



## KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956)

Registered Office: Vidyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004

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### ABSTRACT

Issues with agencies executing civil works in various projects - Execution of Balance Civil and Hydro Mechanical works of Thottiyar Hydro Electric Project (40 MW/ 99 Mu) in contract with M/s PRIL - SSIPL Consortium and Balance Civil Works of Tunnel, Surge Shaft, Pressure Shaft, Penstock, Power House and Allied Works of Pallivasal Extension Scheme (2X30 MW) in contract with M/s. Anchor Structurals - DSE - SSIPL Consortium - Amendment of price variation clause of agreement - Orders issued.

### **Corporate Office (SBU-G/C)**

B.O.(DB) No.41/2024 (DGC/AEEIII/Thottiyar/2014)

Dated:29-01-2024

Thiruvananthapuram.

- Read :
1. Agreement No. 01/CECC/2018-19 dated 05.04.2018.
  2. Agreement No. 10/CCM/2019-20 dated 19.08.2019.
  3. Minutes of Meeting convened by the Chairman & Managing Director on 18.08.2023.
  4. Note No. CECCS/THEP/2016/2756 dated 04.10.2023 of the Chief Engineer (Civil - Construction) South.
  5. Note No. DGC/AEEIII/Thottiyar/2014 (24) dated 16.10.2023 of the Chairman & Managing Director.
  6. Remarks No. FA-AT-ST 1/2023/77 dated 24.10.2023 of the Financial Adviser.
  7. Letter No. DB-30/CCM/PES-Balance civil works/2022-23/746 dated 30.10.2023 of the Deputy Chief Engineer & Project Manager, PES with full powers of Chief Engineer addressed to the Financial Adviser.
  8. Note No. DGC/AEEIII/Thottiyar/2014 dated 22.11.2023 of the Chairman & Managing Director to the Board of Directors (OA 01-11/2023).
  9. Proceedings of the second adjourned 74<sup>th</sup> meeting of the Board of Directors held on 18.12.2023 (Agenda OA 01-11/2023).

### ORDER

**The history of Thottiyar project** is as follows -

- Board accorded administrative sanction amounting to Rs 131.15 crores for 70 MW Thottiyar HEP on 11<sup>th</sup> July 2000.
- Government accorded Administrative Sanction for 70MW Thottiyar HEP on 18.01.2001.
- 1<sup>st</sup> stage clearance for 3.8134 Ha. of forest land obtained on 23.09.2005.
- 2<sup>nd</sup> stage clearance for 3.8134 Ha. of forest land obtained on 11.07.2007.
- Board invited tender for the first stage of the project (Civil, Hydro Mechanical and Electro Mechanical) at SOR 2007 rates on 31.08.2007.
- Board has accorded revised administrative sanction for 40 MW Thottiyar HEP STAGE 1 (Rs 136.79 crores) on 05.06.2008.
- Sanction accorded to issue work order to M/s CPPL-Chongqing JV (Rs 144 crores) on 13.06.2008.
- Work order issued to M/s CPPL-Chongqing Joint Venture. PAC of work - Rs 144 crores on 20.10.2008.
- Official date of commencement of work - 19.11.2008.



- Agreement executed on 22.12.2008 between KSEBL and M/s CPPL-Chongqing Joint Venture, with gestation period of 42 months and date of completion as 19.05.2012.
- Work started on 16.01.2009.
- 1<sup>st</sup> stage clearance for 0.9996 Ha. of forest land obtained on 14.07.2009.
- In 2009, 3.48539 Ha. of patta land and 1.055645 Ha. of non patta land acquired.
- In 2010, 0.72279 Ha. of patta land, 3.005809 Ha. of non patta land acquired.
- In 2011, 0.2954 Ha. of patta land and 0.30794 Ha. of non patta land acquired.
- Tunnel driving started on 24.04.2012.
- 2<sup>nd</sup> stage clearance for 0.9996 Ha. of forest land obtained on 09.07.2012.
- On 12.12.2012, Works in entire project stopped by contractor.
- In 2012, 0.039284 Ha. of non patta land acquired.
- On 12.02.2013, Works in entire project resumed.
- In 2013, 0.0883 Ha. of patta land, 1.259122 Ha. of non patta land acquired.
- Official date of completion of the project extended to 11.11.2015 on 12.02.2014.
- Tunnel driving completed on 30.08.2014.
- During the period of July 2015 to November 2015, contractor stopped the work of various components.
- On 20.01.2016, Board constituted a committee with members of the existing members of the Project Monitoring Committee for foreclosure of the project.
- Government accorded sanction on 4<sup>th</sup> March 2016 for foreclosing the contract without risk and cost, due to delay in land acquisition factors not attributable to contractor and for arranging the balance work by open tender or through government approved executing agencies.
- Board accorded revised administrative sanction on 19<sup>th</sup> November 2016 for 40 MW Thottiyar HEP Stage 1 for Rs 280 crores
- Foreclosure agreement executed on 28.04.2017.
- Tender invited on 20.05.2017 for stage 2 Civil and hydro mechanical works.
- Agreement executed on 5<sup>th</sup> April 2018 for the balance Civil and Hydro Mechanical works - awarded to M/s P&R Infra Projects Ltd.- SSIPL Consortium @ 7.62% below estimate rate.
- Official date of completion - 03.04.2020 (Gestation period - 26 months).
- The actual date of commencement - 09.04.2018.
- Board extended time of completion (Civil & H&M works) - (1<sup>st</sup> Time Extension) on 28.07.2020 up to 31.03.2021 due to flood in 2018 & 2019, covid 19 lock down etc.
- Board extended time of completion (Civil & H&M works) - (2<sup>nd</sup> Time Extension) on 10.08.2021 up to 31.12.2021 due to covid 19 lock down, containment zone etc.
- Board extended time of completion (Civil & H&M works) - (3<sup>rd</sup> Time Extension) on 22.02.2022 up to 31.05.2022 due to covid 19 second wave, lock down, torrential rain etc.
- Board extended time of completion (Civil & H&M works) - (4<sup>th</sup> Time Extension) on 11.08.2022 up to 31.12.2022 due to inundation of site due to unprecedented rain.
- Board extended time of completion (Civil & H&M works) - (5<sup>th</sup> Time Extension) on 31.03.2023 up to 30.06.2023 due to restrictions imposed in quarrying due to monsoon rainfall etc.
- Board extended time of completion (Civil & H&M works) - (6<sup>th</sup> Time Extension) on 16.10.2023 up to 15.11.2023 due to the rescheduled timeline planned for E&M works.

The above history is clear for the officers to take the follow up actions properly in order to facilitate the project completion and commissioning.

The contract for the execution of the balance Civil and Hydro Mechanical works of Thottiyar Hydro Electric Project was awarded to M/s. PRIL-SSIPL Consortium for Rs 97,76,73,638/- as per the agreement read as 1<sup>st</sup> above. As per the agreement, the scheduled date of completion of the work was on 03.04.2020. The indices are frozen on 04/2020 as per agreement. Vide order B.O. (FTD) No. 448/2023 (DGC/AEEIII/THYR/2014) dated 16.10.2023, Board has accorded sanction to extend the time of completion of the contract upto 15.11.2023 and the decision on imposing penalty, if any, be



taken up after completion of the works in all respects by the contractor, considering the decisions taken in the previous Board Orders in connection with the extension of contract period and price escalation.

### **The history of Pallivasal project**

- AS issued – Rs 175.86 crores dated 21.11.2001.
- Contract awarded – M/s ESSAR- DEC-CPPL Consortium for Rs 268.01 crores.
- 02.03.2007 - project started - expected date of commissioning - 01.03.2011.
- Till due date 57.7% works were over. Time Extended till 15.6.2012.
- 08.09.2012 – Tunnel collapsed.
- 26.03.2014 - Board appointed NHPC to give technical audit report.
- 05.04.2014 - Work started.
- Notice issued to Contractor 15.07.2015 and decided to foreclose on 22.07.2015.
- 16.01.2017 - Annulled the foreclosure order.
- 27.03.2017 - Board decided to extend time till 31.12.2020.
- 10.04.2018 - Contractor abandoned the project (74.6% completion)
- As per the Government Order dated 10.07.2018, the contract terminated on 13.09.2018.
- M/s ESSAR filed a case in Hon'ble High Court of Kerala.
- As per order of Hon'ble High Court of Kerala, invoked bank guarantee Rs 13.4 crores.
- Case is pending in Hon'ble High Court of Kerala.
- The balance works are contracted out to 3 different contracts.
- Tail race weir and outlet pipe – M/s Sharvana Industries Pvt Ltd for 8.45 crores on 12.06.2019.
- Intake works – M/s Bumi Zillion for Rs 130 crores on 15.03.2018.
- Tunnel to Power house works – M/s Anchor Structural for Rs 57.04 crores on 17.07.2019.
- The works stopped due to COVID.
- All the contractors were given extension due to COVID.
- In 2022 - works started and part by part completed.
- 25.12.2022 – Inclined Pressure shaft completed.
- 31.12.2022 – Surge and Penstock completed.
- 3<sup>rd</sup> extension to M/s Bumi and M/s Anchor Structural given till 31.07.2023.
- 11.04.2023 - ADIT 2 gate erection completed
- 30.04.2023 - Tunnel lining completed.
- 08.05.2023 - Intake gate erection and testing completed.
- 25.05.2023 - ADIT 1 plugging completed.
- Civil contractor was given extension upto March 2024 for the works to be completed after Electrical works. 99% works completed.

The contract for the 'Balance Civil works of tunnel, surge shaft, pressure shaft, penstock, power house and allied works' of Pallivasal Extension Scheme was awarded to M/s. Anchor Structural - DSE - SSIPL Consortium for an amount of Rs 48,34,11,157/- with an overall percentage of 18.36% below PAC, as per the agreement read as 2<sup>nd</sup> above. As per the agreement, the time of completion of the work was on 11.10.2021. The indices are frozen on 10/2021 as per agreement. The time of completion of the work has been extended up to 05.03.2024.

The Chairman & Managing Director had visited the project sites of Thottiyar HEP and Pallivasal Extension Scheme on 18.08.2023 and 19.08.2023 respectively, to review the progress of works. In the meeting, the civil contractors had raised their issues including revision of rates of certain items of contract and amendment of price variation clause of agreement. Till these times none of the Directors



have brought these issues into notice to take appropriate decisions. On the contrary then Director gave wrong information regarding commissioning of the projects in April 2023.

The Civil contractor of Thottiyar HEP, M/s. P&R Infra Projects was requesting for following amendment of Escalation/ Price Variation clause (5.2.16) of Agreement:

1. The limit of +/- 10% in the change of indices for the clause to become operational to be amended with removal of limits.
2. During the extended period of contract, the condition of applicability of indices of the last month of completion period to be amended as indices of current month during the extended period need to be made applicable for claim of price variation.

The Civil contractor of the Pallivasal Extension Scheme, M/s. Anchor Structural was also requesting for granting escalation for the extended period of contract without freezing the price indices to the last month of original period of completion as the projects delays were not attributed to the contractors.

The Chairman & Managing Director has directed to put up the issues on file as per the minutes read as 3<sup>rd</sup> above. The Chief Engineer (Civil - Construction) South as per note read as 4<sup>th</sup> above has reported the details of issues raised by the contractor. The details were submitted to the Chairman & Managing Director as per note read as 5<sup>th</sup> above. On perusal of the note, the Chairman & Managing Director has directed the Financial Adviser to put up detailed remarks and later the proposal for Thottiyar and Pallivasal Extension Scheme to be put up to the Board for appropriate decisions.

The clause 5.2.16 (Escalation / Revision of rates) of the agreement specifies that "The price adjustment shall be made for variation in cost of Labour, Cement, Steel and POL (Petrol, Oil, Lubricant). The price adjustment shall be based on relevant price indices published by the Government of India. The base indices for price adjustment shall be the monthly index applicable for the previous month of submission of tender. Current indices or prices shall be those applicable for the month during which the work under the particular Contract Bill has been executed. The price variation will be allowed only if the variation in index is more than +/-10%.

The clause also specifies that " Price adjustments shall be made monthly. Price variation will not be given for extended period of contract, if the extension is due to the fault of the Contractor. However, price variation will be given for the extended period if the same is due to reasons beyond the control of the Contractor subject to the following condition.

- a. In case the indices increase above the indices applicable to the last month of original completion period the price adjustment for the period of extension will be limited to the amount payable as per indices applicable to the last month of the original completion period.
- b. In case the indices fall below the indices applicable to the last month of the original period of completion then the lower indices will be adopted for price adjustment.. The total price adjustment shall not exceed 15% of the agreed PAC of the work.

As per agreement, the indices taken for calculation of price variation for the extended period of contract is 04/2020 for Thottiyar HEP and 10/2021 for Pallivasal Extension Scheme respectively (i.e., last month of original period of contract).

If the above clause is amended, the additional financial commitment worked out with index of 7/2023 for the civil contract of Thottiyar HEP comes to Rs 6,79,67,183/- approximately and that of



the Pallivasal Extension Scheme till January 2024 comes to Rs 65,47,554/- approximately. The actual price indices may vary, which are published at a later date.

The Financial Adviser as per the note read as 6<sup>th</sup> above has furnished the following remarks:

“The request for removal of limit of +/- 10% in the change of indices for price variation calculation may not be acceptable. Every bidder who submits their bid for the project is very clear about the duration of the contract and site condition and no one expect that bidders having experience in the field will quote their price without considering the inflation factor. Price escalation is given to mitigate an unexpected increase in the prices and every one expects a normal increase of +/- 10% over the project period which is reflected by the indices of +/- 10% specified in the price variation clause. Hence it is opined that no amendment is required in this regard.

If the contract period is extended mutually, there is no doubt that the contractor shall be compensated for the extra cost they have incurred for the extended period, however, how far it can be compensated is the pertinent question. If the contract is extended beyond a reasonable period, the very purpose of execution of the project, its financial viability etc. is questionable and as an employer it will do more harm than good. Several projects like PES, Bhoothankettu, Thottiyar etc. in which Board has invested so much money has not been materialized yet and further delay will add more harm to the financial viability of the project. The purpose of time extension is to compensate some unforeseen or unexpected events happened during the contract period and both parties are mutually admitting such delays. It is not a good practice to prolong the execution of the project indefinitely. As an employer, we must act strictly if the contractor falls behind the project schedule by taking timely decision either to terminate the contractor or to charge penalty as per agreement terms. In most of the ongoing works, it is seen that these actions are not taken from our part which seems to be not proper from the project execution point of view. If we act strictly as per agreement terms as an employer, there is no harm in giving reasonable price escalation for the unexpected hike in rates during extended period. We may also think of capping the additional cost to certain percentage of contract amount so that contractor may be aware and alerted to complete the work at the earliest possible time. Adopting good practices followed in other power utilities who undertakes hydroelectric projects and consequent changes in our tender conditions may be considered subject to above observations”.

Regarding the remarks of the Financial Adviser, the following points were furnished:

(i) As per agreement, the price variation/revision of rates are applicable for the extended period of contract subject to the condition that the price adjustment will be limited to the amount payable as per indices applicable to the last month of the original completion period. In the case of Thottiyar, it is April 2020. The contractor is availing the price variation as per this clause.

The contractor has requested for amendment of clause 5.2.16 (a) ‘last month of the original completion period with current month of bill claim.’ The Financial Adviser has not furnished specific remarks in this regard.

(ii) Regarding charging of penalty, the Board had accorded sanction for extensions of contract period subject to the condition that the decision on imposing penalty, if any, may be taken up after completion of works in all respects by the contractor, in due consideration of the interest of the organization to complete the work.

(iii) Regarding capping the additional cost regarding price escalation, provision has been given in the agreement as “The total price adjustment shall not exceed 15% of the agreed PAC of the work.”



(iv) Regarding changes in our tender conditions, the Board vide order B.O. (DB) No. 192/2023 (DGC/AEEI/TENDER/GCC/2023) dated 11.04.2023 had resolved to adopt the 'General Conditions of Contract' issued by CPWD as standard GCC of KSEBL for all future tenders invited by KSEBL with prospective effect. Also, vide B.O. (DB) No.375/2023 (DGC/AEEI/CMD Note/2023) dated 04.08.2023, Board has accorded sanction to execute the forthcoming projects/ HE projects having Administrative Sanction amount above Rs 100 crores on EPC mode and to engage the PMC. Hence for future tenders of Hydro Electric Projects of KSEBL, the tender conditions will be modified as per the above Board Orders.

Regarding the requests of the contractor for amending the clauses of agreement, the following points were furnished.

(i) Board as per order B.O.(FB) No. 2982/2010 (GPC6/GGCP/19/2009) dated 19.11.2010, has accorded sanction to include the price variation clause in the 'Conditions of Bids of Contract' for the implementation of future Hydro Electric Schemes having time of completion more than 24 months. As such the tenders were invited for the above works.

(ii) The same price escalation formula has been adopted in KSEBL for all the existing contracts of Hydro Electric Projects, the completed Hydro Electric Projects and tendered Hydro Electric Projects, having time of completion more than 2 years.

(iii) There will be a very huge additional financial commitment to KSEBL in this regard.

(iv) There may be chances of delaying the contract indefinitely, as the contractor will be getting the full benefit of price variations reflected during the extended period of contract. To safe guard the interest of the organization, more stringent clauses have to be introduced while granting time extension of the existing contracts.

The matter was taken up with the Board of Directors for appropriate decision as per note read as 8<sup>th</sup> above.

The matter was discussed in detail in the second adjourned 74<sup>th</sup> meeting of the Board of Directors held on 18.12.2023 (Agenda OA 01-11/2023) read as 9<sup>th</sup> above.

In the meeting of the Board of Directors, the Chairman stated that a detailed agenda note for issues in implementation of Generation projects would be placed in the Board meeting proposed during January 2024. However, the issues with agencies executing civil works in Thottiyar HEP and Pallivasal Extension is being placed separately before the Board because these projects are under execution by the company for more than two decades.

The Chairman explained that contractors are seeking amendment in the agreement clause forexecuting Thottiyar and Pallivasal Extension projects relating to escalation and Price Variation under 5.2.16 of the agreement. In Thottiyar project, the contractor is requesting for the removal of limit in the condition that the price variation will be allowed only if the variation in the index is more than +/-10%. Also, they are seeking amendment in the condition that for the calculation of price variation during the extended period of contract, the indices of last month of the original completion period would be taken may be modified with the indices of current month during the extended period.

The Chairman remarked that if the reason for delay in execution of the project is attributable to the contractor, then these conditions application would be appropriate. In a situation, if the reasons for delay is not on the part of the contractor, but beyond the means of the contractor or due to force majeure conditions, then this price variation clause would become unreasonable.



The Board in its 70<sup>th</sup> meeting held on 25.03.2023 vide Agenda no. 9-03/2023 had already approved CPWD conditions for all future tenders for civil works executed by KSEBL, with prospective effect. It is clearly indicated in the CPWD manual that if contract extension is justified then the contractor would get the revision of rates. The freezing of indices is not seen in the tender conditions of PSUs like NTPC, NHPC, SJVN etc.

Until the issues in the agreement conditions are resolved, completion of projects is likely to remain delayed. The Chairman stated that he is of the view that wherever there is no default of the contractor, the request for amending the agreement conditions should be appropriately decided. The micro schedule agreed by contractor and KSEBL for completion of project should be strictly followed. Substantiating documents to establish procurement dates for cost escalation of materials like steel, cement etc. would be insisted so as to ensure that no perverse incentive accrues to the contractor for keeping the project delayed. He further added that as these real issues were never brought into the notices of decision making authorities the projects are pending for decades. Now after extensive field visits and discussions with PMU and the contracting agencies these issues have come up for appropriate decisions.

The Director (Generation-Electrical, REES, SOURA, Sports & Welfare) in charge reported that the work of 5-6 generation projects is getting delayed due to various bottlenecks faced in execution. The reasons for the delay are varied ranging from compensation issues for Generation loss, delay in carrying out performance test due to availability of water only during a particular period of year, issues in price variation when the contract gets extended indefinitely, changes in the technical specifications post award of work etc.

The Director (Finance) in charge pointed out that in the Thottiyar Project initial delays in execution by the contractor were observed within the current contract period. Although time extension was granted it is essential to clarify that not all delays are attributable to KSEBL. The extension primarily facilitates the processing of the bills for completed works. It is noteworthy that the tender condition specifies a +/- 10% limit in the index changes, a factor the contractor was aware of while quoting. Any unforeseen deviations are being compensated by KSEBL. He opined that the first request for removal of limit of +/-10% in the change of indices for price variation calculation is not acceptable as the quote must have been submitted after considering this factor. The Finance Division has no objection for removing this clause in future contracts by changing the bid condition. In respect of the second request seeking modification for freezing the indices based on the last month of the original completion period to the indices of current month during the extended period, the finance wing has no objection. The Chairman & Managing Director asked specifically that how come any contracting agency would anticipate delays beyond the construction period that too for decades and would quote the rates to work with a clause +/-10% limit. There was no clarification/justification given for this by the Financial Adviser. Regarding the delays and reasons would be examined by the technical team in the division and opinion expressed would not be sufficient to determine the same.

Independent Director observed that necessary solution has to be arrived at the Board level for removing the bottle necks in project management to facilitate the project completion and commissioning.

The Additional Chief Secretary (Power) suggested that the existing procurement system in the company should be modified and the timely execution is highly crucial for infrastructure projects. The pre-qualification conditions should be made stringent so that the quality is not compromised for getting lower quotes. There should also be provision to compensate the contractor if the delay in



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execution of the project is on the part of KSEBL. Generally, variation in administrative sanction (AS) up to 10% are allowed and for the variation above 10% need to be brought before the competent authority for revision of AS. He suggested that for future projects, NBC (National Building Code) and ICB (Industry Classification Benchmark) norms should be adopted in the company so as to ensure timely completion of projects. In the existing projects, wherever there is cost escalation due to quantity or price variation, if delay is on the part of KSEBL, responsibility has to be taken and revised AS shall be given for allowing rate revision. If the delay is on part of contractor, then they have to be penalized. The OSD (Finance) agreed to the suggestions.

The history of both the projects are studied and the choice before the present Board is to find out the solution to the problems arose due the processes done in the past. After vetting all the sides in interest of the project commissioning and having considered the matter in detail, the Board decided that the total time series analysis shall be done by the technical wing on the causes of delay clearly identifying the period of delay attributable to the contractor or KSEBL or other line departments or force majeure. Based on the delay attributed, appropriate provisions of contract to be applied. If the delays period is due to the contractor, during that period the contract agreement conditions to be applied. If delays are not due to the contractor, such period appropriate costs/rates to be worked out to get revised Administrative sanction by amending to delete

- (i) +/-10% limit condition.
- (ii) Freezing of index month.

The responsibility should be fixed on the officials responsible for delay in execution of project, if the delay is found attributable to KSEBL.

Orders are issued accordingly.

**By Order of the Director Board**

Sd/-  
Lekha G  
Company Secretary

To:

1. The Chief Engineer (Civil - Construction) South, Thiruvananthapuram.
2. The Deputy Chief Engineer & Project Manager, PES with full powers of Chief Engineer, Meencut.

Copy to:

The Company Secretary/ Chief Engineer (IT,CR&CAPS)/ Financial Advisor/ LA&DEO/ Chief Internal Auditor/ Chief Vigilance Officer.

The TA to the Chairman & Managing Director / Director (Generation-Civil) / Director (Distribution, Safety, SCM & IT) / Director (Transmission, SO & Planning)/ Director (Generation - Electrical, REES, SOURA, Sports & Welfare)

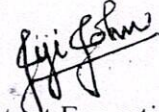
The PA to the Director (Finance & HRM)

The Sr.CA to the Secretary (Administration)

The RCAO/ RAO

Stock File.

**Forwarded / By Order**

  
Assistant Executive Engineer