

DETAILS OF WORKS / CONSULTANCY / PURCHASE CONTRACTS AWARDED ON NOMINATION BASIS
4TH QUARTER OF 2025 - 26 (JANUARY 2026 – MARCH 2026)

DETAILS OF WORKS / CONSULTANCY CONTRACTS

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---------|---|-------------------------------|-----------------------------|--------------------|---|--|------------------------------|
| Sr. No. | Description of Item | Cost (Rs. in Lakhs) | Name of the Agency | Contract Period | Reason for nomination | Approving Authority | UNIT |
| 1 | Name of the Work: | Estimated Cost: | M/s Shyam Engineering works | 14 (Fourteen) Days | Unit#3 is under cold shutdown for identification and rectification of leak from PHT systems equipment as tritium activity was observed in the Active Process Water side. During leak search leak was found from Shutdown HX-1. After opening of HX, defects were observed to be widespread at the outlet end with multiple leaks from tube to tube sheet weld joint as well as from inside the tube near the weld joint. | Station Director, Unit-3&4, RR Site | RAPS-3&4, RR Site |
| | Rolling of tubes in Shutdown Heat Exchangers at RAPS-3. | 38,98,210 Rs. | | | Similar leak was observed in 3-Shutdown HX-2 during RAPS-3 PSD in Dec 2025. This leak was concentrated to few tubes in first two rows only. Hence, leak was attended by carrying out single rolling operation at outer end of 90 tubes of first two rows through a petty contract, followed by machining and welding of affected tubes by departmental personnel. During this PSD, all probable equipment were checked for any leaks by process water sampling and no leak was observed from any equipment. | | |
| | Tender / Quotation No: | Value of work awarded: | Starting Date: | | During the repair job, RAPS-3 Shutdown HX-2 was isolated from the PHT system and there was no increase in global process water activity further indicating no leaks from any other equipment. After attending the leaks, RAPS-3 was started back on 29/12/2025. However, from 19/01/2026 (around 20 days after unit start), tritium activity in process water again started rising and process water sampling and other analytical methods indicated probable leak from shutdown HX-1. | | |
| | NPC/RRS/34/2026/CN T-B2950M | 38,98,210 Rs. | 07.02.2026 | | Based on previous experiences station expected similar degradation of tube to tube sheet joint hence a petty contract was awarded to M/s Shyam Engineering works, Ghaziabad, UP for rolling 135 Nos of tubes (this time provision of three rows was considered in petty contract) at two rolling per tube end at two different locations from tube sheet face as suggested by designers. | | |
| | Work Order Details: | | End Date: | | Further actions carried out on 3-Shutdown HX-1: Further measurements of HX tube OD, ID and thickness was done and shared with designer. Based on recommendations of designer, rolling of all tubes at inlet as well as outlet end is required to be carried out at two different locations from tube sheet face in HX-1. This activity is also required to be done in Shutdown HX-2. | | |
| | 64780 | | 21.02.2026 | | As per Technical Specification for operation, APW system tritium activity limits shall be 6 MBq/l, when leak is known to exist in both units. With known leak, continuous feed and bleed of APW system water is needed to control the activity within limit. This is operator burden for both units. The process water removed from the system also needs to be disposed as radioactive liquid waste by WMP and hence is an additional burden for WMP as well as environment also. | | |

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| | | | | <p>In case the APW system tritium activity level exceeds the limits specified above, corresponding unit needs to be shut down. Hence, operating with leaks is an alarming issue as PHT boundary is breached and tritium activity is getting ingressed from active to nonactive side. Hence, to enhance the reliability and availability of Shutdown Cooling System and to improve station performance, maintenance of HX is a necessity before unit startup. This job is specialized in nature and requires qualified manpower, tools and measuring instruments. Being radioactive area job, this also involves high man-rem consumption.</p> <p>As station does not have expertise to carry out such job and in large quantity, so this job is proposed to be carried out by an external agency, who has done similar jobs and is capable to execute proposed job as per station requirement.</p> <p>Based on the recent experiences of tube rolling at RAPS-3, It is proposed to carry out the work through M/s Shyam Engineering Works, Ghaziabad, UP on nomination basis due to the following reasons:</p> <p>They have carried out similar tube rolling work in Shutdown HX-2 at RAPS-3 in previous shutdown. At ongoing shutdown, they have concluded rolling work in HX-1 as per scope of the petty contract (135 tubes at outlet end). This petty contract was awarded with L1 price among three quotations obtained before award of work.</p> <p>This party has also carried out the required qualification part for this job. Hence executing the job through them will save manpower qualification time and hence minimize the overall outage time of RAPS-3.</p> <p>This additional scope of rolling had arised based on designer recommendations from HQ, (to complete all tubes of both HX) as soon as petty contract work completed. As going for additional job through other mode of purchase will take substantial time, so unit startup will get delayed.</p> <p>Hence, it is proposed to get this work done through M/s Shyam Engineering Works, Ghaziabad, UP on nomination basis as they are already available at site, hence mobilization time for resources will also be saved.</p> <p>Accordingly, M/s Shyam Engineering Works, Ghaziabad, UP was asked to submit a quotation based on the scope of work. These rates were further negotiated in CS-3&4 office on 06/02/2026 with the party.</p> | | |
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