

## STATE DISTRIBUTION UTILITIES – SIXTH ANNUAL INTEGRATED RATING FOR FY2017 WITH SPECIAL REFERENCE TO RAJASTHAN DISCOMS

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### ABSTRACT

*Power is one of the most important drivers of growth in an economy. The power sector has seen a transformational growth in the recent years on various fronts like generation capacity, strengthening of transmission and distribution networks, village electrification, energy efficiency and supply of electricity. Ministry of Power (MoP) is on a mission mode to put in place a robust power sector to power the high economic growth agenda of the country. The electrification of Leisang village in Manipur on 28th April 18 marked the crossing of a historic milestone in achieving 100% village electrification by the country. The objective of "Pradhan Mantri Sahaj Bijli Har Ghar Yojana-(Saubhagya)" scheme is to provide last mile connectivity to all households in rural and urban areas by March 19. The achievement of these two key milestones would totally transform the rural economic landscape; promote inclusive growth and turbocharger the Indian Economy towards a high growth trajectory.*

**KEYWORDS:** *Discoms, Integrated Rating, AT&C losses, MoP, PFC, UDAY, Strengths, Concerns.*

### Introduction

A strong and efficient distribution sector is an essential prerequisite for the development of a robust, self-sustaining power sector. The State Power Sector entities play a major role in power distribution in India and to implement various schemes / majors drawn by MoP several viz. Saubhagya, IPDS, DDUGJY, UDAY, etc. for bringing about improvements in the efficiency of technical, operational, financial and managerial areas of utility functioning. The Integrated Rating Methodology is one of the key initiatives of Government of India to objectively assess the performance of the distribution utilities across various parameters and enable utilities to draw up corrective action plans for improving their performance.

Sixth Annual Integrated exercise report covering 41 state Distribution Utilities spread over 22 States in respect of their performance for FY 17 was released in July, 18. State Power / Energy Deptts . and private Power Sector Distribution Companies are however not covered under integrated rating exercise. ICRA and CARE are the designated rating agencies who have been assigned 21 & 20 utilities respectively. MoP mandated Power Finance Corporation (PFC) to the rating exercise.

Prior to this five integrated rating exercises covering FY 12, FY 13, FY 14, FY 15 and FY 16 have been completed. The first integrated rating report was released / declared by MoP in March 13, the second in February 14, the third in August 15, the fourth in June 16 and fifth integrated ratings released on 3rd May 17.

This annual integrated rating initiatives that aims at evaluating the operational and financial performance of State Distribution utilities differs from the financial rating exercise as the later measure the extent of ability of an entity to carry out debt servicing liability.

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The details of 41 State Distribution Utilities covered in Sixth Integrated rating are as given below:

| S.No. | Name of Utility   | State            |
|-------|---|------------------|
|       | <b>Northern Region</b>  |                  |
| 1     | Dakshin Haryana Bijli Vitran Nigam Limited                    | Haryana          |
| 2     | Uttar Haryana Bijli Vitran Nigam Limited                      | Haryana          |
| 3     | Himachal Pradesh State Electricity Board Limited              | Himachal Pradesh |
| 4     | Punjab State Power Corporation Limited                        | Punjab           |
| 5     | Ajmer Vidyut Vitran Nigam Limited                             | Rajasthan        |
| 6     | Jodhpur Vidyut Vitran Nigam Limited                           | Rajasthan        |
| 7     | Jaipur Vidyut Vitran Nigam Limited                            | Rajasthan        |
| 8     | Uttarakhand Power Corporation Limited                         | Uttarakhand      |
| 9     | Kanpur Electricity Supply Company Limited                     | Uttar Pradesh    |
| 10    | Paschimanchal Vidyut Vitran Nigam Limited                     | Uttar Pradesh    |
| 11    | Madhyanchal Vidyut Vitran Nigam Limited                       | Uttar Pradesh    |
| 12    | Purvanchal Vidyut Vitran Nigam Limited                        | Uttar Pradesh    |
| 13    | Dakshinanchal Vidyut Vitran Nigam Limited                     | Uttar Pradesh    |
|       | <b>Eastern &amp; North-Eastern Region</b>                     |                  |
| 14    | Assam Power Distribution Company Limited                      | Assam            |
| 15    | North Bihar Power Distribution Company Limited                | Bihar            |
| 16    | South Bihar Power Distribution Company Limited                | Bihar            |
| 17    | Jharkhand Bijli Vitran Nigam Limited                          | Jharkhand        |
| 18    | Manipur State Power Distribution Company Limited              | Manipur          |
| 19    | Meghalaya Power Distribution Corporation Limited              | Meghalaya        |
| 20    | Tripura State Electricity Corporation Limited                 | Tripura          |
| 21    | West Bengal State Electricity Distribution Company Limited    | West Bengal      |
|       | <b>Western Region</b>   |                  |
| 22    | Chhattisgarh State Power Distribution Company Limited         | Chhattisgarh     |
| 23    | Uttar Gujarat Vij Company Limited                             | Gujarat          |
| 24    | Dakshin Gujarat Vij Company Limited                           | Gujarat          |
| 25    | Madhya Gujarat Vij Company Limited                            | Gujarat          |
| 26    | Paschim Gujarat Vij Company Limited                           | Gujarat          |
| 27    | Madhya Pradesh Paschim Kshetra Vidyut Vitaran Company Limited | Madhya Pradesh   |
| 28    | Madhya Pradesh PoorvKshetra Vidyut Vitaran Company Limited    | Madhya Pradesh   |
| 29    | Madhya Pradesh Madhya Kshetra Vidyut Vitaran Company Limited  | Madhya Pradesh   |
| 30    | Maharashtra State Electricity Distribution Company Limited    | Maharashtra      |
|       | <b>Southern Region</b>  |                  |
| 31    | Eastern Power Distribution Company of Andhra Pradesh Limited  | Andhra Pradesh   |
| 32    | Southern Power Distribution Company of Andhra Pradesh Limited | Andhra Pradesh   |
| 33    | Bangalore Electricity Supply Company Limited                  | Karnataka        |
| 34    | Mangalore Electricity Supply Company Limited                  | Karnataka        |
| 35    | Gulbarga Electricity Supply Company Limited                   | Karnataka        |
| 36    | Chamundeshwari Electricity Supply Corporation Limited         | Karnataka        |
| 37    | Hubli Electricity Supply Company Limited                      | Karnataka        |
| 38    | Kerala State Electricity Board Limited                        | Kerala           |
| 39    | Tamil Nadu Generation & Distribution Corporation Limited      | Tamil Nadu       |
| 40    | Southern Power Distribution Company of Telangana Limited      | Telangana        |
| 41    | Northern Power Distribution Company of Telangana Limited      | Telangana        |

Rating Approach / Inputs for evaluation of the performance of State Distribution Utilities has been considered in the Sixth Integrating Rating based on the following scoring methodology.

| S.No. | Parameters                                    | Weightage / Maximum score |
|-------|---|---------------------------|
| 1     | <b>Operational &amp; Reform Parameters</b>    | 52                        |
| I)    | Operational related                           |                           |
| i)    | AT&C Losses                                   | 28,-4                     |
| ii)   | Power purchase                                | 5                         |
| iii)  | Cost Efficiency                               | 6                         |
| iv)   | Quality of Service & Digital Payment Facility | 6                         |
| II)   | Reform related                                |                           |
| v)    | Access to supply                              | 5                         |
| vi)   | RPO compliance                                | 2                         |

|      |                             |        |
|------|-----------------------------|--------|
| 2    | <b>External Parameters</b>  | 15     |
| I)   | Regulatory                  | 11,-19 |
| II)  | Govt. Support               | 4      |
| 3    | <b>Financial Parameters</b> | 33     |
| I)   | Ratios                      |        |
| A    | Cost Coverage Ratio         | 15     |
| II)  | Sustainability              | 6      |
| III) | Receivables                 | 4      |
| IV)  | Payables                    | 3      |
| V)   | Audited Accounts            | 5,-12  |
| VI)  | Audit Qualifications        | 0,-1   |
| VII) | Default to Banks/FIs        | 0,-2   |
|      | Total                       | 100    |

### Grading Scale and Grades

| Score Distribution | Grade | No. of Utilities | Grading Definition   |
|--------------------|-------|------------------|--|
| Between 80 and 100 | A+    | 5                | Very High Operational and Financial Performance Capability     |
| Between 65 and 80  | A     | 2                | High Operational and Financial Performance Capability          |
| Between 50 and 65  | B+    | 13               | Moderate Operational and Financial Performance Capability      |
| Between 35 and 50  | B     | 11               | Below Average Operational and Financial Performance Capability |
| Between 20 and 35  | C+    | 2                | Low Operational and Financial Performance Capability           |
| Between 0 and 20   | C     | 8                | Very Low Operational and Financial Performance Capability      |

The grading scale of 'A+ to C' adopted under MOP Integrated Rating Methodology is **different** from the normal rating scale adopted by CRAs (**AAA to D**) for credit rating purposes as the credit rating measures the degree of safety regarding timely servicing of financial obligations based on "probability of default"; however, integrated rating reflects the operational and financial health of the distribution entities based on the rating framework approved by Ministry of Power. Further, normal credit rating assigned by CRAs for distribution utilities entails comparison with other corporate, as compared to the integrated rating exercise wherein comparison of the entity is done with other distribution utilities only.

### Utility Wise Grades

| S. No. | Name of Utility  | State            | Rating Agency | 6th IR Grade (FY 2017) |
|--------|--|------------------|---------------|------------------------|
| 1      | Uttar Gujarat Vij Company Limited                        | Gujarat          | ICRA          | A+                     |
| 2      | Dakshin Gujarat Vij Company Limited                      | Gujarat          | ICRA          | A+                     |
| 3      | Madhya Gujarat Vij Company Limited                       | Gujarat          | ICRA          | A+                     |
| 4      | Uttarakhand Power Corporation Limited                    | Uttarakhand      | CARE          | A+                     |
| 5      | Paschim Gujarat Vij Company Limited                      | Gujarat          | ICRA          | A+                     |
| 6      | Eastern Power Distribution Company of AP Limited         | Andhra Pradesh   | CARE          | A                      |
| 7      | Bangalore Electricity Supply Company Limited             | Karnataka        | ICRA          | A                      |
| 8      | Himachal Pradesh State Electricity Board Limited         | Himachal Pradesh | CARE          | B+                     |
| 9      | Southern Power Distribution Company of AP Limited        | Andhra Pradesh   | CARE          | B+                     |
| 10     | Uttar Haryana Bijli Vitran Nigam Limited                 | Haryana          | CARE          | B+                     |
| 11     | Punjab State Power Corporation Limited                   | Punjab           | ICRA          | B+                     |
| 12     | Madhya Pradesh Pash. Kshetra Vidyut Vitaran Co Ltd.      | Madhya Pradesh   | CARE          | B+                     |
| 13     | Dakshin Haryana Bijli Vitran Nigam Limited               | Haryana          | CARE          | B+                     |
| 14     | Mangalore Electricity Supply Company Limited             | Karnataka        | ICRA          | B+                     |
| 15     | Southern Power Distribution Company of Telangana Limited | Telangana        | CARE          | B+                     |
| 16     | Northern Power Distribution Company of Telangana Limited | Telangana        | CARE          | B+                     |
| 18     | Gulbarga Electricity Supply Company Limited              | Karnataka        | ICRA          | B+                     |
| 17     | North Bihar Power Distribution Co. Ltd.                  | Bihar            | ICRA          | B+                     |
| 19     | West Bengal State Electricity Distribution Company Ltd   | West Bengal      | ICRA          | B+                     |
| 20     | Maharashtra State Electricity Distribution Company Ltd   | Maharashtra      | ICRA          | B+                     |

|    |   |                |      |           |
|----|---|----------------|------|-----------|
| 21 | Chamundeshwari Electricity Supply Corporation Ltd.  | Karnataka      | ICRA | <b>B</b>  |
| 22 | Assam Power Distribution Company Limited            | Assam          | ICRA | <b>B</b>  |
| 23 | Kerala State Electricity Board Limited              | Kerala         | CARE | <b>B</b>  |
| 24 | Kanpur Electricity Supply Company Limited           | Uttar Pradesh  | ICRA | <b>B</b>  |
| 25 | Ajmer Vidyut Vitran Nigam Limited                   | Rajasthan      | CARE | <b>B</b>  |
| 26 | Jodhpur Vidyut Vitran Nigam Limited                 | Rajasthan      | CARE | <b>B</b>  |
| 27 | Jaipur Vidyut Vitran Nigam Limited                  | Rajasthan      | CARE | <b>B</b>  |
| 28 | Tamil Nadu Generation and Distribution Corporation  | TamilNadu      | ICRA | <b>B</b>  |
| 29 | Hubli Electricity Supply Company Limited            | Karnataka      | ICRA | <b>B</b>  |
| 30 | South Bihar Power Distribution Co. Ltd.             | Bihar          | ICRA | <b>B</b>  |
| 31 | Chhattisgarh State Power Distribution Company Ltd.  | Chhattisgarh   | CARE | <b>B</b>  |
| 32 | Madhya Pradesh PoorvKshetra Vidyut Vitaran Co Ltd   | Madhya Pradesh | CARE | <b>C+</b> |
| 33 | Madhya Pradesh Madhya Kshetra Vidyut Vitaran Co Ltd | Madhya Pradesh | CARE | <b>C+</b> |
| 34 | Jharkhand Bijli Vitran Nigam Limited                | Jharkhand      | CARE | <b>C</b>  |
| 35 | Paschimanchal Vidyut Vitaran Nigam Limited          | Uttar Pradesh  | ICRA | <b>C</b>  |
| 36 | Meghalaya Power Distribution Corporation Limited    | Meghalaya      | CARE | <b>C</b>  |
| 37 | Madhyanchal Vidyut Vitran Nigam Limited             | Uttar Pradesh  | ICRA | <b>C</b>  |
| 38 | Purvanchal Vidyut Vitaran Nigam Limited             | Uttar Pradesh  | ICRA | <b>C</b>  |
| 39 | Dakshinanchal Vidyut Vitran Nigam Limited           | Uttar Pradesh  | ICRA | <b>C</b>  |
| 40 | Manipur State Power Distribution Company Limited    | Manipur        | CARE | <b>C</b>  |
| 41 | Tripura State Electricity Corporation Limited       | Tripura        | CARE | <b>C</b>  |

**Performance of Rajasthan Discoms:** Consequent upon the evaluation of functional and operational and financial performance of the State Distribution Utilities, Rajasthan Discom namely Ajmer Vidyut Vitran Nigam Limited (AVVNL), Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Jodhpur Vidyut Vitran Nigam Limited (JDVVNL) get scores placing them all in B grade as per break up of marks obtained indicated in the following table:

FY 2017

| Particulars           | JVVNL | AVVNL | Jd.VVNL |
|-----------------------|-------|-------|---------|
| Score (Max.marks 100) | 44.90 | 48.34 | 46.60   |

| S.No.       | Particulars   | Calculated Value |        |         | Max. Marks | Loss of Marks |       |         |
|-------------|---|------------------|--------|---------|------------|---------------|-------|---------|
|             |   | JVVNL            | AVVNL  | Jd.VVNL |            | JVVNL         | AVVNL | Jd.VVNL |
| 1(i)a       | AT&C Losses   | 29.56%           | 25.11% | 26.10%  | 15         | 11.57         | 10.24 | 10.51   |
| 1(i)b       | Billing Efficiency  | 74.52%           | 77.90% | 78.31%  | 8          | 5.66          | 5.78  | 7.02    |
| 1(i)c       | Collection efficiency   | 94.53%           | 96.14% | 94.37%  | 5          | 2.73          | 1.93  | 2.81    |
| 1(ii)b      | Cost Competitiveness of poer purchase   | -0.85            | -0.54  | -0.49   | 3          | 3             | 3     | 3       |
| 1(iii)a     | O&M & Adm. Costs/Revenue  | 7.05%            | 4.13%  | 3.02%   | 3          | 3             | 3     | 2       |
| 1(iii)b     | Employee cost/Revenue   | 7.06%            | 12.43% | 6.98%   | 3          | 1             | 3     | 1       |
| 1(iv)b      | Release of new connection within SERC stipulated time limits (sourced from latest available R-APDRP report) | 0                | 0      | 0       | 1          | 1             | 1     | 1       |
| II(v)B      | Hours of supply in rural areas  | 22               | 22     | 22      | 2          | 0.5           | 0.5   | 0.5     |
| II(v)C      | House hold electrification (against target)   | 77.57%           | 77.57% | 77.57%  | 2          | 1.12          | 1.12  | 1.12    |
| II(vi)      | RPO Compliance  | 9.34             | 8.75   | 8.83    | 2          | 0.36          | 0.46  | 0.45    |
|             |   | 11.34            | 11.40  | 11.40   |            |               |       |         |
| 2(1)(i)a.i  | Filling of MYT petition for FY19  | 0                | 0      | 0       | 1          | 1             | 1     | 1       |
| 2(1)(i)a.v  | Return on equity  | 0                | 0      | 0       | 2(1)       | -3            | -3    | -3      |
| 2(1)(i)a.vi | Untreated Revenue gap in the ARR  | 0                | 0      | 0       | 0(-5)      | -5            | -5    | -5      |

|          |  |                  |                  |                  |       |       |      |       |
|----------|--|------------------|------------------|------------------|-------|-------|------|-------|
| 2(ii)(i) | Tariff support   | Not recd.in full | Not recd.in full | Not recd.in full | 4     | 1     | 1    | 1     |
| 3(i)a    | Cost coverage ratio  | 0.87             | 0.88             | 0.87             | 15    | 10.16 | 9.63 | 10.53 |
| 3(ii)b   | Fixed assets to Total debt ratio   | 48%              | 39%              | 40%              | 4     | 4     | 4    | 4     |
| 3(VI)    | Non provision/ payment to Employee related liabilities/ Statutory dues in the accounts | Yes              | No               | No               | 0(-1) | -1    | 0    | 0     |
| 3(VII)   | Default to Banks/ FIs  | Yes in (T-2) yr  | No               | Yes in (T-2) yr  | 0(-2) | -1    | 0    | -1    |

Note: T yr – Rating Exercise Yr, T-1 yr-Rating Evaluation year & T-2 yr – Year Preceding Rating Evaluation year

### Following Salient Observations Emerged on the Score Sheets of Rajasthan Discoms:

#### Key Strengths

- Improvement in Aggregate Technical and Commercial (AT&C) Losses

|       | AVVNL  | JVVNL  | JDVVNL |
|-------|--------|--------|--------|
| FY 17 | 25.1%  | 29.56% | 26.10% |
| FY 16 | 27.61% | 35.65% | 29.38% |

- Take-over of 75% of the debt as of September, 2015 by Government of Rajasthan under UDAY
- Decline in interest cost and no defaults to FIs & Banks in FY 2017
- Timely filing of tariff petition

#### Key Concerns

- Billing Efficiency**

|       | AVVNL  | JVVNL  | JDVVNL |
|-------|--------|--------|--------|
| FY 17 | 77.90% | 74.52% | 78.31% |
| FY 16 | 73.25% | 68.10% | 76.68% |

- Low Collection efficiency in Jaipur & Jodhpur Discoms (JVVNL \* JDVVNL)**

|       | JVVNL  | JDVVNL |
|-------|--------|--------|
| FY 17 | 94.53% | 94.37% |

- High Power Purchase Cost (Rs. per Unit)**

|       | AVVNL | JVVNL | JDVVNL |
|-------|-------|-------|--------|
| FY 17 | 4.59  | 4.52  | 4.56   |

- Significant delay in issuance of tariff order for FY 18 and true-up order for FY 16

#### Key Actionable

- Reduction in AT&C loss level by focusing more on circles which have high AT&C losses
- Improvement in collection efficiency for JVVNL and JDVVNL
- Billing efficiency to be improved through various administrative and technical measures
- Timely issuance of tariff order by Rajasthan Electricity Regulatory Commission (RERC)
- Cost coverage to be improved through suitable tariff increase and curtailment of losses
- Effective implementation of UDAY

