

Design, Engineer, Install and Commission the expansion of the Fire Detection System (FDS) for Kriel Power Station for an estimated period of 12 months

Tender number MPGXC006855R1

Clarification 03 – 11/04/2022

Questions and **Eskom's Responses**

Questions	Eskom's Responses
<p>The battery rooms have approximately 15 battery packs per room, is the Eskom standard to install one gas detector per battery pack? Besides gas detectors are flame detectors required to be installed in the battery rooms as well?</p>	<p>This is to be decided by the tenderer(professionals on the FDS)</p>
<p>Several areas in the plant have been identified with potential hazardous, can you clarify and confirm if the following areas are included for the expansion and whether flame and gas detection as noted below will be appropriate?</p> <ul style="list-style-type: none"> • Turbine cooling, 2 bottle rack H2 <ul style="list-style-type: none"> ○ Gas sensor above each bottles rack + H2 flame detectors • Turbine cooling piping, lots of obstacles by the pipes <ul style="list-style-type: none"> ○ H2 flame detectors to protect the flanges ○ Pipe trace required to identify the H2 cooling pipes • BPT Oil Lubricant <ul style="list-style-type: none"> ○ flame detectors underneath to detect a fire from leaks • EBP bearings (2 pumps, 1 turbine) <ul style="list-style-type: none"> ○ flame detectors for each bearing • Oil tank <ul style="list-style-type: none"> ○ Flame detector underneath ○ Flame detectors at the oil catch ○ Flame detectors above the tank at the pumps • Top Gen, bearings(4) <ul style="list-style-type: none"> ○ Flame detectors per bearing • Gen Box <ul style="list-style-type: none"> ○ Gas + H2 flame • Oil burners, 2 x 3 burners on 3 levels <ul style="list-style-type: none"> ○ Flame detectors per 3 burners • Coal bunkers (6) only glowing fires not visible <ul style="list-style-type: none"> ○ Gas detector in each bunker (CO2?) 	<p>Only areas identified on the scope are required to be covered. As mentioned above the professionals will select what is suitable</p>

<ul style="list-style-type: none"> • Air heater, closed system with dust inside <ul style="list-style-type: none"> ○ Flame detector with air shield flange mount ○ Atex zone inside Eskom to clarify • 2 pump stations Diesel fuel + tank area <ul style="list-style-type: none"> ○ Flame detectors in each pump station ○ Flame detectors in each tank area • Mill, closed and very dusty inside <ul style="list-style-type: none"> ○ Flame detection very difficult but the hazardous is very low – what is Eskom recommendation • Coal storage, 2 separate buildings <ul style="list-style-type: none"> ○ Same as bunker, only gas detection can work 	
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