Australian Government
National Offshore Petroleum Titles Administrator

Fact Sheet

Retention lease application content

All information should be read in conjunction with the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (the OPGGS Act), associated regulations and policies (available on NOPTA's website).

This factsheet provides additional detailed information related to an application for grant or renewal of a retention lease. This factsheet should be read in conjunction with the '*Guideline: Retention leases*'.

Please note: *this factsheet is intended as a guide only and should not be relied on as legal advice or regarded as a substitute for legal advice in individual cases.*

Overview

The application should provide a clear, detailed discussion of the barriers that are impeding the commercial recovery of petroleum from the block(s).

How these barriers are being actively addressed, with a clear link to the activities in the proposed work program, should also be identified.

An application should discuss in detail the primary constraints which would make the relevant discovery commercially viable and address their likelihood of occurrence, including:

- details of changes which are likely to make development of the discovery commercially viable within 15 years (e.g. technical appraisals, market conditions or access to third party infrastructure), and indicative timeframes;
    - information that such changes would be sufficient to make the project viable;
- the internally accepted economic criteria used by the applicant to assess commercial viability if this is different to the Joint Authorities' economic criteria (see *Guideline: Retention leases*);
- any other information the applicant wishes to be considered in the application.

Factors and assumptions which particularly impact on commercial viability (sensitivities) should be clearly identified and discussed. For example, a large possible range of development costs due to technical challenges, or dependence on access to third party infrastructure.

Where for reasons of commercial propriety it is not possible for a consortium (e.g. a Joint Venture) to provide commonly agreed information, for example estimates of project revenues and rate or return, separate data should be provided by individual members of a joint venture, on an in-confidence basis.

Where the estimated internal rate of return (IRR) is sufficient for the project to proceed under current market conditions and the applicant still does not believe the project is commercially viable, the applicant should provide evidence that there are other factors preventing commercial development of the resource (e.g. market issues or technical risks).

Information, such as the domestic gas price, contract availability, access to markets, existing infrastructure and geotechnical considerations, may be tested by NOPTA using information supplied in the application, sought from the applicant as part of a request for further information, or sourced independently in assessing commerciality.

For renewals only, applicants should include an overview of compliance with the title conditions, chapters 2, 4, 6, and Part 7.1 of the OPGGS Act and the associated regulations. If applicable, provide details of non-compliance (s 154).

Lessees should describe how compliance with the work program to date has made progress towards removing identified commercial barriers.

Proposed work program

Work programs are unique to each retention lease. Where a resource is located across two or more adjacent titles held by the same applicant, and applications are being made for each of the titles, there should be a standalone work program in each application with work program activities and indicative expenditure specific to each title.

Applications must include the completed proposed work program and expenditure table in the relevant Petroleum Retention Lease application form (grant or renewal). In addition, applications should contain a detailed discussion of how the work program addresses the primary constraints to development of the petroleum resource that have been identified. It should identify key decision points that may result from activities, and include indicative timing and expenditure.

The work program activities should address other areas where information on which to base commercial decisions is insufficient. For example, further seismic definition, appraisal drilling, environmental studies or other technical activities may be appropriate to better define the resource. All expected activities should be explicitly addressed as separate items, including clear descriptions of the work to be undertaken where engineering, environmental or marketing studies are proposed.

Applicants are expected to identify the phasing of activities. In general, a year-by-year breakdown for the five year retention lease term is not required. However, the work program should be consistent (with regards to timing, the activities proposed and the level of effort) with what a titleholder could be expected to reasonably carry out in order to commercialise the project in a timely manner. Estimated expenditure on each activity must be provided, in Australian dollars

Proposed work programs may include, for example:

- project feasibility studies to bring the project closer to FEED and FID;
- reviews of exploration data or proposals to undertake further appraisal or exploration activities to improve understanding of the hydrocarbon resources;
- reviews of technology to assess potential reductions in capital costs; and
- development of a preliminary field development plan.

Annual reporting of activities carried out by lessees is required through the annual title assessment reports. Where studies are undertaken to fulfill work program requirements detailed information on the results of the studies should be provided, including for geotechnical studies, commercial studies, and internal or third party reviews of development concepts.

Existing knowledge of the field

Applicants should demonstrate existing knowledge of the field, including mapping and in-place and ultimate recoverable resource estimates at proved, probable and possible (1C/P90, 2C/P50 and 3C/P10) levels, and any critical uncertainties relating to these estimates. Resources should be presented in a tabular format. An example is shown in Table 1 in **Attachment** A. Undrilled prospects should be separately identified.

ESRI Shapefile, Geodatabase file or a spreadsheet with the coordinate listing (latitude, longitude and datum) of pool/field should be provided.

The anticipated production profile, with a breakdown into gas, condensate, and oil phases for each level of certainty, should be provided and presented graphically and in a tabular form. Tables should be submitted in digital format (e.g. comma-separated values). These should provide support for the revenue streams in project cash flows.

If these estimates differ from resource estimates previously provided to NOPTA, an explanation should be included for the difference.

Development concepts

An application should adequately consider all reasonable development concepts including oil, domestic gas, liquefied natural gas and gas to liquids, as appropriate. This should include a detailed assessment, discussion and comparison of the option(s) including schematics, timeframes and advantages or disadvantage of each.

If a preferred development option has been identified, include information on the basis for selecting that option, along with details on all other options which were considered, referencing previous applications where appropriate.

Provide information on infrastructure components as per Table 2 at **Attachment A**, separately for each field/ shared facilities, and for each concept where appropriate. Include cost estimates, in real units, specifying currency and cost estimate class. These should provide support for the cost estimates in the project cash flows. Provide annual operating costs and basis for assumption.

Where the applicant refers to integration in a larger project as a development option, provide comprehensive supporting information on the project as a whole. This includes information on other fields (whether production licences or retention leases) which are intended to be developed through the same facilities, and the anticipated development path for the project including timeframes for each field.

Applicants should provide evidence of preliminary negotiations, if any, with infrastructure owners and current understanding of likely access costs.

Prevailing market conditions

Supporting information including market access, prices and timing of potential market opportunities should be provided. Provide references to information sources.

Where the commercial viability is dependent upon securing customers, applicants should provide evidence of efforts made to obtain sales contracts, including any information on approaches by third parties, engagements with potential buyers and reasons for not proceeding.

An assessment may also consider using a commodity price forecast appropriate to the life of the field and will not necessarily accept the price used by the applicant in its assessment if it is considered unreasonable.

Project economics

Cash flows for each viable development option must be provided based on 2C/P50 (proved and probable) resource estimates and current P50 estimates of capital expenditure (and cost class) as per Table 3 at **Attachment A.**

Where an applicant's internal economic assessment criteria relies on scenarios based on other levels of probability (e.g. 1C/P90 & 3C/P10), cash flows for these scenarios should also be provided stating the sensitivity assumptions and capital cost class estimates. Minimum economic thresholds used by an applicant to determine commercial viability should be specified and justified.

NOPTA will analyse the extent to which there are reasonable grounds for adopting any alternative commercial viability assumptions and methodologies. Applicants should provide more detailed information to support those parts of the application that are critical to demonstrating to the Joint Authority that the criteria in s 142, s 148 or s 154 can be met.

Information on the following assumptions should be included:

- Modelling assumptions about decline curves;
- Product conversion rates, fuel and flare percentages, liquids content of gas as necessary. Raw gas profiles must be reconcilable with sales product profiles;
- Basis of product(s) pricing assumptions;
- Tariff assumptions by component as appropriate e.g. transportation, processing, capacity reservation, capital repayment etc.;
- Depreciation method, lifetimes, and assumptions and formulae for calculation;
- Inflation rates, exchange rates and company tax provisions;
- PRRT assumptions including GDP factor and long-term bond rate assumptions, anticipated starting base expenses;
- Discount rate (this should reflect the weighted average cost of capital or the long term bond rate plus 5%); and
- Reference date.

Questions

If you have any questions about this factsheet, please contact NOPTA via titles@nopta.gov.au.

Version history

Version	Date	Comment
1.0	February 2022	Creation of factsheet. Factsheet comes into effect on 2 March 2022

Attachment A

Field Name:
Basin:
Reference Date:
Reference Point#:
Project / Development Concept Description:

Table 1. Estimated resource volumes. Refer to notes below. PIIP: petroleum initially in place.

				Contingent Resources					
	PIIP			**TUR**			**EUR**		
	1C	**2C**	**3C**	**1C**	**2C**	**3C**	**1C**	**2C**	**3C**
Natural Gas									
Condensate									
NGLs									
Oil									
Other									

- The reported volumes are expected to be in accordance with definitions and guidelines set out in the latest Petroleum Resources Management System, approved by the Society of Petroleum Engineers.
- Volumes reported at Standard Conditions, 60° F (15.56° C) and 1 atm (101.325 kPa); 1 cf = 0.02831685 m^3; 1 MMbbl = 0.1589873 GL
- Probabilistic (P90, P50 and P10) or deterministic (low, best and high) or deterministic (Proved, Proved plus Probable, or Proved plus Probable plus Possible) values for 1P, 2P or 3P and 1C, 2C and 3C estimates are acceptable under SPE PRMS Guidelines (2018).
- Technical Ultimate Recovery (TUR) is assumed to be equivalent to Technically Recoverable Resources (2018 SPE PRMS 1.1.08 B) and defined as raw production (2018 SPE PRMS 3.2.1.3)
- TUR Contingent Resources should be specified at the reference point (2018 SPE PRMS 3.2.3) i.e. wet gas, dry gas, condensate or NGLs etc.
- Estimated Ultimate Recovery (EUR) is assumed to be equivalent to sales quantities (2018 SPE PRMS 3.2.1.3) and defined as production available for sales at the reference point
- #Reference point (2018 SPE PRMS 3.2.1) is a defined location within a petroleum extraction and processing operation where the produced quantities are measured or assessed. A reference point is typically the point of sale to third parties or where custody is transferred to the entity’s midstream or downstream operations.

Table 2:

Field:			
Facility:			
Development Concept:			
Other Assumptions for example: Currency	**Cost Estimate Class**		
Category		**Description**	**Cost (Real)**
Production rate	Maximum rate (MMcsf/d)		
	Annual average (MMscf/d)		
Water depth	(MSL/LAT/AHD)		
Development wells	Number of wells		
	Well type		
	Number of days		
Offshore pipelines	Material		
	Size/Capacity		
	Distance (Km)		
Rig	Rig type		
	Est daily cost ($)		
	Mobilisation ($)		
	Demobilisation ($)		
Subsea infrastructure components	Number of Manifolds		
	Number of flowlines (Km)		
Production facilities	Facility type		
	Capacities (water handling, raw gas rate, gas export rate, condensate handling)		
If Compression is expected	Timing (Year)		
Relocation and decommissioning	Timing (Year)		
Cost Estimates	Pre-FEED ($)		
	Pre-FID ($)		
	Future exploration/appraisal ($)		
	Owners Costs (%)		
	Contingency (%)		
	Annual Operating Costs ($)		

Table 3: The following data, where applicable, should be provided for each year of the project in nominal dollar, stating the reporting currency.

Field:						
Development Concept:						
Year	**Real**	**PV**	**Total**	**20XX**	**20XX**	**20XX**
Reporting currency (AUD, USD)						
Raw gas						
Feed gas net of fuel and flare, inerts and liquids content						
Annual production for each product						
Price assumption for each product						
Annual revenue from each product						
Total revenue						
Exploration & appraisal CAPEX						
Upstream CAPEX						
Downstream CAPEX						
Exploration & appraisal OPEX						
Upstream OPEX						
Downstream OPEX						
Tariff paid						
Tariff received						
Abandonment less salvage						
Depreciation						
Royalty / excise						
PRRT						
Net Cashflow Pre Tax						
Company tax						
Net Cashflow Post Tax						
NPV						
IRR						