



Corroded Bolts

WHAT HAPPENED?

During a routine climbing Condition Assessment (CA) inspection, the team identified a significant number of severely corroded nuts on bolts attached to major cross arm members and other critical components of the tower structure. This corrosion poses a serious risk to workers on the tower, as bolt failure could lead to falls from height. Additionally, if enough bolts are compromised by rust and corrosion, there is a potential risk of the tower collapsing.

The purpose of this is to highlight the need to ensure all steel and bolt is completed on a structure at the completion of tower painting and ensure that the structure is left in a safe state for future works to be completed.



IMMEDIATE ACTION TAKEN

- Service Provider escalated to RSM and SDM.
- The tower bolts and nuts were replaced by the Service Provider.

ROOT CAUSE

- Defects in Maximo were cancelled, without confirming that they were completed or if they were included in the project scope.
- The corroded bolts were not identified during the final inspection after the tower painting.
- There was no clear scope of the steel and bolt replacement in the MAD prior to works commencing on the project.



LEARNINGS

- When undertaking independent scoping assessment for tower painting, all Maximo defects and skeletal drawings should be used to help inform and finalise the steel and bolt replacement that's forms part of the structure refurbishment.
- Reinforce the steel and bolt replacement strategy. This will provide clarity for the RSC service provider to be aware of what is in scope and the replacement priority order.
- Formalise all projects to be handed over via the TP593 handover form. This will ensure the Service Delivery Manager will have full visibility of the work done, before formally signing this off.
- Investigate alternative options to assist the post painting quality checking process in the MAD area when each structure is completed. □

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