


Metmast MMB - foundation nuts are not torqued

a database entry created by  Bing Liu on 22 Aug 19

Id.no	469
Emendo no.	
Reg. Date	22 Aug 2019
Reg. Unit	Statkraft
Contract	Meterologi Mast & Power Curve Verification
Title	Metmast MMB - foundation nuts are not torqued
Risk Potential	
Case type	Observation
Category	Health & Safety
Consequence	Hazardous Conditions
LTI indicator	
External reporting	No
Investigation	Yes
Description	<p>During the Employer's inspection before taking over, we have the following finding:</p> <p>-----</p> <p>Sendt: onsdag 21. august 2019 16.30</p> <p>We have performed first part of inspection on ground. Now I'm waiting for better weather before climbing.</p> <p>But we have run into an issue. When inspecting MMB I found that foundation nuts are not torqued at all. And I don't think anybody shall climb that mast before torque.</p> <p>The photo attached the nut that the inspector has taken away just with fingers. . The nut was not even turned all the way down to steel bracket.</p> <p>Best regards XXX</p> <p>-----</p> <p>Suggested actions for WOODGROUP:</p> <ol style="list-style-type: none"> 1) check the torque for all existing metmasts under Fosen program, 2) implement torque for all nuts according to installation guidance, 3) to develop a QC procedure to make sure the torque be checked after installation, 4) send result of inspection/ investigation and document the result of actions to Statkraft. <p>There is no explicit torque requirement for these bolts.</p> <p>Unlike the guy wire anchors, where the rods are held in tension, the mast base is held in compression. Therefore the bolts are somewhat less critical than those on the rock anchors.</p> <p>As such, the requirement is simply the general case for a fixture which is part of a permanent structural installation: for the nut to be too tight, then either the threaded rod's thread punched (or a second nut added).</p>
Causes	
Days of absence (if relevant)	
Immediate measure (Yes/No)?	Yes
If Yes, describe immediate measures performed	
Vendor/Contractor	WoodGroup
Owner - Unit	Woodgroup Ltd
Action responsible	Andrew Martin
Status	Open
Due date	29 Aug 2019
Utkvittert av Statkraft	
Action for info	Roy Aune, Tobias Hüttner-Vaag, Ove Nordin, Torleif Sætrevik
Corrective action measured/implemented	Responsibility for installation of this scope lay with the site EPC contractor (PEAB); nevertheless it is Wood's responsibility to accept the installation and request any amendments from PEAB where deficiencies are identified.
	Wood does possess a completed checklist from each RMM from the main subcontractor (Eltel), which states that the mast bases and foundations have been accepted. However, it is clear that (at least in this instance) the check, as well as the installation, has not been done adequately.
	With regard the suggested actions:

- 1) check the torque for all existing metmasts under Fosen program
Wood response: these shall all be checked to provide full assurance. Any deficiencies will be reported to the EPC contractor or site management for rectification.
- 2) implement torque for all nuts according to installation guidance
Wood response: as above, rectification is the responsibility of the EPC contractor. Any bolts requiring action will be reported. If rectification activities cannot be carried out while Wood are on site, Wood can accept the change remotely if high-quality photographic evidence is provided.
- 3) to develop a QC procedure to make sure the torque be checked after installation,
Wood response: As mentioned above, checking was already included in Wood's subcontractor (Eltel's) checklist. The Wood aite supervisor will remind the subcontractor used at Kven/Harb/Geit (Telecon) of the requirement and ensure that the check is completed and documented.
- 4) send result of inspection/ investigation and document the result of actions to Statkraft.
Wood response: this will be summarised on a site by site basis in the respective communications database.

References/Attachments

Name	Modified	Owner	Size
P8211749.JPG	22 Aug 19 8:43am	Bing Liu	594 k

Comments
Distribution log

22 Aug 2019, 09:42:28 (CET+1): Distribute, Bing Liu - Roy Aune, Tobias Hüttner-Vaag, Andrew Martin, Ove Nordin, Torleif Sætrevik, Sven Erik, Odd Joar Vevang

Change Log

date	member	field	change
23 Aug 19	Andrew Martin	Corrective action measured/implemented	...e check, as well as the installation, has not been done adequately. With regard the suggested actions...
23 Aug 19	Andrew Martin	Corrective action measured/implemented	...checking was already included in Wood's subcontractor (Eltel's) checklist. The Wood aite supervisor...
23 Aug 19	Andrew Martin	Corrective action measured/implemented	... If rectification activities cannot be carried out while Wood are on site, Wood can accept the change...
23 Aug 19	Andrew Martin	Causes	...the general case for a fixture which is part of a permanent structural installation: for the nut to...
23 Aug 19	Andrew Martin	Corrective action measured/implemented	...The Wood aite supervisor will remind the subcontractor at Kven/Harb/Geit (Telecon) of the requirement...

(36 entries not shown)