSS Banar	SS,LC			819.20	2012-13				1000		
99	Strengthening scheme of existing 132kV Chopasani Housing Board (CHB) GSS	SS,LC										
	(i) 132 kV D/C Cable system for LILO of existing 132 kV S/C PS8-Jodhpur Line at CHB	SS,LC	10		3585.80	2012-13	100			1500	10	
	(ii) 132 kV Terminal Hybrid GIS Bays (4 Incomer/ Outgoing & 1 Bus Coupler	SS,LC			1338.28	2012-13						

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
	(iii) 132 kV S/C Line along Bypass Road, to interconnect 132kV lines emanating from 220kV Jodhpur GSS towards Pali and PS-8	SS,LC	3		36.78	2012-13					3	
<b>Works associated with 220kV GRID-SUBSTATIONS</b>												
100	(i) 132/33 kV Transformer at 220 kV Bundi	SS,LC		1X25	Incl. in 220kV Bundi	2011-12	Incl. in 220kV Scheme			Incl. in 220kV		
	(ii) LILO of existing 132 kV S/C Talera-Bundi line at proposed 220 kV GSS Bundi	SS,LC	14		144.87	2011-12		14		30		
	(iii) 132 kV S/C Bundi (220 kV GSS)-Bundi (132 kV GSS) line	SS,LC	9		110.84	2011-12		9				
101	(i) 132/33 kV Transformer at 220 kV Gajner	SS,LC		1X25	Incl. in 220kV Gajner	2011-12	Incl. in 220kV Scheme			Incl. in 220kV Scheme		
	(ii) LILO of existing 132 kV S/C Pugal Road-Gajner (PS-4) line at proposed 220 kV GSS Gajner.	SS,LC	34		206.62	2011-12	250	34		50		
	(iii) LILO of existing 132 kV S/C Bhinasar-Kolayat line at proposed 220 kV GSS Gajner.	SS,LC	28		206.62	2011-12		28				
102	(i) 132 kV S/C Manoharpur- Shahpura line (Second circuit)	SS,LC	12		184.00	2012-13	50			200	12	
	(ii) 132 kV S/C Manoharpur- Ajeetgarh line.	SS,LC	30		366.90	2012-13					30	
103	(i) 132/33 kV Transformer at 220 GSS Gangapurcity (New location) (Distt. Sawai Madhopur)	SS,LC		1x25	incl. in 220kV Gangapurcity (New location)	2012-13	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) 132 kV D/C Gangapurcity (220 kV GSS)-Gangapurcity(132 kV GSS) line	SS,LC	7		103.87	2012-13				500	7	
	(iii) 132 kV S/C Gangapurcity (220 kV GSS)-Sapotra line	SS,LC	25		305.92	2012-13					25	
	(iv) 132 kV S/C Gangapurcity (220 kV GSS)- Shrimahavir ji line	SS,LC	35		427.85	2012-13					35	
104	(i) 132/33 kV Transformer at 220 GSS at Kuchera (New location) (Distt. Nagaur)	SS,LC		1x25	incl. in 220kV scheme	2013-14	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) LILO of existing 132 kV Kuchera - Mundwa line at proposed 220 kV GSS Kuchera	SS,LC	6		62.76	2013-14				30		
	(iii) LILO of existing 132 kV Kuchera - Sanjoo line at proposed 220 kV GSS Kuchera	SS,LC	2		21.64	2013-14						
105	(i) 132/33 kV Transformer at 220 GSS at Aspur (New location) (Distt. Dungarpur )	SS,LC		1x25	incl. in 220kV scheme	2011-12	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) LILO of existing 132 kV Salumber - Sagwara line at proposed 220 kV GSS Aspur	SS,LC	20		206.62	2011-12		20		50		
	(iii) LILO of existing 132 kV Salumber - Dhariyawad line at proposed 220 kV GSS Aspur	SS,LC	23		206.62	2011-12		23				
<b>Transmission System for New Solar and Wind Power Plants in Jaisalmer, Barmer &amp; Jodhpur Districts</b>												
106	(i) Up-gradation of PS No. 2 to 132kV Grid Substation with 132/33kV, 2x20/25 MVA Transformers with associated 132kV line	ES		2x25	2228.01	2012-13	100			900		25
107	Up-gradation of PS No. 3 to 132kV Grid Substation with 132/33kV, 2x20/25 MVA Transformers	ES		2x25	1993.12	2012-13				900		25
108	Charging of 132 kV line from PS_No.5 to PS_No.1 on 132 kV voltage level via 132 kV PS_No.2 GSS and 132 kV PS_No.3 GSS	ES			718.88	2012-13				600		
109	Up-gradation of PS No. 4 to 132kV Grid Substation with 132/33kV, 2x20/25 MVA Transformers	ES		2x25	1993.12	2012-13				950		25
110	132/33kV, Transformer at 220kV GSS Bap (Distt. Jodhpur)	ES		2X50	incl. in 220kV scheme	2012-13	incl. in 220kV scheme			incl. in 220kV scheme		

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
								Plan	Ckt Km.		MVA	Plan
111	(i) 132/33kV, Transformer at Kanasar (Distt. Jodhpur)	ES		2X50	incl. in 220kV scheme	2013-14	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) LILO of 132 kV PS1 - PS2 line at proposed 220kV GSS at Kanasar		24		277.85	2013-14				200		
	(iii) LILO of 132 kV PS2 - PS3 line at proposed 220kV GSS at Kanasar		20		231.54	2013-14						
112	(i) 132/33kV, Transformer at 220kV GSS Mandalgarh(New) (Distt. Bhilwara)	LR,SS		1X25	incl. in 220kV scheme	2013-14	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) LILO of existing 132 kV S/C Mandalgarh- Begun line at proposed 220 kV GSS Mandalgarh	LR,SS	1		11.38	2013-14						
	(iii) LILO of existing 132 kV Bijolia-Beegod line at proposed 220 kV GSS Mandalgarh	LR,SS	1		11.38	2013-14						
	<b>Normal Development Works</b>											
113	(i) 132/33kV Tranformer at Chonkarwada (Distt. Bharatpur)	LR,SS		1X25	Incl.in 220kV Chonkarwada	2013-14	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) 132kV D/C line from proposed 220kV Chonkarwada to 132kV GSS Bhusawar	LR,SS	16		167.90	2013-14				100		
	(iii) 132kV D/C line from proposed 220kV Chonkarwada to proposed 132kV GSS Mahuwa	LR,SS	30		313.85	2013-14						
114	132 kV S/C Tehandesar-Parewara line	LR,SS	15		183.99	2012-13				150	15	
<b>C</b>	<b>NEW START SCHEMES 2011-12</b>											
	<b>(a) Work associated with 220kV GSS</b>											
115	(i) 132/33kV Transformer at GSS Baithwasia (Distt. Jodhpur)			2x25	incl.in 220kV Baithwasia	2013-14	incl. in 220kV scheme			incl. in 220kV scheme		
	(ii) 132kV D/C Baithwasia-Osian line	LR,SS	30		313.85	2013-14				150		
	(iii) 132kV S/C Baithwasia-Matora line	LR,SS	30		368.20	2013-14						
116	(i) 132/33kV, Transformer at GSS Behror (Distt. Alwar)			1x25	incl.in 220kV Behror	2013-14	incl.in 220kV Behror			incl.in 220kV Behror		
	(ii) LILO of 132kV S/C Behror-Jakhrana line at proposed 220kV GSS Behror	LR,SS	4		42.80	2013-14				100		
	(iii) LILO of 132kV S/C Keshwana-Behror line at proposed 220kV GSS Behror	LR,SS	20		209.60	2013-14						
	(iv) 132kV S/C Jakhrana-Mandan line	LR,SS	20		245.84	2013-14				100		
117	(i) 132/33kV, Transformer at GSS Bansur (Distt. Alwar)			1x25	incl.in 220kV Bansur	2013-14	incl.in 220kV Bansur			incl.in 220kV Bansur		
	(ii) LILO of 132 kV S/C Kotputli-Bansur line at proposed 220 kV GSS Bansur	LR,SS	4		42.80	2013-14				100		
	(iii) 132 kV S/C Bansur(Proposed 220 kV GSS)-Mundawar line	LR,SS	35		429.39	2013-14						
118	(i) 132 kV S/C from proposed 220 kV GSS Lalsot to existing 132 kV GSS Toonga	LR,SS	30		367.10	2012-13	30			700	30	
	(ii) 132 kV S/C from proposed 220 kV GSS Lalsot to existing 132 kV GSS Bhadoti	LR,SS	50		611.84	2012-13					50	
119	(i) Transformer at 220kV GSS Lakhesara			1X25	Incl in 220kV Lakhesra	2013-14	Incl in 220kV Lakhesra			Incl in 220kV Lakhesra		
	(ii) LILO of 132 kV S/C Bassi-Puranaghat line at proposed 220kV Lakhesara GSS	LR,SS	6		62.75	2013-14				20		
120	132 /33kV, 2X80MVA & 33 /11 kV , 3X20MVA Transformer at 220kV GSS Chambal	LR,SS		2x80 3x20	Incl in 220kV Chambal	2013-14	Incl in 220kV Chambal			Incl in 220kV Chambal		
121	(i) 132/33kV Transformer at GSS at Amberi (Distt. Udaipur)	LR,SS		1X25	Incl in 220kV Amberi	2013-14	Incl in 220kV Amberi			Incl in 220kV Amberi		
	(ii) LILO of 132 kV S/C Debari-Sukher line at proposed 220 kV GSS Amberi	LR,SS	10		105.35	2013-14	Incl in 220kV Amberi			Incl in 220kV Amberi		

S.No.	Scheme	Category	Line Length (Ckt. kM)	Capacity (in MVA)	Estimated Cost	Working Target / Dt. of Comm.	Annual Plan 2011-12 (Revised)			Annual Plan 2012-13 (Proposed)		
							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
							Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA
	(iii) LILO of 132 kV S/C Sukher-Seesarma line at proposed 220 kV GSS Amberi	LR,SS	10		105.35	2013-14	Incl in 220kV Amberi			Incl in 220kV Amberi		
122	(i) 132/33kV Transformer at Bamantukda (Distt. Rajsamand)			1X25	Incl in 220kV Bamantukda	2012-13	Incl in 220kV Bamantukda			Incl in 220kV Bamantukda		
	(ii) LILO of existing 132 kV S/C Mokhampura –Amet line at proposed 220 kV GSS Bamantukda 10ckm		10		105.35	2012-13					10	
	(iii) LILO of under construction 132 kV S/C Kankroli(220 kV GSS)–Sapol line at proposed 220 kV GSS Bamantukda 14ckm		14		147.05	2012-13					14	
	<b>(b) New 132kV Schemes</b>											
123	(i) LILO of 132kV Reengus-Govindgarh line with 132kV GSS at RIICO, Reengus (Disst.Sikar)	LC,LR,VR	4	25	1745.03	24.9.11	700	4	25	100		
	(ii) 132 kV S/C line for RIICO, Reengus from location no 60B	LC,LR,VR	2			2011-12		2				
124	LILO of 132 kV Asind-Beawer line with 132kV GSS at Partappura ( Disst. Bhilwara)	LC,LR,VR	24	25	1572.35	2012-13	200			700	24	25
125	132 kV S/C Ganganagar- Raipur line with 132kV GSS at Raipur ( Disst. Bhilwara)	LR,VR	25	25	1630.54	2012-13	150			700	25	25
126	132 kV S/C Dhod- Dayalpura line with 132kV GSS at Dayalpura ( Disst. Nagaur)	LC,VR	28	25	1667.12	2012-13	100			700	28	25
127	LILO of 132 kV Reodar-Aburoad line with 132kV GSS at RIICO Growth Centre, Aburoad ( Disst. Sirohi)	LR,VR	4	25	1366.83	2012-13	100			650	4	25
128	LILO of 132 kV Badnu-Jasrasar line with 132kV GSS at Lalamesdar Bada ( Disst. Bikaner)	LC,LR,VR	6	25	1387.38	2012-13	100			650	6	25
129	LILO of 132 kV Napasar-Badnu line with 132kV GSS at Moonsar ( Disst. Bikaner)	LC,LR,VR	4	25	1366.83	2013-14	100			650		
130	LILO of 132 kV Sangod-Kawai line with 132kV GSS at Bapawar ( Disst. Kota)	LC,LR,VR	6	25	1387.38	2012-13	100			650	6	25
131	LILO of 132 kV Mandawa-Bandikui line with 132kV GSS at Dhigaria Bhim ( Disst. Dausa)	LC,LR	6	25	1387.38	2012-13	100			650	6	25
132	(i) 132kV GSS at Sultanpur(Kota)	LR,LC		25	1250.18	2012-13	150			650		25
	(ii) 132kV S/C Dahara-Sultanpur line	LR,LC	28		343.73	2012-13					28	
133	(i) 132kV GSS at Mangrol (Baran)	LC		25	1250.18	2013-14				250		
	(ii) 132kV S/C Baran-Mangrol line	LC	30		368.2	2013-14						
134	(i) 132kV GSS at Khetusar (Jodhpur)	LR,LC		25	1250.18	2013-14				250		
	(ii) 132kV S/C Bap-Khetusar line	LR,LC	45		551.75	2013-14						
135	(i) 132kV GSS at Hatundi(Jodhpur)	LR,LC		25	1250.18	2013-14				250		
	(ii) 132kV S/C Soyla-Hatundi line	LR,LC	25		307.02	2013-14						
136	(i) 132kV GSS at Kirmarsariya(Jodhpur)	LR,LC		25	1250.18	2013-14				250		
	(ii) 132kV S/C Tinwari-Kirmarsariya line	LR,LC	25		307.02	2013-14						
137	(i) 132kV GSS at Anandpur Kaloo (Pali)	LR,LC		25	1250.18	2013-14				250		
	(ii) 132kV S/C Jaitaran-Anandpur Kaloo line	LR,LC	17		209.12	2013-14						
138	(i) 132kV GSS at Subhash Nagar, Ajmer(Pali)	LC		25	1250.18	2013-14				250		
	(ii) LILO 132kV Ajmer-Saradhna line at Subhash Nagar, Ajmer	LC	1		11.53	2013-14						
139	(i) 132kV GSS at Sawalpur Tanwaran (Sikar)	LC		25	1250.18	2012-13	100			700		25
	(ii) 132kV S/C Ajeetgarh -Sawalpur Tanwaran line	LC	20		245.83	2012-13					20	
	<b>Jaipur City EHV Network Strengthening Scheme-IV (Phase-I)</b>											
	<b>132kV Interconnection</b>											
140	(i) 132 kV Hybrid GIS Bay at Jawahar Nagar (Jaipur)	LR,SS			269.84	2012-13	50			1000		
	(ii) 132 kV S/C Cable system between 132 kV MNIT and 132 kV Substation Jawahar Nagar(6kM S/C)	LR,SS	6		2251.67	2012-13					6	
140	(i) 132kV GSS at Bijaipur (Chittorgarh)	LR,SS		25	1190.48	2012-13				800		25
	(ii) 1 No. 132kV bay at 220kV GSS Nimbahera	LR,SS			59.70	2012-13						
	(iii) 132 kV S/C Nimbahera - Bijaipur line	LR,SS	40		490.57	2012-13					40	

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
								Plan	Ckt Km.		MVA	Plan
141	(i) 132kV GSS at Kushalgarh (Banswara)	LR,SS		25	1190.48	2012-13				650		25
	(ii) 1 No. 132kV bay at 132kV GSS Bagidora	LR,SS			59.70	2012-13						
	(iii) 132 kV S/C Bagidora-Kushalgarh	LR,SS	45		551.75	2012-13					45	
142	(i) 132 kV GSS at Sawar (Distt.Ajmer)	VR,LR		25	1271.70	2013-14	100			250		
	(ii) LILO of 132kV Kekri-Deoli line (8kM D/C)	VR,LR	16		170.79	2013-14						
143	(i) 132 kV GSS at Mehara (Distt.Jhunjhunu)	VR,LC,LR		25	1271.70	2013-14				250		
	(ii) LILO of 132kV Khetri Nagar-Babai line (5kM D/C)	VR,LC,LR	10		107.16	2013-14						
144	(i) 132 kV GSS at Bilwadi (Virat Nagar) (Distt.Jaipur)	VR,LC		25	1271.70	2013-14				250		
	(ii) LILO of 132kV Paota-Shahpura line (12kM D/C)	VR,LC	24		255.63	2013-14						
145	(i) 132 kV GSS at at Jatawali (Distt.Jaipur)	VR,LC,LR		25	1210.97	2013-14				250		
	(ii) 1 No. 132kV bay at 220kV GSS Chomu	VR,LC,LR			60.72	2013-14						
	(iii) 132kV S/C line from 220kV Chomu GSS (12kM D/C)	VR,LC,LR	24		150.49	2013-14						
146	(i) 132 kV GSS at Maniya (Distt.Dholpur)	VR,LC,LR		25	1271.70	2013-14				250		
	(ii) LILO of 132kV Dholpur-Rajakhera line (12kM D/C)	VR,LC,LR	24		255.63	2013-14						
	<b>132kV schemes associated with 220kV GSS's</b>											
	<b>Supplementary Transmission System for Power Evacuation Scheme of Solar Power Projects in Jaisalmer, Barmer, Jodhpur and Bikaner Districts</b>											
147	LILO of existing 132 KV S/C Aau(132 KV GSS)-Phalodi line at proposed 220 KV GSS Aau	ES	10		154.27	2014-15	Incl in 220kV Schemes			100		
148	LILO of existing 132 KV S/C PS1-Bajju line at proposed 220 KV GSS PS_1 /	ES	20		308.54	2014-15						
149	LILO of existing 132 KV S/C Chandan-Pokaran line at proposed 220 KV GSS Pokaran	ES	20		308.54	2014-15						
150	LILO of existing 132 KV S/C Kolayat-Bajju line at proposed 220 KV GSS Kolayat	ES	20		308.54	2014-15						
151	20 Nos., 132/33kV, 1x20/25 MVA Capacity Grid Sub-Stations alongwith approx. 25kM long 132kV D/C line (for each of 132kV GSS) in the periphery of 30kM around various proposed 220kV GSSs as mentioned in project report{ location of 132kV GSS to be identified later on in consultation with field officers of RVPN/RREC}											
	(i) 20 nos.132/33kV, 1x20/25 MVA Capacity Grid Sub-Stations	ES		20X25	15426.97	2014-15	-			1500		
	(ii) 500kM long 132kV D/C lines for 20 Nos. 132kV GSS	ES	1000		42803.82	2014-15	-			1950		
152	Optical Fibre Cable System for 132kV Schemes already approved under Main Transmission System for New Solar & Wind Power Plants (as per Appendix-IIB) & Smart Grid Applications.	ES										
	(i) 132kV Transmission Lines already approved under Main Transmission System for Solar & Wind Power Plants (Total Route length 22kM)	ES	22		141.83		-					
<b>D</b>	132 kV New Schemes (To be identified )					2014-15	200			4000		
	<b>IV. TOTAL (132KV)</b>											
	<b>TARGET 132 kV - WORKING</b>						<b>36560</b>	<b>634</b>	<b>750</b>	<b>55650</b>	<b>1020</b>	<b>1125</b>
	<b>- ACHIEVEABLE</b>							<b>634</b>	<b>750 / 28</b>		<b>1020</b>	<b>1125 / 40</b>
<b>V</b>	Capacitor banks (MVAR)	Cap.					1600		<b>150MVAR</b>	1500		
<b>VI</b>	Augmentation (EAP & Plan)/(Upgradation)	Aug.										
	i. Transformers capacity (MVA)								<b>1500MVA</b>			
	ii. 400/220/132/33kV Feeder bays, Transformer bays, Bus-coupler bays etc.											
	iii. 33kV line bays as per requirement of Discoms											
	iv. Other works approved under Augmentation											
	(A) Jaipur Zone						16000			9000		
	(B) Jodhpur Zone						10500			8000		
	(C) Ajmer Zone						10500			8000		

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							Provision	Physical Targets		Provision	Physical Targets	
								Proposed			Proposed	
Plan	Ckt Km.	MVA	Plan	Ckt Km.	MVA							
VII	Automation/ SCADA solutions, RTU's/ BCU's, related primary equipments upgradations, communication interfaces/ channels (under ULDC, up gradation of existing S/S) & setting up of Sub control centre at CDCC Jaipur	SCADA / SLDC					1800			4000		
VIII	Utility Software, IT Software, Other Allied Software, Hardware Equipments (Upgradation / New)						10			30		
IX	Capital cost on IT/non-IT goods for Integrated MIS & Computerisation in RVPN						150			50		
X	Purchase of IT hardwares, custom software, non IT items, computer furniture, net working items and broad band connectivity required under IMIS Project.						200			100		
XI	RMU of equipments & protection schemes of RVPN (Scheme -II & III)						4000			2000		
XII	Air Conditioning of Control Rooms of 220kV GSS						200			120		
XIII	Allocation by CCOA						700					
<b>TOTAL (V TO XIV)</b>							<b>45660</b>			<b>32800</b>		
<b>TOTAL OF TRANSMISSION WORKS (I TO XIII)</b>					<b>1588130.85</b>		<b>198000</b>			<b>278000</b>		
<b>Abbreviation Used :-</b>												
<i>VR : Voltage Regulation Improvement Scheme.</i>		<i>BPTS : Bulk Power Transfer Scheme.</i>				<i>ES : Evacuation System Scheme.</i>						
<i>LC : Load Catering Scheme.</i>		<i>Mig. : Metering</i>				<i>LR : Loss Reduction.</i>						
<i>SS : System Strengthening Scheme.</i>		<i>Aug. : Augmentation</i>										