Timor-Leste Prepares for Sunrise Project Even as Development Stays Elusive

Timor-Leste is proceeding with preliminary work on the Sunrise liquefied natural gas (LNG) project in the Timor Sea – that separates its southern coast from Australia's Northern Territory – as the governments of the two countries have yet to agree on their maritime borders on which the stalled development hinges.

Since gaining independence in 2002, Timor-Leste has attempted to renegotiate a treaty with Australia on petroleum revenue sharing arrangements.

In April 2013, the newly independent country commenced arbitration proceedings against the Australian government at the Permanent Court of Arbitration on the Treaty on Certain Maritime Arrangements in the Timor Sea (CMATS), which governs the distribution of revenue derived from the Sunrise project.

With little progress made on the arbitration, Timor-Leste Development Minister Xanana Gusmao appealed recently to the Australian public's sense of fair play to nudge Canberra to hold meaningful talks with his country over the maritime spat.

"If we go to the media and if we raise awareness, it is not because we want people to be against Australia but just to say 'oh yes, it is unfair','" Gusmao told Reuters Nov. 17.

Despite the impasse, Timor-Leste would continue with efforts to resolve the boundary dispute with Australia even though this will not be easy, according to a senior official at TIMOR GAP, E.P. – the country's national oil company (NOC).

"Timor-Leste continues to approach Australia … hoping to resolve the [maritime boundary] issue now rather than later. This is the main agenda but the response from Australia has not been positive," Domingos Lequi Siga Maria, TIMOR GAP's director of the Gas Business Unit told Rigzone in a telephone interview.

Australia's Woodside Petroleum Ltd. – the Sunrise LNG project operator – has indicated on its website that the firm and its partners – ConocoPhillips Co., Royal Dutch Shell plc and Japan's Osaka Gas Co., Ltd. – "remain committed to developing the Greater Sunrise fields, and consider it vital that both the Timor-Leste and Australian governments agree the legal, regulatory and fiscal regime applicable to the resource."
TIMOR GAP Conducts Sunrise Studies

Meantime, TIMOR GAP has kept in contact with the Sunrise partners on issues pertaining to the development of the LNG project.

“We [TIMOR GAP] have been given the mandate by the government to hold negotiations with Woodside and the joint venture on the technical and commercial aspects for the [Sunrise] project.” Lequi Siga revealed.

The project, when developed, could yield substantial hydrocarbon resources as the Sunrise and Troubadour fields – discovered in 1974 – hold a gross contingent resources of 5.13 trillion cubic feet (Tcf) of gas and 225.9 million barrels of condensate. The fields, situated in water depths of less than 328 feet to more than 1,969 feet, are located approximately 93 miles south-east of Timor-Leste and around 280 miles north-west of Darwin in Australia's Northern Territory.

In April 2010, the Sunrise joint venture opted to use a floating liquefied natural gas for the development instead of piping gas from the fields to Darwin or Timor-Leste, for which Dili prefers as shown by its many studies for such a possibility.

“We did our homework and conducted studies by engaging industry consultants.”

Lequi Siga added that they do not believe there will be a $5 billion savings if the Sunrise project is developed using a floating liquefied natural gas (FLNG) compared to an onshore LNG plant.

He pointed out that “in 2010, FLNG is something that did not exist … We questioned whether it's [FLNG] cheaper, in terms of its construction and operation, not whether it can be built.”

TIMOR GAP also refuted concerns about the technical difficulties and the high cost of opting for a subsea pipeline solution to transport the gas from the fields to Timor-Leste.

“Our study with [pipeline and subsea engineering and management contractor] JP Kenny Ltd. finds the subsea
pipeline project is technically feasible despite what we were being told at that time, [which was] that it was hard and difficult terrain through the Timor Trough route [located between the Greater Sunrise fields and the southern coast of Timor-Leste],” the TIMOR GAP senior executive revealed, adding that “we are positive that the pipeline project is much less expensive than thought.”

While the NOC acknowledged the existence of technological challenges facing the Sunrise LNG project, it believed that those are not insurmountable. TIMOR GAP said the proposed subsea gas pipeline, measuring 24-inch and 143 mile (230 kilometer) long, will connect the fields to Beaco in Timor-Leste's southern coast.

“There are certain risks identified as the pipeline has to be laid at 9,908 feet (3,020 meters) in deepwater but those risks are manageable since we all know there are already 1 to 2 subsea pipelines operating for about 5 to 6 years at 7,218 feet (2,200 meters) water depth,” according to Lequi Siga.

“We talked to contractors involved in laying those pipelines and they confirmed that their existing laybarge are capable of laying subsea pipelines beyond that depth [7,218 feet or 2,200 meters].”

“In order to give us more confidence regarding the viability of the project, a number of geotechnical and geophysical surveys for the pipeline project have also been completed,” he told Rigzone.

**Planned Onshore LNG Plant at Beaco**

Timor-Leste planned to build an onshore LNG plant at Beaco, Viqueque to process gas transported from the subsea pipeline from the Sunrise or other gas fields. According to TIMOR GAP, the selected area will incorporate the LNG Plant Complex as well as a marine facility to enable loading and unloading of goods.

Initially Timor-Leste plan to construct one LNG train, with a capacity to process 5 million tons per annum (Mtpa) of gas for the Sunrise project. TIMOR GAP says the Beaco onshore plant site has sufficient space to build another three 5 Mtpa LNG trains, with feed gas piped from Sunrise or other nearby gas fields, bringing the total gas production capacity in the area to 20 Mtpa.
Given the stalemate on the Sunrise project, no construction activity has taken place at the site currently. However, the government has secured support from the local community to use Beaco as the landing point for gas from the Sunrise project.

“TIMOR GAP maintains close relations with the community that are affected by the pipeline project. And they are positive about it and are willing to be relocated, if required,” Lequi Siga said.

Looking further ahead, Timor-Leste – a former Portuguese and Indonesian territory – is intent on bringing the Sunrise LNG project to its shores, given the potential economic, including employment, opportunities that will accrue to the relatively impoverished country. In 2014, it had a gross domestic product of approximately $1.42 billion and was ranked 174 out of 193 economies worldwide, World Bank data showed.

Meanwhile, the NOC has made projections about employment opportunities that the onshore LNG plant project would generate for the local economy.

“TIMOR GAP expects that a conservative estimate of the overall manpower needs for the construction plant at Beaco site will peak at around 8,000 people … If the project were to start today, at least 15 percent of this workforce can be sourced locally based on what skills are presently already available in the country; however, the figure can be easily increased to 30 percent or more if an investment on training is provided a few years beforehand,” he elaborated.

**Sunrise Project Hinges on Governmental Accord**

With much gains accruing from the Sunrise project, TIMOR GAP estimates that LNG production can commence from the fields five years after the joint venture made the final investment decision (FID).

“We are talking about FID plus five years before the Sunrise project comes into production," Lequi Siga said.

Still as the Sunrise joint venture partners had emphasized earlier, the onus is on the Australian and the Timor-Leste governments reaching an accord on the legal, regulatory and fiscal regime necessary for the LNG development.

“Once government alignment is established, the Sunrise Joint Venture believes that there is opportunity to proceed with a development that benefits all parties,” Woodside said in its website on the project last month.

Even if Timor-Leste and Australia overcome their disagreement and reach a deal on their maritime boundary, the issue of the Sunrise field development option – whether an onshore LNG plant or an FLNG – still needs to be addressed by the joint venture.

“Timor-Leste continues to maintain its position that if Woodside and the Sunrise joint venture insist on FLNG, there will be no project," TIMOR GAP’s Lequi Siga commented.

“We are not really desperate for it. It’s not the case for Timor-Leste that there are no funds to run the country. We want to do it right as it [Sunrise] belongs to Timor-Leste. Look at Bayu-Udan, its development and investment benefited Timor-Leste,” he explained.

Bayu-Udan is a producing gas-condensate field in the Timor Sea – that lies within the Joint Petroleum Development Area (JPDA) which provided the framework for all petroleum exploration and development within the area between Australia and Timor-Leste.