

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

No. L-1/50/2010-CERC

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NOTIFICATION

1. Introduction:

The Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 has been specified by the Central Commission under Section 61 read with Section 178(2)(s) of the Electricity Act, 2003. Third proviso to clause(2) of Regulation 7 provides that “the Commission may issue guidelines for vetting of capital cost of hydro-electric projects by an independent agency or expert and in that event the capital cost as vetted by such agency or expert may be considered by the Commission while determining the tariff of hydro generating station”. The Central Commission hereby issues the guidelines for vetting of capital cost of hydro electric projects by Designated Independent Agencies/Experts.

2. Title and Applicability:

(1) These Guidelines shall be called Guidelines for vetting of the capital cost of hydro electric projects by Designated Independent Agencies or Institutions or Experts and other related matters.

(2) These Guidelines shall apply to the Designated Independent Agencies/Experts, Central Generating Companies or the Generating Companies having a composite scheme for sale of power in more than one State for vetting of project Capital cost of such hydro-electric projects which

are being developed or have been executed by such generating companies and the tariff of such projects are to be determined by the Commission.

(3) These guidelines shall come into effect from the date of their notification in the Official Gazette.

3. Objectives of the Guidelines: These guidelines seek to (a) describe the roles and responsibilities of the Central Commission, generating companies and Designated Independent Agencies/ Experts in the matter of vetting of capital cost of the hydro electric projects; (b) information to be exchanged between the generating companies of hydro electric projects and the Designated Independent Agencies/Experts, (c) Scope of vetting of project capital cost, factors to be considered and stages of intervention by the Designated Independent Agencies/ Experts during the execution of the project, and (d) procedure to be followed for vetting of the capital cost of hydro electric projects for the purpose of determination of tariff.

4. Definitions: For the purpose of these guidelines, unless the context otherwise requires:

(1) “Designated Independent Agencies/ Experts” shall mean and include such agencies and experts as may be notified by the Central Commission from time to time for the purpose of vetting of Capital cost of Hydro-Electric projects of generating companies;

(2) “Generating Company” means generating companies owned or controlled by Central Government and other generating companies which have a composite scheme for generation and supply of electricity in more than one State and which have developed or are in the process of developing hydro electric projects;

(3) The words and expressions used and not defined in these guidelines but defined in the Electricity Act, 2003 or the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 shall have the meaning as assigned to them in the Act or the said regulations.

5. Selection of the designated Agency/Experts by the Generating Company

(1) The Commission shall publish on its website a panel of Designated Independent Agencies/Experts for vetting the capital cost of the hydro electric projects:

Provided that the Commission may at its discretion add or delete the names of Designated Independent Agencies/Experts for the reasons to be recorded in writing. Breach of confidentiality agreement as referred to in para 8(9) of these guidelines would be one of such reasons.

(2) A generating company may choose one Designated Independent Agency or Expert from the panel notified by the Commission from time to time for vetting the capital cost of hydro-electric project already developed or in the process of being developed by it.

(3) The generating company shall seek the bids from the two or more designated agencies/experts and shall select the agency/expert with the lowest quotation for vetting the capital cost of the project after following a transparent process:

Provided that where a single bid is received in response to notice inviting the bids, the generating company may select such designated agency or expert with prior intimation to the Commission.

(4) The selected Designated Independent Agency/Expert should not have any conflict of interest with the generating company which has selected it for vetting of capital cost.

Explanations:

(i) Any form of association or financial/commercial dealings of the generating company with the selected Designated Independent Agency/Expert during the period of two years preceding invitation of bids shall be construed as conflict of interest.

(ii) Assignment of the work of vetting of capital cost to the same Designated Independent Agency/Expert by the generating company for its subsequent project(s) shall not constitute conflict of interest.

(5) The generating company may also select another designated agency/expert in the following circumstances under prior intimation to the Commission:

(a) Undue delay in appraising the capital cost by the appointed Designated Independent Agency/Expert for the reasons not attributed to generating company;

(b) The appointed Designated Independent Agency /Expert refuses to carry out the vetting of capital cost;

(c) At different stages as stipulated at para 7(4) of these guidelines.

(6) The generating company should ensure that the Designated Independent Agency/Expert is selected well in advance, preferably within a reasonable time of investment approval in order to undertake the vetting of the capital cost as envisaged in para 7.4 of these guidelines.

6. Ceiling on consultancy charges:

(1) The consultancy charges payable by the generating company for vetting the capital cost by one or more than one Designated Independent Agency/Expert engaged in different stages of the project shall not exceed a ceiling of 0.02% of the capital cost of the hydro-electric project (excluding IDC and financing charges) or Rs. 2 Crore whichever is less.

(2) In the event of delay due to geological surprises encountered during execution of the project, an additional consultancy charge may be payable on pro rata basis corresponding to the extended period of the date of commercial operation from the schedule.

7. Responsibilities of and the Procedure to be followed by the Designated Independent Agencies /Experts

(1) The Independent Agency /Expert shall carry out appraisal of the capital cost of the project in due consideration of the following:

- (a) Features of the Hydro Electric Scheme including site specific features,
- (b) Location of the project site,
- (c) Geology of the project site,
- (d) Defence aspects,
- (e) Hydrology,
- (f) Optimum development of the river basin,
- (g) power potential studies,
- (h) Optimum location of dam and other civil works detailing various alternatives considered,
- (i) Type of technologies available and the Construction machinery to be deployed,

- (j) Studies for optimization of dam height, detailed design calculations for checking dam design & safety,
- (k) Civil design aspects, inter-state and international aspects,
- (l) Environmental & Forest aspects,
- (m) Rehabilitation & Resettlement aspects in line with govt directives from time to time,
- (n) Cost estimates for civil works and electro-mechanical works,
- (o) Source of funding and fund flow,
- (p) Schedule of Commissioning,
- (q) Geological surprises,
- (r) Time and cost over-run, if any
- (s) Any recommendation/observation of CEA/CWC in their concurrence on any of the aspects referred to at 'a' to 'r' above,
- (t) The revised cost estimate approved by PIB/CCEA & any observation / direction made therein, if applicable.

(2) The above factors shall be considered by the Designated Independent Agency/Expert with the sole purpose of the cost appraisal only. The ultimate responsibility of design and technical aspects of the project shall rest with the generating company.

(3) The cost overrun of the project 'attributable' and 'not attributable' to the generating company shall be indicated separately after due consideration of schedules of completion of various milestones as per PERT/CPM Chart along with reasons for time and cost overrun.

(4) The Designated Independent Agency/Expert shall be required to submit its appraisal and recommendations about the capital cost of the project as on COD to the generating company, with a copy to the Commission within 3 months of making available the DPR by the Generating Company:

Provided that in case of any change in the configuration, capacity or scope of works after submission of DPR by the generating company, the Designated Independent Agency/Expert shall submit its appraisal/recommendations within two months of receiving such intimation and complete details in this regard:

Provided further that in case of on-going projects, the Designated Independent Agency/Expert shall submit its appraisal/recommendation within 3 months of making available to it the complete information of the project along with DPR after notification of these guidelines:

Provided also that in case of changes in the designs and consequential effect on schedule of commissioning due to natural calamities like floods, earth quake etc. or due to geological surprises within two months of such intimation of such occurrence including complete details of consequential changes in the design and schedule of commissioning.

(5) Monitoring of the execution of the project by the Designated Independent Agency/Expert shall be limited to the purpose of cost appraisal.

(6) Any commercial or sensitive information gathered by the Designated Independent Agencies /Experts from the generating company during the course of vetting of project capital cost shall not be made public or used to the detriment of the interest of the generating company.

(7) The Designated Independent Agencies /Experts shall be required to appear before the Commission during the hearing of the tariff petition of the concerned hydro electric generating station and render necessary assistance to the Commission with regard to the reasonableness of the project cost.

8. Responsibilities of and Procedure to be followed by the Generating Company

(1) The generating company after completing essential site survey and investigations shall prepare a detailed project report (DPR) of the hydro electric project and, after grant of concurrence of Central Electricity Authority, if applicable, submit a hard copy and a soft copy of the same to the designated agency/expert and to the Commission. Any subsequent changes in design and scope of work of the project shall be intimated to the Designated Independent Agency/Expert and to the Commission along with necessary justification and relevant details. The generating company should revise the DPR in case there are material changes in the location, design and scope of work of the project.

(2) The DPR should be prepared with due consideration to the latest “Guidelines for Formulation of Detailed Project Reports for Hydro Electric Schemes, their Acceptance and Examination for Concurrence” published by the Central Electricity Authority and “Guidelines for preparation of Detailed Project Report of Irrigation & Multipurpose Schemes” published by the Central Water Commission and the latest practices and technologies.

(3) The DPR shall include a checklist incorporating tie-up of essential inputs and statutory clearances, salient features of the hydro electric project, executive summary, geological aspects, defence aspects, hydrology, justification for the best ultimate development of the river basin, power potential studies, optimization of location of dam and other civil works detailing various alternatives considered, studies for optimization of dam height, detailed design calculations for checking dam design and safety, civil design aspects, inter-State and international aspects, environmental and forest aspects, rehabilitation and resettlement aspects, cost estimates for civil works and electro-mechanical works and source of funding, IDC , fund flow

and tariff calculations as per the relevant regulations of the appropriate Commission.

(4) The electrical and mechanical cost estimates shall be with due consideration to the latest edition of “Guidelines for Formulation of Detailed Project Reports for Hydro Electric Schemes, their Acceptance and Examination for Concurrence” published by the Central Electricity Authority, as modified from time to time and civil cost estimates shall be in due consideration of the latest edition of “Guidelines for preparation of Estimates for River Valley Schemes” published by the Central Water Commission, as modified from time to time. The deviations from the guidelines shall be justified/ explained in clear terms along with details.

(5) The DPR shall also include the information on the status of various clearances, acquisition of land and approval of Rehabilitation and Resettlement plan etc.

(6) The generating Company shall clearly indicate the schedule of completion of the project starting from investment decision i.e. the zero date, time to be taken in the financial closure of the project, and scheduled date of completion supported by PERT/CPM Network identifying the critical path and milestones.

(7) The queries raised by the Designated Independent Agency/Experts, shall be promptly replied to by the generating company within a reasonable time under intimation to the Commission.

(8) Any change in the schedule of completion and estimate of the capital cost of the project after the submission of DPR due to changes in the cost of various packages of works as a result of competitive bidding process, changes in the design features of the proposed hydroelectric scheme or it's

configuration and capacity viz. type of development (storage/ ROR), type and height of dam, live storage, design head, installed capacity, number of units, type of turbine, type of power house, transmission voltage etc, having implication on the project capital cost shall be promptly brought to the notice of the Independent Agency/Experts along with details of the revised cost estimates in comparison to previous estimates, supported by justification and suitable explanations within a reasonable time.

(9) The Generating Company shall furnish to the Independent Agency/Expert copies of the tender enquiry and the letter of Awards of major packages and the packages on the critical path and any other relevant information if required by the Independent Agency/Expert. Any information necessary for the vetting of the capital cost of the project even if sensitive in nature should be furnished to the Independent Agency/Expert except where disclosure of such information has potential of jeopardising the safety and security of the country or friendly relations with other nations. The Independent Agency/Expert shall abide by confidentiality agreement to be entered into between him and the generating company.

(10) The generating company shall be required to submit the appraisal of the capital cost of the hydro electric project by the Independent Agency/Expert along with recommendations received from time to time while filing the petition for determination of tariff of the concerned project.

(11) The capital cost as vetted by the Designated Independent Agency or Expert shall be considered by the Commission while determining the tariff of the concerned hydro electric generating station in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

Sd/-
(Alok Kumar)
Secretary