

# Jammu & Kashmir State Electricity Regulatory Commission



Order  
on  
Business Plan  
for  
3-Year Multi Year Tariff (MYT) period  
from  
FY 2013-14 to FY 2015-16  
for  
Power Development Department - Distribution,  
Govt. of J&K

Jammu  
March 2013

# Jammu & Kashmir State Electricity Regulatory Commission



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for  
3-Year Multi Year Tariff (MYT) period  
from  
FY 2013-14 to FY 2015-16  
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Power Development Department - Distribution,  
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**Jammu & Kashmir State Electricity Regulatory Commission**

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**Before**

**Jammu & Kashmir State Electricity Regulatory Commission**

**Petition No. JKSERC/ 32 of 2013**

**In The Matter Of:**

In the matter of filing of Petition for approval of Business Plan of Jammu and Kashmir Power Development Department - Distribution for 3-Year MYT Control Period from FY 2013-14 to FY 2015-16

**And**

**In The Matter Of:**

Jammu and Kashmir Power Development Department - Distribution,  
Srinagar/Jammu

**ORDER**

**Order No. JKSERC/124 of 2013**

**(Passed on 22<sup>nd</sup> March, 2013)**

- 1.1 This Order relates to the Business Plan petition for its Distribution business filed by the Jammu & Kashmir Power Development Department-Distribution (hereinafter referred to as JKPDD-D or the Petitioner or the licensee) before the Jammu & Kashmir State Electricity Regulatory Commission (hereinafter referred to as J&KSERC or the Commission) for the first Multi Year Tariff (MYT) control period beginning FY 2013-14 to FY 2015-16. The petition was filed as per the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012 and in accordance with J&K Electricity Act, 2010.
- 1.2 In accordance with the applicable regulations i.e., the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, the Petitioner was required to file an application for approval of the Business Plan for the Control Period (FY 2013-14 to FY 2015-16) by 30<sup>th</sup> September 2012 (as per Regulation 12.1 of the said Regulations). However, JKPDD-D filed an application for approval of the Business Plan to the Commission on 30<sup>th</sup> November 2012. Further, on initial scrutiny of the Business Plan application, the Commission vide its letter dated 13<sup>th</sup> December 2012 directed the Petitioner to submit certain clarifications with regard to the Business Plan, which the Petitioner submitted subsequently vide its letter dated 27<sup>th</sup> December 2012. The Commission vide ref no. JKSERC/Secy/1153 dated 3<sup>rd</sup> January 2013 directed the Petitioner to submit scheme-wise actual expenditure incurred upto 30<sup>th</sup> September 2012 in respect of *“all the Schemes/Projects figuring in Table 13, page 24 of the Business Plan and the status of accord of approval by competent authority in respect of schemes shown at S.no. 4&6 of the said table”*. Further, the Commission directed the Petitioner to attend a meeting to be held on 8<sup>th</sup> January 2013 for discussion on the Business Plan.

## Order for Business Plan for JKPDD-Distribution for MYT Period from FY 14 to FY 16

- 1.3 The Petitioner failed to submit the requisite information regarding its application for Business plan as directed by Commission vide ref no. JKSERC/Secy/1153 dated 3<sup>rd</sup> January 2013 and also no official from JKPDD-D attended the meeting held on 8<sup>th</sup> January 2013. Meanwhile, the Commission observed additional discrepancies/data deficiencies in the submitted Business Plan which were communicated to the Petitioner vide ref no. JKSERC/Secy/31/1192-98 dated 8<sup>th</sup> January 2013 wherein the Commission directed the Petitioner to submit the desired information latest by 23<sup>rd</sup> January 2013 and also called a meeting with the Petitioner on 28<sup>th</sup> January 2013 to discuss the Business Plan petition filed along with the Petitioner's replies to the deficiencies noted by the Commission. The Commission held a technical validation session with the JKPDD-D on the Business Plan Petition on 28<sup>th</sup> January 2013 and took into consideration the reply submitted by the Petitioner to its deficiency note and additional data and clarifications submitted by the Petitioner and admitted the Business Plan petition for the Distribution business of JKPDD for the entire MYT control period on the same day.
- 1.4 Meanwhile, the Petitioner also submitted the Petition for determination of Aggregate Revenue Requirement (ARR) for 3-year MYT control period from FY 2013-14 to FY 2015-16 and the Tariff Petition for FY 2013-14 on 18<sup>th</sup> February 2013. Subsequent to above, the Petitioner also submitted the revised Business Plan for approval for the entire MYT control period i.e. FY 2013-14 to FY 2015-16 on 20<sup>th</sup> February 2013 to incorporate the changes made in the projected ARR for the MYT control period which was to include un-regularized/ un-registered but energized connections as per the Census 2011 report which were inadvertently left out by the Petitioner in its earlier submission. The above-mentioned change necessitated change in the Business plan projections for energy sales, loss trajectory and power purchase plan. The Commission held a meeting with Officials of JKPDD-D for acceptance of the petition for determination of ARR for MYT control period from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14 and the revised Business Plan Petition for the MYT period from FY 2013-14 to FY 2015-16 on 20<sup>th</sup> February 2013. The Commission informed the Petitioner of acceptance of the revised Business Plan for the Distribution business of JKPDD for the entire MYT control period vide its letter ref no. JKSERC/Secy/1369-71 dated 21<sup>st</sup> February 2013.
- 1.5 Further the Commission directed the Petitioner vide ref no. JKSERC/Secy/31/363-64 dated 20<sup>th</sup> February, 2013, to publish the gist of the Business Plan and its ARR petition for the MYT period FY 2013-14 to FY 2015-16 and Tariff proposal for FY 2013-14 as public notice and invite comments/objections/suggestions from the stakeholders including consumers on the above mentioned petitions filed.
- 1.6 The approved gist of Business Plan and ARR petition for the MYT period from FY 2013-14 to FY 2015-15 and the Tariff proposal for FY 2013-14 was published by the Petitioner in some widely read newspapers on 21<sup>st</sup> February 2013 and 22<sup>nd</sup> February 2013. The stakeholders were requested to submit their written comments/suggestions/ objections latest by 15<sup>th</sup> March 2013.

### **Meeting of the State Advisory Committee**

- 1.7 The Commission convened a meeting with the Members of the State Advisory Committee (SAC) on 15<sup>th</sup> March 2013 for the purpose of discussing the Business Plan

and ARR Petition for entire MYT Period from FY 2013-14 to FY 2015-16 and Tariff Petition for FY 2013-14 filed by the JKPDD-D.

- 1.8 The State Advisory Committee discussed and analyzed the various components of the Business Plan and ARR/Tariff Petition filed by JKPDD-D in detail. Representatives from the JKPDD-D highlighted the main components of the Business Plan and ARR/Tariff petition and major items of expenditure and revenue. The members of the SAC provided several valuable suggestions which have been considered by the Commission in this Order at appropriate places.

## Public Hearings

- 1.9 In order to maintain transparency in the process for approval of the Business Plan for JKPDD-D, the Commission involved the stakeholders by initiating a public consultation process to understand their views on various aspects of the Business Plan along with the public hearing conducted for the ARR petition for the MYT period from FY 2013-14 to FY 2015-16 & the Tariff Petition for FY 2013-14 filed by the Petitioner. Accordingly, the Public hearings on the Business Plan and ARR for MYT period from FY 2013-14 to FY 2014-15 & Tariff petition for FY 2013-14 filed by JKPDD-D were held at Jammu and Srinagar as per the details provided in the following table.

**Table 1: Details of Public Hearings**

Place/ city	Date	Location
Jammu	18 <sup>th</sup> March 2013	PWD, Guest House, Gandhi Nagar
Srinagar	20 <sup>th</sup> March 2013	IMPA Auditorium

- 1.10 The comments/objections/suggestions received during the hearings have duly been considered while finalizing this Order for Business plan and the ARR/Tariff Order for the MYT control period.

## Implementation of the Order

- 1.11 As per Regulations 6.1 and 7.2 of the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, the Business Plan for the entire MYT control period should be approved before the filing of the ARR/Tariff Petition by the Petitioner, as the Petitioner should incorporate the approved business plan and trajectory into the ARR petition for the entire control period to be filed subsequently. The relevant portions of the aforementioned regulations have been reproduced below:

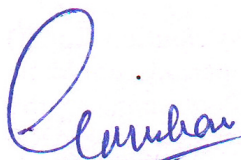
*“6.1 The applicant shall, based on the Business Plan as approved by the Commission by order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the Control Period by a Petition in accordance with the J&K State Electricity Regulatory Commission (Conduct of Business), Regulations, 2005, by 30<sup>th</sup> November of the year prior to the commencement of the Control Period and accompanied by such fee payable, as specified in the Annexure-II to said Regulations.*

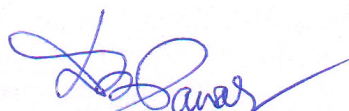
.....


7.2 *The trajectory stipulated by the Commission in the order approving the Business Plan submitted by the applicant, shall be incorporated by the applicant in its forecast of Aggregate Revenue Requirement and/or expected revenue from tariff and charges under Regulation 6.”*

- 1.12 However, there was delay in filing of the Business plan by the Petitioner and the revised Business plan for the entire MYT control period was submitted along with the ARR/ Tariff petition on 20<sup>th</sup> February 2013 only, the Commission has processed both the applications simultaneously.
- 1.13 Further, as per Regulation 13.1 of the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, “*An Order approving or rejecting the Business Plan shall, as far as practicable, be issued within thirty (30) days from receipt of a complete Business Plan*”, the Commission vide this Order is approving the Business plan for the entire MYT control period containing approval of the sales forecast, power procurement plan, capital investment plan and targets for loss reduction/ collection efficiency as spelt out in the relevant sections of this Order.
- 1.14 Based on the approvals for Business Plan given in this Order, the Commission would finalize the ARR for the entire MYT period from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14 to be issued subsequent to the finalization of this Order.
- 1.15 Thus, the Commission directs that this Order be implemented along with directions given and conditions mentioned in the detailed Order.
- 1.16 In exercise of the powers vested in it under the Jammu & Kashmir Electricity Act, 2010 (Act XIII of 2010), the Commission hereby passes this Order for approval of Business plan for the entire MYT control period from FY 2013-14 to FY 2015-16 today, the 22<sup>nd</sup> March, 2013.

Ordered as above, read with attached detailed reasons, grounds and conditions

  
**(G.M. Khan)**  
Member

  
**(D.S. Pawar)**  
Member

  
**(S.M. Desalphine)**  
Chairperson

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## **A1: INTRODUCTION**

### **Jammu & Kashmir State Electricity Regulatory Commission**

1.1 The Jammu & Kashmir State Electricity Regulatory Commission (hereinafter referred to as the Commission) is a statutory body setup under an Act of the State Legislature to regulate power sector in the State of Jammu & Kashmir.

1.2 Section 71 of the Jammu & Kashmir Electricity Act, 2010 has described the various functions required to be discharged by the Commission. These functions have been summarised below:

- (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

Provided that where open access has been permitted to a category of consumers under section 36, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

- (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) facilitate intra-state transmission and wheeling of electricity;
- (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) adjudicate upon the disputes between the licensees, and generating companies and to refer any dispute for arbitration;
- (g) levy fee for the purposes of the Act;
- (h) specify State Grid Code consistent with the Grid Code specified under the Electricity Act, 2003 (Central);
- (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

- (j) fix the trading margin in the intra-State trading of electricity, if considered, necessary; and
  - (k) discharge such other functions as may be assigned to it under this Act.
- 1.3 The Commission shall ensure transparency while exercising its powers and discharging its functions.
- 1.4 In discharge of its functions, the Commission shall be guided by the State Electricity Policy, State Electricity Plan, and Tariff Policy published under the provisions of the Act.

### **Jammu & Kashmir Power Development Department**

- 1.5 JKPDD, viz. Power Development Department (PDD), Government of Jammu & Kashmir is the sole transmission and distribution utility in the State of Jammu and Kashmir.
- 1.6 The Government of Jammu & Kashmir, vide GO no. 264 PDD of 2012 dated 5<sup>th</sup> September 2012, has ordered for unbundling of JKPDD and setting up of one transmission company, two distribution companies (one each for Jammu and Kashmir divisions) and one trading company with the function of a holding company. In line with the above order, GoJK has ordered for setting up of the following companies vide GO no. 285 PDD of 2012 dated 21<sup>st</sup> September 2012:
- (a) Jammu & Kashmir State Power Transmission Company Limited
  - (b) Jammu & Kashmir State Power Trading Company Limited
  - (c) Jammu Power Distribution Company Limited
  - (d) Kashmir Power Distribution Company Limited
- 1.7 As the process of unbundling is still under progress, JKPDD-D (as a deemed distribution licensee) has filed the Business Plan for its Distribution business for the entire MYT Control period from FY 2013-14 to FY 2015-16 as a combined entity for both Jammu and Kashmir divisions.
- 1.8 The JKPDD-D has filed the petition for approval of its Business plan for the entire MYT Control period based on the provisions of the J&KSERC (Multi Year Tariff Distribution) Regulations, 2012 and J&KSERC (Conduct of Business) Regulations, 2005.

### **Scope of the Present Order**

- 1.9 The ambit of the present Order extends to approval of Business plan for the entire MYT control period from FY 2013-14 to FY 2015-16 for the Distribution business of JKPDD.

## Procedural History

- 1.10 In accordance with the applicable regulations i.e., the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, the Petitioner was required to file an application for approval of the Business Plan for the Control Period (FY 2013-14 to FY 2015-16) by 30<sup>th</sup> September 2012 (as per Regulation 12.1 of the said Regulations). However, JKPDD-D filed an application for approval of the Business Plan to the Commission on 30<sup>th</sup> November 2012. Further, on initial scrutiny of the Business Plan application, the Commission vide its letter dated 13<sup>th</sup> December 2012 directed the Petitioner to submit certain clarifications with regard to the Business Plan, which the Petitioner submitted subsequently vide its letter dated 27<sup>th</sup> December 2012. The Commission vide ref no. JKSERC/Secy/1153 dated 3<sup>rd</sup> January 2013 directed the Petitioner to submit scheme-wise actual expenditure incurred upto 30<sup>th</sup> September 2012 in respect of *“all the Schemes/Projects figuring in Table 13, page 24 of the Business Plan and the status of accord of approval by competent authority in respect of schemes shown at S.no. 4&6 of the said table”*. Further, the Commission directed the Petitioner to attend a meeting to be held on 8<sup>th</sup> January 2013 for discussion on the Business Plan.
- 1.11 The Petitioner failed to submit the requisite information regarding its application for Business plan as directed by Commission vide ref no. JKSERC/Secy/1153 dated 3<sup>rd</sup> January 2013 and also no official from JKPDD-D attended the meeting held on 8<sup>th</sup> January 2013. Meanwhile, the Commission observed additional discrepancies/data deficiencies in the submitted Business Plan which were communicated to the Petitioner vide ref no. JKSERC/Secy/31/1192-98 dated 8<sup>th</sup> January 2013 wherein the Commission directed the Petitioner to submit the desired information latest by 23<sup>rd</sup> January 2013 and also called a meeting with the Petitioner on 28<sup>th</sup> January 2013 to discuss the Business Plan petition filed along with the Petitioner’s replies to the deficiencies noted by the Commission. The Commission held a technical validation session with the JKPDD-D on the Business Plan Petition on 28<sup>th</sup> January 2013 and took into consideration the reply submitted by the Petitioner to its deficiency note and additional data and clarifications submitted by the Petitioner and admitted the Business Plan petition for the Distribution business of JKPDD for the entire MYT control period on the same day.
- 1.12 Meanwhile, the Petitioner also submitted the Petition for determination of Aggregate Revenue Requirement (ARR) for 3-year MYT control period from FY 2013-14 to FY 2015-16 and the Tariff Petition for FY 2013-14 on 18<sup>th</sup> February 2013. Subsequent to above, the Petitioner also submitted the revised Business Plan for approval for the entire MYT control period i.e. FY 2013-14 to FY 2015-16 on 20<sup>th</sup> February 2013 to incorporate the changes made in the projected ARR for the MYT control period which was to include un-regularized/ un-registered but energized connections as per the Census 2011 report which were inadvertently left out by the Petitioner in its earlier submission. The above-mentioned change necessitated change in the Business plan projections for energy sales, loss trajectory and power purchase plan. The Commission held a meeting with Officials of JKPDD-D for acceptance of the petition for determination of ARR for MYT control period from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14 and the revised Business Plan Petition for the MYT period from FY 2013-14 to FY 2015-16 on 20<sup>th</sup> February 2013. The

Commission informed the Petitioner of acceptance of the revised Business Plan for the Distribution business of JKPDD for the entire MYT control period vide its letter ref no. JKSERC/Secy/1369-71 dated 21<sup>st</sup> February 2013.

- 1.13 Further the Commission directed the Petitioner vide ref no. JKSERC/Secy/31/363-64 dated 20<sup>th</sup> February, 2013, to publish the gist of the Business Plan and its ARR petition for the MYT period FY 2013-14 to FY 2015-16 and Tariff proposal for FY 2013-14 as public notice and invite comments/objections/suggestions from the stakeholders including consumers on the above mentioned petitions filed.

### **Meeting of the State Advisory Committee**

- 1.14 The Commission convened a meeting with the Members of the State Advisory Committee (SAC) on 15<sup>th</sup> March 2013 for the purpose of discussing the Business Plan and ARR Petition for entire MYT Period from FY 2013-14 to FY 2015-16 and Tariff Petition for FY 2013-14 filed by the JKPDD-D.
- 1.15 The State Advisory Committee discussed and analyzed the various components of the Business Plan and ARR/Tariff Petition filed by JKPDD-D in detail. Representatives from the JKPDD-D highlighted the main components of the Business Plan and ARR/Tariff petition and major items of expenditure and revenue. The members of the SAC provided several valuable suggestions which have been considered by the Commission in this Order at appropriate places.

### **Public Hearings**

- 1.16 In order to maintain transparency in the process for approval of the Business Plan for JKPDD-D, the Commission involved the stakeholders by initiating a public consultation process to understand their views on various aspects of the Business Plan along with the public hearing conducted for the ARR petition for the MYT period from FY 2013-14 to FY 2015-16 & the Tariff Petition for FY 2013-14 filed by the licensee. Accordingly, the Public hearings on the Business Plan and ARR for MYT period from FY 2013-14 to FY 2014-15 & tariff petition for FY 2013-14 filed by JKPDD-D were held at Jammu and Srinagar as per the details provided in Table 1 of this Order.
- 1.17 The comments/objections/suggestions received during the hearings have duly been considered while finalizing this Order for Business plan and the ARR/Tariff Order for the MYT control period.

## A2: GIST OF BUSINESS PLAN PETITION FILED BY JKPDD-D FOR MYT PERIOD FROM FY 2013-14 TO FY 2015-16

2.1 JKPDD-D submitted the present petition for approval of Business Plan for entire Multi Year Tariff (MYT) control period i.e. FY 2013-14, 2014-15 and 2015-16 in compliance with the provisions of the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, consisting of following components:

- (a) Sales & Demand forecast;
- (b) Distribution loss trajectory and collection efficiency targets;
- (c) Power procurement plan based on sales forecast & distribution loss trajectory;
- (d) Capital investment plan along with capitalization and financing schedule; &
- (e) Projections for ARR

2.2 Each component of the business plan as projected by JKPDD-D has been summarized in the following sub-section.

### Sales & Demand forecast

2.3 The licensee has projected the energy sales for MYT Period on the basis of the category-wise Compounded Annual Growth Rate (CAGR) in energy sales for the past three years (FY 2009-10, FY 2010-11 and FY 2011-12) as well as the growth observed in the first six months of FY 2012-13. Category wise re-estimated energy sales for FY 2012-13 and forecast for the MYT period as submitted by the licensee has been summarized in the following table:

**Table 2: Summary of Energy Sales Forecast as submitted by JKPDD-D (in MUs)**

Sl. No.	Description	2012-13 (Rev. Est.)	MYT Period (Proj.)		
			2013-14	2014-15	2015-16
1	Domestic				
	- Metered	772	1,137	1,744	2,768
	- Unmetered	883	1,003	789	-
2	Non Domestic / Commercial				
	- Metered	347	453	567	773
	- Unmetered	158	130	107	-
3	Agriculture				
	- Metered	160	218	274	379
	- Unmetered	114	90	71	-
4	State / Central Govt. Department				
	- Metered	507	534	563	577
	- Unmetered	-	-	-	-
5	Public Street Lighting				
	- Metered	6	17	26	45

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	- <i>Unmetered</i>	28	21	16	-
6	LT industrial Supply				
	- <i>Metered</i>	369	394	420	420
	- <i>Unmetered</i>	-	-	-	-
7	HT Industrial Supply				
	- <i>Metered</i>	596	651	710	774
	- <i>Unmetered</i>	-	-	-	-
8	HT-PIU Industrial Supply				
	- <i>Metered</i>	125	126	128	129
	- <i>Unmetered</i>	-	-	-	-
9	LT Public Water Works				
	- <i>Metered</i>	111	221	242	509
	- <i>Unmetered</i>	299	226	246	-
10	HT Public Water Works				
	- <i>Metered</i>	97	102	107	113
	- <i>Unmetered</i>	-	-	-	-
11	General Purpose / Bulk Supply				
	- <i>Metered</i>	145	154	162	172
	- <i>Unmetered</i>	-	-	-	-
	<b>Grand Total</b>	<b>4,719</b>	<b>5,478</b>	<b>6,173</b>	<b>6,660</b>

**Distribution loss trajectory and collection efficiency targets proposed by JKPDD**

2.4 JKPDD-D is undertaking several measures to reduce losses and improve collection efficiency. It has also proposed to undertake specific capital investment such as R-APDRP schemes and other technical intervention schemes for reducing distribution losses and improving collection efficiency during the MYT control period. Based on the proposed capital investment and other measures being carried out by the licensee to reduce distribution losses, the distribution loss trajectory and Collection efficiency targets for the MYT period as submitted by the licensee has been summarized in the following table.

**Table 3: Summary of Distribution loss & Collection efficiency as submitted by JKPDD-D (in %)**

Description	2012-13 (Rev. Est.)	MYT Period (Proj.)		
		2013-14	2014-15	2015-16
Distribution Losses	55.5%	50.0%	44.0%	40.0%
Collection efficiency	95%	96%	97%	98%

2.5 Based on the sales forecasts and the trajectory for distribution losses, the energy requirement for the MYT period as submitted by the licensee has been summarized in following table.

**Table 4: Summary of Energy Requirement as submitted by JKPDD-D (in MUs)**

Sl. No.	Description	Unit	2012-13 (Rev. Est.)	MYT Period (Proj.)		
				2013-14	2014-15	2015-16
1	Energy Sales	MU	4,719	5,478	6,173	6,660

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2	Distribution Losses	%	55.5%	50.0%	44.0%	40.0%
3	<b>Total Energy required at Distribution periphery</b>	<i>MU</i>	<b>10,595</b>	<b>10,957</b>	<b>11,023</b>	<b>11,099</b>
4	Intra-State Transmission losses (%)	%	4.30%	4.25%	4.20%	4.15%
5	<b>Total Energy Requirement</b>	<i>MU</i>	<b>11,071</b>	<b>11,443</b>	<b>11,506</b>	<b>11,580</b>

### Power Procurement Plan

2.6 The energy requirement for the state is met from the following sources

- (a) Power Purchase from JKSPDC
- (b) Power Purchase from CPSUs (including free power from select stations)
- (c) Power Purchase from other sources

2.7 Based on the availability of power from different sources, total power procurement being planned during MYT period to meet the energy requirement as submitted by the licensee is given in the following table.

**Table 5: Summary of Energy Availability as submitted by JKPDD-D (in MUs)**

Sl. No.	Description	Unit	2012-13 (Rev. Est.)	MYT Period (Proj.)		
				2013-14	2014-15	2015-16
1	Power purchase from own sources & JKSPDC	<i>MU</i>	2,546	2,546	2,546	2,546
2	Power purchase from CPSUs	<i>MU</i>	8,768	9,216	9,216	9,216
3	Additional Tie-up from New Sources	<i>MU</i>	-	96	159	233
4	UI/Power Purchased from ST Purchases	<i>MU</i>	152	-	-	-
5	Less: Inter-state Transmission losses	<i>MU</i>	(395)	(415)	(415)	(415)
6	<b>Total Energy Available</b>	<i>MU</i>	<b>11,071</b>	<b>11,443</b>	<b>11,506</b>	<b>11,580</b>

### Capital Investment Plan

2.8 The project-wise details of capital expenditure proposed by JKPDD-D during FY 2012-13 and the MYT control period have been summarized in following table.

**Table 6: Summary of Capital Investment Plan as submitted by JKPDD-D (in Rs. Cr.)**

Sl. No.	Description	Scheme Provision	2012-13 (Rev. Est.)	MYT Period (Proj.)		
				2013-14	2014-15	2015-16
1	RGGVY Projects	917.02	174.23	174.23	0.00	0.00
2	PMRP Projects	1351.00	302.45	0.00	0.00	0.00
3	R-APDRP Projects	3115.09	205.00	547.10	800.00	771.61
4	New Distribution Works	1086.50	21.73	86.92	162.98	217.30
5	REC Funded Projects	310.05	25.00	50.00	50.00	75.00



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6	Others	377.26	112.74	70.69	83.26	27.25
	<b>Total</b>	<b>7156.92</b>	<b>841.15</b>	<b>928.94</b>	<b>1096.24</b>	<b>1091.16</b>

2.9 Entire capital investment, except REC funded projects which is funded through debt, is expected to be funded by way of State Government grants/subsidies. Based on the year of completion of various projects being undertaken by JKPDD-D, the capitalization plan has been summarized below.

**Table 7: Summary of Capitalization Plan as submitted by JKPDD-D (in Rs. Cr.)**

Sl. No.	Description	2012-13 (Rev. Est.)	MYT Period (Proj.)		
			2013-14	2014-15	2015-16
1	RGVY Projects	87.11	174.23	87.11	0.00
2	PMRP Projects	151.23	151.23	0.00	0.00
3	R-APDRP Projects	102.50	376.05	673.55	785.81
4	New Distribution Works	10.87	54.33	124.95	190.14
5	REC Funded Projects	25.00	50.00	50.00	75.00
6	Others	112.74	70.69	83.26	27.25
	<b>Total</b>	<b>489.44</b>	<b>876.52</b>	<b>1018.87</b>	<b>1078.19</b>

**Annual Revenue Requirement projections**

2.10 The following table summarizes the ARR projections submitted by JKPDD-D for FY 2012-13 and the MYT period from FY 2013-14 to FY 2015-16.

**Table 8: Summary of ARR for MYT Period as submitted by JKPDD-D (in Rs. Cr.)**

Sl. No.	Description	2012-13 (Rev. Est.)	MYT Period (Proj.)		
			2013-14	2014-15	2015-16
1	Power Purchase Cost				
a)	Purchase of Power from JKSPDC	617.06	631.17	650.10	669.61
b)	Purchase of Power from Other sources (including inter-state transmission charges)	3205.34	3132.96	3277.78	3426.98
	<b>Sub-Total</b>	<b>3822.40</b>	<b>3764.13</b>	<b>3927.88</b>	<b>4096.59</b>
2	Water Usage Charges	305.65	305.65	305.65	305.65
3	Transmission & Load Dispatch charges	171.77	203.14	243.88	295.03
4	O&M Expenses	518.07	553.21	590.77	630.89
5	Interest on Loans	16.36	19.15	23.10	28.17
6	Depreciation	179.60	204.19	238.30	276.05
7	Interest on Working Capital	-	144.26	153.25	163.08
<b>8</b>	<b>Gross ARR</b>	<b>5013.85</b>	<b>5193.72</b>	<b>5482.83</b>	<b>5795.46</b>
9	Add: Return on Equity	-	-	-	-
10	Less: Non-tariff income	13.42	14.09	14.80	15.54
<b>11</b>	<b>Net ARR (A)</b>	<b>5000.43</b>	<b>5179.63</b>	<b>5468.03</b>	<b>5779.92</b>

### **A3: REVIEW OF BUSINESS PLAN COMPONENTS**

- 3.1 As per Regulation 5.1 of the J&KSERC (Multi Year Distribution Tariff) Regulations, 2012, the licensee has to file Business Plan for the entire control period and shall contain following:
- (a) **Capital Investment Plan** for the entire Control Period commensurate with load growth, distribution loss reduction trajectory and quality improvement measures proposed in the Business Plan;
  - (b) **Sales/Demand Forecast** for each customer category and sub-categories for each year of the Control Period;
  - (c) **Power Procurement plan** based on the sales forecast and distribution loss trajectory for each year of the Control Period. The power procurement plan should also include energy efficiency and demand side management measures;
  - (d) **A set of targets** proposed for other controllable items such as distribution losses, collection efficiency, working capital requirement, quality of supply targets, etc. The targets shall be consistent with the capital investment plan proposed by the Licensee;
  - (e) Business Plan shall also contain the requisite information for the preceding five years.
- 3.2 Accordingly, the Commission has approved the Business plan for the entire MYT period from FY 2013-14 to FY 2015-16 in line with the relevant Regulations mentioned above containing approval for the load/sales growth, loss trajectory, power procurement plan, distribution system strengthening and expected capital investment.
- 3.3 However, the Commission has not set any target for working capital requirement in this Order as per Regulation 5.1 (d) of above-mentioned regulations. This is because the methodology for computing the working capital requirements would include determination of ARR for the entire MYT period from FY 2013-14 to FY 2015-16 in this Order. The relevant provision of the J&KSERC (Multi Year Tariff Distribution) Regulations, 2012 which provide for computing working capital has been reproduced below:

#### ***“26. Interest on Working Capital***

*The Distribution Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:*

- a) O&M expenses for one month*
- b) Two months equivalent of expected revenue*
- c) Maintenance spares @ 40% of R&M expenses for one month:*

*Less: Security deposits from consumers, if any.”*

- 3.4 As the above components would be determined as part of the ARR and Tariff petition for the MYT period submitted by the licensee for the MYT Control period and same is being processed separately by the Commission, the targets for working capital for the MYT period from FY 2013-14 to FY 2015-16 would be approved by the Commission in its Order for approval of ARR for MYT period from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14.
- 3.5 In addition, the Commission noted that the Petitioner has not submitted any targets for improvement of Quality of Supply. The Commission is of the opinion that along with technical interventions to improve the efficiency of the utility it is essential that the quality of supply is also improved for the end consumers. Accordingly, the Commission directs JKPDD-D to submit a detailed plan for improvement of quality of supply during the three year MYT control period within 3 months of issue of this Order and it should incorporate the impact of such schemes along with the Capital investment requirement (if any) for approval of the Commission.
- 3.6 The following sub-section presents detailed analysis of the above-mentioned components as submitted by JKPDD-D and approved by the Commission for the entire MYT Control period from FY 2013-14 to FY 2015-16.

## **Sales projections**

### **Petitioners Submission**

- 3.7 JKPDD-D caters to a diverse consumer mix constituting of domestic, commercial, industrial and agriculture consumers. JKPDD-D submitted that at end of FY 2011-12, the total number of consumers catered by JKPDD-D system was 13,31,956 having a total connected load of 1821.76 MW. In FY 2012-13, the number of consumers and connected load are estimated to be 13,82,604 and 2143.63 MW, respectively. The projections for the MYT Control period for number of consumers and connected load have been made based on the past trend and the proposed metering plan of the existing un-metered consumers in the State.
- 3.8 As per the J&K Electricity Act, 2010 and Commission’s Order dated 26<sup>th</sup> April, 2012, JKPDD-D had to meter all existing consumers by end of June 2013. However, due to inherent challenges in metering such consumers, JKPDD-D submitted that it would be able to achieve 100% consumer metering by end of the MYT control period i.e. FY 2015-16. Even though it is committed to meter all consumers in the State; it faces several difficulties in doing so such as presence of un-registered consumers, replacement of defective/faulty meters, reluctance by existing un-metered consumers, etc. In order to do so, JKPDD-D submitted that it would prepare a comprehensive province-wise/circle-wise metering plan along with investment requirement and would submit the same to the Commission along with the petition for request of “Extension of Deadline of 100% metering in Jammu & Kashmir beyond June 2013 upto the end of the MYT control period”.

3.9 At end of FY 2012-13, estimated number of total un-metered consumers stands at 6,90,822 which are proposed to be metered by end of the MYT control period only (FY 2015-16). In addition, approx. 4,73,034 consumers have been identified as un-registered consumers based on the Census 2011 report which are not reflected in the records of JKPDD-D. These consumers are proposed to be regularized during FY 2013-14 and FY 2014-15 and metered by end of the MYT control period as shown in following table.

**Table 9: Target to identify and regularize electrified connections as per Census 2011**

Description	No. of connections	Electrified %	No. of household Electrified	Opening FY 2013-14	TO BE REGISTERED				
					Overall un-registered connection	Buffer for already Metered/ Non existing Connections	To be finally registered	Target in FY 2013-14	Target in FY 2014-15
Urban	517,168	98.06%	507,141	354,304	152,837	5%	145,195	108,896	36,299
Rural	1,497,920	80.69%	1,208,706	844,440	364,266	10%	327,839	196,703	131,136
<b>Total</b>	<b>2,015,088</b>	<b>85.15%</b>	<b>1,715,847</b>	<b>1,198,744</b>	<b>517,103</b>	<b>9%</b>	<b>473,034</b>	<b>305,599</b>	<b>167,435</b>

3.10 JKPDD-D proposed to meter all the un-metered consumers in the State including un-registered consumers by end of MYT Control period i.e. FY 2015-16. The proposed metering plan by JKPDD-D has been summarized in following table.

**Table 10: Proposed Metering Plan (in Nos.)**

Description	At Start of Financial Year	Target Conversion from Un-regularized to Regularized	Target Conversion from Unmetered to Metered (In No.)	At End of Financial Year
FY 2013-14	690,822	305,599	230,274	766,147
FY 2014-15	766,147	167,435	374,859	558,723
FY 2015-16	558,723	0	558,723	0

3.11 Based on the proposed metering plan, the projected consumer category-wise number of consumers and connected load for the MYT period as projected by JKPDD-D has been summarized below.

**Table 11: Projected Number of Consumers and Connected Load (MW)**

Consumer Categories	No. of Consumers			Connected Load (MW)		
	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
Domestic						
<i>Metered</i>	780,340	1,166,534	1,733,904	676	1,050	1,651
<i>Unmetered</i>	716,861	525,866	-	538	438	-
Non-Domestic/ Commercial						
<i>Metered</i>	121,316	141,021	176,432	234	288	371
<i>Unmetered</i>	44,794	29,863	-	39	33	-
Agriculture						

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Consumer Categories	No. of Consumers			Connected Load (MW)		
	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
<i>Metered</i>	13,394	15,366	18,689	85	105	142
<i>Unmetered</i>	3,733	2,488	-	46	33	-
State/ Central Govt. Dept.						
<i>Metered</i>	10,012	10,278	10,550	196	212	231
<i>Unmetered</i>	-	-	-	-	-	-
Public Street Lighting						
<i>Metered</i>	103	159	269	5	7	12
<i>Unmetered</i>	153	102	-	6	5	-
LT Industrial						
<i>Metered</i>	19,420	19,781	20,149	247	256	266
<i>Unmetered</i>	-	-	-	-	-	-
HT Industrial						
<i>Metered</i>	698	724	750	281	300	321
<i>Unmetered</i>	-	-	-	-	-	-
HT-PIU Industrial						
<i>Metered</i>	15	15	16	38	38	40
<i>Unmetered</i>	-	-	-	-	-	-
LT Public Water Works						
<i>Metered</i>	1,293	1,601	2,136	44	58	87
<i>Unmetered</i>	606	404	-	33	25	-
HT Public Water Works						
<i>Metered</i>	151	159	167	20	23	26
<i>Unmetered</i>	-	-	-	-	-	-
General Purpose/ Bulk Supply						
<i>Metered</i>	148	167	187	38	41	43
<i>Unmetered</i>	-	-	-	-	-	-
<b>Total</b>	<b>1,713,037</b>	<b>1,914,527</b>	<b>1,963,250</b>	<b>2,528</b>	<b>2,911</b>	<b>3,189</b>

3.12 JKPDD-D estimated the category-wise energy sales for the MYT Period based on compounded annual growth rate (CAGR) in energy sales in various consumer categories for the past three years (FY 2009-10, FY 2010-11 and FY 2011-12), the growth observed in the first six months of FY 2012-13 and the proposed metering plan of the un-metered consumers. The projected increase in sales during FY 2013-14, FY 2014-15 and FY 2015-16 over the previous year figures is 16%, 13% & 8%, respectively. Consumer category-wise energy sales projected for the MYT period by JKPDD-D has been summarized in the following table.

**Table 12: Projected Energy Sales Forecast (in MUs)**

Sl. No.	Description	MYT Period		
		2013-14	2014-15	2015-16
1	Domestic			
	- Metered	1,137	1,744	2,768
	- Unmetered	1,003	789	-
2	Non Domestic / Commercial			
	- Metered	453	567	773
	- Unmetered	130	107	-
3	Agriculture			
	- Metered	218	274	379
	- Unmetered	90	71	-
4	State / Central Govt. Department			
	- Metered	534	563	577
	- Unmetered	-	-	-
5	Public Street Lighting			
	- Metered	17	26	45
	- Unmetered	21	16	-
6	LT industrial Supply			
	- Metered	394	420	420
	- Unmetered	-	-	-
7	HT Industrial Supply			
	- Metered	651	710	774
	- Unmetered	-	-	-
8	HT-PIU Industrial Supply			
	- Metered	126	128	129
	- Unmetered	-	-	-
9	LT Public Water Works			
	- Metered	221	242	509
	- Unmetered	226	246	-
10	HT Public Water Works			
	- Metered	102	107	113
	- Unmetered	-	-	-
11	General Purpose / Bulk Supply			
	- Metered	154	162	172
	- Unmetered	-	-	-
	<b>Grand Total</b>	<b>5,478</b>	<b>6,173</b>	<b>6,660</b>

### Commissions Analysis

3.13 In case of un-metered consumption, the J&K Electricity Act 2010 mandated supply of electricity to all consumers through correct meters only and that the power supply is not legally possible to unmetered consumers beyond April, 2012. The relevant provision of the J&K Electricity Act 2010 has been reproduced below:

*“49. Use, etc., of meters.—(1) No licensee shall supply electricity, after the expiry of two years from the commencement of the Act, except through installation of a correct*

*meter in accordance with the regulations to be made in this behalf by the Commission:*

....

*Provided further that the Commission may, by notification, extend the said period of two years for a class or classes of persons or for such area as may be specified in that notification.”*

- 3.14 However, JKPDD-D through its petition dated 25<sup>th</sup> April 2012, citing its inability in accomplishing installation of 100% correct meters at all levels and to all persons by 28<sup>th</sup> April 2012 (being the cut-off date as per Section 49 (1) of the J&K Electricity Act 2010), requested the Commission to extend the period. The Commission vide its Order dated 26<sup>th</sup> April 2012 and in exercise of the powers vested in it under the second proviso to Section 49 (1) of the Act extended the period for supply of electricity, beyond the expiry of two years from the commencement of the Act for installation of correct meters upto 30<sup>th</sup> June, 2013.
- 3.15 The Commission notes with concern that JKPDD-D has again submitted that it is unable to meet the target date for accomplishing 100% consumer metering citing that the target set out in the Act was too optimistic in view of the actual ground realities and that there exists very large number of un-registered/ un-regularized consumers which affect the efforts of the utility. Further, metering of existing consumers having old/defaulted meters also poses challenges. Accordingly, JKPDD-D has now submitted that metering being a continuous process; it would be able to meter all consumers by end of FY 2015-16 including the identified un-regularized consumers.
- 3.16 The Commission views that even though there are challenges at ground level in adhering to the deadline as set out in the J&K Electricity Act 2010 and subsequent extension Order issued by the Commission dated 26<sup>th</sup> April, 2012, the Petitioner has not made sincere efforts in meeting the targets. The Commission notes with serious concern that JKPDD-D had almost three years from the notification of the Act to take steps in metering of unmetered connections but there has not been much progress made by JKPDD-D during this period. Further, even at current stage, there is complete lack of preparedness by JKPDD-D. Even though there are only three months left in expiry of the abovementioned deadline of 30<sup>th</sup> June 2013, the licensee has not prepared any comprehensive workable plan for metering of remaining 11.63 lakhs unmetered consumers which should include identification of province-wise/ circle-wise un-metered consumer, procurement of necessary meters/equipments, phasing of installation, timelines, actual estimate for cost of metering, financing plan, monitoring plan etc. Moreover, the Petitioner in its proposed metering plan has not considered the provisions as laid down in Section 49 (1) of the Act and the directives issued by the Commission in this context which states that no new connections can be released except through installation of a correct meter by the Petitioner; and the proposed metering plan considers first conversion of un-regularized/ un-registered consumers into flat rate consumers (un-metered) consumers and then proposes to meter them by end of the MYT Control period.

- 3.17 In view of the above, the Commission feels that any further extension alone is not going to be sufficient for successful implementation of the metering plan. It has become mandatory that licensee develops a comprehensive metering plan for completion by end of FY 2015-16 and get it approved by the State Government with an undertaking of the support of GoJK on compliance of the relevant provisos of the Act by the Licensee.
- 3.18 Till such time, the Commission for the purposes of the approval of sales/load growth for the MYT Control period has been considered as per the metering plan as submitted by Licensee. However, the same is subject to the grant of approval of a comprehensive metering plan with province-wise/circle-wise metering plan along with investment requirement, financing and procurement plan in line with the relevant provisos of the Act from the State Government. Further, in order to take approval of the Commission, the Petitioner should submit the State Government approved metering plan to the Commission before the completion of existing deadline i.e. by 30<sup>th</sup> June 2013. Alternatively, Section 49 (1) of the Act maybe got suitably amended extending the deadline of 100% metering upto the end of the first MYT Control period.
- 3.19 In case the above conditions are not complied within the stipulated time period, the Commission shall disallow the investment plan for metering as well as all sales to unmetered consumers and shall also direct the licensee to immediately comply with the provision 49 (1) of the J&K Electricity Act, 2010 and the Commission's Order dated 26<sup>th</sup> April 2012 which states that "*No licensee shall supply electricity, after the expiry of two years from the commencement of the Act, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Commission*".
- 3.20 The Commission also directs that no further delay in metering would be admitted beyond the MYT control period and that any such delay would invite penal action against the Petitioner, and would call for suitable action from the Commission under the provisions of the Act and the relevant Regulations of the J&KSERC (Multi Year Tariff Distribution) Regulations, 2012.
- 3.21 In case of metered consumption, the Commission has projected the number of consumers, connected load and energy sales for the MYT control period for FY 2013-14 to FY 2015-16 in accordance with the methodology specified as per Regulation 16 of the J&KSERC (Multi Year Tariff Distribution) Regulations, 2012. The compounded annual growth rate (CAGR) of past 3 years (FY 2009-10, FY 2010-11 and FY 2011-12) has been considered after adjusting for any abnormal variation observed in the past trend for projecting category-wise number of consumers, connected load and energy sales. In addition, the conversion of un-metered consumers to metered consumers has been considered as per the metering plan submitted by the Licensee, subject to approval granted by the State Government before 30<sup>th</sup> June 2013.
- 3.22 Accordingly, the approved number of consumers, connected load and energy sales for the MYT period have been summarized in the following table:



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**Table 13: Approved number of Consumers, Connected Load (MW) and Energy sales (MU)**

Consumer category	No. of Consumers			Connected Load (MW)			Energy Sales (MU)		
	2013-14 (App.)	2014-15 (App.)	2015-16 (App.)	2013-14 (App.)	2014-15 (App.)	2015-16 (App.)	2013-14 (App.)	2014-15 (App.)	2015-16 (App.)
Domestic									
<i>Metered</i>	769055	1140403	1685423	656	863	1439	1055	1494	2731
<i>Unmetered</i>	716861	525865	0	538	438	0	1003	789	0
Non-Domestic/ Commercial									
<i>Metered</i>	118778	137013	170688	216	251	317	416	513	740
<i>Unmetered</i>	44794	29863	0	39	33	0	130	107	0
Agriculture									
<i>Metered</i>	12856	14502	17443	83	102	141	204	265	368
<i>Unmetered</i>	3733	2488	0	46	33	0	90	71	0
State/ Central Govt. Dept.									
<i>Metered</i>	9812	10014	10220	192	205	219	522	538	554
<i>Unmetered</i>	0	0	0	0	0	0	0	0	0
Public Street Lighting									
<i>Metered</i>	93	149	258	4	6	12	15	23	44
<i>Unmetered</i>	153	102	0	6	5	0	21	16	0
LT Industrial									
<i>Metered</i>	19355	19545	19737	245	253	261	378	399	419
<i>Unmetered</i>	0	0	0	0	0	0	0	0	0
HT Industrial									
<i>Metered</i>	695	720	745	298	336	378	647	705	768
<i>Unmetered</i>	0	0	0	0	0	0	0	0	0
HT-PIU Industrial									
<i>Metered</i>	16	17	17	37	37	37	117	123	128
<i>Unmetered</i>	0	0	0	0	0	0	0	0	0
LT Public Water Works									
<i>Metered</i>	1253	1515	1991	38	49	76	184	210	491
<i>Unmetered</i>	606	404	0	33	25	0	226	246	0
HT Public Water Works									
<i>Metered</i>	127	132	136	19	21	23	101	106	112
<i>Unmetered</i>	0	0	0	0	0	0	0	0	0
General Purpose/ Bulk Supply	138	142	146	47	50	52	154	162	172
<b>Total</b>	<b>1698325</b>	<b>1882873</b>	<b>1906804</b>	<b>2498</b>	<b>2705</b>	<b>2958</b>	<b>5263</b>	<b>5767</b>	<b>6526</b>

## Distribution Loss Trajectory

### Petitioners Submission

- 3.23 The distribution loss levels in J&K are one of the highest in the country. In FY 2011-12, the actual losses were reported at 56.4% while in FY 2012-13 losses are estimated to come down to 55.5%. During past three years, JKPDD-D through its efforts has managed to bring down losses by more than 3%, however it is a continuous process and losses would come down gradually. JKPDD-D further submitted that it is making all efforts to reduce distribution losses in the State and has projected that by end of MYT control period it would be able to maintain losses at 40%.
- 3.24 Some of the key investments proposed by JKPDD-D to reduce distribution losses considerably are:
- (a) **R-APDRP schemes:** The main objective of R-APDRP schemes is to bring down T&D losses considerably. Part A of the scheme covers Ring Fencing, Feeder Metering, DT Metering, application of IT and SCADA / DMS in distribution sector. Part B is aimed to strengthen Distribution system in identified areas. The total amount proposed towards R-APDRP schemes is Rs. 3115.09 crores out of which Rs. 2341.49 crores is expected to be incurred by the end of MYT control period.
  - (b) **Technical intervention projects:** JKPDD-D has initiated various technical intervention projects to strengthen the distribution network, reduce distribution losses and improve collection efficiencies. It includes following:
    - (i) Installation of 100% consumer meeting and effective metering at feeder and DT level to facilitate energy accounting and auditing;
    - (ii) Computerization of revenue centers, strengthening and upgrading billing and collection system to improve collection efficiency; &
    - (iii) Strengthening of SLDC.
- 3.25 Considering the capital investment being proposed and other measures being carried out to reduce distribution losses, distribution loss trajectory as proposed by the Petitioner has been summarized in following table:

**Table 14: Projected Distribution loss Trajectory (in %)**

Description	2012-13 (Rev. Est.)	MYT Period		
		2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
Distribution Losses	55.5%	50.0%	44.0%	40.0%

### Commissions Analysis

- 3.26 Even though the licensee has brought down losses in the State in the last couple of years, the T&D loss in the State are still very high. Further, the Commission notes

with concern that JKPDD-D has repeatedly failed to achieve the target for loss as set out by the Commission in its previous Tariff Orders. The actual T&D losses submitted are higher than that proposed by the Petitioner itself in previous Tariff Orders. A summary of proposed T&D loss, approved T&D loss and the actual loss submitted by JKPDD-D during past three years has been summarized in following table:

**Table 15: Distribution T&D loss Targets vs. Actual (in %)**

Description	Proposed by Petitioner in previous Tariff Petition	Approved by Commission in previous Tariff Order	Actual submitted by Petitioner
FY 2010-11	58.98	57.79	60.55
FY 2011-12	59.72	55.99	58.16 *
FY 2012-13	52.82	46.76	57.37 **

Note: \* Based on actual transmission loss of 4.05% and distribution loss of 56.40% for FY 2011-12 as submitted in the present petition; \*\* Based on re-estimated transmission loss of 4.30% and distribution loss of 55.46% for FY 2012-13 as submitted in the present petition

3.27 As can be seen, the utility has been unable to meet the targets set out by the Commission in previous Tariff Orders and also has been unable to achieve the projected loss levels as per its own submission. In case of FY 2012-13, the Commission had set a target for aggregate Transmission & Distribution (T&D) losses of 46.76% for FY 2012-13 in its previous Tariff Order for FY 2012-13 (corresponding to target of distribution loss of 44.5%). However, the re-estimated distribution loss for FY 2012-13 of 55.5% submitted by JKPDD-D itself is substantially higher than the overall T&D loss target set by the Commission.

3.28 The Commission in its previous Tariff Order had set the target for T&D loss of 46.76% for FY 2012-13 after taking into consideration the JKPDD's commitment for metering and implementation of Central Government assisted R-APDRP scheme in the State. The relevant extract of the abovementioned Tariff Order has been summarized below:

*“The Commission is of the view that the T&D loss of 52.82% proposed by JKPDD for FY 2012-13 is very high and unacceptable. Hence, considering JKPDD's commitment for 100% metering by the end of FY 2012-13 and implementation of R-APDRP scheme in the state with the Central Government allocation of Rs 1909 Crore under the scheme (as per JKPDD's submissions), the Commission has decided to approve a T&D loss of 46.76% (10% lower than JKPDD's submission of 56.76% for FY 2011-12) for FY 2012-13.”*

3.29 Further, the Petitioner in its previous Tariff Petition had set itself a target of achieving aggregate T&D loss level of 52.82% in FY 2012-13 (corresponding to distribution loss of approx. 50%). However, the estimated distribution loss for FY 2012-13 is significantly higher than the proposed target by the Petitioner itself.

3.30 Based on above, the Commission is of the view that the JKPDD-D has to make serious efforts to achieve the targets set out for reduction in losses and any

inefficiency on account of the licensee should not be passed on to the consumers. Thus the Commission approves the same aggregate T&D loss for FY 2012-13 i.e. 46.76% (corresponding to distribution loss of 44.5%) and any additional power purchase to meet the T&D losses over and above the target loss level would be disallowed by the Commission. It is pertinent to mention here that the Commission had in its previous Retail Tariff Order for FY 2012-13 discussed the various steps to be taken by the Petitioner in order to reduce the power losses in a separate section (Section A12) under the heading “A Way Forward”. It appears that no serious steps have been taken by the Petitioner in this regard as the losses have not come down to the desired level. It is, therefore, reiterated that the Petitioner takes urgent steps as suggested in the relevant section of the previous Tariff Order to bring down T&D losses.

3.31 In case of distribution loss targets for the MYT period, the Commission feels that in view of the actual position of the losses, the licensee’s proposal of reducing the distribution loss to 40% by end of the MYT control period is acceptable. Accordingly, the distribution loss trajectory as approved by the Commission has been summarized in the following table.

**Table 16: Approved Distribution loss Trajectory (in %)**

Description	2012-13	MYT Period		
		2013-14	2014-15	2015-16
Transmission Losses	4.05% *	4.00% **	4.00% **	4.00% **
Distribution Losses	44.5%	43.0%	41.4%	40.0%
<b>Aggregate T&amp;D Losses</b>	<b>46.76%</b>	<b>45.26%</b>	<b>43.76%</b>	<b>42.26%</b>

Note:\* In absence of system studies to estimate transmission loss, intra-state transmission loss for FY 2012-13 has been considered at the actual loss level for FY 2011-12; \*\* For the MYT period, the Commission approves intra-state transmission loss to be at reasonable level of 4.0%.

3.32 Further, the Commission directs the Petitioner to carry out system studies for determination of transmission loss in the system and also conduct feeder-wise energy audit and consumer indexing for estimating the base T&D loss level. Subsequently, the Petitioner should identify feeders with high loss levels and develop a holistic loss reduction plan for reducing distribution losses on such feeders. The Commission directs the Petitioner to submit a report in this regard within 6 months of issue of this Order.

3.33 Based on its projected energy sales and loss trajectory, the energy requirement for the MYT period as submitted by the Petitioner and as approved by the Commission has been summarized in following table.

**Table 17: Energy Requirement (in MU) for the MYT Period**

Particulars	2013-14		2014-15		2015-16	
	Prop. by JKPDD	App. by Commission	Prop. by JKPDD	App. by Commission	Prop. by JKPDD	App. by Commission
Energy Sales	5478	5263	6173	5767	6660	6526
Add: Distribution Loss (%)	50%	43%	44%	41%	40%	40%
<b>Energy Req'd. @ Trans-Dist. interface</b>	<b>10957</b>	<b>9230</b>	<b>11023</b>	<b>9844</b>	<b>11099</b>	<b>10851</b>

Add: Intra-state Transmission Loss (%)	4.25%	4.00%	4.20%	4.00%	4.15%	4.00%
Energy Req'd. @ State Periphery	11443	9614	11506	10254	11580	11303

## Collection efficiency target

### Petitioners Submission

3.34 Based on the targeted efficiency improvement plan and the technical intervention projects including 100% consumer metering, computerization at revenue centers, billing improvements, etc, JKPDD-D has proposed considerable improvement in collection efficiency by end of MYT control period as summarized in following table.

**Table 18: Projected Collection Efficiency Trajectory (%)**

Description	2012-13 (Est.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
Collection Efficiency	95%	96%	97%	98%

### Commissions Analysis

3.35 The Commission is of the view that with the targeted efficiency improvement plan along with corresponding capital investment, the licensee should be able to achieve 1% per annum improvement in the collection efficiency for the collection made on account of energy sold during the financial year (excluding recovery of past arrears) as proposed by the Petitioner. Accordingly the approved trajectory for collection efficiency has been summarized in following table.

**Table 19: Approved Collection Efficiency Trajectory (%)**

Description	2012-13 (Est.)	2013-14 (App.)	2014-15 (App.)	2015-16 (App.)
Collection Efficiency *	95%	96%	97%	98%

Note: \* The approved target for collection efficiency pertains to collection made on account of energy sold during the year and does not include recovery of past arrears.

## Power procurement plan

### Petitioners Submission

3.36 The energy requirement for the state is met from the following sources:

- (a) Power Purchase from JKSPDC
- (b) Power Purchase from CPSUs (including free power from select stations)
- (c) Power Purchase from other sources

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3.37 JKPDD-D estimated the energy available from own and JKSPDC stations during FY 2012-13 on the basis of actual generation from state-owned stations during the first six months period ending 30<sup>th</sup> September 2012. Further, for the MYT control period, JKPDD-D has assumed that energy available from JKSPDC would be same as that estimated for FY 2012-13. The station-wise energy availability projected from JKSPDC stations for the MYT control period has been summarized in the following table.

**Table 20: Projected availability from JKSPDC Stations (in MUs)**

S. No.	Source	Plant Capacity (MW)	2012-13 (Estd.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
<b>A)</b>	<b>JKPDD's Own generation (Diesel)</b>	23.41	23.76	23.76	23.76	23.76
<b>B)</b>	<b>JKSPDC's Generation - Thermal</b>					
1	Kalakote	0.00	0.00	0.00	0.00	0.00
2	Gas Turbine-I	75.00	5.43	5.43	5.43	5.43
3	Gas Turbine-II	100.00	0.00	0.00	0.00	0.00
	<b>Sub-Total</b>	<b>175.00</b>	<b>5.43</b>	<b>5.43</b>	<b>5.43</b>	<b>5.43</b>
<b>C)</b>	<b>JKSPDC's Generation - Hydel</b>					
1	LJHP	105.00	515.44	515.44	515.44	515.44
2	USHP-I	22.60	83.20	83.20	83.20	83.20
3	USHP-II	105.00	303.69	303.69	303.69	303.69
4	Ganderbal	15.00	18.91	18.91	18.91	18.91
5	Chenani-I	23.30	89.99	89.99	89.99	89.99
6	Chenani-II	2.00	7.31	7.31	7.31	7.31
7	Chenani-III	7.50	21.74	21.74	21.74	21.74
8	Sewa-III	9.00	12.03	12.03	12.03	12.03
9	Karnah	2.00	3.46	3.46	3.46	3.46
10	Sumoor	0.10	0.12	0.12	0.12	0.12
11	Bazgo	0.30	0.67	0.67	0.67	0.67
12	Hunder	0.40	0.78	0.78	0.78	0.78
13	Iqbal Bridge	3.75	7.13	7.13	7.13	7.13
14	Sanjak	1.26	0.08	0.08	0.08	0.08
15	Badherwah	1.00	1.37	1.37	1.37	1.37
16	Pahalgam	3.00	8.17	8.17	8.17	8.17
17	Haftal	1.00	1.45	1.45	1.45	1.45
18	Marpachoo	0.75	0.89	0.89	0.89	0.89
19	Igo-Mercellong	3.00	8.79	8.79	8.79	8.79
20	Stakna	4.00	3.13	3.13	3.13	3.13
21	Matchil	0.35	0.00	0.00	0.00	0.00
	<b>Sub-Total</b>	<b>306.31</b>	<b>1088.31</b>	<b>1088.31</b>	<b>1088.31</b>	<b>1088.31</b>
<b>D)</b>	<b>Baglihar</b>	<b>450.00</b>	<b>1428.54</b>	<b>1428.54</b>	<b>1428.54</b>	<b>1428.54</b>
	<b>Grand Total (A+B+C+D)</b>	<b>958.72</b>	<b>2546.03</b>	<b>2546.03</b>	<b>2546.03</b>	<b>2546.03</b>

3.38 Other than own generation and power available from JKSPDC, the JKPDD-D sources power mainly from CPSUs such as NTPC, NHPC and other hydro power projects. JKPDD-D also has share in power from SJVNL, THDC, TALA (through PTC), KWHEP (through PTC) and NPCIL Plants (i.e. NAPS & RAPP). The projected energy availability from CPSUs for MYT control period has been summarized in the following table.

**Table 21: Projected availability from CPSUs Stations (in MUs)**

S. No.	Source	Plant Capacity (MW)	JKPDD Share	2012-13 (Estd.) MU	2013-14 (Proj.) MU	2014-15 (Proj.) MU	2015-16 (Proj.) MU
<b>A</b>	<b>NTPC</b>						
1	Anta(G)	419	9.14%	248.10	227.01	227.01	227.01
2	Anta(L)						
3	Auriaya(G)	663	8.17%	315.97	327.80	327.8	327.80
4	Auriaya(L)						
5	Dadri(G)	830	7.79%	454.12	404.03	404.0	404.03
6	Dadri(L)						
7	Unchahar-I	420	3.90%	120.99	117.52	117.52	117.52
8	Unchahar-II	420	8.95%	267.25	269.69	269.69	269.69
9	Unchahar-III	210	7.97%	125.74	120.08	120.08	120.08
10	Rihand-I	1000	8.80%	560.46	631.35	631.35	631.35
11	Rihand-II	1000	11.21%	847.01	804.25	804.25	804.25
12	Singrauli	2000	1.81%	209.29	256.83	256.83	256.83
13	Farraka	1600	0.85%	86.98	84.56	84.56	84.56
14	Talcher	1000	0.00%	0.00	0.00	0.00	0.00
15	Kahalgaon-I	840	3.69%	192.51	197.67	197.67	197.67
16	Kahalgaon-II	1500	5.56%	484.76	565.11	565.11	565.11
17	NCTP- Dadri II	980	1.81%	105.57	127.26	127.26	127.26
18	Rihand – III	500	8.37%	0.00	300.25	300.25	300.25
19	Meija – 6	250	7.06%	0.00	119.59	119.59	119.59
<b>A</b>	<b>Sub-Total (1-19)</b>	<b>13632</b>		<b>4023.41</b>	<b>4553.01</b>	<b>4553.01</b>	<b>4553.01</b>
<b>B</b>	<b>NTPC JV</b>						
	Indira Gandhi STPS (Jhajjar)	1000	1.12%	4.67	75.89	75.89	75.89
<b>B</b>	<b>Sub-Total (NTPC-JV)</b>	<b>1000</b>		<b>4.67</b>	<b>75.89</b>	<b>75.89</b>	<b>75.89</b>
<b>C</b>	<b>NHPC</b>						
1	Salal	690.00	22.39%	731.32	674.92	674.92	674.92
	Free power		12.00%	393.60	361.73	361.73	361.73
2	Tanakpur	94.00	7.68%	28.53	33.92	33.92	33.92
3	Chamera-I	540.00	3.90%	95.68	83.01	83.01	83.01
4	Chamera-II	300.00	8.98%	116.06	131.49	131.49	131.49
5	Chamera-III		9.11%	89.83	96.83	96.83	96.83
6	Uri	480.00	21.96%	631.15	554.56	554.56	554.56
	Free power		12.00%	346.87	303.04	303.04	303.04
7	Dulhasti	390.00	11.36%	225.18	248.38	248.38	248.38

S. No.	Source	Plant Capacity (MW)	JKPDD Share	2012-13 (Estd.) MU	2013-14 (Proj.) MU	2014-15 (Proj.) MU	2015-16 (Proj.) MU
	Free power		12.00%	259.36	262.37	262.37	262.37
8	Dauhaliganga	280.00	8.28%	83.23	91.70	91.70	91.70
9	Sewa II	120.00	9.38%	37.03	43.84	43.84	43.84
	Free Power		12.00%	61.44	56.08	56.08	56.08
10	Chutak	44.00	72.00%	0.00	151.52	151.52	151.52
	Free Power		12.00%	0.00	25.25	25.25	25.25
<b>D</b>	<b>Sub-Total - NHPC-Hydro Power</b>	<b>2938</b>		<b>3099.28</b>	<b>3118.65</b>	<b>3118.65</b>	<b>3118.65</b>
1	SJVNL (Nathpa Jakri)	1500.00	8.47%	547.63	572.52	572.52	572.52
2	THDC	1000.00	6.26%	176.25	156.11	156.11	156.11
3	THDC KOTESHWAR	400.00	5.98%	58.74	68.24	68.24	68.24
4	PTC (Tala)	1020.00	1.77%	58.65	60.69	60.69	60.69
5	PTC (BHEP)			78.03	84.68	84.68	84.68
6	PTC (KWHEP)			67.15	67.15	67.15	67.15
<b>E</b>	<b>Others</b>	<b>3920</b>		<b>986.43</b>	<b>1009.39</b>	<b>1009.39</b>	<b>1009.39</b>
1	NAPs	440.00	9.64%	177.56	162.19	162.19	162.19
2	RAPP 3 & 4	440.00	7.95%	249.03	178.34	178.34	178.34
3	RAPP 5	220.00	11.52%	231.99	118.44	118.44	118.44
	Rebate				<b>458.97</b>	<b>458.97</b>	<b>458.97</b>
	<b>Sub-Total (12-13)</b>	<b>1100</b>		<b>658.57</b>	162.19	162.19	162.19
	<b>Total (A+B+C+D+E)</b>			<b>8767.69</b>	<b>9215.90</b>	<b>9215.90</b>	<b>9215.90</b>

3.39 Apart from JKSPDC and share in power from CPSUs, JKPDD-D has also entered into banking arrangements with the neighboring states and has banked certain quantum of surplus energy available in the summer/monsoon months. Actual Net Banking has been assumed as zero for the MYT period as per the approach followed by the Commission in the past. However, the gap in the energy availability as per the Energy Balance is expected to be procured from other short term sources. The energy availability from other sources has been summarized below.

**Table 22: Projected availability from Other Sources (in MUs)**

S. No.	Source	2012-13 (Estd.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
1	Additional Tie-up from New Sources	0	96	159	233
2	Net UI/Power Purchased from ST Purchases/ Banking	152	0	0	0
	<b>Total</b>	<b>152</b>	<b>96</b>	<b>159</b>	<b>233</b>

3.40 Based on the availability of power from different sources, total power procurement being planned during MYT period to meet the energy requirement as proposed by the Petitioner has been summarized in the following table.



**Table 23: Total Power Procurement Planned (in MUs)**

Energy Procurement/Availability	2012-13 (Estd.)	2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
Power purchase from own sources & JKSPDC	2,546	2,546	2,546	2,546
Power purchase from CPSUs	8,768	9,216	9,216	9,216
<i>(Less) : Interstate Transmission Loss</i>	<i>(395)</i>	<i>(415)</i>	<i>(415)</i>	<i>(415)</i>
Additional Tie-up from New Sources	0	96	159	233
UI/Power Purchased from ST Purchases	152	0	0	0
<b>Total Energy Available</b>	<b>11,071</b>	<b>11,443</b>	<b>11,506</b>	<b>11,580</b>

### Commissions Analysis

- 3.41 As mentioned above, JKPDD-D sources power from own sources, state owned generating company namely JKSPDC, allocated/ unallocated share in CPSUs, banking arrangement, short term purchase through UI, and any other source.
- 3.42 In order to project the energy availability from JKSPDC stations, the Commission verified the actual net energy generated and sent out during FY 2012-13 as per the submission made by the JKSPDC. Accordingly, the Commission approves net energy available from JKSPDC to be 2541 MU for FY 2012-13 and the same is considered for the MYT period.
- 3.43 The energy availability from CPSU's stations including NTPC, NHPC, NPCIL, PTC, etc has been estimated on the basis of long term allocated share to JKPDD-D from these stations along with proportion of un-allocated share available during past two years. The average availability from these stations has been worked out, which is then used to estimate the future availability during the MYT period. Accordingly, the Commission approves energy available from CPSUs to be 9028 MU for MYT period from FY 2013-14 to FY 2015-16.
- 3.44 The Commission has not projected any power availability from short term sources or banking arrangement for the MYT control period, but has considered power purchase from renewable energy sources for meeting the Renewable Purchase Obligation (RPO) by the Petitioner in accordance with the J&KSERC (Renewable Power Purchase Obligation, its Compliance and REC Framework implementation) Regulations, 2011 and J&KSERC Notification No. JKSERC/27 dated 5<sup>th</sup> March 2013. As per the above mentioned Notification, the RPO target for the MYT Period have been summarized in the following table:

**Table 24: Renewable Purchase Obligation (RPO) for MYT period (in %)**

Description	2013-14	2014-15	2015-16
<b>RPO Target as per Notification No. JKSERC/27 dated 5<sup>th</sup> March 2013</b>			
Solar	0.25%	0.75%	1.50%
Non-Solar	4.75%	5.25%	6.00%
<b>Total</b>	<b>5.00%</b>	<b>6.00%</b>	<b>7.50%</b>

Note: RPO in MUs is estimated as a percentage of total energy requirement based on above mentioned targets.

- 3.45 The Commission estimated the power available from renewable energy sources during the MYT period on the basis of the RPO targets as summarized in Table 24 and approved energy requirement as summarized in Table 17 of this Order. Accordingly, the power available from renewable sources works out to be 481 MU, 615 MU and 848 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively. Out of the above, the solar RPO works out to be 24 MU, 77 MU and 170 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively and non-solar RPO is 457 MU, 538 MU and 678 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively. The solar RPO has to be met either through power purchase from solar energy generator or purchase of solar Renewable energy certificates (RECs) available in the power exchange. While non-solar RPO can be met through purchase of non-solar power (including already tied up power from small hydro stations of JKSPDC having installed capacity < 25 MW) and purchase of non-solar RECs. Projected power available from JKSPDC's small hydro stations during FY 2013-14, FY 2014-15 and FY 2015-16 is 272 MU per annum. Thus requirement of non-solar power/RECs to meet non-solar RPO works out to be 184 MU, 266 MU and 406 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively. Accordingly, the Commission approves net energy available from solar & non-solar sources (other than already tied up power from small hydro stations of JKSPDC) to be 208 MU, 343 MU and 575 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively.
- 3.46 Further, as stated above in Para 3.30, the Commission has disallowed additional power purchase to meet the T&D losses over and above the target loss level by the licensee during the MYT period. The disallowed units of power purchase works out to be 1804 MU, 1172 MU and 137 MU for FY 2013-14, FY 2014-15 and FY 2015-16, respectively. However, this is subject to true up based on actual data of energy sales and power purchased quantum to be submitted by the Petitioner along with APR and Tariff Petition for FY 2014-15.
- 3.47 Based on the above analysis, the approved energy availability from all sources of power for the MYT control period has been summarized in the following table.

**Table 25: Approved energy available (in MUs)**

Sl. No.	Particulars	2013-14	2014-15	2015-16
<b>A</b>	<b>JKPDD - Own Station (Diesel)</b>	24	24	24
<b>B</b>	<b>JKSPDC – Thermal</b>			
1	Kalakote	0	0	0
2	Gas Turbine-I	5	5	5
3	Gas Turbine-II	0	0	0
	<b>Sub-Total (B)</b>	<b>5</b>	<b>5</b>	<b>5</b>
<b>C</b>	<b>JKSPDC – Hydel</b>			
1	LJHP	495	495	495
2	USHP-I	87	87	87
3	USHP-II	312	312	312
4	Ganderbal	19	19	19
5	Chenani-I	85	85	85
6	Chenani-II	7	7	7

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7	Chenani-III	23	23	23
8	Sewa-III	12	12	12
9	Karnah	3	3	3
10	Sumoor	0	0	0
11	Bazgo	1	1	1
12	Hunder	1	1	1
13	Iqbal Bridge	7	7	7
14	Sanjak	3	3	3
15	Badherwah	2	2	2
16	Pahalgam	9	9	9
17	Haftal	2	2	2
18	Marpachoo	1	1	1
19	Igo-Mercellong	11	11	11
20	Stakna	3	3	3
21	Matchil	0	0	0
	<b>Sub-Total (C)</b>	<b>1083</b>	<b>1083</b>	<b>1083</b>
<b>D</b>	<b>Baglihar</b>	<b>1429</b>	<b>1429</b>	<b>1429</b>
	<b>Total State owned generation (A+B+C+D)</b>	<b>2541</b>	<b>2541</b>	<b>2541</b>
<b>E</b>	<b>NTPC</b>			
1	Anta	130	130	130
2	Auriaya	327	327	327
3	Dadri	400	400	400
4	Unchahar-I	122	122	122
5	Unchahar-II	280	280	280
6	Unchahar-III	122	122	122
7	Rihand-I	660	660	660
8	Rihand-II	825	825	825
9	Singrauli	291	291	291
10	Farraka	87	87	87
11	Talcher	0	0	0
12	Kahalgaon-I	198	198	198
13	Kahalgaon-II	562	562	562
14	NCTP- Dadri II	187	187	187
15	Rihand - III	0	0	0
16	Mejia – 6	122	122	122
17	Indira Gandhi STPS (Jhajjar)	34	34	34
	<b>Sub-Total (E)</b>	<b>4346</b>	<b>4346</b>	<b>4346</b>
<b>F</b>	<b>NHPC</b>			
1	Salal	674	674	674
	Free power	362	362	362
2	Tanakpur	33	33	33
3	Chamera-I	83	83	83
4	Chamera-II	132	132	132
5	Chamera-III	0	0	0
6	Uri	555	555	555

	Free power	303	303	303
7	Dulhasti	505	505	505
	Free power	262	262	262
8	Dauhaliganga	91	91	91
9	Sewa II	101	101	101
	Free Power	56	56	56
10	Chutak	0	0	0
	Free Power	0	0	0
	<b>Sub-Total (F)</b>	<b>3156</b>	<b>3156</b>	<b>3156</b>
<b>G</b>	<b>NPCIL</b>			
1	NAPs	161	161	161
2	RAPP 3 & 4	178	178	178
3	RAPP 5	238	238	238
	<b>Sub-Total (G)</b>	<b>577</b>	<b>577</b>	<b>577</b>
<b>H</b>	<b>Others</b>			
1	SJVNL (Nathpa Jakri)	572	572	572
2	THDC	155	155	155
3	THDC KOTESHWAR	0	0	0
4	PTC (Tala)	70	70	70
5	PTC (BHEP)	85	85	85
6	PTC (KWHEP)	67	67	67
	<b>Sub-Total (H)</b>	<b>949</b>	<b>949</b>	<b>949</b>
	<b>Total - Outside State sources (E+F+G+H)</b>	<b>9028</b>	<b>9028</b>	<b>9028</b>
<b>I</b>	<b>Renewable purchase obligation</b>	<b>208</b>	<b>343</b>	<b>575</b>
<b>J</b>	<b>UI (+)/ UI (-)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>K</b>	<b>Banking</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>L</b>	<b>Power traded (disallowed)</b>	<b>-1804</b>	<b>-1275</b>	<b>-419</b>
	<b>Gross Energy Availability</b>	<b>9973</b>	<b>10637</b>	<b>11725</b>
	Less: Inter-state Transmission Loss @ 3.6%	359	383	422
	<b>Net Energy Availability</b>	<b>9614</b>	<b>10254</b>	<b>11303</b>

### Capital Investment plan

3.48 JKPDD-D submitted the capital investment plan for the entire MYT control period on the basis of load/sales growth, loss reduction trajectory, efficiency targets, metering plan and power procurement plan proposed for the MYT control period i.e. FY 2013-14 to FY 2015-16. The Commission analyzed each scheme separately and accorded its approval for the MYT Control period. However as the proposed schemes are at planning or execution stage only, the approval granted is provisional subject to true up based on actual expenditure incurred and the benefits accruing from each scheme. All the new schemes contemplated by the Petitioner for strengthening & improving the distribution network need initially to be discussed along with the Detailed Project Reports (DPRs) in the quarterly meetings of the Commission. Further, the Petitioner should submit scheme-wise detailed cost benefit analysis with the Annual Performance Review (APR) and Tariff Petition to be filed for FY 2014-15 in next financial year.

3.49 The following sub-section summaries the scheme-wise details of projected capital expenditure as submitted by JKPDD-D and as approved by the Commission for the entire MYT period from FY 2013-14 to FY 2015-16.

#### **A. RGGVY Works**

##### **Petitioners Submission**

3.50 REC has sanctioned 14 schemes in the State of J&K for system improvement and strengthening/ up-gradation of distribution works at a cost of Rs. 917.02 Cr. In total the above schemes envisage electrification of 356 virgin villages, un-electrified and de-electrified villages, which are financially viable for electrification within the Grid System. Under the scheme 3,03,682 rural household connections are proposed to be provided. The BPL households which are earmarked to be electrified free of cost are 1,10,337 and 5,889 already electrified villages are to be covered for intensive electrification under the scheme. Further, as per the guidelines issued by REC, the works are to be executed by PSUs and accordingly the State Govt. has entrusted the execution of work in the seven districts namely, Jammu, Kathua, Udhampur, Srinagar Budgam Kargil and Leh to NHPC and in the balance districts namely Poonch, Rajouri, Doda, Anantnag, Pulwama Baramulla and Kupwara to JKSPD.

3.51 JKPDD-D further submitted that out of total project cost of Rs. 917.01 Cr, cumulative capital expenditure incurred upto 31<sup>st</sup> March, 2012 was Rs. 568.57 Cr. JKPDD-D proposes to incur the balance amount in 2 equal tranches i.e. of Rs. 174.23 Cr each in FY 2012-13 and FY 2013-14.

##### **Commissions Analysis**

3.52 The RGGVY schemes are ongoing schemes for which capital expenditure has been approved in the J&KPDD Resource Plan for FY 2013-14. Further, more than 60% of works/ capital investment have already been incurred by JKPDD-D on such works and balance works are likely to be completed in FY 2013-14. Thus, keeping in mind the overall socio-economic benefits' arising from the project, the Commission approves the proposed outlay on the above-mentioned schemes i.e. Rs. 174.23 Cr each in FY 2012-13 and FY 2013-14.

#### **B. PMRP Works**

##### **Petitioners Submission**

3.53 Hon'ble Prime Minister of India, during his visit to J&K State in November 2004, announced a Reconstruction Plan at an estimated cost of Rs. 707 Cr subsequently revised to Rs.1,351 Cr. The scheme envisages construction / augmentation of transformation and transmission works at 220 kV and 132 kV level. JKPDD-D submitted that upto 31<sup>st</sup> March 2012, total estimated expenditure of Rs. 1048.55 Cr was incurred, while the balance amount of Rs. 302.45 Cr is proposed to be incurred during the current financial year i.e. FY 2012-13.

### **Commissions Analysis**

- 3.54 As the funds for PMRP Works relates to construction/augmentation of transformation and transmission works at 220 kV and 132 kV level, the Commission is of the view that any capital expenditure under this head has to be included in the investment plan for Transmission business of JKPDD. Accordingly, for the purposes of approving the Capital investment plan for JKPDD-D, the Commission has not considered any amount under this head in this Order.

### **C. R-APDRP Works**

#### **Petitioners Submission**

- 3.55 The JKPDD-D is undertaking several works under the Restructured Accelerated Power Development Programme (R-APDRP) scheme to bring down T&D losses which at present are considerably high in the State. Works have been planned under Part A and Part B of the scheme. Part A works cover Ring Fencing, Feeder Metering, DT Metering, application of Information Technology and supervisory Control and Data Acquisition (SCADA) /DMS in distribution sector, while Part-B is aimed to strengthen Distribution System in identified project areas. 30 towns have been identified as project areas in J&K state with population of above 10,000 as per 2001 Census. The GoI has sanctioned Rs 151.99 Cr for Part-A and Rs 1,665.27 Cr for part-B of R-APDRP. DPR for SCADA/DMS for Jammu and Srinagar cities has been approved at an estimated cost of Rs 52.89 Cr.
- 3.56 Further, the JKPDD-D submitted that it has prepared additional DPRs in respect of towns/areas with population of 4,000 and above on the pattern of R-APDRP with an objective to reduce T&D losses in the state in accordance with directions of Central Electricity Authority/ Government of India under which 283 towns have been identified. Part-A of 283 towns is to cost Rs. 171.61 Cr and Part-B will cost Rs. 1073.33 Cr. These projects are proposed to be taken up under Phase-II of R-APDRP through a special dispensation which could not materialize. These schemes are now proposed to be taken up under National Electricity Fund for which REC is the nodal agency.

### **Commissions Analysis**

- 3.57 Capital investment works under R-APDRP scheme are part of ongoing schemes for which capital expenditure has been approved in the J&KPDD Resource Plan for FY 2013-14. Further, out of the approved outlay of Rs. 204.88 Cr under Part-A of the scheme on ring-fencing & SCADA works, approx. Rs. 157.78 Cr are expected to be incurred by end of FY 2012-13. Remaining expenditure on Part-A works i.e. Rs. 47.10 Cr is proposed to be incurred during FY 2013-14 and same is being approved by the Commission.
- 3.58 In case of works to be undertaken as per Part-B of the scheme, the approved outlay during FY 2013-14 is Rs. 350 Cr in the J&KPDD Resource Plan for FY 2013-14. Accordingly, the Commission approves Rs. 350 Cr for works under Part-B for FY 2013-14. Further, in line with the total approved outlay of Rs.1665 Cr for projects

under Part-B, the Commission provisionally approves the planned expenditure projected by the Petitioner i.e. Rs. 450 Cr and Rs. 500 Cr for FY 2014-15 and FY 2015-16, respectively. The Commission will approve the actual expenditure on Part B schemes for remaining period of MYT period subject to approval by State Government in the JKPDD's Resource Plan for FY 2014-15 and actual expenditure incurred during FY 2012-13 and FY 2013-14.

- 3.59 The Commission appreciates the steps taken by the JKPDD-D in bringing in additional 283 towns under the ambit of R-APDRP works. However, the funds under special dispensation not being materialised remains an area of concern and the State Government has also not approved any outlay under this head for FY 2013-14 in its Resource Plan for the said year. Thus, the Commission has approved no expenditure under this head for FY 2013-14. However, proposed funds to be channelized from the Central Government scheme on National Electricity Fund (NEF) scheme i.e. an interest subsidy scheme for works undertaken which are similar to R-APDRP works would be available from FY 2014-15 only i.e. after JKPDD-D is able to meet pre-eligibility criteria and also the eligibility criteria of actual AT&C loss reduction of approx. 3-6% per annum. Also as the proposed schemes would result in substantial reduction of T&D losses, the Commission provisionally approves the proposed expenditure under this head for FY 2014-15 and FY 2015-16 as Rs. 350 Cr and Rs. 272 Cr respectively, subject to approval from the State Government in next year's Resource Plan and cost benefit analysis for the additional schemes and submit the same along with the APR & Tariff petition for FY 2014-15.

#### **D. New Distribution Works**

##### **Petitioners Submission**

- 3.60 JKPDD-D proposes to undertake new distribution works estimated at a cost of Rs. 1,086.50 Cr during the MYT control period. Further the said works are to be funded through grants from State Government.

##### **Commissions Analysis**

- 3.61 The Commission asked the Petitioner to submit scheme-wise details of the proposed capital investment under the new distribution works. The Petitioner submitted that all the schemes under this head are under planning stage and details would be submitted on finalisation of DPRs along with administrative approval from the State Government.
- 3.62 The Commission views that the projected expenditure of Rs. 87 Cr, Rs. 163 Cr and Rs. 217 Cr for FY 2013-14, FY 2014-15 and FY 2015-16 on the proposed schemes under this head is very high. Further, to conduct a detailed scrutiny of the said schemes the Commission asked the Petitioner to submit additional information including scheme-wise detailed DPRs and administrative approval from State Government, which was not provided by the Petitioner. However, in light of the nature of works and funds to be available from approved outlay under the State plan as per JKPDD's Resource Plan for FY 2013-14, the Commission provisionally approves 50% of the proposed capital expenditure under this head subject to approved

outlay by State Government in JKPDD's Resource Plan for FY 2014-15 and the detailed investment plan along with the cost benefit analysis for the proposed new distribution works to be submitted along with the APR & Tariff petition for FY 2014-15.

## **E. REC Funded Projects**

### **Petitioners Submission**

3.63 JKPDD-D is also implementing several REC funded schemes including 2 schemes at 132/33kV level, 21 schemes at 66-33/11 kV level and 13 pump set schemes and all are under construction. The total amount of projects planned under REC funding is estimated at Rs. 310.05 Cr and an amount of Rs. 110.05 Cr was spent upto 31<sup>st</sup> March 2012 and remaining expenditure is proposed to be incurred in phased manner during the MYT period.

### **Commission's Analysis**

3.64 The Commission noted that these are ongoing projects which have been funded by the REC. Approx. 35% of investment has already been incurred and remaining has been proposed to be incurred in phased manner. Further, the approved outlay under this scheme during FY 2013-14 is projected to be Rs. 50 Cr as per the details available in the J&KPDD Resource Plan for FY 2013-14. Accordingly, the Commission approves Rs. 50 Cr for works under this head for FY 2013-14.

3.65 The remaining expenditure of Rs.125 Cr, is also approved by the Commission provisionally to be incurred in phased manner during FY 2014-15 and FY 2015-16 subject to approval by State Government in the JKPDD's Resource Plan for FY 2014-15 and actual expenditure incurred during FY 2012-13 and FY 2013-14.

## **F. Technical Interventions and Other Projects**

### **Petitioners Submission**

3.66 Other than the above mentioned capital works/ schemes, JKPDD-D also submitted that it would implement several technical intervention projects aimed at efficiency improvement and other system studies. The schemes under this head include following:

- (a) **Metering** – JKPDD-D submitted that the present level of consumer metering is only 50% of the total consumers in the State and hence there is considerable scope to improve consumption assessment thus increasing revenue by metering consumers and assessing power consumption of earlier non assessed actual power consumption and consequent recovery. The un-metered consumption not only results in wrong assessment but also encourages wasteful consumption of power by consumers. Although JKPDD-D achieved 100% metering at feeder level in March, 2007, the consumer metering is an ongoing process and needs to be continued by replacing defective meters, CT's, PT's and allied equipment. JKPDD-D submitted the metering plan for



existing 11.63 lakh un-metered consumers to be metered during the MYT control period at an estimated cost of Rs. 143.12 Cr to be incurred in phased manner. Further, if there is any additional funding requirement at a later stage, same will be submitted to the Commission for approval along with the detailed justification.

- (b) **Strengthening and upgrading the Billing and Collection System** - To improve financial health, besides metering, due importance is required to be given to strengthening and upgrading billing and collection system. Computerization of revenue centres is essential to improve the collection efficiency. An amount of Rs. 1.70 Cr is proposed to be incurred towards this project till FY 2018-19.
- (c) **Power factor Correction** - The J&K state depends upon the drawal of power from Northern Grid. Due to poor power factor there is excessive drawl of reactive power which causes consequent poor system voltage and operation of generating station with less generation capability. The drawal of excessive reactive energy from the Northern Grid also increases the power purchase bill of the state. Reactive consumption is required to be reduced for improvement of quality, lowering of energy purchase bills and improvement of generation capabilities of Power Houses. NRPC has already sanctioned a scheme at a cost of Rs. 22 crores for reactive compensation in the state. The scheme stands implemented at 33kV level in the Grid Sub Stations of Kashmir Valley and Jammu. However all grid sub stations are not covered. Accordingly, an investment of Rs. 50.42 crores is proposed for power factor improvement at 33kV and 11kV level. Further in order to improve power factor and voltage at the consumer end, it is proposed to install LT shunt capacitors at major distribution transformers in the state. The year-wise requirement of LT shunt capacitors is estimated to be about 41,000 kVAR. The projected total investment required for power factor improvement by way of installation of LT shunt capacitors is Rs. 3.02 crores.
- (d) **Strengthening of SLDC** - The State Load Dispatch Centre (SLDC) functioning at Gladni, Jammu and Sub Load Dispatch Centre functioning at Bemina Srinagar need improvement by way of providing RTUs at substations, which are currently not available and also by way of providing communication through PLCC/ Fiber Optics. The scheme costing Rs. 75 crores has been assigned to PGCIL for implementation. In addition, an amount of Rs. 4 crores is budgeted towards new PLCC and renovation of existing PLCC system.
- (e) **Energy Conservation** - Demand Side Management (DSM) initiatives need to be taken up for conservation of energy. This would include preparation of DSM Plan, assessment of potential, undertaking preliminary studies, providing CFLs at subsidized rates, providing LED lights and undertaking awareness campaign through print and electronic media and through seminars, symposia and public workshops. This would also require restructuring of tariff so as to introduce ToD tariff, Power factor incentives, seasonal tariff etc. TERI has proposed Rs. 35 crores (till 2018-19) as investment for taking up energy conservation measures.

- (f) **Training and Capacity Building** - National Training Policy for the Power Sector emphasizes a need for all organizations in power sector to adopt a training policy to ensure training for all personnel for a minimum period of one week per annum. In this context it is essential to establish Training institute which includes construction building, training hostel, staff quarters, work shop, Lecture Halls and allied facilities such as Laboratory, garden and other training aids including transportation facility. On the basis of the estimation made by TERI, the total requirement of funds for establishing training institute is Rs. 60 crores which is proposed to be incurred in three years time from 2012-13 to 2014-15.
- (g) **Power System Studies** - The power system studies are required to be carried out in the state on a regular basis so as to assess demand forecast both short term and long term, prepare master plan for planning of generation, transmission and distribution including short circuit and stability studies, estimation of T&D losses, identify the overloaded feeders and transformers etc. The total capital expenditure proposed towards power system studies is Rs. 5.0 crores from 2012-13 to 2018-19.

### Commissions Analysis

- 3.67 The Commission is of the view, that the proposed schemes under technical intervention such as metering plan, strengthening & upgrading of billing & collection system, power factor correction and energy conservation are important steps in the right direction by the Petitioner to improve its overall operational efficiency. Further, the costs proposed under each of the above-mentioned items apparently appear to be within reasonable limits while the benefits accruing from them such as assessment of additional revenue which was earlier not assessed pertaining to un-metered consumers and improved collection efficiency cannot be under estimated. Hence the Commission approves the capital expenditure proposed under metering, strengthening & upgrading of billing & collection system, power factor correction and energy conservation as proposed by the Petitioner.
- 3.68 In case of the proposed metering plan for targeted 11.63 lakh un-metered consumers, the Commission has provisionally approved the proposed capital expenditure subject to submission of State Government approved comprehensive metering plan with province-wise/circle-wise metering plan along with investment requirement, financing and procurement plan before 30<sup>th</sup> June 2013. Further, as mentioned in Para 3.19, in case the above conditions are not complied with within the stipulated time period, the Commission shall disallow the investment plan for metering as well as all sales to unmetered consumers and shall also direct the licensee to immediately comply with the provisions of Section 49 (1) of the J&K Electricity Act, 2010 which states that *“No licensee shall supply electricity, after the expiry of two years from the commencement of the Act, except through installation of a correct meter in accordance with the regulations to be made in this behalf by the Commission”*. Further, the deadline of 100% metering was extended by the Commission upto 30<sup>th</sup> June 2013 on the basis of the petition filed by the Petitioner which needs to be strictly adhered to.

- 3.69 Further, the Petitioner should also conduct an independent audit of actual consumers metered and pending for metering during the MYT period and submit Quarterly reports to the Commission for monitoring purposes.
- 3.70 Also it should be noted that the Commission would allow any additional expenditure for metering plan on the basis of actual cost-benefit analysis and independent audit reports/ causal analysis for requirement of additional expenditure. In absence of any such detailed analysis, the Commission would not allow any other additional expenditure.
- 3.71 Further, with respect to the proposed investment for strengthening of SLDC, the Commission is of the opinion that on the un-bundling of JKPDD, the SLDC function would form part of the transmission business, hence any capital investment for strengthening of SLDC system should form part of the business plan for transmission business. Accordingly the Commission has not approved any cost under this head while approving the business plan for distribution business of the JKPDD.
- 3.72 In case of proposed investment for training and capacity building, the Commission is of the view that as it pertains to both the distribution and transmission business of the Petitioner, only the expenditure pertaining to distribution business of JKPDD should be considered under this Business Plan. The Commission has allocated the expenditure for training and capacity building in ratio of actual number of employees in Distribution business of JKPDD at end of FY 2011-12. The ratio of employees for distribution business/total employees in JKPDD is 87% and same is then multiplied with the proposed expenditure on training and capacity building to arrive at expenditure for distribution business which works out to Rs. 52.4 Cr.
- 3.73 In case of Power system studies, the Commission is again of the view that as it pertains to both the distribution and transmission business of the Petitioner, only the expenditure pertaining to distribution business of JKPDD should be considered under this Business Plan. Accordingly, the Commission has allocated the cost to distribution business in ratio of GFA for distribution business and total GFA for JKPDD, which works out to be 74%. The capital investment approved for power system studies for distribution business which works out to be Rs. 2.60 Cr. The Commission further directs the Petitioner to submit proposal for studies to be undertaken during FY 2013-14 within 3 months from the date of issue of this Order along with detailed cost benefit analysis of each study.
- 3.74 Based on the above analysis, the capital investment plan for the MYT period as submitted by JKPDD-D and as approved by the Commission has been summarized in the following table.

**Table 26: Summary of Capital Investment Plan (in Rs. Cr.)**

Particulars	2013-14		2014-15		2015-16	
	Prop. by JKPDD	App. by Commission	Prop. by JKPDD	App. by Commission	Prop. by JKPDD	App. by Commission
RGGVY Projects	174.23	174.23	0.00	0.00	0.00	0.00
PMRP Projects	0.00	0.00	0.00	0.00	0.00	0.00
R-APDRP Projects	547.10	397.10	800.00	800.00	771.61	771.61

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New Distribution Works	86.92	43.46	162.98	81.49	217.30	108.65
REC Funded Projects	50.00	50.00	50.00	50.00	75.00	75.00
Others	70.69	45.89	83.26	44.84	27.25	26.62
<b>Total</b>	<b>928.94</b>	<b>710.68</b>	<b>1,096.24</b>	<b>976.33</b>	<b>1,091.16</b>	<b>981.88</b>

### Capitalization plan

#### Petitioners Submission

3.75 JKPDD-D submitted the capitalization schedule based on the year of completion of various projects being undertaken by JKPDD-D and same has been summarized in following table.

**Table 27: Proposed Capitalization Plan (in Rs. Cr.)**

Sl. No.	Description	2013-14	2014-15	2015-16
1	RGGVY Projects	174.23	87.11	0.00
2	PMRP Projects	151.23	0.00	0.00
3	R-APDRP Projects	376.05	673.55	785.81
4	New Distribution Works	54.33	124.95	190.14
5	REC Funded Projects	50.00	50.00	75.00
6	Others	70.69	83.26	27.25
<b>7</b>	<b>Total</b>	<b>876.52</b>	<b>1,018.87</b>	<b>1,078.19</b>
8	Projected Capital expenditure	928.94	1,096.24	1,091.16
<b>9</b>	<b>Ratio of proposed capitalisation/ capital expenditure</b>	<b>94%</b>	<b>93%</b>	<b>99%</b>

#### Commission's Analysis

3.76 The Commission is of the view that the proposed capitalization as ratio of proposed capital expenditure during the MYT period of average 95% is too high. Further, the estimated capitalization during the existing FY 2012-13 is only 58% of the capital expenditure incurred. Thus Commission has applied prudence check and has approved only reasonable capitalization for the MYT control period.

3.77 The Commission has approved capitalization for each scheme separately by applying the past approval ratio of capitalization as approved in the previous Tariff Order for JKPDD.

3.78 In case of RGGVY projects, the Commission has approved the capitalization as proposed by the Petitioner as the scheme is nearing completion. No capitalization has been considered for PMRP projects as it pertains to transmission business of JKPDD. In case of other projects the Commission has applied the ratio of approved capitalization for FY 2012-13 as per previous Tariff Order for FY 2012-13 which works out to approx. 70%. Accordingly, the approved capitalization ratio for FY 2013-14, FY 2014-15 and FY 2015-16, works out to 76%, 78% and 69% respectively. The following table summarizes the approved capitalization schedule for the entire MYT control period.

**Table 28: Approved Capitalization Plan (in Rs. Cr.)**

Sl. No.	Description	2013-14	2014-15	2015-16
1	RGGVY Projects	174.23	87.11	0.00
2	PMRP Projects	0.00	0.00	0.00
3	R-APDRP Projects	272.95	552.28	532.68
4	New Distribution Works	27.17	56.26	75.01
5	REC Funded Projects	34.52	34.52	51.78
6	Others	31.68	30.96	18.38
<b>7</b>	<b>Total</b>	<b>540.54</b>	<b>761.13</b>	<b>677.85</b>
8	Approved Capital expenditure	710.68	976.33	981.88
<b>9</b>	<b>Ratio of Approved capitalisation/ capital Ex</b>	<b>76%</b>	<b>78%</b>	<b>69%</b>

## Monitoring of Capital Investment

- 3.79 The Commission has observed in the past that the Petitioner had submitted a capital investment plan along with a capitalization schedule but the same is not adhered to and the schemes more often turn in to cost and time over runs due to delay in commencement of schemes and/or project management issues during implementation. Moreover, it has also been observed that many schemes for which approvals are sought from the Commission either do not have a defined objective in terms of load growth, loss reduction, system strengthening, quality of supply etc or the benefits accruing from such schemes are not captured and monitored correctly by the Petitioner.
- 3.80 In view of the above, the Commission has designed a monitoring mechanism for the capital investment schemes approved by the Commission wherein the Petitioner shall submit a quarterly information on each of all the existing schemes approved by the Commission along with the Detail Project Report of all new schemes approved by the Commission which are being implemented in the ensuing quarter. The information to be submitted should be consistent with the DPR for the respective schemes. Any scheme without a detailed DPR would be disallowed by the Commission. The format for the submission of quarterly information is enclosed in the **Annexure 1** of this Order. The Petitioner is directed to submit the desired information along with the DPRs of new schemes within the first week succeeding every quarter on cumulative basis. Non-compliance in this regard shall invite penal action.

## Financing plan

### Petitioners Submission

- 3.81 JKPDD-D submitted that the entire proposed capital investment, except REC funded projects are funded by way of Government Grants / Subsidies, while no equity has been considered by the JKPDD-D. The proposed financing plan as submitted by JKPDD-D has been summarized in the following table.

**Table 29: Proposed Financing Plan (in Rs. Cr.)**

Sl. No.	Particulars	Total for MYT	Govt Grants	Debt	Equity
1	RGGVY Projects	174.23	174.23	0.00	0.00
2	PMRP Projects	0.00	0.00	0.00	0.00
3	R-APDRP Projects	2,118.71	2,118.71	0.00	0.00
4	New Distribution Works	467.20	467.20	0.00	0.00
5	REC Funded Projects	175.00	0.00	175.00	0.00
6	Others	181.20	181.20	0.00	0.00
	<b>Total</b>	<b>3,116.34</b>	<b>2,941.34</b>	<b>175.00</b>	<b>0.00</b>

### Commissions Analysis

3.82 The Commission has approved the financing plan based on the approved capitalization schedule and same has been summarized in the following table.

**Table 30: Approved Financing Plan (in Rs. Cr.)**

Sl. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Equity	0.00	0.00	0.00
2	Debt (REC)	506.02	726.61	626.07
3	Government grants/ subsidies	34.52	34.52	51.78
	<b>Total</b>	<b>540.54</b>	<b>761.13</b>	<b>677.85</b>

### ARR for MYT Control Period

#### Petitioners Submission

3.83 Based on the projected sales/load growth, distribution loss trajectory, efficiency targets, power procurement plan and the capital investment plan, the JKPDD-D has also submitted the summary of proposed ARR for the MYT control period and same has been summarized in the following table.

**Table 31: Summary of proposed ARR for MYT Control Period (in Rs. Cr.)**

Sl. No.	Description	2012-13 (Rev. Est.)	MYT Period		
			2013-14 (Proj.)	2014-15 (Proj.)	2015-16 (Proj.)
1	Power Purchase Cost				
a)	Purchase of Power from JKSPDC	617.06	631.17	650.10	669.61
b)	Purchase of Power from Other sources (including inter-state transmission charges)	3205.34	3132.96	3277.78	3426.98
	<b>Sub-Total</b>	<b>3822.40</b>	<b>3764.13</b>	<b>3927.88</b>	<b>4096.59</b>
2	Water Usage Charges	305.65	305.65	305.65	305.65
3	Transmission & Load Dispatch charges	171.77	203.14	243.88	295.03
4	O&M Expenses	518.07	553.21	590.77	630.89
5	Interest on Loans	16.36	19.15	23.10	28.17
6	Depreciation	179.60	204.19	238.30	276.05
7	Interest on Working Capital	-	144.26	153.25	163.08

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<b>8</b>	<b>Gross ARR</b>	<b>5013.85</b>	<b>5193.72</b>	<b>5482.83</b>	<b>5795.46</b>
9	Add: Return on Equity	-	-	-	-
10	Less: Non-tariff income	13.42	14.09	14.80	15.54
<b>11</b>	<b>Net ARR (A)</b>	<b>5000.43</b>	<b>5179.63</b>	<b>5468.03</b>	<b>5779.92</b>

**Commissions Analysis**

3.84 As the ARR for the entire period is being simultaneously processed by the Commission and would be approved separately as part of the ARR and MYT Order for JKPDD-D for FY 2013-14 to FY 2015-16, the same has not been approved here. Further, the Commission would incorporate the approved load/sales growth, loss trajectory, power procurement plan and capital investment for the entire MYT control period as per this Business Plan order while approving the ARR & MYT Order for FY 2013-14 to FY 2015-16.

**ANNEXURE 1: QUARTERLY MONITORING FORMAT FOR CAPITAL INVESTMENT SCHEMES**

Sl. No.	Scheme Name	Objective of the Scheme	Details of area (existing sales/ loss level)	Date of approval	Expected completion date	Actual date of completion	Approved Scheme Cost	Actual cost incurred	Expected outcome (units saved/ revenue earned)	Actual outcomes derived	Reasons for variations	Whether DPR submitted to the Commission (Yes/No)