



4th November 2021

Committee Secretariat,

Senate Standing Committee on Economics

Submission to the inquiry into the Offshore Petroleum (Laminaria and Corallina Decommissioning Cost Recovery Levy) Bill 2021 {Provisions} and Treasury Laws Amendment (Laminaria and Corallina Decommissioning Cost Recovery Levy) Bill 2021 {Provisions}

The two Bills, the subject of this submission, possibly do not need to be amended to allow the Laminaria and Corallina oil fields and their associated production facilities to be assigned to Timor Leste in their current condition to the government of Timor-Leste. The fields should not be decommissioned since that would deprive the people of Timor Leste the opportunity recovering the remaining oil reserves in what should be their oil fields. To date, all their other reserves have been exploited by Australian interests. Additionally, the two Bills do not appear to require amendment to allow the proceeds of the Decommissioning Cost Recovery Levy to be assigned in total, to the government of Timor Leste and to continue until such time as the current target cost of decommissioning the two fis and associated production facilities is achieved.

An assessment was made of the potential of recovering additional oil reserves from the Corallina oil field by applying tertiary recovery (enhanced oil recovery – EOR) technology. The work was undertaken on a voluntary basis by colleagues in the USA. and was possible because Corallina had only two producing wells enabling a relative quick means of history matching the reservoir model with actual production data. NOGA management provided historical production data for the individual wells of the Laminaria and Corallina oil fields. This data is normally held as confidential between leaseholders and NOPTA and as such, unavailable for third parties.

Once the model was history matched, it was used to simulate tertiary recovery (enhanced oil recovery or EOR) possible from the Corallina field. Simulating the injection of nitrogen into the Corollina field indicated an incremental recovery in excess of 30 million barrels was possible.

It is worth noting that production of more than 100 million barrels of crude oil from the Corollina field was achieved with only two wells (Corallina #2 and #3) with Corallina #3 producing 77 million barrels, possibly Australia's (and certainly Timor Leste's) most prolific oil well.

A reservoir model was not prepared for Laminaria. The results from the simulation of EOR of Corallina was meant to be indicative of what could be expected from Laminaria. Recoveries could be expected to be improved with in-depth studies using existing detailed reservoir models of Corallina and Laminaria oil fields.

It should also be recognized that producing 100 million barrels from an oil field with only two wells provides considerable scope for technology to improve the sweep of oil from the reservoir and for tertiary recovery. The March 2019 RISC reserve study undertaken for NOGA had conventional 2P proven reserves of 8.7 million barrels and conventional 2C contingent resources of 16.8 million barrels mostly from Laminaria South development.

The results from the Corallina EOR simulation were provided to Minister Pitt and to the Northern Endeavour Task Force on 9th September 2020 and 9th November 2020, respectively together with a recommendation for a more detailed simulation of both fields. The cost of the studies was expected to be less than US\$1 million and could be completed in less than six months particularly if existing reservoir models of the fields were made available. The Autoridade Nacional do Petroleo e Minerais (ANPM) of the Timor Leste Government was also provided with the results of the Corallina EOR simulation in February 2021 with a recommendation that it should enter discussions with the Australian Government with a view to the transfer of the fields to Timor Leste without their decommissioning, together with a cash payment for their decommissioning in the future by Timor Leste.

An earlier response from the Minister was that the Taskforce was receiving industry advice on the future of the LamCor project. Woodside on the 20th June 2020, advised it was only advising NOPTA on abandonment options and not on the upside potential of the fields. Apart from NOGA, Woodside appeared to be the only member of the industry with access to the necessary data and information to evaluate the upside potential of the fields for the Taskforce. The attached animated simulation of the EOR potential of Corallina made possibly by data supplied by NOGA, appears to be the only attempt to consider anything but abandonment of the fields and the Northern Endeavour

The Australian Government has no appetite for anything but abandonment of LamCor. The decommissioning including the plug and abandonment of the wells, will mean the irreversible loss of the

reserves that otherwise could have been recovered by tertiary recovery technology as demonstrated above by the Corallina simulation.

Rather than plug and abandon the wells, it is recommended that the Australian Government enter discussions with the Timor Leste Government with the aim of transferring ownership of the fields to Timor Leste with the wells and facilities in their current condition. Additionally, it is also recommended that Australia continue to collect the levy recently imposed on Australian offshore operators and assign those funds to the government of Timor Leste for its future EOR development and ultimate abandonment of the fields. This would appear to be a just and fitting approach to rectifying past perceived inequities while honouring the terms of the 2018 Maritime Boundary Treaty.

Yours Sincerely,

