



**ES/2022/007**

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**Department for Energy Security  
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Dear [REDACTED]

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING  
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS  
2020**

**NOTICE UNDER REGULATION 12(1)**

**The Captain EOR Stage 2 Phase II Project**

The Offshore Petroleum Regulator for Environment and Decommissioning (“OPRED”) acting on behalf of the Secretary of State for Energy Security and Net Zero (“the Secretary of State”) is currently considering the Environmental Statement (“ES”) in relation to the above project. Ithaca Energy (UK) Limited is hereby required to provide further information in relation to the following:

<b>ES REFERENCE PAGE</b>	<b>COMMENT</b>
-	Please confirm that the low, mid and high cases refer to the P10, P50 and P90 cases.
Page 3-10	Table 3-5 illustrates the length and sections for each polymer injection well to be drilled. Does the drill cuttings modelling included in the ES in Appendix C include contingency sections (i.e. increased cuttings quantities) that have now been applied for under the drilling screening direction applications?
Page 7-5	Further information provided on 26 January 2023 (“the further information”) discusses the amount of gas required for use in the fired heaters on the FPSO (please refer to comments #33 & 41 in Regulation 12(1) letter sent 9 December 2022). Please clarify, for the low and mid cases, the anticipated length of time that there will be sufficient gas to run the fired heaters. The example given in the further information states that in the high case, there will be sufficient gas for 800 days during 2025-2027 timeframe. Please also quantify the reduction in diesel demand in the fired heaters in the low and mid cases as a result of using the gas.

	Please also confirm that in the low, mid and high cases, after 2027, whether there will be sufficient gas e.g. more than 900 mscf/d, for use in the fired heaters.
Page 7-7	Please add into updated Table 7-4 from the further information, the incremental increase in venting from the FPSO as a result of the low, mid and high cases.
Page 7-7	Please confirm the incremental increase in venting as a result of the high case e.g. by way of updating Table 7-5.
Page 7-8	Please refer to comment #49 in Regulation 12(1) letter dated 9 December 2022. Please clarify whether the fugitive emissions in Table 7-6 are correct, and that these emissions in 2019 are expected fugitive emissions of a typical operating year.
Page 7-9	<p>The further information and update to Table 7-7 (please refer to comment #50 in Regulation 12(1) letter dated 9 December 2022), shows a decrease in the fuel used compared to the original estimation. For example, 20 offloads in the original table used 220t of fuel. The updated table shows a fuel use of 203t. This example is repeated within the table. Please clarify why the fuel use is lower than previously stated.</p> <p>Please also include in the updated table 7-7, additional columns to show the incremental increase in offloads compared to the without case, for number of offloads, vessel fuel use and emissions as a result of the Stage 2 Phase II project.</p>
Page 7-10	Please clarify whether Figure 7-3 (please refer to comment #51 in Regulation 12(1) letter dated 9 December 2022) is to be replaced with the new Figure 11 in the further information response.
Page 7-11	Please include information within Table 7-8 to include the incremental increase in sailings per year, the associated fuel consumed and emissions for the Stage 2 Phase II project.
Page 7-11	Please refer to comment #54 in Regulation 12(1) letter dated 9 December 2022. Please provide the calculation for the total hydrocarbons use (t) in Table 7-9 e.g. provide references to the tables in the ES that add up to create the hydrocarbon use total.
Page 7-13	Please add into Table 7-11, the incremental increase in the total TeCO <sub>2</sub> e emissions, for the low mid and high cases.
Page 7-13	Please add into the updated Table 7-12 from the further information, the GHG intensity by year for the incremental changes for the low mid and high cases.
Page 7-13	Please refer to comment #65 in Regulation 12(1) letter dated 9 December 2022. Can you clarify the GHG intensities for the year 2023 for the low, mid and high cases in the updated Table 7-12?
Page 7-13	Table 7-12 of the ES (please refer to comment #65 in Regulation 12(1) letter dated 9 December 2022) provides GHG intensity for all cases for the length of the project. Table

	10 in the FDP(A) states that the base case emissions intensity is 32.9 (t CO <sub>2</sub> /MBOE). Table 10 also states that the GHG intensity for the EOR Stage 2 expansion is 22.1 Please clarify the differences in these GHG intensities.
Page 7-13	The updated Figure 7-4 (please refer to #58 in Regulation 12(1) letter dated 9 December 2022) does not align with Figure 22 in the FDP(A). Please clarify why there is a difference in these figures
Page 7-19	Please include in Table 7-17 additional information to include the incremental GHG intensity for all 4 cases for the years 2025, 2027 and 2030.
Page 7-19	The further information has updated Table 7-17 however it is not clear in the updated table that the GHG intensity estimates for the base, low, mid and high cases are weighted averages for the life of the EOR project (12 years) (please refer to comment #61 in Regulation 12(1) letter dated 9 December 2022). Please provide a clearer description for each case such as by updating Table 7-17.
Page 7-19	Please include in Table 7-18, the incremental increase in production at Captain for the low, mid and high case.
Appendix A	Please refer to comment #71 in Regulation 12(1) letter dated 9 December 2022. The further information has stated that the after the ENVID was conducted, the climate change magnitude of effect was lowered from Minor (2) to Low (1). Please detail the justification for this change.
Appendix A	The further information has stated that the after the ENVID was conducted, the receptor sensitivity on the impact of flora and fauna for discharges to sea was considered to be A (low), and was changed from B (medium). Please detail the justification for this change.
Appendix E	Please refer to comments #73, #74 & #81 in Regulation 12(1) letter dated 9 December 2022. The further information has added additional tables 22 and 23, that are related to production. It is acknowledged that there are errors with the original data provided in Table D1 and D2. Please clarify that Tables D1 and D2 have been updated with the new data, and again, that the updated tables (tables 22 & 23 in the further information) have been used in all the emissions calculations, such that these calculations in the ES do not need to be updated.

Your response will be reviewed, and consideration given as to whether the information provided ought to be made public because the information is directly relevant to reaching a conclusion on whether the project is likely to have a significant effect on the environment. If so, OPRED will notify Ithaca Energy (UK) Limited under Regulation 12(3), and Ithaca Energy (UK) Limited will have to take further steps to publish

information and make provision for further public consultation under Regulations 12(5) to 12(9).

OPRED looks forward to receiving your response so that we can progress our consideration of the ES.

Yours sincerely



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The Offshore Petroleum Regulator for Environment and Decommissioning  
For and on behalf of the Secretary of State for Energy Security and Net Zero