

CHAPTER - 13

ENERGY

13.1 Electricity is an essential requirement for all facets of our life and it has been recognized as a basic human need. It is the key to accelerating economic growth, generation of employment, elimination of poverty and human development especially in rural areas. Provision of electricity is essential to cater for requirements of agriculture and other important activities including small and medium industries, khadi and village industries, cold chains, health care, education and information technology.

13.2 The State is deficient in water resources and conventional resources of power generation like coal, oil and gas for undertaking new hydro power/thermal power generation schemes. However, there is vast potential for power generation from non-conventional energy sources like wind, solar and biomass, therefore, emphasis on renewable energy will supplement the electricity requirement of the State. The gross annual per capita consumption of electricity during 2007-08 of Rajasthan was 560.80 kwh as compared to all India average of 704.20 kwh.

13.3 State Government accords highest priority to power generation to become self-sufficient in power and minimize the gap between demand and supply. Efforts would be made to encourage public private partnership in power generation. The State Government is facilitating efforts to reduce the T & D losses. All villages and habitations would be covered by electrification and priority would be given to SC/ST colonies.

13.4 Efforts would be made to provide regular and continuous electricity to the farmers @ 8 hours per day on economical rates. Efforts would also be made to provide 24 hours domestic electricity in all villages as being provided in urban areas. Electricity connection to the BPL families of urban areas would be given only on Rs. 2,500/-. Under the Kutir Jyoti Yojna, free electric connection would be given to rural BPL families.

13.5 The Rajasthan Power Sector Reforms Act unbundled RSEB into one generation, one transmission and three distribution companies at Jaipur, Jodhpur and Ajmer. It also established the Rajasthan Electricity Regulatory Commission. The State is one of the India's most advanced States in terms of metering and collections (more than 95% electricity is metered & sustained rate is also about 95%). Strengthening of power network is high priority area of the State Government.

13.6 Despite growth in connectivity, there are issues like unconnected households and low consumption of electricity that need to be improved. Agriculture accounts for about 41 percent and industry for over 31 percent of total consumption of electricity in the State. Though almost 75% of electricity consumers are domestic but they account for only 20 percent of the total consumption. Only 55 percent households have

access to electricity. About 91 percent villages are connected but electrification has not penetrated adequately at the household level, therefore, 56 percent rural households are still unconnected. The number of customers is around 38.50 lakhs.

13.7 The company-wise details of the outlays kept in the Eleventh Five Year Plan 2007-12, anticipated expenditure to be incurred in the Annual Plan 2009-10 and outlay proposed for these companies in the Annual Plan 2010-11 are as follows:-

Table No. 13.1

(Rs. in crores)

S. No.	Company	Eleventh Plan Outlay	Anticipated Exp. 2009-10	Proposed Outlay 2010-11
1	Raj. Vidyut Utpadan Nigam Ltd.	11443.00	2999.00	6930.00
2	Raj. Vidyut Prasaran Nigam Ltd.	6600.00	1233.00	2550.00
3	Jaipur Vidyut Vitran Nigam Ltd.	2680.00	1871.20	1297.00
4	Ajmer Vidyut Vitran Nigam Ltd.	2432.00	1045.20	1089.00
5	Jodhpur Vidyut Vitran Nigam Ltd.	2435.00	954.60	567.00
Total		25590.00	8103.00	12433.00

13.8 The outlays proposed in the Eleventh Five Year Plan 2007-12 for the different activities of the power companies, are as follows:-

Table No. 13.2

(Rs. in crores)

Particulars	RVUN	RVPN	JVVN	AVVN	JDVVN	Total
1. Generation	11443.00	80.00	-	-	-	11523.00
2. Transmission	-	3895.00	-	-	-	3895.00
3. Sub-Transmission	-	-	680.00	730.00	815.00	2225.00
4. WB Funded Works	-	625.00	740.00	775.00	360.00	2500.00
5. Normal RE	-	-	882.00	495.00	900.00	2277.00
6. Feeder Renovation Programme	-	-	50.00	180.00	80.00	310.00
7. RGGVY/AREP	-	-	328.00	252.00	280.00	860.00
8. Cash Support for FRP	-	2000.00	-	-	-	2000.00
Total	11443.00	6600.00	2680.00	2432.00	2435.00	25590.00

13.9 The outlays proposed in the Annual Plan 2010-11 for the different activities of the power companies, are as follows:-

Table No. 13.3

(Rs. in crores)

Particulars	RVUN	RVPN	JVVN	AVVN	JDVVN	Total
1. Generation	6930.00	20.00	-	-	-	6950.00
2. Transmission	-	2530.00	-	-	-	2530.00
3. Sub-Transmission and Distribution	-	-	435.00	392.00	150.00	977.00
4. Normal RE	-	-	588.00	408.00	295.00	1291.00

Particulars	RVUN	RVPN	JVVN	AVVN	JDVVN	Total
5. Feeder Renovation Programme	-	-	-	15.00	-	15.00
6. RGGVY/AREP/ R-APDRP	-	-	130.00	130.00	10.00	270.00
7. Transition Support	-	-	144.00	144.00	112.00	400.00
Total	6930.00	2550.00	1297.00	1089.00	567.00	12433.00

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13.10 At present, Rajasthan Vidyut Utpadan Nigam owns & operates the following Thermal/Gas Hydel power stations in the State sector. The capacity includes units commissioned up to December, 2009.

Table No. 13.4

S. No.	Power Stations	Installed Capacity (MW)
1.	Suratgarh Thermal Power Station	1500
2.	Kota Thermal Power Station	1240
3.	Ramgarh Gas Power Plant	113.5
4.	Mahi Hydel Power Plant	140
5.	Mini Micro Hydel Schemes	23.85
6.	Giral Lignite Thermal Power Plant Unit-I & II	250
7.	Dholpur Combined Cycle Gas Project	330
8.	Chhabra Thermal Power Project Unit-1	250
	Total	3847.35

13.11 In addition to this, RVUN is managing and operating following two power stations, which are owned by RVPN:

1. Rana Pratap Sagar Hydel Power Stations	172 MW
2. Jawahar Sagar Hydel Power Stations	99 MW
Total	271 MW

13.12 The following power projects of RVUN are under various stages of installation and their commissioning is scheduled by the end of 11th Five Year Plan i.e. by 2011-12:

Table No. 13.5

S. No.	Power Station	Capacity (MW)	Commissioning Schedule
1.	Chhabra Thermal Power Project Unit - 2	250	Mar., 10
2.	Chhabra Thermal Power Project Unit 3 & 4 (2x250 MW)	500	Oct., 2011 & Dec., 2011
3.	Kalisindh Thermal Power Station, Jhalawar Unit - 1 & 2 (2x600 MW)	1200	Dec., 2011 & Mar., 2012
4.	Ramgarh Gas based Extn. Power Project Stage III (110 MW GT + 50 MW ST)	160	Mar., 2012
	Total	2110 MW	

13.13 Funding sources for the activities of the Rajasthan Vidyut Utpadan Nigam Limited for the Revised Annual Plan 2009-10 and Annual Plan 2010-11 are as follows:-

Table No. 13.6

(Rs. in Crores)

	Source	Revised Annual Plan 2009-10	Annual Plan 2010-11
1	State Equity	650.00	1386.00
2	Loan from PFC / Commercial Banks	2349.00	5544.00
Total		2999.00	6930.00

13.14 The Revised outlay agreed for RVUN Ltd in the Annual Plan 2009-10 is Rs. 2999.00 crores and the proposed outlays for Annual Plan 2010-11 is Rs. 6930.00 crores; this would be utilized on the following projects:

Table No. 13.7

(Rs. in crores)

S. No.	Item/ Project	Outlays	
		Revised Annual Plan 2009-10	Proposed Annual Plan 2010-11
1	Dholpur Gas Thermal Power Project	0.00	0.00
2	Giral Lignite Thermal Power Project Unit-II	83.00	0.00
3	Chhabra Thermal Power Project Stage-I Phase-1 Unit-1& 2	257.00	0.00
4	Kota Thermal Power Project Stage-V Unit-7	49.00	0.00
5	Suratgarh Thermal Power Project Unit-6	135.00	0.00
6	Chhabra Thermal Power Project Stage-I, Phase-2, Unit 3 & 4	770.00	690.00
7	Kalisindh Thermal Power Project	1455.00	1153.00
8	Ramgarh Gas Thermal Power Project Stage III 160 MW	180.00	317.00
9	Giral Lignite Thermal Power Project Stage-III (Unit-3 & 4) 2x125 MW	5.00	500.00
10	Chhabra Thermal Power Project Stage-II (Unit-5 & 6) 2x660 MW	40.00	2125.00
11	Suratgarh Thermal Power Project Stage V (Unit-7 & 8) 2x660 MW	20.00	2125.00
12	Survey & Investigation Schemes & carried over liabilities	5.00	20.00
Total		2999.00	6930.00

13.15 Project-wise details are as follows:

On-going Power Projects :-

Kota Thermal Power Station Unit-7 (1x195 MW)

13.16 The unit-7 of 195 MW capacity at Kota Thermal Power Station was initially synchronized on oil on 30.05.2009 and subsequently was commissioned on coal on 31.08.2009.

Suratgarh Thermal Power Station Unit-6 (1 x 250 MW)

13.17 The unit-6 of 250 MW capacity at Suratgarh Thermal Power Station was initially synchronized on oil on 31.03.2009 and subsequently was commissioned on coal on 29.08.2009.

Chhabra Thermal Power Project Stage-I Phase 1, Unit-1&2 (2x250 MW)

13.18 The unit-1 of 250 MW capacity at Chhabra Thermal Power Project was initially synchronised on oil on 16.04.2009 and subsequently was successfully commissioned on coal on 30.10.2009. The commissioning work of unit - 2 of 250 MW capacity is also under progress and it is expected to commission this unit by March, 2010.

13.19 A provision of Rs. 257.00 crores is proposed in the Annual Plan 2009-10 against which an expenditure of Rs. 183.27 crores has been incurred up to Nov., 2009.

Chhabra TPP Stage I Phase 2, Unit-3 & 4 (2x250 MW)

13.20 The State Government has accorded 'Administrative & Financial' approval on 31.01.07 for taking up of 2x250 MW coal based thermal power station at Chhabra under Stage I phase 2. Land and water allocation for the project are available. Stack height clearances from Air Port Authority of India & Ministry of Defence have been received. MoEF has also granted environment clearance for the project.

13.21 A captive coal block 'Parsa East and Kanta Basan' in Chhatisgarh State has been allotted by Ministry of Coal, GoI for the project. M/s TCE has been appointed as engineering consultants. Order has been placed to BHEL on 20.08.08 for main package and advanced released. Order has also been placed to M/s Indure, New Delhi on 29.12.08 for BOP package and advanced released. The contractors have been mobilized at site and initial civil works are under progress. Construction materials like TOR/TMT steel, cement have started reaching the site. The units are targeted for commissioning by Oct., 2011 & Dec., 2011.

13.22 Estimated cost of the project is Rs. 2200.00 crores, out of which 20% i.e. Rs. 440.00 crores has been made available by the State Government as equity. Remaining capital cost is being arranged by resorting to borrowing from PFC. An expenditure of Rs. 770.00 crores is likely to be incurred during 2009-10; provision of Rs. 690.00 crores is proposed in the Annual Plan 2010-11.

Kalisindh Thermal Power project (2x600 MW)

13.23 The State Government has accorded 'Administrative & Financial' approval on 06.06.07 for taking up a new coal based thermal Power Station at Kalisindh in District Jhalawar having capacity of 2x600 MW. All statutory clearances including Environmental Clearance have been received. M/s TCE have been appointed as Engineering consultants for

the project. Land for the project has been acquired and 1200 mcft water has been allotted by the Water Resources Department.

13.24 EPC contract has been awarded to M/s BGR Energy Systems, Chennai on 09.07.08. A captive coal block 'Parsa East and Kanta Basan' in Chhatisgarh State has been allotted by Ministry of Coal, GoI for the project. The contractor has been mobilized at site and initial civil works are under progress. Construction materials like TOR/TMT steel, cement have started reaching the site. The units are targeted for commissioning by Oct., 2011 & Dec., 2011.

13.25 Estimated cost of the project is Rs. 4600.00 crores, out of which 20% i.e. Rs. 920.00 crores has been made available by the State Government as equity. Remaining capital cost has been arranged from PFC. An expenditure of Rs. 1455.00 crores is likely to be incurred during 2009-10; provision of Rs. 1153.00 crores is proposed in the Annual Plan 2010-11.

Ramgarh Gas TPS Stage III (160 MW)

13.26 The State Government has also accorded 'Administrative & Financial' approval on 13.08.08 for taking up of 160 MW gas based extension project at Ramgarh, Jaisalmer under Stage III. The project comprises of 110 MW capacity of Gas Turbine (GT) and 50 MW capacity of Steam Turbine (ST). Initial activities of arranging statutory clearances have been initiated. REIA studies have been carried out and TOR has been approved by State Expert Appraisal Committee of RSPCB. The public hearing is scheduled in Feb., 2010 and Environmental Clearance is expected to be issued by March, 2010.

13.27 M/s Power Tech has been appointed as Project Consultants. Order for main equipment has been placed to M/s BHEL and order for balance of plant (BOP) is expected by March 2010. The project is targeted for commissioning by March, 2012.

13.28 Estimated cost of the project is Rs. 640.00 crores, out of which 20% i.e. Rs. 128.00 crores is being made available by the State Government as equity. Remaining capital cost shall be arranged by resorting to borrowing from PFC/REC. An expenditure of Rs. 180.00 crores is likely to be incurred during 2009-10; provision of Rs. 317.00 crores is proposed in the Annual Plan 2010-11.

New Power Projects:

Chhabra Thermal Power Project Stage-II Unit - 5 & 6 (2x660 MW)

13.29 The State Government has accorded 'Administrative & Financial' approval on 02.03.09 for taking up a new super-critical technology based thermal unit- 5 & 6 at Chhabra Thermal Power Project under Stage-II. Section-4, 6 & 17 Notification for 2361 bigha land has been issued and process for acquiring land has been initiated. 1570 mcft water has been

allotted from Lhasi, Andheri & Parvan dam by the Water Resources Department.

13.30 Initial activities of arranging statutory clearances have been initiated. REIA studies have been carried out and TOR has been approved by State Expert Appraisal Committee of MoEF. The public hearing is scheduled in Feb., 2010 and Environmental Clearance is expected to be issued by March, 2010.

13.31 M/s TCE, Bangalore has been appointed as project consultants. Tenders on International Competitive Basis (ICB) for the project on EPC mode have been invited and orders are expected to be placed by March, 2010. The units are targeted for commissioning by Sep., 2013 & March 2014.

13.32 Estimated cost of the project is Rs. 7920.00 crores, out of which 20% i.e. Rs. 1584.00 crores shall be made available by the State Government as equity. Remaining capital cost is to be arranged by resorting to borrowing from PFC/REC. An expenditure of Rs. 40.00 crores is likely to be incurred during 2009-10; provision of Rs. 2125.00 crores is proposed in the Annual Plan 2010-11.

Suratgarh Thermal Power Project Stage-VI Unit-7 & 8 (2x660 MW)

13.33 The State Govt. has accorded 'Administrative & Financial' approval on 02.03.09 for taking up a new super-critical technology based thermal unit- 7 & 8 at Suratgarh Thermal Power Project under Stage-VI. Section-4 & 6 Notification for 679 hectare land has been issued and process for acquiring land has been initiated. 60 cusec water has been allotted from IGNP canal by the Water Resources Department.

13.34 Initial activities of arranging statutory clearances have been initiated. REIA studies have been carried out and TOR has been approved by State Expert Appraisal Committee of MoEF. The public hearing is scheduled in Jan., 2010 and Environmental Clearance is expected to be issued by March 2010.

13.35 M/s TCE, Bangalore has been appointed as project consultants. Tenders on International Competitive Basis (ICB) for the project on EPC mode have been invited and orders are expected to be placed by March, 2010. The units are targeted for commissioning by Sep., 2013 & March 2014.

13.36 Estimated cost of the project is Rs. 7920.00 crores, out of which 20% i.e. Rs. 1584.00 crores shall be made available by the State Government as equity. Remaining capital cost is to be arranged by resorting to borrowing from PFC/REC. An expenditure of Rs. 20.00 crores is likely to be incurred during 2009-10; provision of Rs. 2125.00 crores is proposed in the Annual Plan 2010-11.

Giral Lignite Thermal Power Project Stage-III Unit-3 & 4 (2x125 MW)

13.37 The State Govt. has accorded 'Administrative & Financial' approval on 02.03.09 for taking up lignite based thermal unit - 3 & 4 at Giral Lignite Thermal Power Project under Stage - III. Land is already available and 12 cusecs water has been allotted from IGNP canal by the Water Resources Department.

13.38 Initial activities of arranging statutory clearances have been initiated. REIA studies have been carried out and ToR has been approved by State Expert Appraisal Committee of RSPCB. M/s Tractabel has been appointed as project consultants. Tenders on International Competitive Basis (ICB) for main equipments (BTG) have been invited and orders for BTG and BOP packages are expected to be placed by March, 2010. The units are targeted for commissioning by March, 2013 & June, 2013.

13.39 Estimated cost of the project is Rs. 1575.00 crores, out of which 20% i.e. Rs. 315.00 crores shall be made available by the State Government as equity. Remaining capital cost is to be arranged by resorting to borrowing from PFC/REC. An expenditure of Rs. 5.00 crores is likely to be incurred during 2009-10; provision of Rs. 500.00 crores is proposed in the Annual Plan 2010-11.

New Power Projects

13.40 Besides the above projects, the State Govt. has accorded 'in-principle' approval for the following new power projects in the State sector to be executed by RVUN, which shall be commissioned in the 12th Plan :-

Table No. 13.8

S. No.	Name of the Project	Capacity
1.	Dholpur Gas Extension Stage -II	3x110 MW
2.	Keshoraipatan Gas Project, Distt. Bundi	3x110 MW
3.	Ramgarh Gas Extension Stage - IV	160 MW
4.	Suratgarh TPS Extension Project Stage VI (Unit 9 & 10) at Distt. SriGanganagar	2x660 MW
5.	Kalisindh TPS Extension Project Stage II (Unit 3 & 4) at Distt. Jhalawar	2x660 MW
6.	Banswara TPP Unit - 1 & 2	2x660 MW
TOTAL		4780 MW

13.41 Water allotment for these power projects have made by the Water Resources Department.

13.42 An expenditure of Rs. 5.00 crores is likely to be incurred during 2009-10 under the Survey & Investigation (S&I) and Rs. 20.00 crores is proposed for the year 2010-11 for the new projects & carried over liabilities etc.

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13.43 An expenditure of Rs. 1233.00 crores is likely to be incurred in the year 2009-10 and Rs. 2550.00 crores is proposed in the Annual Plan 2010-11. Break-up of the resources are as follows:-

Table No. 13.9

(Rs. in crores)

S. No.	Resources	Eleventh Plan Outlay	Anticipated Exp. 2009-10	Proposed Outlay 2010-11
1	Bonds	450.00	-	200.00
2	LIC	250.00	180.00	250.00
3	Rural Electrification Corporation	1230.00	410.00	700.00
4	PFC/Commercial Banks	1256.00	403.00	890.00
5	World Bank	500.00	-	-
6	State Equity	914.00	240.00	510.00
7	Transition support for FRP	2000.00	-	-
Total		6600.00	1233.00	2550.00

13.44 These outlays are proposed to be utilized on the following activities:-

Table No. 13.10

(Rs. in crores)

	Resources	Eleventh Plan Outlay	Anticipated Exp. 2009-10	Proposed Outlay 2010-11
1	Generation (Shared Generating Project)	80.00	20.00	20.00
2	Transmission (on going & New works)	4520.00	1213.00	2530.00
3	Transition support for FRP	2000.00	-	-
Total		6600.00	1233.00	2550.00

Generation (Shared Generating Projects)**Survey, Investigation and Preliminary Expenses**

13.45 A provision of Rs. 1 crore is proposed for making payment for for S&I work and for preliminary expenses for inter-state new projects during the year 2010-11.

Bhakra Beas Complex and New Projects

13.46 A total provision of Rs. 19 crores is proposed for up rating of Bhakra Left Bank and other capital works of BBMB for the year 2010-11. This provision is for the Rajasthan's Share in Modernization works. This provision can be utilized for purchase of 11kv / 132kv generator transformers for RPS / JS Hydel Power Stations also.

Transmission

13.47 A total provision of Rs. 2530 crores is proposed for Transmission works during the year 2010-11. At present work on evacuation system of

Chhabra TPS (Stage-I, Phase-I), Suratgarh TPS (Unit-6), Rajwest LTPS, Barsingsar TPS & Wind Farm Projects is in full swing. A scheme for upgradation of 132 kV GSS at Puranaghat (Jaipur) to 220 kV GSS was approved in Dec., 2008. IN July, 09 a composit power evacuation system for Chhabra Super Critical TPS (2x660 MW) and Kalisindh TPS (2x600 MW) was approved. This composite system include construction of 765 kv GSS at Phagi (Jaipur South) and Anta (Baran) and one 400 kv GSS at Ajmer along with associated 765 kv, 400kv and 220 kv lines. The 765 kv system shall be created first time in the State. These schemes have been included in the Annual Plan 2009-10 as new start schemes and token provision has been kept for land purchase and preliminary works. Besides, this evacuation system for Ramgarh GTPS (160 MW), Suratgarh Super Critical TPS (2x660 MW) and Banswara Super Critical TPS (2x660 MW) have also been approved. Work on these schemes shall start in 2010-11. However token provision for preliminary works (survey, land purchase etc.) of evacuation schemes of Ramgarh GTPS and Suratgarh Super Critical TPS has been kept in 2009-10. Works on various evacuation schemes are required to be completed matching with commissioning with generating projects.

13.48 During 2010-11, the work on evacuation scheme on Chhabra Critical TPS, Kalisindh TPS, Suratgarh Critical TPS, Banswara Super Critical TPS and Ramgarh GTPS shall start. Under these schemes, 2 nos. of 765 kv GSS at Phagi and Anta pooling station along with their associated lines, 6 nos of 400 kv GSS at Ajmer, Babai (Jhunjhunu), Jaipur, Udaipur, Jodhpur and Chittorgarh along with their associated lines and one kv GSS at Dechu along with its associated lines are proposed to be constructed. These GSS are scheduled to be commissioned from 2011-12 to 2013-14 matching with commissioning with generation projects. The NITs for 765 kv GSS at Phagi and Anta and 400 kv GSS at Ajmer and Babai along with their associated lines have already been issued.

13.49 Recently Board of Directors have approved schemes for construction of 32 Nos. new 132 kv GSS at various places on the recommendation of distribution companies. These GSS will strengthen the transmission system. During 2009-10, there is target to commission 3 nos. of 400 kv GSS, 5 nos. of 220 kv GSS and 15 nos. of 132 kv GSS. After commissioning of these GSS, total 2 nos. of 765 kv, 8 nos. 400 kv, 14 nos. 220 kv and 84 nos. of 132 kv GSS shall remain under execution as on 1.4.2010. More transmission schemes relating to forthcoming generating stations and for expansion of transmission system are likely to be approved in balance period of 2009-10 and in 2010-11 for execution which will be included in Annual Plans of RVPN for execution at the time of revision.

13.50 Targets for the Eleventh Five Year Plan 2007-12, likely achievements of the Annual Plan 2009-10 and proposed targets for Annual Plan 2010-11 are as follows:-

Table No. 13.11

S. No.	Head of Scheme	Unit	Eleventh Plan Target	Likely Ach. 2009-10	Proposed Target 2010-11
I	400 KV Lines	Km	2445	500	750
	400 KV Substations	MAV	2205	945	630
	400 KV Substations	No.	7	3	2
II	220 KV Lines	Km	2950	500	600
	220 KV Substations	MVA	2600	500	800
	220 KV Substations	No.	26	5	8
III	132 KV Lines	Km.	1750	350	500
	132 KV Substations	MVA	1875	425	550
	132 KV Substations	No.	75	15	20
IV	Augmentation	MVA	5000	750	1200

DISTRIBUTION COMPANIES

13.51 The details of resources envisaged for financing the outlays of Rs. 3871.00 crores kept in the Revised Annual Plan 2009-10 are as follows:-

Table No. 13.12

(Rs. in crores)

Resources	Annual Plan 2009-10			
	Jaipur	Ajmer	Jodhpur	Total
1. LIC	65.00	80.00	80.00	225.00
2. Normal RE	781.00	94.00	285.00	1160.00
3. Feeder Renovation Programme	-	40.00	-	40.00
4. RGGVY/AREP	135.00	10.00	-	145.00
5. State Equity	320.00	160.00	150.00	630.00
6. PFC/Comm. Banks	365.00	456.00	280.00	1101.00
7. Transition Cash Support	144.00	144.00	112.00	400.00
8. Additional Power Purchase	61.20	61.20	47.60	170.00
Total	1871.20	1045.20	954.60	3871.00

13.52 The details of resources envisaged for financing the outlays of Rs. 2301.17 crores proposed in the Annual Plan 2010-11 for distribution companies are as follows:-

Table No. 13.13

(Rs. in crores)

Resources	Proposed Outlay 2010-11			
	Jaipur	Ajmer	Jodhpur	Total
1. LIC	65.00	100.00	80.00	245.00
2. Normal RE	417.00	310.00	229.00	956.00
3. Feeder Renovation Programme	-	15.00	-	15.00
4. RGGVY/AREPR/APDRP	213.00	130.00	10.00	353.00
5. State Equity	180.00	170.00	80.00	430.00
6. PFC and Commercial Banks	278.00	220.00	56.00	554.00
7. Transitional Cash Support	144.00	144.00	112.00	400.00
Total	1297.00	1089.00	567.00	2953.00

13.53 Proposed outlays for various activities of the Distribution Companies in the Annual Plan 2010-11 are as follows:-

Table No. 13.14

(Rs. in crores)

Schemes	Proposed Outlay 2010-11			
	Jaipur	Ajmer	Jodhpur	Total
1. Sub Transmission	435.00	392.00	150.00	977.00
2. Normal Rural Elect.	588.00	408.00	295.00	1291.00
3. Feeder Renovation Programme	-	15.00	-	15.00
4. RGGVY/AREP/R-APDRP	130.00	130.00	10.00	270.00
5. Transitional Cash Support	144.00	144.00	112.00	400.00
Total	1297.00	1089.00	567.00	2953.00

Feeder Renovation Programme

13.54 The distribution system suffers from very high losses as well as poor quality of infrastructure. The present distribution losses in the state are as high as 40 percent. A massive Feeder Renovation Programme has been launched for renovation of distribution feeders to bring down T&D losses. Under this programme higher capacity existing 11/0.4 KV transformers on rural feeders are being replaced by 25 KVA with meter inbuilt transformers and the LT Lines will also be replaced by insulated AB Cables. Under FRP length of 11 KV Lines will be increased and for individual agriculture connection separate L.T. Line from distribution transformer is to be drawn up to the maximum length of 270 meter.

13.55 A provision of Rs. 15.00 crores is proposed in the Annual Plan 2010-11 for Feeder Renovation Programme.

Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY)

13.56 The Government of India has launched the scheme of RGGVY in April 2005. As per this scheme, all the villages/hamlets will have to be electrified during the next 5 years and provide access of electricity to rural households including BPL families. Connections to BPL families will be given free of cost. 90% of the cost of the scheme would be released as grant where 10% as loan. Rural Electrification Corporation has been designated as Nodal Agency for implementation of this programme.

13.57 A provision of Rs. 270.00 crores is proposed for all Discoms for this scheme in the Annual Plan 2010-11.

Projects being developed through private sectors

Jalipa Kapurdi Lignite Mining cum Power Generation Project

13.58 Project sponsor was selected in November, 1996 based on International Competitive Bidding held in 1994. But the project could not see light of the day till 2006 due to one or the other reason. Government of Rajasthan in January, 2006 revived the Letter of Intent issued in November, 1996 to M/s West Power to establish 1000 MW lignite mining cum power generation project based on lignite of Jalipa and Kapurdi mines in Distt. Barmer, Rajasthan. The Implementation Agreement was

executed on 29.05.2006 between Govt. of Rajasthan and M/s Raj West Power Limited. Rajasthan Electricity Regulatory Commission (RERC) has determined in-principle Capital Cost, Fuel Cost and Tariff for the Project. The Power Purchase Agreement has also been executed on 26.10.2006. Land for the power plant acquired. All statutory clearances for setting up the project have been obtained. The financial closure for the project has also been achieved. A joint venture company has been formed with RSMML for mining of lignite for the project.

13.59 As per information provided by M/s Raj West Power Limited, First unit (135 MW) has been commissioned in Nov 2009 and subsequent units are expected in gap of two months.

1320 MW Banswara Thermal Power Project (2 x 660 MW)

13.60 The State Government has approved for setting up of 2 X 660 MW Super 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, Government of India on dated 16.04.2009. Water allocation of 2000 MCFT from Mahi Project has been allocated by Government of Rajasthan on dated 01.05.2009. The Terms of Reference for environmental appraisal has been approved by the expert appraisal committee of MOE&F on 02.06.2009. Notification under section 4 & 6 for acquiring land for the power project has been issued by Government of Rajasthan. RFQ for selection of developers for this project have been issued and shall be opened on 15.01.2010, and accordingly short listed bidders will be issued RFP documents.

70 MW Gurha Thermal Power Project

13.61 A lignite based generation station with 70 MW capacity is proposed to be built at Gurha (West) based on competitive bidding process under Private Sector. It is 70 KM (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 Government of Rajasthan from Indira Gandhi Canal. RFQ issued on 07.07.2009 & opened on 13.10.2009, evaluation of the same is under process.

Transmission line projects

13.62 The following GSS and lines have been taken up for construction through private sector on tariff based competitive bidding as per Government of India guidelines.

1. 400 kV S/C Bikaner-Deedwana-Ajmer Line with 400 kV/220 kV GSS at Deedwana.
2. 400 kV S/C/ Hindaun-Alwar Line with 400/220 kV GSS at Alwar.

3. 220 kV S/C Sikar (400 kV) Nawalgarh-Jhunjhunu Line with 220/132 kV GSS at Nawalgarh.

13.63 RFQ of the above projects have been opened on 04.11.2009 and the short listing of the bidders is under process.

RAJASTHAN RENEWABLE ENERGY CORPORATION

13.64 Rajasthan Energy Development Agency and Rajasthan State Power Corporation Ltd. have been merged in 2002 to form a new Corporation namely Rajasthan Renewable Energy Corporation (RREC) is responsible for development of non-conventional energy sources in the State.

13.65 There are still a large number of un-electrified villages in the State. These villages are located in remote areas and sparsely populated due to which cost of electrification of these villages is very high. Therefore, these villages are economically illuminated through Solar Photo-Voltaic Domestic Lighting System (DLS).

13.66 State Government is providing a subsidy of Rs. 4550/- for installing a DLS. An expenditure of Rs. 97.00 lakhs is likely to be incurred during 2009-10 and Rs. 100.00 lakhs is proposed for 2198 SPV DLS under Rural Electrification Programme during the Annual Plan 2010-11.