WANO MC Corporate Peer Review for NPPD
15-24 May 2022

CORPORATE LEADERSHIP (CO.1)

**Performance Objective**

The corporate organisation provides the strategic direction and leadership for the nuclear stations to improve and sustain continuously high levels of safe, reliable operation and emergency response.

**Area for Improvement CO.1-1**

**The Company Leadership is performing support for the plant Safety and Performance,**

**however it requires some improvement in setting more strict target and in implementing**

 **more support to increase plant performance:** the overall performance of the plant

 is not improving enough and set currently the plant in the last quartileof the world fleet.

**Causes and Contributors**

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**Supporting Facts**

**Plant Performance**

1. Plan Safety performance indicators at the Corporate level are mainly WANO PI plus 3 specific Corporate indicators: NR (Number of request deviations), NNC (Number of non-compliances) and CNC (Difference between plant and Corporate assessment). The results of these last year shows that performance of the plan is rather low and could be improved. Even the WANO indicators on safety equipment availability (SP1, SP2 and SP5) are at high level, WANO index class the plant in the last quartile of the world for several years. Even the plant performance is slightly increasing more challenge and more support are needed from corporate to allow a significant increase of the plant results. For example to have a target for 2022 to reach 70% for the WANO Index while the current result is 73% is not challenging at all. Moreover 70% is one of worse value in the world.
2. According the “Performance evaluation report on the achievement of NPPD Co. annual goals in 2020-2021”, the following NPPD annual goals in 2020-2021 were not achieved: Generating reliable power at the rate of 6400 million kWh (3 out of 8), Safe and efficient power generation (7 out of 26), Supplying technical support services required by BNPP in 2020-2021 (4 out of 8), Manufacturing BNPP parts and equipment in parallel with current addenda with Russian contractor (3 out of 3), Implementation of defined and approved localization plans and definition of new plans based on needs assessment and feasibility study (3 out of 3), Improving the attitudes of human resources and staff growth and development (14 out of 29), Establishment and improvement in the field of human sources and training infrastructure (6 out of 11).
3. Several Plant events due to human errors occurred since the last FUCPR:- manual scram after loss of all FWPs on 21 Jul 2018, RCP trip on 30 Sep 2018 due to work without permission and procedure, power reduction on 4 May 2019 due to inadequate command, control and communication of CR staff, generator protection on 3 Dec 2019 due to inadequate maintenance, de-energetisation of safety train No4 on 20 Jan 2020 due to failure in technical service, RCP trip on 28 Jan 2020 due to loss of attention, over-confidence thus not used HEPTs, boron pump unavailability on 19 Jan 2021 due to improper maintenance generator trip on 3 Jul 2021 after improper Pre-Job Brief and without procedure. Additionally when performing walkdown in the plant near the BNPP training center TAVANA (or TAPNA) workers were performing work without PPE. Nobody from the BNPP personnel challenged them. These examples show progresses need to be made on staff behavior to reduce Human Error.
4. Among the Company concerns it was mentioned the reliability of the Main Generator, in HR – succession planning and in Equipment Reliability - repetitive defects. The Company approach, reflected in KPIs, is to maintain currently achieved level of reliability, or improve. There are no expectations to challenge achieved performance level.
5. Company document “Annual performance indicators and goals for 2022” includes 23 goals to be reached, and set target for HU errors – to have ‘decreasing trend’. The industry approach is to have target for ZERO safety events because of HU errors, company target is not challenging enough to improve HP.
6. According to the company's "Safety Culture Assessment Report", the company's NSC score improved to 125 points (from 110 in the previous year). The current improvement target for this year is to increase 5% this value. The survey result gives incertitude on the real picture which could be more than 5%.
7. A plan for NSC improvement exists at the plant level for 20-21. This plan is focusing on Working Environment, Motivation, Sanction and rewards. It is signed by the Plant Managing Director and by the Plant Chief Engineer and agreed by the Corporate. At this stage one action expected closed end of Mars 2022 on WE5 is already overdue. The explanation is due to Corona virus inpact.
8. These last year several events happened because of Human Error. Behaviour expectation from people and manager are published in the booklet and BNPP personnel has been informed about it. To publish the booklet is not enough to transfer meanings of those expectations for personnel. The expectations should be used interactively, for example, in safety messages, work performance assessment, observations, training.
9. According to the Contractual and Legal Affairs Manager, questions of safety, nuclear safety culture (NSC) at the contractors are described, required, included in the contracts, eg. safe work is required/confirmed, experience and reputation confirmed, necessary documents provided. It is their responsibility and of the Safety Department. However, no company actions are directed to ensure the same (or similar) high level work quality and NSC at the contractors like at the plant.

**Supporting Plant**

1. In the current situation of the company which is isolated with only one reactor there are important needs that NPPD will provide to the plant and to the corporate people more external and international contact to share and gain experience. WANO MC is of course a source of benchmarking but creating direct contacts with other companies in the same situation could be beneficial for safety and performance improvement.
2. BNPP needs support from NPPD for:
* benchmarking and Operating experience with other international compagnies (operation, maintenance and Emergency Preparedness….)
* knowledge transfer from retired experienced personnel
* Infrastructure for practical training (laboratories, workshop, mock ups)
* Fastening SAM guideline compliance for contractor purchase, for off-site coordination and for official documentation approval
1. NPPD is expected by the Plant to have more potential contractors providing services to have opportunity to choose. The NPPD has not yet determined how this selection will be carried out in the future. Currently, NPPD does not have any criteria for the selection of contractors.
2. The maintenance contractor TAPNA said need more support from NPPD to be able to have autorization to appoint new manpowers. It needs also support from NPPD for reducing the time for receiving spare parts
3. Self-assessment requirements document has been developed at the Plant but no guidance was provided from Company level for this topic.

**Current Perspective**

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