



ENERGY INTENSIVE USERS GROUP OF SOUTHERN AFRICA

ESKOM INTERRUPTIONS – STAGE 6 LOADSHEDDING AND STAGE 4 LOAD CURTAILMENT CONSIDERATIONS



Date

9 December 2022



Time

07H00 - 09H00



Venue

MS Teams

EIUG

Energy Intensive
Users Group SA Est. 1999

Collaborative, Credible, Progressive

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Context

- Continued Generation performance deterioration – 7 Dec'22: Planned maintenance of just under 5 000 MW and unplanned maintenance of Over 19 000 MW with 5 700MW of diesel and water reserves depleting fast with Loadshedding at Stage 6 and Load Curtailment at Stage 4.
- Generation units continue to fail with Koeberg planned to be taken off for maintenance.
- Continued escalations of Loadshedding and extension of Load Curtailment with realistically a high probability sustained load shedding and curtailment for the foreseeable future.
- Limited diesel availability due to budget constraints and logistical limitations(Ankerlig).

- Safety concerns beyond Stage 4 Load Curtailment – reasonable notice to evacuate employees and ramp-down plant should that be required, especially for deep mining and smelters in the event a decision is taken to progress to essential load conditions
- People Safety and Equipment Safety considerations in case of a Blackout – advanced warning signals
- Urgent need to at least minimise Loadshedding and Curtailment to lower stages – diesel requirement to achieve this and the associated funding mechanisms
- Integrity of the system to avoid Blackout, considering generation sudden failures and huge loads being switched during loadshedding
- Continuing deterioration of Generation performance and its lack of predictability
- The extent of possible deliberate damage to plant for nefarious reasons
- Likelihood of Stage 8 and beyond Stage 8 what manual measures are in place and how will they be implemented
- Appreciation of System Operation team in handling a difficult situation and need to retain the talent

Proposed Mitigations

- **Expedite revision of NRS 048-9 to among others cover:**
 - Reasonable notice for Essential Load Implementation – some customers like deep mining may need far more than 2 hours to taper down to essential loads and evacuate workers in a safe and orderly manner.
 - In case of a black-start – Prioritise returning power to entities susceptible to human safety and equipment safety /integrity
- **Reconsider Demand Response Options – DR is cheaper than diesel and cost of unserved energy**
 - Consider re-introducing Power Buy-Back Schemes (ongoing cost to economy must take priority over other considerations)
 - Consider increasing incentives for Demand Response to increase participation subject to system needs
 - Voluntary electricity conservation scheme – voluntary reduction of NMD for specified periods (May extend to mandatory one with options to trade among customers)
- **Avoid OCGT Diesel induced Load Curtailment - Cost of Unserved Energy is much higher than the costs of diesel**
 - Recovery of prudent additional diesel usage need to be negotiated – through RCAs or National Treasury support
- **Expedite Operational Recovery**
 - Until new capacity is added current assets need to perform until replaced
 - Improve diesel logistics for faster deliveries
 - Consider connecting wind even in constrained corridors with a condition of curtailing during congestion periods
- **Improve Communication**
 - Need for transparent communications on system constraints or risks
 - Kusile duct communicated 10 days after the event and still no prognosis of full implications/ likely duration of outage
 - Stage 6 Loadshedding and no substantive communication

EIUG Proposed Way-Forward

- **Engage Eskom Management:**
 - Request State of the System Briefing including prognosis of power interruptions over the next 24 months
 - Formal feedback on likelihood of Essential Load Declaration and possible indicators for consideration
 - Possible ramp-down framework in case of Essential Load declaration
 - Prioritisation of most affected(human and equipment safety) parties in case of a black-start
 - Diesel funding status and possible funding mechanisms
 - NRS 048-9 revision to cover current and future realities (or consider outsourcing to a dedicated project manager to drive)
 - Need to improve operational performance
 - Advocacy support Eskom may need
- **Engage other associations to amplify business voice and align on messaging**
 - Consider BUSA, Minerals Council, FAPA, Energy Council, ...
 - Consider joint engagements with government and related agencies
- **Membership Involvement**
 - Encourage member companies to use their influence to advocate for proposed mitigations
- **Engage Government and Agencies (e.g. NERSA)**
 - Identify messages(diesel support, maintenance improvement, law enforcement, etc.) for different departments or agencies and engage through letters or meetings - preferable jointly with other associations.
 - NERSA to consider implications of system collapse versus diesel costs when considering RCAs
- **No public statements at this point just direct engagements**

An aerial photograph of a city at sunset and night. The sky is a mix of deep blue, orange, and yellow, with scattered clouds. The city lights are visible, reflecting on the water in the foreground. The overall scene is a beautiful blend of natural and urban elements.

Thank You

Contact Us: info@eiug.org.za

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