**PROJECT PROGRESS ASSESSMENT REPORT (PPAR)**

|  |  |
| --- | --- |
|  | ***Explanations*** |
|  |  |  |
| ***SECTION-1: OUTPUTS ACHIEVEMENT (mandatory for PPAR and project closure report)*** |
| Please refer to the project LFM and provide the following information |
| Outputs achieved as the results of the implemented activities  |  |  |
| Outputs partially achieved or in progress and status  | Output 1. Safety program is assessed and improved (60%).Output 2. Maintenance program is optimized and updated (90%)Output 3. Technical Support program is modified (60%)Output 4. BNPP training program is updated.(50%).Output 5. Improved capability in legal and contractual issues relating preparation of required contracts for operation and maintenance of BNPP1 (60%)Output 6.Overall HRM system for BNPP-1 is in progress of improvement (50%)Output 7. Improvement of BNPP-1 full scope simulator (FSS) performance in progress (30%)Output 8. Increased owner organization capability in application of nuclear oversight function (70%)Output 9. BNPP Training Centre in process of upgrading (60%) | *Some of considered activities have not been conducted yet in this regard.* |
| Outputs non achieved and reasons |  | *The activities will be implemented after availability of computer codes and training (owner’s responsibility)* |
|   |  |   |
| ***SECTION-2: EQUIPMENT & HUMAN RESOURCES(mandatory for PPAR and project closure report)*** |
| Please explain issues related to the equipment component. | * Establishment of permanent warehouse system in BNPP.
* Development of equipment maintenance and repair documents based on manufacturing documents and assembly drawings
* Development of equipment M&R history incorporating changes due to construction, installation and M&R activities
* Preparation of checklist and control documents of main equipment M&R activities to increase quality performance and analysis of results
* Initiation of selected equipment aging management programmes with a view to be expanded to other equipment.
 | *This can be related to request, reception, commissioning, installation, testing or functioning.* |
| Please explain issues related to the human resource (HR) component | Please provide a general statement on the status and plans* Basic requirements for equipment of training laboratories and workshops developed using Balakovo NPP training center experience
* Training methods of M&R personnel established based on Systematic Approach to Training (SAT)
* Strengthened capabilities on non-destructive (NDT) and ultrasonic tests (UT)
* Proactive safety performance indicators include human performance indicators
 | *In relation with fellowship, training, experts, and scientific visits.* |
|   |  |   |
| ***SECTION-3: OUTCOME PROGRESS: (mandatory for Project Closure Report (PCR), Optional for PPAR)*** |
| Outcome statement | Improved operational safety and reliability of BNPP-1 |  |
| Indicator(s) | Performance and standard safety indicators are assessed and in some areas improved in comparison with the baseline |
| 1. Please state to what extent the expected outcome is being achieved.
 | Safety performance indicators are collected, assessment is under way and based on results, improvement program will be developed.  | *Progress in relation to the likelihood that the expected outcome will be achieved or not* |
| 2) Please provide details/ explanations supporting the statement  | Output 1:1. Strengthened capability of 20 experts of the owner organization in safety and severe accident management of BNPP-1 based on stress tests (1.12.1)
2. Strengthened capability of 25 experts in BNPP on-site and off-site monitoring system during normal and accident situations (1.16.1)
3. Owner capabilities strengthened on BNPP security procedures (1.5.1)
4. Physical protection system (PPS) effectiveness assessed, procedures developed/improved, and needed changes of its design recommended (1.6.1)
5. Strengthened capability of operating organization in practical application of Living Probabilistic Safety Assessment (LPSA) for safe operation of BNPP (1.3.1)
6. Development of process and methodology for assessment and improvement of BNPP safety culture(1.13.1)
7. Strengthened capabilities of BNPP personnel on proactive safety management during operation and outage and on operational safety indicators (8.2.1)
8. Preparations for implementation of IAEA OSART mission(1.11.1)

Output 2:1. Maintenance strategy, predictive/preventive maintenance programme and M&R procedures developed; 20 staff of M&R department capable of using the new methods in M&R process planning and implementation of procedures.(8.4.1):
2. Improved outage management organization, implementation and support activities; strengthened outage management capabilities on safety requirements (TECSPEC) and plant system operation (3.1.1)
3. Improved spare parts and warehouse management; establishment of databases and datasheets of main equipment spare parts, special tools and consumer materials(2.1.1)
4. Strengthened capabilities on modern methods of maintenance and repair of rotating equipment (3.7.1)

Output 3:1. Strengthened capabilities of 20 experts of the owner organization on practical application of technical support of utility/operating organization.(8.7.1)
2. Safety performance Indicators (SPI) established in compliance with the latest IAEA guidance and word practices (3.5.1)
3. Strengthened BNPP personnel capabilities in methods and procedures for Plant Life Management (PLIM) programme and Aging Management Programme (AMP); and on interfaces and functionality of PLIM and AMP teams (3.2.1)
4. Strengthened BNPP personnel capabilities in using advanced Ultrasonic Test (UT) methods, equipment, measurements and evaluation techniques; BNPP In-Service-Inspection (ISI) programme updated (3.3.1)
5. BNPP radioactive waste management (RWM) programme assessed and recommendations for its further improvement provided (8.5.1)

Output 4:1. Assessment of BNPP-1 selected operational training programmes & procedures and development of corrective action plan in progres (4.1.1)

Output 5:1. Draft contract for BNPP repair and maintenance between owner and/or operator/maintenance company developed; strengthened capabilities in selection and implementation of insurance against nuclear damage civil liability during the all phases of NPP life time (5.1.1)

Output 6:1. Evaluation of self-assement of BNPP HRM system and recommendations for improvement in progres (6.1.1)

Output 7:1. Implementation of integrated proces of recruitment, selection, training, qualification and authorization/licensing of BNPP-1 personnel (7.1.1)

Output 8:1. Strengthened capabilities of 20 experts of the owner organization in application of nuclear oversight function (8.3.1)

Output 9:1. Improvement of BNPP Training Centre functions, training-related regulations, organizational structure; instructor selection, training, qualification with the focus on maintenance personnel training utilizing experiences and practices of Balakovo NPP, Russia in Full-Scope Simulator (FSS) (9.1.1)
 | *Provide examples, (field) observations, or signs.**Attach any document supporting your statement* |
| 3) Please state any other achievements. | * In September 2013 a preliminary acceptance certificate of BNPP-1 was signed and the unit turned over to the owner’s operating organization for its warranty operation.
* Establishment of a NPPD centralized company TAPNA for BNPP maintenance and repair
* Establishment of a NPPD centralized Technical Support company TAVANA for BNPP-1 operation
* Developed and approved assessment and safety management system improvement plans in industrial safety and environment area (available in Persian)
 | *Spin-offs, unexpected/unplanned benefits or negative effect(s)* |
| 4) Please explain issues encountered (if any)that affected the achievement of the outcome | * Long duration of organizing the activities; for example conducting a scientific visit since the completion time and sending the forms last about 8 months.
* Timely submission of nomination forms for NEX
* Difficulties with timely issuance of entry visa for NEX and IEX
 | *Issues can be related to the overall project context* |
|   |  |   |