

ITEM NO. 17 (B-05)

1. Name of the subject/project.

Smart utility Road Map for NDMC - "Submission of Detailed Project Report for Strengthening of Sub-transmission & Distribution Network including Metering & IT enablement under Integrated Power Development Scheme (IPDS)", of Ministry of Power, Government of India.

2. Name of department.

Electricity Department-II

3. Brief history of the subject/project.

To introduce the concept of smart grid & speedy execution of pending works in the distribution network, in the existing Electricity Infrastructure in NDMC, it is observed that sub-transmission system of 66 & 33 KV in NDMC supply network has already been strengthened & made SCADA compatible through M/s PGCIL (Power Grid Corporation of India Ltd.). There is adequate capacity in the system, capable of meeting future projected demand of 600 MVA by year 2020 thus no major overhauling is needed at this Voltage level. However 11 KV, HT & LT distribution systems upto the consumer premises, need strengthening & revamping which is also highlighted in the Y.P. Singh committee report on "Road Map for Revamping Electrical in NDMC" submitted in the year 2007.

Considering that during the intervening period not only the load demand has increased but also with the introduction of smart grid/ metering concepts, requirements of revamping & strengthening of the distribution system need to be looked afresh.

To make NDMC sub - transmission & distribution system compatible to the requirement of smart grid, the SCADA facilities of other utilities in Delhi, who had done considerable work in their sub-transmission & distribution network by integrating technologies in improving the overall performance of system in terms of lowering losses and improving reliability were visited by NDMC team. The NDMC team is of the view that there is a need in improving its systems & processes for commercial, operation & billing in line with the requirement of "Smart Grid".

Govt. of India (GOI) through Ministry of Power (MOP) has launched IPDS with the following schemes:-

- i) Strengthening of sub transmission and distribution networks in the urban areas

- ii) Metering of distribution transformers/ feeders/ consumers in the urban areas.
- iii) IT enablement of distribution sector and strengthening of distribution network, as per CCEA approval dt. 21.06.2013 for completion of the targets laid down under R-APDRP for 12th and 13th Plans carrying forward the approved outlay for R-AAPDRP to IPDS

The scheme covers works relating to strengthening of sub-transmission & distribution system, including provision of solar panels, metering of distribution transformers/ feeders/ consumers in the urban areas and IT enablement of distribution sector. All Discoms including private sector Discoms & State Power Departments are eligible for financial assistance under the scheme. The Discoms are to assess the need for strengthening the urban distribution and formulate bankable Detailed Project Reports (DPR) for coverage under the scheme.

Since IPDS guidelines are concerning improvement of transmission & distribution network with specific funds allocation to state utilities, it was a considered view that a Detailed Project Report (DPR), on the specified format of PFC (Power Finance Corporation) be submitted to the Ministry of Power, detailing the scheme & requirement of funds under IPDS.

M/s Rural Electrification Corporation (REC) a Navratna, Central Public Sector Enterprises, under Ministry of Power, GOI, focusing on facilitating the power utilities in the areas of operation related to power distribution sector by providing expertise, conducted a study of NDMC distribution system. In the report, prepared in consultation with NDMC, besides identifying focused areas for improving effectiveness of resources and adopting State-of-Art technologies, recent scheme launched by the Govt. of India for "Electricity distribution sector in urban and semi urban areas" under "Integrated Power Development Schemes (IPDS)" was considered. It was decided that NDMC may approach Ministry of Power (MOP) through Ministry of Home Affairs (MHA) detailing the scheme and requirement of funds under IPDS.

4. Detailed proposal on the subject/project.

Considering the financial outlay for Delhi under IPDS, based on the minimum quantity of life served equipments, on inputs provided by Operation, Power, Commercial & IT deptt., a Detailed Project Report (DPR) amounting to ₹. 52870.09 Lacs, covering following schemes in the work were prepared (Annexure Separate Booklet):-

Priority	Scheme	Value Proposed (₹) in Lacs
(i)	Strengthening of Sub-transmission and Distribution network.	24424
(ii)	Smart Metering / AMI	7096.83
(iii)	IT enablement of distribution system including Technology infusion & others.	21349.26
	Total	52870.09

- As the meeting of Empowered Monitoring Committee, Ministry of Power (MOP) on IPDS was scheduled on 06.08.2015, the Detailed Project Report (DPR) was submitted to Ministry of Home Affairs (MHA) vide letter no. D - 174/ PS / Secy / 2015 dt. 03.08.2015 informing that the Detailed Project Report (DPR) for execution of "Advance Metering Infrastructure" (AMI) and strengthening of Distribution network, covering all relevant details and cost estimates based on DERC Cost Data Book rates, NDMC approved rates & current market rates has been prepared. It was also submitted that the scheme would be implemented through REC, a public sector, undertaking of Govt. of India, Ministry of Power. Rural Electrification Corporation Ltd. (REC), a Govt. of India undertaking would be assigned the above work under IPDS on a "Turn Key" basis, to ensure compliance of codal provisions and relevant guidelines of the Govt. of India in project execution through transparent and competitive bidding. Ministry of Home Affairs, being the controlling ministry of NDMC, was requested to forward the DPR with endorsement to Ministry of Power, Govt. of India, for consideration and approval of the Empowered Monitoring Committee for project scrutiny under IPDS. NDMC's DPR was forwarded by the Ministry of Home Affairs to the Ministry of Power, vide letter no. F-no.14011/32/2015- Delhi-II dt.05.08.2015, for consideration by the Ministry of Power (MOP), being the nodal ministry for IPDS
- Power Finance Corporation (PFC), the nodal agency for operationalization and implementation of the scheme under the overall guidance of Ministry of Power, besides suggesting certain improvement in the DPR also made a presentation on NDMC's DPR for consideration under IPDS before the Empowered Monitoring Committee on IPDS in Ministry of Power, in the meeting held on 06.08.2015. After deliberations, Monitoring Committee Approved-In-Principle, the DPR within the proposed value of Rs. 528.70 Crores.

Suggestions of PFC, concerning DPR, listed below, were discussed in the meeting held in the chamber of Chairman on 25.08.2015, & decision taken to revise the DPR accordingly.

- I. Distribution Reforms Committee & District Electricity Committee
- II. Signing of Tripartite/Bipartite agreement
- III. AT & C losses & loss trajectory up to 2021-22
- IV. Funding pattern
- V. Gap assessment of the functionalities developed by M/s Vyamtech in IT & OT infrastructure

The revised DPR shall be submitted to council in due course of time.

5. Financial implications of the proposed project/subject.

The estimated cost of work in DPR is ₹.528.70 Crores. The proposed funding pattern is as under:-

- | | | |
|---|-------------------|-----------------------|
| - | G.O.I Grant | - 60% (₹. 317.22 Cr.) |
| - | NDMC contribution | - 40% (₹. 211.48 Cr.) |

In case NDMC achieves implementation milestones as per IPDS guidelines, there is a provision of maximum 15% additional grant. Therefore if the project is implemented as per schedule, NDMC would be entitled for additional 15% grant. In such scenario the NDMC contribution would reduce to 25 % (₹ 132.18 Cr only).

6. Implementation schedule with timeliness for each stage including internal processing.

Eighteen months from the date of award to the Rural Electrification Corporation Ltd. (REC).

7. Final Comments of the Finance Department on the subject with diary no. & date.

Dy. No. 1976/Finance dt. 28.08.2015

- i. As far as the Draft Agendum for Transmission Distribution Report Committee and District Electricity Committee is concerned, there is no financial implications as such and administrative decision is to be taken.
- (II) Regarding the proposal in Draft Agendum No.2 above, Finance Department suggest the Department to also take cognizance of the following points while placing the Agenda before the Council:-
 - 1) The total cost of the project has been estimated as ₹ 528.70 crore. As per record, the Govt. of India will fund 60% (₹ 317.22 crore) and NDMC to bear 40% (₹ 211.48 crore) of the cost of the Project. The Department has proposed to bear the NDMC share of the cost from the internal resources of NDMC. A cost plus benefit analysis of the project needs to worked out

and should be part of the project report. It is further advised that Deptt. may also work out and bring on record the year wise allocation of fund required for the project so that the commitment of NDMC fund is considerably spread out.

- 2) The modalities of fund transfer to be made to the selected Company which is awarded as turn key project may also be worked out and brought on record.
The department may also bring on record as to how they will ensure timely release of funds from Govt. of India so that there is availability of adequate fund during execution of work.
- 3) The funding as described under fund disbursement guidelines Chapter -IV for IPDS states that additional grant to the tune of 50% of total loan/own fund (30%) i.e. 15% shall be disbursed by the Govt. of India on achievement of laid down prescribed milestone. The Department may ensure and plan the activities to achieve this additional grant so that there is no burden on NDMC reserves.
- 4) In the recommendations, it is observed that the project is to be implemented on turn key basis through Rural Electrification Corporation (REC), Govt. of India Undertaking stating that they are having adequate experience and expertise in the field. The guidelines of IPDC issued by Ministry of Power, it inter-alia described under mode of implication on page 7 that the turn key contract shall be awarded by concerned utility i.e. REC in this case through e-tendering with the prescribed procurement policy, standard bidding documents and technical specifications being circulated separately by Nodal Agencies.
- 5) It appears from perusal of record that various works/schemes under the instant proposal would have been covered/executed under Y.P. Singh Committee report and the work regarding IT modules awarded to M/s. Vayamtech. The Department may ensure that there is no overlapping/duplicity of schemes under the instant project.
- 6) In the guidelines issued by Ministry of Power vide para 8 at Annexure 1, there is a list of items not eligible to be covered under this scheme. The Department may bring on record whether there is any such item. If so, the details along with financial implication may be brought on record.

(This issues with the approval of F.A.)

Department's Clarifications:-

Para II(1)The cost plus benefit analysis of the project would be worked out and made a part of the "Revised Detailed Project Report", which would be submitted to Council in due course of time. Further the year wise allocation of funds required for the project, to spread out the commitment on NDMC funds, shall also be placed before the council along with the revised DPR in due course of time.

Para II(2) The modalities of the fund transfer to the selected company, which is awarded "Turn Key" project, shall be finalized in consultation with finance & approval of the competent authority.

For timely release of funds from GOI, the progress of execution of work shall be communicated to the nodal agency for IPDS & Ministry of Power (MOP) regularly.

Para II(3) Department in close co-ordination with Commercial, Power & IT department would make all out efforts & plan the activities to achieve the defined milestones as per IPDS guidelines for becoming eligible for additional grant of 15% to minimize burden on NDMC reserves.

Para II(4) Advice of Finance is noted and REC would be advised to award the "Turn Key" contract through e-tendering with the prescribed procurement policy, standard bidding documents and technical specifications circulated by nodal agency, if any.

Para II(5) Power, Commercial & IT department would ensure that there is no overlapping & duplicity of items already covered in modules, awarded to M/s Vaymtech & Electricity Department would also ensure that old/outlived substation equipments, not covered in Y.P Singh Committee Report, are a part of Detailed Project Report.

Para II(6) The Detailed Project Report has been submitted to Power Finance Corporation who is the nodal agency on IPDS in Ministry of Power (MOP). The revised DPR would also be submitted to PFC, who would examine the proposal, as per IPDS Guidelines.

8. Legal implication of the subject/project.

---Nil---

9. Details of previous Council Resolutions, existing law of Parliament and Assembly on the subject.

---Nil---

10. Final Comments of the Law department on the subject/project.

There are no legal issues at this stage. The DPR is prepared as per the guidelines on IPDS .Comments of Law Deptt. may be treated as Nil at this stage.

11. Certification by the Department that all Central Vigilance Commission (CVC) guidelines have been followed while processing the case.

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12. Recommendation.

The case may be placed before the Council for approval of the following:-

- (A) The Council being the 'Distribution Reforms Committee' & 'District Electricity Committee' recommends the DPR for the work of Strengthening of Sub-transmission & Distribution Network including Metering & IT enablement in NDMC under Integrated Power Development Scheme (IPDS) for approval of monitoring committee, in Ministry of Power (MOP) through Ministry of Home Affairs (MHA).
- (B) Ex-Post facto Administrative Approval (A/A) of the Council for submission of DPR amounting to ₹ 528.7009 Crores under IPDS for Strengthening of sub-transmission and distribution network including metering & IT enablement, for consideration of the Empowered Monitoring Committee in Ministry of Power, GOI, in the meeting held on 06.08.2015 through Ministry of Home Affairs (MHA).
- (C) Rural Electrification Corporation (REC), a Navratna, Central Public Sector Enterprises, under Ministry of Power, GOI, having adequate experience and expertise in the field to be assigned execution of above work under IPDS on a "Turn Key" basis, complying codal provisions and relevant guidelines of the GOI in project execution through transparent and competitive bidding as recommended by the High Level Committee in NDMC for this work & authorize Chairman, NDMC, to sign the agreement with Rural Electrification Corporation (REC).
- (D) Expenditure sanction (E/S) of ₹. 211.480 Crores, being the non-grant (40%) portion in the work of Strengthening of Sub-transmission & Distribution Network including Metering & IT enablement in NDMC under Integrated Power Development Scheme (IPDS), to be funded by NDMC, from its own resources.
- (E) To delegate the authority with Chairman, NDMC to appoint a *Project Management Agency (PMA)* for assisting NDMC in Project Management, ensuring timely implementation of the project, as per the guidelines for implementation of IPDS. A/A & E/S of Council on the financial implications shall be taken in due course of time.
- (F) Based upon PFC's observation & further ground trotting an updated/revised "Detailed Project Report" (DPR) be submitted to Council in due course of time.

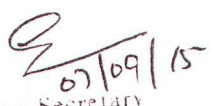
9. Draft Resolution

Approval of Council is accorded to the following:-

- (A) The Council being the 'Distribution Reforms Committee' & 'District Electricity Committee' recommends the DPR for the work of Strengthening of Sub-transmission & Distribution Network including Metering & IT enablement in NDMC under Integrated Power Development Scheme (IPDS) for approval of monitoring committee, in Ministry of Power (MOP) through Ministry of Home Affairs (MHA).
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COUNCIL'S DECISION

Approved.


 07/09/15
 For Secretary
 New Delhi Municipal Council
 Ballia House, New Delhi

28.08.2015