

## CHAPTER - 6

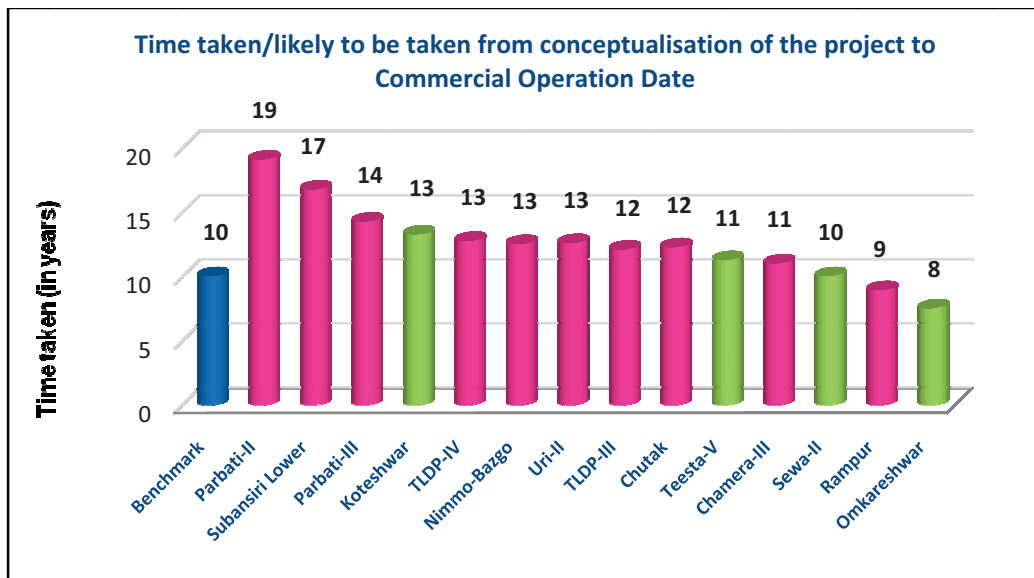
# Execution of projects

Time and cost is the essence of every contract to ensure completion of any project as per schedule. Audit examined various contracts awarded for execution of projects under the Capacity Addition Programme of the four CPSEs. Project-wise details of the scheduled date of commercial operation (COD), actual COD and financial progress as on 31 March 2012 is detailed in **Annexure-VI**.

## 6.1 Delays in commissioning of projects

In the Hydro Development Plan for the XII Plan (2012-17), the Central Electricity Authority envisaged that development of a large size hydro project takes about 10 years from planning to commissioning. Similarly, as per the guidelines of the MOP read with the submission of NHPC before the Committee on Public Undertakings in 2008 also envisaged a timeline of about 6.5 years to 9.5 years from planning to the date of Commissioning of hydro power projects.

Overall time taken/likely to be taken from conceptualisation to commercial operation date of 14 out of 16 projects (except two projects of NEEPCO<sup>57</sup>) is depicted in the following chart:



<sup>57</sup> Data regarding conceptualization of 2 projects of NEEPCO were not available

Considering the CEA benchmark of 10 years for completion of projects, two projects (Omkareshwar and Sewa-II) were completed within the benchmark. Two other projects- 'Teesta-V' of NHPC and 'Koteshwar' of THDC were completed in 11 and 13 years respectively. Of the remaining 10 ongoing projects, nine projects are likely to take between 11 and 19 years and one project (Rampur of SJVNL) is likely to be completed in nine years.

With reference to time lines envisaged in the Investment approval of the respective projects, one project (Omkareshwar project) was completed within the scheduled date of commercial operation while three projects<sup>58</sup> were completed with delays ranging between 14 months and 84 months with reference to scheduled date of commercial operation. Remaining 12 projects are running behind the scheduled date of commercial operation by 20 months to 115 months (*Annexure-VI*).

The delays in the project execution had significant cost implications. 16 projects under execution/executed by four CPSEs approved at the aggregate cost of ₹ 30,005 crore, were revised to ₹ 44,712 crore. In seven completed/ongoing projects, the cost overrun was in the range of 53 to 148 per cent (*Annexure-VII*).

**Project-wise analysis of reasons of delay and consequential cost escalation noticed in 12 out of 16 projects are detailed below:**

**(i) Sewa-II of NHPC (Delay of 34 months)**

Audit analysis revealed that main reasons of delay in completion of this project were (i) delay in handing over access roads to work sites to the contractors, (ii) delay in obtaining forest clearance for approach road of 2 kms which initially was not envisaged at the DPR stage, (iii) rerouting of head race tunnel after observing loose starta, (iv) revision of envisaged design and drawings of the foundation structure in anchor block which was not envisaged at tendering stage. Besides reasons like floods of July 2005 and September 2006 which washed away coffer dams and agitation by workers also affected the pace of work.

The approved cost of project at ₹665.46 crore was revised to ₹1,108.83 crore (increase of 67 per cent) in execution of works which were not initially envisaged due to inadequate investigation. As a result per unit cost of generation of power from the project has increased from ₹2.98 per unit to ₹4.17 per unit.

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<sup>58</sup> *Teesta-V & Sewa-II projects of NHPC and Koteshwar of THDC*

NHPC Management while accepting the delays on the part of Company in handing over of access road to the contractor stated (October 2011) that there was no mention for approach road of 2 km length in the bidding documents. Re-routing of HRT and revision of envisaged design was due to geological conditions, performance of sub-contractors was not satisfactory and therefore, the main contractor terminated their contract and the balance works of HRT was undertaken by another contractor. The coffer dams were also washed away in July 2005 and September 2006 as the same were designed for non-monsoon flood.

Reply of the Management is not tenable as responsibility of providing access roads rests with NHPC who should have immediately provided the same to the contractor for mobilisation of men & machinery. Adverse geological conditions were encountered due to inadequate survey & investigation. Further, NHPC failed to ensure credentials of the sub-contractor before approval to ensure smooth execution of the work. Designing of coffer dams only for non-monsoon season also revealed shortsightedness of the Management.

#### **(ii) Parbati-II of NHPC (Delay of 99 months)**

The main reasons as analysed by audit for the tardy progress were (i) wrong assessment of land required for the project at DPR stage requiring the Management to submit application for additional land after award of main contracts, (ii) non-completion of infrastructure works before award of main contracts and delay in handing over site to main civil contractors, (iii) delay in issuance of construction drawings, (iv) increase in scope of work due to incorrect assessment of BOQ, (v) inordinate time taken by the management in conveying decision on issues like development of new quarry in the light of Shimla High Court order, finalization of design and methodology for ground treatment of face-4 due to excessive water and sand/silt, etc. (vi) inordinate time taken in resolving technical and contractual issues with contractors, (vii) not taking all-embracing measures for power house back hill slope treatment after its first failure in April 2004 as a result of which it repeatedly failed in June 2006 and again in February 2007, and (viii) delay in finalization of erection agency by electro-mechanical contractor (BHEL).

The anticipated date of completion of July 2014 was worked out by the Management on the assumptions that (i) lining work of HRT face-1 would be resumed by December 2010 and would be carried out at a pace of 120m per month, (ii) the contract for balance work of Lot PB-IV would be awarded by December 2010, and (iii) claim of electro-mechanical contractor would be settled and work would be resumed by November 2010. However, the contract (PB-2) for tunneling through TBM of the Parbati-

II project has been terminated (March 2012) by NHPC and new contract is yet (June 2012) to be awarded.

NHPC Management while accepting delays in the issue of drawing stated (October 2011) that infrastructure work and handing over site to the main contractor got delayed due to delay in accord of forest clearance/felling of trees. Further, scope of work increased due to adverse geological conditions during execution and delays in treatment of shear/fault zone. The work was also affected due to non-finalisation of erection agency by BHEL.

Reply of the Management is not tenable as prime responsibility for completion of infrastructure work and handing over of site to the contractor rests with NHPC. Further, construction drawings should also have been issued to the contractor timely. Inadequate survey/investigations and delay in finalization of erection agency by BHEL also led to delay in completion of project and extra cost on the Company.

### (iii) Parbati-III of NHPC (Delay of 26 months)

Audit analysis revealed delay in handing over access roads to civil contractors, Poor performance by the civil work agency, delayed supplies by electro-mechanical contractor and poor performance of erection sub-contractor. Besides, poor geological conditions in TRT, change in dumping yard, non-availability of agency for Raise Boring<sup>59</sup>, disorder in project area and additional work of HRT beyond original scope of contract also contributed to the delays.

NHPC Management stated (October 2011) that unit-1 was re-scheduled to be commissioned in January 2012 but delay in commissioning may further increase and all four units may be commissioned by August 2012. Work in open area like dam filling, excavation in plunge pool area, concreting in surge shaft and pot head yard got delayed due to intermittent and heavy rains. Erection of steel liners in pressure shaft suffered badly due to cloud burst. Moreover, erection work of machines hampered due to seepage in power house cavern and construction activities on all fronts were held up during the strikes called by local people. Further, although geology encountered in TRT downstream was more or less comparable to as given in pre-construction stage but main reason of delay was formation of unexpected cavity.

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<sup>59</sup> *A raise borer is a machine used in underground mining, to excavate a circular hole between two levels of a mine without the use of explosives.*

Had Management conducted survey & investigations adequately as per site requirement, impact/delays due to adverse geological conditions could have been minimised.

**(iv) Chamera-III of NHPC (Delay of 21 months)**

Audit analysis revealed that slow progress was due to (i) consent from Himachal Pradesh Pollution Control Board was accorded in April 2006 though civil works package was awarded in September 2005, (ii) closure of crushing plant by State Government since February 2009 to October 2009, (iii) washing away of upstream and downstream coffer dams in floods of July 2008 in July 2010, and (iv) damage to contractor's construction equipment due to rock fall in September 2009 and December 2010 from right hill slope at Dam site.

**(v) Subansiri Lower of NHPC (Delay of 75 months)**

Audit noticed that slow progress of the project is attributable to (i) delay in handing over site to civil contractors, (ii) non-finalization of specialized agency for cut off wall for dam by the civil contractor, (iii) delay in treatment of power house back hill slope after its failure in January 2008, (iv) change of design/layout from surge chamber to surge tunnels necessitated due to back hill slope failure for which go ahead was given to the existing contractor in May 2009 (with completion period of 42 months), and (v) intermittent law and order problems and strike/bandh by local groups/organizations.

Further, delay in signing of MOU with Government of Arunachal Pradesh also resulted into delay in progress of work (though the work started in 2005, MOU was signed in January 2010)<sup>60</sup>. The project has missed the scheduled COD in September 2010.

NHPC Management stated (October 2011) that formal forest clearance led to delay in handing over of site to the civil contractors. The forest clearance was delayed due to litigation and net present value payments issue. The contractor was allowed to undertake the works after survey and demarcation of area by erecting concreting pillars w.e.f. 01 January 2005. Further, delay in resolving contractor's claims was due to absence of condition in the contract for addressing idling claims which was being included in future contracts. Regarding back hill slope failure, it was stated that external expert committee recommended additional rock mechanic tests and stress/stability

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<sup>60</sup> *MOU signing with Government of Assam is still pending.*

analysis of the structure. The additional geological investigation indicated unfavourable rock mass properties. Therefore, the design and layout of surge arrangement was modified. Moreover, intermittent law and order problems and bandh/strike by local groups/organizations had major adverse impact on ensuring the uninterrupted and steady progress of the work. However, NHPC was trying to maintain close coordination with the local, district & State authorities to minimise the extent of impact to the best extent possible.

Reply of the Management is not tenable as NHPC awarded works to the contractor without obtaining statutory clearance from MOEF and in process incurred an extra expenditure of ₹24.85 crore (against total claims of ₹135.68 crore) on account of payment of idling charges of men & machinery. The contractual clause was also defective as no provision of settlement of idling claims were included in the contract agreement due to back hill slope failure which indicates that survey & investigations were not carried out properly and resulted in time/cost overruns to the project.

**(vi) Uri-II of NHPC (Delay of 39 months)**

Audit observed that main reasons for delay in the project were *inter alia* (i) delay in award of E&M work due to poor participation resulting in contract completion schedule slipping beyond CCEA approved date of completion by 4 months, (ii) unprecedented flood in river Jhelum in March 2007 breaching the coffer dam, and (iii) intermittent agitation/bandh and curfew called by different organizations affecting the supply of construction material and manpower.

**(vii) TLD-III of NHPC (Delay of 69 months)**

Audit noticed that the main reasons of delay included (i) non handing over of forest land, (ii) regular right bank slope failure since 2005, (iii) delay in submission of drawings by the civil contractor and approval of the same by the Company, (iv) flash flood in May 2009 and July 2010, and (v) frequent strike/bandh by local groups/organizations. This project was initially approved at a cost of ₹768.92 crore and is now anticipated to be completed at a cost of ₹1,628.39 crore. The levelled tariff at the sanctioned cost of ₹2.02 per unit would increase to ₹4.95 per unit based on revised cost. The main reasons for variation in cost are (i) increase in quantities because of slope protection measures, extension of cut off wall, increase in excavation quantities due to debris and slush and subsequent modification: ₹351.19 crore and (ii) increase in IDC & FC because of time overrun and cost overrun: ₹246.07 crore.

NHPC Management while accepting delays in handing over of civil fronts stated (October 2011) that forest clearance for the project was received in April 2004 and accordingly works were started by the civil contractor from May 2004. Further, the right bank slope failures occurred during the monsoon of year 2005 & 2006 and unprecedented flash flood occurred in July 2007, 2008, 2009 & 2010, caused disruptions of works.

Reply of the Management is not tenable as NHPC awarded civil works without obtaining forest clearance and land acquisition. Further, Management did not carry out thorough analysis of the flood data of the project site to ensure proper quantification in the in the Bill of Quantities (BOQ) leading to extra cost.

**(viii) TLD-IV of NHPC (Delay of 47 months)**

Audit analysis revealed that the main reasons of delay are: (i) increase in overall quantities on account of foundation rock located at a lower level than anticipated in Power House, Service Bay and Power Dam, and (ii) increase in length of Power house and increase in weight of radial gates. The E&M package was awarded in May 2007 with completion period of 36 months i.e. by May 2010 against the initial project completion schedule of September 2009.

This project initially approved at a cost of ₹1,061.38 crore is now anticipated to cost ₹1,501.75 crore. The main reasons for variation in cost are (i) increase in quantities because of inclusion of extra/new items owing to various restoration works required because of frequent floods, increase in civil works items on account of availability of foundation rock at a level lower than the anticipated (₹138.53 crore) and (ii) increase in IDC & FC because of time overrun and cost overrun (₹150.36 crore).

NHPC Management stated (October 2011) that variations in foundation occurred due to soft nature of rock and due to dental treatment provided in the coal seams for laying the foundation of civil structures. Further, due to non-availability of boulder of required size in the vicinity of project area required for diversion channel protection, which was damaged in the flash flood of 2007, the length of the power house has been increased from 100m to 104m during the final design from the tendered provision.

Reply of the Management is not tenable as the geological problems were encountered due to inadequate survey & investigations by the management. It is also observed that flood data was also not properly analysed to avoid any eventuality in future. The designs were also not prepared properly as length of power house had to be increased during the final design.

**(ix) Nimmo Bazgo of NHPC (Delay of 29 months)**

Audit noticed that the delay in execution of project was due to (i) delays in issuance of drawings/instructions by the Company in respect of power dam concreting, right bank non-flowing blocks, switchyard and dam power pack room, (ii) additional work due to change in design, (iii) delay in supply and erection of E&M equipment by BHEL. Besides cloud burst of August 2010 damaging many enroute bridges also affected the construction schedule.

NHPC Management stated (October 2011) that all the construction drawings were issued in commensurate with the construction activities and there is no delay on account of this account. There is no additional work due to change in design. Further, delay in commissioning of the project was due to (i) the working season is only six months due to extreme cold conditions, (ii) materials/supplies got stranded for long time due to curfew, bandh and other law & order problems, (iii) non-availability of skilled or non-skilled local labour, (iv) extreme climatic conditions, etc.

Reply of the Management is not tenable as NHPC delayed in issuing drawings/instructions to the contractors. Further, BOQ increased due to change in design. NHPC did not schedule all activities in a planned manner.

**(x) Chutak of NHPC (Delay of 20 months)**

Audit analysis revealed that the delay in completion of project were (i) shortage of manpower with civil contractor, (ii) delay in supply of material by E&M contractor (BHEL), and (iii) variation in the BOQ of reinforcement, pre-cast lagging and excavation of shaft.

The project initially approved at a cost of ₹621.26 crore is now anticipated to be completed at a cost of ₹913.25 crore. The levelled tariff at the sanctioned cost was ₹3.16 per unit which would increase to ₹7.49 per unit based on revised cost.

NHPC Management stated (October 2011) that delay in completion of project were (i) shortage of manpower with the civil contractor, (ii) delay in supply of material by E & M contractor (iii) variation in BOQ, (iv) delay in issuance of construction drawings, (v) poor geological conditions at site, and (vi) inclement weather condition in the region.

The reply of the Management is not tenable as BOQ increased due to change in design. Poor geological conditions were not anticipated due to inadequate survey &



investigations. NHPC awarded civil works to a contractor who did not have adequate manpower.

**(xi) Rampur of SJVNL (Delay of 20 months)**

Audit noticed that the main reasons for delay were (i) poor performance of civil work contractors due to encountering of many geological surprises; (ii) late award of electromechanical package; and (iii) delay due to MOEF clearance for acquisition of additional forest land for Kasholi Adit.

The revised schedule of project completion by September, 2013 as anticipated by the Management seems to be doubtful as Consultant (Hydro) has observed (March, 2010) that considering the critical construction activity of 'heading excavation of about 2600m length of HRT between downstream of Kasholi and upstream of Goshai Adit', even if the project is commissioned during last quarter of the financial year 2013-14 it would be an appreciable achievement.

SJVNL Management stated (October 2011) that the main reasons for delay are encountering of geological surprises and adverse/extremely poor rock conditions vis-à-vis anticipated, time taken in MOEF clearances for acquisition of additional forest land for Kasholi Adit, etc.

The reply of the Management is not acceptable as adverse geological conditions and requirement of additional forest land for extra Kasholi Adit were encountered mainly due to inadequate survey & investigations by the Management. Had Management conducted thorough survey & investigations, above problems could have been mitigated/minimised.

**(xii) Kameng Hydro Electric Project (Delay of 87 months)**

Kameng Hydro Electric Project (Kameng project-600 MW) was contemplated as a run-of-the-river scheme situated in the West Kameng district of Arunachal Pradesh. The original schedule of completion of project (December 2009), however, slipped to March 2017 due to revision of design of the major works, geological surprises encountered during detailed engineering and slow progress of work.

NEEPCO Management while accepting (September 2011) the slow progress of work intimated that efforts would be made to expedite the progress of work. Management also intimated that constant monitoring was being done to adhere to the schedule. Ministry added (March 2012) that in-spite of vigorous persuasion by NEEPCO,

contractor (Patel Engineering Limited) is not achieving the desired progress, primarily on the plea of revision of rates for the items requiring steel and cement in particular.

The reply is not acceptable because the progress of work was far from satisfactory despite monitoring by NEEPCO. The Management should have taken timely decision to resolve the contractual issues to expedite the progress of work.

Besides the above 12 projects, the delay in Teesta-V Project had already been highlighted in the CAG Report No.27 of 2009-10.

**Thus, it is evident from the above that main reasons for delay in project execution were:**

- **geological surprises; and**
- **other controllable factors like delay in handing over of access roads to the contractors, wrong assessment of land requirements, delay in issuance of construction drawings, increase in scope of work due to incorrect assessment of bill of quantities, inordinate time taken in resolving contractors' claims on idling of resources, etc.**

**Thorough survey and investigation as envisaged in the Policy on Hydro Power Development (1998) would have minimized the geological surprises. Further, other factors like delay in handing over of access roads, delay in issuance of construction drawings, etc. could have been controlled by proper coordination and monitoring by the CPSEs.**

## 6.2 Other points of interest

### *(a) Adverse cascading impact on project*

Water discharged by Parbati-II will not be available for generation of electricity till December 2017. As a result, Parbati-III project, which is a downstream project of Parbati-II, can not become fully operational till commissioning of Parbati-II project for want of water discharged by this project. Only two units<sup>61</sup> (260 MW) of Parbati-III will be able to generate power from water available in the Sainj River including water discharge from Jiwa Nallah.

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<sup>61</sup> *Anticipated to be commissioned in December 2012 and January 2013*

Balance two units (260 MW) will remain idle for five years<sup>62</sup>. This would result in loss of generation of 4,882 million units during next five years.

NHPC Management accepted (October 2011) that only two units of Parbati-III would be able to generate electricity from the water available in Sainj River.

**(b) *Payment without commensurate benefits***

NHPC agreed (July 2011) to compensate a contractor (M/s Om Metals) for compression of schedule of hydro mechanical works relating to Chamera-III and Uri-II projects. Accordingly, NHPC paid an amount of ₹13.60 crore to the contractor. Audit observed that the compression of the schedule was not required at all as the civil works were already running behind schedule and completion of hydro mechanical works without civil works was of no use.

NHPC Management stated (October 2011) that due to delay in completion of civil works, completion of hydro-mechanical works were likely to go beyond 2011. Therefore, compression of erection period of hydro-mechanical works packages was felt essential. Ministry further added (March 2012) that the compression schedule given to hydro-mechanical contractor has helped in early completion of erection of vital hydro-mechanical components/works as compared to scheduled completion of hydro-mechanical works under original Contract Agreements of both projects.

Replies are not tenable as compression of the schedule of hydro mechanical works without completion of civil works did not deliver the desired results.

**(c) *Non-compliance with contractual terms***

As per terms of contract for construction of Head Race Tunnel (HRT) of Parbati-II project, no partner of the Joint Venture was allowed to off load his portion of work (in any manner) to other party, partner or sub-contractor without prior permission of the owner. It was, however, observed that MAYTAS off loaded his entire work to Sri Shankarnarayna, with least work capacity

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<sup>62</sup> *Difference between anticipated date of COD of Parbati-III {(i.e. December 2012 (Unit-III) and January 2013 (Unit-IV)} and of COD of Parbati-II (December 2017)*

partner in the Joint Venture in terms of specific work experience as well as financial participation (19.71 per cent).

NHPC Management stated (October 2011) that NHPC had no records with regard to offloading the works by MAYTAS to Sri Shankarnarayna. Ministry added (March 2012) that a show cause notice has been issued by NHPC to M/s HJV.

Reply of the Management and Ministry is devoid of merit as NHPC's records<sup>63</sup> indicate that MAYTAS was not involved in the execution of contract. NHPC has also issued show cause notice to the lead partner and JV on this issue.

**(d) Extra-contractual financial assistance**

The performance of M/s HJV in the construction of Head Race Tunnel of Parbati-II project was not satisfactory from September 2002. However, instead of cancelling the contract in 2005-06, when its performance was noted as far from satisfactory, NHPC sanctioned (December 2004 to October 2009) advances of ₹131.65 crore<sup>64</sup> beyond contractual provisions for recommencement of TBM work, bridging gap and balance work. NHPC also deferred the recovery of advances and interest from time to time. On being pointed out (October 2011) by Audit, NHPC cancelled (9 March 2012) the contract of M/s HJV, encashed their bank guarantees available with it and adjusted the security deposit. Finally as on 21 June 2012, an amount of ₹182.48 crore was still outstanding, chances of recovery of which were remote. This has also led to estimated cost overrun of ₹243.54 crore and time overrun of 99 months in the project.

Ministry/NHPC Management stated (October 2011 and March 2012) that the issue of slow progress of works by M/s HJV was deliberated in its various meetings since July 2005 and the Board in order to find the way out, took decisions in the overall interest of the Company and early commissioning of the project.

Thus, due to award of the work to ineligible contractor by relaxing PQ criteria after sale of tender documents (as discussed earlier), and ignoring the

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<sup>63</sup> 325<sup>th</sup> meeting (Agenda item No.325.3.1), 328<sup>th</sup> meeting (Agenda item No.328.3.1) and 330<sup>th</sup> meeting (Agenda item No. 330.2.5) held on 28.10.2010, 20.12.2010 and 27.01.2011 respectively.

<sup>64</sup> Out of total advances of ₹131.65 crore, an amount of ₹21 crore was approved by CMD and balance by Board of Directors.

non fulfillment of eligibility conditions, led to blocking of ₹182.48 crore besides estimated cost overrun of ₹243.54 crore and time overrun of 99 months in the project.

**(e) *Lack of transparency in resolving contractual issues***

The work for boring of head race tunnel had to be suspended as tunnel boring machine got stuck in the tunnel due to ingress of water slush and loose rock. MOP constituted (January 2008) a High Level Committee under the Chairmanship of Shri P. Abraham, former Secretary (Power) to suggest (i) possible solutions with M/s HJV to recommence work on fronts other than tunnel boring machine (TBM) face immediately and (ii) a rate restructuring for recommencement of work with TBM. The Committee recommended (March 2008) release of an advance of ₹72 crore to enable M/s HJV to meet its outstanding liabilities. Accordingly, the Company released (April 2008) ₹72 crore to M/s HJV.

Audit observed that Chairman of above Committee, was also a member on the Board of Directors of Nagarjuna Construction Company Limited, one of the partners of M/s HJV. Thus, there was a clear conflict of interest in his both the responsibilities. Audit also observed that the Ministry neither asked the Chairman of the Committee nor he himself disclosed his interest while chairing the Committee.

Ministry/NHPC Management stated (October 2011 and March 2012) that recommendation of the Committee was jointly made by the Committee members and was further approved by the Board. Further, Chairman of the Committee decided (August 2010) to dissociate himself from the Committee after having 14 meetings. NHPC further issued (01 December 2010) instructions to all the appointees to the Committees obtain a declaration seeking disclosure of interest. Ministry further added (March 2012) that since the Chairman of the Committee was former Secretary (Power), GOI, it was expected that he would be aware of rules/guidelines pertaining to clash of interest.

**(f) *Settlement of Claims***

The claim settlement mechanism in NHPC is not prompt as a large number of contractual claims were pending for one to seven years. Age-wise analysis of claims as on 31st March 2012 is given below:

Age of the claims	No. of claims	Amount of claims (₹ in crore)
Less than one year	47	2,456.93
One to two years	51	1,734.90
Two to three years	34	258.05
Three to four years	30	338.05
Four to five years	59	415.85
Five to six years	45	985.73
More than six years	30	806.91
<b>Total</b>	<b>296</b>	<b>6,996.42</b>

It is evident from the above table that 164 claims amounting to ₹2,546.54 crore are outstanding for more than three years. Non-settlement of claims of the contractor for a long period affected the cash flow position of the contractor and consequent progress of work. It was observed that prior to October 2010, no procedure for valuation of claims of contractors and processes of amicable settlement were prescribed in NHPC.

NHPC Management accepted (October 2011) the observation and added that the procedure for valuation of claims of the contractors and processes of amicable settlement had been formulated (October 2010).

**(g) *Payments without adequate securities***

As the progress of work in Koteshwar project was not satisfactory, THDC constituted (March 2007) a high level “Empowered Committee” to get the work done by making direct payment to the manufacturers/suppliers etc. against the orders placed by M/s PCL at their risk and cost. As on 31 March 2012, an advance of ₹190.42 crore (Principal ₹124.95 crore and interest ₹65.47 crore) was recoverable from the contractor (M/s PCL) on account of risk and cost.

THDC Management stated (August 2011) that performance securities, security deposit, the guarantees for mobilization advances and mortgages on equipment brought by contractor are available with THDC. Ministry added (March 2012) that Board of THDC took a prudent decision to carry out the execution of work at the risk and cost of contractor even beyond the amount available in securities in hand. This facilitated completion of a derailed project, which was a non-starter up to March 2007, within a shortest period of four years.

The reply is not acceptable as security amounting to ₹56.28 crore (performance guarantee/cash) only is available against recoverable amount of ₹190.42 crore with THDC, thereby exposing the Company to risk of default. Thus, THDC did not take necessary safeguards before releasing payments to the manufacturers/suppliers.

**(h) Loss due to inadequacies in the insurance policy:**

During execution of Tunnel work under Package-I, a mishap took place on 12 January 2007 followed by another mishap on 28/29 December 2007. As per contractual provisions, the contractors were solely responsible for lodging and persuasion of claims with Insurance Companies against contractor's all Risk policy taken by them in case of any damage except due to *force majeure* claim. The contractor had taken insurance policy covering only items included in the Bill of Quantities (BOQ). During execution while extra items were being executed, neither the contractor insured these items nor NEEPCO on its part ensured that contractor took insurance policy for these extra items as well. As a result, when NEEPCO asked (February 2008) the contractor to lodge claim with the Insurer for recovering the loss due to the said incidents, the contractor informed that the loss was out of the scope of the insurance policy. Thus, NEEPCO could not recover the loss amounting to ₹19.88 crore from the Insurance Company due to deficient policy taken by the contractor and poor monitoring by the Management.

Ministry/NEEPCO Management stated (March 2012) that claim lodged by the contractor was disallowed by the Insurance Company being extra items.

Reply is not acceptable as extra items should also have been included as 'add on' in the insurance policy by the contractor or a fresh policy for such extra items should have been taken. NEEPCO Management failed to monitor and ensure that the insurance policy taken by the contractor includes extra items as well.