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Date:
26/06/2023

HV Plant Manager
Transmission

Enquiries: Naledi Dhlamini
Tel +27 51 404 5721

Dear Rodger Peense,

SECURITY THREAT ASSESSMENT (STA) REPORT: GROMIS SUBSTATION: KLEINSEE 220/66/22 KV

1. INTRODUCTION

As part of a continuous security service to the Rodger Peense a STA was conducted by the mandated security officials and/or team in order to assist the client to better understand their current security threat profile. This report identifies and describes any evident threats identified that may affect the Client's accountable and responsible business function(s).

This report further assists the Client to effectively manage legal compliance (e.g. *NKP Act, PSIRA Act etc.*), organisational conformance (e.g. *SHEQ, Risk & Resilience Management etc.*) and other key performance areas and may also assist with the SWOT analysis and the identification of risks in regard to their Operational and Business Plans. As per the Eskom "Security Threat Assessment (STA) Standard (240-79537982)" a STA need to be conducted at least bi-annually for all sites, regions, and areas where security is mandated to do so.

2. MANDATE

The mandate of the security officials and/or team that conducted this STA is described within their formal appointment and/or designation as agreed with their responsible line management.

3. SCOPE

The scope of a GROMIS Substation Security Threat Assessment is guided by the Security Threat Assessment (STA) Standard (240-79537982) in consultation with the Client and according to their needs.

4. CONTEXT OF THE STA METHODOLOGY

The security threat assessment for Gromis S/S is a study of the environment that will affect security and site operations. The security threat assessment was conducted to determine the threat profile of the Gromis S/S (e.g., Substation, buildings, personnel, and visitors). The scope of a Security Threat Assessment is guided by the Security Threat Assessment (STA) Standard (240-79537982) in consultation with the Client and according to their needs.

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5. THREAT PROFILE

5.1. Environmental Scanning results

- a) Number of Employees** : +- 1 Permanent
- b) Number of Visitors / Clients** : +-7 in a week maximum
- c) Contractors on site** : +- 20 Tyris Powerline Construction and 2 day shift 2 night shift Mulanga security Eskom contracted security deployed and 2 Ensemble security 1 arm response guarding project material.
- c) Political Circumstances** : DA and ANC are dominant political party within the area
- d) Socio-Economic Circumstances:** Diamond mining and Farming poor infrastructure and limited employment opportunities. And tourism is seen as a possible job creator as mining is not sustainable in long term due to down scaled production and retrenchment and agriculture.
- e) Demography** : Gromis Substation is found in the Namaqua district municipality under Richterveld Municipality on the R382 , 61 km from Port-Nolloth. Surrounded by diamond mines and farms.

5.2. Site Details

- a) Area or Address of Site** : Transmission
- b) Sector / Part of Site** : Gromis Substation
- c) Coordinates Latitude** : 29 35.58.8
- d) Coordinates Longitude** : 17 10 46.4
- e) Site Description** : 61 km from Port Nolloth on R382 and 100km from Springbok.
- f) Additional comments of Site or Area:** Surrounded by mining industrial offices such as Kleinsee-De Beers, Alexander Bay, Coignaas mine, bushes, open space.

The Gromis substation refurbishment project is facilitated by Tyris Powerline construction commenced 07 August 2022 and planned handing over scheduled for 30 July 2023.

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5.3. Asset Identification *(Typical examples of assets and surroundings on site or within area)*
Access Control gate to Gromis substation





GROMIS SUBSTATION NEW SECURITY GUARDHOUSE

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GROMIS SUBSTATION NEW 3 PHASE FENCE INSTALLATION AND PERIMETER LIGHTS



GROMIS SUBSTATION NEW HV YARD INFRASTRUCTURE

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Project materials on site



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Gromis substation parking



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Gromis substation new buildings

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a) Relay room, Battery room, Cladded store, and Workshop

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b) OLD GUARDROOM OFFICE- INSIDE PREMESIS



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Gromis Substation scrap material

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Gromis substation 3rd gate entrance



Gromis substation old designated parking

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6. CRIME SATITISTICS OF SITE OR AREA (*Crime Statistics Worksheet*)

#	1	Threat (What and when?)	Theft and vandalism of Eskom infrastructure			
Asset; processes; people; information; plant building equipment etc.			Equipment			
Place (Where?)			Substation			
Modus Operandi (Where and When?)			removal			
Aggressor (Who?)			Criminals			
Probability (likelihood)		4	Consequence (Impact)	Serious	Threat Index (High/Medium/Low)	Medium

#	2	Threat (What and when?)	Theft/Vandalism/ Tampering			
Asset; processes; people; information; plant building equipment etc.			Material, Equipment, and Infrastructure			
Place (Where?)			Inside the substation			
Modus Operandi (Where and When?)			Cutting the fence to gain access to site, impersonating Eskom employee to gain access to site and draw a firearm against the site EA and steal valuables and Eskom assets			
Aggressor (Who?)			Criminals			
Probability (likelihood)		High	Consequence (Impact)	Asset	Threat Index (1 -10)	7

#	3	Threat (What and when?)	Information /Cyber Crime			
Asset; processes; people; information; plant building equipment etc.			Illegal access to server, confidential information			
Place (Where?)			Online, Internet server			
Modus Operandi (Where and When?)			Hacking of system			
Aggressor (Who?)			Criminals			
Probability (likelihood)		Low	Consequence (Impact)	Asset	Threat Index (1 -10)	3

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#	1	Crime Incident Description	Date: Between 2022/10/12 and 2022/09/26 Time: 22:35 Offence: Armed robbery and Theft
What happened: 141m BVX4 QCV Cable worth R78 238.08 was stolen at gun point after 2 private security companies night shift officers were ambushed and assaulted and injured by alleged armed Zama zamas wearing blankets and balaclavas loaded in 5 bakkies. Kleinsee SAPS: CAS 5/10/2022			
#	2	Crime Incident Description	Date & Time: Between 15/10/2022 at 23:10 & 16/10/2022 at 02:40 Attempted Theft
What happened: Front gate chain was broken to gain access onto the site 2) Approximately 50 Meters of cable was cut into 5 x 10 Meter sections and found on site. 3) The modus operandi is the same as the 1st incident at Gromis ss which took place on 12/10/2022 at 22:35. Kleinsee: CAS 07/10/2022			

7. CURRENTS SECURITY CONTROLS MEASURES IMPLEMENTED

The current security controls security measures were recorded and evaluated during the STA.

#	1	Security Control Measure - Type	Perimeter fence						
Security Control Measure – Description			3 LAYERED FENCE -1. MESH 8metres outside Bob wires 2. Non-lethal energised/electrical fence 3. MESH 8metres inside						
Threat Control Effectiveness			FE	x	ME		MI		None
#	2	Security Control Measure - Type	Access Control/24 hours static security guards						
Security Control Measure – Description			- Eskom Contracted Mulanga security 24 Hours static security guards deployed on site 2 Day shift and 2 Night shift. - Ensemble security 2 day shift and 2 night shift and 1 supervisor armed response vehicle appointed by project .						
Threat Control Effectiveness			FE	X	ME		MI		None

#	3	Security Control Measure - Type	Gates						
Security Control Measure – Description			➤ Three-layered remote-control gate ➤ 3x 8meters access control gates ➤ Outer gate with bob wires						
Threat Control Effectiveness			FE	X	ME		MI		None

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#	5	Security Control Measure - Type	Building						
Security Control Measure – Description			Old Offices – Good Condition Rely room Control room Workshop Storeroom Carrier room Battery room Parking new and old New modern brick security guardhouse Old asbestos office Toilets Site office -container						
Threat Control Effectiveness			FE	X	ME		MI		None
#	6	Security Control Measure - Type	Lighting						
Security Control Measure – Description			➤ Perimeter lighting ➤ HV Yard apollo lights						
Threat Control Effectiveness			FE	X	ME		MI		None

#	7	Security Control Measure - Type	General Housing						
Security Control Measure – Description			Vegetation needs attention especially weed that is visible inside the HV-Yard, there is building/construction project on site. Housekeeping lots of scrap and copper cable drums and project material, building material, equipment lying around						
Threat Control Effectiveness			FE		ME		MI	X	None

Legend					
FE	Fully Effective	ME	Mostly Effective	MI	Mostly Ineffective

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8. THREAT ASSESSMENT RESULTS

SECURITY THREAT ASSESSMENT							
#	Asset Description	Threats	Type of Compromise	Probability	Consequences	Impact	Threat Index
1	People	Robbery/Hijack	Assault/Injury	High	High	Severe	7
2	Equipment	Burglary/Theft	Removal	Medium	High	Serious	6
3	Assets	Theft of material /equipment	Removal	Medium	Medium	Severe	6
4	Information	Cyber crime	Sabotage	Low	Low	Trivial	3

Legend											
Threats	Who		What		When		Where		Why		How
Type of Compromise	Disclosure		Modification		Destruction		Removal		Interruption		Injury
Probability	Low (1-6)				Medium (7 -9)				High (10)		
Consequence	Privacy			Trust			Asset			Service	
Impact	Trivial				Serious				Severe		
Threat Index	1	2	3	4	5	6	7	8	9		

PROBAILITY RATING	7
ORGANISATIONAL IMPACT LEVEL	6
VULNERABILITY LEVEL	High
THREAT INDEX	Serious

9. THREAT AND RISK ASSESSMENT VILIDITY (12 Months)

Date of assessment (YYYY-MM-DD)	2023/06/26
Due date (YYYY-MM-DD)	2024/06/26

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10. DETAILS OF ASSESSMENT TEAM

#	NAME	DESIGNATION
1	Hennie Stramrood	Senior Supervisor
2	Brian Klaase	EA
3	Naledi Dhlamini	Officer Security Operations

11. RECOMMENDATIONS

It is the prerogative of the Client / asset owner to decide on how to treat the security threats specifically or collectively and how to manage the related risks arises from the threats as described in this document. Based on the information gathered during the threat assessment, the following recommendations need to be considered for improvement of security control measures:

#	Security Measures Type	Recommendations
1	Perimeter Fence and Energised fence	➤ Installation of security motion sensors or intruder detection system. ➤ Regular monitoring, maintenance, and repair ➤ Regular testing of non-lethal electrical fence
2	CCTV	➤ Linked to a control room and armed response team
3	Gate	➤ Regular monitoring, maintenance, and repair of gate motor
4	Alarm monitoring & response	➤ Use of security alarm monitoring and response team
5	Lighting	➤ Perimeter lights installation with motion sensors or intruder detection system ➤ Regular replacement of bulbs.
6	Infrared beams /Motion detector system	Installed at strategic points on site integrated with cameras
7	Material on site	Scrap must be collected and removed or stored out of sight and controlled. Unused project material and spares to be removed and removal of left-over materials before handing over the project.
8	Biometric access control	➤ Installation of card readers/fingerprint readers
9	Housekeeping/Vegetation	Must be maintained continuously Removal of scrap from site
10	Asbestos building	Demolishing of asbestos building

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12. DISCLAIMER & CONFIDENTIALITY

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Yours sincerely



Naledi Dhlamini

Officer Security Operations



Tanya Kotze

Security Manager