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Edward Mountain
Convenor
Net Zero, Energy & Transport Committee
Scottish Parliament
EH99 1SP

30 June, 2023

Dear Mr Mountain,

Quarterly update on Glen Sannox, Hull 801 & Hull 802

In May 23, the Cabinet Secretary confirmed the end of the due diligence process that the sponsoring team had been running since we set out £202.6m forecast costs to complete, to them on 23rd Sept '22 and to the NZET committee 28th Sept '22. The positive outcome from that process is welcome news for the future of the yard and the learning from the process has increased our rigour in the evaluation of risk registers.

Since setting out the September forecasts, we have dealt with a large amount of re-work on Glen Sannox and we estimate that this is in the region of ~£20m arising from 4 main categories – Owner Observation Reports for specification compliance; Replacement of non-compliant equipment and systems/pipework (some of which are proving very difficult to resolve); Steelwork modifications to facilitate new design or different equipment; and Costs from sub-contractors for their services for modifications and design changes. Regrettably, re-work issues continue to arise and will probably not fully close out until handover. This has significantly increased the overall scope of work since we set out the forecasts last September.

The cost to complete Glen Sannox is now estimated at £114m plus a contingency of £4m compared to the September forecast of £94.8m plus £2.7m contingency. It should be noted that £108m of this has been spent and/or committed to date and within the ~£6m still to spend, nearly £3m relates to FMPG direct staff and overheads. We therefore aim to close within the estimate and to only need the contingency for unplanned issues – for example, as noted below ref final approvals.

Within the £202.6m budget set out 10 months ago in Sept '22, the forecast cost to complete 802 was £101.6m plus £3.5m contingency (£105.1m) and our latest forecast is ~£109m, less our ambitions still to deliver some gain from "second ship" learning of up to ~£6-7m. Hence, as I set out to the Public Audit Committee earlier this month, we remain targeted at staying within the £105.1m budget for 802.

I have agreed with the sponsoring team within SG that I will update on the final out-turn costs for Glen Sannox and provide more details on the costs of re-work as we complete commissioning and handover trials during the rest of the year. We currently aim to launch 802 at the end of November and I will update on the forecast cost to complete 802 at that time.

In my letter to you 28th Sept '22, I noted my recommendation for a £3.5m provision for each ship for the 12-month warranty obligations FMPG has under the build contracts (and to include the provision of a 'Guarantee Engineer' to support the ship) – we need to agree this with SG as an additional operating budget above the build budgets once the handover is concluded. This will be required from handover and then will run into the next financial year '24/'25 commencing 1st April '24 for Glen Sannox and 802 will have a similar requirement in FY '25/'26.

The Public Audit Committee recently raised a question about why vessel 802 appeared to be costing more than Glen Sannox. For clarity, I confirmed in evidence to the PAC, that when the costs by FMEL and FMPG are added together - and consideration is given to the different states of completion of the two ships when FMPG took over in in late 2019[1] - 802 will, overall, be at a significantly lower cost than Glen Sannox.

I am pleased to confirm that we have made good positive progress with both ships and significantly increased our knowledge of the complexity of the "First of Class" aspects of these vessels and their systems. We have had all the main machinery running, propellers turning, thrusters running and navigation equipment operational on Glen Sannox, with Lloyds Register Classification surveyors witnessing tests and progressively signing off key stages of bringing the ship to life. We remain confident that we can transfer the learning from Glen Sannox into a faster, more efficient, and more robust outfitting & commissioning programme for 802.

Within the ~£54m cost to go forecast for 802 from end of May '23, there is ~£21m for internal costs of direct labour and overheads and ~£33m for external costs with contractors and for materials. We still aspire to out-perform these forecasts as we learn from Glen Sannox and progress with 802 – hence the stretch target noted above.

Earlier in this month, we successfully lifted the wheelhouse and the last 2 modules for deck 7 accommodation onto 802 and the vessel will complete structural consolidation in the next few weeks. In contrast to Glen Sannox, we are planning for the funnels and masts to be installed as completed and outfitted units ready to 'plug-in' later in the year.

We set out revised contract delivery dates of latest end December '23 for Glen Sannox and end December '24 for 802 and these were also confirmed by the CabSec in May, noting our aspirations earlier this year to continue to try to deliver both ships earlier than these 'backstop' dates.

Regrettably, as noted above, we continue to find re-work on Glen Sannox as we close the design gaps and build issues and as part of this, we close the final approvals processes with CMAL as client reps for Scottish Ministers and with Lloyds & the Maritime Coastguard Agency (MCA).

Issues, some complex, continue to arise from design and build decisions made in 2015-2017, exacerbated by changes in key contractors and designers in the recovery from administration in 2019 and other factors – as I set out in evidence to the Public Audit Committee earlier this month.

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[1] *FMPG will have been responsible for ~70% of 802 (~50% of Glen Sannox)*

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Some issues have just surfaced over the last month with the MCA, and our plans for a few days in dry-dock in September have had to move to December[2]. We will update separately on any work scope and procurement challenges that may arise from this over the next month. It's clear and regrettable, that having 100% confidence in the delivery date for Glen Sannox will remain a challenge monthly as we progress through commissioning, snagging and handover trials during the rest of the year.

In contrast, I confirm that there is a good working relationship between the key stakeholders in addressing these final stages of a long, complex, political and media challenged project, and there have also been some positive aspects. The FMPG team believe these ships will more than satisfy all the key technical and operational aspects once finally delivered and the LNG vacuum sensor skids – a significant issue in previous reports to you - were dispatched from the supplier well ahead of schedule and are now on site ready for installation.

We are making good progress with commissioning Glen Sannox with the MGO diesel fuel systems before we commission the alternative fuel LNG[3] system. The LNG system can only be proven once we have agreed where the very low temperature LNG (-170 degree C) can be safely loaded on to the ship and the once the integrity of machinery has been first proven with the MGO fuel. We expect decisions to be made during the next 3 months and this highlights that Glen Sannox will be the first ship to be built and commissioned in the UK with LNG and there could be unforeseen issues during the final commissioning processes.

As is standard shipbuilding practice we will run "builders' trials" first followed by "owners' trials", and then move to snagging and client (CMAL as SG reps) handover trials for this complex vessel during Q4 '23.

We have started regular programme meetings with Calmac, Transport Scotland and CMAL now also in attendance and understand that Calmac will need 1-2 months for mobilisation after we have handed the vessel to CMAL. Subject to the key issues noted above and positive progress with final snagging and trials, Glen Sannox should be available for passengers in Spring '24.

Yours sincerely,

David Tydeman
Chief Executive Officer

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[2] *Dry-docking in September could have resulted in the ship being trapped there with another vessel which requires 3-4 weeks in dock.*

[3] *There appears to have been some confusion about the LNG and MGO diesel systems and how separate they are. Since this letter is made public, and for the benefit of readers, I advise that the switch of fuels between the same engine running on LNG or diesel, will be seamless and, rather akin to a hybrid car switching between battery and a petrol engine in a way that is almost unnoticeable to the driver, the switch on board ship will not be easily noticeable to passengers.*