This inspection report has been prepared on the basis of information provided by O/o the Managing Director, Uttarakhand Jal Vidyut Nigam Limited (UJVNL), Dehradun. The office of the Accountant General (Audit) Uttrakhand, Dehradun disclaims any responsibility for any misinformation, non submission or submission of incomplete records.

Audit inspection of accounting records of O/o the Managing Director, Uttarakhand Jal Vidyut Nigam Limited, Dehradun for the period April 2015 to March 2016 was carried out in exercise of the power conferred by section 19 of the C&AG, DPC Act 1971 read with section 143 of Companies Act 2013. Audit Inspection was conducted by Shri Amit Kumar Mishra, AAO, Shri A.P. Singh, AAO and Shri Vikas Dhyani, AAO under the partial supervision of Shri Mukesh Kumar, Sr. AO during the period from 29.12.2016 to 10.02.2017.

Part-I

1. **Introduction**:- The last audit of this unit was carried out by Shri Amit Kumar Mishra, AAO, Shri A.P. Singh, AAO and Shri Vikas Dhyani, AAO under the partial supervision of Shri Mukesh Kumar, Sr. AO in which accounting records of the period from April 2014 to March 2015 were generally examined. In current audit, accounting records of the period from April 2015 to March 2016 were generally examined.
2. (i) **Functions and geographical jurisdiction of the unit:**
   UJVNL operates hydro power plants ranging from 0.2 MW to 376 MW, totalling upto 1306 MW. The management of UJVNL vests in a Board of Directors headed by the Chairman. The Managing Director is Chief Executive of the Nigam who is assisted by 04 Directors, 04 Executive Directors and other functionaries. Uttarakhand Jal Vidyut Nigam Limited with its corporate office at Dehradun and has units spread over 13 districts of Uttarakhand State. The Nigam is engaged in generation of hydro power and development of new location of hydro power generation in the State.

3. (ii) **Auditing methodology and scope of audit:**
   Office of MD, UJVNL was covered in the audit. Inspection reports of all independent Drawing and Disbursing officers are being issued separately. This inspection report is based on findings of audit and December 2015 month was selected for detailed examination and March 2016 was selected for Arithmetical Accuracy.

(iii) (In `)

Year	Revenue	Expenditure	Profit
2015-16	9400542849.25	132342870.00	--

(iv) Organisation structure of the unit and reporting lines.

The management of UJVNL vests in a Board of Directors headed by the Chairman. The Managing Director is Chief Executive of the Nigam who is assisted by 04 Directors, 04 Executive Directors and other functionaries.

Part II A

Para 1: Procurement of material amounting to ₹ 59.38 lakh after declaration of project in ecosensitive zone.

Tenders for Kaldigad Project (2X 4.5 MW) were invited and two major contracts, first for civil work and second for E & M works were awarded in 2009. The performance of civil contractor was very poor and after approval from Board on 11.05.2012, the civil contract was terminated on 07.08.2012. Due to unprecedented rains and cloudbursts in Asiganga valley on 03.08.2012, Kaldigad SHP was severely damaged. The technical committee visited site and submitted their recommendations and subsequently the DPR was prepared in house, which was approved by the Board on 27.09.2013. Ministry of Environment and Forest has declared Eco-Sensitive Zone in District Uttarkashi on 18.12.2012 wherein setting up of new hydro-electric power plants and expansion of existing plants on river Bhagirathi and all its tributary from Gaumukh to Uttarkashi except micro and mini hydel power projects is prohibited. Additional land was also required for construction of Kaldigad SHP after flood and request for the same on the direction of District Magistrate Uttarkashi was sent to nodal officer. The case is pending with nodal officer in compliance of order of Hon'ble Supreme Court dated 13.08.2013. During meeting of High Power Committee headed by Chief Secretary, GoU on 03.12.2014 regarding ongoing and proposed works in Eco-sensitive Zone, no clearance shall be given for construction of any hydel projects. Despite the issue regarding clearance of projects, administrative approval for remaining civil and hydro mechanical works was accorded by Managing Director on 04.03.2014. Moreover Project has been taken out from ADB funding as it falls in Eco-sensitive Zone.

During scrutiny of records it was observed that despite the issues related to clearance of the project, contractor for E & M works was permitted to supply material valuing ₹ 59.38 lakh and received same on 21.03.2014 after the date i.e. 18.12.2012 when MoEF declared the area as Eco-Sensitive Zone. UJVNL had not only ignored the decision of MoEF and prepared (29.09.2013) in house DPR for remaining work which resulted in blockade of the fund to the extent of ₹ 59.38 lakh as the chances of utilization of material is remote, being arrear declared on eco sensitive zone.

Management in its reply stated that the MoEF notification is silent for the projects under construction wherein approval already given by MoEF. Kaldigad SHP was under construction when on the date of issue of notification and approval of land been accorded by MoEF on 21.04.2008. It also stated that power transformer was damaged during transit in the month of July 2012 and the same was again supplied by contractor in the month of March

2014 after repair from manufacturer. The reply of management is not convincing as MoEF permitted only mini and micro hydel projects in eco sensitive zone and it was in the interest of company to reassure itself about continuity of the project before transferring any further expenditure particularly as the project required additional load.

Para 2: Undue favour to contractor

An agreement was entered into by UJVN Ltd. with Gammon India Ltd (GIL) for balance civil work related to concrete dam, diversion works, intake and 1.35 km HRT of Vyasi Hydroelectric Project (120 MW) valuing ₹ 317.04 crore. This agreement also included a job item "Care and diversion of river during construction" with lumpsum quantity valuing ₹ 8.352 crore. The scheduled date of completion of work was 19.01.2017. The payment condition of this item under clause 8.9 (measurement and payment) of contract is as below:

- 50 percent of lump sum bid for the same after the completion of over flow of blocks up to EL 584.50m.
- Additional 20 percent of the lump sum bid for the items after completion of over flow of blocks up to EL 590.00m.
- Additional 20 percent of the lump sum bid for the items after completion of plunge pool/ stilling basin.
- Additional 8 percent of the lump sum bid after plugging of the diversion conduits and in accordance with clause 8.5 remaining 2 percent after the diversion works have been removed.

The work of diversion channel out of dam body raft concreting had been completed and wall concrete was partially (70 percent) completed. GIL requested to release the part payment of ₹1.25 crore against the work dated 14.09.2015. It submitted that the work of diversion channel had been done by procuring the aggregate from outside that delayed completion of diversion channel and created adverse cash flow situation and accordingly submitted the estimate of total value of work done i.e. ₹ 2.00 crore upto July 2015 and requested to release ₹ 1.25 crore to meet out its immediate requirements of expenses incurred in consumables like cement/HSD/ Steel etc. UJVN Ltd intimated GIL to give consent to furnish the bank guarantee amounting equal to the part payment to be released. Regarding production of mass concrete for dam, arrangements were still not completed as commissioning of ice plant and chilling plant and only one ice plant of 25 TPD was commissioned at site, equipment for placing of concrete i.e. telebelt/ tower crain/ creter crain etc. had not been deployed till the request made for part payment by GIL. UJVN Ltd. allowed part payment and paid ₹ 1.25 crore (23.11.2015) with the condition that if rock covering of the deepest dam blocks was not be completed upto June 2016 or otherwise part payment would be recovered from the due payments by the contractor. GIL again requested for interim payment of ₹ 3.00 crore and also submitted that the work of diversion channel had been done by procuring the aggregate from outside which affected their cash flow situation. GIL submitted the estimate of total work done valuing ₹ 6.86 crore. UJVN Ltd approved interim payment of ₹ 2.00 crore and paid the amount in May 2016 with the condition that in case the contractor fails to achieve milestone 2. i.e. excavation of dam foundation of overflow section and concreting upto EL 584.50m the amount would be recovered from due payments of the contractor. GIL requested for waiver of recovery of part payment made as the condition of rock covering of the deepest dam blocks was not done till June 2016 and requested to extend the date of same work upto 31.12.2016. UJVN Ltd. had deferred both the targets for recovery of part payments made to GIL.

During scrutiny of records it was noticed that the part payments made to GIL was done to save it from financial crisis and to accelerate the progress in work. As no milestone mentioned in contract has been achieved till date this part payment should have been treated as an advance to contractor. Moreover, UJVN Ltd had demanded bank guarantee equal to the amount of part payment made to contractor which shows that part payment was made as an advance. However UJVN Ltd. considered the already submitted performance bank guarantee against this advance and gave relaxation in furnishing of bank guarantee. Further, as per Uttarakhand Procurement Rules 2008 advance for accelerating the progress in work can be given to contractor subject to payment of interest and a bank guarantee of advance should be taken to secure the repayment of advance. Despite considering this part payment as an advance, UJVN Ltd gave interest free advance which resulted in undue favour to contractor amounting to ₹ 40.34 Lakh by violating the provisions of Uttarakhand Procurement Rules 2008.

Management in its reply stated that as it is a lump sum contract there is a provision in a contract against clause 57.2 (FIDIC GCC) to release part payment against lump sum item. As per design and drawings of approved diversion works, cost of work done assessed is ` 6.86 crore. For releasing part payment to ease the financial crisis of contractor, part payment of lump sum item of care and diversion against the work done or diversion can be released pursuant to clause 57.2 of FIDIC GCC (Breakdown of Lump sum items). The payment released to the contractor is well below the amount prescribed in the contract clause. All the referred payments were done against the work done. It is a widely accepted fact that, in the original civil works the ratio of Material to works is about 70:30. It is pertinent to mention here that this item i.e. “Care and diversion of river during construction” was to be measured on lump sum basis along with the other items in BOQ. The contractor purchased the aggregate from local market at considerably high price and consequently the cash flow of the contractor was adversely affected. As per clause 57.2 “ for the purpose of statements submitted in accordance with sub clause 60.1, the contractor shall submit to the engineer within 28 days after the receipt of the letter of acceptance, a breakdown for each of the lump sum items contained in the tender. Such breakdowns shall be subject to the approval of the engineer”. Here it is pertinent to mention that overall payment of ₹ 3.25 crore for this item is well below the initial 50 per cent payment envisaged for the instant lump sum items i.e. ₹. 4.18 crore. The reply of management is not convincing as clause 57.2 does not mention the breakdown of payments made to contractor rather it only states about breakdown of lump sum items. As per agreement the breakdown of lump sum items were specified as above mentioned milestones. Both the part payments made to contractor were subject to the fulfillment of the certain conditions i.e. if rock covering of the deepest dam blocks was not completed upto June 2016 for first part payment and excavation of dam foundation of overflow section and concreting upto EL 584.50m for second part payment or otherwise part payment would be recovered from the due payments by the contractor. Both the conditions were not fulfilled within stipulated time which is violation of part payment conditions and recovery clause due to non fulfillment of targets itself clarifies that UJVNL had considered these part payment as advance and the same should have been recovered from the contractor. It is also pertinent to mention that the responsibility of arranging the aggregate was of contractor only as per clause 9.4.2.2(2) scope of work in agreement. Allowing part payment to contractor to give relief from financial crisis which arises due to purchase of costly aggregate from local market is not in order. Management itself admitted the fact that financial crisis of contractor could have led to further time and cost overruns. As per Uttarakhand Procurement Rules 2008, advance for accelerating the progress in work can be given to contractor subject to payment of interest and a bank guarantee of advance should be taken to secure the repayment of advance. This resulted in undue favour to contractor amounting to ₹. 40.34 lakh by allowing part payment instead of treating it as interest bearing advance.

Para 3: Loss due to non taking of appropriate insurance cover of Project – ₹ 2.18 crore

Kaliganga I (4 MW) Small Hydro Project (SHP) work was awarded to M/s SCL-BFL(JV) dated 07.11.2007 for design, Supply, Installation, Commissioning, Testing and One year operation and maintenance. The project was commissioned on 18/19 July 2012. The COD was declared on 10.09.2012. Standard Fire and Special Perils policy of the project was taken by M/s SCL-BFL Joint Venture &UttarakhandJalVidyut Nigam Ltd. after commissioning of project for the period 31.08.2012 to 30.08.2013 covering building and permanent structure, plant and equipment. The project was damaged on 16/17 June 2013 due to natural calamity in the Uttarakhand State. The project generated 11.60 MUs since commissioning i.e. July 2012 to June 2013 with an average monthly generation of 9.66 lakh units. Nigam also took the Industrial all risk policy for commissioned Large hydro projects & Small Hydro Projects. Industrial all risk insurance policy also covers loss of complete revenue due to reduction in turnover/output.

During scrutiny of records it was observed that Nigam has claimed generation loss of various projects also from insurance company after natural calamity occurred in Uttarakhand State in June 2013. Nigam should have taken Industrial All Risk policy to insure itself against loss due to business interruption for Kaliganga I, instead of taking Standard Fire and Special Peril Policy as the project was commissioned on 18/19 July 2012 and had started generation since then. Due to not taking appropriate policy cover for Kaliganga I SHP, Nigam had suffered a loss of ₹ 2.18 crore (9.66 lakh units x 6 months x ₹ 3.75 per unit). Had the Nigam taken All Industrial Risk Policy of the Kaliganga I, it could have claimed the generation loss of ₹ 2.18 crore from insurance company.

Management in its reply stated that one insurance policy was taken by the contractor which was valid for the period of one year operation and maintenance. It was not appropriate to take two different policies as insurance premium will be multiplied for the same property/project. It also stated that the loss of generation was due to stoppage of functioning of project due to silt etc. which is an exclusion in industrial risk policy. Reply of management is not convincing as the management's statement i.e. generation loss was due to stoppage of functioning of project due to silt etc. is incorrect as the project was badly damaged in flood as per UJVNL inspection report (10-09-2013) on Kaliganga–I. Further, it is a business practice of UJVNL to take All risk policy for commissioned projects. Kaliganga I project was commissioned on 18/19 July 2012 and had started generation since then but fire and special perils insurance cover (for the period 31.08.2012 to 30.08.2013) was taken up by UJVNL after commissioning of project instead of taking Industrial All Risk policy.

Para 4: Undue favour to contractor resulted in extra cost of ₹ 2.38 crore

During unprecedented flood in the month of August 2012 and June 2013, almost all the protection works around the reservoir rim of Joshiyara Barrage got damaged thereby creating threat of damages to residential as well as commercial buildings situated alongwith both banks of the river. Therefore, to ensure safety of residential & commercial building adjoining to reservoir area of Joshiyara Barrage of ManeriBhali-II, HEP the protection work is essentially required around Reservoir Rim which would also facilitate Nigam to maintain reservoir level upto 1108 mt. UJVNL took consultancy from WAPCOS Ltd. for the said work vide agreement 02 & 03/DGM/(CM-BV)/2013-14. WAPCOS suggested using M15 with plum concrete in construction of protection wall. Accordingly, in view of urgent need and shortage of time available before forthcoming monsoon, a short term tender was floated for the work of "Construction of protection wall around Reservoir Rim of Joshiyara Barrage of ManeriBhali-II HEP at Uttarkashi" vide NIT no. 19/DGM(CM-BV)/Maneri/2013-14. The work was awarded to L1 bidder i.e. M/s Piyush Infratech Pvt. Ltd, Aurangabad at a cost of ₹ 63.77 crore as per agreement 6/DGM/(CM-BV)/Maneri/2013-14. One year time was given to M/s PiyushInfratech Pvt. Ltd, to complete the work from the date of start i.e. 08.02.2014. In first phase, on priority basis, the work of construction of protection wall upto EL level 1104 mt. was to be completed within 75 days from closure of reservoir.

During scrutiny of relevant files it was seen that M/s PiyushInfratech Pvt. Ltd, was not having sufficient labour and equipments since start of the said work and there was delay due to which M10 material was used instead of M15 with plum concrete for construction of protection wall. General Manager Civil vide its letter dated 15.07.2014 stated DGM Civil that M/s Piyush Infratech Pvt. Ltd, was using M10 instead of M15 with plum concrete and directed to stop the use of M10. The approval for using M10 in place of M15 with plum concrete in order to complete the work before monsoon was accorded on 15.09.14 considering the delay in completion of work because of insufficient manpower and machinery. The extra cost for using M10 in place of M15 with plum concrete was ₹ 2.38 crore. The fact remains that the work of construction of protection wall upto EL level 1104 mt which was to be completed within 75 days from closure of reservoir was completed in December 2015 on the right bank of the river and still not completed on the left bank upto March 2016. However, during this period, closures for two times {10.03.2014 to 05.06.2014

(88 days) & 20.02.2015 to 20.04.2015 (59 days)} have been taken for urgent works. It appears from above that the contractor was not having sufficient labour and machinery to complete, even that portion of work which was to be completed within 75 days of closure, despite incurring extra cost of ₹ 2.38 crore for using M10 in place of M15 with plum concrete for construction of protection wall. It is also to be noted that the natural calamity in Uttarkashi occurred in 16/17 June 2013 and the LOI for above work was given on 01.02.2014 and the contractor was very much aware about the natural calamity and conditions thereafter in Uttarkashi. Therefore, non availability of manpower in Uttarkashi is not the justifiable reasons for delay in work and using M10 in place of M15 with plum concrete as mentioned in the records.

The management stated in its reply that the contractor was given one year time to complete the work from the date of start i.e. 08.02.2014. Meanwhile, it was deliberated that it would be beneficial to engage some reputed firm for consultancy who may render it's consultancy for Design, Technical Supervision, Monitoring & Quality Assurance for above mentioned work and as such after floating tender for consultancy services an agreement No. 02/DGN(CM-BV)/Maneri/2013-14 with M/s WAPCOS Ltd. was entered on dated 15.11.2013. M/s WAPCOS Ltd. submitted his preliminary drawing in the month of March-2014. The sectional drawing submitted by M/s WAPCOS Ltd. was entirely different from what was proposed in the estimate. Hence, the execution of protection wall as per drawing submitted by M/s WAPCOS Ltd. involved huge quantity of material, labor and T&P as compared to proposed drawing of estimate and contract, thus the resources which were initially mobilized by the contractor at site faced scarcity. Hence, progress rate for construction of protection wall was not as proposed in estimate and contract thereof. As per drawing submitted by M/s WAPCOS Ltd. M-15 concrete with plum behind face wall was proposed. The reply of the management is not convincing as the first priority of the work is to construct the wall upto the safe level for which another 59 days (20.02.2015 to 20.04.2015) closure was accorded but the same was significantly delayed by 20 months from the scheduled completion date. It indicates that the contractor was not having sufficient labour and machinery to complete, even that portion of work which was to be completed within 75 days of closure, despite incurring extra cost of ₹ 2.38 crore for using M10 in place of M15 with plum concrete for construction of protection wall. Further, Nigam awarded the work to the contractor on 8th Feb, 2014 without waiting for preliminary drawing of the selected consultant for this work, who submitted its preliminary drawing in the month of March, 2014. Moreover, M-15 concrete with plum behind face wall was proposed by the consultant but M-10 was used instead of M-15. This shows Nigam's negligence towards the consultancy and services provided by the consultants. Hence, Nigam's reply that 'contractor had initially mobilized huge quantity of material labour and T&P at site as compared to proposed in-house drawing and contract which hamper progress rate of work', was not justified. Thus, Nigam had to bear the additional expenditure of ` 2.38 crore.

Para 5: Undue favour to contractor resulted in extra cost of ₹ 1.40 crore

During unprecedented flood in the month of August 2012 and June 2013, almost all the protection works around MB-I got damaged thereby creating threat of damages to residential as well as commercial buildings situated along both banks of the river. Therefore, to ensure safety of residential & commercial building adjoining to reservoir area of JoshiyaraJhulapul to Tiloth bridge of ManeriBhali-I, HEP the protection work was essentially required. UJVNL also took consultancy from WAPCOS Ltd. for the said work vide agreement 02 & 03/DGM/(CM-BV)/2013-14. WAPCOS suggested using M15 with plum concrete in construction of protection wall. Accordingly, in view of urgent need and shortage of time available before forthcoming monsoon, a short term tender was floated for the work of "Construction of protection wall around ManeriBhali-I HEP at Uttarkashi" vide E tender no. 12/DGM(Civil)/2013-14. The work was awarded to L1 bidder i.e. M/s R.R. Constructions Pvt. Ltd, Hyderabad at a cost of ₹ 55.25 crore as per agreement 5/DGM/(CM-BV)/Maneri/2013-14. The entire work was to be completed within 18 months from the date of start of work i.e. 19.12.2014 to 18.06.2015. In first phase, on priority basis, the work of construction of protection wall upto EL level 1104 was to be completed within 75 days from closure of reservoir.

During the scrutiny of relevant files it was seen that M/s R. R. Constructions Pvt. Ltd, was not having sufficient labour and equipments since starting of the said work and there was delay due to which M10 material was used instead of M15 with plum concrete for construction of protection wall. It was also noticed that there were 5 transit mixture at site which were used by both R.R.Construction Pvt. Ltd and PiyushInfratech Pvt. Ltd for the MB I work and MB II work which also contributed to delay in completion of work. General Manager Civil vide its letter dated 15.07.2014 stated DGM Civil that M/s R. R. Constructions Pvt. Ltd, was using M10 instead of M15 with plum concrete and directed to stop the use of M10. The approval for using M10 in place of M15 with plum concrete in order to complete the work before monsoon season was accorded on 15.09.14 considering the delay in completion of work because of insufficient manpower and machinery. The extra cost for using M10 in place of M15 with plum concrete was ₹ 1.40 crore. The fact remains that the work of construction of protection wall upto EL level 1104 which was to be completed within 75 days from closure of reservoir was completed in December 2015 on the right bank of the river and still not completed on the left bank. However, during this period closures for two times (10.03.2014 to 05.06.2014 & 20.02.2015 to 20.04.2015) have been taken for urgent works. It appears from above that the contractor was not having sufficient labour and machinery to complete, even that portion of work which was to be completed within 75 days of closure, despite incurring extra cost of ₹1.40 crore for using M10 in place of M15 with plum concrete for construction of protection wall. It is also to be noted that the natural calamity in Uttarkashi occurred in 16/17 June 2013 and the LOI for above work was given on 01.02.2014 and the contractor was very much aware about the natural calamity and conditions thereafter in Uttarkashi. Therefore, non availability of manpower in Uttarkashi is not the justifiable reasons for delay in work and using M10 in place of M15 with plum concrete as mentioned in the records.

The management stated in its reply that the contractor was given one year time to complete the work from the date of start i.e. 08.02.2014. Meanwhile, it was deliberated that it would be beneficial to engage some reputed firm for consultancy who may render it's consultancy for Design, Technical Supervision, Monitoring & Quality Assurance for above mentioned work and as such after floating tender for consultancy services an agreement No. 02/DGN(CM-BV)/Maneri/2013-14 with M/s WAPCOS Ltd. was entered on dated 15.11.2013. M/s WAPCOS Ltd. submitted the preliminary drawing in the month of March-2014. The sectional drawing submitted by M/s WAPCOS Ltd. was entirely different from what was proposed in the estimate. Hence, the execution of protection wall as per drawing submitted by M/s WAPCOS Ltd. involved huge quantity of material, labor and T&P as compared to proposed drawing of estimate and contract, thus the resources which were initially mobilized by the contractor at site faced scarcity. Hence, progress rate for construction of protection wall was not as proposed in estimate and contract thereof. As per drawing submitted by M/s WAPCOS Ltd. M-15 concrete with plum behind face wall was proposed. The reply of the management is not convincing as the first priority of the work is to construct the wall upto the safe level for which another 59 days (20.02.2015 to 20.04.2015) closure was accorded but the same was significantly delayed by 20 months from the scheduled completion date. Hence, the contractor was not having sufficient labour and machinery to complete, even that portion of work which was to be completed within 75 days of closure, despite incurring extra cost of ₹ 1.40 crore for using M10 in place of M15 with plum concrete for construction of protection wall resulted in undue favour to the contractor. Further, Nigam awarded the work to the contractor on 8th Feb, 2014 without waiting for preliminary drawing of the selected consultant for this work, who submitted its preliminary drawing in the month of March, 2014. Moreover, M-15 concrete with plum behind face wall was proposed by the consultant but M-10 was used instead of M-15. This shows Nigam's negligence towards the consultancy and services provided by the consultants. Hence, Nigam's reply that 'contractor had initially mobilized huge quantity of material labour and T&P at site as compared to proposed in-house drawing and contract which hamper progress rate of work', was not justified, and due to negligence on the part of contractor, Nigam had to bear an extra expenditure of ` 1.04 crore.

Para 6: Loss of ₹ 43.12 lakh due to non-taking of insurance cover

Madhyamaheshwar SHP (3X5 MW) was severely damaged during the devastating flood on 16-17 June 2013 in Uttarakhand. Loss assessment committee was constituted to visit the SHPs of UJVNL damaged due to heavy rain and cloudburst during 15.06.2013 to 17.06.2013. As per loss assessment committee report UJVNL suffered loss of ₹ 5.60 crore. Insurance cover was taken by contractor for the structure of project and loss of₹ 5.17 crore out of loss of ₹ 5.60 crore was covered under insurance.

During scrutiny of records, it was noticed that no insurance policy was taken for construction of residential building, playground and water supply line for residential building valuing 43.12 lakh which resulted in loss to the same extent. Moreover, despite the repeated requests of UJVNL for submitting the insurance claims for damaged structure as mentioned above, contractor had not submitted the insurance claim till date. UJVNL had decided to the recover the loss of ₹ 5.17 crore by forfeiting the performance bank guarantee submitted by the contractor as he failed to lodge the insurance claim in due course. UJVNL also decided to terminate the contract as the contractor showed its unwillingness to work on the same rates due to drastic changes in topography of the project site.

Management stated in its reply that it is general practice in the nigam for a small work i.e. construction of residential building, playground, water supply line for residential building, no-insurance provision was kept in the contract terms to get the low price bids. As it might have been anticipated that contractor may load the premium to the cost of work consequently increase in the value of bid. Reply of management is not satisfactory as the project lies in the area prone to floods and earthquakes. It is a matter of general prudence to take insurance cover of all structures of the project which lie in high seismic zone (Dist. Rudraprayag) in order to avoid unforeseen losses.

Para 7: Nigam deprived of consistent revenue due to delay in modification of Tail Race Channel, ManeriBhali II.

ManeriBhali II project (76x4=304 MW) was commissioned on 15 March 2008 at reservoir level El 1104 m. At the time of availability of water to run all the four machines at full load in July 2008, excessive vibrations on the machines were observed by Nigam. Due to excessive vibrations all four units of power house were not able to run continuously at their designed capacity of 76 MW each and presently running at 267 MW against 304 MW. Nigam invited various experts to study these excessive vibrations and it was noticed by experts that vibrations were caused due to typical layout of Tail Race Channel (TRC) and evacuation of water from the TRC is not steady. Afterwards the study on Computational Fluid Dynamics (CFD) analysis for TRC was carried out by SardarVallabhbhai National Institute of Technology (SVNIT), Surat, Gujarat. SVNIT submitted its report in December 2010. It was suggested in the report that existing tailrace configuration is not suitable for proper evacuation of the flow from all turbine units running at full load and also apprised Nigam that the rated 304 MW and as well as 334 MW (up-rated) cannot be reached safely unless the evacuation from tailrace is improved. SVNIT suggested some modifications in TRC. To comply the above recommendations, an estimate of ₹ 24.15 crore was prepared on the basis of recommendations of M/s WAPCOS Ltd, the consultant of UJVNL. The administrative approval of modification of TRC work was accorded on 17.11.2011. In agendas of 71 & 72 board meeting dated it is mentioned that the aforesaid work may be awarded immediately without any delay as after modification of TRC, the generation would increase by 30 MW at reservoir level El 1104 m and additional revenue of ₹ 39.12 crore per annum would be earned. However, Notice Inviting Tender (NIT) for aforesaid work was published in newspaper as late as 25.05.2014 & 26.05.2014.The contract was awarded to L-1 bidder, namely, M/s GSCO Infrastructure Pvt. Ltd on 19.09.2014 at ₹ 26.93 crore.

Audit observed that the CFD analysis by SVNIT was submitted to Nigam in December 2010 and administrative approval for aforesaid work was accorded in November 2011 after 11 months of SVNIT report. The NIT from the prospective bidders were invited after two and half years of administrative approval i.e. 17.11.2011 and contract was awarded. The delay in inviting tender and awarding contract deprived the Nigam of additional generation of 208.1 MUs at existing reservoir level El 1104 m.

Management in its reply stated that, the exercise for preparing estimate was started, just after getting recommendations of SVNIT. Accordingly an estimate of ` 24.15 crore was prepared and note was moved for according administrative approval on 13.06.2011.. The First tender was invited on 19.08.2011 before getting the administrative approval which was given on17.11.2011 from BOD which was scrapped on 09.02.2012. This tender was floated without consulting any expert consultant/agencies.. The power house was under operation therefore the work was critical and needed detailed planning with appropriate methodology so that removal of existing TRC wall and construction of modified TRC wall involve minimum closure of Power house. To meet out the technical aspects for compliance of SVNIT CFD analysis recommendations and to fulfill the above requirement, it was essential to engage a consultancy firm,/organization for TRC modification work so that the construction drawings, designs, construction methodology, construction schedules, equipment planning and BOQ may be finalized before inviting a tender. For providing consultancy services first tender was invited on 17.10.2012 which was cancelled due to non receipt of tender on 13.12.2012. Second tender for providing consultancy services was invited on 15.12.2012 and LOI was issued to M/s WAPCOs Ltd. on 20.09.2013. M/s Wapcos submitted the construction drawings, design, construction methodology, schedule, equipment planning and BOQ for TRC modification work on 23.05.2014. On the basis of recommendations of M/s Wapcos Ltd submitted to UJVNL on 23.05.2014, NIT for TRC modification work was issued on the very next day i.e. on 24.05.2014 which was published in newspaper on 25.05.2014 and 26.05.2014. After completion of tendering process the contract was awarded to L-1 bidder namely, M/s GSCO Infrastructure Pvt. Ltd on 19.09.2014.

Thus on the basis of above facts, it is crystal clear that no delay was made in awarding the contract and a continuous exercise was going on after approval of BOD.. At present, TRC modification work had been completed 4 days before completion of the scheduled closure period and the generation from Dharasu Power House of MB-II project was successfully restarted from 8 May, 2015. After the modification work of TRC, Dharasu Power House of MB-II project is running successfully and has achieved record generation. The maximum generation before modification of TRC was 273 MW in Sep-2014 while after modification of TRC, Dharasu Power House has achieved the Maximum Generation of 301 MW in June-2016.

The reply of the management is not convincing as SNVIT furnished its study report in December 2010 and management took 22 months to realize that it was very precise and specific job hence it was decided to engage reputed consultancy firm for detail design and drawings construction methodology, construction schedule, construction supervision, advisory monitoring and quality control for that very specific nature of work. However first tender for consultancy was invited on 17/10/2012. Further, second tender for consultancy was invited on 15/12/12 and consultant (Wapcos) started working on 20.11.2013 after a delay of eleven months. Hence the delay since December 2010 (Submission of SVNIT report) to November 2013 (Date of start of work by consultant) could have been avoided to increase generation by 28 MW. The work for modification was completed in May 2015 and since then project achieved record generation of 301 MW in June 2016 with an additional increase of 28 MW.The reply highlights the laxity on the part of management in process of modification of the TRC, which was crucial for achieving the maximum generation.

Para 8: Loss of ₹68.91 crore incurred on MB-II Project due to negligence on the part of UJVNL and eventually got disallowed by UERC.

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 requires Generating Companies and the Licensees to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations.

The Commission/Regulator in the case of UJVNL is Uttarakhand Electricity Regulatory Commission (UERC). UERC determines the tariff of UJVNL as provided in the section 86 of the Electricity Act. For determination of tariff, UERC resort to UERC (terms and conditions for determination of tariffs) Regulation 2011. The Commission offers tentative tariff to a project based on presumptive figures and the same is finalized in true up after submission of actual expenditure incurred by a company on the project for the year concerned based on audited accounts. For allowing extra expenditure on true up, UERC bifurcates expenditure into controllable and uncontrollable expenditures. UERC determines the tariff considering the project's capital expenditure, return on equity (ROE), depreciation & interest paid on loan etc. Any controllable expenditure which is incurred in excess of the norms is disallowed by UERC as it represents inefficient operations by the company and consumer should not be charged for the inefficiency of the company.

Audit noticed that UJVNL commissioned a project named MB-II (Capacity 4x76 MW) in March 2008 and for determining the tariff of this project UJVNL submitted a final petition on 28 November, 2014 before UERC of ₹1958.13 crore. UERC analysed and took the decision on 11 April, 2015 keeping in view the Judgement of Hon'ble Appellate Tribunal for Electricity (APTEL) and disallowed the price variation of ₹7.94 crore, interest paid to PFC ₹30.16 crore (₹287.57 crore submitted by UJVNL minus ₹257.41 crore allowed by UERC) and ₹12 crore in respect of guarantee fee (₹40.86 crore submitted by UJVNL minus ₹28.86 crore approved by UERC) as these expenditures were controllable and had to be borne by UJVNL itself, the consumers should not be made to bear the same.

UERC also stated in their order dated 11 April 2015 that UJVNL did not submit any response to demonstrate that they made any effort with GoU to waive off this additional guarantee fee or for reduction of the penal amount of guarantee fee. The excess amount was the penal amount and the same was due to delay in making timely payment by UJVNL. Hence, UERC allowed/approved ₹1889.22 crore only. On disallowance of ₹ 68.91 crore, UJVNL filed a review petition (No.58 of 2015) before UERC, on which UERC ordered (22 January 2016) that the view adopted by UERC in its earlier order was based on the records brought before UERC and also in line with the principle laid down by the Hon'ble APTEL in similar matter. Hence, UERC did not find any error apparent on the face of records and therefore, the contentions of the Petitioners cannot be considered as point for review and finally the review petition of UJVNL was turned down.

Had UJVNL controlled the price variation, timely paid the interest to PFC and paid guarantee fee to GoU in time, they would have avoided getting amount of ₹ 68.91 crore disallowed by UERC. Due to negligence on the part of UJVNL, the UJVNL has been forced to bear this loss amounting to ₹68.91 crore.

Management stated in its reply that it is correct that for allowing capital expenditure on true up, hon'ble UERC bifurcates expenses into controllable and uncontrollable and UERC has already approved 1885.50 out of 1923.60 claimed by UJVNL and only 38.10 crore has not been approved by UERC till date. For the remaining amount UJVNL is regularly taking up the issue with UERC. The reply of the management is not convincing as management has itself reduced its capital cost from 1958.13 crore to 1923.60 crore in order to get approval from UERC. Even after that UERC has allowed capitalization of only `1885.50 crore which is a loss of `38.10 crore from the revised cost. Thus, due to excess expenditure on controllable factor, company could not get ` 38.10 crore in its true up.

Para 9: Loss of interest of ` 44.16 lakh due to delay in repayment of loan.

Sobla-1 SHP (2X400KW) of UJVNL with the DPR cost of Rs 3626.11 lakh was under construction when it got damaged due to heavy rainfall and cloud burst in Pithoragarh district on 16th and 17th of June 2013. Due to heavy damage, the project was abandoned by the Board of UJVNL vide "Agenda item no. 70.31 (February 2014) Approval for "Abandoning of Sobla-I SHP and exclusion from ADB loan-2309-IND". For construction of Sobla-1, UJVNL had taken a loan from NABARD of Rs.6.49 crore at the rate of Rs.6.5% p.a. and taken loan of Rs.11.15 crore from ADB at the rate of LIBOR plus 0.60 % as per UJVNL documents.

The scrutiny of the action taken notes in respect of Board agenda of the company reveals that Notice to stop the works has been given to the following executing contractors:

i) M/s KCPL, Ranikhet vide letter no. 582/DGM/Ag. 01/2011-12(Sobla-I) dated 11.04.2014 for the work of "Supply , Erection and Commissioning works for the Penstock Pipe Including related Civil works for 2x4 MW Sobla-I SHP" at Tehsil Dharcula in District-Pithoragarh for contract agreement no. 01/DGM(ADB-Projects)/11-12 dated 05.04.2011.

ii) M/s KCPL, Ranikhet vide letter no. 583/DGM/Ag. 02/2011-12(Sobla-I) dated 11.04.2014 for the work of " Design & construction of Power House Building, Switchyard and Tail Race including associated Civil works for 2x4 MW Sobla-I SHP" at Tehsil Dharcula in District-Pithoragarh for contract agreement no. 02/DGM(ADB-Projects)/11-12 dated 05.04.2011.

iii) M/s Neeraj Singh Hyanki&Dalip Singh Adhikari (JV) Pithoragarh vide letter no. 584/DGM/Ag.05/2011-12 (Sobla-I) dated 11.04.2014 for the work of "Miscellaneous repair and construction work related to trench weir and Construction work related to Trench weir, D-Tank, power channel, escape channel etc" at Sobla-I at Tehsil Dharcula in District-Pithoragarh for contract agreement no. 05/DGM (ADB-Projects)/2011-12 dated 11.04.2011.

iv) M/s Go-Goal, Hydro, Haridwar vide letter no. 589/DGM/Ag.04/2011-12 (Sobla-I) dated 11.04.2014 for the work of"Design, Supply, Installation, Commissioning and testing with one year operation and maintenance of Electro mechanical works with all men and material under EPC contract of (2x4 MW+15% COL) Sobla Stage-I SHP for contract agreement no. 04/DGM (ADB-Projects)/2011-12 dated 07.04.2011.

It was further observed that even though UJVNL's Board has taken a decision in respect of abandoning of Sobla-I SHP and exclusion from ADB loan-2309-IND, the original Project administration memorandum (PAM) has no mention that the Sobla-1 project is being funded by ADB. Besides, even after the decision of BoD to abandon in February 2014, UJVNL retained the loan amount and had to pay an amount of ` 31.73 lakh in form of interest on loan taken from NABARD during 2015-16 and interest accrued but not paid ` 12.43 lakh on loan taken from ADB. If the UJVNL had returned the loan amount immediately after decision of BoD then the interest paid by it could have been avoided. Thus, due to negligence on the part of UJVNL it had to bear unfruitful expenditure in the shape of interest of ` 44.16 lakh.

Management accepted the audit observation and stated that ` 44.16 lac is the interest amount which accumulated on the loan amount from the date of abandoning of project by BoD, UJVNL. Further, a committee has submitted their report on 13.01.2017 regarding feasibility of the project site and also a new committee has been formed for the revival of SOBLA SHP. The reply of the management is not convincing as despite abandoning of project in February 2014, management has not repaid the principal loan amount which has resulted in infructuous expenditure of ` 44.16 lacs (31.73 + 12.43) in form of interest on loan. Also, even if the site is considered feasible for rework, company will have to prepare a new DPR as continuing with the existing loan and existing contractors will only result in cost overrun and additional expenditure on interest. It is also to be mentioned that even after lapses of there three years, no concrete action for reviewed of the project has been taken by the management. Thus, loan should have been returned to reduce interest amount.

PART-II B

Para 1: Extra expenditure of ₹ 38.00 lakh due to split of work.

The spillway of Maneri Dam (Maneri Bhali-1) was damaged adversely due to flash flood on 16/06/2013 & 17/06/2013 in Bhagirathi River. After considerable reduction in river discharge in September 2013, the losses in the spillway were examined and a proposal for renovation of spillway gate no. 1, 2, & 3 of Maneri Dam amounting to ₹ 759.01 lakh was prepared. As the work was quite important therefore after getting due approval, the short term tender notice was invited for the above mentioned work. Only two bidders participated against above work namely M/s Hightec Equipment and Service, New Delhi & Alpha Pacific System, New Delhi. M/s Hightec Equipment did not qualify in technical evaluation. M/s Alpha Pacific System was only qualified bidder, at the total cost of ₹ 7.48 crore.

Meanwhile, the routine as well as major overhauling of turbine, E & M unit of Tiloth Power House was expected to have a closure with effect from 31.05.2014 to 09.06.2014. Considering it, it was proposed that required maintenance of damaged part of spill way including replacement/repair of sill beam should also be taken care within the said closure. Keeping the exigency of repair work, time period available before monsoon and utilize the closure period, it was decided to execute only the bare minimum repair work. The work was awarded to Nalkoop wing U.P. Jal Nigam, Noida amounting to ₹ 1.33 crore dated 31.05.2014 on urgent basis without taking approval from Central Purchase Committee (CPC). Remaining work was decided to be taken up separately through open tender. Further, the matter was brought to the notice of Central Purchase Committee (CPC) and it recommended (30.08.2014) to award the work of renovation of spillway of Gate no. 1, 2 & 3 of Maneri Dam of Maneri Bhali-1 to M/s Alpha Pacific System at a cost of ₹ 7.48 crore. Thereafter, the contract for remaining work was awarded to M/s Alpha Pacific System on 10.10.2014 at a cost of ₹ 6.53 crore.

Audit noticed the following:

- The work awarded to M/s Nalkoop wing U.P. Jal Nigam, Noida at a cost ₹ 1.33 crore dated 31.05.2014 on urgent basis to complete within 10 days during closure period was actually completed in January 2015. The actual period of closure was in August 2014.

Therefore, the purpose of completing the work on urgent basis was defeated. Keeping the exigency of repair work, the Nigam itself analyzed the fact that bare minimum work of repair must have been done before monsoon but even, the site was not handed over to U.P. Jal Nigam till September 2014 which shows the complete ignorance from the Nigam's end.

- The contract for remaining work was awarded to M/s Alpha Pacific System on 10.10.2014 at a cost of ₹ 6.53 crore. Once, UJVNL decided to execute the remaining portion of the work through open tender, awarding of remaining work through short-term tender was not in order. Had the work been awarded through open tender, more competitive rates could have been achieved. Moreover, the work was split between M/s Alpha Pacific System at a cost of ₹ 6.53 crore and M/s U.P. Jal Nigam at a cost of ₹ 1.33 crore which resulted in extra expenditure of ₹ 0.38 crore (₹ 6.53 cr+₹ 1.33cr- ₹ 7.86 cr).

The management stated in its reply that on the urgent basis bare minimum repair work, was allotted to UP Jal Nigam and the equal quantities (which were ordered to UP Jal Nigam) of the items were deducted from the scope of original BOQ while awarding contract to M/s Alpha Pacific Systems. In June 2014, the average water discharge shooted up on higher side and came in the range of 180-250 cumecs in June 2014. The officers of UP Jal Nigam visited the site on 13/06/2014 and asked to postpone the work due to increase in river discharge. Finally, the closure was accorded in August 2014. But the average daily discharge was in the Range of 200-400 cumecs with the maximum range of 884 cumecs in September 2014. In view of the then prevailing circumstances, the work was not executed and site was not handed over to UP Jal Nigam. It was finally decided to take a closure from 02.12.2014 to 07.01.2015 so that both the agencies i.e. M/s U P Jal Nigam and M/s Alpha Pacific Systems can work together. Further M/s UP Jal Nigam was allowed to execute the bare minimum work amounting to ` 0.44 crore only. Hence the final cost of work executed by M/s UP Jal Nigam is ` 0.44 crore only, thus there is no extra expenditure (` 6.53 cr + `0.44 cr = ` 6.97 cr) due to split of work. Further payment made to M/s Alpha Pacific System ` 7.63 crore against agreement value of ` 6.53 crore were due to extra quantities to repair the some damages.

In view of reply of management the following clarifications may be provided to audit:

- Whether the work awarded to M/s UP Jal Nigam amounting to ` 1.33 crore was completed with in final cost of ` 0.44 crore without change in any scope of work or any other work/ payment is yet to be executed/ paid as per terms of agreement?
- Whether the second segment of work has been completed by M/s Alpha Pacific Systems? If yes, amount of total payment under this agreement.
- Value of extra work executed by M/s Alpha Pacific Systems may be provided. Whether this work (Partially or fully) includes the work which was initially included in the scope of work of UP Jal Nigam amounting to ` 1.33 crore.

Para 2: Loss amounting to ` 29.66 crore due to non recovery of cost of projects transferred to UREDA.

During the course of audit, it was noticed that as per the direction (October 2012) of the State Government and BoD dated March 2013, 32 small/micro hydro generation plants were to be transferred and handed over to UREDA during 2013-14 and 2014-15. Out of which 18 small/micro hydro generation plants along with three associated lines amounting to Rs 29.66 crore were transferred to UREDA during 2014-15 by UJVNL. BoD of UJVNL also advised (March 2013) that the value of assets and liabilities, loan and their repayment should be frozen and audited accounts to be submitted to UREDA and State Government for further action.

Audit also observed that UJVNL intimated (April 2014) UREDA that the book value of assets and liabilities in respect of transferred projects will be audited and finalized and intimated to UREDA as all the liabilities will be borne by UREDA. In response, a meeting (June 2015) of the committee of UREDA was convened and it was decided that a joint committee of charterd accountants of UJVNL and UREDA were to be formed for finalization of assets and liabilities as well as claims of the insurance and the report of the same had to be submitted to UREDA through State Government within one month. This amount (` 29.66 crore) has neither been paid nor accepted by UREDA even after lapse of two years and UJVNL has not taken any concrete action under intimation of State Government for finalization.

Thus, due to lack of pursuance on the part of UJVNL, UJVNL failed to recover the value of the transferred projects.

Management stated in its reply that the projects were transferred to UREDA as per the directives of GoU and as both are State Govt. undertakings, the matter is not required to be pursued further. The reply of management is not acceptable as UJVNL in its balance sheet of 2015-16 is showing an amount of ` 29.66 crore recoverable from UREDA and has still not provided for the same in the books of A/Cs.

Part III

(In this part, detail of unsettled paras of previous inspection reports to be reported in below given format.)

Details of unsettled paras of previous inspection reports:-

Sl. No.	**Period**	**Part II A**	**Part II B**
1.	01/2002 to 12/2004	1,2,3,4	1
2.	01/2005 to 09/2005	1,2,3,4,5,6,7,8	1
3.	10/2005 to 03/2008	1 to 12	2,3&6
4.	04/2008 to 03/2014	1 to 10	1 to 4
5.	04/2014 to 03/2015	1 to 12	01

Compliance report of unsettled paras of previous inspection report-

Inspection report period and number	Para No. Audit observation	Compliance report	Comments of Audit Party	Remarks
-	-	-	-	-

Part IV

Best practices of the unit

NIL

Part V

Acknowledgement

1. Office of The Accountant General (Audit) Uttarakhand, Dehradun expresses gratitude towards O/o the Managing Director, Uttarakhand Jal Vidyut Nigam Limited, Dehradun and their officers and employees for promptly providing desired documents and information including infrastructure related co-operation during the course of audit.

   Though following documents were not produced during audit:

   Records related to Solar PV Project in Khodri and Dakhrani was not produced during currency of audit.

2. **Persistent irregularities**.

NIL

3**. The following officers held the charge of head of the office during the audit period**:

Sr. no.	Name	Post
(i)	Shri S. N. Verma,	Managing Director
(ii)	Shri R. N. Verma,	Director (Finance)

Minor and operational irregularities which could not be resolved at the time of audit and have been included in Temporary Audit Note with the request that the compliance report on the same may be sent to Sr. DAG/DAG (concerned sector) within one month of receipt of the letter.

Sr. Audit Officer/ES-I