SUBMISSION BY JOHN IMLE, TECHNICAL CONSULTANT TO OCEANIC EXPLORATION COMPANY LIMITED AND PETROTIMOR DE PETROLEOS SARL, TO THE JOINT STANDING COMMITTEE ON TREATIES ON PROPOSED TIMOR SEA TREATY BETWEEN THE GOVERNMENT OF AUSTRALIA AND THE GOVERNMENT OF THE DEMOCRATIC REPUBLIC OF EAST TIMOR

1. BACKGROUND AND QUALIFICATIONS

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- 1.1 Mr Imle has 40 years' experience in the international energy business. He retired two years ago from Unocal Corporation, a large U.S.-based independent energy company with extensive international holdings, particularly natural gas in Asia. He served as president of the Corporation, then as vice chairman and for 10 years was a member of Unocal's Board of Directors.
- 1.2 Trained as a petroleum engineer, Mr Imle served as a project manager for major offshore design and construction projects in Alaska and the North Sea. Later, he was the senior executive for all Unocal's worldwide oil, gas and geothermal exploration and development activities. His executive experience includes major natural gas development projects and commercial gas arrangements in the United States, Thailand, Myanmar and Indonesia (where Unocal's gas was processed by the giant Bontang LNG plant).
- 1.3 He has been directly responsible for the highest-level negotiations with host governments for long-term resource contracts and renewals in Thailand, Philippines, Myanmar, China, Bangladesh, India, Turkmenistan, Pakistan, Vietnam and Azerbaijan. In Azerbaijan, he was the architect of the well-known international oil consortium that successfully negotiated a long-term highly successful production sharing agreement with this new nation. The consortium was crafted to spread the political risk among as many nations as possible, thereby reducing the real risk significantly. Risk spreading and risk reduction for East Timor is certainly possible with the appropriate commercial arrangements.
- 1.4 Mr Imle is also a founding member of the Business Humanitarian Forum, a Geneva-based non-profit created to help business and humanitarian groups work together for benefit of their host countries, especially in the developing world. His work with the Business Humanitarian Forum reinforces manifest industry evidence that the stability of new nations especially those emerging from conflict can best be enhanced by private sector investment, which provides jobs, dignity and self-reliance. At this point in its history, there is nothing that East Timor needs more than foreign investment on a large scale. The processing of its own natural resources is the only feasible way for this to happen.

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2. EAST TIMOR HAS NEVER BEEN GIVEN ITS DUE CONSIDERATION AS A POSSIBLE SITE FOR THE TRANSPORT, PROCESSING AND EXPORT OF GAS

- 2.1 This was understandable since when these discussions on the development of these oil and gas resources first began, East Timor was a nation victimized by violence and bloodshed. Fears of political instability may well have been a logical and rational historical reason for not considering a plant there. It seems, however, that technical rather than political arguments have thus far been put forward as the major obstacles to development of infrastructure in East Timor. None of these technical arguments can withstand expert scrutiny. They are flawed.
- 2.2 East Timor's leaders have been consistently told that pipelines cannot be laid to East Timor because of excessive water depth. The Australian Government Senate sub-committee was told the same thing some years back. These statements were incorrect then and even more so now. In the industry, it is not uncommon for such technical "trump cards" to be used to reject consideration of project options an operator does not favour.

3. PIPELINES STUDIES CONFIRM THE TECHNICAL FEASIBILITY AND ECONOMIC ADVANTAGE OF GAS GOING TO EAST TIMOR FOR PROCESSING

- 3.1 At least two known studies of pipeline routes to East Timor have been undertaken by experienced pipeline engineering firms.
- 3.2 JP Kenny Pipeline Engineers conducted a study of deep-water pipeline feasibility related to the Bayu Undan Field for 2600 meters of water depth. This is shown on their website.
- 3.3 It is understood that JP Kenny concluded an economically feasible pipeline could be laid from the Bayu Undan field to East Timor.
- 3.4 INTEC Engineering Pty Ltd conducted a study in May 2002, paid for by Oceanic Exploration and donated to the people of East Timor. This study has been distributed widely in Australia and East Timor -- to set the record straight on the technical and economic feasibility of a pipeline to East Timor. A copy is attached.
- 3.5 INTEC concludes it is feasible to install a pipeline from Bayu Undan to East Timor at *less cost* than a pipeline of similar capacity to Darwin.
- 3.6 INTEC assumed a design gas flow rate of 1 billion standard cubic feet per day to either destination. This would be sufficient to supply approximately 6 million tons

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per year of LNG for export. The pipeline size and distance for the East Timor option would be 28 inch and 220 km. The pipeline size for the Darwin option would have to be 32 inch to transport the same volume of gas over the greater distance of 500 km.

- 3.7 The cost for a Bayu Undan-to-East Timor pipeline was estimated to be approximately US\$ 317 million (page 2 of INTEC report). The cost for a Bayu Undan-to-Darwin pipeline was estimated to be approximately US\$ 571 million (page 12).
- 3.8 Using the report's methodology, it would be expected that gas from Sunrise could be transported to East Timor for significantly less capital investment than to Darwin. The distance from Sunrise to East Timor is about 172 km and to Darwin about 440 km. Costs to East Timor are lower in both cases because even though the water is deeper on the East Timor routes, the distance is about half that to Darwin.
- 3.9 Judged against the engineering realities, it appears the deepwater issue has been misrepresented to the Governments of Australia, the Northern Territory and East Timor. As a result, the myth "The Water is Too Deep" has been commonly accepted even though the facts do not support it.
- 4. TECTONIC RISKS IN THE TIMOR TRENCH AND ON TIMOR ISLAND HAVE BEEN GROSSLY OVERSTATED, AND THE ENVIRONMENTAL RISK MAY BE LOWER THAN SITING A PLANT IN AUSTRALIA
- 4.1 The operating companies and others have publicly stated that the Timor Trench is too seismically active to be crossed by a pipeline. Industry activity in areas of greater seismic risk elsewhere in the world refutes that assertion.
- 4.2 By way of example, for over 30 years, there have been both oil and natural gas pipelines off the coast of California, a notorious earthquake zone. Phillips Petroleum, for instance, operates an LNG plant in Alaska and owns oil refineries in California -- both active earthquake areas. In terms of environmental risk, natural gas pipelines are relatively safe. This is because the relatively small amount of gas released from a damaged underwater pipeline rises to the water's surface and, being lighter than air, dissipates immediately.
- 4.3 Taking a more comprehensive view of environmental hazards, there has been little or no public discussion of well-documented cyclone risk in the Darwin area. By contrast, the northern shore of East Timor is well protected from major storm effects. However, since Darwin *is* in the cyclone track, if winds or storm surge were to cause catastrophic damage to an LNG carrier or storage tank, the risk posed by a "methane cloud" could be serious. These risks should be thoroughly

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examined wherever LNG imports and exports take place. That is why any LNG imports for the state of California have to be landed in Mexico; California will not permit the building of such facilities.

- 4.4 GIVEN THE TECHNICAL FEASIBILITY, LOWER COST AND AN ARGUABLY LOWER ENVIRONMENTAL RISK OF TRANSPORTING THE GAS TO EAST TIMOR FOR PROCESSING AND EXPORT, IT IS TIME TO CONSIDER THAT OPTION FULLY
- 4.5 Until political stability was achieved in East Timor, there was an obvious reluctance to invest in East Timor. With East Timor's independence and the successful establishment of a democratic state, now is the appropriate time for a full airing and debate of all the issues technical, economic, environmental and social.
- 4.6 For developing nations around the world, foreign direct investment has proved to be one of the most powerful engines for creating jobs, building infrastructure, expanding educational and career opportunities, and contributing to overall growth and stability. The operating companies state they will, through donations and employment, add something less than A\$100 million over the life of the project. This seems a pittance when compared to the *billions* of dollars that would arise from FDI, plus the "multiplier effect," if the facilities were built in East Timor.
- 4.7 It is time for a serious, unbiased study of all the options especially when the outcome would mean so much for the people of East Timor. Undue haste in ratifying this treaty and committing to the Darwin LNG Plant sites is unwarranted. Too much is at stake, especially for East Timor.

OHN IMLE