Generation Supervisors' Excellence Programme Scope of Work

Background

Generation is a line division within Eskom Holdings SOC Ltd. The other line divisions are, the Distribution division and the now separated Transmission division or the National Transmission Company, South Africa (NTCSA) company.

The mandate of the Generation business is to "***generate electricity, provide ancillary services, and leverage core competencies to expand its revenue base. This will be done within the bounds of the triple bottom line of financial, environmental and social sustainability and in a manner that is supportive of the country's economic objectives***".

The Generation business generates electricity for South Africa and the Southern African Power Pool (SAPP) by operating a fleet with a nominal capacity of 46 836 MW. The fleet comprises a diverse energy mix consisting of 14 coal-fired plants (nominal capacity 39 147 MW), four open-cycle gas turbine (OCGT) plants (2 409 MW), three pumped-storage plants (2 724 MW), two hydroelectric plants (600 MW), one wind farm (100 MW), one nuclear plant (1 854 MW), and another four mini hydro plants (2.4 MW).

Generation is implementing its Recovery Plan which commenced in 2023, mainly to improve energy availability factor ("**EAF**") with the objective to achieve and sustain 70% EAF from FY27. EAF has improved from 55.27% in September 2023 to 62.97% in September 2024. The unpanned capability loss factor ("**UCLF**") decreased to 25.59% in September 2024 from 34.24% in September 2023. By completing Kusile Unit 5, and Koeberg Unit 2, a total of 1 260 MW was recovered, and open-cycle gas turbines (OCGT) utilisation has decreased.

The Generation Recovery Plan has 6 main priorities over the next 5 years. One of the Recovery Plan's priorities ***"is to continue efforts to increase training and development in line with the skills/competency audit. Generation also has a programme to promote a culture of accountability, instil consequence management, offering executive mentoring and psychosocial support".***

Scope of Work

A Generation Supervisor Development Programme ("**GSDP**") has been running since 2003. Arguably, the programme has been "watered down' having morphed into an online training intervention from classroom based face-to-face training. Generation would like to build on the GSDP by rolling out a change management process to drive a "***new way of doing***" for its technical supervisory level employees at its power stations. The new upgraded programme should be integrated closely with systems and processes at the Eskom Leadership Institute (ELI) through which the current GSDP is hosted. The "new way of doing" is to be firmly embedded within a strong safety ethos.

Generation's technical supervisory staff are 'front line' team leaders in various disciplines including Operating (OPS), Maintenance, Outage Management and the Projects environment.

OPS staff are shift workers. Power stations may run 3 to 4 shifts in a 24-hour cycle in Operating. OPS supervisors may lead teams of up to 12 front-line staff.

In Maintenance, supervisors are on call after hours per the different plant areas e.g. Boiler, Turbine, Auxiliary, Outside plant, and Coal & Ash plant to attend to breakdowns and to conduct routine preventative maintenance (PMs).

Supervisors in the Outage Management environment coordinate Outage planning and execution. They are not necessarily shift workers but may be responsible for coordinating all Outage work including shift rosters. Supervisors in the Outages environment focus largely on contracts management (using primarily New Engineering Contracts or NEC) and contractor management.

Supervisors in Projects manage and execute power station's technical plan projects end to end. They are responsible for ensuring capital efficiency, project approvals (ERAs) and execution and project close outs (FRAs).

Supervisors are generally at a human resource Task Grade level of between T10 to T13. There are approximately 906 Technical Supervisors and about 45 Non-technical Supervisors in the Generation Division.

Generation seeks to build a high performing technical supervisory function by improving supervisor performance through certain focused interventions.

Generation seeks the assistance of a consulting company that has tried and tested models, systems and frameworks, for improving and sustaining supervisor performance in electricity generation or similar industries such as other heavy engineering/ industrial environments ("**Reference Sites**"). The consultancy needs to have a very strong and proven track record of working with or partnering with the Reference Sites in developing technical supervisory level employees. Reference Sites were identified on the basis that (i) there are technical supervisory level employees working in shifts at the company (ii) there is a strong focus on production and (iii) safe working practices are non-negotiable.

Generation seeks the intervention of a consulting company to research and clearly articulate the skills, competency levels and desired workplace culture necessary for technical supervisory staff to improve their own performance and thereby the performance of their teams and the Generation business. Furthermore, the consulting company will need to show how their interventions at the Reference Sites improved production and/or key performance indicators (KPIs).

The Generation business measures its own performance using a suite of KPIs that include Lost Time Injury Rate (LTIR), EAF, UCLF, Planned Capability Loss Factor (PCLF), Unplanned Automatic Grid Separations (UAGS) and Other Capability Loss Factor (OCLF). However, these are aggregated indices and are mostly lagging indicators. Indicators that will have closer influence and control by supervisory staff and are viewed as leading indicators in the Generation business are the Maintenance Index (including Mean Time to Repair (MTTR), Mean Time to Failure (MTTF), the Ops Index, Outage Readiness index and a suit of Projects indices (including Capital Efficiency, ERAs, FRAs) ("**Leading Indicators**"). Each of the Leading Indicators comprises of a suite of KPIs that make up the index.

A gap analysis is to be conducted to assess competency levels and determine workplace culture gaps of Generation's supervisory staff against benchmarks developed by the consulting company. Evidence suggests that the average depth of technical supervisory skills has eroded over the years and is compounded by the lack of experience and skills of their own team members resulting in many supervisors doing the work that should be done by their teams. Furthermore, skills erosion manifests itself in poor plant reliability, repeat failures, extended outages, repeat breakdowns, maintenance delays and premature plant failures.

The consulting company should show how technical supervisory skills improvement in the areas of, *inter alia* overall job competence, self-management, working independently, dealing with complexity, effective decision making, effective planning, working well under pressure,

effective mentoring and coaching practices, compliant and effective procurement processes, effective contract and contractor management practices will be embedded into the Generation Business.

A programme is to be developed and implemented to restore skills and competence levels and close workplace culture gaps identified. The programme needs to be sustainable. It is imperative that the programme aligns with Eskom's six core values of *Zero Harm, Integrity, Innovation, Sinobuntu (caring), Customer Satisfaction, and Excellence*. Furthermore, the programme needs to align with Eskom Leadership Brand Pillars of "*Leadership with the heart of a servant, Leadership that creates a learning organisation, Leadership characterised by good governance and Leadership characterised by disciplined execution*. Existing Generation initiatives like the Recovery Plan need to be integrated into the programme. The consulting company must show how the outcome of the programme will improve the Leading Indicators technical supervisory staff have influence over.

Generation requires a roll-out of the programme to all Generation's power stations. A phased approach targeting a batch of power stations initially, as opposed to a "big bang" approach is the preferred implementation path, to be followed by rollout to the entire Generation division. The success of the programme will be assessed by measuring the sustained improvement to the Leading Indicators set out above.

Generation contemplates the implementation of the "***new way of doing***" to consist of certain focused interventions:

(i) Research and articulate the skills and workplace culture required by the supervisory function to enable performance improvement.
(ii) Closing skills and workplace culture gaps identified by on-the-job coaching and classroom training. Enhancing existing KPIs for the supervisory function for performance measurement purposes.
(iii) On-the-job coaching of supervisors to manage tasks using attributes of high performing teams.
(iv) Inculcate a continuous improvement mindset with all supervisory staff.
(v) Ensure that the interventions are self-sustaining by training line management to provide ongoing on-the-job coaching for supervisors and by integrating and embedding the "new way of doing" into all aspects of the business e.g. Generation's talent management processes and talent boards, Generation's induction programmes and performance management and incentive schemes.

The consulting company will need to identify all key stakeholders. Stakeholders need to be characterised into stakeholders to be consulted prior to implementation and stakeholders to be consulted during/post implementation. A structured co-created approach, including but not limited to, a clear stakeholder management plan, communication and project plan including programme duration will need to be developed that aligns with Generation's business imperatives. The structured approach should be co-created with the Generation business.

A clear benefits realisation plan showing tangible business improvement such reduction in downtime, increase in EAF, decrease in UAGS and resulting in reduced costs need to be clearly articulated. The consulting company needs to show how the programme will be self-sustaining in the future using amongst others the Eskom's learning facility (ELI).