Investor Briefing

May 2018





Frontier Folly

Investor risk from Statoil's plans for the Great Australian Bight

Following BP's October 2016 decision¹ to withdraw from the Great Australian Bight (the Bight) its joint venture partner Statoil² in March 2017 announced its decision to take 100% ownership and operational control of two of the four previously jointly held exploration leases in this unexplored basin. Since then Chevron - the only other international oil company considering exploration drilling in the Bight - also announced its decision to cancel its plans.3 In the context of its peers determining that exploration of the Bight did not fit with their strategic priorities and escalating opposition to drilling in such an area of marine life significance, Statoil's decision to persist in the Bight invites investor scrutiny. This briefing outlines the operational, economic, and reputational risks facing Statoil in their plans to drill in the Bight. We suggest questions investors should ask Statoil to understand if the company has adequately assessed the various risks it faces.

Energy analysts indicate that the Bight is a high break-even price and primarily gas province, raising questions about the project's long-term financial viability given the likely high associated infrastructure costs. Investors may wish to examine the viability of this project under various oil demand scenarios. By the time BP had announced its withdrawal, community opposition to drilling grounded in fears about the impact of oil spill had become

increasingly forceful, particularly in the coastal communities of South Australia where tourism, recreation, fishing and agribusiness activities rely on the health of the Bight and "clean, green" brand positioning.4 Concern about and opposition to exploration in the Bight continues to grow, as do concerns regarding Australia's national regulatory framework for offshore oil and gas with calls for the imposition of increased transparency and consultation requirements on operators. 5 The challenging operating conditions of the Bight have forced a previous exploration effort to be abandoned and combined with the remoteness of the drilling areas raise questions about the ability to respond to a major oil spill.

Major risks for investors

- Impact of exploration activity and/ or an oil spill in an area of exceptional marine significance
- Questions about long-term financial viability
- Growing pressure from civil society and local community groups
- Challenging operating conditions
- Climate risk and inconsistency with Statoil's public messaging on company strategy

Statoil's plans

Statoil's initial entry into the Bight was through a minority joint venture, nonoperational stake in BP's four exploration permits (EPPs 37-40). In March 2017, after BP announced its withdrawal from those permits, Statoil assumed a 100% operating stake over two of them, EPPs 39 and 40. This transfer included further extensions to BP's original work program obligations. Under Statoil's work program, Statoil is currently planning to drill four exploration wells by October 2022, one of which is to scheduled to be completed by October 2019.6

Statoil has previously stated its intention to commence drilling in the Bight by the end of 2018.7 However, this timeline looks ambitious. The company has not started the formal consultation and approval process which caused BP so much difficulty nor has Statoil yet made any specific details regarding the proposed drilling program available to the public. This includes disclosure of any proposed drilling locations. The precise locations of Statoil's drilling sites will be of significant interest to conservation groups given that parts of Statoil's EPPs overlay the Great Australian Bight Marine Reserve (GABMR) with unique and diverse flora and fauna.8

Questions for Statoil

- Is the company still planning to commence drilling by the end of 2018 or has it had to revise its timetable?
- What is the current status of the formal process to receive approval to commence drilling?
- Will any drilling take place between
 October and May in any year? If
 so, how will any potential negative
 impacts on marine life be mitigated?
- Oan the company provide details on the steps it is taking to ensure its community and civil society outreach and consultation processes are considered acceptable by potentially impacted communities and civil society organisations?
- What lessons has Statoil learned from BP's failure to secure social licence for its drilling and the the challenges it faced during the approval process?
- Will Statoil disclose the precise locations of the wells to allow for assessment of the impacts of drilling activity on marine life and the effect of a possible oil spill, including whether any of the wells are located within the Great Australian Bight Marine Reserve (GABMR)?

The Great Australian Bight

The Bight is an area of exceptional marine significance on the coastline of South and Western Australia, hosting a wide-range of threatened and endangered species. Scientists believe that 85% of the species in the Bight can be found nowhere else in the world.9 In 2013, 900,000 hectares (9000 km2) of the Nullarbor Plain region along the Bight's remote coastline were established as a 'highly protected Wilderness Area' and in 2012 the Bight was included within a series of new Commonwealth and State Marine reserves creating Australia's first representative marine park network outside the Great Barrier Reef.¹⁰

The impacts of routine exploration activity - particularly noise pollution from drilling and seismic activities, disposal of drill cuttings, and increased risk of vessel strike - can harm and disrupt cetaceans and other marine life, in addition to the much more dramatic ecological damage likely in the case of a spill.¹¹ For example Southern Right Whales which usually migrate to the area between May and November may be negatively impacted by drilling activity. 12 If the impact exceeds the level permitted by the relevant regulatory framework for Australian offshore oil and gas activities, the regulator should deny final approval for drilling.13

The Bight's rich ecology supports extensive tourism and fishing. The Bight's ocean environment provides 25% of the total value of Australian seafood production¹⁴ with combined wild fisheries and aquaculture industries providing the region with around Australian \$1.4 billion in economic value, and Australian \$350 million in household incomes per annum¹⁵. Coastal tourism, heavily reliant on nature-based activities like whale watching and charter fishing, is worth more than Australian \$1.2 billion per annum and growing rapidly.¹⁶



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Financial viability

Energy analyst data raises questions as to the financial viability of Statoil's Bight endeavour, with Rystad¹⁷ currently estimating break-even prices for Statoil's two blocks of US \$93.50 for EPP 39 and US \$113.30 EPP 40 respectively. These are defined as the constant (flat) oil prices at which a project will deliver a 10% internal rate of return.

While Statoil may have proprietary geological data suggesting the Bight is primarily an oil prospect, Rystad's preliminary assessment of the province is that it is primarily a gas and condensate prospect rather than oil. This together with the likely high associated infrastructure costs further raise questions about the economic viability of the Bight.

Even with an oil find, Statoil would be dependent on oil prices into the 2030s which may be impacted by both highly unpredictable technological changes in transportation efficiency and government policies to address global climate change.

In light of recent political and market-based signals of transition to a low-carbon economy the long-term economic viability of projects such as the Bight with high break-even prices is questionable. The project is notably at odds with Statoil's insistence that its strategy is to build a "high value and lower carbon oil and gas portfolio".¹⁸

Questions for Statoil

- Why does Statoil consider the Bight a suitable project for its "higher value lower carbon" strategy?
- Why does Statoil consider the Bight a good prospect when BP and Chevron did not?
- What is the oil/gas split that Statoil is expecting to find in the Bight? Does the company expect a primarily gas find to be economically viable?
- What is Statoil's assumed break-even price for the Bight project?
- If there is a successful find, when does Statoil anticipate the Bight entering production?
- Is Statoil receiving any tax breaks from the Australian government for this exploration project? If so, how reliant is financial viability of the project on those tax incentives? Is it possible that this tax break might be removed on a change of government?
- Does Statoil anticipate that costeffective production will be dependent on further tax breaks or subsidies beyond the exploration phase?



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Intense Scrutiny and Opposition

Intense scrutiny and growing public opposition to the prospect of drilling activities in the Bight surrounded BP's exploration drilling planning processes in Australia in the lead up to its withdrawal. The Great Australian Bight Alliance¹⁹ was formed to campaign for its protection.

Since that time, public opposition has continued to grow. To date, six local government councils on the South Australian coast have passed formal resolutions raising specific concerns about and/or outright opposition to either specific or all forms of exploration drilling in the region.²⁰ It is likely that further local governments will similarly oppose drilling. This indicates a lack of social license and could be an indicator that local community opposition will be a factor in Statoil's formal consultation process. Civil society campaigning and media coverage is likely to intensify further, as Statoil commences stakeholder consultation activities.

Concerns over regulatory regime

Public scrutiny of the adequacy of the Australian regulatory framework for the approval and management of offshore petroleum activities, and the regulator itself, has also intensified over the past 18 months. At the instigation of the Australian Labor Party, the Australian Senate is currently investigating work health and safety for workers in the offshore petroleum industry with the inquiry and report due for release in August 2018.²¹ Two previous public inquiries by the Australian Senate into oil and gas drilling in the Bight undertaken during 2016 exposed serious stakeholder concerns about the transparency and robustness of the regulatory regime. These concerns are not limited to civil society groups and were recently echoed by the New South Wales Minister for Resources, Don Harwin, who stated that: "Our assessment and performance requirements at a state level for onshore are much, much more rigorous than the offshore requirements that the Commonwealth has in place." 22

Statoil's safety record

In 2017, Unearthed reported²³ that Statoil, had seen an increase in the rate of both potential and actual serious incidents in 2016²⁴ — after a decade of safety improvement stalled the year before.

"We also experienced a number of serious incidents in 2016, two of which had a major accident potential," Statoil admitted in its report, in reference to a poisonous gas leak at a Norway oil terminal and a well control incident in the North Sea.²⁵ The Wall Street Journal reported²⁶ that "Under slightly different circumstances, both could have led to much more severe accidents, Norway's oil-safety regulator said in its investigations."

An Unearthed analysis of media reports highlights 14 major incidents that Statoil suffered over 18 months leading to May 2017. This list of incidents²⁷ includes 4 gas leaks, 2 fires and an oil spill.

Questions for Statoil

What changes has Statoil made to its processes and practices following the serious incidents that occurred in 2016 including the two which had 'major accident potential'?



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Operating conditions in the Bight

Although Statoil's precise drilling timeline is currently unknown, BP previously stated an intention to drill 'all year round'.²⁸
However, analysts Wood Mackenzie have stated that the Bight is exposed to harsh weather conditions and rough seas which "restricts the drilling window to a short season between November and May each year", and also that any developments will have to be built to high specifications to withstand the extreme conditions.²⁹

BP's previous documentation relating to its plans to drill within the relevant region demonstrated the isolation and drilling depths likely to be involved for any operator in these permit areas: drilling areas located around 340 - 395 km from nearest coastal towns, water depths ranging from 1,000 to 2,500m and seabed drilling depths up to 3000m.³⁰

BP also specifically acknowledged that its exploration area was currently outside of the reach of helicopters and that only recently has rig technology been advanced enough to handle the deep water and extreme weather of the Southern Ocean.³¹

In May 2003, Woodside Petroleum attempted to drill an exploration well in the Bight. The well was drilled to a seabed depth of 3336 metres, but attempts to drill to depths of 4200 metres (in about 1400 metres of water depth) failed due to bad weather.³² The project was abandoned.

Questions for Statoil

- Is Statoil's exploration area outside of the range of helicopters? If so, how is Statoil satisfied that it will be able to adequately respond to health & safety issues arising on the drilling rigs?
- Given the remoteness of the drilling area, what are Statoil's specific plans for managing the logistics of any require response to an incident such as a major spill?
- Weather conditions have led to the abandonment of previous drilling attempts? Why is Statoil confident that its operations will not be similarly impacted?



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Impact of a spill

It is estimated that 70% of the Australian population could be affected by an oil spill in this area, due to the number of people living within 50km of the Great Southern Reef. ³³ A large spill could affect the entire ecological system that runs along the southern coast of the continent and around Tasmania – a region that supports fishing and tourism activities generating over \$10 billion per annum.³⁴

Community opposition to exploration in the Bight was, in part, galvanised by worst case oil spill modelling findings and oil spill response plans released by BP just prior to its announced withdrawal.35 Those findings indicated that a major spill from an uncontained well blow-out would be guaranteed to impact the South Australian coast and that an oil spill from its exploration permit areas could hit tourism icon, Kangaroo Island, and fishing hub, Port Lincoln, within 15 days and the South Australian capital city, Adelaide, within 20 days. It also found that such a spill posed risks beyond South Australia, to coastal communities as far afield as New South Wales, Tasmania, Victoria and Western Australia.

It has been noted that these findings did not fully assess the risks or impacts of a spill to fisheries or marine wildlife at sea, which could be significantly impacted by much lower concentrations of oil.³⁶

Oil spill modelling commissioned by
The Wilderness Society and conducted
by oceanographer and oil spill modelling
expert Laurent C.M. Lebreton applying
a number of scenarios including the
impact of lower concentrations of oil
demonstrated that were a spill to occur in
summer (November to May), the oil could
impact the shores of Western Australia.
Within four months, it could impact an area
of roughly 213,000 km², with an 80%
chance of surface oil thickness above levels
likely to trigger the closure of fisheries.

In a winter spill, Lebreton's model predicts that within four months it could impact an area of roughly 265,000 km² with an 80% chance of having surface oil thickness above levels likely to trigger the closure of fisheries.

BP noted in its Oil Spill Response
Tactics Summary that the prevailing
weather conditions in the Bight will
greatly affect the opportunity to deploy
oil containment and recovery systems
safely. Given Woodside Petroleum's forced
abandonment of its 2003 drilling efforts
because of weather conditions, questions
should be asked about the possibility of
similar conditions impeding spill response
tactics including capping stacks and even
the drilling of a relief well.

Questions for Statoil

- Has Statoil conducted a financial worst case scenario for the company in the event of a major spill?
- In the event of a well blowout, will Statoil have a capping stack available to be deployed? How quickly will it be deployed?
- Is it the case that essential spill response equipment will need to be transported from either Singapore or Texas? How long will this take? What steps can be taken while such equipment is awaited?
- Will Statoil model spill impact and response scenarios where response measures are severely impacted by adverse weather conditions?

Conclusion

Statoil's decision to persist with plans to drill in the unexplored, expensive, and ecologically significant Great Australian Bight is at odds with the company's supposed focus on building a high value and low carbon portfolio. Considering BP's and Chevron's conclusion that opening this new province did not fit with either company's strategic priorities at a time when structural changes in the industry are forcing companies towards cheaper, shorter-term, and less carbon intensive projects, Statoil's decision to press on in the Bight demands investor scrutiny. The likely significant impact of a major spill on marine life and the local economy has generated significant opposition to and media coverage of plans to drill and carries with it the potential for significant and reputational impacts on Statoil - a company that has for years worked to position itself as a leader among its peers. Considering Statoil's recent worrying record of health & safety incidents, investors would be prudent to scrutinise the company's ability to successfully secure social licence for its plans and to carry them out safely.

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Endnotes

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