

ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION
4th Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

O.P.No.28 of 2015
Dated: 07-11-2015

Present
Sri Justice G. Bhavani Prasad, Chairman
Dr. P. Raghu, Member
Sri P. Rama Mohan, Member

Between:

Eastern Power Distribution Company of
Andhra Pradesh Limited

... Petitioner

A N D

-NIL-

... Respondent

The petition has come up for hearing finally on 31-10-2015 in the presence of Sri P. Shiva Rao, learned Standing Counsel for the petitioner and Sri Tarun Tayal representing M/s. Energy Efficiency Services Limited, New Delhi. After carefully considering the material available on record and after hearing the arguments of all the persons present, the Commission passed the following:

ORDER

Eastern Power Distribution Company of Andhra Pradesh Limited filed the petition requesting for allowing it to implement the Domestic Efficient Fans Programme (DEFP) as part of Demand Side Management (DSM) measures with the financial support of M/s. Energy Efficiency Services Limited, New Delhi and for consequential reliefs.

2. The petitioner stated that M/s. Energy Efficiency Services Limited, New Delhi submitted a programme for implementation of Domestic Efficient Fans Programme (DEFP) in household sector in Narsapuram and adjoining areas promising to make the capital investment required, recovering the cost from the consumers through the distribution company in 20 (twenty) monthly instalments. BEE five star rated fans will be offered in exchange of old working fans to domestic consumers in the project area of Narsapuram and adjoining areas and collected old fans will be destroyed to preclude their use forever. The first pilot project in India is useful to the consumers,

who do not make any upfront payment and the price of the fans will be determined through competitive bidding which is expected to be lower. The sample Survey Report conducted in Narsapuram is filed and one lakh fans will be offered in the said license area of the petitioner on first cum first served basis at 2 fans for each domestic consumer. M/s. Energy Efficiency Services Limited, New Delhi offers to provide Rs.100/- for each fan as salvage value to be an incentive to the consumers and the actual salvage value will be determined through competitive bidding, with any excess benefit being passed on to the consumers. The energy savings on considering all the relevant factors were calculated at Rs.5.81 crores for the petitioner through saving of 14.70 million units of energy per annum. While M/s. Energy Efficiency Services Limited invests Rs.17.60 crores, the total payout to it will be Rs.19.25 crores including O & M charges, service tax etc. The project benefits the society through energy security, savings and environment protection, while reducing the cost and the energy consumption to the consumers. The cross subsidized category and the Distribution Utility will also be benefitted and the estimation of the tentative project cost is Rs.17.60 crores including the cost of the fan at Rs.1,500/-, Distribution, Installation, Insurance & storage charges at Rs.150/- per fan, Awareness & Registration at Rs.10/- per fan and Incentive to consumers at Rs.100/- per fan. Out of Rs.1,760 per fan, consumer gets a buy back price of old fan at Rs.100/-. Interest for Debt Servicing is at Rs.10/- per fan on the debt portion of 80% of the project cost, Return on Equity is calculated at 14% per annum on 20% of the project cost and Annual Maintenance Charges are calculated at 1.5% per annum. For each fan, the amount is paid through 19 monthly instalments of Rs.100/- each and the 20th instalment of Rs.25/-. The petitioner requested that draft Energy Savings Agreement submitted may be approved to implement the scheme for fans with a 2 year technical warranty. The regular consumers without any dues to the petitioner will have the option to register under the scheme and hence, the petitioner desired that the programme be approved, the

capital investment also be approved, the petitioner be permitted to recover the cost through monthly bills in 20 months, approve the normative parameters, allow the benefits/modifications/additions in the electricity bills of consumers accordingly, to permit to treat any defaulting consumer as a defaulter under Section 56 of the Electricity Act, 2003 and the Andhra Pradesh Electricity Supply Code and the annual payout to be recovered through Aggregate Revenue Requirement. The petitioner also requested for permission to pay monthly to M/s. Energy Efficiency Services Limited and to issue an irrevocable and revolving Letter of Credit to it.

3. The enclosures to the petition gave further details and the draft Energy Savings Agreement provided among other things, for a minimum salvage value of Rs.100/- for each fan. The Agreement further stated about the cost in all other aspects being determined through competitive bidding including the buy-back price of the old fan, subject to a maximum cost of Rs.1,925/- per fan. The distribution companies have to provide payment security mechanism to M/s. Energy Efficiency Services Limited in the form of a Letter of Credit for a term of 12 months or till the complete payment. The sample survey at Narsapuram estimated the total number of ceiling fans in Narsapuram to be 34,833.

4. After the petition was taken on file, a Public Notice was given to all interested persons/stakeholders through placing the petition on the website of the Commission calling for responses/objections and also intimating about the hearing on 09-10-2015.

5. Sri S. Surya Prakasa Rao, a former Secretary of the erstwhile Andhra Pradesh Electricity Regulatory Commission submitted that the provisions of Energy Conservation Act, 2001 have to be kept in view and the petitioner appears to be a mere provider for billing and collection of instalments, doing “other business” as defined in Regulation 3 of 2005. He also requested not to permit disconnection of

supply for defaulting consumers and creation of first charge in favour of M/s. Energy Efficiency Services Limited may sacrifice the interests of the petitioner.

6. Sri M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation in his comments wondered why the conventional ceiling fans should not be replaced with super efficient fans, which consume 50% less energy than BEE star rated fans consuming 30% less energy. The price of Rs.1,500/- per fan appears to be on the higher side and when they are procured through competitive bidding on large scale, they become available at a lower price. The incentive to the consumer is sought to be recovered under the cost of the fan and if there is 2 year warranty for the fan, there need be no maintenance charges for 2 years. The consumer has to bear Rs.300/- to Rs.500/- for installation of the 2 fans and the quantum of power to be saved is estimated on higher side. The new fans are of a lower wattage. The existing power consumption is estimated at a high percentage. The target of one lakh fans may not be achieved, when the total ceiling fans in use are only 34,833 in the area and the consumers may be given choice of paying the full amount at a time, so as to deduct the interest part of the cost. As the net payment from the Aggregate Revenue Requirement is Nil, the payment security mechanism under the Agreement may be removed more so, as Clause 6 of the draft Agreement makes consumers liable. The right to information should not be restricted and the Agreement should provide for monitoring and evaluation of the programme.

7. The petitioner in its reply answered the comments of Sri S. Surya Prakasa Rao saying that it is a pilot programme for creation of awareness. While the petitioner is only a service provider, the defaulting consumer is made liable.

8. On the comments of Sri M. Thimma Reddy, the petitioner explained that super efficient fans cost almost two times more than the 5 star rated fans and even the production capacity of such fans is low. If super efficient fans come at a lower price

than others, they will be provided. Any benefit of reduced price on bulk procurement will be passed on to the consumers and incentive offered may be equal to the salvage value of the fan. Annual maintenance charges are claimed to set up call centers and engage the man power to help the consumers. The fans would last for more than 5 years making the reduced electricity bills save more for the consumer than the cost of the fan. On the estimates based on the sample survey, it is proposed to initially implement the same at Narsapuram and adjoining areas for willing consumers and consumers can be provided the option to pay upfront or in equal monthly instalments. While noting the other suggestions, the petitioner desired the programme to be cleared.

9. During the hearing on 17-10-2015, Sri Tarun Tayal, DGM (BD) of M/s. Energy Efficiency Services Limited was requested to get back to their management to come back with the maximum benefit that may be offered to the consumers on the aspects identified by the Commission including Cost of the fan, Distribution, Installation, Insurance & Storage charges, Awareness & Registration, Incentives to consumers, Buy back price of the old fans, Interest for Debt Servicing, Return on Equity, Annual Maintenance Charges, Number of Instalments, Security Mechanism and installing the new fan.

10. During the hearing on 31-10-2015, Sri Tarun Tayal, DGM (BD) of M/s. Energy Efficiency Services Limited filed the proposals of M/s. Energy Efficiency Services Limited clarifying and revising the proposal for the advantage of the consumers and also submitted that there will be no buy back of the fan now, as the Commission observed the buy back and incentive to have cancelled each other offering nothing to the consumer for the old fan in effect and substance.

11. The proposals dated 31-10-2015 stated that the costs indicated in the petition are only estimates and any reduction in costs through open competitive bidding will be

passed on to the consumers. Interest for Debt Servicing, Return on Equity and Annual Maintenance Charges are kept at the same level as approved by this Commission for Phase-II of DELP programme. Installation of fans may be removed from the programme to avoid delays, which will reduce the cost of distribution and storage by Rs.50/- per fan. The programme may be extended to commercial and institutional category of consumers including industrial consumers with a cap of 2 fans for each domestic consumer, 10 fans for each commercial category consumer and 50 fans for each institutional (industrial also) category consumer. Choice can be given to the consumer to pay the entire amount upfront without having to go for the EMI scheme. The cost for such upfront payment will be Rs.1,555/- including Rs.1,500/- towards cost of the fan, Rs.50/- towards Distribution, Transportation and Storage and Rs.5/- towards Awareness cost. If it were 24 monthly instalments, it will be Rs.75/- per instalment. M/s. Energy Efficiency Services Limited also proposed to evolve a programme for training local electricians, in consultation with the Indian Fan Manufacturers Association. The pilot project is proposed to be extended thereafter based on review by the Government of Andhra Pradesh after distribution of 25,000 fans.

12. The point for consideration is whether the request for approval of the pilot project has to be positively considered and if so, subject to what terms and conditions.

13. The Domestic Efficient Fans Programme proposed in this petition is a pilot project depending on the success or result of which it is proposed to be extended for the entire State of Andhra Pradesh. The petitioner does not incur any financial liability due to implementation of this pilot project and payment security mechanism provided at Article-4 of the draft Energy Savings Agreement provides for such security mechanism being provided through consumer bills opted on bill financing scheme for obtaining fans in the form of Irrevocable and Revolving Letter of Credit in favour of

M/s. Energy Efficiency Services Limited. Any burden on the petitioner due to implementation of this Article cannot be perceived, as the consumer, who opts for this benefit is sought to be made liable under Section 56 of the Electricity Act, 2003 read with the Andhra Pradesh Electricity Supply Code in the event of any default. While M/s. Energy Efficiency Services Limited acts as a facilitator, the petitioner in effect and substance acts only as a distributor with the additional responsibility of collecting monthly instalments from the benefitted consumers through regular monthly electricity consumption bills. Being a public utility, it is laudable that the petitioner undertakes such a responsibility to promote energy conservation with consequential benefits to the consumer, the petitioner and all other stakeholders in Electricity sector.

14. The Distribution, Installation, Insurance, Storage and other costs are clearly stated to be subject to what has to be determined through competitive bidding and any reduction in the estimated costs as shown in the petition was assured to be passed on to the consumers. It has been stated during the hearing that the actual costs are anticipated to be much less than what was estimated in the petition.

15. The interest for Debt Servicing, Return on Equity and Annual Maintenance Charges are claimed to have been limited to the same level as approved by this Commission in respect of DELP programme Phase-II and though, it is true that during the period of warranty for the fan, M/s. Energy Efficiency Services Limited is not burdened with any responsibility of maintenance of the fan, it claims the maintenance charges to have been intended to ensure the setting up of call centers and man power for ensuring compliance with the warranty by the manufacturers and avoiding any inconvenience to the consumers. In so far as the amount proposed to be charged from the consumers towards the buy-back price of the old fans, it is obvious that the amount of Rs.100/- proposed to be paid as buy-back price of the old fan is again

collected from the same consumer in the name of incentive, thus taking away the old fan free of cost in effect and substance without making any payment for it. When the Commission made such an observation to the representative on behalf of M/s. Energy Efficiency Services Limited, the response was by stating that there will be no buyback of the fan now. As the consumer can retain his old fan and use it or dispose it off in any manner he likes, there will be no such inhibiting factor in accepting the proposal, which is otherwise beneficial.

16. In so far as the suggestion of Sri M. Thimma Reddy about the possibility of replacing the conventional ceiling fans with super efficient fans instead of BEE 5 star rated fans is concerned, it was represented on behalf of M/s. Energy Efficiency Services Limited that the cost of the super efficient fans is almost 2 times the cost of 5 star rated fans at present, apart from the production capacity of super efficient fans being too low. It also stated that in case super efficient fans come at a cost lower than others, the same would be provided under the programme. If a super efficient fan costs 2 times more than the conventional ceiling fan or a 5 star rated fan, the consumers may not be enthusiastic to respond to the programme and it is also doubtful as to how many consumers would have the financial capacity and economic comfort to pay such higher sum, as such beneficial programmes are intended more for the low end consumers and not high profile users.

17. Concerning the other objection about the wattage of the fan, it is stated that there are several 5 star rated fans which are between 40-50 watts and it is also explained that there is no monetisation of energy savings to presume any adverse impact on the revenues of the petitioner.

18. In so far the installation of new fans is concerned, M/s. Energy Efficiency Services Limited now proposed that the cost of installation of the new fan and the responsibility for installation of fan may be deleted from the proposal to avoid

avoidable delays and also to reduce the cost of distribution and storage by Rs.50/- per fan. It also stated that installation can be through manufacturing dealer network and it will also evolve a programme for training the local electricians in consultation with the Indian Fan Manufacturers Association. Hopefully, the personnel of the petitioner will be able to organize the services of local electricians at reasonable rates for installation of new fans under this project and such electricians also may be readily forthcoming in view of the volume of work they are likely to get in contrast with the limited work they have in the ordinary times. Coordination between the manufacturers and M/s. Energy Efficiency Services Limited in this regard and training of the local electricians may significantly reduce the cost of installation and this being a pilot project, the result thereof can guide in extending the programme further to other areas of the State.

19. The assumed power saving estimated by the petitioner and M/s. Energy Efficiency Services Limited is suspected to be high by the objector. But any such hypothetical apprehension should not stand in the way of extending the benefits of such energy management programme which even according to the objector appears to be definitely capable of leading to lesser consumption of energy though not to the extent claimed by the petitioner. In so far as meeting the proposed target of one lakh fans, while there are only 34,833 fans in Narsapuram town as of now as per the survey, it is represented on behalf of M/s. Energy Efficiency Services Limited that the pilot project is not confined to Narsapuram but it is proposed for all the adjoining areas of the erstwhile Narsapuram revenue sub- division. Execution and evaluation of such a pilot project is a must to enable the petitioner and M/s. Energy Efficiency Services Limited to decide whether the programme should be spread further.

20. Sri S. Surya Prakasa Rao in his objections cautioned to keep in view the provisions of Energy Conservation Act, 2001 and the relevant rules and regulations in

the implementation of this pilot project and the Energy Conservation Act, 2001 does not appear to be contravened in any manner by the present project. In fact, efficient use of energy and its conservation are the aim and object of the legislation which imposes positive duties on the Central and State Governments in this regard and makes any default in complying with the statutory mandate liable to prescribed penalties. Sri S. Surya Prakasa Rao himself opined the activity to fall under 'other business' as defined in Regulation 3 of 2005 of this Commission, making it legitimate for the petitioner to undertake such a programme. No sacrifice of the interests of the petitioner is involved in ensuring the payment by the benefitted consumers to M/s. Energy Efficiency Services Limited as feared by Sri S. Surya Prakasa Rao and thus, there appear to be no insurmountable obstacles against permitting the programme.

21. The suggestion of Sri M. Thimma Reddy to give choice to the consumers to pay the full amount at a time to avoid liability for interest, has been accepted and the cost of awareness and registration has been agreed to be reduced to Rs.5/- per fan from Rs.10/- per fan, the Energy Conservation Mission of the State of Andhra Pradesh undertaking to meet any deficit in this regard. M/s. Energy Efficiency Services Limited undertakes under the Agreement that the fan will conform to the mandatory minimum technical specifications stipulated by the Bureau of Indian Standards, thus guaranteeing the interests of the consumers and it was also agreed that instead of 20 monthly instalments, it will be 24 monthly instalments to the consumer in equal sums of Rs.75/- for the total estimated cost of Rs.1,555/- and if it is a lump sum payment, the advantage will be by not charging towards the interest / Return on Equity component which the consumer pays in case of monthly instalments. Onetime payment thus saves Rs.245/- to the consumer. On an overall view of all the facts and circumstances placed on record, the pilot project has to be permitted to be implemented subject to various changes explained during the course of hearing. M/s. Energy Efficiency Services Limited also proposed to extend the benefits of the

programme to commercial and institutional category consumers including industrial consumers with a cap of 2 fans for domestic consumers, 10 fans for the commercial consumers and 50 fans for the institutional consumers. In view of the execution of the project as pilot and the doubts about demand for the target of one lakh fans for the domestic consumers only, the said request also appears to be reasonable and acceptable. It should be made clear that the question of recovery of any amount through Aggregate Revenue Requirement by the petitioner does not arise, as no financial commitment by the petitioner is involved in implementation of the pilot project. The proposal should thus be moulded on the whole on the above lines, thus effectively answering all the concerns of the two energy experts also.

22. Therefore, the petitioner is permitted to implement the Domestic Efficient Fans Programme (DEFP) in Narsapuram revenue sub-division of West Godavari District with the financial support of M/s. Energy Efficiency Services Limited, New Delhi, subject to the following:

(a) the cost of Awareness and Registration in respect of each fan shall be limited to Rs.5/-.

(b) no amount shall be charged from the consumers towards any incentive and there will be no buyback of the replaced old fan of the consumer.

(c) the total cost of the fan in the event of upfront payment by the consumer shall be subject to a maximum of Rs.1,555/- with the benefits of any reduction in the cost through open competitive bidding being passed on to the consumer.

(d) if consumer opts to pay in monthly instalments, he shall have to pay a maximum of Rs.75/- per month subject to the benefit of any reduction in the cost through open competitive bidding being passed on to the consumer.

(e) M/s. Energy Efficiency Services Limited shall during the period of warranty of 2 years be responsible for observance of warranty and the consequential maintenance.

(f) the installation of the new fans shall be by the consumer himself for which every possible assistance may be extended by the petitioner, M/s. Energy Efficiency Services Limited and the manufacturer through training the local electricians and taking every possible step for providing such service to the consumers at reasonable charges.

(g) implementation of this pilot project has nothing to do with the Aggregate Revenue Requirement of the petitioner in any year.

(h) the pilot project can cover domestic consumers, commercial consumers and institutional consumers (including industrial consumers) with a cap of 2,10 and 50 fans to each of such consumers respectively.

23. The petition is allowed accordingly subject to the above directions and the petitioner shall enter into and submit an Energy Savings Agreement with M/s. Energy Efficiency Services Limited, New Delhi accordingly incorporating all the necessary details as per the directions detailed above and submit the same to the Commission for approval. The petitioner and M/s. Energy Efficiency Services Limited can proceed to take steps for implementation of the programme even in the meanwhile in respect of the pilot project.

This order is corrected and signed on this the 7th day of November, 2015.

Sd/-
P. Rama Mohan
Member

Sd/-
Dr. P. Raghu
Member

Sd/-
Justice G. Bhavani Prasad
Chairman