

Guidelines for Saturation Survey and Preparation of Detail Project Reports (DPRs) under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) – II (12th Five Year Plan) Project

Preamble

Govt. of India has implemented the RGGVY scheme in the State during the Xth and XIth plan period with an objective of access to electricity to all households having population above 100. During the implementation of **RGGVY - I** some of the structural deficiencies have been noticed. It was also noticed that due to lack of due diligence during survey, even habitations having population more than 100 were left out from the DPRs in many villages. Besides these significant numbers of BPL Households were not covered in the scope of RGGVY – I, resulting into lower provision of infrastructure in the DPR. In order to overcome these deficiencies, Govt. of India is now planning to extend the RGGVY Programme in the XIIth plan period with some modifications.

At this juncture, therefore a saturation survey has become necessary to be conducted to assess the realistic requirements. In order to have full-proof survey, each village and habitation should be surveyed thoroughly. Primarily Govt. of India has intended to entrust the saturation survey & DPR preparation activities for the XIIth Plan RGGVY to all the Distribution Utilities in the State instead of the implementing Central Public Sector Units (CPSUs).

While conducting the saturation survey & preparing the DPR, all DISCOMs must ensure that no habitation & no BPL households has been left out. For preparation of BPL household list the latest census data should be taken into consideration. During the preparation of DPR the DISCOM officials have to keep close contact with the Gram Panchayats, BDOs, Block & Tehsil officials & Public representatives to determine the number of habitations & BPL households. Further, the DISCOM officials should obtain block wise village enumeration, block maps & abridged households list from Collectors/BDOs. In the preparation of draft DPR for every village a map should be prepared with the help of Revenue official of the area. All district Collectors will actively support the preparation of draft DPR & provide the data in respect of hamlets, villages along with its population & number of BPL households as per the latest population survey with census code.

The achievement during last 5 years district wise will be taken into account for calculating the future 5 years growth to be implemented year wise.

The saturation survey should be conducted meticulously to assess the accurate number of habitations, number of BPL & APL households and infrastructure requirement under the scheme. While preparing the technical aspects of DPR, DISCOMs should take into account the existing network as well as the new networks created under RGGVY - I & find out the additional infrastructure requirement keeping in view the future load enhancement with full justification.

While assessing the new infrastructure requirement the existing 33/11 KV Sub-stations, 33 KV lines, 11 KV lines, LT lines, DTRs, AB cables & safety gadgets like VCBs are obviously to be taken into consideration. The route plan of new lines (33 KV, 11 KV & LT), re-alignment of networks (33 KV, 11 KV & LT), the tentative location of the Primary Sub-stations (33/11 KV) and probable location of DTRs are to be identified. A village map indicating the location details of the existing as well as proposed electrical installations shall be developed. Subsequently the villages shall be mapped with the corresponding 11 KV feeders. The requirement of statutory clearances like Railway crossing, National highway crossing, Forest clearance and River crossing, Canal crossing etc. should be indicated clearly in the DPR.

In case there is possibility of up-gradation 33 /11 K.V Sub-station, the same be taken up at first instance before taking up the new 33/11 K.V sub-station at new location.

A comprehensive DPR should be prepared for XIIth plan RGGVY for proper & effective implementation of the scheme in the State as there would be no provision of Revised Cost Estimates or Supplementary DPRs to be entertained by Govt. of India in the RGGVY - II during XIIth plan.

Modalities of Saturation Survey for RGGVY - II

1. The DISCOMs shall conduct the saturation survey. While doing the survey the household data of SECC & abridged house list and enumeration block map shall be shared with the survey Team of the DISCOMs by the District Administration.
2. Every Village and Habitation should be physically surveyed.

3. All the BPL households should be covered (This should include Socio Economic and Caste Census (SECC) data, Annapurna & Antodaya Yojana list & Left out Poors list).
4. Every Gram Panchayat and Block Officials should be fully involved with the survey activity.
5. BDOs will be the Nodal Officers for the Saturation Survey. BDOs are to ensure that all the villages and habitations are physically visited and surveyed by the Survey Team consisting of Block Officials, DISCOM Officials & Village representatives. BDOs shall conduct surprise checks of the survey through their extension officers.
Basing on final survey habitation wise/ village wise datas may be entered online develop by REC village wise with single line diagram also need to upload in the portal.

PART – A (Procedural Guidelines)

- 1) A survey team comprising of the following members:
 - I) Sub Divisional Officers (SDOs)/ Junior Engineers/nominated representative of DISCOMs,
 - II) Panchayat Samiti Member/Nominated representative of the Sarpanch/ Ward Member of the village/ Village Level Workers &
 - III) Representative of the BDO
- 2) The BDO may decide the number of panchayat level survey teams to be formed for timely completion of survey in the entire Block. The BDO shall chalk out the time schedule for the Survey
- 3) The Team will obtain the block wise village enumeration, block maps & abridged household lists along with Socio Economic and Caste Census (SECC) data, Annapurna & Antodaya Yojana beneficiary lists & Left out Poors (LOP) list from the Block Office/ Office of DRDA.
- 4) The Survey Team will conduct necessary survey of each individual village and their habitations physically irrespective of their status of electrification & will capture the basic electrification data in the prescribed formats.
- 5) Further the Team will assess the requirement of additional 11 KV lines, Distribution Transformers, LT lines & Household Loads inside

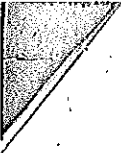
the village considering the Technical aspects as provided at PART – B of this document. Besides this the route for proposed new lines (if any), location of Distribution transformers, Tapping points, Additional Infrastructure requirements & expected Right of Way, Road/Canal/Crop field etc. Crossings, Forest patches shall be mentioned clearly along with the survey data.

- 6) The village map showing its habitations along with the single line diagram of the existing infrastructures indicating the tapping point (including those created under RGGVY Phase - I) and the proposed infrastructure details are to be prepared.
- 7) The respective SDOs of the DISCOM will assess the requirement of New 33/11 KV Sub-stations, additional Power Transformers and Distribution transformer, New/Up-gradation of 33 KV & 11 KV feeder lines in the Block considering the Technical aspects as provided at PART – B of this document.
- 8) Prior to submission of village level survey data in the prescribed formats to the Block Office, the Survey Team shall ensure a certificate from concerned Sarpanch regarding complete coverage of the panchayat.
- 9) The survey team shall submit the village level survey data in the prescribed format duly signed by the team members at Block Office. At Block level the same shall be compiled / assimilated and submitted to the concerned DISCOM Executive Engineers.
- 10) A Task Force shall be formed at District level by the Collector for random sample checking of survey in the District.
- 11) The Collector shall review the progress of survey fortnightly.
- 12) Subsequently a State level Task Force shall be formed to test check the survey works in the field.
- 13) The DISCOMs shall consolidate the data District wise, based on which the Draft DPRs will be prepared.
- 14) The Draft DPRs will be submitted in 100 copies to the District Collectors by the DISCOMs.

- 15) The District Collectors shall circulate the Draft DPRs among the MPs, MLAs, Zilla Parishad Members & Block Chairmans seeking comments of Panchayat Samiti, Zilla Parishad, MLA's & MPs within 15 days. In case no suggestion is received within the stipulated time frame, it will be treated as there is No Objection on the Draft DPR.
- 16) The Draft DPRs along with the comments received will be placed before District Electricity Committee (DEC) for freezing of information & finalization of DPR.
- 17) Approved DPRs will be forwarded by the Collectors to the Dept. of Energy along with affidavits of the respective DISCOM's Executive Engineers, Superintending Engineers & Managing Directors/CEOs.

PART - B (Technical Guidelines)

- 1) Distribution Transformer capacities shall be estimated on the basis of 250 Watts per BPL Household & 500 Watts per APL Household.
- 2) Proposed Infrastructure requirement will be calculated taking into account the existing infrastructures (including infrastructures created under RGGVY Phase - I in 10th & 11th Plan) and expected future load growth for a period of 5 years.
- 3) New additional 33/11 KV Sub-station to be proposed where ever required considering existing and work in progress with a distance of 20 Km radius of each 33/11KV Sub-station. The proposals shall be supported with the Technical feasibility report of the Executive Engineers.
- 4) The existing Sub-station to be up-graded, in case a 33/11 KV Sub-station exists within 20 Km radius.
- 5) Power Factor will be calculated as 0.9. Other Technical parameters like Line Clearances, Diversity Factor, Maximum permissible Voltage Drop, and Permissible Voltage Regulations etc. shall be calculated as per relevant Electricity Act/Rule and IEC/ISS/CEA/REC Standards/Guidelines in force.
- 6) Vaccum Circuit Breakers (VCBs) to be proposed at new 33 KV incoming & 11 KV outgoing feeders.

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- 7) Arrangement for extension of 33 KV bay from Grid Sub-stations as well as at incoming of 33/11 KV Sub-stations to be provided, if required.
 - 8) Additional new 11 KV feeders along with bay arrangements shall be limited up to 25 Kms.
 - 9) Concrete Platform/Metallic Platform to be provided in the 33/11 KV Sub-stations for easy operation of VCBs & other Safety equipment's, as recommended by original equipment manufacturer (OEM).
 - 10) Up-gradation of existing 33 KV & 11 KV feeders to be done by providing midpoint/interposing poles (to avoid ROW problems in case of new lines).

Pole to pole distance for P.S.C pole shall be planned for 67 meters for cross country alignment. The straight alignment of lines should be planned in all possible cases depending on site conditions.

- 11) In the LT circuit 3 Ph./1 Ph. AB Cable to be provided as per the site requirement
- 12) Provision of Double Pole & Four Pole structures to be incorporated as per REC Construction Standards & Guidelines
- 13) Individual Coil Earthing to be provided for each BPL Households for safety purpose.
- 14) Existing 33 KV and 11 KV feeders to be bifurcated limiting 22-25 Km respectively best on clause No.4&8 above.
- 15) The size of DTR i.e single phase 10 KVA, 16 KVA and 3 Phase 16 KVA, 25 KVA along with 63 KVA & 100 KVA to be proposed based on required load in the habitations/ villages excluding existing DTR.

GOVERNMENT OF ODISHA
DEPARTMENT OF ENERGY

No.EL (RGGVY)-28/2012 9228 /En. Bhubaneswar Dt. 20/11/2012

From

Shri C.P. Mohanty, OFS (SAG),
F.A-cum-Addl. Secretary to Govt.

To

The All Collectors./
EIC (Elect.)-cum-PCEI,Odisha, Bhubaneswar.
The CEO, CESU, Bhubaneswar.
The Managing Director,NESCO,Balasore.
The Managing Director,WESCO, Burla, Sambalpur.
The Managing Director,SOUTHCO, Berhampur.
The General Manager,NTPC Ltd., Bhubaneswar
The General Manager, PGCIL, Bhubaneswar
The Asst.General Manager,NESCL, Bhubaneswar
The CEO, CSO,Bhubaneswar.
The C.P.M. REC, Bhubaneswar.

Sub: Guidelines for saturation Survey and Preparation of Detail Project Reports (DPRS) under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)-II (12th five year plan) Project.

Sir,

I am directed to invite a reference to the subject noted above, and enclose a copy of the Guidelines for necessary followup action at your end.

Yours faithfully,

Memo No. 9229 /En., Dated 20/11/2012 ✓
Copy alongwith copy of the Guidelines forwarded to P.S. to Hon'ble Minister(S),
Energy for kind information of Minister. F.A-cum- Addl. Secretary to Govt. 20/11/12

Memo No. 9230 /En., Dated 20/11/2012 ✓
Copy alongwith copy of the Guidelines forwarded P.S.to Commissioner-cum-
Secretary,Energy Deptt. for information of Commissioner-cum-Secretary Energy Deptt. F.A-cum- Addl. Secretary to Govt. 20/11/12

Memo No. 9231 /En., Dated 20/11/2012 ✓
Copy alongwith copy of the Guidelines forwarded to All Officers of Energy Deptt. for
information. F.A-cum- Addl. Secretary to Govt. 20/11/12

Memo No. 9232 En. Dated, 20/11/2012 ✓
Copy alongwith copy of the Guidelines forwarded to All Branches/ Computer
Cell/Technical Consultants /Er.S.K.Das/ All DCOs of Energy Deptt. for information. F.A-cum- Addl. Secretary to Govt. 20/11/12

✓ F.A.-cum-Addl. Secretary to Govt. 20/11/12

20/11/12

Memo No. 9635 /En., Dated the, 03/12/2012

Copy alongwith copy of the Guidelines forwarded to Head Portal Group, Secretariat with a request to make it available over the Official Website of Energy Department.


F.A-cum-Addl. Secretary to Govt. 12

