

Programme: 100m LNG Dual-fuel Ro-Ro Passenger Ferry

Review Period: December 2022

<u>Name</u>	<u>Job Title</u>	
[Redacted]	CEO	
[Redacted]	Ship Delivery Director	
[Redacted]	CFO	



Agenda



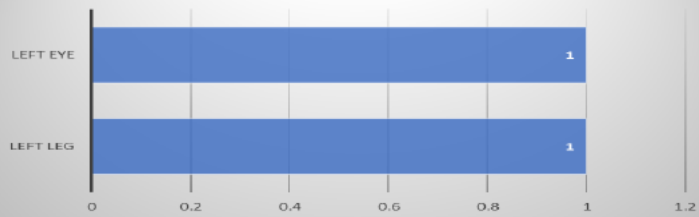
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HSE Dashboard December 2022

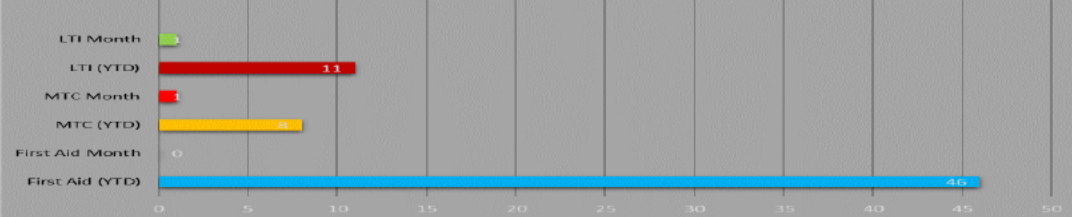
* Per 1,000,000 working hours
** Estimated no. of hours worked

Incident Statistics	Target	Actual		Fatal	0	Fire	0	Proactive Statistics	Target		Actual	
	2022	Month	YTD						Month	2022	Month	YTD
Number of Hours Worked**	870,000	69509	636431	RIDDOR	1	Damage	0	Number of YSYD Cards	>50	>600	48	427
Number of Lost Time Incidents (> 3 Days)	< 9	1	11	LTI (> 3days)	1	Environmental	0	Toolbox Talks Issued	2	24	2	16
Lost Time Incident Freq Rate*	< 10.14	14.39	17.28	Medical Treatment (MTC)	1	Serious Near Miss	0	Housekeeping Inspections	4	48	4	29
Number of Recordable Injury Incidents	< 30	1	16	First Aid	0	YSYD	48	Emergency Drills Completed	4	>48	2	19
Total Recordable Injury Incident Rate*	< 35.0	28.77	29.85	Total Injuries	2	TOTAL Incidents	2	Vessel Compliance Checks	30	420	30	260

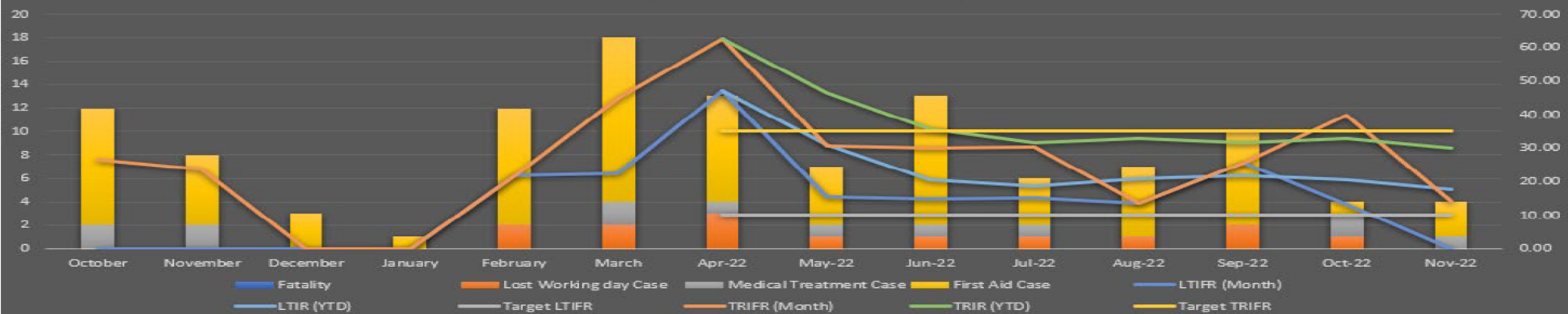
Affected Areas Dec 22



Reported Incidents YTD 2022



Injury Incident Summary



HSE Summary November 2022

Progress Update:

- We experienced a RIDDOR this month - incidents reported with – 1 RIDDOR, 1 MTC reported.
- As we continue to move through the commissioning part of the project on 801 extra vigilance is required throughout including better communications and supervision onboard.
- Encouraging and driving better engagement in YSYD program from all, FMPG Management and Supervision & Subcontractor involvement will now be reviewed every Thursday morning at the Subcontractor meeting.
- HSE inspection - Visit focused on PTW, CSE, Scaffold, COSHH and general observations – Report received 19th December with 4 opportunities of improvement detailed in the report.
- Vessel Daily HSE inspections continue to be valuable on both vessels, these along with the weekly safety walk around is helping drive continual improvement throughout all areas of the yard and both vessels, these inspections were noted as a positive improvement from the HSE.
- Following a successful trial of various gloves these will now be introduced into circulation in January, Toolbox Talk to follow in the coming days.

801 Level 0 Programme



Year	2022												2023									
	Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July			
Engineering/Design			Drawings submitted to MCA/Customer								Change, TQ: & OOR support											
Manuals/Certification										Manuals				Certification								
Hotwork Installation			Current												Projected							
Painting			Current												Projected							
Clam Shell Doors/Ramps				Current								Projected		Commissioning								
Mezzanine Decks [Redacted]			Current												Projected		Commissioning					
Lift Install											Current		Commissioning									
Wheelhouse completion			Current								Electrical Installation/Commissioning											
Accommodation/Outfit				Current								Projected		Projected								
Pipework Installation			Current					Projected					Projected									
HVAC			Current								Projected		Commissioning									
Electrical Installation			Current								Projected		Projected									
Miscellaneous Outfit										Projected												
Commissioning			Commissioning																			
Dry Dock													Completion activities									
Sea Trials/MGO															Completion activities							
LNG Install/Commissioning										Projected												
Snagging & Delivery															Completion activities							



801

Latest LNG update/plan below, now based on confirmed lead time and [Redacted] update:

Preliminary Plan, Pending Skid Approval from [Redacted]

	2022		2023									
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct
Plan Approval												
Equipment Order + Manufacture + Inbound Equipment												
Skid Manufacture, Assembly & Testing												
Despatch to Shipyard												
Installation at Ship												
Commissioning and Testing												
Vessel Available for Service												

[Redacted] Update 12/12/2022

FMPG PO 111310 (replacing 111098) received against VOR 400005853a + 400005883a, thanks for trust in us.

Actions ongoing:

1. Procurement: Ordering VMS at skid maker. Equipment needed for skid assembly already ordered. PRV's can't be in time as known, est delivery end-Jul-23/early-Aug-23 at yard, borrow from bunkerline meanwhile;
2. Engineering:
 - a. P&ID draft to be approved,
 - b. VMS GA + STP under work as priority. We can & will change orientation of vent outlet (Z) to upwards as requested by you;
 - c. Pkg of all doc updates will be taken under work and IPI update will follow in couple of weeks.
3. Class approval: after documentation is ready, we will send replies to comments + package to LR, hopefully DAD will follow soon;

801 RAG status

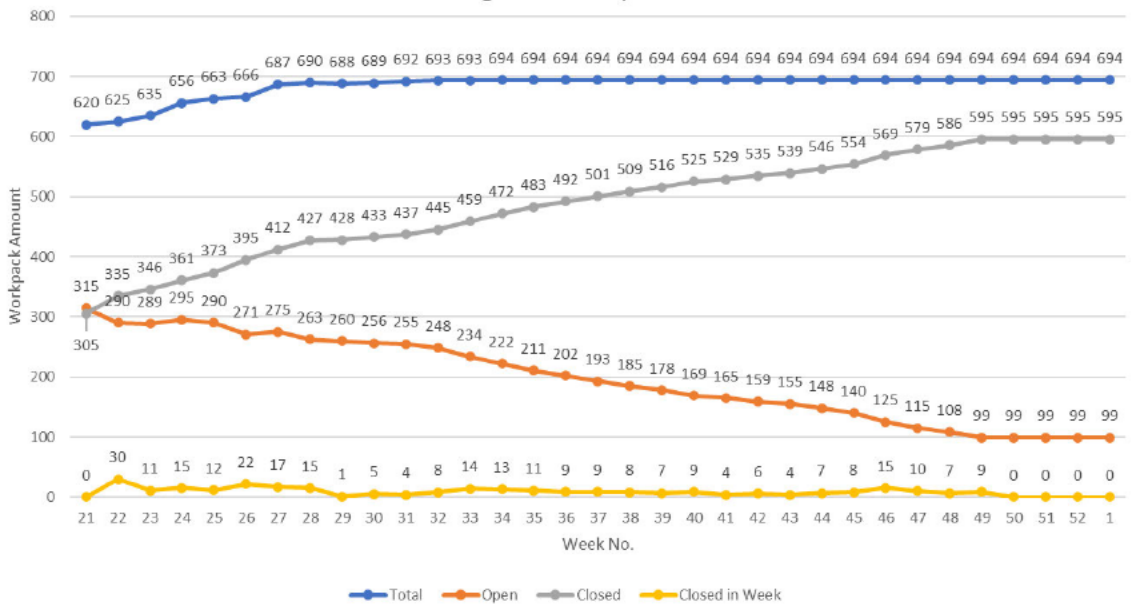
[Redacted]

Discipline	Overall Status						
	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Overall Status	R	A	A	A	A	A	A
Safety	R	R	A	A	A	A	A
Engineering- Design	R	R	R	R	R	R	R
Procurement	R	A	A	A	A	A	A
Hot-Work	R	A	A	A	A	A	A
Piping - RMPG	R	R	A	A	A	A	A
Piping - [Redac	R	A	A	A	A	A	A
Piping - [Redacted]	R	A	A	A	A	A	A
Mechanical	A	A	A	A	A	A	A
Electrical - [Redacted]	R	R	R	R	A	R	R
HVAC - [Redacted]	A	A	A	A	A	A	A
Commissioning	A	A	A	A	A	A	A
LNG	A	A	R	R	R	R	R
Lift Install	A	A	A	A	A	A	A
RO-RO Equipment						A	A

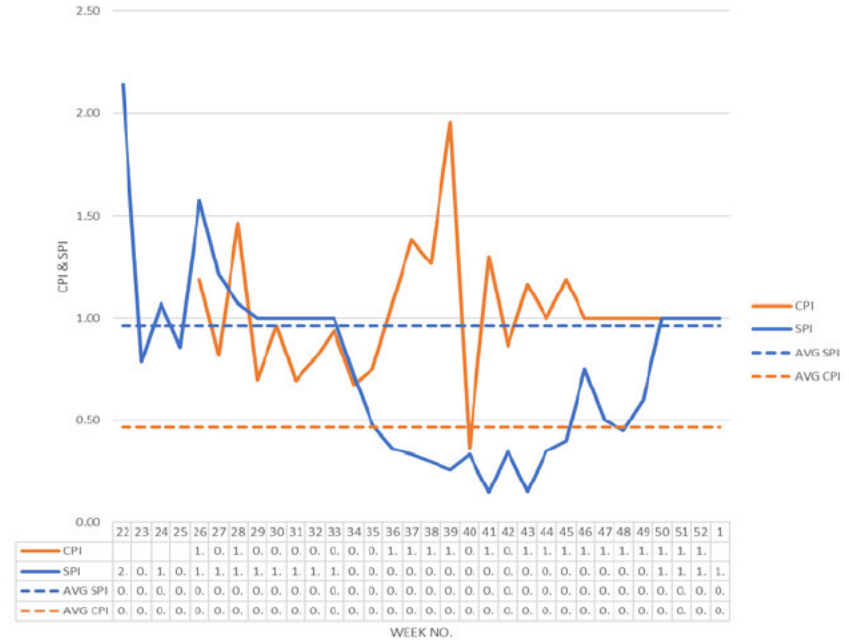
801 Hotwork Work Packs

- No [Redacted] staff onsite week 51/ week 1 to continue hotwork.
- [Redacted] staff commence works week 3 onsite.
- Currently 99 hotwork WPs remaining to completion for original scope.

Progress of Workpacks



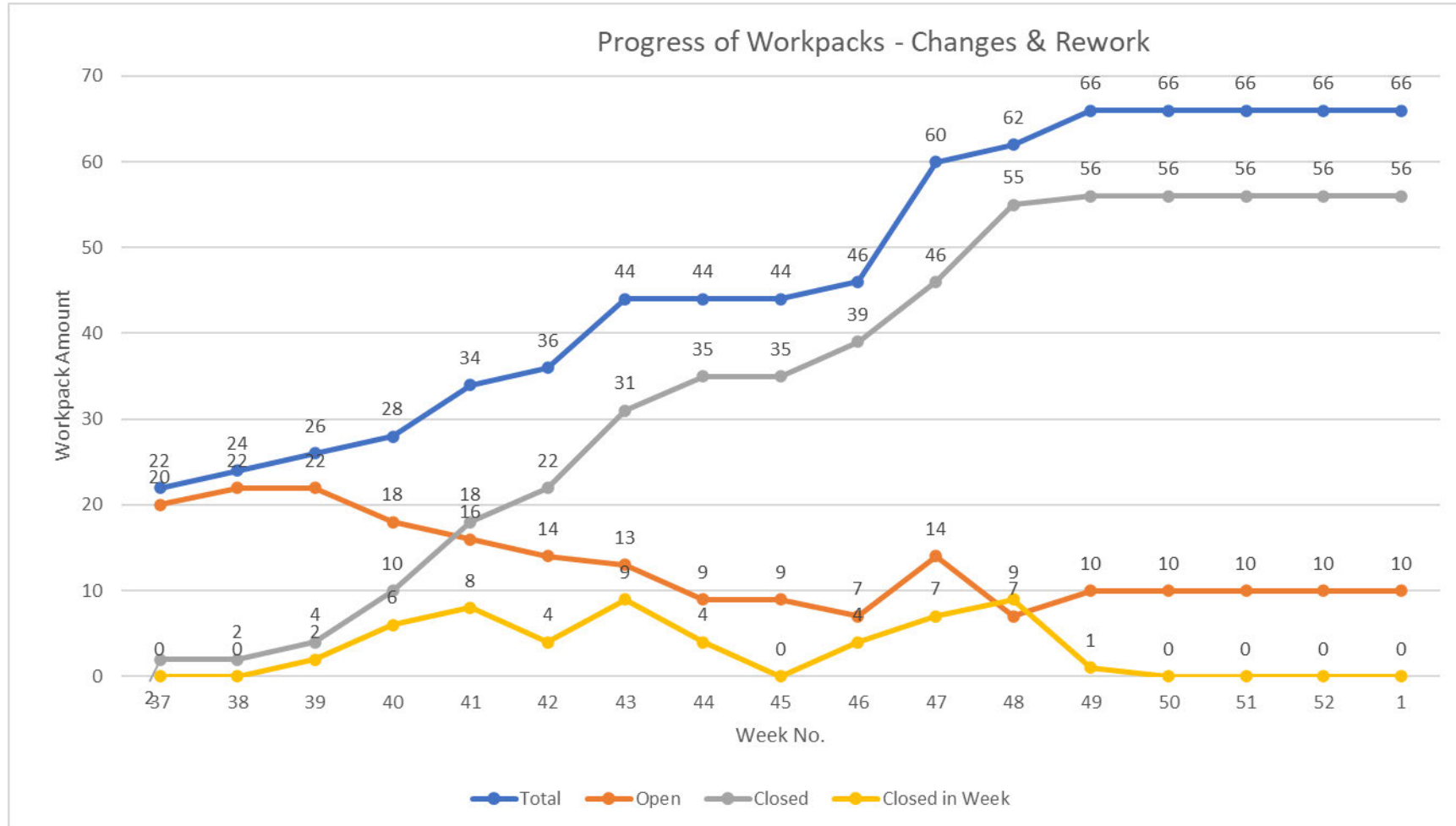
CPI & SPI



Average SPI: 0.96

Average CPI: 1.26

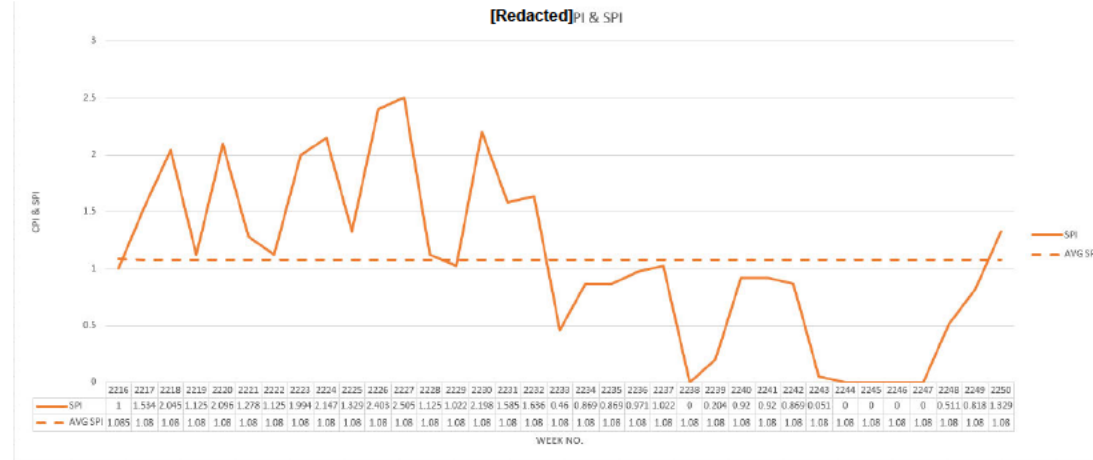
801 Hotwork Changes & Rework



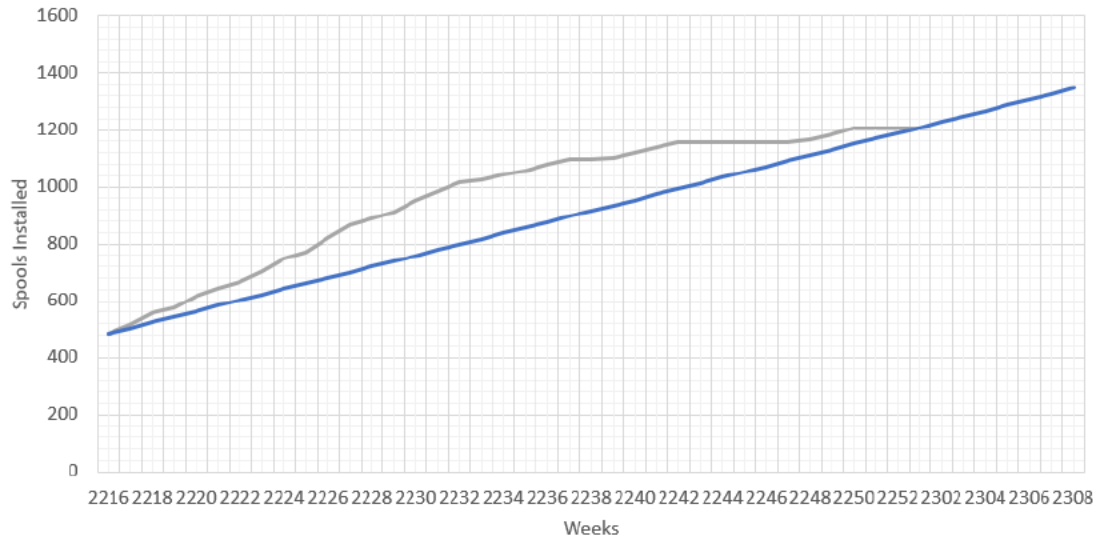
801 [Redacted] Hydraulic Pipework Installation

[Redacted]

- Additional staff now onsite
- Revised planned date now includes rework/change.
- [Redacted] now completed bow area rework and are progressing with new spool installation.
- Removal of pipework in bunker stations now commenced for repositioning of manifolds.



[Redacted] Install S-curve



Total planned spools to completion: 1346

Week 1:

Cumulative planned 1208 (90%)

Cumulative installed 1208 (90%)

Average SPI: 0.99

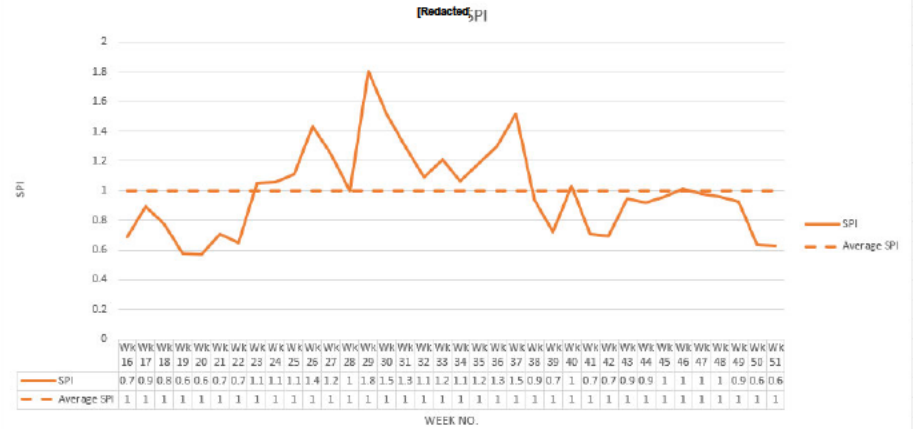
801 [Redacted] Cable Install

[Redacted] are currently working to Rev-34 of Cable Schedule.

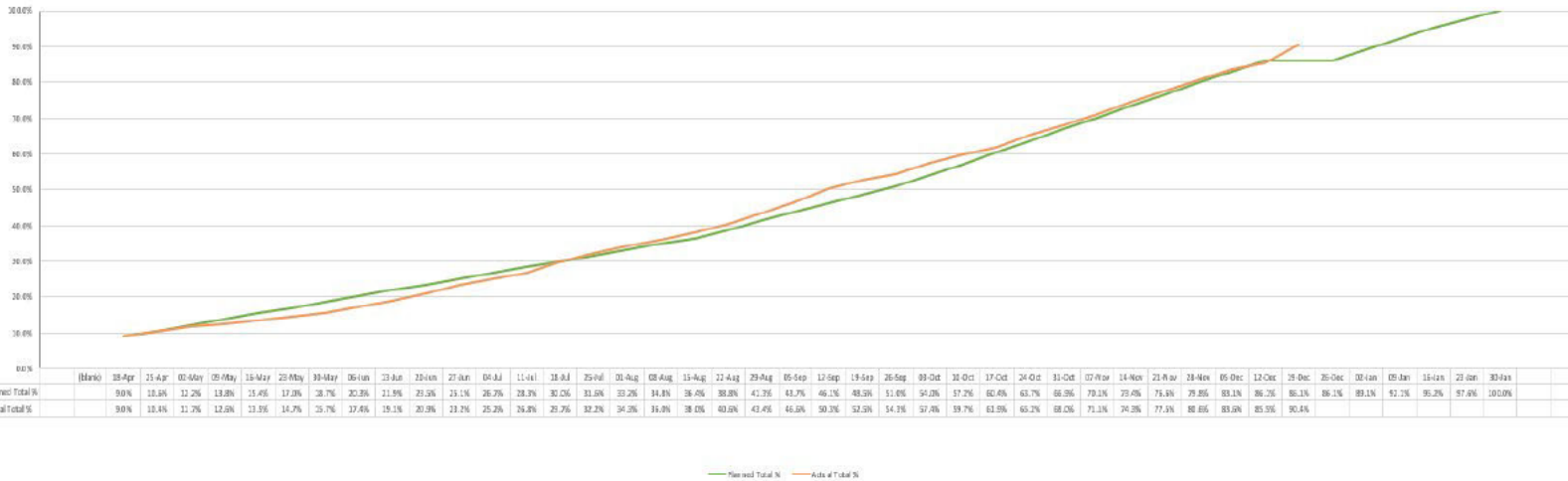
Cable install still progressing to plan, Challenges still remains a challenge as can be seen in the rapid incline within S curves and is monitored daily. Terminating/Glanding and Testing have slipped behind plan. Discussions ongoing on recovery for this hence RAG status currently red.

Installation of Priority Cabling for Systems & Gland/Terminate and Test Cables:

- Propulsion, Auxilliary Engine
- Propulsion & Thruster Control
- Main Engine & Shaft Generators
- Tunnel Thruster, Radar
- Nav Light
- Alarm & Monitoring
- Wheelhouse
- Server Room
- Instrument Room



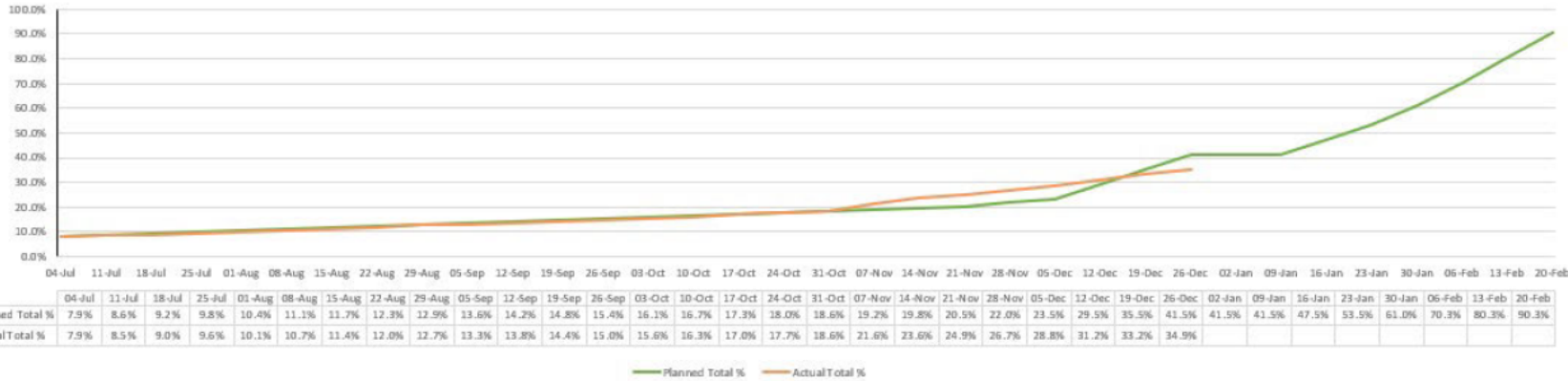
[Redacted] Ship 801 Cable Pulling



[Redacted] Glandling/Terminating and Testing



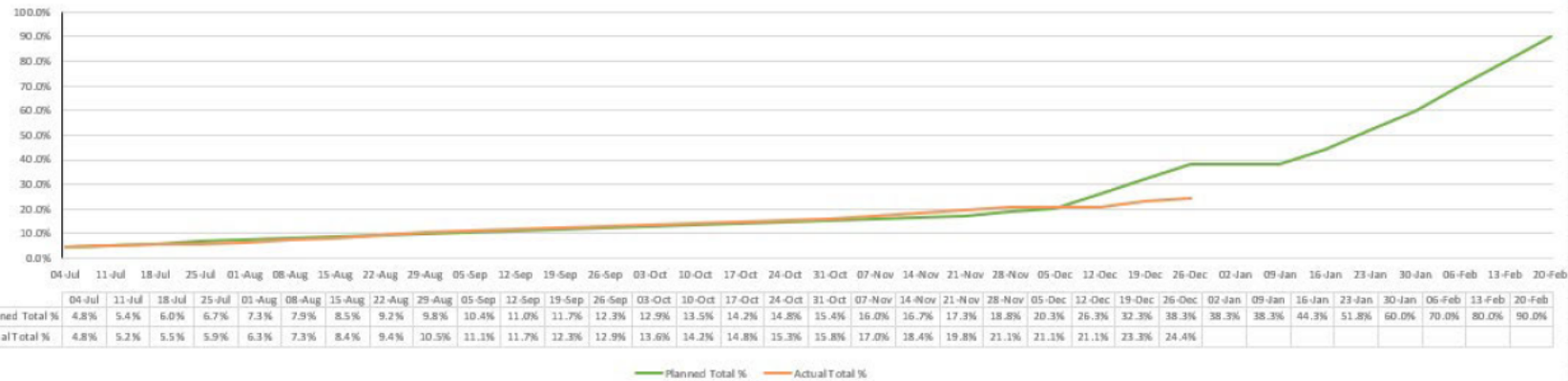
[Redacted] Ship 801 G&T



Planned G and T: 41.5%

Actual G and T: 34.9%

[Redacted] Ship 801 Testing



Planned Testing: 38.3%

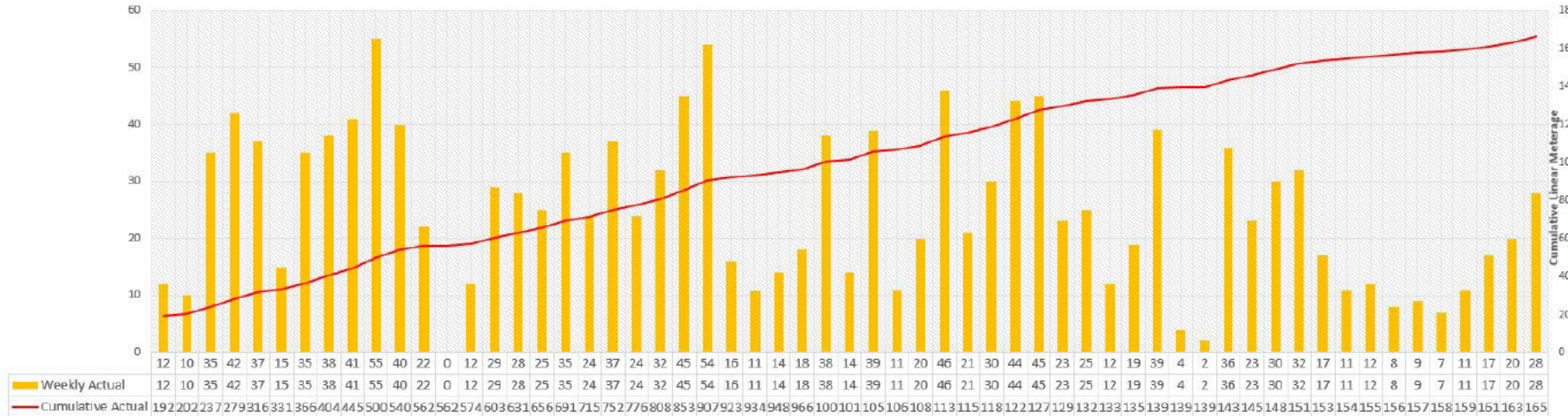
Actual Testing: 24.5%

Week 1:

Currently no major issues.

Zone	Total Metreage	Installed Metreage	%age Complete
1	32	23	71.9%
2	35	26	74.3%
3	113	80	70.8%
4	94	73	77.7%
5	14	10	71.4%
6	378	123	32.5%
7	0	0	#DIV/0!
8	280	274	97.9%
9	1096	819	74.7%
10	198	198	100.0%
11	115	115	100.0%
Totals	2355	1741	73.9%

[Redacted] Installation Progress 'S' Curve



801 Status

Engineering & Steelwork

[Redacted]cope

The remaining scope for [Redacted] on Hull 801 includes the installation of lifting wires on Mezzanine decks/ Clamshell doors and commissioning of both. In addition, we will also need support for the commissioning of the bow ramp which has yet to be installed.

[Redacted] planned to be onsite Mid January to carry out initial survey work 2023.

Steelwork

- [Redacted] Off-site Week 51-2
- Team are setting up work for the return of all hotworkers

Specialist Subcontractors

- [Redacted] continuing with bow scaffold, completion date now mid January.
- [Redacted] returning on site 9th of January. Programme of install for 801 provided by [Redacted] with a planned commission completion in early April.
- [Redacted] returned to site to progress liquid phase pipe installation.

Electrical

Priorities remain the same as previous week.

Installation of Priority Cabling for Systems & Gland/Terminate and Test Cables:

- Steering Gear
- Engineers Workshop
- Engine & Generator rooms
- AMR - Chilled Water system
- Decks 6 & 7
- Lift Shafts
- AHU Deck 6

Pipework

- Shipwide scuppers completion priority.
- [Redacted] on site working on TCS unit upgrade
- Focus now on Ship wide scuppers install.
- [Redacted] to commence in pipe and cable/ECR spaces.
- Install on Glycol pipework
- [Redacted] progressing fixed fire fighting change on upper decks
- FMPG working on compartment completion as set out by [Redacted].
- FMPG began working on fuel modification to both stabilizers
- [Redacted] completed part 1 of bow area change to stainless
- FMPG began installing LNG System in tank space

801 Status Continued

Engineering/Design/Technical:

General update

- Metrics for engineering now established for monitoring progress, data being collected (man hours spent against progress).
- Engineering continuing to submit requisitions to procurement for long lead items for all disciplines, hatches, sliding doors, pumps and valves. This continues to be a challenge.
- Work scope for completion of 801 now identified for all disciplines.
- ^[Redact] Change Requests still open with ICE reduced to 26 , with a further fall expected once ^[Redact] have reviewed FMPG responses and CRs are approved.
- Production TQs reduced to 6 from 95 in November.
- ^[Redact] Field Engineering Team support extended to end of January and 50 percent drop off expected going into February.

801 Issues, Challenges & Successes



- Issues
 - Techwind team delayed returned to site until week 4 due to COVID.
 - Additional work uncovered on Clam shell doors.
 - Engineering/Design, still seeing large amounts of change. [Still relevant this month.](#)
- Challenges
 - Clam shell door install. [Still relevant this month.](#)
 - Cable install/termination/glanding and testing. [Still relevant this month, progressing slowly](#)
 - Fire main and accommodation to resolve. [Site run pipe now complete and sent to galvanizing.](#)
 - Level of change being managed. [Still relevant this month.](#)
 - Material availability along with procurement.
 - Driving OORs to closure. [Still a challenge, process now in place with mechanism for monitoring close out.](#)
- Successes
 - Hazardous zone plan now approved by ^[Redacted]
 - LNG portside bunkering proposal submitted to CMAL for review and consideration.
 - Turbo charger upgrade nearing completion.
 - Fuel system vent piping, major modifications nearing completion with fuel bunkering (10,000 litres) scheduled 16/01/23.
 - **[Redacted]** now back onsite for commissioning following agreed on outstanding commercial issues.
 - **[Redacted]** on site carrying out service bulletin works and pre-commissioning checks on the auxiliary generators.
 - Auxiliary Generator turbo chargers have been removed from ship and had bearings changed.
 - HT/LT system has been run with mesh in place to remove any grit.
 - **[Redacted]** have commissioned the serial connections for the alarm system.
 - Alarm channel testing underway. All switchboards & MCC's signals checked as far as possible.
 - Aux Engines have been filled with oil, priming pumps run and ^[Redacted] have checked engines internally.
 - Port Engine has been filled with oil, priming pump run. Engine checked internally .
 - Demonstrated Start Air system automatics.
 - Updated software for Praxis installed.
 - Aux Engine turbo chargers refitted.

802 Level 0 Programme

802 Level 0 Programme	Ship Construction																								Ship Delivery into Service									
	2022												2023												2024									
Year	2022												2023												2024									
Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May							
Engineering/Design <small>[Redacted]</small>				[Blue bar]																														
<small>[Redacted]</small> Workpack Release																																		
Structure (Unit Construction)	[Blue bar]																																	
Structure (Unit Erection)	[Blue bar]																																	
Structure (Unit Consolidation)	[Blue bar]																																	
Hotwork Manufacturing							[Blue bar]																											
Hotwork Installation																																		
Clam Shell Doors/Ramps <small>[Redacted]</small>																																		
Mezzanine Decks																																		
Pipe Manufacture																																		
Pipework Installation																																		
HVAC																																		
Electrical Installation																																		
Outfit																																		
Launch Prep & Launch				[Blue bar]																														
Commissioning																																		
Dry Dock																																		
Sea Trial																																		
Snagging/ Delivery/ In Service																																		

Changes made to the 802 Level 0 Programme, refer to 802 Issues/Challenges slide:

- New line item added: "Hotwork Manufacture".
- Pipework completion date.
- Outfit completion.

Manufacturing Sheds

- Units A8/6, A9/6, U99, U100 awaiting erection.
- Following 6 and 7 deck units in progress: A10/6, A11/6, A4/7, A7/7, A8/7, A9/7, A10/7 (Wheelhouse). A10/6, A7/7 and A9/7 are completed and waiting to fix lifting lugs.
- Units remaining to be manufactured: FWD & AFT Masts.

Erection and Consolidation

- Consolidation of 5 and 6 deck units underway:
- Consolidation of several units in progress: A4/6, A5/6, A6/6, A7/6, U97, U98.
- Consolidation complete, awaiting dry survey: A7/5, A8/5, A9/5, A10/5, A11/5, U85, U86, U89, U90.

Outfitting

In December the main focus was structural hotwork in the lift shafts, fabrication of AMS platforms complete, installation in progress. Installation of manholes, lashing pots, embarkation doors and pilot doors, and closing plates are also in progress. Ongoing structural modifications in zone 4. Lack of ship wide scaffolding support. Installation of link up widows in 5 deck complete, welding in progress. Manufacturing of major seats in 0202 and installation of major seats in 0402 ongoing. Various work packs are on hold due to the ongoing design review by [Redact] on 802.

Pipework Installation

Continuing with [Redact] sign-off of over boards, penetrations still being burned and fitted. Pipe fitting has commenced, no pipes claimed as fitted before [Redact] sign off, which is ongoing.

- There are 61 spools in the over boards, 23 spools fitted and signed off by [Redact].
- Total amount of spools ship wide: 12021.
- Total amount of spools manufactured/procured: 4140.
- Total amount of spools installed on ship: 325.

Launch

- Launch agreed to take place in August. Meeting postponed. In diary for Wednesday 18th of Jan.

Electrical

- Contract to be re-tendered.

HVAC

- Nothing to report.

Specialist Contractors

- Currently reviewing opportunities and finalizing plan with specialist contractors.

802 Issues, Challenges & Successes



Issues

- Unit outfit in manufacturing sheds is minimal due to the lack of clean drawings.
- Purchase requisition process for material/required services proving to be time consuming.

Key Challenges

Key known challenges for Hull 802 to meet the programme:

- Manpower support. Lack of manpower available on 802.
- Material availability. A Min/Max process is in progress of being implemented which will reduce bottlenecking of work due to unavailable material.
- Delivery and completion of production drawings and accuracy of production drawings.
- Scaffolding support shipwide.
- Unit consolidation is challenging due to lack of manpower.

Successes

- Effective workforce – good progress for the limited manpower available.
- Unit fabrication on track with plan.
- ^[Redacted] delivery of Workpacks and new BOMs has ongoing with minimal delay.

Weight & Stability

Stability

- Stability book was submitted on 9th Dec to the [Redacted] . [Redacted] review is ongoing.
- Bespoke WT buffer door (semi-WT) engineering is WIP with candidate manufacturers. One company has met the technical requirements and their final offer is awaited and expected to receive it by 16th Jan.

Weight

- Interim inclining date is cancelled on 20 Jan23 and decided to carry on with final inclining only. (Interim inclining is not a part of critical path) Final inclining will be undertaken after drydocking about 7Apr23.

Other docs to deliver

- CMAL & FMPG have agreed (13/05/22) that FMEA is not required as a final deliverable document however a test pack will be created to show how the system recovers after failures. FMPG to propose a test pack format to CMAL.
- Machinery list (including serial numbers) is WIP. The commissioning team are producing and will also record last maintenance date where appropriate. This shall also cover the requirements for producing tallies. PO currently being raised.
- Operations Manual – This will be reviewed on an ongoing basis during commissioning and training of equipment.
- As built drawings for P&IDs and technical compartment arrangements have been agreed with CMAL. Other as built drawings to be agreed with CMAL
- ^[Redacted] Manuals etc will be shared on FMPG-CMAL SharePoint site to allow CMAL-^[Redacted] access for crew training/familiarization prior to delivery of document pack.

[Redacted] / [Redacted] submission update

Under Review with [Redacted]	Date sent to LR	Note
Anti Fouling Plan	15/09/2021	Part of the Eco notation, Shall be approved for ship completion hand over date as part of larger pack
Cargo Securing Manual	01/02/2022	All actions were addressed except CMAL furnished equipment (loose lashing type and certification) details are awaited to satisfy [Redacted] comments dated 18 Nov2022. In progress by CMAL since 29Nov2022. [Redacted] to provide quantity of lashing items and types
Damage Control Plan	20/04/2022	Part of Stability book. To be released after stability book approval

[Redacted] 'Copy' Approval by [Redacted] Status

Count of Approval Status	Outfit	Outfit Total	Struct. Total	Mech. Total	Elec. Total	Naval Arch. Total	Naval Arch. Total
Row Labels	Co.						
1. Awaiting Submission				3	20	1	1
16. LNG				6		1	1
3. Boilers and Machinery				3			
4. Electrical Equipment & Installations					20		
3. Conditionally Approved				2			
3. Boilers and Machinery				1			
5. Bilge Pumping Arrangements				1			
4. FRPG submitted to MCA awaiting feedback	1	1	4			1	1
1. Hull			2				
16. LNG			2				
2. Load Line	1	1					
3. Passenger and Crew Accommodation						1	1
6. Noted as Supporting Info			15	2		5	5
1. Hull			14				
16. LNG				1			
5. Bilge Pumping Arrangements				1			
6. Anchor Handling Equipment, Anchors & Chain Cables			1			5	5
Grand Total	1	1	19	13	20	7	7

[Redacted] Approval status

Count of Approval Status	Outfit	Outfit Total	Mech. Total	Elec. Total	Naval Arch. Total	CMAL Deliverable	Grand Total
Row Labels	Yes				Yes		
1. Awaiting Submission	3	3	3	9	1	4	20
11. Structural Fire Protection Plan	2	2	1				3
13. Marpol			2			1	3
15. Lifting Plan/ Use of Work Equipment	1	1					1
17. Other					1		1
4. Electrical Equipment & Installations				3			3
7. LSA and Navigation						3	3
8. Radio				2			2
9. Passenger and Crew Accommodation				4			4
2. Resolution required (inserted)	1	1	1				2
11. Structural Fire Protection Plan	1	1					1
12. Fire Extinguishing			1				1
3. Conditionally Approved	7	7	10	4	1		22
12. Fire Extinguishing	1	1	5	1			7
4. Electrical Equipment & Installations				2			2
5. Bilge Pumping Arrangements			1				1
6. Anchor Handling Equipment, Anchors & Chain Cables	2	2					2
7. LSA and Navigation	1	1			1		2
9. Passenger and Crew Accommodation	3	3	4	1			8
4. FRPG submitted to MCA awaiting feedback	4	4	22	4	11		41
10. Stability					5		5
11. Structural Fire Protection Plan	1	1			2		3
12. Fire Extinguishing			19	4			23
13. Marpol			2				2
16. LNG			1				1
6. Anchor Handling Equipment, Anchors & Chain Cables	1	1					1
7. LSA and Navigation					3		3
9. Passenger and Crew Accommodation	2	2			1		3
5. Approved			4		1		5
12. Fire Extinguishing			3				3
7. LSA and Navigation					1		1
9. Passenger and Crew Accommodation			1				1
6. Noted as Supporting Info			6	3	5		14
10. Stability					1		1
11. Structural Fire Protection Plan					1		1
12. Fire Extinguishing			4	1			5
13. Marpol			1				1
5. Bilge Pumping Arrangements			1				1
7. LSA and Navigation				1	3		4
9. Passenger and Crew Accommodation					1		1
7. N/A	1	1		3			4
11. Structural Fire Protection Plan	1	1					1
7. LSA and Navigation				3			3
Grand Total	16	16	46	23	19	4	108

- Balance of [Redacted] mechanical submissions are subject to Tyco drawing updates and commercial signoff req on now approved awaiting PO to forecast submission date.
- Review of [Redacted] contract deliverables with CMAL concluded and CMAL now responsible for 4 in number submissions (also Tracked on master FRPG)
- Electrical submissions to [Redacted] now started as forecasted.
- LNG Hazardous Zone Plans [Redacted] now approved by [Redacted], received on 5/1/23, subsequently forwarded to [Redacted] for approval on
- LNG pipework chemical analysis for upscale equivalence to 3 [Redacted] certification nearing conclusion – Reg f [Redacted] additional testing received awaiting final approval by [Redacted]. Agreement in principle with [Redacted] senior management.

CMAL Drawing Approval update

- NO CHANGE due to other priorities as these drawings will be covered when as built drawings are produced for the final sign off.
- CMAL Outfit Drawing Approval update - List now provided to CMAL and reviews undertaken on weekly basis
- P&IDs
 - 9 Systems Approved (P&IDs)
 - 23 Systems (P&IDs) to be approved by CMAL, currently these are being reviewed separately and then both parties. Details of the 4 Systems to be resubmitted to Southampton provided separately to this meeting.

Contract Specification

- There are various updates within the document which require to be internally reviewed and then presented to CMAL for agreement.

Crew Training

Training schedule (Dates for 801 and soft booking for 802 about to be confirmed by [Redacted])

1st vessel in Q1/2023

- Week 2: 9th until 13th January 2023 [Redacted]
- Weeks 6-7: 6th until 17th February 2023 Engines W20DF and W34DF operation and practical at [Redacted]
- Week 8: 20th until 24th February 2023 Engine Control system at [Redacted]
- Week 10: 6th until 10th March 2023 LNGPac at [Redacted]

2nd vessel in Q1/2024

- **Week 8:** 19th until 23rd February 2024 (Propulsion at [Redacted] or on board)
- **Weeks 9-10:** 26th February until 8th March 2024 (Engines at [Redacted])
- **Week 11:** 11th until 15th March 2024 (Engine Control at [Redacted])
- **Week 12:** 18th until 22nd March 2024 (LNGPac at [Redacted])

Still to confirm

PMS and Alarm and Monitoring system Under discussion to arrange with [Redacted]

118 TECHNICAL TRAINING FOR CREW

The Builder will provide on board training in machinery and equipment for key staff. The Builder will also provide training as detailed in the Requirement Specification and Technical Schedule, and will include:

LNG Systems	Up to 10 people (3 courses)
Navigation and Communication Systems	6 people
Communications Systems	6 people
Generators & Prime Movers	Up to 10 people (3 courses)
Propeller Units	Up to 10 people (CPP)
Power Management System	6 people
Alarm, Monitoring & Control Systems,	6 people
Lifesaving Equipment	6 people

This will be done separately from the commissioning process.

The training is to be in English and held by specialist commissioning engineers from the Builder, or representatives from sub-contractors, prior to delivery and signed off by Buyers.

Specialist LNG training (approx. 1 week per ship) will be provided to ship's crew.

Training will also include Ship Specific ECDIS training for Deck Officers.

Commissioning Update



The following has been achieved in the last 3 weeks:

- [Redacted] on site carrying out service bulletin works and pre-commissioning checks on the auxiliary generators.
- Auxiliary Generator turbo chargers have been removed from ship and had bearings changed.
- HT/LT system has been run with mesh in place to remove any grit.
- [Redacted] have commissioned the serial connections for the alarm system.
- Alarm channel testing underway. All switchboards & MCC's signals checked as far as possible.
- Aux Engines have been filled with oil, priming pumps run and [Redacted] have checked engines internally.
- Port Engine has been filled with oil, priming pump run. Engine checked internally
- Demonstrated Start Air system automatics.
- Updated software for [Redacted] installed.
- Aux Engine turbo chargers refitted.

Planned activities for the next 3 weeks.

- [Redacted] to continue with commissioning and service work on main engines.
- Fuel supply to Aux/Main engines to pressure test and flush.
- Gearbox flushing will start Tuesday / Wednesday.
- Stbd Engine to be filled with oil, priming pump run. Engine to be checked internally.
- Fill HT/LT system with inhibitor.
- Protection settings to be set on 690V switchboard
- 690/415V transformers to be energised.
- First run of Auxiliary and Main Engines.
- **[Redacted]** booked to commence commissioning of Steering Gear 30 January.

801

801 NDT Activity

- 12 MPI
- 1 DPI
- 2 UT

801 Fabrication Surveys with ^[Redacted]

- Air Test pipe pens tank No. 3 MGO drain overflow tank
- Air Test Cooling Water Drain Tank
- Block 4 Unit 60, Tank 12 Renovating Tank

Pre-Insulation Surveys complete with ^[Redacted]

- Deck 5 Passenger Stairway Port & Stbd
- Deck 5 Around windows Port & Stbd
- Deck 5 Fwd Stairway, casing external

- Deck 6 Bulkhead at door 604
- Deck 6 Fwd window on bulkhead.
-

802

802 NDT Activity

- 5 MPI
- 0 DPI
- 0 UT

802 Fabrication Surveys with ^[Redacted]

- Unit A9-7 Port & Stbd
- Port & Stbd Aft Mooring Bollards
- Stairwell 12, 36 & 37 Stairwell infills

- Comments
- AOB

CMAL Top Priority OOR's	Cat 1	Cat 2	Cat 3	Overall
Committed	8	1		9
Close when work complete	8	3		11
Still to resolve	1	1		2
CMAL Priority OOR's Totals	17	5	0	22

All other OOR's	Cat 1	Cat 2	Cat 3	Overall
Total Committed	15	4	0	19
Close when work complete	14	6	2	22
Still to resolve	0	0	1	1
All other OOR's Totals	29	10	3	42

Totals	46	15	3	64
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Submit to CMAL for closure

	Cat 1	Cat 2	Cat 3	Overall
Total Committed	10	3	1	14
Close when work complete	16	8	1	25
Still to resolve		3	0	3
Submitted to CMAL to close Totals	26	14	2	42

Overall Total	106
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Category 1 - Must be done before handover

Category 2 - General / Specification Issues to be done - may carry over to warranty period

Category 3 – Snagging

- All OORs that were not closed have been reviewed before year end
- All CWWC have had physically verified onboard
- Robust year-end review resulted in a 40% reduction in open OORs presented to CMAL for closure through agreed channels
- Of the 64 remaining, action plans defined round WHO/WHAT/WHEN have been compiled with administrative staff now appointed to support with tracking & reporting activities