

CHAPTER - II

Department of Atomic Energy

2.1 Avoidable expenditure on compensation due to breach of agreement

Nuclear Fuel Complex (NFC) entered into an agreement for procurement of a minimum quantity of magnesium granules from a private firm for a period of seven years. No clause to cover deviations in the procurement quantity was included in the agreement. In the meantime the requirement shifted to magnesium chips from magnesium granules. NFC could not revise the agreement and also failed to document the proceedings of an important meeting with the firm on the issue, resulting in avoidable payment of ₹1.43 crore towards compensation due to breach of agreement.

Nuclear Fuel Complex (NFC), Hyderabad established in 1971, is a major industrial unit of the Department of Atomic Energy (DAE) and is responsible for the supply of nuclear fuel bundles and reactor core components for all the nuclear power reactors operating in India.

During the course of its research activities NFC, between 1977 and 1982 designed, developed and qualified prototype/process for production of magnesium granules. The magnesium granules were being supplied to meet the captive requirement¹⁵ of Uranium Metal Plant (UMP) of Bhabha Atomic Research Centre (BARC)¹⁶. In view of the increased requirement¹⁷ of magnesium granules projected by UMP, NFC decided (July 1991) to transfer the technology to private parties for commercial production of magnesium granules on non-exclusive basis for a period of seven years. NFC further decided to give an undertaking to the firms for purchasing a minimum of 10 MT per annum during the seven year period of the agreement.

Accordingly NFC entered into an agreement (March 1992) with Yashoda Metals, Hyderabad (firm) for transfer of the technology and grant of license for seven years for manufacture of the magnesium granules against payment of a lump sum amount of ₹3.50 lakh as a non-refundable technology transfer fee. The agreement stipulated supply of a minimum of 10 MT of magnesium

¹⁵ 12 to 15 MT per annum

¹⁶ a constituent unit of DAE

¹⁷ 20 to 25 MT per annum

granules per year for seven years from March 1992 to March 1999 to NFC/DAE for which NFC would place purchase orders accordingly. The agreement also allowed NFC to inspect and test the product manufactured by the firm and in case it failed to meet the specifications as per the agreement, the former had the right to revoke the licence. Audit observed that NFC did not include a safety clause in the agreement to protect itself from possible deviations in the procurement of magnesium granules from the firm. Audit also found that no inspection was carried out by NFC though the firm did not install manufacturing facility as per the terms of agreement.

During 1993, BARC changed their preference from magnesium granules to magnesium chips and floated an open tender (October 1993) through its Directorate of Purchase and Stores (DPS)¹⁸ for the procurement of magnesium chips. Thereafter, the firm filed a petition against this in the Hon'ble High Court of Andhra Pradesh, as a result of which the tender notice was withdrawn and the petition was dismissed.

In March 1994 the firm requested NFC to revise the agreement for supply of magnesium granules into magnesium chips and referred to an earlier meeting held in April 1993, in which it was requested to stop the implementation of the project. The firm also claimed that it was asked during the meeting whether it could supply magnesium chips, as there was no demand for magnesium granules. NFC neither documented the minutes of the said meeting nor revised the agreement. Audit observed that although NFC was aware of the change in preference of UMP, BARC to magnesium chips, it did not take adequate measures to re-negotiate the contract and safeguard its interests.

Against the 70 MT of magnesium granules stipulated in the agreement, NFC procured only 15 MT from the firm. Due to lack of response, the firm issued a legal notice to NFC (July 2000) for loss on account of breach of contract committed by NFC. The matter was ultimately referred to the Sole Arbitrator (July 2002), who decided in favour of the firm (December 2003). NFC challenged the award before Hon'ble City Civil Court, Hyderabad but lost the case and eventually paid ₹1.43 crore to the firm (October 2010) towards full and final settlement of the above case.

Failure to protect its interest by not satisfactorily pursuing the issue with the firm nor documenting discussions of important meetings resulted in avoidable expenditure of ₹1.43 crore as compensation for breach of agreement.

¹⁸ Directorate of Purchase and Stores is a centralized agency under DAE responsible for the materials management function of the various centres and industrial units working under DAE.

In reply NFC denied (March 2012) that the Department had advised the firm to unilaterally suspend production of magnesium granules and manufacture magnesium chips. NFC further stated that the requirement of magnesium granules still existed. In the same reply, they stated that the firm never furnished any status report on production as the required unit was not installed by them.

The reply of NFC needs to be viewed in the context of its failure to document important proceedings in the execution of the agreement. They failed to carry out any inspection of the unit though as per the agreement they had right to do so. Further NFC committed to buy 10 MT per year of the magnesium granules from the firm for a period of seven years without including safety provision for possible deviations in the procurement. Also in spite of being aware that UMP, BARC had changed their preference to magnesium chips instead of granules, NFC took no action to revise the agreement or to document the meetings held with the firm on the issue. It was further seen that the average requirement of magnesium granules at UMP, BARC from 1992 up to November 2012 was 7.5 MT per annum only.

Thus failure to carry out inspection of the unit as also to record adequate precaution by NFC in the execution of the agreement resulted in avoidable expenditure towards payment of compensation of ₹1.43 crore.

The matter was referred to the Department in March 2013, its reply was not received as of July 2013.

2.2 Hasty procurement of equipment without creating infrastructure facilities for installation

Saha Institute of Nuclear Physics, Kolkata (SINP) could not install equipment of ₹38.90 crore for want of required infrastructure.

The Saha Institute of Nuclear Physics (SINP), Kolkata is an institute of basic scientific research working under Department of Atomic Energy (DAE). SINP formulated a proposal to set up a national Facility for Research in Experimental Nuclear Astrophysics (FRENA) in February 2007. The project comprised of procurement of a three MV (high current) tandem and a 500KV accelerator system along with other accessories at an estimated cost of ₹35 crore. To install these pieces of equipment, major works including construction of accelerator hall and laboratory buildings, electrical and air conditioning, liquid nitrogen plant, computers and networking, etc., were to be completed at an estimated cost of ₹24.46 crore at the institute's new campus at Rajarhat, Kolkata. The proposed facility was to provide

opportunities of research in the field of low energy nuclear astrophysics for first time in India.

In June 2007, SINP sought the approval for procurement of the equipment for the FRENA project from DAE for which DAE sanctioned ₹35 crore in March 2008. Before the memorandum conveying sanction was received, it floated (November 2007) a global tender for the equipment allowing the bidders, 35 days to respond as against 90 days as stipulated in the Purchase Manual of DAE. A single bid received from a foreign firm was opened on 7 December 2007 and supply order for two items¹⁹ was placed with the firm on 31 December 2007.

Subsequently, SINP revised supply orders twice, first in March 2008 and again in August 2008, to include remaining 24 pieces of equipment and issued to the same firm. The total value of orders was Euro 57,81,084 and delivery period was 24 to 26 months from the placement of confirmed orders. The institute placed orders for procurement of equipment without prior approval of the DAE and the concurrence of Member (Finance), Atomic Energy Commission (AEC) as required under Delegation of Financial Powers Rules. The equipment was received in December 2010 and expenditure of ₹38.90 crore had been incurred on the same.

As stated above, SINP had planned to construct the accelerator hall and laboratory building at the proposed new campus at Rajarhat and the works were scheduled to be completed by September 2009. But, it engaged a consultancy firm for the preparation of a Master Plan for its Rajarhat campus only in September 2008. In December 2009, it decided to construct the FRENA laboratory building in existing Salt Lake campus, citing procedural delays in getting the approval of the Master Plan for the Rajarhat Campus. Meanwhile the equipment was delivered in December 2010. The tenders for construction of laboratory building had not been finalised as of October 2012, despite lapse of 22 months from the date of delivery of equipment. As 22 month period was stipulated for completion of building works in prequalification tender documents and, therefore, the building infrastructure is not expected to be ready before August 2014. This indicated lack of planning coupled with delayed action for construction of infrastructure for costly equipment. Thus undue haste in placing order for equipment resulted in following:

- (a) Equipment worth ₹38.90 crore was lying uninstalled and extra expenditure of ₹15.03 lakh has been incurred since December 2010. The temporary arrangement in place for last 18 months is likely to

¹⁹ Switching magnet, Type 'A' including accessories and 90° deflection magnet including accessories.

continue at least for another 18 months, as construction of the laboratory building was yet to start (June 2012).

- (b) The project cost was revised to ₹45.24 crore to cover escalation in equipment cost, exchange rate variation and custom duty etc., the approval of DAE for the revised project cost was still awaited (June 2012).
- (c) No testing for the equipment was done and the warranty period for the equipment was over in March 2012. Rectification of any major fault, if discovered during installation in future will have additional cost implications.

SINP stated (June 2012) that Directorate of Constructions, Services and Estate Management (DCSEM) of DAE had shortlisted the interested agencies for construction of the accelerator hall and laboratory building. Tender papers for the same were being prepared and construction of the building was expected to commence later this year. SINP subsequently stated (October 2012) that AERB had given approval in September 2012 and they were in process of placing the work order for construction of the building. The fact remains that SINP showed undue haste in procurement of equipment and did not show the same level of diligence in creating supporting infrastructure which led to idling of costly equipment.

The matter was referred to DAE in June 2013; their reply was awaited as of July 2013.

