#### L-1/50/2010-CERC

## **Central Electricity Regulatory Commission**

#### New Delhi

Coram: Dr. Pramod Deo, Chairperson Shri S.Jayaraman, Member Shri V.S.Verma, Member Shri M Deen Dayalan

#### In the matter of:

GUIDELINES FOR VETTING OF CAPITAL COST OF HYDRO-ELECTIC PROJECTS BY THE DESIGNATED INDEPENDENT AGENCIES/INSTITUTIONS/EXPERTS

### STATEMENT OF REASONS

#### 1. Introduction

1.1 Clauses (a) and (b) of sub-section (1) of Section 79 of the Electricity Act, 2003(hereinafter "the Act") vests the power and functions in the Central Commission in respect of the following among others:

- "(a) to regulate the tariff of generating companies owned or controlled by the Central Government;
- (b) to regulate the tariff of generating companies other than those owned or controlled by the Central Government specified in clause (a), if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State;"
- 1.2 The Act enjoins upon the Commission under Section 61 read with Section 178(2)(s) to specify the terms and conditions for

determination of tariff. In due discharge of the statutory functions assigned under the Act, the Commission has specified the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter "2009 tariff regulations") vide notification dated 20.1.2010. In terms of the 2009 tariff regulations, the Commission is required to regulate the tariff of the hydro electric projects covered under section 79(1)(a) and (b) of the Act.

- 1.3 Section 8 of the Act provides that a generating company intending to set up a hydrogenating plant shall prepare a scheme and submit it to the Central Electricity Authority (CEA) for its concurrence and concurrence by CEA shall cover such areas as prospects for best ultimate development of the river or its tributaries for power generation consistent with other requirements for optimum utilisation of water resources, dam design and dam safety.
- 1.4 In compliance with the provisions of section 3 of the Act, the Central Government has notified the tariff policy vide Resolution No.23/2/2005/R&R/Vol-III dated 6.1.2006. Subsequently, the Central Government has amended the tariff policy vide Resolution

F.No.23/2/2005/R&R (Vol. IV) dated 31.3.2008 to give effect to the new 'Hydro Power Policy-2008'. Under the provisions of amended Tariff Policy, in case the site of a hydro generating station is awarded to a developer (not being a State controlled or owned company) by a State Government by transparent process of bidding, such a developer has the option to sell 40% of its power by merchant sale and remaining 60% through long terms PPAs for which tariff will be determined by the Appropriate Commission. Further, the Appropriate Commission has also to approve the time period of commissioning of hydro projects before commencement of the construction.

- 1.5 Thus, the Central Commission has the following two specific responsibilities in the context:
  - (a) To ascertain the reasonableness of the capital cost of a hydro electric project – private or public.
  - (b) To scrutinize and approve the commissioning schedule of the private hydro-electric projects of a developer not being a state owned/controlled as per the tariff policy as amended on 31st March, 2008.

- 1.6 With due regard to the above, the following provisions have been made in third and fourth proviso to clause (2) of Regulation 7 of 2009 tariff regulations:
  - "(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff.

Provided that.....

Provided further that.....

Provided also 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;

Provided also that the Commission may issue guidelines for scrutiny and approval of commissioning schedule of the hydro-electric projects of a developer, not being a State controlled or owned company as envisaged in the tariff policy as amended vide Government of India Resolution No. F.No.23/2/2005/R&R (Vol. IV) dated 31<sup>st</sup> March 2008."

1.7 In pursuance to the statutory obligations cast by third and fourth proviso to clause (2) of Regulation 7 of 2009 tariff regulations, the Commission initiated a proposal to frame guidelines for vetting of project capital cost of hydro electric projects by circulating the draft guidelines on the website of the Commission vide public notice dated 19.4.2010. A public hearing was also held on 20.5.2010. List of the entities whose comments

were received pursuance to the public notice and the entities who participated in the public hearing is enclosed as **Annexure** to this order. The Commission has considered the comments/suggestions of the stakeholders received in response to the public notice, during and after the public hearing and finalised the guidelines for vetting of the capital cost of hydro electric projects. The issues raised by the stakeholders and the findings of the Commission thereon are discussed in the succeeding paragraphs.

## 2. Applicability of the Guidelines

2.1 NHPC has submitted that these guidelines may not be made applicable to the Central generating companies as hydro projects executed by these generating companies are already scrutinized by various Government agencies such as CEA/CWC, Geological Survey of India, CSMSR, Ministry of Water Resources, Ministry of Power, Planning Commission, Ministry of Finance, Ministry of Statistics and Programme Implementation, Ministry of Social Justice, Ministry of Environment & Forest in the DPR Stage and the project including its capital cost is concurred by CEA and recommended by PIB for sanction by the CCEA. After completion, the revised cost estimates of the hydro projects are also scrutinized by various Government agencies and finally recommended by the Standing Committee on time and cost overrun to PIB for approval by CCEA. The proposed appraisal through an independent agency/expert may infringe upon the present set up as well as its normal function and may thus jeopardize the entire process. The Commission in its wisdom may take the opinion of an independent agency to ascertain the reasonableness of capital cost of a Hydroelectric Project of CPSUs

at the time of fixation of its tariff. In case the Commission still feels the need for involvement of an independent agency for CPSUs, the same may be associated during execution only after the CCEA approval taking the DPR concurred by CEA and cost and time-frame approved by CCEA as the baseline to check the efficiency/economy by developer. Similar view has been expressed by NTPC and THDC.

- 2.2 Reliance Power has requested the Commission to clarify whether the project cost of schemes as per the DPR approved by the CEA would be re-vetted by the independent agencies.
- 2.3 We have thoughtfully considered the views of the stakeholders. Clauses (a) and (b) of sub-section (2) of section 8 of the Electricity Act, 2003 provide as under:
  - "Section 8. (Hydro-electric generation): --- (1) Notwithstanding anything contained in section 7, any generating company intending to set-up a hydrogenating station shall prepare and submit to the Authority for its concurrence, a scheme estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government, from time to time, by notification.
  - (2) The Authority shall, before concurring in any scheme submitted to it under sub-section (1) have particular regard to, whether or not in its opinion,-
  - (a) The proposed river-works will prejudice the prospects for the best ultimate development of the river or its tributaries for power generation, consistent with the requirements of drinking water, irrigation, navigation, flood-control, or other public purposes, and for this purpose the Authority shall satisfy itself, after consultation with the State Government, the Central Government, or such other agencies as it may deem appropriate, that an adequate study has been made of the optimum location of dams and other river-works;
  - (b) The proposed scheme meets, the norms regarding dam design and safety."

- 2.4 In terms of above provisions in the Act, the concurrence of CEA is required if the scheme exceeds such sum as notified by the Government (presently Rs. 500 crores) and for taking investment approval. However, it is not necessary in such case that completion cost or increase in cost of hydro project accorded concurrence shall be revisited by CEA later except in case of CPSUs where cost estimate/revised cost estimate are required to go through the process by PIB/CCEA clearance. In such cases, CEA looks into the capital cost, time over run and cost overrun etc. as part of committee of PIB. Moreover, such cost is approved by PIB/CCEA in its capacity as the owner of CPSU. Further, the CPSUs with Navratna status like NTPC are not required to go through the process of PIB/CCEA approval.
- 2.5 As such, we are not inclined to differentiate CPSUs from private developers. Therefore, the projects being set up by CPSUs shall also be examined by Designated Independent Agencies/Experts, however, with due regard to the observations of CEA in its concurrence and observations of PIB/CCEA in its cost approval. Therefore, scheme accorded concurrence by CEA shall also be required to get cost of the project vetted by a Designated Independent Agency/Expert.
- 2.6 Reliance Power and NHPC have also sought to know whether the independent agency is required to be engaged for on-going projects in construction stage. They have suggested that it should be applicable only for upcoming project obtaining CEA concurrence and sanction of Government.

2.7 As far as ongoing projects are concerned, Designated Independent Agency/Expert may be engaged after notification of these guidelines within reasonable time. As discussed earlier, the vetting of capital cost by Designated Independent Agency/Expert shall be applicable to all hydroelectric projects of IPPs/CPSUs whose tariff is being regulated by the Commission whether under construction or where construction is yet to start.

# 3. Selection of the designated Agency/Expert by the Generating Company

- 3.1 NHPC has suggested that sufficient number of agencies/experts should be empanelled for the purpose to avoid the monopoly of expert agencies. NHPC has also explored the situations where the contract with an Independent Agency needs to be terminated before the completion of the project due to unavoidable circumstances.
- 3.2 To meet this situation, the Commission has made the following provisions in Para 5(5):
  - "(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 stage as stipulated at para 7(4) of these guidelines."

3.3 Further, number of Designated Agencies/Experts could be less initially but with passage of time, we expect that more and more agencies would get empanelled. It will not be fair to conclude that agencies empanelled at initial stage would monopolise the market. To deal with this situation, we have already provided for a ceiling on payment of fees to the Designated Independent Agency/Expert.

## 4. Ceiling on consultancy charges

- 4.1 NHPC, NTPC and PTC have commented that the consultancy charges are on higher side. Duly taking into account the views of the stakeholders, the Commission has reviewed the ceiling limit and has modified para 6.1 of guidelines as follows:
  - "(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."

## 5. Parameters for appraisal of capital cost by the Independent Agency/Expert.

5.1 Reliance Power has submitted that while according concurrence of the hydro electric projects, CEA carries out the detailed evaluation of these parameters. They have therefore sought clarification whether independent agency shall also be

revisiting all the technical features of scheme yet again as concurred by CEA. NHPC has also submitted that once the concurrence is already granted by CEA, determination of technical viability of the project by the Independent Agency/Expert is repetition of efforts, time and money.

5.2 The guidelines provide for due consideration of all technical and design parameters for reasonable assessment of completion Independent Agency/Expert. cost the The ultimate responsibility of design and technical aspects shall rest with the project developers. However, vetting by Independent Agency shall be limited to the capital cost alone from the point of view its reasonableness in due consideration of project design finalized by the developers, optimization study, safety of dam design etc. They will also be required to duly consider the observations made by CEA and PIB/CCEA. Accordingly, para 7.2 of the Guidelines has been modified to clarify to these aspects. The Independent Agency/Expert must carefully examine the cost to see whether there is any gold plating in design and shall also be able to examine the responsibility for unwarranted delay in project execution and cost implications.

#### 6. Conflict of interest

6.1 PTC and Reliance Power have sought clarification that the prior dealing of generating company with the Independent Agency/Expert purely for vetting of capital cost as per the subject regulation would not be treated as association with such agency or conflict of interest. Further, Reliance has sought to know whether

the generating companies can approach one particular Independent Agency for vetting of project cost of more than one project simultaneously or in phases.

- 6.2 Since the number of Independent Agencies/Experts may be limited initially, the Commission has reviewed the Para 5.3 and 7.1 of draft guidelines and has provision has been made in para 5.4 of the Guidelines as under:
  - "(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."

## 7. Sharing of Sensitive Information

7.1 NTPC submitted that some information related to project development is of strategic, sensitive and confidential nature. Much of this is information like Equipment Specification, Packaging,

Quality Plan, Project MNW etc. over which NTPC has intellectual property rights which its competitors would be interested in having access to. All developers would therefore naturally be extremely apprehensive over sharing such information with private agencies. The designated agency might sign confidentiality or Non-disclosure agreements but such agreements are applicable to the agency and not to individuals who would take up this work on behalf of the agency. Ensuring confidential and intellectual property rights would be huge challenge in this scenario. On this count too, engaging external expert agency from the stage of DPR to COD is ill advised. If at all and external expert is associated, it must be explicitly stated that he will have right only to inspect documents but shall not be provided any copies of sensitive documents.

- 7.2 We have examined the issues. In a project there would be number of contracts and submitting contract documents for all contract packages to Independent Agency would not only be voluminous but also time consuming. In our view, contract details and documents of major packages contributing to 75 to 80% of the hard cost and contracts of packages on critical path would be necessary for making reasonable assessment of cost of the project. Further details of any sensitive information should be furnished only when it is necessary for vetting of capital cost. Accordingly, the following safeguards have been provided in para 7(7) of the guidelines as under:
  - "(7) 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."

### 8. Penalty on Designated Independent Agency/Experts

- 8.1 NHPC has submitted that there may be situations when contract with and Independent Agency may be required to be terminated before completion of the project due to unavoidable circumstances. The manner of regulating payment to the Independent Agency in such a scenario is not clear in the guidelines. Terms/Break-up of payment to the Independent Agency at different stages of work has not been defined in the guidelines.
- 8.2 We have carefully gone into the question of imposing penalty on Designated Independent Agency/Experts in the detailed procedure. We are of the view that the project developers should incorporate similar safeguards as are usually taken in any business/contractual transactions for performance and non-performance. As discussed earlier, the Commission has already provided for appointing different Independent agencies/Experts at different stages. Para 5(5) of the guidelines provides for the circumstances under which the engagement of the Independent Agency/Expert can be dispensed with. Further, the Commission has also made provision for addition or deletion of designated independent agencies/experts from the list at its own discretion citing reasons for such addition or deletion, by duly considering the conduct of designated agency and quality of vetting cost. In view

of above, we do not feel any immediate need of imposing any separate penalty in the detailed procedure.

## 9. Monitoring of the project

- 9.1 NTPC and NHPC have submitted that for monitoring of the project execution, the following mechanism is being presently practiced by:
  - (a) Internal monitoring through monthly RRTs, exception reviews and reviews of specific issues. The PRT meetings commence from the zero-date of the project. NTPC has also started pre-award monitoring on a monthly basis.
  - (b) CEA through regular reports/visits/meetings
  - (c) Ministry of Power through regular reviews/reports/visits
  - (d) Experts appointed by MOP visit Hydro projects from time to time and submit their reports.
- 9.2 According to the stakeholders, proposed monitoring by the Independent Agency would be in addition to the extensive monitoring mechanism already in place and thus may not be called for as it may lead to avoidable delays.
- 9.3 In our view, monitoring of project cost by Designated Independent Agencies/Experts would be the sole mechanism for the purpose of vetting of capital cost and to keep track of time and cost overrun of hydro electric projects. As such, we do not feel that such monitoring by Designated Independent Agencies/Experts

would cause any interference in the affairs of project developer and other monitoring agencies.

10. In view of the above, we direct the Secretary of the Commission to take necessary action for the notification of the guidelines.

Sd/- sd/- sd/- sd/[M DEEN DAYALAN] [V.S.VERMA] [S. JAYARAMAN] [Dr. PRAMOD DEO]
MEMBER MEMBER MEMBER CHAIRPERSON

Dated 20<sup>th</sup> of July, 2010

#### Annexure

## List of Stakeholders who submitted their written response/made oral submission during public hearing

- 1. Central Electricity Authority
- 2. Moserbaer India LTD.
- 3. NHPC Limited
- 4. NTPC
- 5. North Eastern Electric Power Corporation LTD.
- 6. PTC India
- 7. Reliance Power
- 8. S.C. Anand
- 9. Satluj Jal Vidyut Nigam Limited
- 10. THDC India Limited