

### Planning/Programme

- Hull 801, 2 months on from the launch, there has been no significant progress on the vessel.
- There is a lack of personnel, skills and experience, the yard are short of Design Draughtsmen, Engineers, Steelworkers, Welders, Pipefitters, Engineers, Cleaners and experienced Coating personnel.
- Hull 801, as of 22<sup>nd</sup> January 2018 – 97.5% fabrication achieved. Original date for 100% fabrication 16<sup>th</sup> January 2017. Currently 12 months (and 2.5% in terms of fabrication) behind schedule.
- Delivery Hull 801, the latest delivery date from FMEL is 28<sup>th</sup> October 2018. CMAL guestimate for delivery is **12 to 15 months** from now, this is on the assumption that there is an acceleration in all aspects of the design and construction. For 801 to be in service for the start of the 2019 summer timetable; an end February 2019 delivery date needs to be achieved to allow CFL 4 weeks familiarisation before the vessels enters service. MCA may require 8 weeks familiarisation for crew to become LNG certified, as such an end January 2018 delivery would be required to have the vessel in service for April 2019.
- Delivery - Hull 802: FMEL are to advise new date for delivery. given current progress, **guestimate for delivery of 802 is end Dec 2019.**
- We have yet to receive any plans from the yard for both vessels.

### **Workforce**

Quality control manager started early January 2018.

Pipework draughtsman left FMEL January 2018.

FMEL lack resource in all areas; management/supervision, technical and production.

### **Manoeuvring and Berthing Simulation Tests**

Updates (modification to astern running) have been made to the software for the ship model. Further testing to be carried out at the Glasgow College facility on Thursday 15<sup>th</sup> February 2018.

A further visit to the simulator arranged for Monday 05<sup>th</sup> March 2018 to include options for alteration of arrangements at Ardrossan.

CFL have requested an additional gun port on the stbd side of the vessel for operations at Uig. We have asked FMEL to consider this as a VTC. We expect FMEL will claim permissible delays as well as additional costs.

# Agenda Item 8 – Project Updates

## Dual Fuel Vessels 1 & 2 – Progress update

### Photographs – 801/802



### Photographs – 801



### Photographs – 802



YARD NO. 801									
Milestone	Original Scheduled Date See Note 1	Revised Scheduled Date See Note 2	Revised Scheduled Date See Note 3	Revised Scheduled Date See Note 4	Revised Scheduled Date See Note 5	Revised Scheduled Date See Note 6	Revised Scheduled Date See Note 7	Actual Date	Comments
<b>Cutting of Steel</b>	15 Dec 2015	15 Dec 2015	-					15 Dec 2015	Achieved on original scheduled date Rev 01
<b>10% Fabrication</b>	18 Apr 2016	13 Jun 2016	-					10 Jun 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule Rev 03
<b>25% Fabrication</b>	14 Jun 2016	26 Jul 2016	-					04 Aug 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule date rev 03
<b>35% Fabrication</b>	15 Aug 2016	12 Sep 2016	-					06 Oct 2016	Achieved 8 weeks later than original schedule Rev 01 Achieved 4 weeks later than revised schedule Rev 03
<b>50% Fabrication</b>	14 Oct 2016	14 Oct 2016						09 Dec 2016	Achieved 2 months later than original and revised schedules
<b>Major Equipment and Lock Out Items Installations</b>	14 Nov 2016	13 Mar 2017 to 18 Jan 2018	-	14 <sup>th</sup> June 2017	16 <sup>th</sup> July 2017			16 <sup>th</sup> July 2017	Not all major equipment has been delivered/installed: Electrical Switchboards, Propellers/Shaft lines/, RoRo Equipment still to be installed.
<b>75% Fabrication</b>	15 Dec 2016	15 Dec 2016	10 Feb 2017					31 <sup>st</sup> March 2017	Achieved 3 and a half months later than originally scheduled.
<b>100% Fabrication</b>	16 Jan 2017	16 Jan 2017	16 June 2017	10 <sup>th</sup> July 2017	15 <sup>th</sup> Sep 2017				97.5% Fabricated. Original date for 100% fabrication was: 16 January 2017. Currently 12 months (and 2.5% in terms of fabrication) behind schedule.
<b>Berth Join Up</b>	14 Mar 2017	28 Apr 2017	14 Jul 2017	15 <sup>th</sup> Aug 2017	06 <sup>th</sup> Oct 2017			17 <sup>th</sup> Nov 2017	Achieved 8 months later than original schedule
<b>Hull Inspection Prior to Paint</b>	17 Apr 2017	26 May 2017	21 Apr 2017	24 <sup>th</sup> July 2017	tba			18 <sup>th</sup> Aug 2017	Partial area inspected only.
<b>Launch</b>	14 Aug 2017	24 Aug 2017	24 Aug 2017	24 Aug 2017	21 <sup>st</sup> Sep 2017	21 <sup>st</sup> Nov 2017		21 <sup>st</sup> Nov 2017	The status of the drawings, outfitting and installation several months behind schedule.
<b>Delivery</b>	25 May 2018	29 Jun 2018	25 May 2018	25 May 2018	25 <sup>th</sup> May 2018		28 <sup>th</sup> Oct 2018		

Note 1: From Cardinal Programme Rev 01 dated 14 Dec 2015  
 Note 2: From Cardinal Programme Rev 03 dated 16 May 2016  
 Note 3: Email from FMEL 09 Dec 2016  
 Note 4: 12<sup>th</sup> May 2017  
 Note 5: Emails Week 28/2017

Note 6: Email 04 Sep 2017  
 Note 7: Meeting FMEL 03 Nov 2017

YARD NO. 802									
Milestone	Original Scheduled Date See Note 1	Revised Scheduled Date See Note 2	Revised Scheduled Date See Note 3	Revised Scheduled Date See Note 4				Actual Date	Comments
<b>Cutting of Steel</b>	15 Dec 2015	15 Dec 2015	-					15 Dec 2015	Achieved on original scheduled date Rev 01
<b>10% Fabrication</b>	18 Apr 2016	13 Jun 2016	-					10 Jun 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule Rev 03
<b>25% Fabrication</b>	14 Jun 2016	02 Aug 2016	-					04 Aug 2016	Achieved 2 months later than original schedule Rev 01 Achieved in line with revised schedule date rev 03
<b>35% Fabrication</b>	15 Aug 2016	26 Sep 2016	-					06 Oct 2016	Achieved 8 weeks later than original schedule Rev 01 Achieved 2 weeks later than revised schedule Rev 03
<b>50% Fabrication</b>	14 Oct 2016	18 Nov 2016	20 Jan 2017					13 Jan 2017	Achieved 3 months later than original schedule Rev 01
<b>Major Equipment and Lock Out Items Installations</b>	14 Nov 2016		TBA	16 Oct 2017					"Installation" of all the "Major Equipment" has not been commenced on the 14th November 2016 as per original plan.
<b>75% Fabrication</b>	15 Dec 2016	19 Jan 2017	05 May 2017	22 Sep 2017					60% Fabricated. Fabrication at a standstill. Less than 5% achieved in the last 8 months. Original date for 75% fabrication was: 16 December 2016. Currently 13 months (and 15% in terms of fabrication) behind schedule.
<b>100% Fabrication</b>	16 Jan 2017	20 Feb 2017	20 Oct 2017	13 Oct 2017					FMEL to advise new date.
<b>Berth Join Up</b>	14 Mar 2017	05 Jan 2018	14 Dec 2017	10 Nov 2017					FMEL to advise new date.
<b>Hull Inspection Prior to Paint</b>	17 Apr 2017	02 Feb 2018	24 Nov 2017	31 Oct 2017					FMEL to advise new date.
<b>Launch</b>	12 Oct 2017	20 Mar 2018	12 Jan 2018	17 Nov 2017					FMEL to advise new date.
<b>Delivery</b>	26 Jul 2018	29 Aug 2018	26 Jul 2018	26 Jul 2018					FMEL to advise new date

Note 1: From Cardinal Programme Rev 01 dated 14 Dec 2015

Note 2: From Cardinal Programme Rev 03 dated 16 May 2016

Note 3: Email from FMEL 09 Dec 2016

Note 4: 12 May 2017