BHP Power Converters Refurbishment

David Hay EN-ACE
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)
ATC Maxime Sardano ECR- PSB-R-EC-0003

- Fabrication and galvanisation of the new metallic structures ongoing
- Installation of the metallic supports week 36 (critical path)

![Before](image)

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY</td>
<td>Fabrication and galvanisation of metallic structures ongoing</td>
</tr>
<tr>
<td>AUG</td>
<td>Installation of metallic supports week 36 (critical path)</td>
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</tbody>
</table>

LS2 Committee Meeting 23-Aug-2019
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

ATC Maxime Sardano

- Identification and disconnection of cables achieved
- De-cabling is progressing well and within the planning
- DC cable disconnection in preparation (BHP & BCER)
- Removal of the power converters 18/03/2019 to 01/05/2019
- Modifications to the rack structures 02/05/2019

Current configuration

Post LS2 configuration

07th February 2019
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

ATC Maxime Sardano

- Removal of the power converters wk 12 18/03/2019 to 01/05/2019 (Disposal bat 133)
- Renovation of the existing rack structures to start week 18

Current configuration

Post LS2 configuration

07th March 2019
Removal of the power converters Ongoing 18/03/2019 to 01/05/2019 (Disposal bat 133)
Renovation of the existing rack structures to start week 18
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

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- Removal of the power converters Completed
- Renovation of the *existing rack* structures postponed

18th April 2019
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

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• Important shift in the planning announced due to a safety issue identified with the metallic structures with paint containing traces of lead & the floor tiles containing traces of asbestos.
• To mitigate; TE-EPC requested the total reconstruction of the false floors with new galvanised structures & new floor tiles.

Integration and SMB studies

18th April 2019
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

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- Displace/Suspend EPC/Det incendie racks
- Remove existing structures (SMB) start W23
- Check compatibility of new structures with EN-CV & EN-EL infrastructure
- Quote Sarvadon signed 20/05/2019
- SMB to produce and validate the drawings.
• VIC done, removal work started.
• SMB to perform a 3D scan & integration studies
• Fabrication and galvanisation of the new metallic structures
• Installation from mid Aug to Mid Sept
B.361 BHP (transfer lines) Power Converters Refurbishment (TE-EPC)

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- SMB confirmed the completion of the 3D scan & integration studies.
- Fabrication and galvanisation of the new metallic structures launched.
- Intervention now programmed to start week 36.
- POPS B EN-CV pipe?
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- Modify cables trays for EN-CV POPS-B cooling pipe **done**
- SMB installation from week 36 to 38.

22nd Aug 2019
EN-CV chilled water pipes connecting B245 and B361 WSS

Co-activity seems unavoidable

Marie-Lou Deleglise
Strategy and solutions

• Before work can commence;
  o EN-EL and TE-EPC need to deliver the necessary work authorisations to ONET, SMB and EN-CV (network separations.. attestations etc..).
  o SMB need to **confirm** the delivery of the galvanised structures and that work can **commence** week 36 and terminate by week 38 (as per current schedule).

• EN-CV to precise their works.
  o Installation of new valves and flexible connections to the power converters?
  o Installation of 2 new POPS-B connection pipes which traverse the BHP (new request, not in the PSB baseline).
  o Integration status? only announced at the ICL meeting last week.
  o Are there other routing options available? Have integration studies taken place.

• Due to the nature of cabling interventions, we must **avoid** co-activities with EN-EL cabling campaigns.

• The schedule is now very tight and **without** contingency.
Is it acceptable to have co-activity between EN-EL A.C cabling and CV consolidation works or (to avoid) with the DC cabling campaign.
Work authorisations & safety issues

Bonjour David et Cyrille,

Une fois le retrait des câbles laissés dans les faux plancher du bat.361 et la mise en court-circuit et à la terre des câbles restants par TE-EPC, si SMB a besoin d'une feuille il faudra refaire passer Patrick Gallay, Christophe Mugnier et TE-EPC pour voir quelles feuilles peuvent être délivrées (autorisation, séparation ou consignation). Christophe est au courant.

Merci
Bonne journée

M. Sardano TE-EPC has confirmed that the cables have been short circuited and earthed.
Salut David,

Patrick sera présent. Nous ne signerons pas d’autorisation de travail, par contre Patrick pourra attester de la séparation de réseau du transformateur 18kV qui alimente l’ERD4, et indiquera qu’il reste des câbles sous tension qui alimentent les services généraux. Ces câbles ne représentent pas de risque toutefois le port de gants isolants 1000V est requis pour plus de sécurité. En cas de doute (pièce nue potentiellement sous tension, vieille prise cachée sous le faux plancher….), conformément à la procédure mise en place pour le désamiantage, le FC prend une photo et s’il ne trouve pas le propriétaire, il contacte Patrick qui fera le nécessaire.

Je reste à disposition pour toute info complémentaire.

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