

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION, BHOPAL

Sub : In the matter of approval of Feeder Separation scheme under Regulation 10.3 of MPERC Regulation, 2004 (The Condition of Distribution License for Distribution Licensee).

ORDER

(Date of hearing 04.01.2011)

Date of order :12.01.2011

MP Poorv Kshetra Vidyut Vitaran Co. Ltd, Jabalpur (East Discom) - Petitioner

Shri G.R. Rao, Superintending Engineer and Shri A.K. Khare, Addl. Executive Engineer appeared on behalf of petitioner.

2. The M.P. Poorv Kshetra V.V. Co. Ltd., Jabalpur has filed the subject petition for obtaining approval of the Feeder Separation Scheme in accordance with the provision 10.3 of the Commission's Regulation namely MPERC (The Condition of Distribution License for Distribution Licensee), Regulations, 2004. The Petitioner has prayed approval to a total outlay of Rs.1931.88 Crs. consisting of phase-I and phase-II schemes amounting to Rs.919.55 Crs. and Rs.1012.33 Crs. respectively for feeder bifurcation schemes.

3. The Commission vide Order dated 01.12.2010 had observed that the petitioner has not provided the details of expected physical benefits such as reduction in T&D loss level and improvement in the quality of supply for individual districts falling under schemes and the Company as whole. It has been stated in petition that a total benefit of Rs. 321.36 Crore per annum due to energy saving, sale of additional energy and reduction in the transformer failure is envisaged. The Commission had directed petitioner to submit the details on the following points:-

- (a) District-wise existing loss level vis-à-vis loss levels projected to be achieved after execution of aforesaid scheme based on expected load flow through network stimulation and increase in sale unit be submitted. Further, extent to which the loss levels of the Company as a whole are expected to be reduced after execution of this Scheme be submitted.
- (b) The petition is not supported with details as to how availability of adequate power supply shall be ensured in meeting out the energy requirement for extended hours of supply proposed in the scheme for domestic and irrigation connections.
- (c) The petition does not contain the comprehensive cost benefit analysis, payback period and also the likely improvement in performance parameters such as voltage profile, etc.
- (d) Financial details such as break up of project cost in equity and loan component, terms and conditions of loan including moratorium and repayment schedule have also not been furnished.

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4. During the course of hearing, petitioner submitted that T&D loss of the Company was 37.23% in the year 08-09 and 33.45% in the year 09-10. It has been envisaged that the loss of around 3%, be reduced as a whole for the Company from current level after execution of project. The Company submitted following details with regard to the district wise loss reduction envisaged after execution of the project :-

| Sr. No. | Name of District | Existing T&D loss level (%) | Proposed T&D loss level after execution of project (%) | Loss reduction envisaged(%) | |
|---------|---------------------------|-----------------------------------|--|-----------------------------|-------------|
| 1 | Jabalpur | Jabalpur | 40.13 | 35.81 | 4.32 |
| | | Patan | 53.10 | 46.77 | 6.33 |
| | | Sihora | 53.20 | 46.31 | 6.90 |
| 2 | Katni | Katni | 45.94 | 40.88 | 5.07 |
| 3 | Narsinghpur | Narsinghpur | 48.78 | 43.78 | 5.00 |
| | | Gadarwara | 55.46 | 48.85 | 6.62 |
| 4 | Chhindwara | East Cwa & Junnerdeo | 50.44 | 44.34 | 6.11 |
| | | Parasia Amarwada Sausar Pandhurna | 44.36 | 39.14 | 5.22 |
| 5 | Seoni | Seoni | 24.90 | 21.73 | 3.17 |
| | | Lakhnadon | 36.68 | 32.31 | 4.37 |
| 6 | Balaghat | Balaghat & waraseoni | 36.29 | 31.94 | 4.35 |
| 7 | Rewa | Rewa North | 59.35 | 51.63 | 7.71 |
| | | Rewa South | 62.98 | 55.77 | 7.21 |
| | | Rewa O & M | 59.42 | 52.64 | 6.78 |
| 8 | Satna | Satna | 64.81 | 57.21 | 7.60 |
| | | Maihar | 40.25 | 36.10 | 4.16 |
| 9 | Sidhi | Sidhi | 34.26 | 30.62 | 3.65 |
| 10 | Waidhan | Singrauli | 46.02 | 41.29 | 4.73 |
| 11 | Shahdol | Shahdol | 41.94 | 37.96 | 3.98 |
| 12 | Umaria | Umaria | 40.55 | 36.74 | 3.80 |
| 13 | Sagar | Sagar Bina | 49.34 | 43.44 | 5.90 |
| | | Rehli Banda | 46.02 | 40.79 | 5.23 |
| 14 | Damoh | Damoh South | 53.56 | 46.95 | 6.62 |
| | | Damoh North | 43.56 | 39.06 | 4.51 |
| 15 | Chhatarpur | Chhatarpur | 38.73 | 34.03 | 4.70 |
| 16 | Panna | Panna | 53.82 | 47.54 | 6.28 |
| 17 | Tikamgarh | Tikamgarh | 52.72 | 46.32 | 6.41 |
| | | Prithvipur | 51.70 | 45.39 | 6.31 |
| | Total Project Area | | 47.72 | 42.23 | 5.49 |
| | Total East Discom | | 33.45 | 30.52 | 2.93 |

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5. The Company, in its submission has stated that the payback period would be around 6.4 years taking into account expected energy saving after execution of project and additional energy being sold due to load growth & benefits that will accrue due to reduction/prevention of theft of electricity.

6. The Company in its reply has further stated that it has carried out an analysis which indicates that the loss of around 3% will be reduced as a whole for the Company. The analysis has been done by carrying out load flow study on selected feeders and the results have been extrapolated for the entire Company area. On extrapolation, the loss of entire Company reduces by 4.66% but to avoid possible error for extrapolation of the data because of different current ratings, loading patterns, length of feeders, conductor size etc., due allowance has been considered while extrapolating. On adopting most conservative approach the T&D loss of entire Company is expected to reduce by 3%. This further gets substantiated on its comparison with the experience of Gujarat where the losses have reduced by 3.74% post feeder separation.

7. It has been further informed that the REC, New Delhi has approved the Feeder Separation Project for funding of the first phase amounting to Rs.835.9 crore. The sanctioned loan is equal to 100% of the project cost without considering cost escalation. The REC has also agreed to give additional fund over and above sanctioned load up to 20% of the sanctioned project cost on account of cost escalation or quantity variation. The second phase of the project is proposed to be funded through ADB amounting to Rs.1012.33 crores for which the ADB has in principle agreed to fund the project. DPR and the tender document have already been submitted to the ADB. The funding by ADB to the second phase of the project will be limited to 80% of the project cost and the counter part funding is expected from the State Government.

8. While the Commission's view is to encourage investment in the Distribution System for overall improvement of the operational efficiencies of the Distribution network, the impact of such investment on the tariff also needs to be evaluated. It needs to be ensured by the Company that the impact of debt service of this size on the tariff would have to be substantially mitigated by its financial benefits. The loss reduction details submitted by the Company do not relate to benchmark norms used for tariff setting and cannot be accepted. As such the contended financial gains will have no positive impact on tariff. The Commission is of the view that the burden of servicing the cost of this project in the tariff has not only to be off-set by the financial benefits resulting out of the implementation of this Scheme but should result into greater overall improvement in the performance.

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9. In view of the foregoing, the Commission accords in principle approval to the proposed investment by the M.P. Poorv Kshetra V.V. Co. Ltd., Jabalpur for carrying out the work of Feeder Separation subject to condition that admissibility of such investment in ARR would be subject to check of its prudence. In view of the observations in the foregoing paras, the servicing of debt, depreciation, return on equity on the said investment would be permissible in ARR to such extent only as is considered prudent by the Commission, does not adversely affect the interest of consumers and only after such assets are put to use i.e. capitalized.

10. With the above directions, the petition is disposed of.

**Sd/-
(C.S. Sharma)
Member (Economics)**

**Sd/-
(K.K. Garg)
Member (Engineering)**

**Sd/-
(Rakesh Sahni)
Chairman**