Delhi Electricity Regulatory Commission

Viniyamak Bhawan, C-Block, Shivalik, Malviya Nagar, New Delhi – 110 017

Petition No. 13/2005

In the matter of : Petition under Section 11, of the Delhi Electricity

Act, 2000, in the matter of High Voltage Distribution System (HVDS) for tube-well connection in

NDPL area.

In the matter of:

M/s North Delhi Power Ltd.Petitioner

Versus

Government of National Capital Territory

of Delhi and Others.Respondents

To,

Sh. A.K. Sardana Managing Director, M/s North Delhi Power Ltd., Vidyut Bhawan, 1st Floor, Hudson Lines, Kingsway Camp,

Delhi - 110009. **Petitioner**

The Special Secretary (Power), Government of National Capital Territory of Delhi, 8th Level, B-Wing, Delhi Secretariat, I.P. Estate,

New Delhi-110002. Respondent No. 1.

Chief Operating Officer, M/s BSES Rajdhani Power Ltd., BSES Bhawan, Nehru Place.

New Delhi – 19. Respondent No. 2.

Sh. Arun Kanchan Chief Executive Officer BSES Yamuna Power Ltd., Shakti Kiran Building, Karkardooma

Delhi - 92. Respondent No. 3.

Shri Ram Nauj Tyagi House No. 31, Village & P.O. Burari, K. No. 414-121589, Delhi-110084

Respondent No. 4.

Shri Jagvir Rana C-10, Sai Apartments, Sector –13,

Rohini, Delhi-110085. Respondent No. 5.

Coram:

Sh. K. Venugopal, Member & Sh. R. Krishnamoorthy, Member.

ORDER

(Date of Order: 18.11.2005)

- 1. This petition has been brought before the Commission by the North Delhi Power Ltd. who are the Electricity Distribution Licensee in the North and North West parts of Delhi. The petition seeks an approval for introduction of High Voltage Distribution System, herein after called HVDS for the tube-well connections in the NDPL area. The applicant has submitted that there are approximately 6000 Agriculture Power connections in NDPL area and the majority of these tube-wells are presently connected to Low Tension (LT) network of supply and the approximate geographical area covered by these agriculture connections is around 150 Sq. Km.
- 2. The Petitioner has submitted that since the tube-well connections are installed in 'Kothras' at the site of agricultural land which are generally locked, this has resulted in provisional billings and in many cases has resulted in non-payment of electricity bills. It is further submitted that there is also tremendous misuse of these connections by way of meters being bypassed, use of such connections by farm houses for non-agricultural purposes etc. The LT network presently installed in the NDPL area is stated to be very vast and the wires are easily accessible to anyone who wishes to draw power unauthorisedly. Further, the theft of wires itself is also rampant in these areas despite seeking recourse to the Police.
- 3. In view of the above constraints, the Petitioner has proposed for introduction of a High Voltage System to ensure continuous and uninterrupted power supply. The applicant proposes to introduce High Voltage Network to replace the present LT Network and to deploy autoreclosures and time graded sectionalizer which would switch on circuits after transient faults are removed. The cost involved for converting the existing LT Network for tube-well into HVDS Network is estimated to be approximately Rs. 1 lakh to 4 lakh per consumer depending on the geographical location of the consumer. Considering an approximate figure of 6000 agricultural connections, the Petitioner has proposed a net expenditure of around Rs.200 crore. It is further estimated that an average

- of Rs. 2.5 to Rs. 3 lakh would have to be contributed by each consumer towards such a project.
- 4. The Petitioner has submitted that most of the outer North and North West parts of Delhi do not have any land development agency like DDA, MCD, Rural Department/Social Welfare Department. In the absence of such institutions, it would be difficult to provide source of finance for the project, and therefore, the 50% share of the cost of development towards this project has to be borne by the consumers of the area. In case the cost of development is not borne by the consumers in the ratio of 50:50, then the burden will fall on the other consumers of Delhi. In view of the above situation, it is prayed before the Commission that suitable guidelines may be issued on the subject matter so that the Licensee can make the investment and include the same in their capital expenditure.
- 5. After going through the initial submissions made by the Licensee, the Commission directed the Licensee on 16.3.2004 to further elaborate on the proposal and furnish other details on the scheme including the financial and technical feasibility of the proposed scheme. The Licensee thereafter, made additional submissions stating that in case of tube-well connections, units billed are negligible in most of the cases since the tubewell connections are given on LT System and the LT bare conductors are available right upto the tube-well 'Kothras' of the agriculture consumers which provides an easy access to the LT conductors to those who intend to steal electricity. It was submitted that no individual 'Energy Audit' is possible in these cases and linking consumers geographically is difficult in view of the large spread of the agriculture connections. It is added that the conversion of these LT bare conductors with HT conductors and by installing individual transformers for each tube-well connection, HVDS will not leave any scope for consumers to indulge in direct theft of electricity. This will result in the accounting of actual energy consumed by each tube-well consumer and would contribute in reduction in AT & C Losses. Further, a typical LT Network has a technical loss of 4% to 7% whereas introduction of HT System will substantially reduce the AT&C losses.
- 6. In a subsequent submission made before the Commission on 3.6.2004, the NDPL had proposed the following:
 - (i) where there is an application for a new tube-well connection upto a maximum of 10 KW capacity and where such connection

is within the range of two standard spans of HT network, in such cases, the connection can be energized after completion of commercial formalities by the consumer(s) subject to payment of Service Line charges and Consumption Deposit in accordance with the guidelines issued by the Commission.

(ii) For any other tube-well connection, requiring extension of HT lines beyond 2 spans or where it calls for installation of additional transformer or extension of HT Network, the total electrification cost shall be shared between the consumer and the Licensee in the ratio of 50:50, so as to avoid any tariff shock to the other consumers of Delhi.

It is further submitted that this system would strengthen the energy audit and in case any agricultural consumer exceeds consumption of 10 KW, he should be easily booked for unauthorised use of energy under the relevant provision of the Act.

- 7. During the pendency of this application, the Licensee, on 14.07.2004, had submitted another set of proposals for grant of new connections which were pending before the Licensee for energization of agriculture pumpsets. This fresh proposal was introduced in view of the fact that there were as many as 1000 cases of stolen conductors which were pending with the Licensee and it is estimated that around 500 running Kms of conductors would be required to refurbish the crippled LT network. Considering the huge volume of work and the cost involved, it was proposed that the entire expenses be phased over a period of two to three financial years. In order to avoid a Tariff shock to the consumers of Delhi, the following three alternatives were submitted:
 - (i) All new connection applicants in a particular area may accept to be grouped together or individually wish to be energised at one point of time together and agree that the total electrification cost from the existing 11 kV network can be shared between consumer and the NDPL in the ratio of 50:50. Similarly, in the case of stolen conductors, the connections could be restored on HVDS basis and the total cost at 11 kV may be shared in the ratio of 50:50 between the consumer and NDPL.
 - (ii) In cases where the tubewell connection is within 60 to 75 meters from the existing HT lines, NDPL shall provide the connection at its

- own cost and shall charge from the consumer in accordance with the Schedule of Miscellaneous Charges issued by the Commission for giving new connections.
- (iii) While the above two alternatives would lead to permanent electrification, as an interim arrangement, NDPL could consider providing a temporary/ad-hoc/provisional tubewell connection wherein NDPL would agree to the consumer installing the service line from the meter to the load point by the consumer itself. The meter in all such cases shall be provided at the sending end in special lockable structure of poles/kiosks. As the service line shall be provided by the consumer, no separate service line charges shall be taken from the consumer and only consumption deposit shall be charged.
- 8. During the pendency of this petition, some of the consumers, namely, Sh. Ram Nauj Tyagi and others have approached this Commission for the purpose of seeking directions from the Commission that the Licensee be directed to energise their tube-well connections at the earliest. The submissions made by such applicants have been considered and also taken on record.
- 9. The Commission after hearing the matter had passed an interim Order on 03.06.2005 whereby directions were given that the two BSES companies may also be impleaded in the matter since the issue is common to all the Discoms. Further, since the requirement of funds was huge, the Government of the NCT of Delhi was also impleaded so as to examine whether funds for energisation of tubewells can be made available from any of the ongoing schemes of the Government. Two other individuals, namely, Sh. Ram Nauj Tyagi and another, Sh. Jagvir Rana who had filed a case in the High Court of Delhi on the same subject were also impleaded. The Commission directed that the petition be admitted and that notice be issued to all the impleaded Respondents to file their replies within two weeks.
- 10. The matter was again heard on 21.7.2005 and the issues raised in the petition were discussed at length. During the course of hearing, the representatives of BSES Rajdhani Power Ltd. and BSES Yamuna Power Ltd. had made further submissions that it is the duty of the Land Development Authority to give Plan Projection for the electrification of area and based

upon such Plan/Policy, the Distribution Companies initiate Load Planning and coordinate for right of way etc. It was added that the Government of Delhi had issued certain restrictions on installation of tube-wells in the areas of supply of BSES. However, certain pockets in the area of supply of BSES were given exemptions subject to "No Objection Certificate" from the Block Development Officer (BDO) and Ground Water Management Board. It was added that the cost per connection for a tube-well on HVDS would be around Rs. 5 Lakh.

- 11. During the course of hearing, the representatives from the Government of NCT of Delhi submitted that it was not possible for the Government to provide any grant at this stage and the Discoms may approach other financial institutions for seeking loans for the purpose of financing the HVDS system. It was further added that the Government of NCT of Delhi has no funds which could be allocated either under the Rajiv Gandhi Grameen Vidyudikaran Yojana or the Rural Infrastructure Development Programme for this purpose. The Commission was also informed that at the time of the DVB, the cost of installation of pumpsets was being borne by the DVB itself from Plan funds which it used to receive from the Government, as loan. The consumers were only being charged Service Line Charges. Sh.Ram Nauj Tyagi, who had appeared before the Commission submitted that he is one of the affected parties and that his tube well connection has not been energised despite his long persuasion with the Discom. The other impleaded individual, ie. Sh. Jagvir Rana did not appear before the Commission.
- 12. After hearing the parties, the Commission directed the Discoms on 27.07.2005 to provide revenue potential and load growth projection for the HVD Scheme which they propose to introduce. The Commission also directed the Discoms to intimate the pay back period which the Discoms estimate for such a scheme. The Government of NCT of Delhi was requested to provide the details of the Plan loans extended to the GENCO and TRANSCO.
- 13. In response to the Orders of the Commission, the NDPL had submitted the details of the proposed scheme wherein it has been indicated that there are about 6,000 tube-well connections in NDPL area out of which about 4,900 are live and the rest are the cases where conductor is stolen. During the next three years, it is expected that the

load growth for tube-well and non-domestic consumers shall be about 300 connections per year in each category whereas, for domestic, it would be about 1200 connections per year. The cost of conversion of the existing LT network to HVDS at the present prices is estimated at Rs. 2.23 lakh per connection. The total capital expenditure has been estimated to be around Rs. 161 crore and the pay back period for this investment is around 19.9 years. The impact of reduction in AT&C by carrying out this conversion from LT to HVDS is estimated to be 0.5 % for NDPL as a whole. No further information was submitted by any of the other stakeholders. GNCTD of Delhi had furnished details of Plan Funds included in the budget for the year 2005-06 which did not include any funds for energisation of tubewells. In a subsequent communication of 17.11.2005, the Government of NCT of Delhi reiterated that the GNCTD never gave any grant to DVB for energisation of tubewells but only released interest bearing Plan loans of Rs. 1 crore to 2 crore in a year. The Government also clarified that it would not be possible to release Plan funds to the Discoms for this purpose. It would also not be possible to fund this programme from any of the Government schemes, such as, the Rajiv Gandhi Vidyutikaran Yojana and the Rural Infrastucture Developent Programme.

- 14. Based on the original petition filed by the NDPL and keeping in view the averments made by the other stakeholders, including the GNCTD, the BSES Discoms and other individuals like Shri Ramnauj Tyagi, issues before the Commission are three-fold and are as follows:
 - (i) Would it be prudent to completely convert the existing LT network into HVDS considering the fact that it is a capitalintensive process with very little returns having a pay back of almost 20 years?
 - (ii) In case, there has to be a mix of LT with HVDS, what should be the guiding principles for introduction of HVDS and its expansion thereafter?
 - (iii) Who would bear the expenditure for the implementation of this scheme considering the fact that money can't be drawn from any of the ongoing welfare/development scheme of the Government? Should the cost be borne in the ratio of 50:50 between the beneficiary consumers and the Discom or should it

be completely financed by the Discom which would form a part of their ARR?

- 15. The Commission is of the opinion that since the LT network is already in place, there is no immediate need to uproot the entire LT network. The magnitude of cost involved is huge and what has to be kept in mind is that the loss reduction on account of introduction of HVDS system is stated to be only 0.5% and the pay back period for the entire scheme is around 20 years. The Commission, therefore, directs the Licensees to strengthen their LT network and ensure that it is duly maintained. The Licensees are however at liberty to introduce the HVDS network at those places where the network requires extension by means of some new installations. The Licensees will submit an Action Plan along with full details and cost for introduction of HVDS connections in the area. These plans have to be submitted along with the other CAPEX plans of the Discoms. Keeping in view the magnitude of funds required, the Action Plan should phase out the programme over at least a 3 year period. Introduction of HVDS should be carried out on the ground only after the Action Plan has been approved by the Commission. Strengthening of LT network or giving new connections on LT can, however, be done rightaway.
- 16. On the issue of who is to bear this cost, the Commission has minutely examined the financing procedure at the time of DVB and has observed that except for Service Line charges, no other expenditure was being borne by the consumer. This being the case, to expect that each individual consumer will pay, at times, more than Rs.1 lakh as Development Charge for a tube-well connection will not be reasonable. The Commission is alive to the fact that Development Charges are shared in the ratio of 50:50 between the Discom and the Developer. The Developer, in turn, recovers this money from the consumers. In this instant case, a departure is being made since there is no Developer involved and because the connections are widely dispersed, the burden on each consumer will be very high. The Discoms, therefore, are directed to include the expenditure as part of their ARR and the consumers would be liable to the Service Line Charges, Development Charges etc. for unelectrified areas as cited in the Schedule of Miscellaneous Charges fixed by the Commission in June 2003. The Discoms, however, shall ensure that all laws and regulations are complied with before connections are energised.

18. While this Order of the Commission shall be enforced with immediate effect, the Commission would like to draw attention to the draft Electricity Supply Code and Performance Standards 2005 on which the Commission has sought the comments of all stakeholders. Section 18 of the draft Regulations deals with the issue of levying charges for electricity connection in unelectrified areas. Depending upon the comments that would be received, their could be a change in the mode of charging which could be other than what has been given at para 17 of this Order. In such a situation, the Regulations of the Commission would take precedence over this instant Order.

19. The Petition is disposed off accordingly.

(K. Venugopal) MEMBER (R. Krishnamoorthy)

MEMBER