CLAYTON UTZ



12 September 2017

**By hand**

Mr David Jones
General Manager - Adjudication
Australian Competition & Consumer Commission
Level 20, 175 Pitt Street
SYDNEY NSW 2000

Dear Mr Jones

**Applications for Authorisation – Western Australian and Northern Territory LNG Producers**

We confirm that we act for Inpex Operations Australia Pty Ltd, Chevron Australia Pty Ltd, Shell Australia Pty Ltd and Woodside Energy Limited (together the **Applicants**) in relation to this matter.

Please find enclosed the following documents, which are submitted on behalf of the Applicants:

1. Form A – Application for Authorisation;
2. Form B – Application for Authorisation;
3. Submission in support of the Applications for Authorisation; and
4. Cheque for $9,000 as payment of the applicable fee.

We confirm that the Applicants do not have any concerns with the ACCC publishing in full each of the enclosed applications and supporting submission.

Please contact us should you wish to discuss any aspect of this matter.

Yours sincerely

**Linda Evans, Partner**
+61 2 9353 4217
levans@claytonutz.com

**Paul Burton, Senior Associate**
+61 2 9353 4860
pburton@claytonutz.com

**Enc**
Our ref 217/15313/80182261

# Form A

Commonwealth of Australia

*Competition and Consumer Act 2010 — subsections 88 (1A) and (1)*

## EXCLUSIONARY PROVISIONS AND ASSOCIATED CARTEL PROVISIONS: APPLICATION FOR AUTHORISATION

To the Australian Competition and Consumer Commission:

Application is hereby made under subsection(s) 88(1A) / 88(1) of the *Competition and Consumer Act 2010* for an authorisation:

- to make a contract or arrangement, or arrive at an understanding, a provision of which would be, or might be, a cartel provision within the meaning of Division 1 of Part IV of that Act and which would also be, or might also be, an exclusionary provision within the meaning of section 45 of that Act.
- to give effect to a provision of a contract, arrangement or understanding that is, or may be, a cartel provision within the meaning of Division 1 of Part IV of that Act and which is also, or may also be, an exclusionary provision within the meaning of section 45 of that Act.
- to make a contract or arrangement, or arrive at an understanding, where a provision of the proposed contract, arrangement or understanding would be, or might be, an exclusionary provision within the meaning of section 45 of that Act.
- to give effect to a provision of a contract, arrangement or understanding where the provision is, or may be, an exclusionary provision within the meaning of section 45 of that Act.

(*Strike out whichever is not applicable*)

PLEASE FOLLOW DIRECTIONS ON BACK OF THIS FORM

**1. Applicants**

(a) Name of Applicants:

*(Refer to direction 2)*

This application for authorisation is made on a joint basis. The Applicants are the operators for each of the liquefied natural gas (**LNG**) projects, namely:

AA1000396-1

- Chevron Australia Pty Ltd (A.B.N. 29 086 197 757) as the operator of the Gorgon and Wheatstone LNG Projects in Western Australia (**Chevron**);
- Inpex Operations Australia Pty Ltd (A.B.N. 48 150 217 262) as the delegated operator of the Ichthys LNG Project in Western Australia and the Northern Territory (**INPEX**);
- Shell Australia Pty Ltd (A.B.N. 14 009 663 576) as the operator of the Prelude Floating LNG Project in Western Australia (**Shell**); and
- Woodside Energy Limited (A.B.N. 63 005 482 986) (**Woodside**) as the operator of the North West Shelf LNG Project (**NWS**) and Woodside Burrup Pty Ltd (A.B.N. 20 120 237 416) (**WBPL**) as the operator of the Pluto LNG Project in Western Australia.

(b) Description of business carried on by applicants:

*(Refer to direction 3)*

The Applicants either have developed, are developing or may in the future develop liquefied natural gas facilities, comprising both onshore and offshore facilities in Western Australia and the Northern Territory which support LNG production (each an **LNG Facility**). The LNG Facilities form part of the Gorgon and Wheatstone, Ichthys, Prelude, NWS and Pluto LNG projects, each of which involves the extraction and processing of natural gas and conversion to LNG for export (**LNG Projects**). Please see the supporting submission to this application for further details.

(c) Address in Australia for service of documents on the applicants:

C/- Linda Evans
Clayton Utz
Level 15
1 Bligh Street
SYDNEY NSW 2000
T: +61 2 9353 4217
E: levans@claytonutz.com

Ref: 217/15313/80182261

**2. Contract, arrangement or understanding**

(a) Description of the contract, arrangement or understanding, whether proposed or actual, for which authorisation is sought:

*(Refer to direction 4)*

The Applicants wish to discuss, make and give effect to arrangements regarding the sequencing and timing of scheduled maintenance works, and associated shutdowns and outages, at each of the LNG Facilities, in order to limit the extent to which scheduled maintenance works occur concurrently at the LNG Facilities.

Accordingly, the Applicants seek authorisation under ss 88(1A) and 88(1) of the *Competition and Consumer Act 2010* (Cth) to engage in the following conduct:

(a) to make and give effect to arrangements or understandings among the Applicants regarding the sequencing and timing of the conduct of scheduled maintenance at the facilities which support LNG production, including the sequencing and timing of shutdowns and partial plant outages associated with such maintenance by:

(i) identifying the maintenance requirements for each of the facilities which support LNG production, including the scope and expected duration of maintenance campaigns and any shutdowns or partial plant outages associated with those maintenance campaigns;

(ii) classifying planned maintenance campaigns (e.g. major/minor shutdown maintenance or campaign maintenance);

(iii) working to identify optimal maintenance windows having regard to factors such as climate, safety considerations and resource constraints;

(iv) scheduling maintenance in such a way as to minimise contractor mobilisation and demobilisation costs;

(v) developing a process to:

(A) nominate preferred dates for planned maintenance;

(B) negotiate and agree the proposed dates for planned maintenance at each of the facilities supporting LNG production;

(C) inform one another of ad hoc unplanned maintenance requirements;

(D) consult about variations to any maintenance dates;

(E) resolve conflicts where maintenance dates overlap; and

(F) prepare and agree a schedule recording the planned maintenance dates for relevant facilities; and

(b) to exchange information for the purpose of making and giving effect to the arrangements and understandings referred to in paragraph (a), including information about:

(i) maintenance techniques safety practices and operational processes, including personnel requirements, specialist equipment and the use, storage, transport and disposal of hazardous chemicals;

(ii) potential resource constraints associated with particular maintenance windows (e.g. transport and accommodation) and discussing mitigation options; and

(iii) disclosing the names of the maintenance contractors who have been appointed by each Party to perform the relevant maintenance, subject to applicable third party confidentiality restrictions.

(collectively the **Proposed Conduct**).

In making this application, the Applicants seek to obtain the certainty afforded by authorisation of the Proposed Conduct. They do not concede that the Proposed Conduct would contravene the CCA in any of the ways identified above.

(b) Description of those provisions of the contract, arrangement or understanding described at 2 (a) that are, or would or might be, exclusionary provisions and (if applicable) are, or would or might be, cartel provisions:

(*Refer to direction 4*)

The Proposed Conduct may give rise to cartel provisions and/or provisions that might be exclusionary provisions. Please see the supporting submission to this application for further details.

(c) Description of the goods or services to which the contract, arrangement or understanding (whether proposed or actual) relate:

The need for authorisation arises because the proponents of the LNG Projects are likely to be competitors both for the acquisition of the goods and services necessary to undertake maintenance and for the supply of LNG to overseas customers.

(d) The term for which authorisation of the provision of the contract, arrangement or understanding (whether proposed or actual) is being sought and grounds supporting this period of authorisation:

A period of 10 years.

## 3. Parties to the proposed arrangement

(a) Names, addresses and descriptions of business carried on by other parties or proposed parties to the contract or proposed contract, arrangement or understanding:

Any proposed contracts, arrangements or understandings will be between one or more of the Applicants listed in 1(a).

(b) Names, addresses and descriptions of business carried on by parties and other persons on whose behalf this application is made:

*(Refer to direction 5)*

Not applicable.

## 4. Public benefit claims

(a) Arguments in support of application for authorisation:

*(Refer to direction 6)*

The public benefits of the proposed contracts, arrangements or understandings for which authorisation is sought are set out in detail in the supporting submission to this application.

(b) Facts and evidence relied upon in support of these claims:

The facts and evidence relied upon in support of the public benefits claims are set out in the supporting submission to this application.

## 5. Market definition

Provide a description of the market(s) in which the goods or services described at 2(c) are supplied or acquired and other affected markets including: significant suppliers and acquirers; substitutes available for the relevant goods or services; any restriction on the supply or acquisition of the relevant goods or services (for example geographic or legal restrictions):

*(Refer to direction 7)*

Please see the supporting submission to this application.

## 6. Public detriments

(a) Detriments to the public resulting or likely to result from the contract arrangement or understanding for which authorisation is sought, in particular the likely effect of the contract arrangement or understanding, on the prices of the goods or services described at 2(c) and the prices of goods or services in other affected markets:

*(Refer to direction 8)*

For the reasons set out in the supporting submission to this application, the Applicants consider that the Proposed Conduct identified above will not give rise to any anti-competitive detriments.

(b) Facts and evidence relevant to these detriments:

Please see the supporting submission to this application.

**7. Contracts, arrangements or understandings in similar terms**

This application for authorisation may also be expressed to be made in relation to other contracts, arrangements or understandings or proposed contracts, arrangements or understandings, that are or will be in similar terms to the abovementioned contract, arrangement or understanding:

(a) Is this application to be so expressed?

No.

(b) If so, the following information is to be furnished:

(i) description of any variations between the contract, arrangement or understanding for which authorisation is sought and those contracts, arrangements or understandings that are stated to be in similar terms:

*(Refer to direction 9)*

Not applicable.

(ii) Where the parties to the similar term contract(s) are known - names, addresses and descriptions of business carried on by those other parties:

*(Refer to direction 10)*

Not applicable.

(iii) Where the parties to the similar term contract(s) are not known — description of the class of business carried on by those possible parties:

Not applicable.

**8.** Joint Ventures

(a) Does this application deal with a matter relating to a joint venture (See section 4J of the *Competition and Consumer Act 2010*)?

No.

(b) If so, are any other applications being made simultaneously with this application in relation to that joint venture?

Not applicable.

(c) If so, by whom or on whose behalf are those other applications being made?

Not applicable.

**9. Further information**

(a) Name, postal address and telephone contact details of the person authorised by the applicants seeking authorisation to provide additional information in relation to this application:

Linda Evans
Clayton Utz
Level 15
1 Bligh Street
SYDNEY NSW 2000
T: +61 2 9353 4217
E: levans@claytonutz.com

Ref: 217/15313/80182261



Dated: 12 September 2017

Signed on behalf of the applicants:

Signature

Linda Evans
Full Name

Clayton Utz
Organisation

Partner
Position in organisation

# Form B

Commonwealth of Australia

*Competition and Consumer Act 2010 — subsections 88(1A) and (1)*

## AGREEMENTS AFFECTING COMPETITION OR INCORPORATING RELATED CARTEL PROVISIONS: APPLICATION FOR AUTHORISATION

To the Australian Competition and Consumer Commission:

Application is hereby made under subsection(s) 88(1A) / 88(1) of the *Competition and Consumer Act 2010* for an authorisation:

- to make a contract or arrangement, or arrive at an understanding, a provision of which would be, or might be, a cartel provision within the meaning of Division 1 of Part IV of that Act (other than a provision which would also be, or might also be, an exclusionary provision within the meaning of section 45 of that Act).
- to give effect to a provision of a contract, arrangement or understanding that is, or may be, a cartel provision within the meaning of Division 1 of Part IV of that Act (other than a provision which is also, or may also be, an exclusionary provision within the meaning of section 45 of that Act).
- to make a contract or arrangement, or arrive at an understanding, a provision of which would have the purpose, or would or might have the effect, of substantially lessening competition within the meaning of section 45 of that Act.
- to give effect to a provision of a contract, arrangement or understanding which provision has the purpose, or has or may have the effect, of substantially lessening competition within the meaning of section 45 of that Act.

(*Strike out whichever is not applicable*)

PLEASE FOLLOW DIRECTIONS ON BACK OF THIS FORM

**1. Applicants**

(a) Name of Applicants:

(*Refer to direction 2*)

This application for authorisation is made on a joint basis. The Applicants are the operators for each of the liquefied natural gas (**LNG**) projects, namely:

AA1000396-2

- Chevron Australia Pty Ltd (A.B.N. 29 086 197 757) as the operator of the Gorgon and Wheatstone LNG Projects in Western Australia (**Chevron**);
- Inpex Operations Australia Pty Ltd (A.B.N. 48 150 217 262) as the delegated operator of the Ichthys LNG Project in Western Australia and the Northern Territory (**INPEX**);
- Shell Australia Pty Ltd (A.B.N. 14 009 663 576) as the operator of the Prelude Floating LNG Project in Western Australia (**Shell**); and
- Woodside Energy Limited (A.B.N. 63 005 482 986) (**Woodside**) as the operator of the North West Shelf LNG Project (**NWS**) and Woodside Burrup Pty Ltd (A.B.N. 20 120 237 416) (**WBPL**) as the operator of the Pluto LNG Project in Western Australia.

(b) Short description of business carried on by applicants:

(*Refer to direction 3*)

The Applicants either have developed, are developing or may in the future develop liquefied natural gas facilities, comprising both onshore and offshore facilities in Western Australia and the Northern Territory which support LNG production (each an **LNG Facility**). The LNG Facilities form part of the Gorgon and Wheatstone, Ichthys, Prelude, NWS and Pluto LNG projects, each of which involves the extraction and processing of natural gas and conversion to LNG for export (**LNG Projects**). Please see the supporting submission to this application for further details.

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Ref: 217/15313/80182261

**2. Contract, arrangement or understanding**

(a) Description of the contract, arrangement or understanding, whether proposed or actual, for which authorisation is sought:

(*Refer to direction 4*)

The Applicants wish to discuss, make and give effect to arrangements regarding the sequencing and timing of scheduled maintenance works, and associated shutdowns and outages, at each of the LNG Facilities, in order to limit the extent to which scheduled maintenance works occur concurrently at the LNG Facilities.

Accordingly, the Applicants seek authorisation under ss 88(1A) and 88(1) of the *Competition and Consumer Act 2010* (Cth) to engage in the following conduct:

(a) to make and give effect to arrangements or understandings among the Applicants regarding the sequencing and timing of the conduct of scheduled maintenance at the facilities which support LNG production, including the sequencing and timing of shutdowns and partial plant outages associated with such maintenance by:

(i) identifying the maintenance requirements for each of the facilities which support LNG production, including the scope and expected duration of maintenance campaigns and any shutdowns or partial plant outages associated with those maintenance campaigns;

(ii) classifying planned maintenance campaigns (e.g. major/minor shutdown maintenance or campaign maintenance);

(iii) working to identify optimal maintenance windows having regard to factors such as climate, safety considerations and local resource constraints;

(iv) scheduling maintenance in such a way as to minimise contractor mobilisation and demobilisation costs;

(v) developing a process to:

(A) nominate preferred dates for planned maintenance;

(B) negotiate and agree the proposed dates for planned maintenance at each of the facilities supporting LNG production;

(C) inform one another of ad hoc unplanned maintenance requirements;

(D) consult about variations to any maintenance dates;

(E) resolve conflicts where maintenance dates overlap; and

(F) prepare and agree a schedule recording the planned maintenance dates for relevant facilities; and

(b) to exchange information for the purpose of making and giving effect to the arrangements and understandings referred to in paragraph (a), including information about:

(i) maintenance techniques, safety practices and operational processes, including personnel requirements, specialist equipment and the use, storage, transport and disposal of hazardous chemicals;

(ii) potential resource constraints associated with particular maintenance windows (e.g. transport and accommodation) and discussing mitigation options; and

(iii) disclosing the names of the maintenance contractors who have been appointed by each Party to perform the relevant maintenance, subject to applicable third party confidentiality restrictions.

(collectively the **Proposed Conduct**).

In making this application, the Applicants seek to obtain the certainty afforded by authorisation of the Proposed Conduct. They do not concede that the Proposed Conduct would contravene the CCA in any of the ways identified above.

(b) Description of those provisions of the contract, arrangement or understanding described at 2(a) that are, or would or might be, cartel provisions, or that do, or would or might, have the effect of substantially lessening competition:

(*Refer to direction 4*)

The Proposed Conduct may give rise to cartel provisions and/or provisions that might have the effect of substantially lessening competition. Please see the supporting submission to this application for further details.

(c) Description of the goods or services to which the contract, arrangement or understanding (whether proposed or actual) relate:

The need for authorisation arises because the proponents of the LNG Projects are likely to be competitors both for the acquisition of the goods and services necessary to undertake maintenance and for the supply of LNG to overseas customers.

(d) The term for which authorisation of the contract, arrangement or understanding (whether proposed or actual) is being sought and grounds supporting this period of authorisation:

A period of 10 years.

**3. Parties to the proposed arrangement**

(a) Names, addresses and descriptions of business carried on by other parties or proposed parties to the contract or proposed contract, arrangement or understanding:

Any proposed contracts, arrangements or understandings will be between one or more of the Applicants listed in 1(a).

(b) Names, addresses and descriptions of business carried on by parties and other persons on whose behalf this application is made:

(*Refer to direction 5*)

Not applicable.

**4. Public benefit claims**

(a) Arguments in support of authorisation:

(*Refer to direction 6*)

The public benefits of the proposed contracts, arrangements or understandings for which authorisation is sought are set out in detail in the supporting submission to this application.

(b) Facts and evidence relied upon in support of these claims:

The facts and evidence relied upon in support of the public benefits claims are set out in the supporting submission to this application.

**5. Market definition**

Provide a description of the market(s) in which the goods or services described at 2 (c) are supplied or acquired and other affected markets including: significant suppliers and acquirers; substitutes available for the relevant goods or services; any restriction on the supply or acquisition of the relevant goods or services (for example geographic or legal restrictions):

*(Refer to direction 7)*

Please see the supporting submission to this application.

**6. Public detriments**

(a) Detriments to the public resulting or likely to result from the authorisation, in particular the likely effect of the contract, arrangement or understanding, on the prices of the goods or services described at 2(c) and the prices of goods or services in other affected markets:

(*Refer to direction 8*)

For the reasons set out in the supporting submission to this application, the Applicants consider that the Proposed Conduct identified above will not give rise to any anti-competitive detriments.

(b) Facts and evidence relevant to these detriments:

Please see the supporting submission to this application.

## 7. Contract, arrangements or understandings in similar terms

This application for authorisation may also be expressed to be made in relation to other contracts, arrangements or understandings or proposed contracts, arrangements or understandings, that are or will be in similar terms to the abovementioned contract, arrangement or understanding.

(a) Is this application to be so expressed?

No.

(b) If so, the following information is to be furnished:

(i) description of any variations between the contract, arrangement or understanding for which authorisation is sought and those contracts, arrangements or understandings that are stated to be in similar terms:

(*Refer to direction 9*)

Not applicable.

(ii) Where the parties to the similar term contract(s) are known - names, addresses and description of business carried on by those other parties:

Not applicable.

(iii) Where the parties to the similar term contract(s) are not known - description of the class of business carried on by those possible parties:

Not applicable.

## 8. Joint Ventures

(a) Does this application deal with a matter relating to a joint venture (See section 4J of the *Competition and Consumer Act 2010*)?

No.

(b) If so, are any other applications being made simultaneously with this application in relation to that joint venture?

Not applicable.

(c) If so, by whom or on whose behalf are those other applications being made?

Not applicable.

## 9. Further information

(a) Name and address of person authorised by the applicants to provide additional information in relation to this application:

Linda Evans
Clayton Utz
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T: +61 2 9353 4217
E: levans@claytonutz.com

Ref: 217/15313/80182261

Dated: 12 September 2017



Signed on behalf of the applicants:

Signature

Linda Evans

Full Name

Clayton Utz

Organisation

Partner

Position in organisation

# Submission in support of application for authorisation

## Co-ordinated scheduling of maintenance for Western Australia and Northern Territory LNG projects

## Contents

# 1. Executive Summary

## 1.1 Background

The Applicants are each of:

- Chevron Australia Pty Ltd (A.B.N. 29 086 197 757) as the operator of the Gorgon and Wheatstone LNG Projects in Western Australia (**Chevron**);
- INPEX Operations Australia Pty Ltd (A.B.N. 48 150 217 262) as the delegated operator of the Ichthys LNG Project in Western Australia and the Northern Territory (**INPEX**);
- Shell Australia Pty Ltd (A.B.N. 14 009 663 576) as the operator of the Prelude Floating LNG Project in Western Australia (**Shell**); and
- Woodside Energy Ltd (A.B.N. 63 005 482 986) (**Woodside**) as the operator of the North West Shelf LNG Project (**NWS**) and Woodside Burrup Pty Ltd (A.B.N. 20 120 237 416) (**WBPL**) as the operator of the Pluto LNG Project in Western Australia.

The Applicants have either developed, are developing or may in the future develop, liquefied natural gas (**LNG**) and associated facilities, located onshore and offshore (each an **LNG Facility**). The LNG Facilities form part of the Gorgon, Wheatstone, Ichthys, Prelude, NWS and Pluto LNG projects, each of which involves the subsea extraction of natural gas, its processing and conversion to LNG for export (**LNG Projects**).

The LNG Facilities are located in the North West region of Australia, from the Wheatstone LNG Project (whose onshore facilities are located near Onslow) in the west, across to the Ichthys LNG Project (whose onshore facilities are located near Darwin) in the Northern Territory.[1]

The LNG Facilities have an expected lifespan of approximately 25 - 40 years. During this period they will require a range of regular maintenance, much of which will be done while the LNG Facility remains online, however some maintenance will involve a partial or full shutdown of the facility. Any maintenance shutdown will typically affect all or part of one of the gas liquefaction units (**LNG trains**) and associated equipment at the relevant LNG Facility.

A minor shutdown involves a partial shutdown of less than a week duration, whereas a major shutdown involves the complete shutdown of an LNG train for a period of typically up to 30 days. During the period of a particular LNG train being shutdown, no LNG will be produced by that train.

The following table describes the types and frequency of maintenance that could be expected to be carried out on an LNG Facility:

| Type of LNG Facility maintenance | Description of maintenance | Frequency (average over the expected LNG Facility lifespan) | Additional specialist workforce requirements |
|---|---|---|---|
| Major Shutdown | Planned periodic maintenance requiring full shutdown of LNG facility | Each LNG train every 3-4 years | Approximately 200 - 2,000 |
| Minor Shutdown | Planned periodic maintenance | Each LNG train every 6 - 12 months | 10 - 100 |

[1] A map showing the locations of each of the LNG Projects is included in section 2.2 of this submission.

| | | | |
|---|---|---|---|
| | requiring partial shutdown of LNG facility | For a 2 train LNG Facility - typically every 3 months | |
| Unplanned Shutdown | Unexpected events requiring immediate partial or full shutdown of LNG facility | Unexpected | Depends on the nature of event |
| Campaign Maintenance | Planned series of maintenance activities which may or may not require shutdown of LNG facility | Varies | Up to 200 |

The Applicants seek authorisation to engage in the Proposed Conduct described in section 1.2 of this submission, so that they can exchange information and enter into arrangements with one another to agree on the sequencing and timing of the conduct of scheduled maintenance at the LNG Facilities, and of associated shutdowns and partial plant outages, and, as required, campaign maintenance. The parties also seek to exchange information in relation to unplanned maintenance.

This application for authorisation by the Applicants does not include conduct related to the shutdown of any infrastructure or facilities used primarily for the supply of domestic gas in Western Australia or elsewhere.

If the Applicants do not engage in the Proposed Conduct, there is a risk that scheduled maintenance will occur concurrently at multiple LNG Facilities. This is likely to result in additional costs, inefficiencies and other adverse impacts as described in this submission.

## 1.2 Conduct for which authorisation is sought

The Applicants wish to discuss, make and give effect to arrangements regarding the sequencing and timing of scheduled maintenance works, and associated shutdowns and outages, at each of the LNG Facilities, in order to limit the extent to which scheduled maintenance works occur concurrently at the LNG Facilities. The different types of maintenance, and associated shutdowns and partial plant outages, are more particularly described in section 3.2 of this submission.

The Applicants seek authorisation under ss 88(1A) and 88(1) of the *Competition and Consumer Act 2010* (Cth) (**CCA**) to engage in the following conduct:

(a) to make and give effect to arrangements or understandings among the Applicants regarding the sequencing and timing of the conduct of scheduled maintenance at the facilities which support LNG production, including the sequencing and timing of shutdowns and partial plant outages associated with such maintenance by:

(i) identifying the maintenance requirements for each of the facilities which support LNG production, including the scope and expected duration of maintenance campaigns and any shutdowns or partial plant outages associated with those maintenance campaigns;

(ii) classifying planned maintenance campaigns (e.g. major/minor shutdown maintenance or campaign maintenance);

(iii) working to identify optimal maintenance windows having regard to factors such as climate, safety considerations and resource constraints;

(iv) scheduling maintenance in such a way as to minimise contractor mobilisation and demobilisation costs;

(v) developing a process to:

(A) nominate preferred dates for planned maintenance;

(B) negotiate and agree the proposed dates for planned maintenance at each of the facilities supporting LNG production;

(C) inform one another of ad hoc unplanned maintenance requirements;

(D) consult about variations to any maintenance dates;

(E) resolve conflicts where maintenance dates overlap; and

(F) prepare and agree a schedule recording the planned maintenance dates for relevant facilities; and

(b) to exchange information for the purpose of making and giving effect to the arrangements and understandings referred to in paragraph (a), including information about:

(i) maintenance techniques, safety practices and operational processes, including personnel requirements, specialist equipment and the use, storage, transport and disposal of hazardous chemicals;

(ii) potential resource constraints associated with particular maintenance windows (e.g. transport and accommodation) and discussing mitigation options; and

(iii) disclosing the names of the maintenance contractors who have been appointed by each Party to perform the relevant maintenance, subject to applicable third party confidentiality restrictions.

(collectively the **Proposed Conduct**).

The need for authorisation arises because the proponents of the LNG Projects are likely to be competitors both for the acquisition of the goods and services necessary to undertake maintenance and for the supply of LNG to overseas customers.

Consequently, an arrangement between them regarding the sequencing and timing of maintenance and associated shutdowns and outages may potentially be considered to breach the cartel provisions in the CCA, the prohibition on exclusionary provisions under the CCA, and/or the prohibition on agreements with the purpose or likely effect of substantially lessening competition.

By making this application, the Applicants seek to obtain the certainty afforded by authorisation of the Proposed Conduct. They do not concede that the Proposed Conduct would contravene the CCA in any of the ways identified above.

## 1.3 Reasons why authorisation should be granted

The grant of authorisation involves a weighing of public benefits and detriments arising from the Proposed Conduct.

The Proposed Conduct will generate significant public benefits. These include:

(a) reducing the safety risks which would arise from increased activity levels associated with concurrent shutdowns;

(b) maximising the production of LNG by each LNG Project ensuring that there is stability in the supply of LNG to overseas customers (primarily in Asian markets) causing the LNG industry located in the North West region of Australia to remain internationally competitive;

(c) ensuring that the Applicants are able to obtain appropriate equipment and appropriately skilled contractors to undertake maintenance during shutdowns;

(d) reducing additional costs which would be incurred if there were simultaneous shutdowns of LNG Facilities (e.g. mobilisation and demobilisation costs, and costs due to delays in accessing required equipment and technical services).

These benefits would not arise, or would arise to a much lesser extent, if the Applicants do not engage in the Proposed Conduct.

The Proposed Conduct will not give rise to any anti-competitive detriments. In particular, the Proposed Conduct will not affect competition in relation to the key activities to which it relates, being the acquisition of technical and associated services and equipment required for the maintenance of the LNG Facilities, the supply of LNG for export, or the supply of domgas in the Western Australian gas supply market or in the Northern Territory.

### 1.4 Period for which authorisation is sought

Authorisation is sought for a period of ten years.

## 2. The LNG Industry in the North West region of Australia

The LNG industry in Western Australia is well established and reliable, with the rich conventional natural gas reserves of the Carnarvon, Browse and Bonaparte Basins offshore from Western Australia (which together contain more than 90% of Australia's natural gas),[2] and the flagship LNG project (NWS Project) which commenced exports in 1989. The industry is reaching a new phase of maturity as several major projects (including those of the Applicants) reach completion and commence export LNG shipments.

Located close to Asia, the LNG Projects are well positioned to supply the region with the largest global consumption of LNG. Japan is the destination of the majority of the region's LNG exports. Although LNG projects also have long term contracts with customers in China, South Korea and India.[3]

Western Australia exported 6.4 million tonnes of LNG in the September quarter of 2016[4] making it the third largest global exporter of LNG.[5] By 2017 it is estimated that Western Australia will be the second largest exporter of LNG in the world, creating opportunities in maintenance, research and technological innovation.

[2] Ledesma, D, Henderson, J and Palmer, N, *The Future of Australian LNG Exports: Will domestic challenges limit the development of future LNG export capacity?*, The Oxford Institute of Energy Studies Paper (September 2014), p 6.
[3] Western Australia Department of State Development, *WA Liquefied Natural Gas Industry Profile,* December 2016 http://dsdwa.blob.core.windows.net/web/default-document-library/wa-lng-profile---december-2016.pdf?sfvrsn=4

[4] Western Australia Department of State Development, *WA Liquefied Natural Gas Industry Profile*, November 2016 http://www.dsd.wa.gov.au/docs/default-source/default-document-library/wa-lng-profile-1116?sfvrsn=4
[5] Western Australia Department of State Development, Western Australia Economic Profile, December 2016 http://www.dsd.wa.gov.au/docs/default-source/default-document-library/wa-economic-profile---december-2016?sfvrsn=4

## 2.1 Economic contribution

The Western Australia LNG Projects represent some of the largest resource development and private sector investment in the region. The benefits of the LNG sector to the State of Western Australia are clear, with more than $88.9 billion invested in LNG projects.[6]

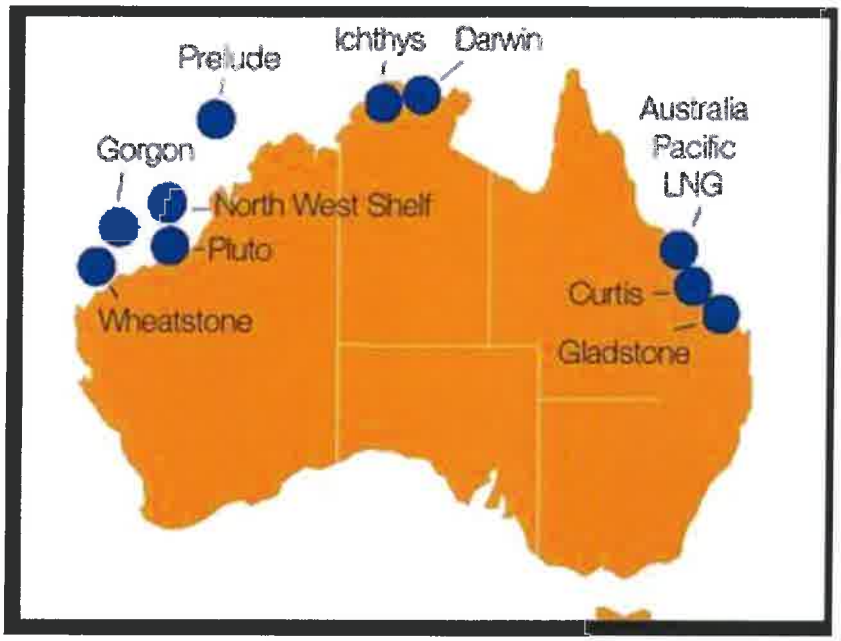
In FY2016, LNG accounted for 12% ($10.7 billion) of Western Australia's total commodity sales.[7] There is approximately $92 billion of LNG projects that are either under construction or have been committed with a further $19.5 billion being considered.[8]

Similarly, extractive resources are a key economic contributor to the Northern Territory, which produces oil and gas from offshore reserves in the Timor Sea, and onshore gas in Central Australia. The Territory has benefitted from continued growth in the sector since the commissioning of the Darwin LNG in 2006, through to the construction of the $34bn INPEX-led Ichthys LNG Facility.

Following completion of the Ichthys LNG project and the commencement of production, it is likely that extractive resources will again become the single largest industry in the Territory. Exports from the Ichthys LNG project will provide a substantial boost to the Territory's economy and are expected to be a key driver of economic growth in 2017-18, and into the future.[9]

## 2.2 Overview of the LNG Projects

The Applicants will operate a total of six LNG projects, five of which are located in Western Australia and one in the Northern Territory (as shown in the Map below). The descriptions below relate only to the LNG Facilities and not to any associated infrastructure used in the supply of domestic gas in Western Australia or elsewhere.




[6] Ibid.
[7] Western Australia Department of State Development, Western Australia Economic Profile, May 2017 http://www.dsd.wa.gov.au/docs/default-source/default-document-library/wa-economic-profile---may-2017.pdf?sfvrsn=2
[8] Ibid.
[9] "2016-17 Budget', Northern Territory Government Budget Papers, https://budget.nt.gov.au/__data/assets/pdf_file/0005/277601/2016-17-economy-book.pdf (accessed 5 January 2017), page 5.

(a) **Gorgon LNG Project (Chevron)**

The Chevron operated Gorgon LNG project is situated on Barrow Island, 60 kilometres off the coast of Western Australia. The project's offshore facilities currently include eighteen high-rate, big bore development wells and a subsea gas gathering system. The project's onshore facilities include an LNG processing plant comprising three processing trains with a combined production capacity of 15.6 mtpa of LNG and a loading jetty.

The first LNG cargo departed in March 2016 and the project is expected to be fully operational by mid-2017 with a production lifespan of 40 years, which includes environmental approval for a fourth LNG train.

(b) **Wheatstone LNG Project (Chevron)**

The Wheatstone project, also operated by Chevron, is located 12 kilometres west of Onslow. The project is currently under construction with the first LNG expected in mid-2017. The project's offshore facilities include well infrastructure, subsea installations and a platform. The project's onshore facilities will consist of two LNG Trains with a combined capacity of 8.9 mtpa. The project has a projected lifespan of 30 years, which includes environmental approval to expand to 25 mtpa of LNG.

(c) **Prelude LNG Project (Shell)**

The Shell-operated Prelude Project, will comprise a floating LNG production facility in the Browse Basin, off Western Australia's Kimberley Coast. The project will be the largest floating LNG offshore facility in the world. The project is expected to be producing material cash flow in 2018. Once operational, the project will have a production capacity of 3.6 mtpa of LNG with an expected operating life of 25 years.

(d) **Ichthys LNG Project (INPEX)**

The INPEX-operated Ichthys project is currently under construction. It is expected to be producing material cash flow in 2018. The project will be comprised of a number of onshore and offshore facilities. The floating offshore facility in the Browse Basin off Western Australia's Kimberley Coast, will be used for extraction, preliminary processing, storage and export. The onshore facilities at Bladin Point, Darwin will include two LNG processing trains, storage tanks, administration facilities, utilities and a loading jetty. A 890 kilometre gas pipeline will link the onshore and offshore facilities. Once operational, the project is expected to produce 8.9 mtpa of LNG and have an operating life of 40 years.

(e) **Pluto LNG Project (WBPL)**

The WBPL-operated LNG project commenced LNG production in 2012. The onshore facilities comprise a single LNG processing train, LNG storage tanks and an export jetty. The Pluto Project has a production capacity of 4.7 mtpa of LNG, and usually operates unmanned (with operations controlled from the onshore Pluto Gas Plant).

(f) **NWS LNG Project (Woodside)**

The NWS LNG Project has been exporting LNG since 1989. The onshore North West Shelf facilities include the Karratha Gas plant, comprising five LNG processing trains with a combined production capacity 16.9 mtpa, as well as storage and loading facilities. The offshore production facilities include the North Rankin Complex, Goodwyn A and Angel platforms, and the Okha floating production storage and offloading vessel.

| LNG Project | Current number of LNG trains | Status |
|---|---|---|
| Gorgon Project (Chevron) | 3 | Train 1 became operational on 7 March 2016. Train 2 became operational on 25 October 2016. Train 3 is expected to be operational mid- 2017. |
| Wheatstone Project (Chevron) | 2 | Not yet operational. First LNG expected mid-2017. |
| Prelude Project (Shell) | 1 | Under construction and expected to be producing material cash flow in 2018. |
| Ichthys Project (INPEX) | 2 | Under construction and expected to be producing material cash flow in 2018. |
| North West Shelf Project (Woodside) | 5 | All trains are operational (Trains 4 and 5 commenced operations in 2004 and 2008 respectively). |
| Pluto Project (WBPL) | 1 | Operational (since 2012). |

## 2.3 LNG Facilities and production process

With the exception of Shell's Prelude LNG Facility, all of the LNG Projects are comprised of onshore and offshore facilities.

While there are some differences between each LNG Project, each LNG Facility will generally comprise the following minimum bundle of facilities:

***Onshore facilities***

(a) LNG processing train/s;

(b) LNG storage tanks;

(c) Condensate storage tanks;

(d) Utility plants (e.g. power generation);

(e) Marine facilities, including an offloading facility and jetty;

(f) Various operational and maintenance buildings.

***Offshore facilities***

(a) Subsea gas wells;

(b) Subsea gas gathering system;

(c) Processing facility/platform;

(d) Feed gas pipeline (connecting the gas gathering system to the onshore LNG processing trains);

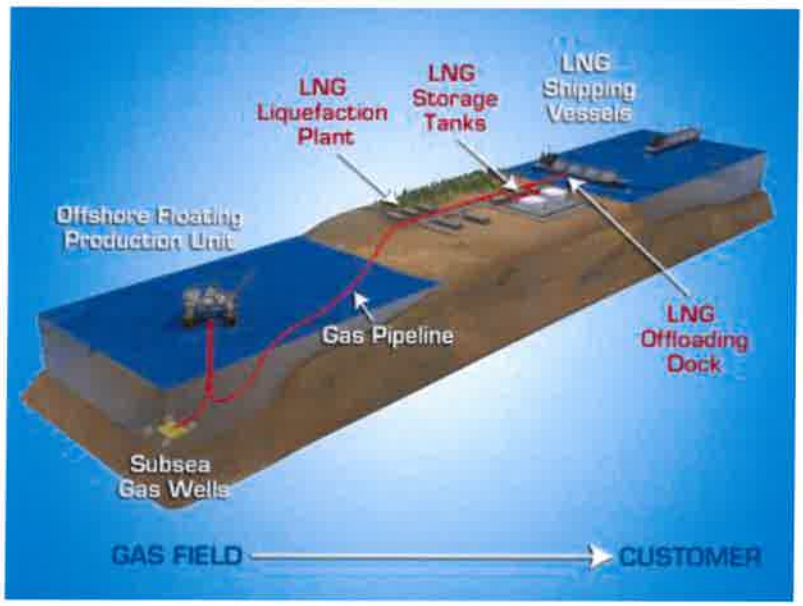
(e) Electric-hydraulic control umbilical and associated pipelines (including for utilities and fibre optics).

***LNG production process***

LNG is natural gas, primarily methane, which has been cooled to minus 161°C to reach its liquid state. Natural gas feedstock for LNG production is generally sourced from conventional natural gas fields. In the case of the Applicants' LNG Projects, the feedstock gas is conventional natural gas.

Liquefying natural gas reduces the volume it occupies by more than 600 times, making it suitable for storage and transportation in specifically designed and built tankers. LNG is widely recognised as a clean, safe and convenient form of energy which can be readily supplied to overseas customers. It is transported to dedicated LNG receiving terminals, which have the capacity to store and re-gasify the LNG for on-supply. LNG, in its liquid state, is not flammable or explosive.

The following diagram provides an overview of the LNG production/export process:




# 3. Operation and maintenance of LNG Facilities

## 3.1 Operation of LNG Facilities

Each LNG Facility is designed to operate 24 hours per day, 365 days of the year. Although parts of the facility, including in some cases a whole LNG train, will need to be periodically shut down to allow for inspection and maintenance activities to occur as needed.

The total number of employees at each facility during normal operations (i.e. post-construction) will be within a range of 130 to 300. This will typically be a mix of operations, maintenance, management, administration, support and contractor personnel and visitors.

## 3.2 Maintenance of LNG Facilities

Each LNG Facility will require routine maintenance and inspections to ensure continued, safe operation during the course of its expected lifespan.

More significant maintenance activities such as major equipment services, regulatory internal vessel inspections, and corrective maintenance will typically necessitate certain shutdowns at the LNG Facility to ensure that these tasks can be undertaken safely. This typically involves the shutdown of all or part of an LNG train and a corresponding reduction or cessation in the gas supply to a train or the LNG Facility entirely.

Maintenance and inspections requiring a shutdown to safely execute work are grouped into maintenance campaigns (major and minor) to assist with planning and to minimise the duration and number of shutdowns over the expected facility lifespan. There are also likely to be some unplanned maintenance activities which require all or part of an LNG Facility to be shutdown.

Minor maintenance and external inspections are routine in nature and typically managed by the core operational workforce with support from a small number of specialist vendors.

Major LNG Facility maintenance is significantly more labour and capital intensive, requiring specialist equipment and a significant number of highly skilled maintenance technicians. The safe and efficient execution of these maintenance campaigns requires significant pre-planning and coordination of limited resources.

***Major Shutdowns***

Major shutdowns involve the planned outage of an LNG train to perform intrusive regulatory inspections, corrective maintenance, critical function testing (e.g. testing plant emergency shutdown systems, and verifying safety barriers), and routine maintenance. Major shutdowns involve draining, isolation and purging of the LNG train to enable intrusive maintenance to occur safely.

Major Shutdowns can typically take up to 30 days per LNG train and, for each of the Applicants, are broadly estimated to occur as follows:

- First shutdown: occurs for most assets after the first year of operation;[10]
- Second (and subsequent) shutdown: occurs after three or four years (i.e. two or three years after initial inspection).

Major Shutdowns require a long lead time of up to 18-24 months, due to:

- the scale of the maintenance activities, the specialised equipment involved and the number of specialist technicians required;
- the need for significant planning and scheduling for the LNG Facility to secure:
    - materials which take a long time to become available (e.g. large engines, specialised gaskets);
    - arrangements for equipment that needs to be sent off-site for servicing;
    - specific Original Equipment Manufacturer (**OEM**) vendor technicians required to service particular machinery (e.g. engines);
    - accommodation for maintenance technicians;
    - support equipment (e.g. heavy lift cranes, transportation services); and
    - contract labour; and
- the time required for each LNG Facility to scope their maintenance requirements, identify prospective suppliers, ascertain availability of specialist contractors (e.g. OEM vendors), implement an appropriate procurement process (e.g. completive tender), negotiate terms with the preferred service provider, make arrangements to secure the necessary resources and equipment to support the preparation and execution and ensure the appropriate systems and processes are in place to allow the major shutdown to occur.

[10] This is not the case for the Shell operated Prelude FLNG Project.

There are a number of skills and occupations required for Major Shutdowns. The maintenance workforce will predominantly be a combination of a contractor and specific OEM vendor personnel. In addition to core operational workforce, approximately 200 - 2,000 specialist workers will be required to support a Major Shutdown at each LNG Facility.

***Minor Shutdowns***

Minor Shutdowns involve the planned partial shutdown of a LNG train (e.g. half a LNG train) to perform engine services, corrective maintenance and routine maintenance. Minor Shutdowns can potentially occur approximately every six months for three to six days per LNG train. This means that a two train facility could potentially have a Minor Shutdown on average once every 3 months, depending on scheduling.

Like Major Shutdowns, Minor Shutdowns are also planned in advance to secure materials which have a long lead time, support equipment (e.g. cranes), contract labour and OEM vendor technicians. As well as the core operational workforce, approximately 10-100 workers will be required to support a minor maintenance campaign on a LNG Facility.

***Unplanned Shutdowns***

It is anticipated that during the lifetime of an LNG Facility there may be unexpected failures of equipment which will require an immediate partial or full LNG train shutdown (**Unplanned Shutdown**). Depending on the nature of the unexpected equipment failure, additional support equipment, contract labour and OEM vendors will be required urgently to minimise the facility shutdown duration.

***Campaign Maintenance***

Campaign Maintenance is defined as maintenance that can be logically grouped for execution as a pre-determined event that does not require a production outage. It is typically complex in resourcing, planning, coordinating or 'like type' work that is grouped to execute with a high degree of efficiency and productivity. Similar to Minor Shutdowns, Campaign Maintenance will utilise some core operational workforce as well as additional support equipment, contract labour and OEM vendors, with approximately 10-50 workers required to support a maintenance campaign on a LNG Facility.

## 3.3 Maintenance Workforce

The skills and services required to undertake shutdowns and campaign maintenance are:

- the specialised technical skills and services required to plan, prepare and carry out the relevant maintenance work; and
- the associated skills and services required to support those undertaking the maintenance work.

***Technical skills and services***

The LNG Facilities have sufficient similarities such that:

- the same OEM vendors have supplied some equipment to each of the LNG Facilities (e.g. each of the LNG Facilities uses the same turbines/engines or the same or similar components); and
- maintenance contractors with the same skills are required to support both Major Shutdowns and Minor Shutdowns.

It is also common for OEM vendors to perform maintenance on some of the equipment that they have manufactured and/or supplied to an LNG Facility. Where the same OEM has

supplied equipment to more than one LNG Facility, the same group of specialist OEM maintenance personnel may be involved in the maintenance of that equipment.

The types of technical skills and occupations required to conduct maintenance work on an LNG Facility during a Major Shutdown or Minor Shutdown typically include:

- Supervisors;
- Mechanical Fitters;
- Electrical & Instrument Technicians;
- Rotating Equipment Specialists;
- Scaffolders;
- Engineers;
- Catalyst Handling Specialists;
- Nitrogen Purging Specialists;
- Flange Management Technicians;
- Industrial Services Specialists;
- OEM Vendors; and
- Work preparers and planners.

In addition the maintenance contractors used by each LNG Facility will typically be required to provide supervision, planning and support staff in order to assist in preparations for the shutdown. When undertaking capital project work within a shutdown, fabrication of equipment prior to execution will be required and usually requires long lead times to accommodate extensive quality checks and controls. At times there is a need for modification of equipment removed during the shutdown which requires quick turnaround performed by labour offsite.

When more than one LNG Facility uses the same contractors for these events, constraints may be placed on that contractor.

There is typically a limited supply of specialist maintenance contractors and OEM vendors required to support LNG train shutdowns. Many of these contractors and vendors also support the maintenance campaigns of several oil and gas facilities nationally and internationally. Accordingly, the LNG Facilities will incur mobilisation, demobilisation and other associated costs to bring these specialist contractors and vendors to the North West region of Australia (e.g. flights, local accommodation, transportation to the LNG Facility etc) for the duration of each maintenance campaign.

***Associated skills and services required to support the maintenance work***

The associated skills and services required in order to support those providing the specialised technical skills and services outlined above include the supply of:

- accommodation, catering and transport for temporary maintenance workforce; and
- equipment transport (e.g. barges and ferries to transport equipment to the relevant LNG Facility).

Many of these services necessarily have a local element to them and the Applicants expect that a number of these providers may wish to supply services to more than one of the LNG Projects where they have the ability and capacity to do so.

## 3.4 LNG Facility shutdown scheduling

The frequency of the maintenance shutdowns which are likely to be required at the LNG Facilities is described in section 3.2 above. In practice, the scheduling of those maintenance campaigns in any given calendar year is influenced by regulatory requirements, external drivers (e.g. weather) and internal company considerations focused on minimising downtime and interruptions to production and exports.

For the North West region of Australia, weather plays a key influence on the scheduling of maintenance of LNG trains and associated facilities. The optimal weather windows for LNG train shutdowns are **April to May** and **September to October**, for the following reasons:

- **Tropical Cyclone** season in the region is from November to February. High winds, rainfall and elevated sea conditions associated with cyclones pose a safety hazard to the workforce. Avoiding the cyclone season eliminates the exposure to unpredictable weather events for the larger workforce required for maintenance campaigns.

- **High rainfall and thunderstorm activity** impacts the ability of the workforce to safely and efficiently conduct maintenance campaigns. Maintenance work on an LNG Facility is typically conducted in the open environment exposing the workforce and equipment to the weather. The region experiences an increase in thunderstorm activity and on average high rainfall from November to March.

- **Efficiency of LNG trains** is higher at lower ambient temperatures. Lower ambient temperatures during the winter period of June to August enable the LNG Facilities to marginally increase LNG production, and as such it is not desirable to conduct a shutdown during this period when increased production is possible.

- **Overseas demand for LNG exports** is higher during the northern hemisphere's winter months of December to February, and as such it is not desirable to conduct a shutdown during this period when demand and price for LNG is higher.

The LNG Projects will together comprise 14 LNG trains with the potential for future development. This application is made in respect of current and potential future LNG trains at each of the Facilities. It is highly likely that without the Proposed Conduct, two or more of the parties will schedule concurrent or overlapping shutdown maintenance owing to the factors described above.

## 3.5 Implications for supply of Domestic gas (Domgas)

Two of the Applicants (Chevron and Woodside) supply gas produced by the facilities they operate in Western Australia to the Western Australian gas supply market (referred to as domestic gas or "domgas").

In each case, the infrastructure and facilities operated to produce gas for supply as domgas can be operated independently from the LNG Facilities.

As a result, the shutdown of the part or whole of an LNG train or the carrying out of any maintenance on the infrastructure supporting LNG production by Chevron or Woodside will not have any impact on the supply of domgas by them to the Western Australian gas supply market.

Further, it is noted that unlike coal seam gas wells, an operator can "turn off" a conventional gas well, if necessary. This means that during a scheduled maintenance shutdown, the

operator can control the levels of feedstock gas such that it is not required to flare the gas, or store or sell it to a third party during the period of the shutdown.

# 4. Public benefits arising from Proposed Conduct

## 4.1 Overview

The term "public benefit" is not defined in the CCA. It has, however, recently been interpreted broadly to mean:[11]

> *"A public benefit arises from a proposed acquisition if the benefit would not exist without the acquisition or if the acquisition removes or mitigates a public detriment which would otherwise exist. If a claimed public benefit exists, in part, in a future without the proposal, the weight accorded to the benefit may be reduced appropriately. Public benefit is a wide concept and may include anything of value to the community generally so long as there is a causal link between the proposed acquisition and the benefit: see Application by Medicines Australia Inc (2007) ATPR 42-164; [2007] ACompT 4 ("Medicines Australia") at [107], [118]-[119]. Benefits not widely shared may nevertheless be benefits to the public: Hospital Benefit Fund of Western Australia Inc v Australian Competition and Consumer Commission (1997) 76 FCR 369 at 375-377. However, the extent to which the benefits extend to ultimate consumers is a matter to be put in the scales: Mac Gen at [168]."*

The Proposed Conduct will give rise to a number of significant public benefits.

## 4.2 Safety considerations

LNG train shutdowns involve periods of continuous activity which may last for up to 30 days in the case of Major Shutdowns, and involve a proportionally larger volume of high risk maintenance activity compared to normal operations (for example, confined space entry, working at heights, heavy lifts and intrusive maintenance).

The LNG Projects will focus heavily on process safety and HSE throughout LNG train shutdowns. Ensuring an adequate emergency response to any potential incident is critical to the safety of all involved in an LNG shutdown.

The increase in activity in and around the North West region of Australia which is associated with maintenance shutdowns means that the risk of safety incidents will inevitably be higher if two or more shutdowns occur concurrently, particularly if the two affected facilities are in close proximity to each other. Further, in the event of a significant safety event occurring, emergency response resources would be spread more thinly if two or more maintenance shutdowns occurred concurrently.

Accordingly, the Proposed Conduct would assist in the management of safety issues by reducing activity levels at multiple LNG Facilities, as well as reducing the strain on emergency response resources, compared to a situation where two or more shutdowns are likely to occur concurrently.

In addition, the avoidance of concurrent or overlapping maintenance campaigns or shutdowns will ensure that each of the Applicants are able to engage maintenance contractors who can commit to perform their services for the duration of the campaign or shutdown period without stretching their resources or requiring them to undertake multiple maintenance contracts at the same time, thereby potentially compromising the quality of the maintenance work performed. Maintenance works performed to a high standard overall reduces potential incidents and ensures that the period between maintenance campaigns or shutdowns is maximised resulting in fewer or less frequent shutdowns.

[11] *Application by Sea Swift Pty Limited* [2016] ACompT 9, [42]. Also see *Application by Tabcorp Holdings Limited* [2017] ACompT 1, [65].

## 4.3 Maximisation of LNG production

The coordination of shutdowns and campaign maintenance will avoid the risk of production being affected at any LNG Facility and will in turn maximise the production of LNG by the LNG projects. Maximising LNG production will lead to a reliable supply of LNG by the Applicants to overseas customers (primarily in Asia) causing the LNG industry located in the North West region of Australia to remain internationally competitive.

By between 2018 and 2020, Australia is expected to become the world's largest exporter of LNG. By that time, Australia's LNG production capacity is expected to reach 85 mtpa, surpassing Qatar.[12] Australia is not alone in significantly increasing its LNG production over the past few years (as a result of the Applicant's projects as well as those situated in Queensland). There are a number of liquefaction plants also currently under construction in North America which are expected to provide additional LNG production capacity of approximately 62 mtpa by the time they all become operational in or before 2020. This new capacity is likely to result in excess supply capacity in the global LNG supply market until 2020.[13]

Consequently, Australian LNG producers will face significant competition from LNG producers in the Middle East and North America for the foreseeable future.

In order to remain internationally competitive, it is vital that Australian LNG producers are able to guarantee the supply of LNG to customers. Failure by any of the Applicants to meet contracted LNG volumes would be expected to not only give rise to them potentially paying financial penalties under individual LNG supply contracts but also damage the industry's reputation more generally as a reliable and competitive source of LNG.

## 4.4 Availability of skilled workers and equipment

Maintenance shutdowns are labour and capital intensive. As described in section 3.2, they require a significant number of highly skilled maintenance technicians, including specialist OEM maintenance personnel, who are experienced in servicing the relevant equipment. In many cases, these personnel and the firms they work for today operate on a national or international basis.

The LNG Projects will require between 200 and 2,000 skilled contractors to support major maintenance campaigns (per LNG train). The LNG Projects have policies to attract local skilled labour to support major maintenance campaigns. The Applicants will often need to draw on the same pool of specialists (e.g. OEM vendors) in order to undertake major maintenance campaigns.

If the Applicants do not engage in the Proposed Conduct, there is a material risk that maintenance and shutdowns will occur concurrently at more than one LNG Facility, with the effect that it will be more challenging to source skilled contractors and appropriate equipment to undertake maintenance during the period of the concurrent shutdown. This has the potential both to increase search costs for the Applicants and result in a more inefficient planning process (which already has long lead times) should the Applicants go to the effort and expense of conducting a formal procurement process only to find that the necessary contractors and equipment are not available due to maintenance commitments at another LNG Facility.

The Proposed Conduct will not reduce demand for technical maintenance or associated services by any Applicant but rather will help to mitigate some of the constraints the Applicants may otherwise face in attempting to obtain skilled contractors and equipment to undertake maintenance during the desired periods for shutdowns.

[12] Ledesma, D, Henderson, J and Palmer, N, *The Future of Australian LNG Exports: Will domestic challenges limit the development of future LNG export capacity?*, The Oxford Institute of Energy Studies Paper (September 2014) and Department of Industry, Innovation and Science (Office of the Chief Economist), *Gas Market Report 2015* (March 2016).
[13] Department of Industry, Innovation and Science (Office of the Chief Economist), *Gas Market Report 2015* (March 2016), pp 79-80.

## 4.5 Cost savings

In addition to the efficiencies described above, the Applicants anticipate that the Proposed Conduct will give rise to cost savings with respect to the use of specialist maintenance equipment and mobilisation/demobilisation of specialist contractors.

As discussed at section 3.2 above, a range of support equipment (e.g. heavy lift cranes) will be required to carry out LNG Facility maintenance campaigns. Equipment may be sourced locally, interstate or internationally and may be needed to be transported to the offshore facilities.

Simultaneous shutdowns give rise to a real prospect of delays, both in accessing equipment which is used across multiple LNG Facilities and in transporting that equipment to the offshore facilities. Such delays risk extending the time required by at least some of the LNG Projects to complete maintenance activities, thereby increasing the downtime of the relevant LNG train and foregoing LNG production.

Scheduling maintenance activities as between the Applicants will also help reduce mobilisation and demobilisation costs if specialist contractors (who are likely to include interstate and international experts) can move from one LNG Facility to another in a planned and coordinated manner.

# 5. No anti-competitive detriment

The Proposed Conduct will not give rise to any anti-competitive detriments.

In particular:

*The acquisition of technical services and equipment required for maintenance*

- The Proposed Conduct will not reduce demand for technical maintenance or associated services or equipment by any Applicant. Each Applicant will still require the same level of maintenance shutdowns, services and equipment regardless of whether the Proposed Conduct is implemented, and accordingly there will be the same opportunities for contractors (local and otherwise) to compete to provide the relevant technical maintenance and associated services;
- The Proposed Conduct will not lessen the number of maintenance and other suppliers that are able to compete in relation to the supply those services and equipment to the Applicants, or seek the opportunity to do so; and
- The Proposed Conduct will not reduce the competition among the Participants to acquire maintenance or associated services and equipment.

*The supply of LNG for export*

- The international market into which the Applicants supply LNG is highly competitive and will remain so once the Proposed Conduct is implemented;
- The Proposed Conduct will not result in any additional shutdowns occurring and hence will not result in any reduction in LNG production relative to the situation without the Proposed Conduct;
- The Proposed Conduct will not result in any detriments in relation to the supply of LNG to overseas customers, or reduce the amount of LNG available for global supply;

- The Proposed Conduct will not involve the Applicants discussing or coordinating LNG sales or any exchange of information between the Applicants regarding LNG production or sales volumes, prices or customers;

- The majority of LNG sales are conducted under long-term contracts (sometimes lasting up to 20 years) and, accordingly, will be less affected by any short-term maintenance scheduling decisions (whether undertaken independently or coordinated);

- Each Applicant will retain the ability and incentive to maximise the volume of LNG it supplies in the global LNG market (which will be further enhanced by the production efficiencies arising from the Proposed Conduct); and

- To the extent that the Proposed Conduct has any bearing on the global LNG market it will be a pro-competitive impact of increasing the Applicants' efficiency and hence competitiveness in that market (in particular by reducing the Applicants' unit costs of production).

*The supply of domgas*

- The Proposed Conduct will not have any impact on the production of gas for supply by any of the Applicants into the Western Australian and Northern Territory gas supply markets (to the extent any of the Applicants do supply any domgas to those markets).