APPEA

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Upstream Petroleum Regulation Study
Productivity Commission
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APPEA COMMENTS ON THE PRODUCTIVITY COMMISSION'S DRAFT RESEARCH REPORT: REVIEW OF REGULATORY BURDEN ON THE UPSTREAM PETROLEUM (OIL AND GAS) SECTOR

The Australian Petroleum Production & Exploration Association (APPEA) represents the upstream oil and gas industry in Australia. APPEA member companies produce approximately 98 per cent of Australia's oil and gas. APPEA welcomes the work and extensive consultation undertaken by the Productivity Commission in analysing and assessing the regulatory burden faced by Australia's upstream petroleum sector.

Please find attached APPEA's comments regarding the recommendations and findings put forward in the Commission's Draft Research Report, as well as responses to the Commission's request for further information on a number of issues. APPEA largely agrees with the majority of recommendations contained in the Draft Report.

The Draft Report picks up on APPEA's views regarding the regulatory burden faced by the sector, and the industry's views regarding possible measures to reduce these regulatory burdens. As such, the comments attached focus on areas where further information and clarification is required and on recommendations that are not wholly supported.

APPEA looks forward to continuing to engage with the Productivity Commission and other stakeholders in the completion of the Commission's review into the regulatory burden of Australia's upstream petroleum sector. If you require further information please contact APPEA's Deputy Chief Executive – Policy and External Relations, Mr Mark McCallum.

Yours sincerely

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SUBMISSION TO THE PRODUCTIVITY COMMISSION'S DRAFT RESEARCH REPORT –

REVIEW OF THE REGULATORY BURDEN ON THE UPSTREAM PETROLEUM (OIL AND GAS) SECTOR

APPEA SUBMISSION

FEBRUARY 2009

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WHAT IS AN UNNECESSARY REGULATORY BURDEN? (CHAPTER 3)

DRAFT FINDING 3.1
Good regulatory design is important to minimise unnecessary burdens on business and the community. Unnecessary regulatory burdens can potentially arise from problems with regulations themselves, poor enforcement or administration, and unnecessary duplication and inconsistency. Best practice regulation imposes the least burden necessary to achieve the policy goals underlying the regulation, bringing the greatest possible net benefit to the community.

This finding supports the views articulated in APPEA's submission to the Productivity Commission's Issues Paper.

DRAFT FINDING 3.2
The compliance costs associated with regulation, delays and regulatory uncertainty can reduce investor returns and increase risk, thereby reducing the incentive to invest in upstream petroleum projects. This is especially the case if regulatory requirements are seen as less onerous in other comparable countries.

This finding supports the views stated in APPEA's submission to the Productivity Commission's Issues Paper.

DRAFT FINDING 3.3
Unnecessary compliance costs and delays increase the already high barriers to entry for small- to medium-sized businesses.

This finding supports the views stated in APPEA's submission to the Productivity Commission's Issues Paper.

REGULATORY OVERVIEW (CHAPTER 4)

DRAFT FINDING 4.1
In addition to 22 petroleum and pipelines laws, there over 150 statutes governing upstream petroleum activities in areas such as occupational health and safety, environmental and heritage protection, development, native title and land rights.

This finding supports the views stated in APPEA's submission to the Productivity Commission's Issues Paper that the industry is highly over-regulated.

DRAFT FINDING 4.2
Well over 50 bodies at the Australian, State, and NT Government level have a role in regulating upstream petroleum activities. In addition, local governments can also regulate activities within their jurisdictions.

This finding supports the views stated in APPEA's submission to the Productivity Commission's Issues Paper that the industry is highly over-regulated.

DRAFT FINDING 4.3
Recognition of the regulatory burden on the upstream petroleum sector is evident from the various reviews that have been undertaken in the past. Several reviews (including this study) are currently underway due to ongoing problems with delays, duplication and overlap. Apparently worthwhile recommendations from past reviews appear not to have been successfully implemented.

> ***APPEA welcomes the Commission's finding and supports the Commission's view that while many reviews have been undertaken, many of the recommendations arising have not been implemented. It would be a highly disappointing outcome if the comprehensive study and recommendations made by this review suffered a similar fate, resulting in the continuation of a regulatory system that consistently prevents Australia's oil and gas industry realising its massive potential.***

DRAFT FINDING 4.2
Well over 50 bodies at the Australian, State, and NT Government level have a role in regulating upstream petroleum activities. In addition, local governments can also regulate activities within their jurisdictions.

> ***This finding supports the views stated in APPEA's submission to the Productivity Commission's Issues Paper that the industry is highly over-regulated.***

RESOURCE MANAGEMENT AND LAND ACCESS (CHAPTER 5)

DRAFT FINDING 5.1
Geoscience Australia, and State and Northern Territory counterparts, by providing precompetitive data, play a valuable role in attracting private sector exploration investment in frontier areas.

> ***APPEA agrees with this finding and strongly supports the critical role that Geoscience Australia and its counterparts play in providing precompetitive geo-scientific information.***

DRAFT FINDING 5.2
The underlying policy intent and the rationale for government intervention in managing the method and timing of extracting petroleum resources is not unambiguously stated. The existence of a divergence between private and public objectives in this area is not clearly established and further, government agencies do not appear to have superior technical knowledge to that of the private sector. It is not clear that the benefits from government intervention outweigh the costs.

> ***While APPEA welcomes the Productivity Commission's view that the industry is better placed to assess the technical aspects of a field development, recognising that the resource is crown-owned, the industry remains comfortable that government has a role in the assessment of field development plans and as an arbiter between corporate and community aspirations.***
>
> ***The industry, however, seeks that approvals for field development are completed in a timely manner within clearly set timeframes and decision points to avoid undue delays and uncertainties for project development.***

DRAFT RECOMMENDATION 5.1
Governments should clearly articulate the objectives of intervention in approving the method and timing of petroleum extraction and periodically assess the benefits and costs to ensure such intervention is justified.

> ***APPEA agrees with this recommendation. APPEA welcomes the call by the Productivity Commission for clarity on when government intervention is appropriate in determining the method and timing of petroleum extraction, and shares the Commission's views that there is rarely a divergence between private incentives and public interests.***

DRAFT FINDING 5.3
Given that companies have typically undertaken costly exploration work and thus have considerable commercial pressures to exploit discovered resources, it would seem that a retention lease is a legitimate instrument when the discovery is not yet considered commercial. Hence an automatic 'use-it-or-lose-it' policy does not appear appropriate and may result in the perverse outcome of reduced commercialisation of resources.

> ***APPEA supports the Commission's finding that retention leases are a legitimate instrument in resource management and development.***

DRAFT FINDING 5.4
The retention lease process lacks clarity and transparency for both applicants and other parties wanting to participate in the process.

> ***APPEA does not support any changes to the current acreage management arrangements in Australia – including the retention lease process – which are longstanding and effective.***
>
> ***Consistent with the Commission's finding, retention leases provide a level of assurance to the exploration industry that in the event of currently uncommercial fields, the industry will not have to 'walk away' from discoveries but will be given an opportunity to make good the exploration risks undertaken. Importantly, retention leases recognise the need for security of title, respecting the risks undertaken by the explorer through its initial exploration investment in making the discovery.***
>
> ***The operation of the retention lease provisions are transparently and publicly set out in the Offshore Petroleum Guideline for Grant and Administration of a Retention Lease prepared by the (now) Department of Resources, Energy and Tourism and available from their website at www.ret.gov.au/resources/documents/upstream%20petroleum/guidelines_for_retention_lease_application.pdf.***

DRAFT RECOMMENDATION 5.2

Governments should introduce lighter handed regulation of retention leases by increasing the period of the initial lease from five years to 15 years, with renewals for a period of ten years (to reduce uncertainty and enhance the incentive to invest in exploration).

APPEA welcomes the Productivity Commission's focus on both the merits of lighter handed regulation in general, and observations about commercial imperatives and technical expertise of the industry.

However, with regards to this recommendation APPEA maintains that the existing legislative and regulatory provisions underpinning retention leases are adequate and do not require any modification to increase the initial lease from five years to fifteen.

DRAFT FINDING 5.5

The WA Government's domestic gas reservation policy is intended to increase domestic gas supply. However, in practice it could negatively affect exploration and development of both liquefied natural gas and domestic gas projects.

APPEA welcomes the Commission's finding that the WA Government's domestic gas reservation policy could negatively affect exploration and development of both liquefied natural gas and domestic gas projects. APPEA recommends the Commission reflect this finding in an appropriate Recommendation in the final report.

Since Western Australia has an abundance of natural gas the issue is not a shortage of gas but the need for more gas production infrastructure. The Western Australian gas market is too small to support the development of many large, high cost and remote offshore gas fields. Once the infrastructure is in place for LNG production and the price for domestic gas is sufficient to attract investment in exploration and production for domestic purposes, the supply of more gas for the Western Australian market will follow.

Consistent with the Commission's finding, APPEA's view is that the introduction of a reservation requirement on LNG projects would reduce their competitiveness (potentially rendering some uneconomic) and reduce exploration, supply diversity and competition in the domestic gas market. The State Government, working with industry, can however play a critical role in ensuring sufficient long-term supplies of competitively priced gas are available to meet the State's future energy security and economic development.

The industry is working constructively with the Government on policies that support further growth in the gas industry including the provision of common-user infrastructure, support for pre-competitive geological research, minimising the regulatory burden, streamlining approvals processes and addressing the shortage of skilled labour.

DRAFT RECOMMENDATION 5.3

State and Territory Governments should mirror amendments resulting from the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008 in coastal waters, and implement nationally consistent legislation for onshore carbon capture and storage as originally endorsed by the Ministerial Council on Mineral and Petroleum Resources in 2006.

APPEA agrees with this recommendation and observed in its submission to the Productivity Commission that there is already emerging a large divergence in approaches to regulating this issue across all jurisdictions.

DRAFT FINDING 5.7

The current Joint Authority–Designated Authority arrangements can cause delays in approval processes, particularly where Geoscience Australia and the State equivalents duplicate technical advice on approving field development plans.

APPEA reiterates its views expressed in relation to Draft Finding 5.2, that the industry remains comfortable that government has a role in the assessment of field development plans and as an arbiter between corporate and community aspirations. However, the industry would support measures to streamline and improve the efficiency in this assessment and would welcome the imposition of binding timelines.

DRAFT RECOMMENDATION 5.4

Governments should update legislation and its administration to ensure relevant offshore State and Territory legislation effectively 'mirrors' the Commonwealth offshore legislation as intended.

While APPEA agrees with this recommendation, the industry believes that there is additional scope for improvements in consistency across onshore legislation.

As identified in APPEA's submission to the Commission's review, there is frequently a large divergence in approach to regulating the industry in onshore jurisdictions. This can relate to issues ranging from environmental offsets, vegetation clearance requirements, native title requirements and processes, pipeline licensing requirements, and occupational health and safety regulations.

There is clearly a role for bodies such as the Ministerial Council on Mineral and Petroleum Resources and the Environmental Assessors Forum to facilitate a common approach to improve consistency in onshore legislation.

Improved consistency and agreement across State and Commonwealth jurisdictions will be of particular benefit to companies operating in several jurisdictions, and companies with an onshore focus that are typically smaller to medium sized Australian petroleum companies.

DRAFT FINDING 5.9

Based on practical experience it appears that Indigenous land use agreements have the potential to streamline approval processes, reduce the resources required for successive negotiations, take less time, and reduce costs in the long run for large, complex projects or where there are many future act applications in one area.

APPEA strongly endorses the Commission's finding regarding the merits of Indigenous Land Use Agreements.

DRAFT RECOMMENDATION 5.5

There is evidence that in some circumstances Indigenous land use agreements can streamline the native title approval process and reduce the backlog of future act applications. State and Territory Governments should investigate whether such agreements could be used more frequently (including state-wide, regional and conjunctive Indigenous land use agreements).

APPEA agrees with this recommendation. APPEA's submission to the Commission clearly indicated that some jurisdictions, such as South Australia, have been far more successful that others in reducing the regulatory burden of the Native Title approval process, while retaining the intent of the legislation and the rights conferred by it.

DRAFT RECOMMENDATION 5.6

To avoid potentially lengthy delays, State and Territory Governments should, at an early stage, undertake strategic assessment processes in particularly sensitive, resource rich areas to identify suitable land to allow the development of major resource projects.

While APPEA agrees with this recommendation, the industry believes that through the various national park regulations, jurisdictions have for decades had the capacity to identify particularly sensitive environments and to establish an extensive protective area network.

Industry has expressed its frustration at a perception that sensitive environments are very frequently identified following exploration and the identification of energy resources, and particularly once proposals for developing these resources in a region are put to governments.

An alternative to identifying suitable land for development, as per the Commission's recommendation, would be the identification of any additional areas to be incorporated into the already extensive protected area network. These areas would then be off limits to incompatible developments and send a signal to project proponents that a much stronger case for compatibility of any proposed development would need to be mounted in these identified areas.

Finally, the industry is of the very strong view that any State based strategic assessment must be recognised and operate in parallel with Commonwealth strategic assessment processes, and vice versa.

ENVIRONMENT AND HERITAGE (CHAPTER 6)

DRAFT FINDING 6.1

Many environmental and heritage issues associated with upstream petroleum projects will invariably be complex and sensitive. While effectively consolidating environmental and heritage approval processes would streamline those approval processes, there would also appear to be merit in retaining an independent decision maker of last resort, particularly in relation to matters of potential national environmental significance. This is consistent with the underlying rationale of the Commonwealth's Environment Protection and Biodiversity Act 1999 (Cwlth) and the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth).

APPEA could support the finding that for matters of potential national environmental significance that there is merit in retaining the current arrangements associated with the EPBC Act. However, this support is contingent on a clearer expression of matters of national environmental significance, significant impacts on these matters, and the activities that are likely to cause significant impacts on these matters of national environmental significance.

With the broadness of the Commonwealth Marine Environment Trigger, each and every activity by the industry in offshore waters potentially triggers the Act. The experience however is that of the several hundred referrals relating to oil and gas operations, only approximately a dozen have actually been deemed to be controlled actions under the Act.

DRAFT RECOMMENDATION 6.1

Specific measures to improve the operation of the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) include:

- *ensuring the Department of Environment, Water, Heritage and the Arts provides available information (such as information from previous assessments and relevant scientific studies) on significant environmental risks to the Department of Resources, Energy and Tourism to report with new acreage releases and to proponents seeking approval for a new project (such as pipelines)*

  APPEA agrees with this recommendation. There must be recognition however that the provision of useful information should firstly assist industry to understand all the potential development constraints, and secondly should not constrain the timely release of new attractive exploration acreage.

- *developing bilateral assessment and approval agreements between the Department of Environment, Water, Heritage and the Arts and the Designated Authorities to avoid the potential for duplication in environmental submissions and to streamline approvals for routine activities where a State or Territory has developed adequate local expertise and knowledge;*

  APPEA agrees with this recommendation, but would comment that other Commonwealth Departments, such as the Department of Resources, Energy and Tourism, equally hold high levels of knowledge and expertise. Consequently the industry strongly believes that processes and assessments to inform the decisions made on behalf of the Minister for Resources should not be duplicated for routine activities and additional assessed and approved by the Minister for Environment and Heritage.

- *where strategic assessments are proposed for particular regions, these should be conducted early and according to clear timeframes and should not prevent proponents from pursuing approvals for existing projects.*

  APPEA agrees with this recommendation, and reiterates its view expressed in response to Recommendation 5.6, that Governments should have identified Australia's sensitive environments under existing National Park legislative instruments.

DRAFT RECOMMENDATION 6.2

The Ministerial Council on Mineral and Petroleum Resources should explore ways of enhancing the effectiveness and transparency of the Environmental Assessors Forum to further improve the consistency of offshore environmental approvals and decision making, particularly in relation to differences in interpretation by individual officials. In addition, the forum should be directed to develop consolidated and consistent environmental guidelines (with flowcharts and procedural information) for petroleum activities that are cross-jurisdictional, such as offshore pipelines.

While APPEA agrees with this recommendation, the industry believes that the Environment Assessors Forum should further improve transparency by formalising a dispute resolution process for resolving issues of interpretation of mirror legislation.

DRAFT RECOMMENDATION 6.3

The Ministerial Council on Mineral and Petroleum Resources should task the Environmental Assessors Forum to review the range of onshore environmental regulations to identify scope for streamlining onshore approval processes related to petroleum activities.

APPEA agrees with this recommendation and reiterates its views in response to Recommendation 5.4 that there is clearly a role for bodies such as the Ministerial Council on Mineral and Petroleum Resources and the Environmental Assessors Forum in facilitating a common approach to improve consistency in onshore legislation.

DRAFT RECOMMENDATION 6.4

Governments should actively manage and release information obtained by proponents as a condition of environmental approvals to enhance the public stock of environmental information and to assist in streamlining future approvals.

- *For example, by improving the provision of baseline environmental information for new acreage releases or for new applications for project approvals in relevant areas.*

  APPEA agrees with this recommendation and observes that much of the data provided by industry, while site specific, could be extrapolated to inform the likely impacts of many of the industry's activities. This information could then be used to inform decision makers to prevent them requesting a new suite of studies for every approval request from industry.

DRAFT RECOMMENDATION 6.5

Indigenous heritage Acts in all jurisdictions should require the consideration of previous decisions made in relation to the same heritage site by other jurisdictions. In addition, the Commonwealth Act should be amended to accredit State Indigenous heritage regimes that comply with a national set of minimum standards.

While APPEA agrees with this recommendation, the industry believes that any heritage agreements should be transferrable across operators when permit interests change, so long as the operations remain within the bounds of the original work program.

DRAFT RECOMMENDATION 6.6

All Governments should introduce transparent policy principles for environmental offsets — especially the principle that offsets where practical should be directly related to the damage being offset. In situations where environmental damage cannot practically or sensibly be 'directly' offset, other transparent offset mechanisms should be explored — including, for example, the use of an offset 'fund', which could be devoted to the highest priority projects in the relevant jurisdiction under transparent and appropriate governance arrangements. There may also be merit in introducing nationally consistent principles.

APPEA agrees with this recommendation. The Productivity Commission's assessment largely reflects the APPEA policy on this issue which is articulated in APPEA's submission to the review.

OCCUPATIONAL HEALTH AND SAFETY (CHAPTER 7)

DRAFT RECOMMENDATION 7.1

The legislated coverage of the National Offshore Petroleum Safety Authority should be extended to include the integrity of offshore pipelines, subsea equipment and wells. Governments should also expand its responsibilities to include offshore environmental compliance regulation. If the National Offshore Petroleum Safety Authority is given these additional responsibilities, it would be necessary to ensure the authority was adequately resourced to carry them out.

APPEA agrees with this recommendation. APPEA has long been working with NOPSA and the Commonwealth Department on the Integrity Working Group and has identified that regulatory requirements for wells and pipelines are largely a safety issue, with a small element of resource management.

DRAFT FINDING 7.1

In those areas where the National Offshore Petroleum Safety Authority uses internal guidelines when assessing safety cases, there are likely to be net benefits from making these guidelines available to the offshore petroleum sector. However, it is important that the extent of use of, and the style of, guidelines does not undermine the objective-based nature of the regulatory regime.

APPEA supports this finding by the Productivity Commission for making NOPSA's internal assessment guidelines available, provided that this would not undermine Australia's petroleum safety regime.

DRAFT RECOMMENDATION 7.2

The Australian Government should clarify whether any significant regulatory uncertainty results from the decision that the Navigation Act would not apply to Australian registered vessels and floating production, storage and offloading vessels when these are operating under the safety case regime. If so, it should act to remove the uncertainty. Reapplication of the Act would impose an onerous regulatory burden and would be unlikely to result in net community benefits.

APPEA agrees with this recommendation and supports the Commission's call for clarity and removal of uncertainty.

DRAFT RECOMMENDATION 7.3

The Australian Government should amend occupational health and safety regulations under the Offshore Petroleum Act 2006 (Cwlth) to ensure that only the petroleum-related functions of sea going vessels that pose a potential threat to health, safety and the environment are regulated under the safety case regime.

APPEA agrees with this recommendation but would welcome consultation with industry in defining 'petroleum related functions'. Clarification on this issue is considered important by the industry.

DRAFT FINDING 7.2

Cost recovery arrangements for the National Offshore Petroleum Safety Authority appear broadly consistent with regulatory best practice.

APPEA strongly rejects this finding. In Recommendation 10.9, APPEA has articulated the joint benefits that arise from regulation to ensure a secure supply of energy to all Australians.

DRAFT RECOMMENDATION 7.4

State and Territory Governments should make efforts to harmonise safety standards, or the interpretation of those standards, for imported upstream petroleum equipment across jurisdictions, whilst giving recognition to appropriate prevailing international standards. Where the application of standards is more onerous than those prevailing in other jurisdictions or comparable countries, efforts should be made to ensure that the application of these more onerous standards provides net public benefits.

APPEA agrees with this recommendation and supports the Commission's call for clarity and harmonisation of standards across jurisdictions. APPEA, in conjunction with NOPSA and Standards Australia, will be hosting an international conference in February 2009 to expand regulatory and industry understanding on the issue of international standards.

DRAFT FINDING 7.3

On balance, the Commission does not see a case for extending the National Offshore Petroleum Safety Authority's legislated responsibilities to include onshore integrated production facilities.

At this point in time, APPEA supports this finding by the Productivity Commission.

WHAT IMPACT ARE IMPEDIMENTS HAVING (CHAPTER 8)

DRAFT FINDING 8.1
There is considerable evidence of unnecessary regulatory burdens affecting the upstream petroleum sector, resulting in lengthy delays and substantial resource demands being placed on sector participants. These burdens can be overwhelmingly attributed to two major problems, namely lengthy and complex approval processes, and onerous reporting requirements.

This finding supports the views articulated in APPEA's submission to the Productivity Commission's Issues Paper.

DRAFT FINDING 8.2
The often cross-jurisdictional nature of pipelines means they are typically subject to particularly complex licensing and approval processes. Their licensing and regulation is covered by multiple jurisdictions and multiple regulators, which leads to duplication of process and delays. The presence of multiple jurisdictions and regulators also raises concerns in regard to interface issues and blurred lines of responsibility between regulators.

This finding supports the views articulated in APPEA's submission to the Productivity Commission's Issues Paper.

DRAFT FINDING 8.3
Some governments appear more proactive than others in adopting measures to improve regulatory practices. This appears to have been reflected by variation in perceptions by industry of regulatory performance for different jurisdictions.

This finding supports the views articulated in APPEA's submission to the Productivity Commission's Issues Paper.

DRAFT FINDING 8.4
Unnecessary approval delays cost the economy dearly. If all project approvals took a year longer than would appear feasible under a streamlined approval process, the present value of petroleum resource extraction in Australia would potentially be diminished by billions of dollars each year.

APPEA welcomes the Commission's finding and believes that this should act as a strong motivation for governments to begin the immediate implementation of many of the Commission's recommendations for regulation reform.

DRAFT FINDING 8.5
Improved regulatory arrangements hold the key to reducing regulatory costs and, thereby, help improve international competitiveness and offset some of Australia's natural disadvantages in attracting exploration capital from international sources — particularly low oil prospectivity and geographical remoteness from gas markets and infrastructure.

APPEA strongly supports the Commission's finding and looks forward to reforms to improve Australia's international competitiveness.

A WAY FORWARD (CHAPTER 10)

DRAFT RECOMMENDATION 10.1
State and the Northern Territory Governments should make clear the scope of local government's role in the approval of upstream petroleum developments (and other major developments). Where aspects of these developments are already regulated by environmental agencies or major hazard facilities regulators or when the regulation requires specialist industry knowledge, involvement by local government is not warranted.

APPEA agrees with this recommendation and welcomes the Commission's suggestions on circumstances under which it is inappropriate for local government assessments.

DRAFT RECOMMENDATION 10.2
Governments should review and update all existing legislation to ensure it is consistent with the features of best practice regulation and good regulatory design. In particular, updated legislation and its administration should:

- *separate policy advice from regulation*
- *promote the use of objective-based legislation where feasible*
- *ensure approval processes are best practice and clearly defined*
- *set statutory timelines for individual regulatory decisions (any decision should include a 'stop the clock' mechanism). There should be two timelines: one excluding periods when the 'clock' is stopped and one including all time elapsed. There should also be disclosure of reasons for regulators requesting additional information, and measurement and public disclosure of their performance against these targets*
- *measure and report overall timelines taking into account all stages of key regulatory processes (including scoping, advising, consultation and decisions)*
- *be consistent with the definitions, format and approach of the updated Offshore Petroleum Act 2006 (Cwlth)*
- *provide clear guidelines where feasible on information requirements to assist proponents in efficiently providing the necessary information to allow timely regulatory decisions.*

APPEA agrees with this recommendation and it is consistent with the views put forward in APPEA's submission to the Productivity Commission.

DRAFT RECOMMENDATION 10.3

To support the system of objective-based legislation and to minimise regulatory creep governments should:

- *ensure that the intent of legislation is clearly defined at the parliamentary level and that objects clauses are clearly defined*
- *clearly define the powers of regulators in developing guidelines and the intent and style of those guidelines.*

APPEA agrees with this recommendation, and while objects clauses are now rarely used, the intent of legislation should be provided through second reading speeches and ministerial statements.

The difficulty for the industry regarding regulatory creep has frequently come from broad generic legislation and guidelines (such as vegetation clearance and naturally occurring radioactive waste management) applying in addition to an already regulated aspect of the industry.

In addition to generic regulation, policy statements, guidelines and Codes of Conduct are increasingly being used by regulators to increase the degree of control over activities of industry. Examples of this include environmental offset policies, accommodation standards, guidelines on restricting the use of synthetic based drilling fluids, seismic, guidelines for minimising the introduction of marine pests, vegetation clearance guidelines, and exploration and whale guidelines.

Requiring regulators to demonstrate that the proposed restrictions on operations are compliant with the clear standards put in place by the Office of Best Practice Regulation would remove a great deal of duplicative and collateral regulation of the industry. Similarly, such best practices regulatory practices must be adopted by states in the onshore jurisdictions.

DRAFT RECOMMENDATION 10.4

The Australian Government should explore options for the introduction of an electronic approvals tracking system to improve the timeliness, accountability and transparency of approval processes. Such a system should allow for tracking of individual regulatory areas (for example, resource management and environment) as well as the overall approval process. In exploring options, the Australian Government should consider whether additional features should eventually be included as part of the system (for example, licence payments and data submission).

Based on the proof and initial experience of this system, State and Territory Governments should consider, where possible, adopting the national tracking system.

APPEA agrees with this recommendation and welcomes the efforts of jurisdictions, especially South Australia and Western Australia, towards an effective tracking system for approvals.

DRAFT RECOMMENDATION 10.5

Where not already implemented, States and Territories should consider establishing a lead agency for petroleum approval processes. Such an agency would manage an integrated approval process and would require a clear mandate for all relevant areas (for example, resource management, environment and heritage) and clear decision-making powers over these areas except in exceptional circumstances. With appropriate governance, experience in South Australia suggests that such an agency can achieve an appropriate balance between enforcing legislative provisions and expediting approvals.

APPEA agrees with this recommendation. APPEA highlighted the South Australian example in its submission to the Productivity Commission and has welcomed similar moves by the new Western Australian Government to also establish a lead agency to manage a more integrated approval process.

DRAFT RECOMMENDATION 10.6

The Australian Government should establish a new national offshore petroleum regulator in Commonwealth waters, with regulatory responsibility for resource management, pipelines and environmental regulation. It should have the following functions:

- *administration of exploration permit, production and pipeline licensing — it would process applications, prepare advice and make recommendations to the Commonwealth Minister for resources*
- *administration and approval of production, well construction and drilling, and pipeline consents — it would have the authority to approve consents for these activities.*

The new national offshore petroleum regulator should also incorporate the National Offshore Petroleum Safety Authority, which would continue to regulate offshore petroleum occupational health and safety.

APPEA welcomes suggestions and considerations of regulatory models aimed at streamlining regulatory functions. However, in APPEA's submission to the Commission's Issues Paper, APPEA clearly articulated that the determination of appropriate administrative arrangements is largely a matter for government. Whatever these arrangements may be, they do have to be designed to ensure that the system acts as an independent verifier of the effective implementation of the industry's operating plans and that it supports the application of world's best practice throughout the industry.

While the Productivity Commission has articulated its views on establishing a new national offshore regulator, it still remains an issue for government to put its case to industry as to the most appropriate institutional structure that will meet the needs of the industry, workforce, governments and the community.

In addition to the views stated by the Commission, the industry would also expect that governments may also consider establishing a joint national statutory authority, whereby State Ministerial responsibilities were not divested to the Commonwealth Minister. Under this model, the single joint Statutory Authority would administer mirror legislation for the Commonwealth Minister in Commonwealth waters, and for the State Minister in State waters and for onshore pipelines.

While the discussion articulated by the Productivity Commission on the rationale for establishing a national regulator, on the face of it, appears to have some merit, the industry would need a detailed proposal on a new regulatory system before the industry would support any case for changing existing regulatory structures. This

proposal would need to address a number of preconditions and key principles that industry believes must be met in regulating the operations of industry.

These were articulated in APPEA's submission to the Productivity Commission's Issues Paper and specifically include:

- ***transparent and open consideration of possible changes to the current regulatory regime and in defining transitional arrangements required in any move to a new regime;***

- ***any new regime should recognise the need for consistency in the application of regulations across all jurisdictions and operations, and therefore apply to all offshore activity (State/Territory and Commonwealth waters);***

- ***be cost effective and appropriately resourced by independent personnel, knowledgeable about the complexities of the oil and gas industry. For example:***
  - ***staff should have a capacity to fully comprehend and promulgate best practice safety case management,***
  - ***there should be adequate numbers of staff, adequate levels of skilling and availability of all appropriate types of skills able to provide timely and competent/practicable/informed/consistent feedback on industry approvals, and***
  - ***That governments need to recognise and address the historical difficulty in attracting and retaining qualified and competent staff;***

- ***drive continuous improvement consistent with 'as low as reasonably practicable' principles;***

- ***ensure that under-utilisation of resources and waste is avoided, for example, consideration needs to be given to appropriate ways of sharing scarce and occasionally used specialists;***

- ***provide timely, certain, coordinated and efficient processes and, in particular,***
  - ***in the interests of cost effectiveness, processes for the administration of safety must be fully coordinated and integrated with the other statutory processes for offshore resource management such as hydrocarbon resource planning and development, environmental management;***

- ***be seen to be independent of, and at arm's length from, industry; and***

- ***the system should provide some element that allows for the recognition of the company's past performance.***

Without these preconditions and principles being considered during the transparent and open development of any new arrangements for regulation of the offshore petroleum industry, industry will not be able to support proposed changes.

DRAFT RECOMMENDATION 10.7

The Australian Government should give State and Territory Governments, on a bilateral basis, the option of delegating their existing petroleum-related regulatory powers in coastal waters to the new national offshore petroleum regulator and ultimately the Commonwealth Minister as relevant. The governance arrangements that would then apply should be similar to those applying to the National Offshore Petroleum Safety Authority.

For States and Territories that wish to opt-in, it would be a requirement that their State or Territory offshore petroleum Act fully mirrors the Offshore Petroleum Act 2006 (Cwlth) and its subordinate regulations, including provisions relating to pipelines.

As stated in response to Recommendation 10.6, it is the view of APPEA that determining the most appropriate administrative structures for regulating new improved streamlined regulatory functions is a decision for Government and we would wish to see a greater level of detail before providing further feedback.

APPEA's submission to the Productivity Commission clearly articulated that while the determination of appropriate administrative arrangements is largely a matter for government, these arrangements do have to be designed to ensure that the system acts as an independent verifier of the effective implementation of the industry's operating plans and that it supports the application of world's best practice throughout the industry.

DRAFT RECOMMENDATION 10.8
Where States and Territories have agreed to delegate their coastal water powers, including pipelines, to the national offshore petroleum regulator and ultimately the Commonwealth Minister as relevant, States and Territories should also have the option to delegate responsibility for the regulation of onshore inter-jurisdictional upstream petroleum pipelines. For States and Territories that wished to opt-in, it would be a requirement that their legislative provisions applying to onshore pipelines were harmonised with the Offshore Petroleum Act 2006 (Cwlth) where relevant.

If States and Territories agreed to a national offshore petroleum regulator, APPEA would support a recommendation to also incorporate onshore pipelines into the remit of the national petroleum regulator.

DRAFT RECOMMENDATION 10.9
The current full cost recovery model used for the National Offshore Petroleum Safety Authority should be used to fund any new regulatory agency. As with the National Offshore Petroleum Safety Authority, the cost recovery model adopted for a new regulatory agency should be subject to regular review and appropriate governance arrangements.

APPEA strongly disagrees with this recommendation by the Productivity Commission. The Commission itself in its draft report acknowledges the significant benefits that a degree of public funding would bring, but then, in the view of the industry, has prematurely and inappropriately dismissed the concept of the public sharing part of the regulatory costs on the grounds of the subjectivity involved in estimating the precise distribution of private and public benefits.

The service that the upstream petroleum industry provides to the Australian community in delivering energy resources is critical to meeting the modern everyday life demands of the Australian community. Disrupting the provision of energy or effecting its affordability can have significant flow on impacts to the way each and every Australian lives their lives and to the economy more broadly.

As articulated in APPEA's submission to the Commission, the industry sees benefits in third party oversight of its operations and undertakes a number of third party audits by the likes of DNV or Lloyds of London at its own expense, supplemented by additional internal audits and audits by the national regulator. However it is the industry's very strong view that best practice safety administration also has a substantial set of public benefits including community oversight in relation to the environment and to ensuring the security and reliability of energy supplies.

With clear set of public benefits from the regulation of the industry, the application of a full cost recovery system contradicts the Productivity Commission's Report into Cost Recovery by Government Agencies 2001. In this report, the Commission supports the Beneficiary Pays Principle, which it defines as "the idea that those who benefit from the provision of a particular good or service should pay for it".

Clearly with the significant public benefits derived from regulation ensuring the secure provision of energy to meet the everyday life demands and expectations of the Australian public, there should be some degree of public funding in recognition of this public benefit.

With an element of public funding, APPEA strongly believes there would be a higher degree of public oversight of all expenditures by regulators, a higher level of confidence in the case for the significant expansion in the regulators' budgets and a far lower level of reluctance by industry to accept any further regulatory functions being incorporated into a national regulatory body.

A single national regulator would be kept efficient and effective through ensuring accountability to both industry and the public. APPEA strongly believes that there should be a high degree of public oversight of all expenditures of a single national regulator to ensure that:

- ***the regulator is focused on appropriate regulatory priorities;***
- ***there are appropriate levels of regulator activity;***
- ***expenditure levels are appropriate to deliver identified regulatory priorities , and***
- ***there is an efficient and effective delivery of regulatory responsibilities.***

Without any degree of public funding that recognises the public benefit derived from regulation and the public oversight this brings, there will remain a high level of reluctance by industry to meet the additional costs to fund a new regulatory regime, regardless of the benefits that nationally harmonised regulation will bring.

Additional Information Requests

Whether proposed changes to offshore block graticulation will create unnecessary regulatory burdens. If so, are these burdens likely to be significant? Are there better ways of improving the current regime? (chapter 5)

> ***APPEA has consulted extensively with its members on these questions and a detailed supplementary submission is attached (See ATTACHMENT A).***

Whether requirements for Australian qualified marine personnel in the Navigation Act create unnecessary regulatory burdens. Do the provisions of the Act represent a disincentive to invest in the upstream petroleum sector in Australia? (chapter 7)

> ***APPEA generally supports the views expressed by the Australian Chapter of the International Association of Geophysical Contractors in regard to the shortage of qualified marine personnel in Australia. APPEA's position would not however be to remove requirements to have Australian officers and seamen as a first position, but to develop a number of mechanisms to ensure the oil and gas industry is able to access the skills required in a timely and effective manner through, for example, developing strategies to increase availability of qualified marine personnel in Australia and specific immigration and visa arrangements to address short term shortages. This is consistent with the broad strategy adopted by the oil and gas industry to skills shortages.***

Whether shipping-related regulations create unnecessary regulatory burdens. Does the system of licences and permits for foreign vessels work adequately? Do visa requirements impose unnecessary burdens? (chapter 7)

> ***APPEA supports the recommendations made in the NOPSA Review Report in regard to the disapplication of the Navigation Act. The consequences of the disapplication of the Navigation Act should be analysed, and unintended consequences addressed.***
>
> ***This matter will form one part of the Offshore Petroleum Regulatory Inquiry announced jointly by the Commonwealth and Western Australian Governments which is due to report by mid April 2009. In regard to shipping-related regulations, the question should be that posed in the NOPSA Review Report: What petroleum related functions conducted by vessels represent a risk to people, environment and asset integrity of the petroleum activities and should therefore be regulated by the coastal state?***
>
> ***In regard to visa requirements please refer to previous answer.***

Whether model occupational health and safety legislation could adequately deal with the offshore petroleum sector (chapter 7)

> ***APPEA remains strongly of the view that the offshore regime has already achieved a best practice national approach and that the oil and gas industry is fundamentally different to other industries in terms of the environment and safety issues it faces. Notwithstanding this strong view, APPEA believes there may be opportunities for NOPSA and for the industry to work cooperatively with the national OHS regime to align common principles and to benefit where there are opportunities for joint initiatives.***

Examples of duplicated reporting requirements. Do such requirements create unnecessary regulatory burdens? If so, how significant are they? (chapter 8)

APPEA has long stated that the oil and gas industry is unique because it frequently crosses three to five jurisdictional boundaries. APPEA believe that given this uniqueness, traditional regulatory models may not be the most efficient means of meeting the community's regulatory expectations on industry. Approvals for major oil and gas projects may take in excess of 5 years, can require over 500 separate approval requirements, and frequently engage with over a dozen and sometimes more than 20 regulatory agencies.

Within this total of up to 500 approval requirements, there are many occasions of duplicative reporting requirements. These can range from reporting of environmental or safety performance data to a vast number of different agencies, providing information about the location and operation of the industry's assets to more than 20 government agencies with an interest in security and infrastructure protection, through to the extensive information and documentation required by the Designated Authorities in granting of licences and consents.

APPEA's submission to the Productivity Commission also identified a number of areas of duplicative reporting requirements for reporting energy consumption and greenhouse gas emission estimates.

Under the Energy Efficiency Opportunities Act 2006, companies in an Australian joint venture are required to go through a process of obtaining written nominations of the operator of a joint venture as the nominated reporting entity for the Act to avoid the consequence of each member of the joint venture needing to count and report on energy consumption of that joint venture. For exploration joint ventures in particular this is a time consuming exercise requiring companies to chase responses from smaller joint venturers who may not be subject to the requirements of the Act due to low energy consumption levels.

Under the new National Greenhouse and Energy Reporting (NGER)Act 2007, companies have to go through another round of nominations of the operator of each Australian joint venture in a different format including the additional step of lodging nominations with the regulator. A process of deeming the operator of a joint venture as the nominated reporting entity unless otherwise agreed in writing by the joint venturers would be a preferable method of regulating the collection of the required data from the joint ventures.

In addition, although some amendments have been made to the Energy Efficiency Opportunities Act 2006 intended to streamline the reporting requirements post introduction of the NGER Act, there is still a requirement for ongoing duplicate nominations, dual registrations once the thresholds are reached and two sets of reporting requirements for companies to understand and comply with the requirements of each Act going forward.

To further complicate the reporting regime, there are State government reporting requirements as well. In Victoria the EPA has launched Energy and Resource Efficiency Plans (EREPs) that require a duplicate of EEO but with the EPAs slant (including mandatory implementation of projects with less than 3 years payback). Theoretically companies were supposed to have been able to apply for an exemption if already participating in EEO but the regulations require your EEO assessment (which is a five year program) to have already been completed to get the exemption.

The scope to reduce requirements for separate licences and consents. How could unnecessary regulatory burdens be reduced without introducing other difficulties or complications? (Chapter 10)

As per APPEA's submission to the Commission, APPEA supports the view that that Pipeline Management Plans (PMPs) and Pipeline Safety Management Plans (PSMPs) be dropped and safety requirements for pipelines be incorporated into the safety case. Other requirements should be incorporated into resource management regulations.

APPEA has been deeply involved in the integrity working group and strongly supports the amendments to remove the duplicative pipeline management requirements. While the pipeline licence requirement is still required to be administrated by the Designated Authority (DA), this could easily be covered within the resource management regulations.

As raised in APPEA's submission however, abolishing individual pipeline management plans and pipeline safety management plans and combining them with facility safety cases would require additional work from the operator. For example, in the case of the North West Shelf assets the PMP comprises an integrated family of documents. There would be a significant amount of work to "unbundle" the family and merge parts into the respective safety cases for North Rankin A Platform, Cossack Pioneer FPSO, Goodwyn A Platform and Karratha Gas Plant.

The integrated design of the PMP also presents a problem of duplication if we rebadged the PMP as the Pipeline Safety Case and add it as an addendum to each of the facility safety cases. Following this suggestion, the same documents would appear in the safety cases for North Rankin A Platform, Cossack Pioneer FPSO, Goodwyn A Platform and Karratha Gas Plant, and this would complicate any future updates to the suite of PMP documents.

The above issues could be overcome however if the revised safety regulations allowed for pipelines to be either integrated into facility safety cases or, where appropriate, be covered by a standalone safety case specific to pipeline systems (i.e. existing or new PMPs are rebadged as a pipelines safety case but not merged into facility safety cases). Stand alone safety cases for pipelines may be beneficial in situations where an Operator operates multiple pipelines as part of a network under a management system common to each pipeline.

APPEA has long stated that because the oil and gas industry, and in particular its pipelines, frequently cross three to five jurisdictional boundaries, that pipelines should be covered by one PMP, end to end. Proposed WA legislation for onshore pipelines will require a safety case with requirements slightly different to those required for pipelines in state and commonwealth waters.

APPEA strongly supports the removal of consents for pipelines and other activities as consents are essentially a legal authority that deems you have a legal authority to undertake an action. Consents are highly duplicative and APPEA supports the approach to remove specific consents to operate and construct pipelines/facilities where licences, giving approval to proceed, are set in legislation. Licences, such as the pipeline licence and production licence are the ultimate requirements.

ATTACHMENT A

SUPPLEMENTARY SUBMISSION ON REGULATORY BURDEN OF PROPOSED CHANGES TO OFFSHORE BLOCK GRATICULATION

Background

In its Draft Research Report, *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*, the Productivity Commission has particularly sought comments on the following question:

> *Whether proposed changes to offshore block graticulation will create unnecessary regulatory burdens? If so, are these burdens likely to be significant? Are there better ways to improving the current regime?*

Titles in the offshore petroleum jurisdictions are granted on a five-minute graticular system. This system can be regarded as an Australian petroleum standard used in many other Australian jurisdictions. As such the system applies to both offshore Commonwealth waters and the states/NT territorial seas. It may be noted here that in South Australia and Queensland, a one-minute graticular system has been adopted for highly prospective exploration and production areas over parts of the well-known Surat, Bowen and Cooper-Eromanga basins, while titles in most other parts of these states are granted under a five-minute system.

References to title numbers below include those in Commonwealth waters and those in the State/NT waters. The state water titles have been included in these comparisons as the offshore legislation is mirrored in these state waters by virtue of the Offshore Constitutional Settlement of 1979 between the Commonwealth and the States/Northern Territory. Further, where states such as Western Australia have decided to adopt a similar legislative framework to the offshore, any change to graticulation may impact on the entire onshore jurisdiction of Western Australia.

Exploration life-cycle

In Australia a five-minute block roughly covers an area of around 67 to 85 km^2 (depending on the latitude) and as such is a viable unit for exploration, that is, an exploration permit of a single five-minute block is feasible to be explored as a single unit and a resultant discovery bounded within such a block is viable to be commercialised. The following is a list of exploration permits that are covered by a single or part (where a territorial sea boundary has affected the size of the block) five-minute block. These permits all have individual exploration work programs dependent on their respective prospectivity. If a discovery were to be made in these permits, the resultant retention lease or production licence will also remain as a single or part block title:

Permit No.	Area (km^2)
WA-399-P	52
TP/23	77.8
EP 459	79.9
WA-393-P	80.1
WA-400-P	80.4
WA-355-P	80.5
WA-369-P	80.9
WA-345-P	91.4

Of the 54 granted retention leases, the following list reveals that 19 (over 35 per cent) are contained within single or, one or more part five-minute blocks.

Lease No.	Lease Name	Area (km²)
AC/RL 5	Ex Tenacious	12.3
TR/3	Blencathra	34.4
NT/RL 4	Greater Sunrise	48.6
VIC/RL 2 (V)	Halladale	53.7
VIC/RL 1	Mulloway	64.4
VIC/RL 4	Sunfish	67.5
AC/RL 4	Excl. Tenacious	71.9
TR/4	Australind	80.1
TR/2	Bambra	80.5
WA-3-R	Gorgon (part)	80.6
WA-14-R	Chrysaor	80.7
WA-19-R	Orthrus	80.7
WA-20-R	Geryon	80.8
WA-21-R	Urania	80.9
WA-23-R	Urania	80.9
WA-9-R	Dixon	80.9
WA-35-R	Lambert Deep	81.1
AC/RL 1	Talbot	84.0

Further of the 82 Production Licences, 24 (over 22 per cent) are contained within single or, one or more part five-minute blocks.

Licence No.	Name	Area (km²)
WA-7-L	Barrow Island	15.3
WA-18-L	Laminaria Ext	32.2
VIC/L 22	Minerva	58.3
VIC/L 17	Perch	67.1
VIC/L 19	West Fortescue	67.3
VIC/L 26	Basker/Manta	67.4
VIC/L 27	Manta	67.4
VIC/L 28	Gummy	67.4
VIC/L 25	Kipper	67.5
VIC/L 29	Longtom	67.5
WA-31-L	Cliff Head	72.4
TL/3	Barrow Island	79.1
T/L 2	Thylacine	79.8
WA-12-L	Ramillies	80.1
TL/9	Double Island	80.4
WA-22-L	East Spar	80.4
WA-24-L	Echo/Yodel	80.9
WA-20-L	Legendre	81.0
WA-23-L	Echo/Yodel	81.0
WA-30-L	Perseus Ext	81.0
WA-4-L (2)	Angel	81.0
WA-9-L	Cossack	81.0
WA-16-L	Lambert	81.1
WA-27-L	Exeter	81.2

It is interesting to note that as the knowledge of the prospectivity of a permit area improves, the resultant lease or licence areas are smaller, for instance while the largest exploration permit in offshore Australia is approximately 15 000 km², the largest lease is 2180 km² and the largest licence is around 755 km².

That is, over the life of a permit, once a discovery is made, the title size decreases in size and after several years of appraisal work the discovery field boundary is refined and prior to development, the full extent of the field is normally known.

The proposed change from five-minute to one-minute

The main reasons for change being considered by government are as follows:

- Increased exploration. As less area will be included in a declared location, more brown-field acreage may be available for competitive exploration at an earlier time.

  The industry maintains that this may not necessarily be the case. Especially in the current financial climate, it is highly likely that any change to the titling system that may elevate sovereign risk, may correspondingly result in decreased exploration activity.

  Smaller blocks will increase the risk of losing blocks in a location. Due to unavailability of appraisal geological and geophysical data, there will be an increased risk that marginal extensions of a field may be excluded from locations. This risk could also manifest itself in increased number of disputes between regulator and several titleholders, potentially deterring exploration investment in offshore Australian acreage.

- Improved productivity of acreage management. With smaller blocks, decisions including or excluding blocks will become less controversial, marginalising disputes and leading to quicker resolution.

  The industry considers that the opposite would occur if the block sizes were to be changed. There will be an increased likelihood of fields encroaching on adjacent acreage, resulting in increased disputes. Smaller blocks are more likely to result in protracted negotiations between the titleholders and the regulator regarding the inclusion or exclusion of blocks.

- Increased appraisal activity. As the fit between title and pool will be closer, pools will have to be better appraised, leading to an increase in certainty about Australia's reserves.

  This only holds good if such appraisal activity occurs on production licences and the required investment rate of return and FID criteria are not negatively impacted. In lesser forms of titles such as Retention Leases and Exploration Permits, appraisal activity occurs on maturation of the prospect or discovery. The industry maintains that given the magnitude of variables involved in maturing a discovery to development stage, it may not be possible to quantify either the increase in the required rate of return or additional appraisal work required.

  Even if the change were limited to apply to only Production Licences, which appears unlikely, this change would potentially deny access to any residual potential of the fields. In addition, such a change would be unfair to titleholders

and may lead to sub-optimal resource management and premature decommissioning of infrastructure.

Disadvantages of the proposed change to the graticular system

The industry maintains that the following disadvantages outweigh the need for the proposed change to the graticular system. Many of these issues are discussed in detail later in the document.

1. **Unintended consequences.** The current five-minute graticular system is effective, and given the current global financial uncertainty, the industry believes that any change that will diminish sovereign certainty over petroleum titles would be inopportune and will impact on the industry making timely investment decisions to develop Australia's hydrocarbon resources.

2. **Increased administration**. Government has agreed that the change will not be applied retrospectively, that is, existing titles and discoveries will remain to be maintained on the five-minute grid, while new titles, and discoveries within those new titles will be maintained on a one-minute grid. Therefore there will be a need for a dual cartographic system to be maintained that will cater for existing titles which will be maintained on the five-minute system, whereas all new locations, leases, licences and possibly renewal of some titles (such as Exploration Permits) will be maintained on a one-minute system.

   This, in the view of the industry, would increase the level of administration for all government regulators and industry operators as all title management and mapping issues would require assessment on either the five-minute or one-minute mapping scales.

   In addition, datum issues will also need to be sensibly resolved – currently the datum used for the five-minute blocks use GDA 94 – which is not co-incident with the five-minute latitude and longitudes used internationally – results in approximately a 200m offset – which would be exacerbated by a move to one minute blocks.

3. **Increased complexity**. Proposed amendments would need to be detailed in order to avoid unintended consequences.

   The legislation in relation to renewal and relinquishment is already complicated. Since the inclusion of Greenhouse Gas Storage legislation within the Act, the legislation is now in excess of 1000 pages and any further extension to the legislative content will increase regulatory compliance and administrative burden.

   Halving rules for relinquishment of acreage at renewal stage of exploration permits would need to be amended to accommodate this change, thus further extending and complicating the legislative intent.

   Transitional provisions will also need to be included in legislation to allow for the preservation of pre-commencement titles and locations, that is, to avoid retrospective application of the legislation.

4. **Sterilisation of acreage**. Having smaller graticular blocks would ultimately lead to the relinquishment of completely non-prospective acreage.

Additionally, as is discussed in the scenarios below, it becomes apparent that having a dual system of graticulation will leave unviable exploration acreage that could potentially remain fallow and unexplored.

Presently there are over 250 exploration permits of varying sizes and block numbers. Many of these permits are in highly prospective regions of Australia and if a discovery were to be made in these permits, the amount of administrative burden on the industry and respective states/NT regulators will be immensely increased with the necessity to maintain two graticular systems. Conversely, the amount of acreage that may become available for further exploration is limited and therefore does not seem to warrant the need for a dual graticular system.

5. **Increased sovereign risk**. The inclusion or exclusion of blocks within locations could impact the certainty of tenure and development of the resource. To alter the graticulation system that would impact existing or future locations would create an undesirable level of sovereign risk for these titles.

   Further, smaller block sizes will not ease the process of inclusion or exclusion of blocks in Locations; on the contrary smaller blocks will increase the risk of excluding, what may then be deemed as marginal extensions of a field due to unavailability of appraisal geological and geophysical data. Furthermore, this risk could manifest itself in an increased number of disputes and potentially deter the exploration industry from taking exploration risks in offshore Australian acreage.

   While smaller blocks would be retained within the existing title, they could cause titleholders to forego potential extensions of the field.

6. **Increased risk resulting in lower quality bids for vacant acreage**. The proposed change needs to also consider the impact on the minimum guaranteed work program system and the risk to the explorer in not being able to retain prospective and contiguous areas for exploration, potentially resulting in lower quality bids.

7. **Not appropriate for frontier areas**. The shift from five-minute to one-minute graticules will impose a 'one size fits all' approach for both frontier and discovered basins.

   Exploration in frontier areas is very expensive; each well in deep water (>400 m deep) could costs anywhere between $50 - $120 million – often beyond the means of small to mid-cap oil exploration companies – therefore most of this work is predominately done by larger companies. When coupled with marginal prospectivity, the decision to explore requires a trade-off in terms of enhanced security to resources discovered.

8. **Prospectivity in Australian basins is marginal when considered in a global context**.

   When compared to other prospective basins globally, such as the Gulf of Mexico, or North Sea, in offshore Australia there are very few basins that are deemed to be highly prospective -- the Gippsland/Otway, North-West Shelf and the Browse/Bonaparte Basins. Most of the rest of Australia's vast offshore acreage remains under-explored or unexplored. To alter the graticular system in such vast frontier basins will not achieve a favourable exploration or appraisal result.

Relinquishment issues

Relinquishments are normally made of blocks that are either considered to be less prospective or that any initial exploration effort in the permit has not revealed any hydrocarbon potential in these blocks. If sufficient new geological data has been acquired in these relinquished blocks that suggests that further hydrocarbon potential could be assessed in these blocks, governments normally repackage the area to release them for future acreage bidding. Such relinquished areas need to be coherent blocks that can be repackaged to for a sensible, attractive and viable area for exploration work.

All exploration permits are required to be halved at renewal (recently granted permits are allowed only 2 renewal terms of 5 years each). If the graticular system was changed, permittees would be required to assess the relinquishment blocks on a one-minute basis; while it is much easier to assess such a halving mechanism under the five-minute system (a five-minute block consists of 25 one-minute blocks as shown in Fig. 1).

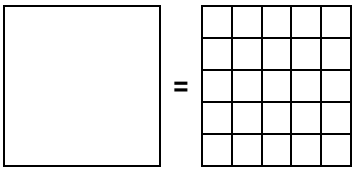


Fig. 1: One five-minute block = 25 one-minute blocks

The legislative provisions of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* that covers the renewal and halving rules applicable for Exploration Permits are as follows:

100 Limits on renewal of work-bid exploration permits and special exploration permits

Scope

(1) This section applies to an application for renewal of a work-bid exploration permit or a special exploration permit.

Limits

(2) The table has effect:

Limits on renewal

Item	In this case...	Do the standard halving rules in section 101 apply?	Do the modified halving rules in section 102 apply?	Can the permit be renewed more than twice?
1	an application for renewal of a work-bid exploration permit, where the original exploration permit was granted: (a) on or after 1 January 2003; and (b) as a result of an application made in response to an invitation in a notice that was published under subsection 82(1) on or after 1 January 2003	Yes	No	No
2	an application for renewal of a special exploration permit, where the original exploration permit was granted on or after 1 January 2003	Yes	No	No
3	the first application after 6 March 2000 to renew an exploration permit, where the original exploration permit was granted before 7 March 2000	No	Yes	Yes, so long as the modified halving rules do not prevent the renewal
4	any other application for renewal of an exploration permit	Yes	No	Yes, so long as the standard halving rules do not prevent the renewal

Note: Under clause 23 of Schedule 6 to this Act, the reference in item 1 of the table to subsection 82(1) of this Act includes a reference to subsection 20(1) of the *Petroleum (Submerged Lands) Act 1967*.

101 Standard halving rules

(1) This section sets out the standard halving rules.

Scope

(2) This section applies to:
  (a) an application for renewal of a cash-bid exploration permit that is capable of being renewed; and
  (b) an application for renewal that is covered by item 1, 2 or 4 of the table in subsection 100(2).

Basic rule

(3) The maximum number of blocks in relation to which an application for a renewal of a permit may be made is worked out using the table:

Maximum number of blocks		
Item	**In this case...**	**the maximum number of blocks is...**
1	the number of non-location blocks in relation to which the permit is in force is a number (the ***divisible number***) that is divisible by 2 without remainder	one-half of the divisible number.
2	the number of non-location blocks in relation to which the permit is in force is a number that is one less or one more than a number (the ***divisible number***) that is divisible by 4 without remainder	one-half of the divisible number.

(4) Subsection (3) has effect subject to subsections (5), (6), (7), (8) and (9).

Additional rules

(5) An application to renew a permit may include, in addition to the blocks worked out under subsection (3):

(a) a block that is, or is included in, a location and in relation to which the permit is in force; or

(b) 2 or more blocks covered by paragraph (a).

(6) An application cannot be made to renew a permit in relation to only one block.

(7) If a permit is in force in relation to 5 or 6 blocks, an application may be made to renew the permit in relation to 4 of those blocks.

(8) If a permit is in force in relation to 2, 3 or 4 blocks, an application may be made to renew the permit in relation to all those blocks.

(9) If a permit is renewed as a result of an application referred to in subsection (8), an application may not be made for the further renewal of the permit.

Definition

(10) In this section:

non-location block means a block that is neither a location nor included in a location.

102 Modified halving rules

(1) This section sets out the modified halving rules.

Scope

(2) This section applies to an application for renewal that is covered by item 3 of the table in subsection 100(2).

Modification of standard halving rules

(3) The modified halving rules are the rules set out in subsections 101(3), (4), (5), (7), (8), (9) and (10), modified as follows:

> (a) if the maximum number of blocks in relation to which an application for renewal of a permit may be made in accordance with those rules is less than 16, the Joint Authority may, by written notice given to the permittee:
>
> (i) tell the permittee that the number of blocks in relation to which the application may be made is such number, not more than 16, as is specified in the notice; and
>
> (ii) give such directions as the Joint Authority thinks fit about the blocks in relation to which the application may be made;
>
> (b) if a permit is in force in relation to only one block, an application may be made for renewal of the permit in relation to that block.

As may be noted the details within the existing legislation in relation to renewal and relinquishment are quite complex. Since the inclusion of Greenhouse Gas Storage amendments to the Act, the legislation is now in excess of 1000 pages and any further extension to the legislative intent is not considered viable for optimal regulation of the offshore hydrocarbon resources.

Further, having smaller graticular blocks would ultimately lead to the relinquishment of completely non-prospective acreage. For example, if there were two leads within a four five-minute by five-minute graticule permit, and where each one of the leads straddles two blocks: under the current system, with 50 per cent relinquishment, one of those leads may have to be relinquished, but under the proposed system, relinquishment could be crafted to fully capture both opportunities, leaving nothing prospective in the relinquished acreage (please see Scenario 3 for an example for this).

Moreover, the industry is concerned about the rules of relinquishment similar to that adopted in the Joint Petroleum Development Area (which is predominantly a Production Sharing Contract system), whereby titleholders would compulsorily have to relinquish prospective areas of their title, without the ability to retain title for appraisal or development purposes. This proposed change to one-minute by one-minute graticules needs to also consider the impact on the minimum guaranteed work program system and the risk to the explorer in not being able to retain prospective and contiguous areas for exploration.

While the industry respects the need for appropriate turnover of acreage and continuing exploration work in both brownfield and greenfield areas, we are concerned that the shift from five-minute to one-minute graticules will impose a 'one size fits all' approach to both frontier and discovered basins. We contend that frontier areas require the greater flexibility of five-minute blocks and that the government already has the ability through existing legislation to satisfy their desire for the increased exploration and appraisal of existing titles.

The assumption that 'one-minute graticular blocks…are sufficient in size to accommodate a reasonable amount of uncertainty', remains unqualified and unsubstantiated and we argue that five-minute graticular blocks better accommodates a reasonable amount of uncertainty to capture the discovered resource, for the above mentioned reasons.

While some States have adopted differential graticulation systems onshore for some mature basins (for example, The Queensland Cooper-Eromanga basins), in territorial waters and offshore areas, the five-minute graticular system remains the national norm of petroleum titles across the continent and is commensurate with the majority of Australia's exploration maturity and prospectivity.

Prospectivity of Australian Basins

In the offshore there are very few basins that are deemed to be highly prospective, the Gippsland/Otway, North-West Shelf and the Browse/Bonaparte Basins. These basins are chequered with exploration permits, retention leases and production licences, as well as a considerable number of known discoveries (under Locations). Many of the Production Licences in these areas are under an indefinite term and several of these licences already have conditions to explore the residual exploration potential of the licence areas. Besides, the industry considers it prudent to ascertain the residual prospectivity of production licence areas to extend the life of production facilities that are already in operation these titles.

Maintaining a dual system along with the complexities of the relinquishment and renewal conditions as discussed in an earlier section for the sake of, "[enhancing] efficient resource management by improving the fit between title boundaries and petroleum pool boundaries" [1], seems like a an approach that will create more administrative and regulatory burden than achieve any obvious advantage towards acreage management.

Locations

Presently there are 22 locations that have been declared around the offshore jurisdiction over various discoveries. These locations are at various stages in preparation of Retention Lease or Production Licence applications. To alter the graticulation system for these locations at this stage would create an undesirable level of sovereign risk for these titles. The inclusion or exclusion of blocks within these locations could mean the certainty of tenure and development of the resource.

It is understood that the size distribution of these locations is as follows:

Size of Location	Blocks	Percentage
1 block	6	27
2-5 blocks	15	68
> 5 blocks	1	5

Historically, since 1999, 71 locations have been granted, most of these have been converted to retention leases or production licences. The size distribution of these locations is as follows:

Size of Location	Blocks	Percentage
1 block	24	34
1-5 blocks	36	50
> 5 blocks	11	16

It is interesting to note that the majority of locations are within 1-5 blocks, suggesting that they range from only around 150-375 km^2 in area. More importantly in the current situation, to change the entire fabric of graticulation to cater for 22 locations, many of which will be appraised and further reduced in size prior to a production licence seems like an ineffective and inefficient policy solution.

[1] Ref pp 87, Productivity Commission Draft Research Report, *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*.

Extension of discoveries upon appraisal

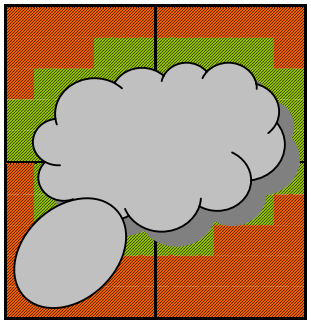
While the one-minute system may include a smaller location, it will need to cover the entire extent of the discovery and accommodate the potential extension of the discovery after future appraisal work. Therefore, limiting the block sizes to one-minute is not the solution; the declaration of location will continue to be based on the best possible data available at hand to define the extension of the field, reflecting a degree of uncertainty due to the "appraisal immaturity" of the asset. After subsequent appraisal work, the need to either increase or decrease the size of the location and therefore the size of future titles over the discovery must be recognised and managed without excessive administration.

Upon discovery of a field, further appraisal work may be considered prudent to determine the full extent of the field. In both Scenarios 2 and 3, the titleholder will have no recourse to re-instate vacant blocks into the future Retention Lease or Production Licence if it were to find an extension of the discovery into blocks that have been relinquished previously. On the other hand in Scenario 1, the titleholder will be able to retain the possible extension of the discovery within the five-minute blocks.

On the other hand, if the discoveries were to contract in size due to future appraisal work, the titleholder may be in a position to relinquish further blocks in all the above scenarios.

The existing five-minute graticulation system is working well and provides for optimal exploration and development of Australia's petroleum resources. The current system, in most cases, provides an adequate buffer around the discovery. A potential small buffer zone due to five-minute graticulation minimises the level of sovereign risk to the explorer while also limiting the need for extensive negotiations and unitisation of fields between neighbouring titleholders.

For instance in the following diagram if the discovery was appraised and was deemed to extend southward, it could potentially still remain within the permit area, however, if those one-minute blocks had been relinquished or were not part of the permit, the titleholder would have no recourse to acquire those blocks unless it was the winning bidder of a future release of those one-minute blocks. This would raise the level of sovereign risk and could deter companies from exploring.



Appraisal of a field occurs after discovery and in some instances, the full extent of the field does is not known until well into the production phase. In these circumstances, limiting the field area without an adequate buffer could jeopardise the optimum recovery of the hydrocarbon resources. A change to the one-minute graticular system, in the industry's view, could further lead to the following issues:

An increase in number of Production Licences

The change in graticulation could potentially lead to more Production Licences being granted over fields that may be separated by a thin margin of one-minute blocks. This will also increase the possibility of future unitisations between fields and future appraised extensions of the same field.

This would not only increase the administrative burden, it will also diminish the sovereign certainty that titleholders will have over the full extent of discoveries that have incurred exploration and appraisal effort.

Production Licence applications are an extensive administrative process and any increase of administrative/regulatory burden in this regard will delay the grant of development licences, thereby leading to delayed profits and returns to the government.

Unitisation

The current five-minute system, in most cases, provides an adequate buffer around a discovery. This small buffer zone minimises the level of sovereign risk to the explorer while also limiting the need for extensive negotiations and unitisation of fields between neighbouring titleholders.

An increase in infrastructure and pipeline licences

The industry believes that the change to the graticular system would lead to an increase in infrastructure licences. Infrastructure licences are normally used to cover production related facilities and equipment that may need to be located outside the production licence. If the field/production licence size were to be minimal, that is, not allowing much room for the full extent of equipment and facilities to be co-located within the production licence (FPSO's are often moored some distance from the field extent and the natural buffer provided by the five-minute system allows for such moorings), then the licensee would be forced to acquire an infrastructure licence to cover such equipment and facilities being located outside the production licence.

It is also possible, where, one or more facilities are 'tied-in' to a single production facility, the number of pipeline licences required to communicate the hydrocarbons from each licence to the production facility will increase. For instance, what are now considered intra-field flowlines and area dealt with as part of a production licence, will need to be covered by discrete pipeline licences under the one-minute system.

An increased incidence in injection or disposal wells being outside the PL boundary

A change to a one-minute system for granting production licences is likely to increase the number of injection/disposal wells to be located outside the licence area. This is particularly an issue where the production licence is granted with little or no buffer area and the field, upon appraisal, is found to extend outside the licence area. In such circumstances, it may be geologically conducive to inject/dispose material at the margins field.

Scenarios

The following 3 scenarios provide a simplistic view of how the current system of graticulation works presently and how the proposed system of graticular system may work in the future if the change from five-minute to one-minute is implemented. For keeping the scenarios simple a Permit 99 of 16 five-minute blocks (in Scenarios 2 and 3 the permit contains 400 one-minute blocks) is assumed to have been granted.

Please note the scale of blocks has been increased in some diagrams for the convenience of reading these drawing with ease, in reality the block sizes will not change if a five-minute block was converted to a one-minute system.

Scenario 1 Current practice

Original Grant: Permit 99 granted as 16 five-minute blocks for 6 years.

1	**2**	**3**	**4**
5	**6**	**7**	**8**
9	**10**	**11**	**12**
13	**14**	**15**	**16**

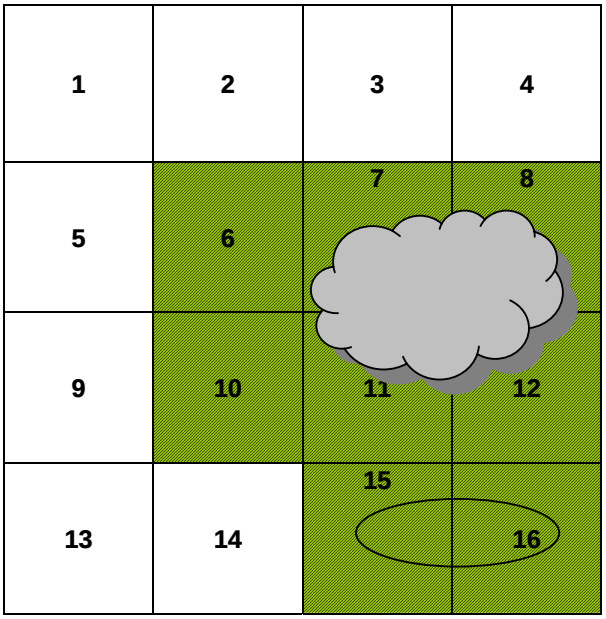
First renewal:

Permit 99 needs to relinquish 8 blocks (half of 16). A discovery was made in the original grant period of the permit in blocks 7, 8, 11, 12, therefore the permittee decides to retain those four blocks, and 4 other blocks adjacent to those, 6, 10, 15 and 16[2]. Blocks 15 and 16

[2] In a situation where a discovery is made in the current term of permit, the titleholder is able to declare a location over the location immediately. The clock then starts ticking for 2+2 years within which time an application for Retention Lease or Production Licence needs to be made with the regulator. If such a location is declared, the halving-rule for relinquishment at renewal of the permit is altered such that the blocks forming the location are subtracted from the total number of blocks, to the remainder, the halving rule is applied, and then the blocks forming the location are then added back to the permit. For instance, in the above example, if a location were to be declared over the 4 blocks, the halving rule will apply to 12 blocks, therefore the permit would be able to retain 6 blocks and the 4 blocks within the location are then added back, therefore the renewed permit will have 10 blocks, rather than the 8 if a location were not to be declared.

are perceived to contain a prospect that is of interest to the permittee. Blocks 1, 2, 3, 4, 5, 9, 13 and 14 are relinquished.

The permit is renewed for a period of five years as highlighted in green.

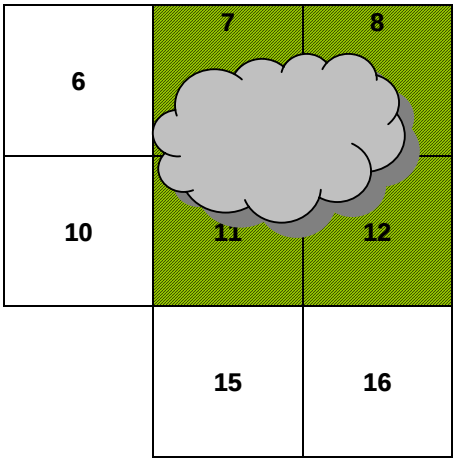


Second renewal:

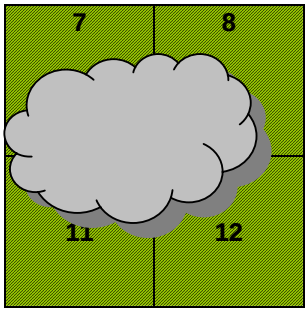
Permit 99 needs to relinquish 4 blocks (half of 8). The permittee decides to retain blocks 7, 8, 11 and 12 that contain the discovery and drop the other blocks, 6, 10, 15 and 16. During this renewal period, the company decides to apply for a Retention Lease and later a Production Licence to develop the field.

Further the perceived prospect in blocks 15 and 16 are relinquished, thus allowing a new entrant to consider exploring this prospect. As will be discussed in Scenarios 2 and 3, this option may not be available for new entrants as the original titleholder will be able to hold on to this acreage and thus not make available prospective acreage for future exploration.

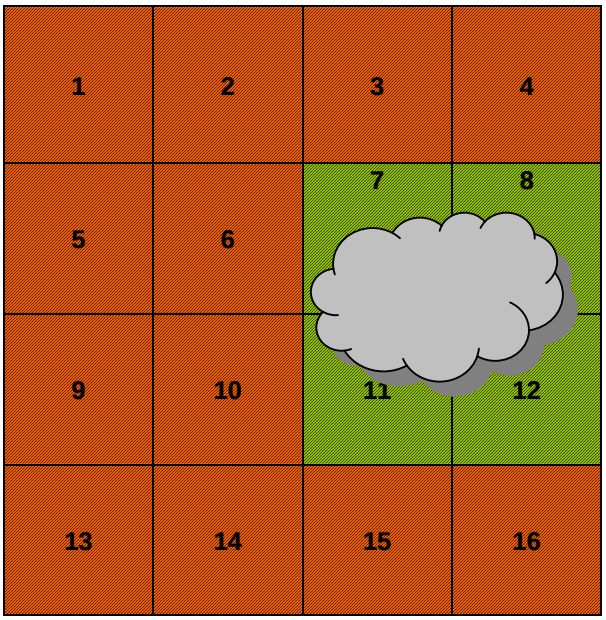
The permit is renewed for a period of five years as highlighted in green.



At the end of the Second Renewal Period a Location is declared over blocks 7, 8, 11 and 12 is retained under the application for Retention Lease.



So for these 16 five-minute blocks, the future release areas for relinquishments in Permit 99 could be packaged from the following vacant blocks (highlighted in orange). These blocks can be individually released as future acreage areas or packaged with other adjacent blocks:



Scenario 2: Hybrid of both five-minute and one-minute

In this scenario the dual graticular system does not kick-in until the Location stage or at the stage of Retention Lease or Production Licence application.

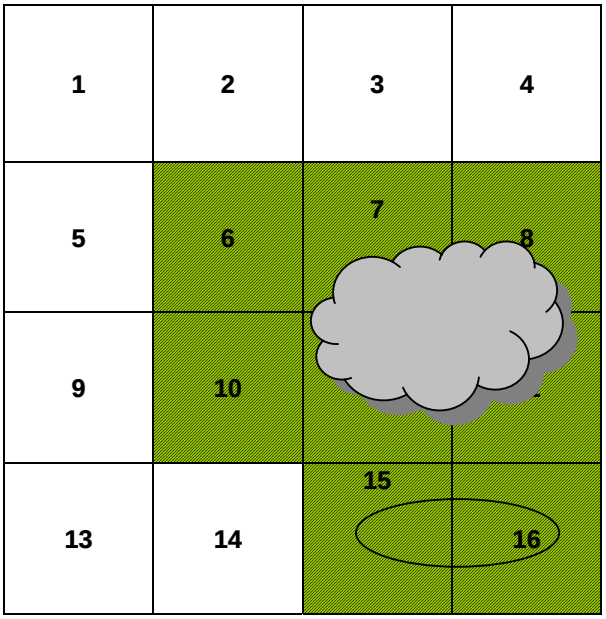
Original grant: Permit 99 granted as 16 five-minute blocks for 6 years.

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

First renewal:

Permit 99 needs to relinquish 8 blocks (half of 16). A discovery was made in the original grant period of the permit in blocks 7, 8, 11, 12, therefore the permittee decides to retain those four blocks, and 4 other blocks adjacent to those, 6, 10, 15 and 16. Blocks 15 and 16 are perceived to contain a prospect that is of interest to the permittee. Blocks 1, 2, 3, 4, 5, 9, 13 and 14 are relinquished.

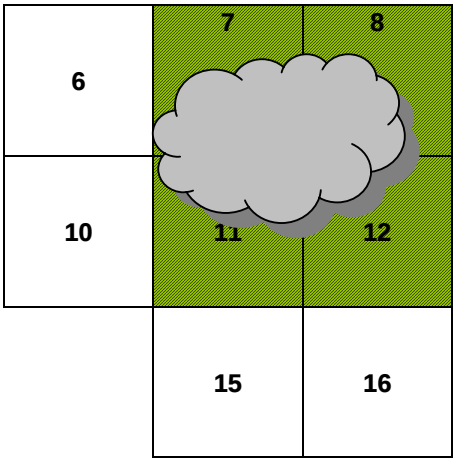
The permit is renewed for a period of five years as highlighted in green.



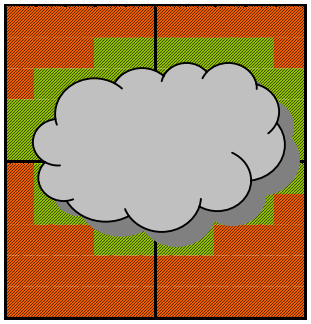
Second renewal:

Permit 99 needs to relinquish 4 blocks (half of 8). The permittee decides to retain blocks 7, 8, 11 and 12 that contain the discovery and drop the other blocks, 6, 10, 15 and 16. During this renewal period, the company decides to apply to declare a Location as a precursor to applying for a Retention Lease and later a Production Licence to develop the field.

The permit is renewed for a period of five years as highlighted in green.

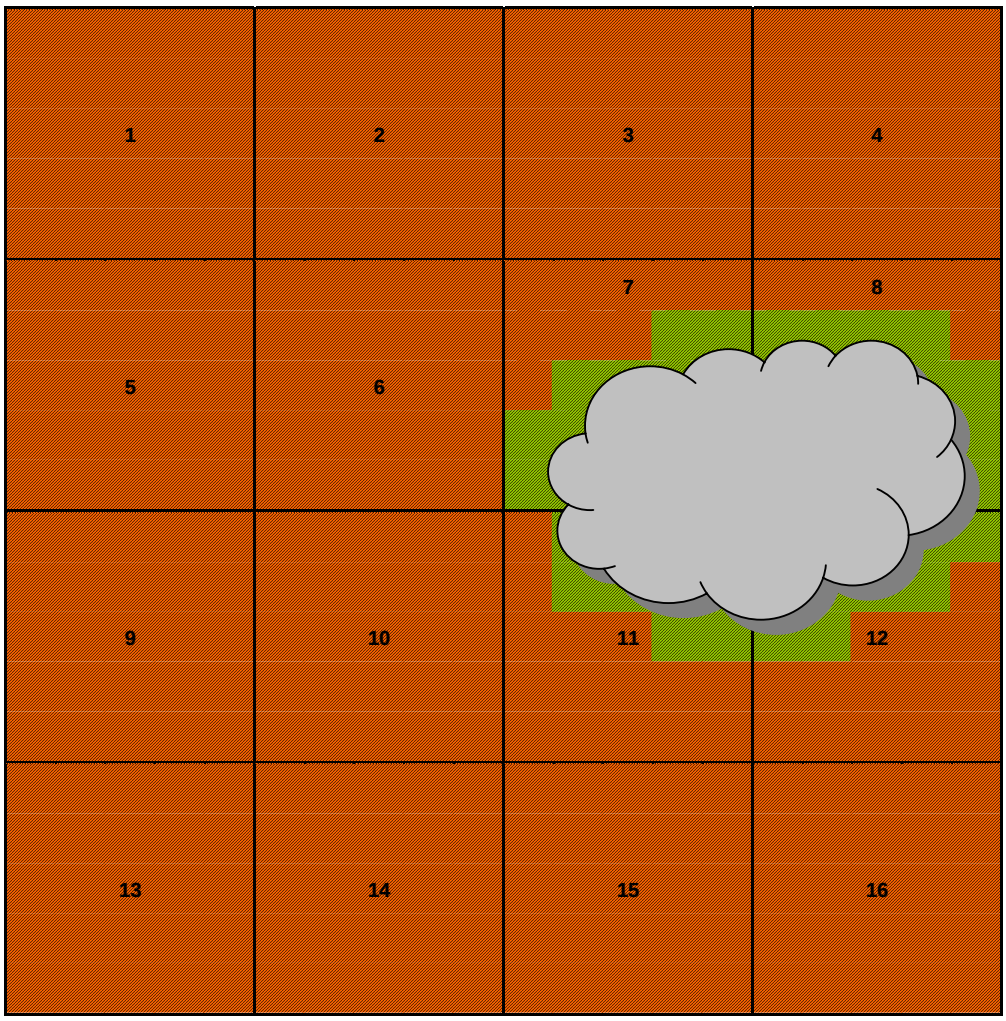


At the end of the Second Renewal Period the only the blocks over the actual Location within blocks 7, 8, 11 and 12 are able to be retained under the application for Retention Lease and the rest of the one-minute blocks (highlighted in orange) would need to be relinquished.



These orange blocks will then be released as part blocks along with other vacant blocks in future years.

So for these 16 five-minute blocks, the future release areas for relinquishments in Permit 99 could be packaged from the following vacant blocks (highlighted in orange):



It should be noted that while in this scenario vacant one-minute blocks in block numbers 7 and 8 could be reasonably packaged with vacant blocks in blocks in 3 and 4. If on the other hand the blocks in 3 and 4 had been retained by the permittee or were the subject of another permit/title, the vacant blocks in 7 and 8 would not be able to be packaged for future acreage releases. These blocks would then remain fallow until other adjacent blocks become vacant.

On the other hand if the permittee had been allowed to retain these blocks within the Location and the subsequent Retention Lease or Production Licence, it is likely that the titleholder may have assessed the prospectivity potential of these few vacant blocks as part of the work program under the lease.

Scenario 3: Moving all titles across to one-minute system

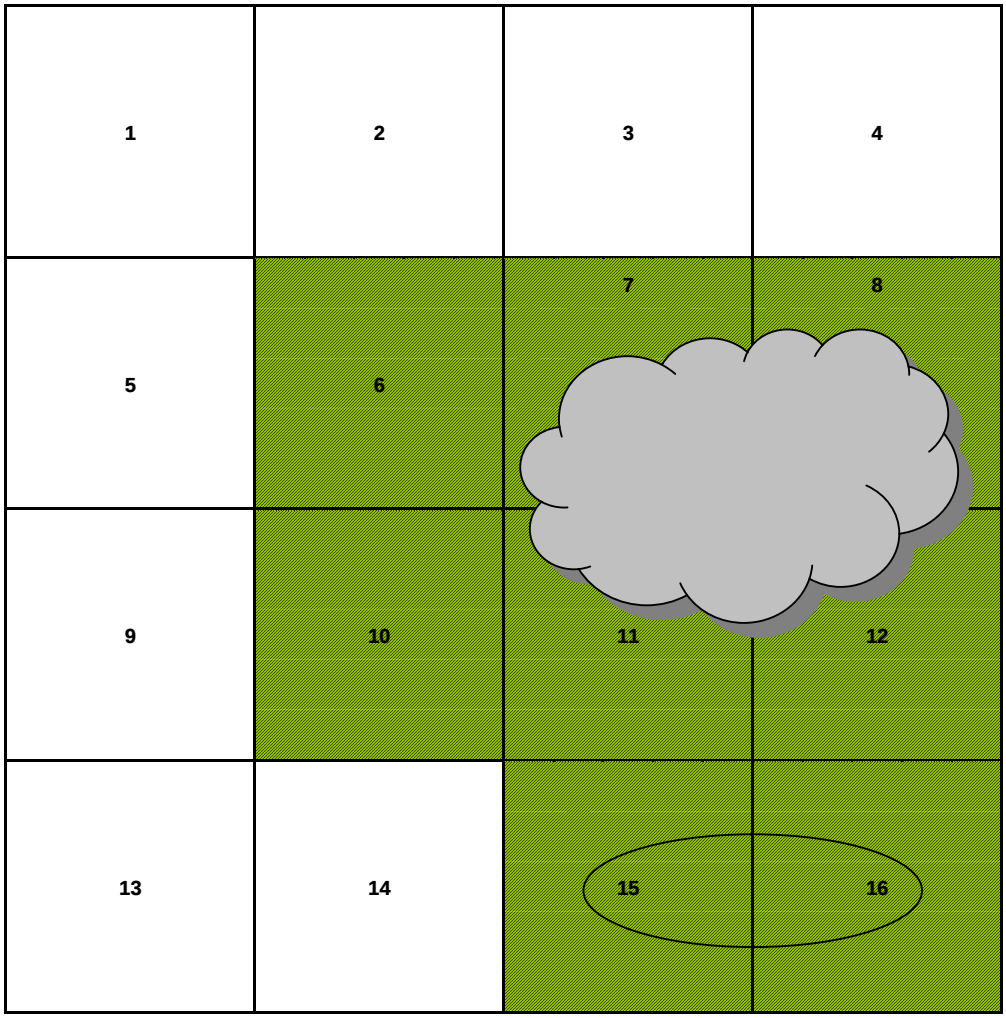
Under this scenario the entire system of graticulation under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* would be converted to a one-minute system. All existing titles would be re-issued in terms of a one-minute graticular system and while their title boundaries would not change, upon making a discovery or on application for future Retention Leases or Production Licences, the titleholder will be required to relinquish all one-minute blocks not covered by the extent of the discovery and those blocks will be individually packaged for future acreage release areas.

1	**2**	**3**	**4**
5	**6**	**7**	**8**
9	**10**	**11**	**12**
13	**14**	**15**	**16**

Scenario 3 First renewal:

Permit 99 needs to relinquish 200 (8x5) one-minute blocks (half of 400). A discovery was made in the original grant period of the permit in blocks 7, 8, 11, 12, therefore the permittee decides to retain those blocks under a Location, and 20 other blocks adjacent to those (contained with five-minute block numbers 6, 10, 15 and 16). Blocks 1, 2, 3, 4, 5, 9, 13 and 14 are relinquished.

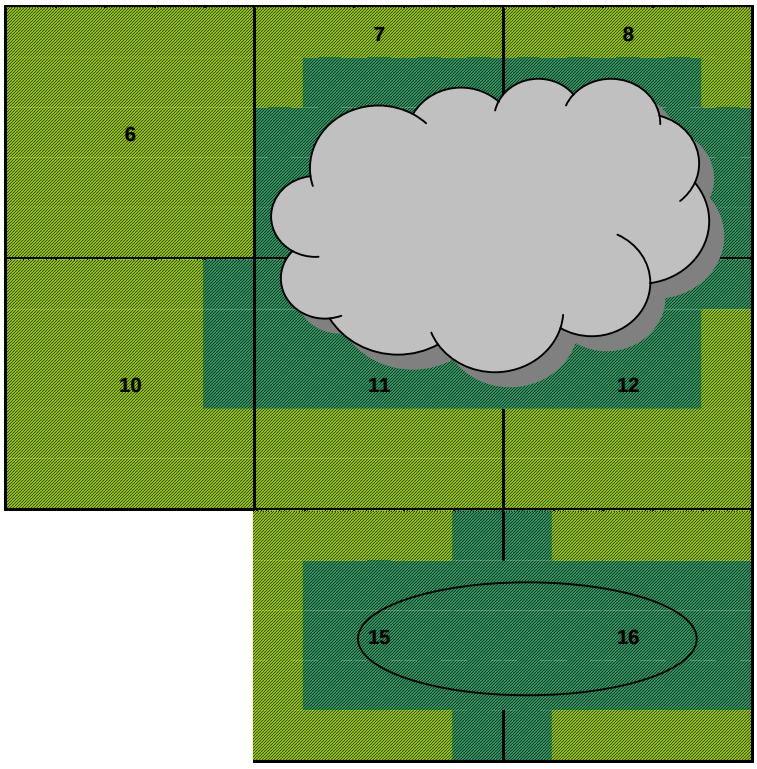
The permit is renewed for a period of five years as highlighted in green.



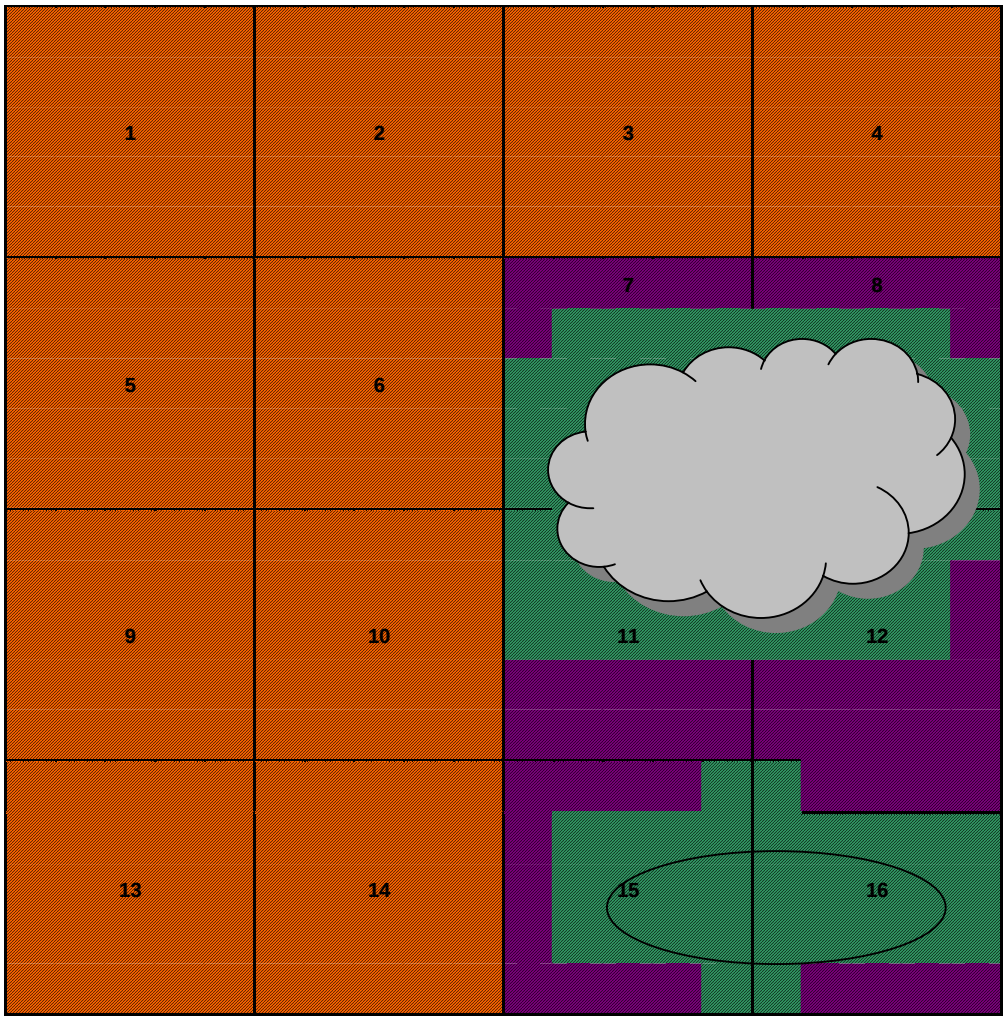
Scenario 3 Second renewal:

Permit 99 needs to relinquish 100 blocks (half of 200). The permittee retains 100 blocks as shown below in darker green and relinquishes the ones in lighter green. The permittee also declares a Location over the prospect in Blocks 15 and 16.

The permit is renewed for a period of five years as highlighted in green.



In this scenario the relinquished blocks from the original Permit 99 would look as follows:



In this scenario, the vacant blocks in block numbers 7, 8, 15 and 16 could be released as a package in individual acreage areas of one-minute blocks, however, it may not be realistic to undertake any sensible exploration efforts in the blocks highlighted in purple. These blocks would be left vacant similar to Swiss cheese and will be difficult to package for future acreage releases.

As discussed earlier a single five-minute block of around 65-85 km² is a viable unit area for exploration, however, if the blocks are reduced to one-minute, they may not necessarily be able to be repackaged into attractive acreage release areas in the future. This could potentially lead to tracks of one-minute blocks around discoveries and/or prospective areas that are unviable to be explored.

If, on the other hand, these blocks were to be left as part of the five-minute system, the chances are that they would be retained within a future retention lease or production licence area and could form the part of future exportation work undertaken within those lease or licence areas.

Possible solution

The main reasons for change being considered by government are as follows:

- Increased exploration. As less area will be included in a declared location, more brown-field acreage may be available for competitive exploration at an earlier time.

- Improved productivity of acreage management. With smaller blocks, decisions including or excluding blocks will become less controversial, marginalising disputes and leading to quicker resolution.

- Increased appraisal activity. As the fit between title and pool will be closer, pools will have to be better appraised, leading to an increase in certainty about Australia's reserves.

As discussed previously, in the industry's opinion smaller block sizes will not ease the process of inclusion or exclusion of blocks in Locations; on the contrary smaller blocks will increase the risk of excluding extensions of a field due to unavailability of appraisal geological and geophysical data. Furthermore, this risk could manifest itself in increased number of disputes and unitisation claims, and potentially deter the exploration industry from taking exploration risks in offshore Australian acreage.

While smaller blocks would be retained within the existing title, they could cause titleholders to forego potential extensions of the field. The relinquishment of exploration blocks, as discussed earlier, would also need to be considered, and titleholders would conceivably relinquish the least prospective bocks, leaving, without new onerous and restrictive relinquishment rules, trails of "Swiss cheese" blocks which would be very difficult to package as contiguous exploration blocks in the future and could increase speculative acreage holdings.

In response to the first two dot points, the industry believes that a more efficient and effective mechanism for acreage management would be to leave the graticular system on a five-minute basis, however some modifications to the management of exploration work within Retention Leases and Production Licence may address the issue of acreage productivity. In this regard, the industry has made couple of recommendations, as follows, to government which are yet to be addressed in the form of policy amendment to the administration of offshore acreage. The implementation of both these recommendations will, in the industry's view, achieve the desired policy outcome to encourage exploration within leases and licences.

Recommendation 1:

Declaration of Locations within an exploration permit and applications for RLs and PLs be based on 3P (Proved plus Probable plus Possible) or P10 boundary based on the best information available at the time of application for any of these 3 possible stages of the title, in a five-minute graticular system.

The definition of the pool based on 3P will allow the applicant and the regulator to agree on the maximum, technically supportable, case scenario. Upon grant of the location, prior to and during a retention lease, the field would normally be appraised in advance of any development (production licence) application. At these later stages, after additional data is available, the pool boundary could be reviewed to ensure that the 3P case is based on the best available data at hand.

Recommendation 2:

The Offshore Petroleum Guideline for Grant and Administration of a Retention Lease, October 1999, be amended, and a similar clause be included in the Production Licence guideline to the effect that if the blocks included in the application contain other prospective resources including potentially drillable prospects, then the application should also contain a strategy for assessing the prospective resources including any proposed activity in the lease/licence area. This is to ensure that the residual prospectivity of the lease/licence is adequately assessed. Such a change could be effected by change to the Retention Lease guideline as follows:

> ***Clause 7.5:*** *If the blocks included in the application contain other prospective ~~reservoirs~~ resources, including potentially drillable prospects, then the application should also contain a strategy for assessing the prospective resources including any proposed ~~exploration~~ activity in the lease/licence area. This is to ensure that ~~those parts of~~ the lease/licence area ~~beyond the identified field are~~ is adequately ~~explored~~ assessed. ~~as if they were part of an Exploration Permit~~;*
>
> and that such proposed activities should only be imposed on a case-by-case basis, dependent on the residual exploration potential of the Lease/Licence.

The inclusion of this provision in both the Retention Lease and Production Licence guidelines, in the industry's view, would allow the titleholder and the regulator to assess the residual exploration potential of the lease or licence, through an appropriate level of exploration work program activity. This is a requirement of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* at s. 138 (5), which states that:

> *"A production licence may be granted subject to a general condition requiring the licensee to:*
>
> *(a) explore for petroleum in the licence area with a view to determining whether there is any additional recoverable petroleum in the licence area; and*
>
> *(b) recover such petroleum if it is commercially viable to do so."*

It is understood that a number of licences, have been granted since the 90s with the above, or a condition worded along the following lines, demonstrating that the JA and the DA have continued to have the right to ensure that Production Licences are not left unexplored:

> *"The licensee shall, to the satisfaction of the DA, continue to appraise and explore the licence area to determine whether additional recoverable petroleum exists in the area and shall exploit such petroleum where economic."*

In response to the notion that improved field boundaries would increase appraisal activities and the knowledge of the resource potential, it should be noted that while this principle may be accurate in theory, in reality appraisal work on discoveries occurs when it is considered that the discovery is mature for such appraisal activity.

Discoveries are made on the basis of exploration data and while an assessment of the discovered resource can be made following the drilling of the discovery well there is significant uncertainty in the resource range. Also, data collected during the exploration phase is not always suitable (or optimal) for appraisal of a discovery. The commerciality of the discovery then determines the timing and appraisal work to be undertaken. In many remote and frontier areas, which tend to be the predominant case in Australia, or for gas discoveries, premature appraisal activity in the absence of a viable market and development option for the resource is commercial folly, and consequently the resource risk cannot be prematurely reduced by inappropriately timed appraisal.

Further imposition of premature appraisal work on discoveries which may be frontier and difficult to commercialise would not be prudent as it would diminish the level of certainty that industry has in the existing titling system under the Act. We respect the need for appropriate levels of appraisal work on field discoveries and in retention leases; however the current system of work programs (and the extensions to this principle, as suggested above, to apply to Production Licences) is effective in ensuring this.