

Central Electricity Authority
Co-Ordination Division
Sewa Bhawan, R.K.Puram
New Delhi-110066

NO: CEA/1/2/RTI/CD - 2013/ 847

Dated: 26.12.2013

शुभ
7/1/14
Sh. Sudhir Mittal,
General Manager (CP) & CPIO,
Saudamini, Plot No-2,
Sector - 29,
Gurgaon -122001

Subject: Information sought under the RTI Act, 2005.

Sir,

Please find enclosed in Original MoP Letter No 10/5/(61)/2013 - PG (RTI), dated 19-12-2013 meant for you, which has been delivered in this office inadvertently.

Encl: As stated above

Su Maharana

(S.K.Maharana)
Director

Sh Babu
9/1/14



No.10/5/(61)/2013-PG (RTI)
Government of India
Ministry of Power
Shram Shakti Bhawan, Rafi Marg, New Delhi – 110001
Telefax No. 23730264

To,

Dated: 19th December, 2013

Shri Naveen Nagpal,
G-220, Srinivaspuri,
New Delhi-110065

Sub: Information sought for under the Right to Information Act, 2005.

Sir,

Reference is invited to your application under provisions of RTI Act, 2005 addressed to CPIO, and Nodal Officer (RTI), M/o Power and received in PG Section on 11/12/2013 seeking information regarding Schedule of Rates(SOR) for various items of Bill of Quantities (BOQ) for the TL and substation for each quarter starting from FY 2009-10 till date pertaining to POWERGRID.

The information requested in your application is available with PGCIL, Gurgaon for which your application is being transferred to them for further appropriate action.

Shri Ghanshyam Prasad, Director (PG) is the Appellate Authority, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.

Yours faithfully,

(Ajay Joshi)

Under Secretary (PG) & CPIO

Copy to

✓ CPIO/ Nodal Officer, RTI, PGCIL, Gurgaon along with RTI application dated 15/11/2013 from Shri Naveen Nagpal with the request that in terms of provisions of Sec 6(3) of the Act the aforesaid RTI application may be taken as transferred to provide available information to the applicant in terms of provision of the RTI Act.

CPIO & US (RTI), MOP wrt to Registration No. POWER/R/2013/60400.

Recd on 20/12/13

20/12

| RTI REQUEST DETAILS | | | |
|---|---|------------------------------|-----------------|
| Registration No. : | POWER/R/2013/60400 | Date of Receipt : | 11/12/2013 |
| Type of Receipt : | Online Receipt | Language of Request : | English |
| Name : | Naveen Nagpal | Gender : | Male |
| Address : | G-220, Srinivaspuri,, New Delhi, Pin:110065 | | |
| State : | Delhi | Country : | India |
| Phone No. : | Details not provided | Mobile No. : | +91-9818699145 |
| Email : | clicknagpal@gmail.com | | |
| Status(Rural/Urban) : | Urban | Education Status : | Above Graduate |
| Is Requester Below Poverty Line ? : | No | Citizenship Status : | Indian |
| Amount Paid : | 10 | Mode of Payment : | Payment Gateway |
| Mode(s) of information Supply : | Hard Copy | | |
| Does it concern the life or Liberty of a Person ? : | Details not provided. | Request Pertains to : | Ajay Joshi(PG) |
| Information Sought : | Please provide the Schedule of Rates (SOR) as mentioned in the Point No. II (i) and (ii) of the attached document, for various items of Bill of Quantities (BOQ) for the TL and substation for each quarter starting from Financial Year 2009-10 till date. | | |
| <input type="button" value="Print"/> <input type="button" value="Close"/> | | | |

PROCEDURE FOR PREPARATION OF COST ESTIMATE IN POWERGRID

The cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

Estimation of cost is done at two different stages:-

- (i) At Feasibility Report stage: The Project cost is worked out for the whole of the project at Feasibility Report stage, for the purpose of investment decision and Project approval. Besides Equipment cost, the project cost also includes Interest During Construction (IDC), Incidental Expenditure During Construction (IEDC) , Cost of survey and soil Investigation, Cost of Land Acquisition, Compensation towards Crop, Compensation towards forest etc.
- (ii) At NIT Stage: For the purpose of procurement, entire project requirement is broken down in various packages (Like Tower package , Conductor package, Insulator package, Sub station package etc.) and NIT cost estimate for each package is prepared based on latest Cost data, for the purpose of NIT of respective package.

ii. The methodology of preparation of cost estimate currently being followed by POWERGRID is summarized as under :-

- (i) First of all the Schedule of Rates (SOR) for various items of Bill of Quantities (BOQ) for the TL and Substation is prepared for each quarter (ending March, June, September, December). Such SOR forms the basis for preparation of cost estimate for relevant BOQ of both FR project cost and NIT cost estimate.
- (ii) The Schedule of Rates (SOR) is prepared for all major items of Transmission Lines and Sub-stations (e.g., Tower parts, Conductor, Insulator, Transformer, Substation Pkgs., etc.) on the basis of average of awarded unit rates of generally three latest award letters for similar work. These unit rates obtained against open competitive bidding are considered to represent best possible market rates and hence are used for the purpose of working out cost estimate. These unit rates are however updated from respective base dates till the latest quarter using applicable PV formula and published

indices for the material involved and labour to take care of variation in input cost during the intermittent period. [Here the base date means the date 30 days prior to the Bid Opening Date (OBD) of respective package as defined in the Bidding Documents].

- (iii) The Cost Estimate so prepared is put up through hierarchy for the approval of Competent Authority as per Delegation of Powers of POWERGRID.
- (iv) While preparing Cost Estimates / Project Cost, the taxes and duties such as Excise duty, Sales Tax, Customs Duty, State Entry Tax etc. is taken into account as per applicability
- (v) Freight and Insurance (F&I) charges for the purpose of cost estimation is considered on normative basis, i.e. 4% of the ex-works price in case of all packages. Based on the terrain conditions (hilly/snowbound) / prevailing local law & order problems etc, additional percentage of F&I is however also considered in case of Tower packages.
- (vi) In case of package for new items/new technology being taken-up first time by POWERGRID or items of irregular nature (like HVDC Station, etc.) for which latest in-house cost data may not be available or in absence of latest LOAs for items of regular procurement, budgetary quotations are invited from experienced Firms in consultation with the indenting department. These budgetary quotations are considered for working out Cost Estimate.
- (vii) In case of small valued new/irregular work/item/activity included in BOQ of a package, whose rates are not available in regular LOAs, engineering estimate for such works/item/activity is worked out
- (viii) After opening of the bids, a comparative price statement indicating bidders' quoted prices vis-à-vis approved NIT cost estimate is reviewed. The review of NIT cost estimate is carried out on account of (i) variation, if any, in Bill of Quantity (BOQ) considered for working out NIT Cost Estimate with respect to that considered for inviting bids and (ii) variation in price level of estimate with respect to price level of bids based on actual date of bid opening.
- (ix) In absence of detailed engineering at the time of preparation of FR, the cost estimate for some of the items like substation auxiliaries, equipment foundation etc in FR is worked out on normative basis depending on the involvement of no. of Transformer / Reactor bays, line bays etc. in the Substation. In NIT estimates, the BOQ is worked out on the basis of detailed engineering only.
- (x) The cost of Preliminary Survey & Soil Investigation, R&R compensation, compensation towards crop, tree & PTCC, compensation towards forest, Substation Infrastructure, Non-Residential Buildings, Colony, etc. is estimated on normative basis in the FR cost of Project, for the purpose of Investment Approval.
- (xi) In FR Cost Estimates, POWERGRID overheads (incidental expenses during construction) and contingencies is considered on normative basis as a percentage of the total cost of the other components of the Project.

- (xii) The financing of the project is considered in Debt : Equity (D:E) ratio in line with GOI / CERC guidelines. As per present guidelines, D:E ratio 70:30 is recommended and same is being considered for working out Project cost. The Interest During Construction (IDC) is included in FR project cost on the basis of interest rates as may be applicable on domestic loan / multilateral loan as per prevalent rates. The IDC in the project FR cost is calculated on loan portion as per the phasing of expenditure up to the scheduled commissioning date of the project. The Completed Cost of a Project for the purpose of tariff is, however, based on the cost / expenditure actually incurred.

III. PROCEDURE FOR PROCESSING OF REVISED COST ESTIMATE

After investment approval of the project, the project is taken up for implementation. In case during execution of project, it is anticipated that the actual cost of the project is likely to exceed the approved cost, approval of the same i.e. 'Revised Cost Estimate' is obtained from the Board of Directors of POWERGRID, who are the competent authority for investment approval of Projects.

- (i) Once all the major packages of project are awarded, PESH Dept. in the concerned Regional office on the basis of information obtained by them from respective site office / Engineering and Finance depts. of the Regional office compiles the cost of Preliminary works, civil works and Equipment cost of the project on the basis of contract price of all the packages already awarded, estimated cost of packages awarded from offices other than Corporate Centre, if any, yet to be awarded, actual/estimated expenditure on land acquisition Forest, Crop, PTCC compensation and other related works. The cost so compiled includes adequate estimated price variation for the duration of the project execution.

Depending upon the extent of cost variation of RCE vis-à-vis original approved cost, the following procedure is followed for processing of RCE:-

- a) If the cost compiled by the Regional office, after excluding the increase within originally approved time cycle due to change in statutory levies, exchange rate variation and price escalation is found to be more than 10% of approved cost, the following step shall be followed:

The RCE is further processed by the PESH deptt. of the Regional office and after concurrence of Head of Finance of the Region and approval of Head of the Region, same shall be forwarded to Cost Engineering group of Corporate Engg. for further analysis and obtaining approval of Management. The RCE so compiled includes year wise cost of actual/anticipated IEDC, IDC and FERV on Loan repayment till the date of preparation of RCE or DOCO (Date of Commercial Operation). The revised cost estimate of the project is worked out on the basis of above. To facilitate analysis of cost variation with respect to approved cost estimate whenever there are variations with respect to original FR cost, the reason for the same are indicated. The details of variation in cost on account of the following are quantified in the RCE furnished by the Regional office:

- (i) Price Variation: Due to change in prices as considered in FR and as actually executed.
- (ii) Change in quantities of approved items such as on account of changes in route length of Transmission Lines, change in type of towers/foundations,
- (iii) New addition or deletion from approved scope
- (iv) FERV, if applicable
- (v) Other reasons such as Centages, IDC etc.

The Cost Engg. Deptt. at corporate centre analyses the details furnished by the Regional office and works out the revised cost estimate and obtain approval of Management.

- b) If the increase in RCE, (after excluding the increase within originally approved time cycle due to change in statutory levies, exchange rate variation and price escalation) is found to be within 10% of original approved cost, the same is informed to Management and when the expenditure incurred on the project approaches 50% of original approved cost, the RCE is prepared on the basis of expenditure already incurred and anticipated balance expenditure and forwarded to Cost Engineering group of Corporate Engg. in the same manner as stipulated in (a) above.
- (ii) The RCE is again reviewed by PESM deptt. 6 (six) months prior to the anticipated completion of the project.

The same is based on audited figures in respect of expenditure already incurred/ to be incurred. Based on the review, if it is found that the RCE amount is likely to exceed latest approved cost (FR or RCE cost as the case may be), the RCE is immediately forwarded to Cost Engineering group of Corporate Engg. in the same manner as stipulated in III (i) (a) above. However, if RCE cost compiled above is found to be within latest approved cost no further action is required. This is required for filing petition to CERC for fixation of provisional tariff at least 03 months before the anticipated completion.
- (iii) Notwithstanding above, if, at any time during execution, due to any unforeseen circumstances, the revised cost is expected to exceed the approved cost requiring an emergent approval of RCE, PESM deptt. of the Regional office prepares RCE and forwards the same to Corporate Cost Engineering in the manner as stipulated in III (i) (a) above. The Cost Engineering Group takes further necessary action towards obtaining management's approval for furnishing the same to Corporate Planning for obtaining approval of BOD.
- (iv) Even in cases, where revised cost estimate of the project is not exceeding the approved cost estimate (FR) but there is major variation in scope vis-à-vis that in approved FR, approval from Board of Directors of POWERGRID is taken.