Capacity Trading Reform Package:

Specification of service points, zones and pipeline segments for capacity trading platform and auction

Consultation Paper

24 September 2018

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

GMRG
Gas Market Reform Group

Abbreviations

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AEST	Australian Eastern Standard Time
BB	Natural Gas Services Bulletin Board
CBU	Contracted but un-nominated
CT&A Procedures	Capacity Transfer and Auction Procedures
CTP	Capacity trading platform
DAA	Day-ahead Auction
DWGM	Declared Wholesale Gas Market
Energy Council	Council of Australian Governments Energy Council
GMRG	Gas Market Reform Group
GSH	Gas Supply Hub
MHQ	Maximum Hourly Quantity
MSV	Market Scheduled Variation
NGL	National Gas Law
OTSA	Operation Transportation Service Agreement
STTM	Short Term Trading Market

List of Pipelines

Term	Definition
AGP	Amadeus Gas Pipeline
BWP	Berwyndale to Wallumbilla Pipeline
CGP	Carpentaria Gas Pipeline
DDP	Darling Downs Pipeline
DTS	Declared Transmission System
ITP	Illabo to Tumut Pipeline
MAPS	Moomba to Adelaide Pipeline System
MSP	Moomba to Sydney Pipeline
NGP	Northern Gas Pipeline
NQGP	North Queensland Gas Pipeline
PCA	Port Campbell to Adelaide Pipeline
PCI	Port Campbell to Iona Pipeline
QGP	Queensland Gas Pipeline
RBP	Roma to Brisbane Pipeline
SESA	South East South Australia Pipeline
SGP	Spring Gully Pipeline
SWQP	South West Queensland Pipeline
TGP	Tasmanian Gas Pipeline

Contents

1 Introduction

On 29 June 2018 the Council of Australian Governments Energy Council (Energy Council) agreed to implement the legal and regulatory framework required to give effect to the capacity trading reform package. The capacity trading reform package, which applies to the operators of transmission pipelines and compression facilities operating under the contract carriage model[1] (jointly referred to as 'transportation facility operators'), provides for the implementation of:

1. A capacity trading platform (CTP) that will form part of the gas trading exchange (Gas Supply Hub (GSH)) and provide for:
    - exchange-based trading of commonly traded transportation products (including firm forward haul services, firm park services and firm compression services on stand-alone compressors); and
    - a listing service for other more bespoke products.
2. A day-ahead auction (DAA) of contracted but un-nominated (CBU) capacity, which will be conducted each day on non-exempt transportation facilities shortly after nomination cut-off and subject to a reserve price of zero. Shippers will be able to use the DAA to procure forward haul transportation services (with separate products offered in both directions on bi-directional[2] pipelines); backhaul services on single direction pipelines (or parts of pipelines) and stand-alone compression services.
3. A range of measures to facilitate capacity trading and the DAA, including the development of standard operational transportation service agreements (standard OTSA) that will establish the standard contract terms between service providers and shippers for capacity procured through the CTP and DAA.
4. A reporting framework for secondary capacity trades and a number of other transparency measures that are designed to facilitate capacity trades and the DAA.
5. A standard market timetable that provides for:
    - a common gas day start time of 6 am (AEST) across the east coast (and Northern Territory once connected to the east coast) that will apply to all production, pipeline, compression and storage facilities and in the facilitated markets; and
    - a common nomination cut-off time of 3 pm (AEST) and common auction service nomination cut-off time of 6:45 pm (AEST) for transportation facilities that will be subject to the capacity trading reforms.

Work on the design of the reform package commenced in early 2017. Following an extensive consultation process, which included a large number of meetings with industry-based project teams, the GMRG provided its final recommendations to the Energy Council on:[3:]

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1 The reforms do not apply to the Declared Transmission System, which operates under the market carriage model.

2 A pipeline will be classified as bi-directional if at any time the direction of the physical flow of gas on the pipeline (or part) is capable of being reversed under normal operating conditions and transportation facility users have transportation capacity for firm forward haul services in both directions (with a service time that includes that time).

3 GMRG, Final Recommendations on the Operation and Administration of the Transportation Capacity Trading Platform and Day-Ahead Action, June 2017. GMRG, Final Recommendations on the Capacity Trading Reform Package (Standardisation, capacity trading platform and reporting framework for secondary trades), November 2017. GMRG,

- the proposal to accord the Australian Energy Market Operator (AEMO) responsibility for operating the CTP and DAA, which was approved by the Energy Council at its 14 July 2017 meeting;
- the proposed design of the trading platform, the measures required to facilitate capacity trading and the DAA, the reporting framework for secondary trades and the adoption of a standard market timetable, which were approved by the Energy Council at its 24 November 2017 meeting; and
- the proposed design of the DAA, which was approved by the Energy Council out-of-session on 3 January 2018.

The Energy Council also agreed at its 24 November 2017 meeting that:

- the capacity trading reform package should be implemented by **1 March 2019**; and
- the harmonisation of gas day start times and nomination cut-off times should occur by **1 October 2019**.

On 29 June 2018, the Energy Council agreed that the reform package will initially apply in the Australian Capital Territory, New South Wales, Queensland, South Australia, Tasmania and Victoria (outside the Declared Transmission System (DTS)). The Energy Council also agreed, at the request of the Northern Territory Government, to:[4]

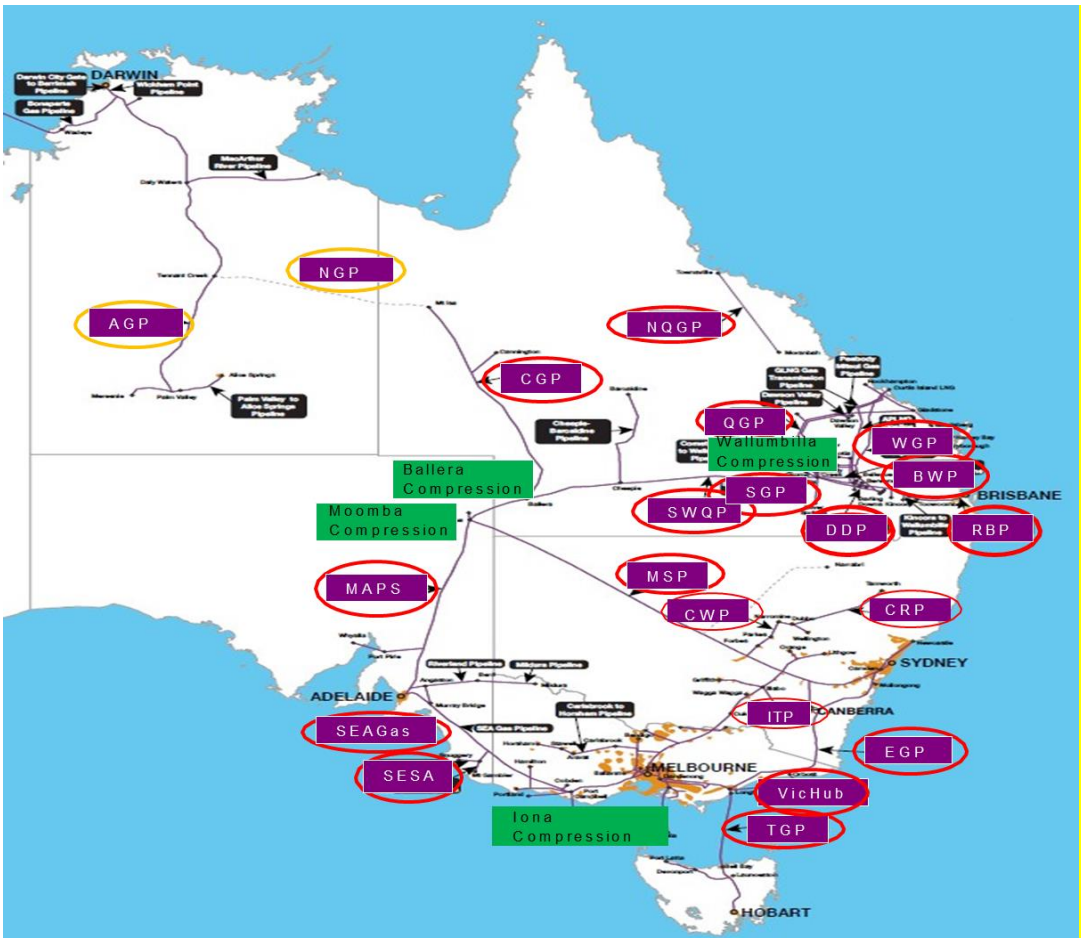
- implement a derogation that will delay the application of the DAA to transportation facilities located wholly or partly in the NT; and
- apply all other aspects of the capacity trading reform package in the NT once the Northern Gas Pipeline (NGP) is commissioned, which is expected to occur in late 2018.

Figure 1 provides an indication of the coverage of the capacity trading reforms and identifies those facilities located wholly or partly in the NT that, by virtue of the operation of the derogation, will not be subject to the DAA until the derogation expires (see facilities circled in yellow). Note that the map excludes those transportation facilities that will be automatically exempt from the reforms and those that are likely to obtain a full or conditional exemption from the reforms.

Final Recommendations on the Design of the Day-Ahead Auction of Contracted but Un-Nominated Capacity, December 2017.

[4] Further detail on the derogation (including the term of the derogation) can be found in the Senior Committee of Officials' Bulletin dated 3 July 2018 (http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/Bulletin%20-%20Application%20of%20the%20Capacity%20Trading%20Reforms%20in%20the%20NT.pdf).

Figure 1: Indicative coverage of capacity trading reforms (excluding harmonisation reforms)



Map source: AEMC with additions made by the GMRG.

1.1 Service points, zones and pipeline segments

Under the legal and regulatory framework that the Energy Council has agreed to implement, AEMO will be responsible for:

- maintaining and publishing a register of each service point (physical or notional) at or between which transportation services are (or may be) provided by the facilities that will be subject to the reform package and each park service point;
- determining the backhaul service points between which backhaul auction services will be available in the DAA on single direction pipelines (or parts of pipelines);
- determining the allocation of service points to the zones that will be used for both the CTP and DAA; and
- determining the forward haul pipeline segments (i.e. the part of a pipeline between pipeline zones) and, where relevant, the backhaul pipeline segments that will be used in the DAA.

Before making a determination on the service points, zones and pipeline segments that will apply on each of the facilities that will be subject to the reforms, AEMO must have regard to a range of matters and must also consult with stakeholders. Box 1.1 provides more detail on the matters that AEMO must consider when making its determination.

Box 1.1: Requirements for service points, zones and segments

Service points

The operators of transportation facilities that are subject to the capacity trading reforms will be required to provide AEMO (and keep up to date) for each transportation facility a specification of:

- each pipeline and compression service point[5] between which services are (or may be) provided by the facility; and
- each park service point for the facility.

This information will be published in the transportation service point register and must be in a form that complies with the Capacity Transfer and Auction Procedures (CT&A Procedures). AEMO will be responsible for maintaining and publishing the transportation service point register, which will set out the service points, pipeline segments and zones on each of the transportation facilities that is subject to the reforms.

AEMO will also be responsible for determining the points between which backhaul auction services will be available in the DAA on single direction pipelines (or parts of pipelines). There are no specific criteria that AEMO must consider when making a determination on backhaul service points.

Zones

AEMO will be responsible for determining the allocation of service points to the receipt and delivery point zones that will be used on each of the facilities that will be subject to the capacity trading reforms (including those facilities that are commissioned after the reforms take effect or later become subject to the reforms through the revocation of an exemption or derogation). When exercising this power, AEMO will be required to consult with stakeholders[6] and apply a number of principles.

These principles provide that AEMO may have regard to:

- the impact of the proposed allocation of points on the trade of products through the CTP and DAA, including the impact on demand or liquidity;
- the possible curtailment of capacity transferred between points within a zone, over time or at particular times or in particular conditions; and
- the technical or operational characteristics of the transportation facility.

The principles also:[7]

- require service points used for *receipt* of gas must be allocated to *receipt zones*;
- require service points used for *delivery* of gas must be allocated to *delivery zones*; and
- specify that a service point cannot be in more than one delivery zone or receipt zone, but if:
  - the point is used for delivery and receipt, it may be in both a delivery zone and receipt zone; or
  - the facility is bi-directional, it may be in both a delivery zone and receipt zone.[8]

To help inform AEMO's determination, transportation facility operators will be required to provide AEMO with the information it reasonably requires for the assessment of the proposed zones and to undertake any analysis that may be required. Once the zones are established and trade commences, AEMO will be required to publish information provided by transportation facility operators on the transfer of capacity between service points in a zone, so shippers can get a better understanding of the deliverability risks associated with a particular zone.

To ensure that the receipt and delivery point zones can adapt to changes in the market and/or to changes in the operational or technical characteristics of the transportation facility, facility operators and any other person (including AEMO) will be able to propose a change to the zones. If this occurs, AEMO will be required to consider the proposal having regard to the principles outlined above.

Pipeline segments

In a similar manner to zones, AEMO will be responsible for determining the forward haul pipeline segments and, where relevant, the backhaul pipeline segments to be used in the DAA. Before making a determination, AEMO must consult with stakeholders. There are no specific matters that AEMO must consider when making a determination on pipeline segments.

2 Consultation on Service Points, Zones and Segment Specification

2.1 Amendments to the initial specification

In July 2018 the GMRG and AEMO prepared and published an Initial Consultation Paper for the specification of service points, zones and pipeline segments for consultation with industry. AEMO and the GMRG have updated the specification of service points, zones and pipeline segments based on this initial consultation.

Table 1: List amendments to the initial specification

Facility	Component	Change
SWQP	Connecting facility information	Updated references to connection to the Wallumbilla compression facilities.
RBP	Auction backhaul service	Auction backhaul service removed.
	Backhaul segment	Backhaul segment from Brisbane STTM has been removed.
	Brisbane STTM nomination point	Backhaul service point removed.
BWP	Forward haul pipeline segments	New forward haul pipeline segment added to link Wallumbilla receipt and delivery zones.
DDP	Correction to service points	A number of service points have been updated.
	Integration of Spring Gully Pipeline	The Spring Gully Pipeline's service points, zones and segments have been integrated with the DDP forming one facility.
	Talinga	The zones and segments at Talinga have been rationalised.
MAPS	Forward haul zone and pipeline segments	Change to the specification of the southern receipt zone and the zone it connects to.
PCA	Service points	Updates and corrections to service point names.
	Forward haul delivery point	Iona Delivery included as a forward haul delivery point.
	Forward haul receipt point	Adelaide notional point has been included in the specification as a backhaul delivery point and a forward haul receipt point. The service point has been added to a new Adelaide receipt zone.

[5] The term 'service point' is used to refer to physical and notional receipt and delivery points and includes in-pipe trading points.

[6] The CT&A Procedures set out the arrangements AEMO will use when consulting on and determining zones, the information to be published in the consultation process (this will include information relating to the possible curtailment of capacity within a zone), the time frames and the confidentiality arrangements.

[7] Note also that a zone may consist of only one service point.

[8] A pipeline will be classified as bi-directional if at any time the direction of the physical flow of gas on the pipeline (or part) is capable of being reversed under normal operating conditions and transportation facility users have transportation capacity for firm forward haul services in both directions (with a service time that includes that time).

Facility	Component	Change
	Backhaul delivery points	Additional backhaul delivery points at Jervois, Bolivar and Naracoorte.
	Backhaul segments	Combined backhaul pipeline segments.
PCI	Service points	Updates and corrections to service point names.
	Update to pipeline segments	Updates to the from or to zone for forward haul pipeline segments.
	Backhaul delivery points	Minerva – PCI included as a Backhaul Delivery Point.
SEPS	Facility specification	The facility was not included in the initial specification report.
EGP	Configuration of points at Longford	Longford EGP has been moved into a separate receipt zone. There is now a segment between Longford zone and the Longford EGP zone.
	Configuration of Orbost receipt point and zone	The Orbost Receipt zone now directly connects to the Cooma, Bombala delivery zone. The Bairnsdale zone now connects to the Orbost Receipt Zone.
	Backhaul delivery points	Bairnsdale backhaul delivery point has been removed, VicHub backhaul delivery point has been moved to the end of the final backhaul segment on the EGP. A new backhaul point has been added for MSP - Wilton.
	Backhaul segments	Backhaul segments have been rationalised to reflect the changes made to backhaul delivery points.
MSP	Configuration of Sydney zones	Sydney delivery zone now connects to the Sydney receipt zone.
	Configuration of Culcairn zones	Culcairn delivery zone now connects to the Culcairn receipt zone.
TGP	Configuration of mid-line zones	Bell bay delivery zone now connects between TGP Notional Point and the mid-line zone, rather than from the mid-line zone.
	Backhaul segments	New backhaul segments included for consultation.
	Backhaul service points	Backhaul service points included for consultation.
	CTP Product	Proposal for TGP product on the CTP to be unbundled from the TGP transfer service.
WCF	Naming of facilities	Wallumbilla compression facilities renamed for clarity.
WCFB	Compression service points	Additional compression receipt and delivery point added to the specification.

2.2 Stakeholder feedback

The GMRG and AEMO are seeking written feedback on the second draft of the service points, zones and pipeline segments by **5pm (AEST) on 25 October 2018**. Stakeholders can submit their feedback by email to the PCT inbox (pct@aemo.com.au). Please note

that submissions will be published by AEMO unless they are clearly marked as confidential.

AEMO and the GMRG encourage stakeholders to provide feedback on the any of the specifications they have a particular issue or concern with. In addition, AEMO seeks feedback on the specific matters listed in the table below.

Facility	Question
RBP	The backhaul segment and related backhaul auction product components have been removed. Do you have any concerns with this change to the specifications?
DDP	Spring Gully Pipeline's service points, zones and segments have been integrated with the DDP forming one facility. Do you have any concerns with this change to the specifications?
PCA	Additional forward haul and backhaul delivery points have been added to the specification. Are you aware of any issues associated with the additional service point specifications?
	Adelaide notional point has been included in the specification as a backhaul delivery point and a forward haul receipt point. The new notional point would allow an auction participant to combine an auction backhaul service (from Cavan) with a forward haul auction service to the Adelaide delivery zone (Power station delivery points). AEMO seeks feedback from stakeholders on potential benefits or technical concerns associated with the proposed backhaul segment, Adelaide notional point and Adelaide receipt zone specifications.
EGP	Updates have been made to forward haul and backhaul specifications on the EGP. Do you have any concerns with these changes to the specifications?
	A new backhaul receipt point has been added for MSP – Wilton. AEMO seeks feedback from stakeholders on potential benefits or technical concerns associated with the proposed backhaul receipt point.
TGP	Backhaul service points and segments have been added to the TGP specification. AEMO seeks feedback from stakeholders on potential benefits or technical concerns associated with the proposed backhaul specifications.
	It is proposed that the TGP product on the CTP is unbundled from the TGP transfer service. Do you have any concerns with this change to the CTP product specification?
WCF A & B	Additional guidance in relation to the operation of the CTP products and auction participation has been added to the WCF A and WCF B specification. Do stakeholders require any further information or have any further concerns in relation to WCF A and WCF B?

2.3 Next steps

The feedback received through this second round of consultation process will be used to inform the final specification of service points, zones and pipeline segments. The final determination cannot be made until the legal and regulatory framework for the capacity trading reforms is implemented, which is expected to occur in November 2018. AEMO's final determination is therefore expected to be made on or before 1 December 2018.

Part A: Transmission Pipelines

3 South West Queensland Pipeline

3.1 Key facility information

Table 3.1: Key facility information

Key information	Detail
Facility name	South West Queensland Pipeline (SWQP)
Facility operator/owner	APA Group
Location	South Australia – Queensland
Single or bi-directional pipeline	Bi-directional pipeline
Services that will be available through the CTP and DAA	Forward haul, Park (CTP only)
Subject to CTP?	Yes
Subject to DAA?	Yes

The South West Queensland Pipeline (SWQP) is a bi-directional pipeline between Moomba and Wallumbilla. Compression facilities at Moomba and Wallumbilla on the SWQP have been separated into stand-alone facilities (see Part B: Compression for further details).

3.2 Service points

Name	Type	Zone Name	Description
Moomba HP Trade Point	Receipt	SWQP-RZ-01	Connection from Moomba Compression Facility
Ballera Entry	Receipt	SWQP-RZ-02	Connection from Ballera Gas Plant, CGP
Fairview	Receipt	SWQP-RZ-03	
Wallumbilla HP Trade Point	Receipt	SWQP-RZ-03	Connection from Wallumbilla Compression Facility 1
MAPS Exit	Delivery	SWQP-DZ-01	Connects to MAPS
MSP Exit	Delivery	SWQP-DZ-01	Connects to MSP
Moomba HP Trade Point	Delivery	SWQP-DZ-02	Notional point
Ballera Exit	Delivery	SWQP-DZ-03	Connects to Ballera Gas Plant, Ballera Compression Facility, CGP
Tarbat	Delivery	SWQP-DZ-04	
Cheepie	Delivery	SWQP-DZ-04	
Roma	Delivery	SWQP-DZ-04	
Wallumbilla LP Trade Point	Delivery	SWQP-DZ-05	Connects to Wallumbilla Compression Facility 1
GLNG Delivery Stream	Delivery	SWQP-DZ-05	Connects to Wallumbilla Compression Facility 2

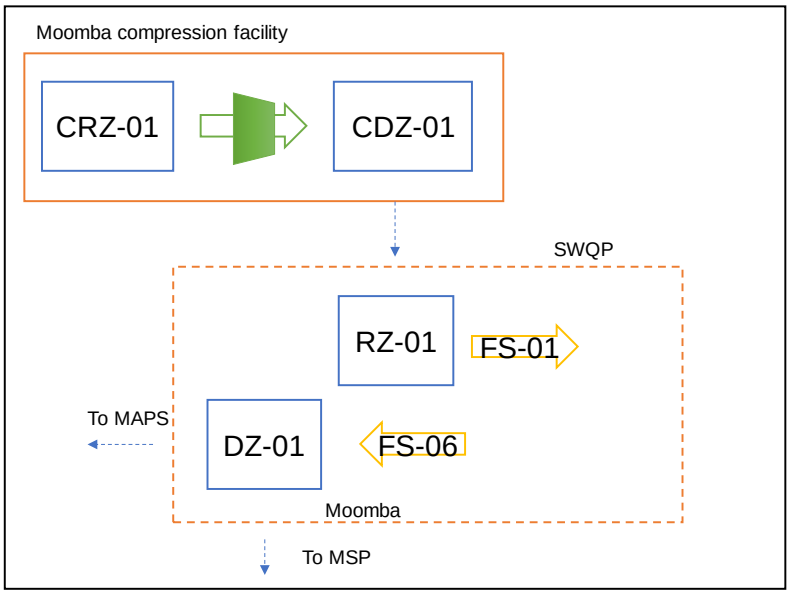
Moomba Receipt Points

When transporting gas on the SWQP from Moomba a shipper requires access to a compression service. A shipper may have an existing contract for access to a compression service or may purchase a service through the CTP or DAA.

The Moomba Compression Facility (MCF) will be established as a separate facility to the SWQP (see Chapter 25 for further details). The Moomba HP Trade Point on the SWQP is the outlet of the Moomba Compressor Facility and it is proposed this service point is:

- the compression delivery point on the MCF; and
- the receipt point on the SWQP.

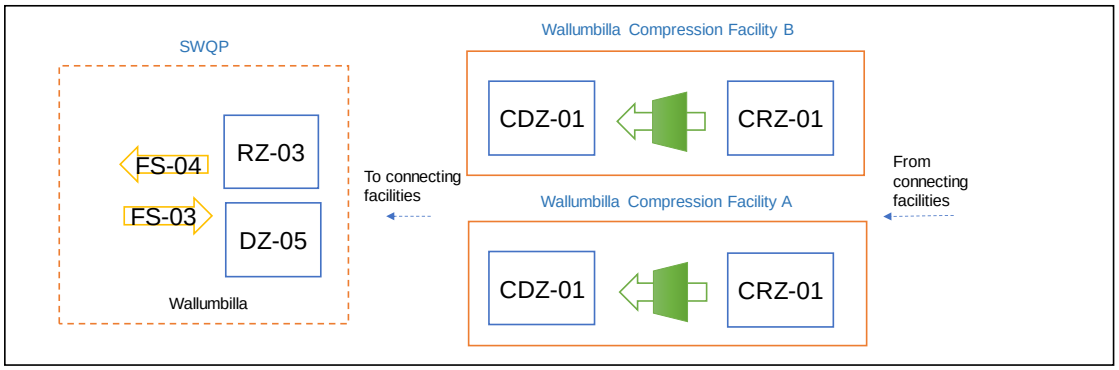
Figure 2: Connection between the SWQP and the Moomba Compression Facility



Wallumbilla Receipt from WCFA and WCFB

The Wallumbilla Compression Facilities will be established as separate facilities to the SWQP (see Chapters 23 and 24 for further detail). The Wallumbilla HP Trade Point is a receipt point on the SWQP that represents gas that has been transferred from the Wallumbilla Compression Facilities. The Wallumbilla HP Trade Point is also specified as the compression delivery point on the Wallumbilla Compression Facility A and Wallumbilla Compression Facility B.

Figure 3: Connection between SWQP and Wallumbilla Compression



Wallumbilla Delivery Points

The Wallumbilla hub is a connection point for many gas pipelines in southern Queensland. Gas delivered to Wallumbilla on the SWQP can be transferred to connecting gas pipelines via the Wallumbilla Compression Facilities.

The Wallumbilla LP Trade point is a delivery point on the SWQP at Wallumbilla and is also the compression receipt point on the Wallumbilla Compression Facility A and Wallumbilla Compression Facility B.

Park Service Points

APA Group has proposed that the Moomba HP Trade Point and the Wallumbilla HP Trade Point are used as park service points on the SWQP (each service will be established as a Park Service Product on the CTP).

3.3 Proposed zones

Name	Type	Description
SWQP-RZ-01	Receipt	Moomba
SWQP-RZ-02	Receipt	Ballera
SWQP-RZ-03	Receipt	Wallumbilla
SWQP-DZ-01	Delivery	Moomba connection to MSP and MAPS
SWQP-DZ-02	Delivery	Moomba Trade Point
SWQP-DZ-03	Delivery	Ballera
SWQP-DZ-04	Delivery	South West Queensland
SWQP-DZ-05	Delivery	Wallumbilla

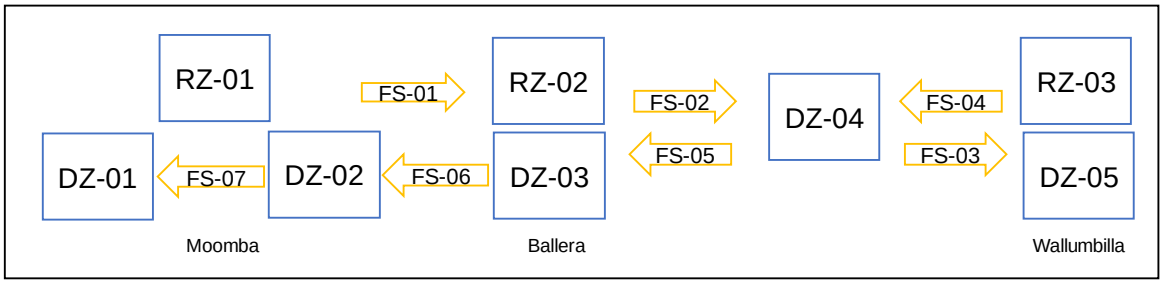
3.4 Proposed pipeline segments

Name	Type	From Location	To Location
SWQP-FS-01	Forward haul	RZ-01	RZ-02, DZ-03
SWQP-FS-02	Forward haul	RZ-02, DZ-03	DZ-04
SWQP-FS-03	Forward haul	DZ-04	DZ-05
SWQP-FS-04	Forward haul	RZ-03	DZ-04
SWQP-FS-05	Forward haul	DZ-04	RZ-02, DZ-03
SWQP-FS-06	Forward haul	RZ-02, DZ-03	DZ-02
SWQP-FS-07	Forward haul	DZ-02	DZ-01

Pipeline segments connecting to Ballera Zones

The pipeline segments to and from Ballera will connect to the Ballera receipt and delivery zones. This allows flows exiting or entering SWQP at Ballera to share the same pipeline segments (and hence constraints) with gas flows between Moomba and Wallumbilla.

Figure 4: SWQP proposed pipeline zones and segments



4 Roma to Brisbane Pipeline

4.1 Key facility information

Table 4.1: Key facility information

Key information	Detail
Facility name	Roma to Brisbane Pipeline (RBP)
Facility operator/owner	APA Group
Location	Queensland
Single or bi-directional pipeline	Single and bi-directional pipeline segments
Services that will be available through the CTP and DAA	Forward haul and Park (CTP only)
Subject to CTP?	Yes
Subject to DAA?	Yes

The Roma to Brisbane Pipeline (RBP) has bi-directional and single direction pipeline segments. The pipeline is bi-directional between Wallumbilla and Kogan allowing forward haul services to be traded in an eastern and western direction. Between Kogan and Brisbane the pipeline allows forward haul in an eastern direction only.

4.2 Service points

Name	Type	Zone Name	Description
Wallumbilla Run 3	Receipt	RBP-RZ-01	
Wallumbilla Run 4	Receipt	RBP-RZ-01	
Wallumbilla Run 7	Receipt	RBP-RZ-01	
Wallumbilla Run 1	Receipt	RBP-RZ-02	10-inch pipeline
Wallumbilla Run 2	Receipt	RBP-RZ-02	10-inch pipeline
Scotia	Receipt	RBP-RZ-03	
Woodroyd	Receipt	RBP-RZ-03	
Argyle	Receipt	RBP-RZ-04	
Condamine	Receipt	RBP-RZ-04	
Kogan North	Receipt	RBP-RZ-04	
Windibri	Receipt	RBP-RZ-04	
RBP Trade Point (IPT)	Receipt	RBP-RZ-04	Notional trade point, Park service withdrawal
Wallumbilla delivery	Delivery	RBP-DZ-01	
Braemar PS	Delivery	RBP-DZ-02	Power station
RBP Trade Point (IPT)	Delivery	RBP-DZ-03	Notional trade point, Backhaul delivery point, Park service injection

Name	Type	Zone Name	Description
Oakey PS	Delivery	RBP-DZ-04	Power station
Swanbank PS	Delivery	RBP-DZ-04	Power station, Brisbane STTM Hub Custody Transfer Point
Dalby Bio Refinery	Delivery	RBP-DZ-04	
Dalby Town Council	Delivery	RBP-DZ-04	Gate station
Oakey APT Allgas	Delivery	RBP-DZ-04	Gate station
Sandy Creek	Delivery	RBP-DZ-04	Gate station
Toowoomba	Delivery	RBP-DZ-04	Gate station
Redbank	Delivery	RBP-DZ-04	Gate station, Brisbane STTM Hub Custody Transfer Point
Riverview	Delivery	RBP-DZ-04	Gate station, Brisbane STTM Hub Custody Transfer Point
Ellen Grove	Delivery	RBP-DZ-05	Gate station, Brisbane STTM Hub Custody Transfer Point
Mt Gravatt	Delivery	RBP-DZ-05	Gate station, Brisbane STTM Hub Custody Transfer Point
Runcorn	Delivery	RBP-DZ-05	Gate station, Brisbane STTM Hub Custody Transfer Point
Ritchie Road	Delivery	RBP-DZ-05	Gate station, Brisbane STTM Hub Custody Transfer Point
Gibson Island	Delivery	RBP-DZ-06	Brisbane STTM Hub Custody Transfer Point
Lytton	Delivery	RBP-DZ-06	Brisbane STTM Hub Custody Transfer Point
Murarrie	Delivery	RBP-DZ-06	Gate station, Brisbane STTM Hub Custody Transfer Point
Tingalpa	Delivery	RBP-DZ-06	Gate station, Brisbane STTM Hub Custody Transfer Point

Notional point

The RBP Trade Point (IPT) is a notional point that is used by shippers as the delivery point for commodity trading on the RBP. This point is notionally allocated to the Kogan receipt and delivery zone. It is proposed that the RBP Trade Point will be a forward haul receipt and delivery point.

Park service point

APA Group has proposed that the RBP Trade Point be used as the park service point. A shipper that wants to use the park service will therefore need to have a transportation service that allowed it to transport gas to and from this service point, which could be acquired through the CTP or DAA.

4.3 Proposed zones

Name	Type	Description
RBP-RZ-01	Receipt	Wallumbilla
RBP-RZ-02	Receipt	Wallumbilla (10-inch pipeline)
RBP-RZ-03	Receipt	Scotia
RBP-RZ-04	Receipt	Darling Downs
RBP-DZ-01	Delivery	Wallumbilla
RBP-DZ-02	Delivery	Braemar power station
RBP-DZ-03	Delivery	RBP Trade Point
RBP-DZ-04	Delivery	Darling Downs - Gas powered generators, Brisbane STTM mixed zone
RBP-DZ-05	Delivery	Brisbane West - STTM split zone
RBP-DZ-06	Delivery	Brisbane East - STTM split zone

Brisbane Zones

It is proposed that delivery points defined as Brisbane STTM Hub Custody Transfer Points be split between the following three delivery zones.

- Custody transfer points east of Ellengrove have been split into a separate zone due to the potential risk for the rejection of nominations associated with trades that move capacity from the western suburbs of Brisbane to the eastern suburbs of Brisbane. Modelling performed by the APA Group showed that the transfer of delivery capacity from Ellengrove to Murrarie could breach minimum pressure requirements at the eastern end of the RBP.
- Swanbank delivery point is a STTM Custody Transfer Point for the Brisbane Hub but has not been grouped into the same zone as other Brisbane delivery points. This designation is based on advice from APA Group that capacity at the Swanbank power station cannot be transferred to Brisbane delivery points located to the east of the power station. Instead, the Swanbank delivery point has been grouped into a delivery zone (DZ-04) with the Oakey power station delivery point to enable trade to occur between these locations.
- The Redbank and Riverview delivery points, along with non-STTM delivery points to the west of Brisbane on the 10-inch pipeline, have been allocated to the same delivery zone as the Swanbank and Oakey power station (DZ-04).

Braemar

It is proposed that the Braemar power station delivery point be allocated to its own zone. While consideration was given to allocating this point to the same zone as the Oakey and Swanbank power stations, APA Group advised that the trading of capacity from Braemar power station to zone DZ-04 would reduce the capacity available to shippers using delivery points in that zone.

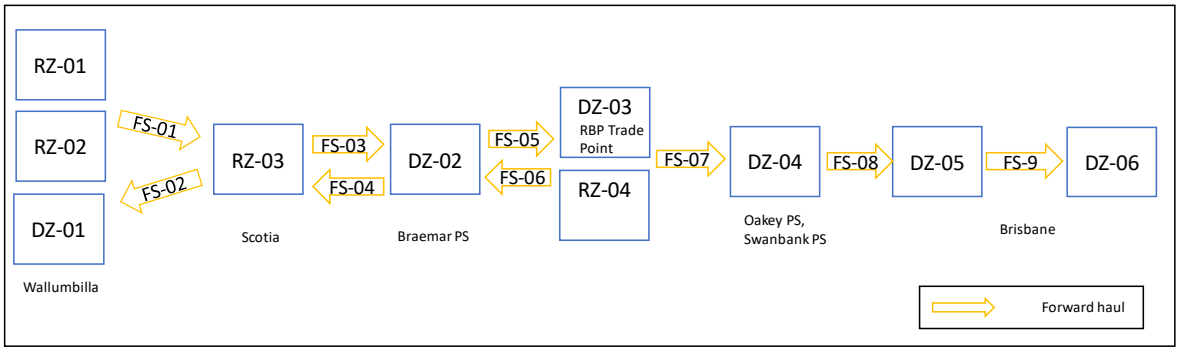
Pipeline configuration

The RBP consists of a 10-inch and a 16-inch pipeline. Receipt points on the 10-inch pipeline at Wallumbilla have been split into a separate zone (RZ-02) from the receipt points on the 16-inch pipeline (RZ-01).

4.4 Proposed pipeline segments

Name	Type	From Location	To Location
RBP-FS-01	Forward	RZ-01, RZ-02	RZ-03
RBP-FS-02	Forward	RZ-03	DZ-01
RBP-FS-03	Forward	RZ-03	DZ-02
RBP-FS-04	Forward	DZ-02	RZ-03
RBP-FS-05	Forward	DZ-02	RZ-04, DZ-03
RBP-FS-06	Forward	RZ-04	DZ-02
RBP-FS-07	Forward	RZ-04	DZ-04
RBP-FS-08	Forward	DZ-04	DZ-05
RBP-FS-09	Forward	DZ-05	DZ-06

Figure 5: RBP proposed pipeline zones and segments



4.5 Amendments from initial specification

Backhaul service

An auction backhaul service (and associated segment and service points) has been removed from the specification for the RBP. Submissions to the initial consultation suggested that there would be limited demand for an auction backhaul service from the Brisbane STTM hub.

Unlike the Sydney and Adelaide STTM hubs, there is no additional gas supply to Brisbane and as such, a participant would need to reduce demand to supply gas to a backhaul service. For a participant that also supplies gas to the hub, an alternative to a backhaul service would be to re-nominate down their deliveries to the hub.

5 Berwyndale to Wallumbilla Pipeline

5.1 Key facility information

Table 5.1: Key facility information

Key information	Detail
Facility name	Berwyndale to Wallumbilla Pipeline (BWP)
Facility operator/owner	APA Group
Location	Queensland
Single or bi-directional pipeline	Bi-directional
Services that will be available through the CTP and DAA	Forward haul only APA has advised that park services are not currently sold on this pipeline
Subject to CTP?	Yes
Subject to DAA?	Yes

5.2 Service points

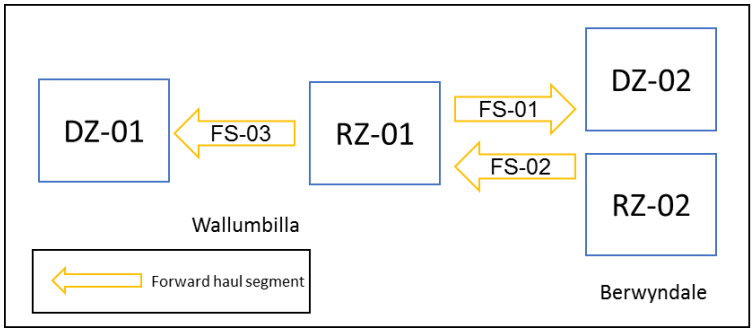
Name	Type	Zone Name	Description
Wallumbilla	Receipt	BWP-RZ-01	
Berwyndale Entry (SO4)	Receipt	BWP-RZ-02	
Wallumbilla	Delivery	BWP-DZ-01	
Silver Springs	Delivery	BWP-DZ-01	
Berwyndale Exit (SO4)	Delivery	BWP-DZ-02	

5.3 Proposed zones

Name	Type	Description
BWP-RZ-01	Receipt	Wallumbilla
BWP-RZ-02	Receipt	Berwyndale
BWP-DZ-01	Delivery	Wallumbilla
BWP-DZ-02	Delivery	Berwyndale

5.4 Proposed pipeline segments

Name	Type	From Location	To Location
BWP-FS-01	Forward	RZ-01	DZ-02
BWP-FS-02	Forward	RZ-02	DZ-01



5.5 Amendments to initial specification

In response to industry feedback, an additional forward haul pipeline segment has been added to the specification for BWP. The new segment (FS-03) would allow a direct service between the Wallumbilla receipt zone (RZ-01) and the Wallumbilla delivery zone (DZ-01). Under the initial specification, this service would have involved the purchase of capacity from Wallumbilla to Berwyndale and then back to Wallumbilla.

6 Wallumbilla to Gladstone Pipeline

6.1 Key facility information

Table 6.1: Key facility information

Key information	Detail
Facility name	Wallumbilla to Gladstone Pipeline (WGP)
Facility operator/owner	APA Group
Location	Queensland
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul only APA has advised that park services are not available for trade on this pipeline
Subject to CTP?	Yes
Subject to DAA?	Yes

6.2 Service points

Name	Type	Zone Name	Description
Ruby Jo	Receipt	WGP-RZ-01	Connects to Ruby Jo production facility
Jordan	Receipt	WGP-RZ-01	Connects to Jordan production facility
Kenya – R	Receipt	WGP-RZ-01	Connects to Kenya Gas Plant
Kenya – D	Delivery	WGP-DZ-01	
Bellevue - R	Receipt	WGP-RZ-01	Bellevue
Bellevue - D	Delivery	WGP-DZ-01	
Woleebee Creek	Receipt	WGP-RZ-01	Connects to Woleebee Creek production facility
Wandoan Interconnect Facility - R	Receipt	WGP-RZ-01	Connects to APLNG Pipeline
Mt Larcom - R	Receipt	WGP-RZ-02	Connects to GLNG Gas Transmission Pipeline
Mt Larcom – D	Delivery	WGP-DZ-02	Connects to GLNG Gas Transmission Pipeline
Curtis Island - D	Delivery	WGP-DZ-02	Connects to QCLNG plant

6.3 Proposed zones

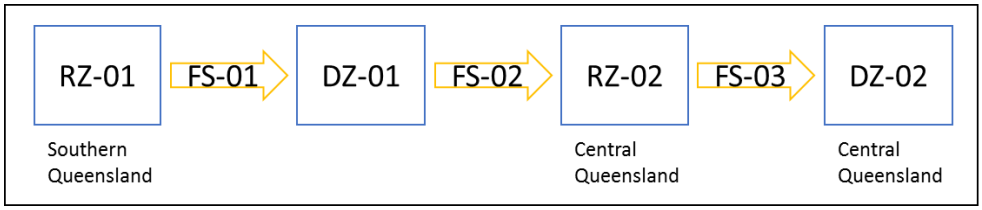
Name	Type	Description
WGP-RZ-01	Receipt	Southern Queensland
WGP-DZ-01	Delivery	

Name	Type	Description
WGP-RZ-02	Receipt	Central Queensland
WGP-DZ-02	Delivery	Central Queensland

6.4 Proposed pipeline segments

Name	Type	From Location	To Location
WGP-FS-01	Forward haul	RZ-01	DZ-01
WGP-FS-02	Forward haul	DZ-01	RZ-02
WGP-FS-03	Forward haul	RZ-02	DZ-02

Figure 6: Wallumbilla to Gladstone proposed pipeline zones and segments



7 Carpentaria Gas Pipeline

7.1 Key facility information

Table 7.1: Key facility information

Key information	Detail
Facility name	Carpentaria Gas Pipeline (CGP)
Facility operator/owner	APA Group
Location	Queensland
Single or bi-directional pipeline	Bi-directional Note that while the CGP is currently a single direction pipeline, APA has advised of its intention to convert this to a bi-directional pipeline to enable gas to flow from the NGP Interconnect in Mt Isa to Ballera from late 2018.
Services that will be available through the CTP and DAA	Forward haul service only APA has advised that park services are not currently sold on this pipeline
Subject to CTP?	Yes
Subject to DAA?	Yes

7.2 Service points

Name	Type	Zone Name	Description
Ballera	Receipt	CGP-RZ-01	Connection from Ballera Compression Facility
Ballera Trade Point	Receipt	CGP-RZ-01	Notional point
NGP Interconnect	Receipt	CGP-RZ-02	Connection from NGP
Ballera Trade Point	Delivery	CGP-DZ-01	Notional point
Phosphate Hill	Delivery	CGP-DZ-02	
Cannington Mine	Delivery	CGP-DZ-03	
Osborne	Delivery	CGP-DZ-03	
Diamantina Power	Delivery	CGP-DZ-04	Power station
Mica Creek Power Station	Delivery	CGP-DZ-04	Power station
Mt Isa Mines	Delivery	CGP-DZ-04	

7.3 Proposed zones

Name	Type	Description
CGP-RZ-01	Receipt	Ballera
CGP-RZ-02	Receipt	NGP
CGP-DZ-01	Delivery	Ballera

Name	Type	Description
CGP-DZ-02	Delivery	Phosphate Hill
CGP-DZ-03	Delivery	Cannington
CGP-DZ-04	Delivery	Mt Isa

Cannington Delivery Zone

The Cannington and Osborne delivery points have been allocated to a separate zone to the Phosphate Hill delivery point because they are located on a relatively small lateral off the CGP main line. APA Group has advised that if the delivery points were to be grouped together that it is highly unlikely that capacity transferred from Phosphate Hill could be used at Cannington.

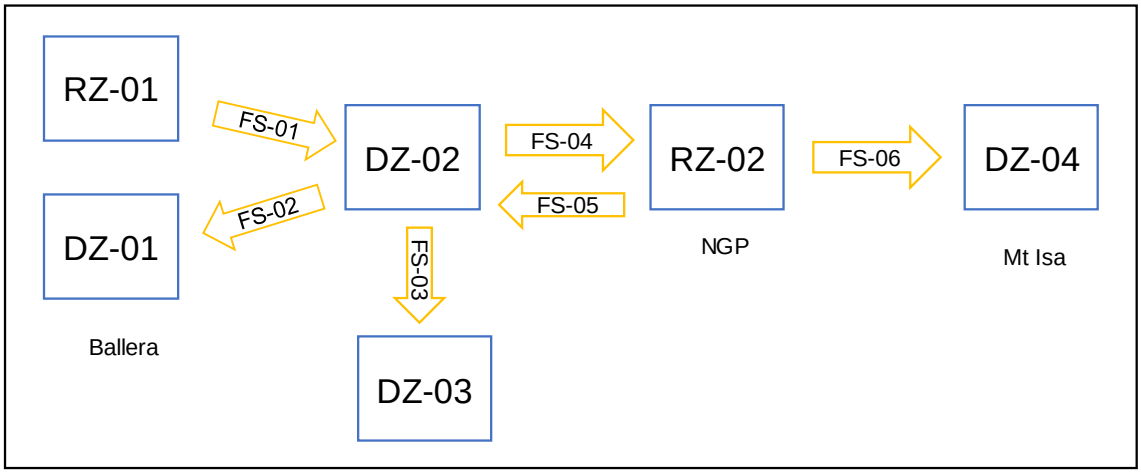
7.4 Proposed pipeline segments

Name	Type	From Location	To Location
CGP-FS-01	Forward	RZ-01	DZ-02
CGP-FS-02	Forward	DZ-02	DZ-01
CGP-FS-03	Forward	DZ-02	DZ-03
CGP-FS-04	Forward	DZ-02	RZ-02
CGP-FS-05	Forward	RZ-02	DZ-02
CGP-FS-06	Forward	RZ-02	DZ-04

The proposed forward haul pipeline segments are as follows:

- Bi-directional flows to and from Ballera (FS-01, FS-02).
- Flow from Phosphate Hill to Cannington Mine and Osborne (FS-03).
- Bi-directional flows to and from NGP interconnect (FS-04, FS-05).
- Flow to from the NGP Interconnect to the Mt Isa delivery zone (FS-06)

Figure 7: CGP proposed pipeline zones and segments.



8 Darling Downs Pipeline

8.1 Key facility information

Table 8.1: Key facility information

Key information	Detail
Facility name	Darling Downs Pipeline (DDP)
Facility operator/owner	Jemena
Location	Queensland Spring Gully to Wallumbilla to Darling Downs. Includes the pipeline formerly referred to as the Spring Gully Pipeline.
Single or bi-directional pipeline	Bi-directional
Services that will be available through the CTP and DAA	Forward haul only. Jemena has advised there are no park services on this pipeline.
Subject to CTP?	Yes
Subject to DAA?	Yes

8.2 Service points

Name	Type	Zone Name	Description
Spring Gully Manifold	Receipt	DDP-RZ-01	Spring Gully Gas Plant receipt point
Taloona	Delivery	DDP-DZ-01	
Spring Gully Manifold	Delivery	DDP-DZ-01	
Wallumbilla Run 6	Delivery	DDP-DZ-02	
Wallumbilla Run 7	Delivery	DDP-DZ-02	
Wallumbilla Compressor Station	Delivery	DDP-DZ-02	
Wallumbilla Run 9	Delivery	DDP-DZ-03	
Talinga GPF	Receipt	DDP-RZ-02	
Talinga PCF	Receipt	DDP-RZ-02	Connection point from Talinga Compression Facility
Talinga PCF	Delivery	DDP-DZ-04	Connection point to Talinga Compression Facility
Darling Downs Power Station	Delivery	DDP-DZ-05	
Kenya	Receipt	DDP-RZ-03	
Orana	Receipt	DDP-RZ-03	
Ruby	Receipt	DDP-RZ-03	

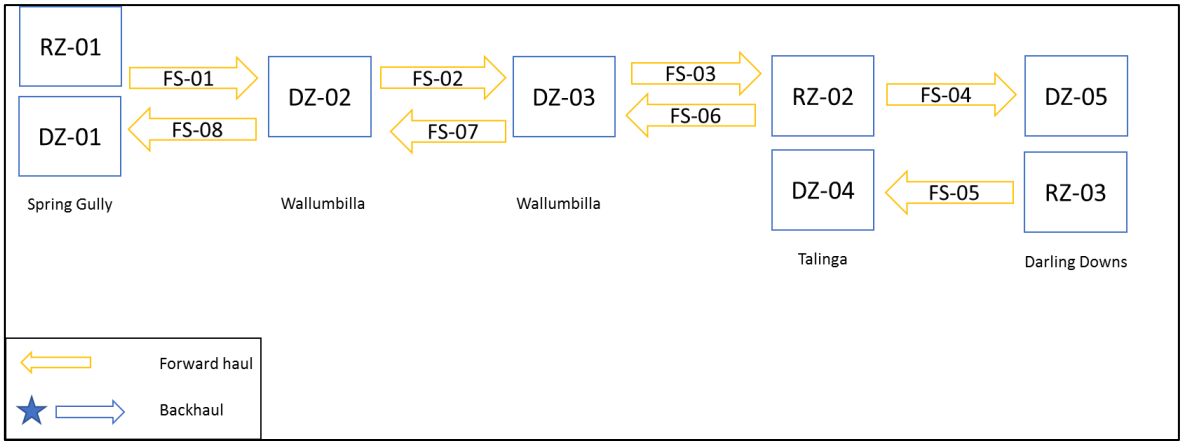
8.3 Proposed zones

Name	Type	Description
DDP-RZ-01	Receipt	Spring Gully Receipts
DDP-DZ-01	Delivery	Spring Gully Deliveries
DDP-DZ-02	Delivery	Wallumbilla Deliveries
DDP-DZ-03	Delivery	Wallumbilla Deliveries (Run 9)
DDP-RZ-02	Receipt	Talinga Receipts
DDP-DZ-04	Delivery	Talinga Deliveries
DDP-DZ-05	Delivery	Darling Downs Power Station Delivery
DDP-RZ-03	Receipt	Receipts from APLNG Surat Basin Facilities

8.4 Proposed pipeline segments

Name	Type	From Location	To Location
DDP-FS-01	Forward Haul	RZ-01	DZ-02
DDP-FS-02	Forward Haul	DZ-02	DZ-03
DDP-FS-03	Forward Haul	DZ-03	RZ-02
DDP-FS-04	Forward Haul	RZ-02	DZ-05
DDP-FS-05	Forward Haul	RZ-03	DZ-04
DDP-FS-06	Forward Haul	RZ-02	DZ-03
DDP-FS-07	Forward Haul	DZ-03	DZ-02
DDP-FS-08	Forward Haul	DZ-02	DZ-01

Figure 8: DDP proposed pipeline zones and segments



8.5 Amendments from initial specification

Following advice from Jemena, the Darling Downs Pipeline and Spring Gully Pipeline have been combined into a single asset. AEMO was informed that the delivery and receipt points at Wallumbilla are common to both pipelines. In addition, Jemena advised AEMO that the two pipelines will have a single Operational Transportation Service Agreement Code and that the pipelines that make up the Darling Downs Pipeline will be reported to the GBB as a single entity.

Talinga

Several corrections have also been made to the specification of service points at Talinga (RZ-02 and DZ-03) and to service point names in line with advice provided by Jemena. AEMO also proposes that RZ-02 (Talinga Receipts) connects directly to DZ-05 (Darling downs power station) via FS-04 without transiting DZ-04 (Talinga Deliveries) as FS-04 should reflect the relevant pipeline constraints.

For western transportation on the DDP, a participant will need to purchase capacity from RZ-03 (Surat Basin Receipts) to DZ-04 (Talinga Deliveries). If the participant intends to transport that gas further west via the DDP the participant will need to be able to have its gas transported to RZ-02 (Talinga Receipts) via the Talinga Compression Facility, as the Talinga Compression facility sits between DZ-04 and RZ-02. The participant will also need to purchase DDP capacity from RZ-02 to its final delivery point in the western section of the pipeline.

At this stage, it is not anticipated that the Talinga Compression Facility will be included in these reforms. As such, there is no forward haul segment between DZ-04 and RZ-02 which means that the two zones are effectively disconnected. As a consequence, participants seeking to transport gas westward via these zones would need to come to a bilateral agreement with the facility operator of the Talinga Compression Facility.

9 Queensland Gas Pipeline

9.1 Key facility information

Table 9.1: Key facility information

Key information	Detail
Facility name	Queensland Gas Pipeline (QGP)
Facility operator/owner	Jemena
Location	Queensland
Single or bi-directional pipeline	Single direction
Services that will be available through the CTP and DAA	Forward haul, Backhaul (DAA only), Jemena has advised that no firm park services are available on this pipeline.
Subject to CTP?	Yes
Subject to DAA?	Yes

9.2 Service points

Name	Type	Zone Name	Description
Wallumbilla Injection	Receipt	QGP-RZ-01	Injections into the QGP from Wallumbilla Hub
Wallumbilla Backhaul Delivery Point	Backhaul Delivery Point	N/A	Delivery point for QGP's backhaul service from all backhaul receipt points
Gooimbah	Receipt	QGP-RZ-02	Forward haul receipt point at Gooimbah, also a backhaul receipt point
Fairview	Receipt	QGP-RZ-02	Forward haul receipt point from Fairview, also a backhaul receipt point
Westgrove	Receipt	QGP-RZ-02	Forward haul receipt point at Westgrove, also a backhaul receipt point
Rolleston	Receipt	QGP-RZ-03	Forward haul receipt point at Rolleston, also a backhaul receipt point
Moura	Delivery	QGP-DZ-01	Moura delivery point
Moura	Receipt	QGP-RZ-04	Forward haul receipt point at Moura, also a backhaul receipt point
Queensland Nitrates Plant	Delivery	QGP-DZ-01	
Boyne Island	Delivery	QGP-DZ-02	
Yarwun	Delivery	QGP-DZ-02	
Gladstone	Delivery	QGP-DZ-02	Distribution network
Orica	Delivery	QGP-DZ-02	
Queensland Alumina	Delivery	QGP-DZ-02	

Name	Type	Zone Name	Description
Wide Bay	Delivery	QGP-DZ-02	
Northern Oil Refineries	Delivery	QGP-DZ-02	
Queensland Magnesia	Delivery	QGP-DZ-03	
Rockhampton	Delivery	QGP-DZ-03	Distribution network

Backhaul service points

The proposed backhaul service points for the DAA include:

- the receipt points located downstream of Wallumbilla (e.g. Fairview, Gooimbah, Westgrove, Rolleston and Moura), which will be backhaul receipt points; and
- Wallumbilla, which will be a backhaul delivery point.

9.3 Proposed zones

Name	Type	Description
QGP-RZ-01	Receipt	Wallumbilla
QGP-RZ-02	Receipt	Mid-line Receipt
QGP-RZ-03	Receipt	Rolleston
QGP-RZ-04	Receipt	Moura
QGP-DZ-01	Delivery	Moura
QGP-DZ-02	Delivery	Gladstone
QGP-DZ-03	Delivery	Rockhampton

RZ-02 is the receipt zone for receipt points between Wallumbilla and Rolleston. Jemena's preliminary advice was for all receipt points in RZ-02 to be in separate zones. However, AEMO and the GMRG consider that splitting the three receipt points into separate zones would split liquidity in the CTP and DAA. Following advice from Jemena, Rolleston has been excluded from RZ-02 and is instead included in RZ-03 due to a significant capacity reduction between Westgrove and Rolleston.

9.4 Proposed pipeline segments

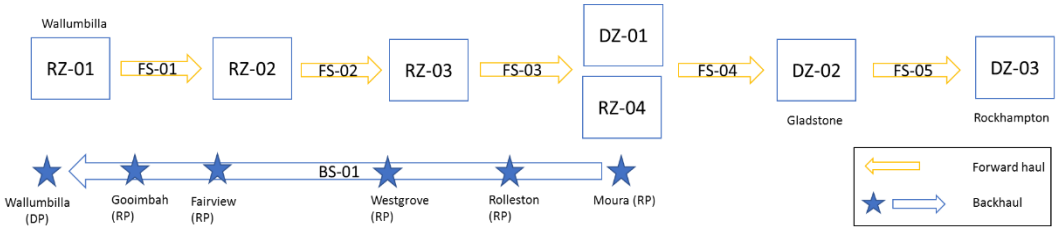
Name	Type	From Location	To Location
QGP-FS-01	Forward haul	RZ-01	RZ-02
QGP-FS-02	Forward haul	RZ-02	RZ-03
QGP-FS-03	Forward haul	RZ-03	DZ-01, RZ-04
QGP-FS-04	Forward haul	DZ-01, RZ-04	DZ-02

Name	Type	From Location	To Location
QGP-FS-05	Forward Haul	DZ-02	DZ-03
QGP-BS-01	Backhaul	Moura Receipt, Rolleston Receipt, Westgrove Receipt, Gooimbah Receipt, Fairview Receipt	Wallumbilla Delivery

Backhaul segments

Backhaul on the QGP can only be delivered to Wallumbilla. As such, backhaul needs to be against the net firm forward flow on the QGP injected at Wallumbilla. BS-01 represents physical injections at Wallumbilla for delivery downstream. Any backhaul service from a backhaul receipt point on the QGP will need to acquire a share of the backhaul segment (BS-01).

Figure 9: QGP proposed zones and pipeline segments



9.5 Amendments from initial specification

No changes have been made to the QGP from its original specification. Jemena has suggested that DZ-02 may need to be split into two zones to reflect a constraint. AEMO requested further technical information from Jemena on this constraint and at the time of publication this information is outstanding. As such, AEMO has decided to not change the specification of DZ-02 at this time.

10 North Queensland Gas Pipeline

10.1 Key facility information

Table 10.1: Key facility information

Key information	Detail
Facility name	North Queensland Gas Pipeline (NQGP)
Facility operator/owner	Palisade Asset Management Pty Ltd
Location	North Queensland
Single or bi-directional pipeline	Single direction
Services that will be available through the CTP and DAA	Forward haul only Palisade has advised that they don't offer park services on this pipeline.
Subject to CTP?	Yes
Subject to DAA?	Yes
Other information	The NQGP does not include compressor stations that are part of the Moranbah Gas Plant. It is understood that compression would be purchased by a shipper when, or as part of, their gas transaction. As such compression rights would not be part of the auction service purchased on the NQGP.

10.2 Service points

Name	Type	Zone Name	Description
Moranbah Gas Plant	Receipt	NQGP-RZ-01	
QNI (Yabulu)*	Delivery	NQGP-DZ-01	
TPS (Yabulu)*	Delivery	NQGP-DZ-01	Power station
CRL (Stuart)	Delivery	NQGP-DZ-01	

* The Townsville Power Station and QNI delivery points are supplied via the Yabulu metering station.

10.3 Proposed zones

Name	Type	Description
NGP-RZ-01	Receipt	Moranbah
NGP-DZ-01	Delivery	Townsville

10.4 Proposed pipeline segments

Name	Type	From Location	To Location
NQGP-FS-01	Forward haul	NQGP-RZ-01	NQGP-DZ-01

11 Amadeus Gas Pipeline

11.1 Key facility information

Table 11.1: Key facility information

Key information	Detail
Facility name	Amadeus Gas Pipeline (AGP)
Facility operator/owner	APA Group
Location	Northern Territory
Single or bi-directional pipeline	Bi-directional
Services that will be available through the CTP and DAA	Forward haul only
Subject to CTP?	Yes
Subject to DAA?	No – subject to a derogation.

11.2 Service points

Name	Type	Zone Name	Description
Mereenie	Receipt	AGP-RZ-01	
Palm Valley	Receipt	AGP-RZ-01	
Palm Valley Interconnect	Delivery	AGP-DZ-01	
Tennant Creek	Delivery	AGP-DZ-02	
NGP	Delivery	AGP-DZ-02	Connects to NGP
Elliot	Delivery	AGP-DZ-02	
Daly Waters	Delivery	AGP-DZ-03	
Katherine	Delivery	AGP-DZ-03	
Katherine (line pressure)	Delivery	AGP-DZ-03	
Pine Creek	Delivery	AGP-DZ-03	
Bonaparte	Receipt	AGP-RZ-02	
Channel Island Line	Delivery	AGP-DZ-04	
Channel Island HP	Delivery	AGP-DZ-04	
Channel Island LP	Delivery	AGP-DZ-04	
Townend Road	Delivery	AGP-DZ-04	
Darwin City Gate (to DDS)	Delivery	AGP-DZ-04	
Darwin City Gate (to WPP)	Delivery	AGP-DZ-04	

Name	Type	Zone Name	Description
Wickham Point	Receipt	AGP-RZ-03	Connects to the Wickham Point Pipeline (that can deliver gas from the Darwin LNG facility)

11.3 Proposed zones

Name	Type	Description
AGP-RZ-01	Receipt	Alice Springs
AGP-RZ-02	Receipt	Bonaparte
AGP-RZ-03	Receipt	Darwin
AGP-DZ-01	Delivery	Alice Springs
AGP-DZ-02	Delivery	Tennent Creek
AGP-DZ-03	Delivery	Katherine
AGP-DZ-04	Delivery	Darwin

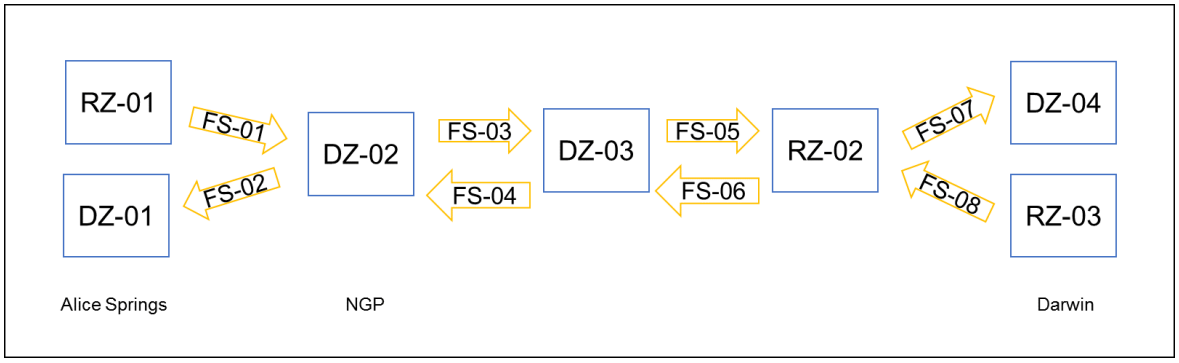
11.4 Proposed pipeline segments

Name	Type	From Location	To Location
AGP-FS-01	Forward haul	RZ-01	DZ-02
AGP-FS-02	Forward haul	DZ-02	DZ-01
AGP-FS-03	Forward haul	DZ-02	DZ-03
AGP-FS-04	Forward haul	DZ-03	DZ-02
AGP-FS-05	Forward haul	DZ-03	RZ-02
AGP-FS-06	Forward haul	RZ-02	DZ-03
AGP-FS-07	Forward haul	RZ-02	DZ-04
AGP-FS-08	Forward haul	RZ-03	RZ-02

The proposed forward haul pipeline segments are as follows:

- Bi-directional flow to and from Alice Springs (FS-01, FS-02).
- Bi-directional flow between the Katherine and Tennant Creek delivery zones (FS-03, FS-04).
- Bi-directional flow between the Tennant Creek delivery zone and the Bonaparte receipt zone (FS-05, FS-06).
- Bi-directional flow between the Bonaparte receipt zone and the Darwin receipt and delivery zones (FS-07, FS-08).

Figure 10: AGP proposed pipeline zones and segments



12 Northern Gas Pipeline

12.1 Key facility information

Table 12.1: Key facility information

Key information	Detail
Facility name	Northern Gas Pipeline (NGP)
Facility operator/owner	Jemena
Location	Northern Territory – Queensland
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul only Jemena has advised their intent for park services to only be available on an 'as available' basis
Subject to CTP?	Yes
Subject to DAA?	No – subject to a derogation
Other notes	The NGP is currently under construction with first gas expected to flow in late 2018[9]

12.2 Service points

Name	Type	Zone Name	Description
Tennent Creek	Receipt	NGP-RZ-01	Receipts from the AGP
Mt Isa	Delivery	NGP-DZ-01	Deliveries to the CGP at Mt Isa

12.3 Proposed zones

Name	Type	Description
NGP-RZ-01	Receipt	Tennent Creek
NGP-DZ-01	Delivery	Mt Isa

12.4 Proposed pipeline segments

Name	Type	From Location	To Location
NGP-FS-01	Forward haul	NGP-RZ-01	NGP-DZ-01

[9] http://jemena.com.au/industry/pipelines/northern-gas-pipeline

13 Moomba to Adelaide Pipeline System

13.1 Key facility information

Table 13.1: Key facility information

Key information	Detail
Facility name	Moomba to Adelaide Pipeline System (MAPS)
Facility operator/owner	EPIC Energy
Location	South Australia
Single or bi-directional pipeline	Single and bi-directional segments
Services that will be available through the CTP and DAA	Forward haul, Park (CTP only)
Subject to CTP?	Yes
Subject to DAA?	Yes

13.2 Service points

Name	Type	Zone Name	Description
Moomba Injection	Receipt	MAPS-RZ-01	
QSN Injection	Receipt	MAPS-RZ-01	
MAPS In-Pipe Trade Point	Receipt	MAPS-RZ-01	Notional point
Park account receipt point	Receipt	MAPS-RZ-01	Park service point
PPIMS Injection	Receipt	MAPS-RZ-02	
Adelaide metro	Receipt	MAPS-RZ-03	Notional point
Amcor	Delivery	MAPS-DZ-03	
Angaston ABC	Delivery	MAPS-DZ-03	
Angaston Riverland	Delivery	MAPS-DZ-03	
Angaston Town	Delivery	MAPS-DZ-03	Gate station
Freeling	Delivery	MAPS-DZ-03	Gate station
Nuriootpa	Delivery	MAPS-DZ-03	Gate station
Sheoak Log	Delivery	MAPS-DZ-03	
Tanunda	Delivery	MAPS-DZ-03	
Pacific Salt	Delivery	MAPS-DZ-04	
Port Bonython	Delivery	MAPS-DZ-04	
Port Pirie	Delivery	MAPS-DZ-04	Gate station
Whyalla BHP	Delivery	MAPS-DZ-04	
Whyalla Cogen	Delivery	MAPS-DZ-04	
Whyalla Town	Delivery	MAPS-DZ-04	Gate station

Name	Type	Zone Name	Description
Frost Road	Delivery	MAPS-DZ-06	
Hi-Tech Hydroponics	Delivery	MAPS-DZ-06	
Osborne	Delivery	MAPS-DZ-06	Power station
Pelican Point	Delivery	MAPS-DZ-06	Power station
Quarantine PS	Delivery	MAPS-DZ-06	Power station
Virginia	Delivery	MAPS-DZ-06	Gate station
Adelaide metro delivery point	Delivery	MAPS-DZ-05	Metro delivery points, Gate stations, Adelaide STTM Hub Custody Transfer Points
Dry Creek	Delivery	MAPS-DZ-05	Power station
Torrens Island PS	Delivery	MAPS-DZ-05	Power station
Moomba Withdrawal	Delivery	MAPS-DZ-01	
QSN	Delivery	MAPS-DZ-01	Notional point
MAPS In-Pipe Trade Point	Delivery	MAPS-DZ-01	Notional point
Park account delivery point	Delivery	MAPS-DZ-01	Park service point
Beverley	Delivery	MAPS-DZ-02	
Burra	Delivery	MAPS-DZ-02	Gate station
Hallett	Delivery	MAPS-DZ-02	Power station
Mintaro	Delivery	MAPS-DZ-02	Power station
Peterborough	Delivery	MAPS-DZ-02	Gate station
Wasleys Metro Farms	Delivery	MAPS-DZ-02	

Adelaide Metro Notional Point

EPIC has advised that the Adelaide Metro notional point is used as a forward haul receipt point only. Gas available at this location could be an offset to Adelaide STTM hub delivery points or gas stored on the pipeline. EPIC has also advised that shippers contract for firm northern haul services with the ability to receipt gas at the PPIMS Injection or the Adelaide metro receipt points. It is proposed that forward haul services from the Southern receipt zone are available for trading through the CTP and the DAA.

Adelaide Metro Delivery Point

Elizabeth, Gepps Cross and Taperoo delivery points connect to the Adelaide distribution network. EPIC has advised that contracting and nominations for delivery to these locations is carried out through the Adelaide metro delivery point.

Park Service Point

The proposed park service point is located around Moomba at the Park account receipt and delivery point. A shipper that wants to use the park service will therefore need to have

a transportation service that allowed it to transport gas to and from this service point, which could be acquired through the CTP or DAA.

13.3 Proposed zones

Name	Type	Description
MAPS-RZ-01	Receipt	Northern receipt zone
MAPS-RZ-02	Receipt	Southern receipt zone
MAPS-RZ-03	Receipt	Metro Mainline receipt zone
MAPS-DZ-01	Delivery	Northern delivery zone
MAPS-DZ-02	Delivery	Rural Mainline Delivery Zone
MAPS-DZ-03	Delivery	Angaston Delivery Zone
MAPS-DZ-04	Delivery	Iron Triangle Delivery Zone
MAPS-DZ-05	Delivery	Metro Mainline Delivery Zone
MAPS-DZ-06	Delivery	Loopline Delivery Zone

Adelaide STTM Hub mixed zone

The Metro Mainline Delivery zone (MAPS-DZ-05) contains STTM and non-STTM custody transfer points. It is proposed that an STTM integrated product is listed on the CTP that will allow the trading of capacity at the Elizabeth, Gepps Cross and Taperoo delivery points.

13.4 Proposed pipeline segments

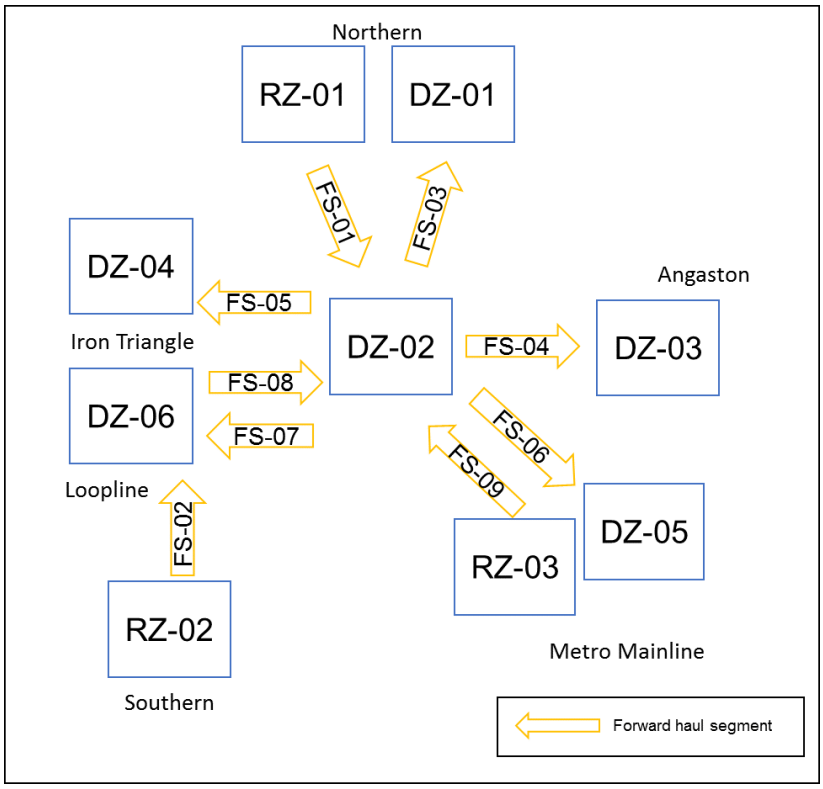
Name	Type	From Location	To Location
MAPS-FS-01	Forward haul	RZ-01	DZ-02
MAPS-FS-02	Forward haul	RZ-02	DZ-02
MAPS-FS-03	Forward haul	DZ-02	DZ-01
MAPS-FS-04	Forward haul	DZ-02	DZ-03
MAPS-FS-05	Forward haul	DZ-02	DZ-04
MAPS-FS-06	Forward haul	DZ-02	DZ-05
MAPS-FS-07	Forward haul	DZ-02	DZ-06
MAPS-FS-08	Forward haul	RZ-02	DZ-06
MAPS-FS-09	Forward haul	RZ-03	DZ-02

The proposed forward haul segments for the MAPS are as follows:

- Bi-directional flows between Moomba and the rural mainline (FS-01, FS-03).
- Single direction flow to Angaston from the rural mainline (FS-04).
- Single direction flow to Iron Triangle delivery zone from the rural mainline (FS-05).

- Bi-directional flows between Adelaide and the rural mainline (FS-02, FS-07, FS-08).
- Bi-directional between Adelaide metro mainline and the rural mainline (FS-06, FS-09).

Figure 11: MAPS proposed pipeline zones and segments



13.5 Amendments from initial specification

The forward haul pipeline segments have been amended so that the southern receipt (RZ-02) connects to the loopline delivery zone (DZ-06) following advice from EPIC Energy that gas physically flows through the loopline delivery zone and then onto the rural mainline.

The Adelaide metro forward haul receipt point has been moved from the southern receipt zone (RZ-02) to a new receipt zone (RZ-03) on advice from EPIC Energy. Flow north from the Adelaide metro forward haul receipt is generally notional whereas the flow from the southern receipt zone is physical and as such they require different auction quantity limits.

As the flow north from the Adelaide metro forward haul receipt point is generally notional, further consideration as to whether this pipeline segment should be defined as bi-directional or single direction (with backhaul) is required. As noted in GMRG's information paper, a pipeline (or part) may be considered bi-directional if:

- it has the capability to reverse the flow of gas under normal operating conditions; and
- transportation facility users have transportation capacity for firm forward haul services in both directions.

14 Port Campbell to Adelaide Pipeline

AEMO has been advised by SEAGas that it intends to register the SEAGas Pipeline as two separate facilities:

- the Port Campbell to Adelaide pipeline (PCA), which links gas production facilities in the Otway basin to Adelaide.
- the Port Campbell to Iona pipeline (PCI), which links gas production, pipeline and storage facilities in the Otway region.

The PCA and PCI are connected at the Langley service point.

The remainder of this chapter sets out the proposed service points, zones and pipeline segments for the PCA while chapter 15 contains this equivalent information for the PCI.

14.1 Key facility information

Table 14.1: Key facility information

Key information	Detail
Facility name	Port Campbell to Adelaide Pipeline (PCA)
Facility operator/owner	SEAGas
Location	Victoria – South Australia
Single or bi-directional pipeline	Single direction
Services that will be available through the CTP and DAA	Forward Haul, Backhaul (DAA only) SEAGAS has advised there are no park services on this pipeline
Subject to CTP?	Yes
Subject to DAA?	Yes

14.2 Service points

Name	Type	Zone Name	Description
Minerva - PCA	Receipt	PCA-RZ-01	
Langley - PCA	Receipt	PCA-RZ-01	Backhaul delivery point
Langley - PCA	Backhaul delivery point	N/A	Connection to PCI
Otway - PCA	Receipt	PCA-RZ-01	
Iona	Receipt	PCA-RZ-01	Backhaul delivery point
Iona	Backhaul delivery point	N/A	
Adelaide notional point	Receipt	PCA-RZ-01	Backhaul delivery point
Adelaide notional point	Backhaul delivery point	N/A	
Jervois	Delivery	PCA-DZ-03	Backhaul delivery point

Name	Type	Zone Name	Description
Bolivar	Delivery	PCA-DZ-03	Backhaul delivery point
Cavan	Delivery	PCA-DZ-03	Backhaul receipt point, Adelaide STTM Custody Transfer Point
Cavan	Backhaul receipt point	N/A	
Torrens Island	Delivery	PCA-DZ-03	Power Station
Quarantine	Delivery	PCA-DZ-03	Power Station
Pelican Point	Delivery	PCA-DZ-03	Power Station
Poolaijelo	Delivery	PCA-DZ-02	Backhaul delivery point, connects to SESA pipeline
Naracoorte	Delivery	PCA-DZ-02	Backhaul delivery point
Langley Delivery	Delivery	PCA-DZ-01	
Iona Delivery	Delivery	PCA-DZ-01	

Backhaul service points

The following backhaul service points are proposed for the PCA:

- The Cavan forward haul delivery point has been specified as a backhaul receipt point, which would allow the offset of deliveries to the STTM hub.
- Jervois, Bolivar, Naracoorte and Poolaijelo are specified as forward haul and a backhaul delivery points. Unused capacity at these service points will be shared between forward haul and backhaul services.
- The Iona and Langley-PCA forward haul receipt points are also defined as backhaul delivery points that would allow the offset of injections into the pipeline.

14.3 Proposed zones

Name	Type	Description
PCA-RZ-01	Receipt	Port Campbell
PCA-RZ-02	Receipt	Adelaide
PCA-DZ-01	Delivery	Port Campbell
PCA-DZ-02	Delivery	South-east South Australia
PCA-DZ-03	Delivery	Adelaide

Adelaide STTM Hub mixed zone

There is a single delivery zone (PCA-DZ-03) defined for the Adelaide section of the pipeline that groups STTM and non-STTM custody transfer points. It is proposed that an STTM integrated product is listed on the CTP, which will allow the trading of capacity at the Cavan delivery point.

14.4 Proposed pipeline segments

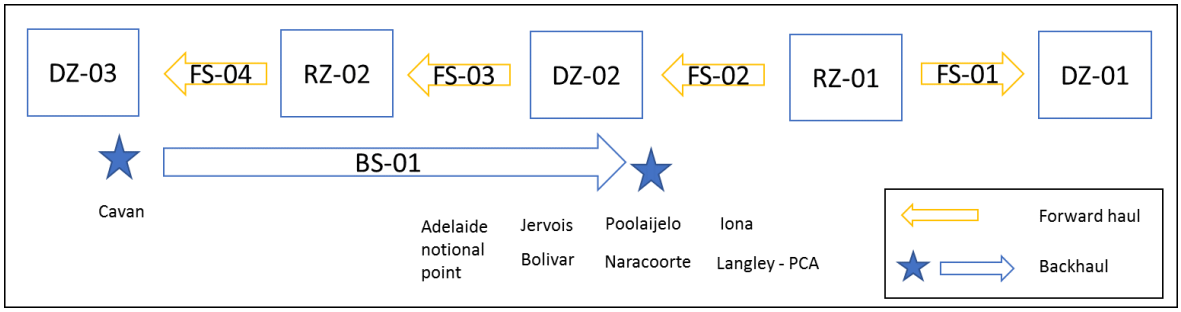
Name	Type	From Location	To Location
PCA-FS-01	Forward haul	RZ-01	DZ-01
PCA-FS-02	Forward haul	RZ-01	DZ-02
PCA-FS-03	Forward haul	DZ-02	RZ-02
PCA-FS-03	Forward haul	RZ-02	DZ-03
PCA-BS-01	Backhaul	Cavan	Adelaide notional point, Jervois, Bolivar, Naracoorte, Poolaijelo, Iona, Langley - PCA

Backhaul segments

It is proposed that there is a single backhaul segment from Cavan to the backhaul delivery points on the pipeline (BS-01).

While backhaul delivery points are located along the pipeline, the key constraint for backhaul services on the pipeline is the flow at Cavan. Under the proposed specification, all purchasers of backhaul services on the PCA will compete for a share of the backhaul segment (BS-01) limit.

Figure 12: PCA proposed zones and pipeline segments



14.5 Amendments from Initial Specification

Service Point Updates and Corrections

The service point names have been updated based on advice from SEAGas so that they align with the Gas Bulletin Board specifications.

Forward haul delivery point

Iona Delivery has been included as a forward haul delivery point.

Backhaul delivery points

Backhaul delivery points at Jervois, Bolivar and Naracoorte have been included as service points on the PCA. The backhaul delivery points will all be connected to the Cavan backhaul receipt point by a single backhaul pipeline segment (BS-01).

Backhaul segment

Two backhaul segments were included in the initial specification, the first connecting Cavan to Poolaijelo and a second connecting Poolaijelo to the Port Campbell backhaul delivery points. As there is a single backhaul receipt point, the key backhaul constraint is the flow that can be offset at the Cavan service point. The auction quantity limit on the second segment would be equal to or greater than that of the first segment because gas flow on the PCA reduces as the pipeline makes its way to Adelaide. Because all backhaul services on the PCA must include the Cavan backhaul receipt point and backhaul segment from Cavan, a second segment would be redundant.

Adelaide Notional Point

Adelaide notional point has been included in the specification as a backhaul delivery point and a forward haul receipt point. The new notional point would allow an auction participant to combine an auction backhaul service (from the Cavan STTM interface point) with a forward haul auction service to the Adelaide delivery zone (DZ-03).

15 Port Campbell to Iona Pipeline

15.1 Key facility information

Table 15.1: Key facility information

Key information	Detail
Facility name	Port Campbell to Iona Pipeline (PCI)
Facility operator/owner	SEAGas
Location	Victoria
Single or bi-directional pipeline	Single and bi-directional sections
Services that will be available through the CTP and DAA	Forward haul, Backhaul (DAA only). SEAGas has advised there are no park services on this pipeline
Subject to CTP?	Yes
Subject to DAA?	Yes

15.2 Service points

Name	Type	Zone Name	Description
Minerva - PCI	Receipt	PCI-RZ-01	
Minerva - PCI	Backhaul Delivery Point	N/A	
Langley - PCI	Receipt	PCI-RZ-01	
Langley - PCI	Backhaul Delivery Point	N/A	
Otway - PCI	Receipt	PCI-RZ-01	
SWCP	Receipt	PCI-RZ-02	Connection from South West Pipeline (DWGM)
Otway UFM 4	Receipt	PCI-RZ-03	Connection from to Otway Gas Plant
M-UGS	Receipt	PCI-RZ-04	Connection from Iona Underground Storage Facility
MIJ-001 – PCI	Receipt	PCI-RZ-05	Connection from Mortlake
Langley - PCI	Delivery	PCI-DZ-01	
Minerva - PCI	Delivery	PCI-DZ-01	
SWP	Delivery	PCI-DZ-02	Connects to South West Pipeline (DWGM)
SWP	Backhaul Receipt Point	N/A	
MPSWCP	Delivery	PCI-DZ-02	Connects to South West Pipeline (DWGM), known as Mortlake DWGM connection point

Name	Type	Zone Name	Description
SWCP	Delivery	PCI-DZ-02	Connects to South West Pipeline (DWGM), known as DWGM connection point
Otway UFM 4	Delivery	PCI-DZ-03	Connects to Otway Gas Plant
M-UGS	Delivery	PCI-DZ-04	Connects to Iona Underground Storage Facility
MIJ-001 - PCI	Delivery	PCI-DZ-05	Connects to Mortlake pipeline

DWGM Interface Points

The PCI has three DWGM interface points:

1. SWP: Connection point between SEAGas and the DTS (MIRN: 30000168PC (injection) and 30000169PC (withdrawal)).

2. MPSWCP: Mortlake injections into the DTS (MIRN: 30000179PC).

3. SWCP: Otway Connection point with the DTS (MIRNs: 30000181PC (injection) and 30000182PC (withdrawal)).

To acquire capacity at the DWGM interface points, a participant must be accredited at the point in the DWGM. Any transfers at a DWGM interface point will result in a participant's MHQ bid accreditation constraint being automatically adjusted. To utilise capacity at a DWGM interface point the participant will need to be scheduled in the DWGM.

See the Guide to Transportation Service Point Register for more information on DWGM integration.

Backhaul service points

The following backhaul service points are proposed for the PCI:

- The SWP (DWGM) forward haul delivery point has been specified as a backhaul receipt point that would allow the offset of deliveries from the SEAGas pipeline to the South West Pipeline.
- The Langley East forward haul receipt point is also defined as a backhaul delivery point that would allow the offset of injections into the pipeline. The Langley East backhaul delivery point will have a different limit in the DAA to the forward haul delivery and receipt point.

A backhaul service from the SWP to Langley East will allow gas purchased in the DWGM to be transported to the PCA via Langley East.

15.3 Proposed zones

Name	Type	Description
PCI-RZ-01	Receipt	Minerva Receipt Zone
PCI-RZ-02	Receipt	DWGM Receipt Zone

Name	Type	Description
PCI-RZ-03	Receipt	Otway Receipt Zone
PCI-RZ-04	Receipt	Iona Receipt Zone
PCI-RZ-05	Receipt	Mortlake Receipt Zone
PCI-DZ-01	Delivery	Minerva Delivery Zone
PCI-DZ-02	Delivery	DWGM Delivery Zone
PCI-DZ-03	Delivery	Otway Delivery Zone
PCI-DZ-04	Delivery	Iona Delivery Zone
PCI-DZ-04	Delivery	Mortlake Delivery Zone

15.4 Proposed pipeline segments

Name	Type	From Location	To Location
PCI-FS-01	Forward haul	RZ-01	DZ-01
PCI-FS-02	Forward haul	RZ-01	RZ-05, DZ-05
PCI-FS-03	Forward haul	RZ-01	DZ-02
PCI-FS-04	Forward haul	RZ-05, DZ-05	DZ-02
PCI-FS-05	Forward haul	RZ-05	DZ-04
PCI-FS-06	Forward haul	RZ-03	DZ-02
PCI-FS-07	Forward haul	RZ-04	DZ-05, RZ-05
PCI-FS-08	Forward haul	RZ-02	DZ-03
PCI-BS-01	Backhaul	SWP	Langley East

Forward haul segments

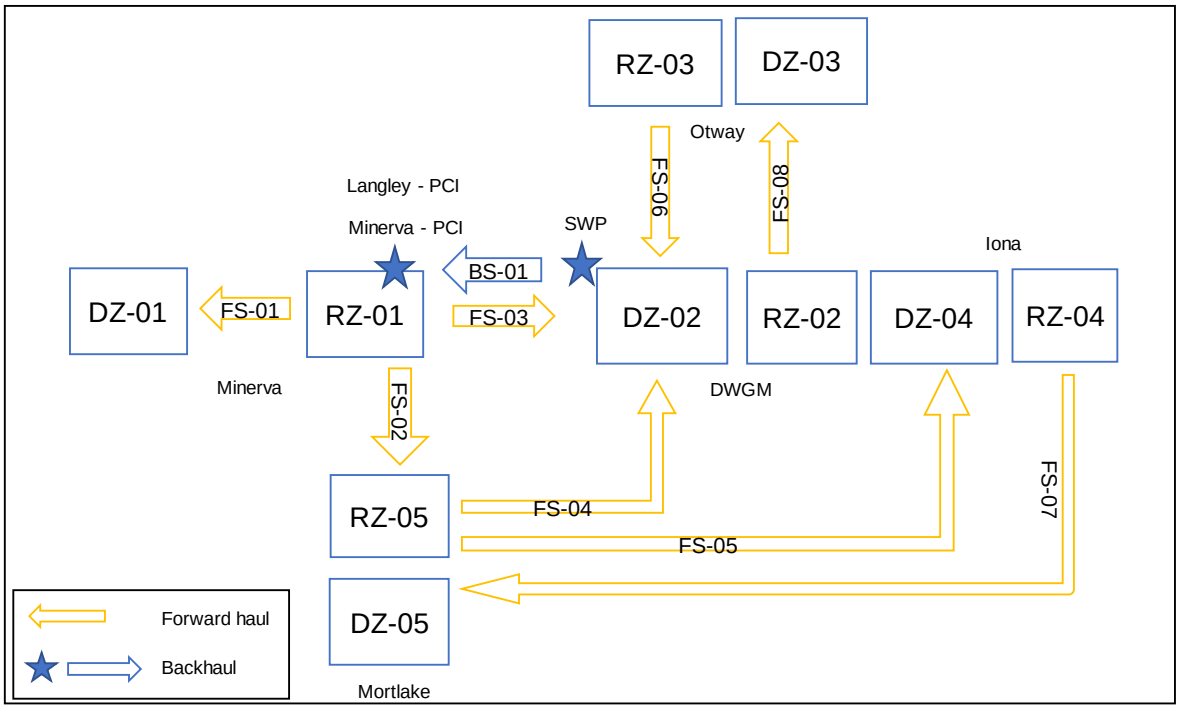
The following forward haul segments are proposed for the PCI:

- Forward haul segments from Minerva receipt zone to Minerva, DWGM and Mortlake delivery zones (FS-01, FS-02, FS-03).
- Forward haul segment connecting the Mortlake receipt zone and the DWGM delivery zone (FS-04).
- Bi-directional flow between Iona and Mortlake zones (FS-05, FS-07).
- Bi-directional flow between Otway and DWGM zones (FS-06, FS-08).

Backhaul segments

Consistent with the proposed specification of backhaul service points, the proposed backhaul segment for the PCI extends from SWP to Langley East.

Figure 13: PCI proposed zones and pipeline segments



15.5 Amendments from Initial Specification

Service points

The service point names have been updated based on advice from SEAGas so that they align with the BB specifications.

Update to pipeline segments

Forward haul pipeline segment updates:

- FS-04 amended to connect to DZ-05 & RZ-05 to allow a forward haul auction service between the Minerva receipt zone (RZ-01) and the Iona delivery zone (DZ-04).
- FS-07 amended to connect to DZ-05 & RZ-05 to allow a forward haul auction service between the Iona receipt zone (RZ-04) and the DWGM delivery zone (DZ-02).

Backhaul delivery points

Based on advice from SEAGas, Minerva – PCI has been included in the specification as a backhaul delivery point.

16 SESA Pipeline

16.1 Key facility information

Table 16.1: Key facility information

Key information	Detail
Facility name	South East South Australia Pipeline (SESA)
Facility operator/owner	APA Group
Location	South Australia
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul only. APA group has advised there are no park services on this pipeline.
Subject to CTP?	Yes
Subject to DAA?	Yes

16.2 Service points

Name	Type	Zone Name	Description
SEAGas Entry Point	Receipt	SESA-RZ-01	
South East Pipeline	Delivery	SESA-DZ-01	
Ladbroke Grove GT1	Delivery	SESA-DZ-01	Power station
Ladbroke Grove GT2	Delivery	SESA-DZ-01	Power station

16.3 Proposed zones

Name	Type	Description
SESA-RZ-01	Receipt	
SESA-DZ-01	Delivery	

16.4 Proposed pipeline segments

Name	Type	From Location	To Location
SESA-FS-01	Forward haul	RZ-01	DZ-01

17 SEPS Pipeline

17.1 Key facility information

Table 17.1: Key facility information

Key information	Detail
Facility name	South East Pipeline System (SEPS)
Facility operator/owner	Epic Energy
Location	South Australia
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul only.
Subject to CTP?	Yes
Subject to DAA?	Yes

EPIC Energy has advised AEMO that it will make an assessment about whether to apply for an exemption for SEPS following the publication of the rules. The specifications were provided to AEMO to allow consultation with industry prior to any formal obligation to specify service point information to AEMO.

17.2 Service points

Name	Type	Zone Name	Description
Katnook	Receipt	SEP-RZ-01	
SESAP	Receipt	SEP-RZ-01	
Penola	Delivery	SEP-DZ-01	
Mt Gambier	Delivery	SEP-DZ-02	Gate Station
Kimberly Clark	Delivery	SEP-DZ-03	

17.3 Proposed zones

Name	Type	Description
SEPS-RZ-01	Receipt	Katnook Plant, SESAP Receipt
SEPS-DZ-01	Delivery	Penola
SEPS-DZ-02	Delivery	Mt Gambier
SEPS-DZ-03	Delivery	Kimberley Clark

17.4 Proposed pipeline segments

Name	Type	From Location	To Location
SEPS-FS-01	Forward haul	RZ-01	DZ-01

Name	Type	From Location	To Location
SEPS-FS-02	Forward haul	RZ-01	DZ-02
SEPS-FS-03	Forward haul	RZ-01	DZ-03

17.5 Amendments from initial specification

The SEPS facility was not included in the initial specification report.

18 Eastern Gas Pipeline

18.1 Key facility information

Table 18.1: Key facility information

Key information	Detail
Facility name	Eastern Gas Pipeline (EGP)
Facility operator/owner	Jemena
Location	Victoria – New South Wales
Single or bi-directional pipeline	Single direction pipeline
Services that will be available through the CTP and DAA	Forward haul, Park (CTP only), Backhaul (DAA only)
Subject to CTP?	Yes
Subject to DAA?	Yes

18.2 Service points

Name	Type	Zone Name	Description
Longford	Receipt	EGP-RZ-01	Connection point from Longford Gas Plant to the EGP
Longford (EGP)	Receipt	EGP-RZ-02	Park service receipt point.
VicHub	Backhaul Receipt	N/A	VicHub Backhaul Receipt Point
Tasmania Gas Pipeline	Delivery	EGP-DZ-07	Connection point from EGP to TGP
VicHub Pipeline	Delivery	EGP-DZ-01	Connection point from EGP to VicHub. VicHub is also a backhaul receipt point and backhaul delivery point.
Longford (EGP)	Delivery	EGP-DZ-01	This point is used to nominate delivery for park and backhaul services on the EGP.
Bairnsdale	Delivery	EGP-DZ-02	Connects to Bairnsdale power station. Bairnsdale is also a backhaul delivery point.
Bairnsdale city gate	Delivery	EGP-DZ-02	Connects to Bairnsdale network
Orbost	Receipt	EGP-RZ-03	Connects Orbost Gas Plant to the EGP
Cooma	Delivery	EGP-DZ-03	Connects to Cooma network
Bombala	Delivery	EGP-DZ-03	Connects to Bombala Network
Hoskinstown	Delivery	EGP-DZ-04	Connects to Hoskinstown network (Canberra)
Nowra	Delivery	EGP-DZ-04	Connects to Nowra network
Bomaderry	Delivery	EGP-DZ-04	Connects to Bomaderry network
Tallawarra	Delivery	EGP-DZ-05	Power station

Name	Type	Zone Name	Description
			Tallawarra is also a backhaul delivery point
Port Kembla	Delivery	EGP-DZ-05	Connects to the Wollongong network at Port Kembla. Port Kembla is a Sydney STTM Hub Custody Transfer Point.
Albion Park	Delivery	EGP-DZ-05	Connects to Wollongong network at Albion Park. Albion Park is a Sydney STTM Hub Custody Transfer Point
Horsley Park	Delivery	EGP-DZ-05	Connects to the Sydney network at Horsley Park. Horsley Park is a Sydney STTM Hub Custody Transfer Point. Horsley Park is a backhaul receipt point
Horsley Park	Backhaul Receipt	N/A	Backhaul receipts from STTM hub
Smithfield	Delivery	EGP-DZ-05	Connects to Smithfield power station
Moomba to Sydney Pipeline (MSP) – Wilton	Delivery	EGP-DZ-06	Connects to the MSP
MSP – Wilton	Backhaul receipt	N/A	Backhaul receipt point for MSP Wilton
Wilton Jemena Gas Networks	Delivery	EGP-DZ-06	Connects to the Sydney network at Wilton. Wilton Jemena Gas Networks is a Sydney STTM Hub Custody Transfer Point.

Park Service Point

The proposed park service point is located at Longford (EGP). A shipper that wants to use the park service will therefore need to have a transportation service that allowed it to transport gas to and from this service point (the service point will be located in DZ-01 and RZ-02).

Backhaul Service Points

The proposed backhaul service points include:

- the Horsley Park, MSP – Wilton, Orbost and VicHub service points (backhaul receipt points); and
- the Tallawarra, VicHub and Longford EGP service points (backhaul delivery points).

Specifying these points would facilitate the following backhaul products:

- Horsley Park or MSP Wilton backhaul receipt points to the Tallawarra, VicHub or Longford EGP backhaul delivery points;
- Orbost backhaul receipt point to the Longford EGP or VicHub backhaul delivery points; and
- VicHub backhaul receipt point to the Longford EGP backhaul delivery point.

AEMO and the GMRG are seeking feedback on the proposed specification of backhaul service points on the EGP.

18.3 Proposed zones

Name	Type	Description
EGP-RZ-01	Receipt	Receipt from Longford Gas Plant
EGP-RZ-02	Receipt	Receipt from Longford EGP (for Park services); Receipt from VicHub
EGP-DZ-01	Delivery	Delivery to VicHub and park service
EGP-DZ-02	Delivery	EGP delivery points at Bairnsdale
EGP-DZ-03	Delivery	EGP delivery points at Coomba and Bombala
EGP-RZ-03	Receipt	Orbost gas plant
EGP-DZ-04	Delivery	EGP Delivery points at Hoskingstown, Nowra and Bomaderry
EGP-DZ-05	Delivery	Delivery zone for STTM points excluding Wilton points
EGP-DZ-06	Delivery	Delivery zone for STTM Wilton and MSP Wilton interconnection
EGP-DZ-07	Delivery	Delivery zone for TGP

Sydney STTM hub mixed zone

AEMO and the GMRG are proposing to divide the Sydney STTM zone into the following zones:

- DZ-05, which includes the STTM custody transfer points at Albion Park, Port Kembla and Horsley park and the non-STTM points at Smithfield and Tallawarra (both of which are power stations).
- DZ-06, which includes the delivery point at Wilton on the MSP and the Jemena Gas Network Wilton STTM custody transfer point.

It was necessary to separate DZ-06 from DZ-05 as the Wilton points sit on their own lateral. DZ-06 is a mixed zone for STTM integration.

For the purpose of STTM integration DZ-05 and DZ-06 are mixed zones including both non-STTM and STTM delivery points. As such, the CTP will have at least two separate products:

- An integrated STTM product (e.g. in DZ-05 this will include Albion Park, Port Kembla and Horsley Park).
- A non-integrated STTM product (e.g. in DZ-05 this will include Smithfield and Tallawarra).

18.4 Proposed pipeline segments

Name	Type	From Location	To Location
EGP-FS-01	Forward haul	RZ-01	DZ-01 and RZ-02
EGP-FS-02	Forward Haul	RZ-02	DZ-02
EGP-FS-03	Forward haul	DZ-02	RZ-03
EGP-FS-04	Forward haul	RZ-03	DZ-03
EGP-FS-05	Forward haul	DZ-03	DZ-04
EGP-FS-06	Forward haul	DZ-04	DZ-05
EGP-FS-07	Forward haul	DZ-05	DZ-06
EGP-FS-08	Forward haul	RZ-01	DZ-07
EGP-BS-01	Backhaul	Horsley Park; MSP Wilton	Tallawarra
EGP-BS-02	Backhaul	Tallawarra	Orbost
EGP-BS-03	Backhaul	Orbost	VicHub (RP)
EGP-BS-04	Backhaul	Vichub (RP)	VicHub (DP), Longford (EGP)

TGP transfer service

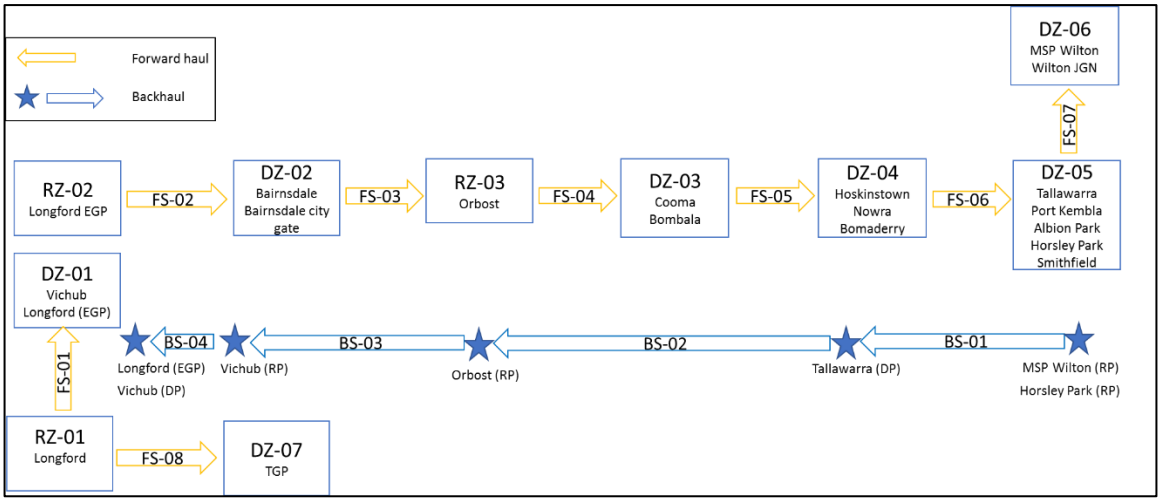
Jemena and Pallisade have advised that the TGP delivery point on the EGP would need to be in its own zone to reserve capacity for the EGP – TGP transfer service, which is required to transport gas on the TGP. AEMO and the GMRG are therefore proposing to allocate the TGP delivery point to its own delivery zone (DZ-07), which will be linked through a forward haul pipeline segment (FS-08) from the Longford receipt zone RZ-01. The segment and zone capacity will reflect the CBU capacity for the EGP – TGP transfer service.

Backhaul segments

Consistent with the proposed specification of backhaul service points, the proposed backhaul segments include:

- MSP Wilton and Horsley Park to Tallawarra (BS-01).
- Tallawarra to Orbost (BS-02).
- Orbost to VicHub Backhaul Receipt Point (BS-03).
- VicHub Backhaul Receipt Point to VicHub Backhaul Delivery Point and Longford EGP (BS-04).

Figure 14: EGP proposed zones and pipeline segments



18.5 Amendments from initial specification

Forward haul pipeline zones and segments

Only minor amendments have been made to the EGP forward haul components for this consultation version based on feedback received from Jemena:

- Longford (EGP) Receipt is now located in its own receipt zone (RZ-02) separate from the Longford Gas Plant (RZ-01). This better reflects the capacity constraints between the Longford Gas Plant and the EGP which will now be captured by FS-01.

- The location of Orbost receipt zone (RZ-03) has been adjusted and it now sits between DZ-02 and DZ-03 to better reflect the location and connection of the Orbost Gas Plant to the EGP.

Jemena provided feedback that zone DZ-05 may need to be split so that the Horsley Park and Smithfield delivery points are located in a separate zone to reflect a capacity constraint at Horsley Park. AEMO requested further technical information from Jemena on this constraint and at the time of publication this information is outstanding. AEMO also notes feedback from several shippers that indicated a strong preference to retain DZ-05 as proposed. Some shippers noted that they would be prepared to manage the potential delivery risks associated with the potential constraints in this zone. As such, AEMO has decided to not change the specification of DZ-05 at this time.

Jemena provided feedback in its submission that the EGP will be bi-directional between Orbost and Longford prior to 1 March 2019. AEMO requested further information from Jemena to indicate whether the EGP will meet the requirements to be classified as a bi-directional pipeline[10]. At the time of publication this information is outstanding and as

[10] The GMRG's *Information Paper: Capacity trading reform package legal and regulatory instruments p.13,* provides guidance on what qualifies as bi-directional pipeline for these reforms.

such, at this stage, no change has been made to the configuration of the segments between Orbost and Longford.

Backhaul

The backhaul components have been updated and rationalised with the following changes:

- Removal of Bairnsdale Backhaul delivery point
- Removal of pipeline segment connecting Orbost to Bairnsdale (the segment now connects Orbost to VicHub backhaul receipt point)
- VicHub delivery point has been moved to the same location as the EGP Park point and shares BS-04 with this point.

AEMO and GMRG welcomes feedback on these changes to the specification of backhaul product components.

AEMO has included MSP – Wilton as a backhaul receipt point. For backhaul services from this location to be effective, arrangements would need to be in place on the MSP to allow the corresponding delivery (offsetting of receipts) and allocation of gas on the MSP. AEMO seeks feedback from stakeholders on potential benefits or technical concerns associated with this proposed backhaul receipt point.

19 Moomba to Sydney, Central West and Central Ranges pipelines

APA Group has advised that it intends to treat the Central West Pipeline (CWP) and Central Ranges Pipeline (CRP) as forming part of the Moomba to Sydney Pipeline (MSP) for the purposes of the CTP and DAA. This chapter has therefore been prepared on this basis.

19.1 Key facility information

Table 19.1: Key facility information

Key information	Detail
Facility name	Moomba to Sydney Pipeline (MSP) (includes the CWP and CRP)
Facility operator/owner	APA Group
Location	South Australia – New South Wales
Single or bi-directional pipeline	MSP: Bi-directional CWP and CRP: Single direction
Services that will be available through the CTP and DAA	Forward Haul, Park (CTP only)
Subject to CTP?	Yes
Subject to DAA?	Yes

19.2 Service points

Name	Type	Zone Name	Description
MSP Inlet	Receipt	MSP-RZ-01	
EGP Entry	Receipt	MSP-RZ-02	
Wilton Trade Point	Receipt	MSP-RZ-02	Notional point, Park service
Culcairn North	Receipt	MSP-RZ-03	DWGM interface point
Culcairn Trade Point	Receipt	MSP-RZ-03	Notional point, Park service
MAPS Exit	Delivery	MSP-DZ-01	
MGP Exit	Delivery	MSP-DZ-01	
SWQP Exit	Delivery	MSP-DZ-01	
Bulla Park	Delivery	MSP-DZ-02	
West Wyalong	Delivery	MSP-DZ-02	
CWP nomination point	Delivery	MSP-DZ-02	Central West Pipeline
CRP nomination point	Delivery	MSP-DZ-03	Central Ranges Pipeline
Wallerawang	Delivery	MSP-DZ-04	Gate station
Lithgow	Delivery	MSP-DZ-04	Gate station

Name	Type	Zone Name	Description
Blayney	Delivery	MSP-DZ-04	Gate station
Bathurst	Delivery	MSP-DZ-04	Gate station
Cootamundra	Delivery	MSP-DZ-04	Gate station
Cowra	Delivery	MSP-DZ-04	Gate station
Illabo	Delivery	MSP-DZ-04	Gate station
Millthorpe	Delivery	MSP-DZ-04	Gate station
Oberon	Delivery	MSP-DZ-04	Gate station
Orange	Delivery	MSP-DZ-04	Gate station
Wagga	Delivery	MSP-DZ-04	Gate station
Wallendbeen	Delivery	MSP-DZ-04	Gate station
Young	Delivery	MSP-DZ-04	Gate station
Junee	Delivery	MSP-DZ-05	Gate station
Coolamon	Delivery	MSP-DZ-05	Gate station
Ganmain	Delivery	MSP-DZ-05	Gate station
Narrandera	Delivery	MSP-DZ-05	Gate station
Rockdale	Delivery	MSP-DZ-05	Gate station
Leeton	Delivery	MSP-DZ-05	Gate station
Murrami	Delivery	MSP-DZ-05	Gate station
Griffith	Delivery	MSP-DZ-05	Gate station
Boorowa	Delivery	MSP-DZ-06	Gate station
Yass	Delivery	MSP-DZ-06	Gate station
Goulburn	Delivery	MSP-DZ-06	Gate station
Marulan	Delivery	MSP-DZ-06	Gate station
Sallys Corner	Delivery	MSP-DZ-06	Gate station
Moss Vale	Delivery	MSP-DZ-06	Gate station
Bowral	Delivery	MSP-DZ-06	Gate station
Bargo	Delivery	MSP-DZ-06	Gate station
Wilton	Delivery	MSP-DZ-06	Gate station, Sydney STTM Hub Custody Transfer Point
Wilton Trade Point	Delivery	MSP-DZ-06	Notional point, Park service point
Canberra	Delivery	MSP-DZ-07	Gate station
Holbrook	Delivery	MSP-DZ-08	Gate station
Henty	Delivery	MSP-DZ-08	Gate station
Uranquinty Power Station	Delivery	MSP-DZ-08	
Uranquinty	Delivery	MSP-DZ-08	Gate station

Name	Type	Zone Name	Description
Culcairn South	Delivery	MSP-DZ-08	DWGM interface point
Culcairn Trade Point	Delivery	MSP-DZ-08	Notional point, Park service

DWGM interface points

Culcairn South and North are DWGM interface points. To acquire capacity at Culcairn South or North, a participant must be accredited to inject at Culcairn south or withdraw at Culcairn North in the DWGM. Any transfers of capacity at Culcairn South or Culcairn North will result in a participant's MHQ bid accreditation constraint being automatically adjusted. See the Guide to Transportation Service Point Register for more information on DWGM integration.

Notional points and park service points

There are two notional points available on the MSP:

1. Culcairn Trade Point, located at Culcairn near the Culcairn South DWGM interface point.

2. Wilton Trade Point, located near Sydney and the Sydney STTM point at Wilton.

Each notional point is specified as a forward haul receipt and delivery point. The notional points are also specified as the point for injection and withdrawal for designated park services on the MSP.

CWP and CRP service points

APA Group has proposed the following service points for the CWP and CRP:

- CWP nomination point – shippers transporting gas to Dubbo, Parkes, Forbes or Narromine delivery points on the CWP make an aggregate nomination to the CWP nomination point.
- CRP nomination point – shippers transporting gas to Tamworth on the CRP make a nomination to the CRP nomination point.

19.3 Proposed zones

Name	Type	Description
MSP-RZ-01	Receipt	Moomba
MSP-RZ-02	Receipt	Sydney
MSP-RZ-03	Receipt	Culcairn
MSP-DZ-01	Delivery	Moomba
MSP-DZ-02	Delivery	CWP
MSP-DZ-03	Delivery	CRP
MSP-DZ-04	Delivery	

Name	Type	Description
MSP-DZ-05	Delivery	
MSP-DZ-06	Delivery	Sydney STTM hub mixed zone
MSP-DZ-07	Delivery	Canberra
MSP-DZ-08	Delivery	Culcairn

DWGM mixed zone

DZ-08 includes the delivery points at Culcairn South, Uranquinty, Uranquinty Power Station, Holbrook, Henty and the Culcairn Trade point. Demand at Culcairn South and Uranquinty Power Station is variable. Including both points in the same demand zone should enable participants to trade unutilised contracted capacity between these two points, subject to there being sufficient available physical capacity on the pipeline and at each delivery point.

Sydney STTM hub mixed zone

AEMO and the GMRG are proposing a mixed zone (DZ-06) for the Sydney STTM on the MSP, which will include the Wilton STTM point, the Wilton Trade Point, and the Booroowa, Yass, Goulburn, Marulan, Sally's Corner, Moss Vale, Bowral and Bargo delivery points. It is proposed that an STTM integrated product is listed on the CTP, which will allow the trading of capacity at the Wilton (Sydney STTM Hub) delivery point.

19.4 Proposed pipeline segments

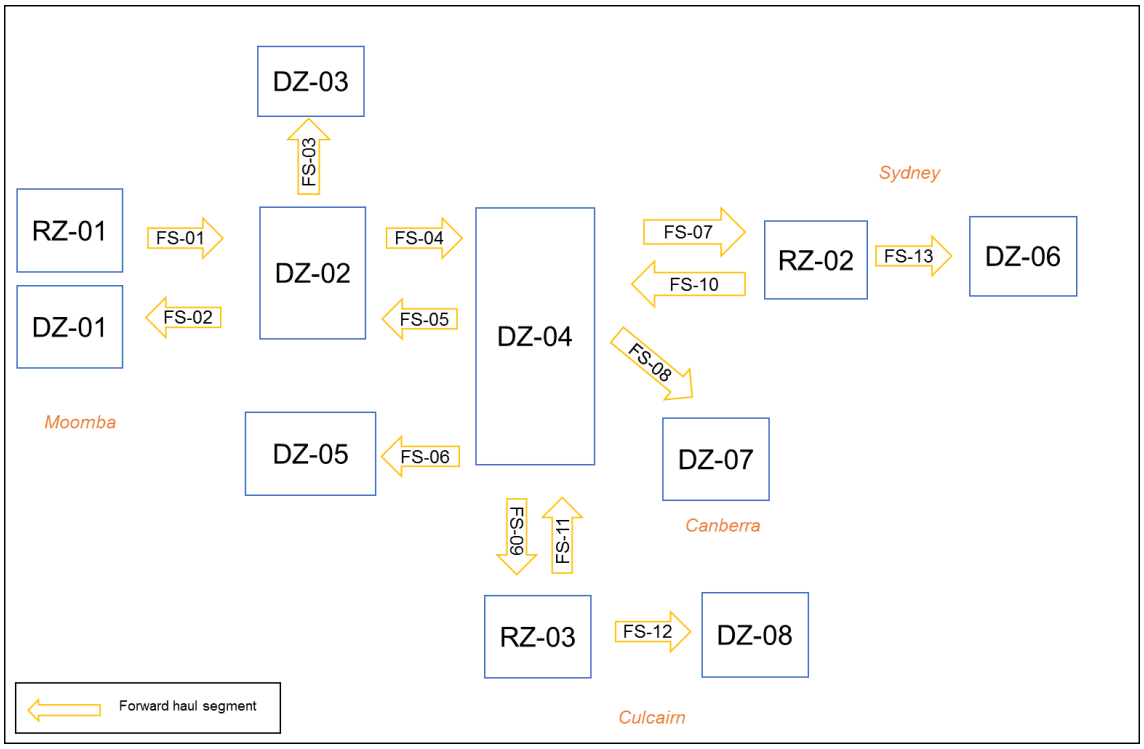
Name	Type	From Location	To Location
MSP-FS-01	Forward haul	RZ-01	DZ-02
MSP-FS-02	Forward haul	DZ-02	DZ-01
MSP-FS-03	Forward haul	DZ-02	DZ-03
MSP-FS-04	Forward haul	DZ-02	DZ-04
MSP-FS-05	Forward haul	DZ-04	DZ-02
MSP-FS-06	Forward haul	DZ-04	DZ-05
MSP-FS-07	Forward haul	DZ-04	RZ-02
MSP-FS-08	Forward haul	DZ-04	DZ-07
MSP-FS-09	Forward haul	DZ-04	RZ-03
MSP-FS-10	Forward haul	RZ-02	DZ-04
MSP-FS-11	Forward haul	RZ-03	DZ-04
MSP-FS-12	Forward haul	RZ-03	DZ-08
MSP-FS-13	Forward haul	RZ-02	DZ-06

The proposed forward haul pipeline segments on the MSP include:

- Bi-directional flows to and from Moomba (FS-01, FS-02).

- Bi-directional flows to and from Culcairn (FS-09, FS-11).
- Bi-directional flows to and from Sydney (FS-07, FS-10).
- Bi-directional flows through central NSW (FS-04, FS-05).
- Single-directional flows on laterals to CRP, Griffith and Canberra (FS-03, FS-06, FS-08).
- Single-direction flow between Sydney receipt and delivery zones (FS-13), Culcairn receipt and delivery zones (FS-12).

Figure 15: MSP proposed zones and pipeline segments



19.5 Amendments from Initial Specification

Configuration of Sydney zones

Forward haul pipeline segments amended so that the Sydney delivery zone connects directly to the Sydney receipt zone. This configuration allows an auction participant to bid for an auction service from the Sydney receipt zone directly to the Sydney delivery zone (for example from the Wilton Trade Point to the Wilton delivery point). In the initial specification, this auction service would have included the purchase of capacity on forward haul segments to and from DZ-04.

Configuration of Culcairn zones

Forward haul pipeline segments amended so that the Culcairn delivery zone connects directly to the Culcairn receipt zone. This configuration allows an auction participant to bid for an auction service from the Culcairn receipt zone directly to the Culcairn delivery zone

(for example from the Culcairn Trade Point to the Culcairn South delivery point). In the initial specification, this auction service would have included the purchase of capacity on forward haul segments to and from DZ-04.

20 Illabo to Tumut Pipeline

20.1 Key facility information

Table 20.1: Key facility information

Key information	Detail
Facility name	Illabo to Tumut Pipeline (ITP)
Facility operator/owner	AGN
Location	New South Wales
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul only
Subject to CTP?	Yes
Subject to DAA?	Yes

20.2 Service points

Name	Type	Zone Name	Description
Illabo meter station	Receipt	ITP-RZ-01	Illabo
Tumut	Delivery	ITP-DZ-01	Gate station
Gundagai	Delivery	ITP-DZ-01	Gate station

20.3 Proposed zones

Name	Type	Description
ITP-RZ-01	Receipt	Illabo
ITP-DZ-01	Delivery	Tumut

20.4 Pipeline proposed segments

Name	Type	From Location	To Location
ITP-FS-01	Forward haul	RZ-01	DZ-01

21 VicHub Pipeline

21.1 Key facility information

Table 21.1: Key facility information

Key information	Detail
Facility name	VicHub
Facility operator/owner	Jemena
Location	Victoria
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward haul, Backhaul (DAA only)
Subject to CTP?	Yes
Subject to DAA?	Yes

21.2 Service points

Name	Type	Zone Name	Description
Eastern Gas Pipeline	Receipt	VicHub-RZ-01	Connection point from EGP to VicHub
Eastern Gas Pipeline	Backhaul delivery		Gas can be backhauled from the DTS to this point
Declared Transmission System	Delivery	VicHub-DZ-01	Connection point from VicHub to the DTS. This is a DWGM interface point
Declared Transmission System	Backhaul receipt		Backhaul point at the DTS

DWGM interface points

The DTS service point is a DWGM interface point. To acquire capacity at the DTS service point, a participant must be accredited at the VicHub MIRN in the DWGM. Any transfers of capacity at VicHub (DTS service point) will result in a participant's MHQ bid accreditation constraint being automatically adjusted. See the Guide to Transportation Service Point Register for more information on DWGM integration.

Backhaul Service Points

The proposed backhaul service points include:

- the DTS service point (backhaul receipt point); and
- the EGP service point (backhaul delivery point).

These service points will allow gas procured from the DWGM to be backhauled to the EGP via the VicHub.

21.3 Proposed zones

Name	Type	Description
VicHub-RZ-01	Receipt	EGP Zone
VicHub-DZ-01	Delivery	DWGM interface Zone

21.4 Proposed pipeline segments

Name	Type	From Location	To Location
VicHub-FS-01	Forward haul	VicHub-RZ-01	VicHub-DZ-01
VicHub-BS-01	Backhaul	Declared Transmission System Delivery Point	Eastern Gas Pipeline Receipt Point

Backhaul Segment

Consistent with the proposed backhaul service points, the backhaul pipeline segment will extend from the DTS service point to the EGP service point via BS-01.

22 Tasmanian Gas Pipeline

22.1 Key facility information

Table 22.1: Key facility information

Key information	Detail
Facility name	Tasmanian Gas Pipeline (TGP)
Facility operator/owner	Palisade Asset Management Pty Ltd
Location	Victoria – Tasmania
Single or bi-directional pipeline	Single
Services that will be available through the CTP and DAA	Forward Haul, Park (CTP only), Backhaul (DAA)
Subject to CTP?	Yes
Subject to DAA?	Yes
Other notes	To deliver gas onto this pipeline a shipper must also have access to the TGP transfer service, which is provided by the EGP.

22.2 Service points

Name	Type	Zone Name	Description
Longford Victoria	Receipt	TGP-RZ-01	Receipt point connected to the EGP
Longford Victoria	Backhaul delivery point	NA	
TGP Notional Park Point (Receipt)	Receipt	TGP-RZ-02	Notional receipt point used for purchasing auction service to receipt gas parked on TGP for delivery.
TGP Notional Park Point	Backhaul delivery point	NA	
TGP Notional Park Point (Delivery)	Delivery	TGP-DZ-01	Notional delivery point used for purchasing auction service to park gas on TGP.
TGP Notional Park Point	Backhaul receipt point		
TasHUB	Delivery	TGP-DZ-02	Used to deliver parked gas from TGP into Victoria. Also known as Longford TGP-Transfer Station.
TasHUB	Backhaul receipt point	NA	
Port Latta	Delivery	TGP-DZ-05	
Spreyton/Devonport	Delivery	TGP-DZ-04	Gate station
Ulverstone	Delivery	TGP-DZ-04	Gate station
Burnie	Delivery	TGP-DZ-04	Gate station
Wynyard	Delivery	TGP-DZ-04	Gate station

Name	Type	Zone Name	Description
Westbury	Delivery	TGP-DZ-04	
Westbury 2	Delivery	TGP-DZ-04	
Carrick/Hadspen	Delivery	TGP-DZ-04	Gate station
Longford Tasmania	Delivery	TGP-DZ-04	Gate station
Bell Bay GGT	Delivery	TGP-DZ-03	Power station
Bell Bay OCGT	Delivery	TGP-DZ-03	Power station
Bell Bay CCGT	Delivery	TGP-DZ-03	Power station
Ecka	Delivery	TGP-DZ-03	Gate station
Comalco	Delivery	TGP-DZ-03	
Bridgewater	Delivery	TGP-DZ-06	Gate station

Park Service Points

The proposed park service point on the TGP is located near the TasHub. A shipper that wants to use the park service will need to be able to transport to and from the TGP Notional Park Point.

TGP Transfer Service

The only physical receipt point on the TGP is the Longford Victoria service point, which is the connection point with the EGP. To deliver gas onto the TGP at the Longford Victoria receipt point, a shipper requires a TGP transfer service with Jemena on the EGP (this is a service from the Longford receipt point on the EGP to the TGP delivery point – see Chapter 18 for more detail).

Initially, AEMO and GMRG proposed that a bundled product (including both the TGP transfer service on the EGP and forward haul transportation on the TGP) would be traded. During the consultation it was suggested that the capacity product on the TGP should trade on an unbundled basis. Before making a change to the capacity product specification, AEMO seeks feedback from stakeholders regarding the trading of the TGP capacity product on an unbundled basis.

For the DAA, the TGP transfer service and the TGP transportation service will trade on an unbundled basis.

22.3 Proposed zones

Name	Type	Description
TGP-RZ-01	Receipt	Longford Victoria
TGP-RZ-02	Receipt	TGP Notional Park Point (Receipt)
TGP-DZ-01	Delivery	TGP Notional Park Point (Delivery)
TGP-DZ-02	Delivery	TasHUB

Name	Type	Description
TGP-DZ-03	Delivery	Bell Bay
TGP-DZ-04	Delivery	Mid-section
TGP-DZ-05	Delivery	Port Latta
TGP-DZ-06	Delivery	Bridgewater

As the table above indicates, AEMO and the GMRG are proposing to include all points south of the lateral towards Bell Bay, other than those at the extremities of the pipeline, in one zone to increase liquidity.

In relation to the Port Latta and Bridgewater service points, which are located at the extremities of the TGP, AEMO and the GMRG are proposing to allocate these points to separate zones due to the physical distance between these points and other delivery points, which affects the ability to transfer capacity between points.

Park Zones

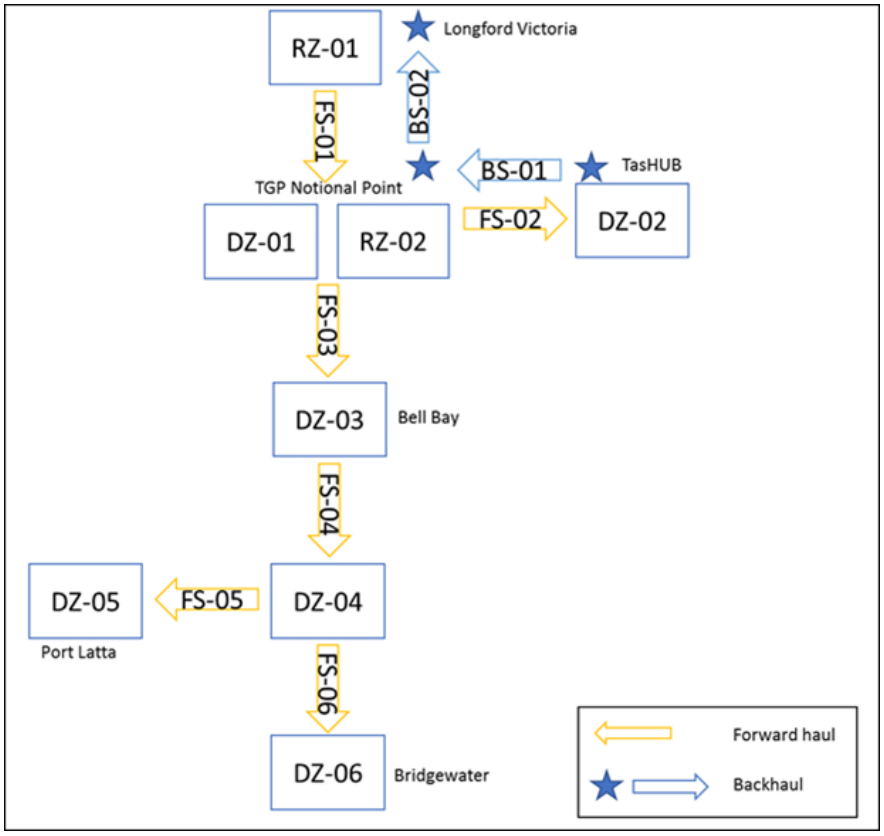
AEMO and the GMRG are proposing to include the TGP Notional Park Point as a single point zone for both receipt and delivery, with pipeline segments directly to and from these zones (FS-01 and FS-02).

22.4 Proposed pipeline segments

Name	Type	From Location	To Location
TGP-FS-01	Forward haul	RZ-01	DZ-01, RZ-02
TGP-FS-02	Forward haul	RZ-02	DZ-02
TGP-FS-03	Forward haul	DZ-01, RZ-02	DZ-03
TGP-FS-04	Forward haul	DZ-03	DZ-04
TGP-FS-05	Forward haul	DZ-04	DZ-05
TGP-FS-06	Forward haul	DZ-04	DZ-06
TGP-BS-01	Backhaul	TasHUB	TGP Notional Point
TGP-BS-02	Backhaul	TGP Notional Point	Longford Victoria

Forward haul segment FS-03 represents the capacity to transport gas to Tasmania.

Figure 16: TGP proposed zones and pipeline segments



22.5 Changes from the initial specification

Change to zone configuration

On advice from Palisade, the Bell Bay delivery zone (now DZ-03) is now situated between the TGP notional point and the mid-line zone (now DZ-04) rather than from the mid-line zone. Changes have been made to the numerical zone names to reflect this.

Backhaul service

Backhaul segments are proposed between TasHUB to TGP Notional Point, and from TGP Notional Point to Longford Victoria. If a shipper purchased a backhaul service from TasHUB the shipper would need to be scheduled for a withdrawal from the DWGM (reducing total forward haul delivery through TasHUB).

For the backhaul service to be effective, arrangements would need to be in place on the EGP for the gas to be allocated to the shipper on the EGP.

AEMO seeks feedback from stakeholders on potential benefits or technical concerns associated with the inclusion of the proposed backhaul services on the TGP.

Part B: Compression Facilities

23 Wallumbilla Compression Facility A

23.1 Key facility information

Table 23.1: Key facility information

Key information	Detail
Facility name	Wallumbilla Compression Facility A (WCFA)
Facility operator/owner	APA Group
Location	Queensland
Services that will be available through the CTP and DAA	Compression services
What the compression services are used for	Compression services on WCFA are used to transport gas from Wallumbilla on SWQP, BWP, QGP, RCWP or RBP. Gas may be receipted from SWQP, BWP, DDP, QGP, SGP, RBP or RCWP.
Subject to CTP?	Yes
Subject to DAA?	Yes
Other notes	APA Group proposes that the gas specification for this facility is the Australian standard gas specification.

23.2 Service points

Name	Type	Zone Name	Description
Wallumbilla LP Trade Point	Compression Receipt	WCFA-CRZ-01	Notional point
Wallumbilla HP Trade Point	Compression Delivery	WCFA-CDZ-01	Notional point

Notional Points

APA Group has proposed the use of the following notional points for the WCFA compression service points:

- The **Wallumbilla LP Trade Point,** which will be the compression receipt point for compression services traded through the CTP and DAA.
- The **Wallumbilla HP Trade Point,** which will be the compression delivery point for compression services traded through the CTP and DAA.

For the purpose of determining the auction quantity limits for the compression receipt point, the Wallumbilla LP Trade Point will reflect the CBU capacity for the physical receipt points specified in the table below.

Wallumbilla LP Trade Point physical points

Name	Type	Facility	Description
BWP	Receipt	SWQP	
Darling Downs Pipeline	Receipt	SWQP	
QGP Entry	Receipt	SWQP	
RBP Entry	Receipt	SWQP	
Spring Gully	Receipt	SWQP	
RCWP	Receipt	SWQP	

For the purpose of determining the auction quantity limits for the compression delivery point, the Wallumbilla HP Trade Point will reflect the CBU capacity for the physical delivery points specified in the table below.

Wallumbilla HP Trade Point physical points

Name	Type	Facility	Description
BWP Exit	Delivery	SWQP	
QGP Exit	Delivery	SWQP	
RBP Exit	Delivery	SWQP	
RCWP	Delivery	SWQP	
CRWP WCS2	Delivery	SWQP	

23.3 Proposed zones

Name	Type	Description
WCFA-CRZ-01	Compression Receipt	
WCFA-CDZ-01	Compression Delivery	

CTP

APA advised AEMO that shippers that hold firm compression rights linked to the Australian standard gas specification will have the ability to trade those rights using the WCFA compressions product (i.e. shippers rights will not be split across WCFA and WCFB).

DAA

APA has also advised AEMO that when determining auction quantity limits for WCFA it will consider contracted capacity and nominations against contracts linked to Australian standard gas specification.

24 Wallumbilla Compression Facility B

24.1 Key facility information

Table 24.1: Key facility information

Key information	Detail
Facility name	Wallumbilla Compression Facility B (WCFB)
Facility operator/owner	APA Group
Location	Queensland
Services that will be available through the CTP and DAA	Compression services
What the compression services are used for	Compression services on WCFB are used to transport gas away from Wallumbilla on CRWP or on SWQP, BWP, QGP, RCWP, RBP (via the Wallumbilla HP Trade Point).
Subject to CTP?	Yes
Subject to DAA?	Yes
Other notes	APA Group proposes that the gas specification for this facility will be based on a restricted gas specification, which will be specified in its standard OTSA for this facility. To use this compression facility, users will therefore have to comply with this gas specification.

24.2 Service points

Name	Type	Zone Name	Description
GLNG Delivery Stream	Receipt	WCFB-CRZ-01	
Wallumbilla LP Trade Point	Receipt	WCFB-CRZ-01	
CRWP WCS3	Delivery	WCFB-CDZ-01	
Wallumbilla HP Trade Point	Delivery	WCFB-CDZ-01	

24.3 Proposed zones

Name	Type	Description
WCFB-CRZ-01	Compression Receipt	
WCFB-CDZ-01	Compression Delivery	

CTP

APA advised AEMO that shippers that hold firm compression service rights with a restricted gas specification will have the ability to trade those rights using the WCFB compression product.

Auction Quantity Limits

When determining auction quantity limits for WCFB, APA will consider contracted capacity and nominations against contracts with a restricted gas specification.

Auction Participation

To purchase an auction service on WCFB a shipper will be required to have a GTA or OTSA for WCF B. APA has proposed that contracts will contain:

- A restricted gas specification as a facility specific term.
- A service that shippers may use to meet the restricted gas specification.
- A service that shippers may use to transfer gas from WCFB to another facility (like SWQP) via the Wallumbilla HP Trade Point.

24.4 Changes from the Initial Specification

Compression Service Points

The Wallumbilla LP Trade Point (receipt) and the Wallumbilla HP Trade Point (delivery) have been added to the specification of WCFB. The additional compression service points have been included to facilitate the use of WCFB to transport gas from Wallumbilla on the SWQP, BWP, QGP, RCWP or RBP.

25 Moomba Compression

25.1 Key facility information

Table 25.1: Key facility information

Key information	Detail
Facility name	Moomba Compression Facility (MCF)
Facility operator/owner	APA Group
Location	South Australia
Services that will be available through the CTP and DAA	Compression services
What the compression services are used for	Eastern haul services from Moomba onto the SWQP.
Subject to CTP?	Yes
Subject to DAA?	Yes

25.2 Service points

Name	Type	Zone Name	Description
Moomba Trade Point	Compression Receipt	MCF-CRZ-01	
Moomba HP Trade Point	Compression Delivery	MCF-CDZ-01	Connects to SWQP

Notional Receipt Point

APA Group has proposed the use of the Moomba Trade Point as the compression receipt point for compression services traded through the CTP and DAA. For the purpose of determining the auction quantity limits for this compression receipt point, the Moomba Trade Point will reflect the CBU capacity for the locations specified in the table below.

Moomba Trade Point physical points

Name	Type	Facility	Description
MSP entry	Delivery	SWQP	
MCF Moomba	Delivery	SWQP	

25.3 Proposed zones

Name	Type	Description
MCF-CRZ-01	Compression Receipt	
MCF-CDZ-01	Compression Delivery	

26 Ballera Compression

26.1 Key facility information

Table 26.1: Key facility information

Key information	Detail
Facility name	Ballera Compression Facility
Facility operator/owner	Santos Ltd
Location	Queensland
Services that will be available through the CTP and DAA	Compression services
What the compression services are used for	Used to compress gas delivered from the SWQP for northern haul transportation on the CGP
Subject to CTP?	Yes
Subject to DAA?	Yes

The Ballera Compression facility is owned and operated by Santos and is used to compress gas delivered from the SWQP onto the CGP. AEMO and the GMRG understand that APA has contracted compression capacity on this facility and on-sells it to shippers with whom it has contracts for transportation on the CGP. Under this arrangement APA nominates to Santos on behalf of these shippers. The proposed arrangements for products associated with the Ballera compression facility are outlined below in Table 26.2.

Table 26.2: Arrangements for the Ballera compression facility

Market	Product	Facility Operator	Description
CTP	Stand-alone compression	Santos	Seller: Has a direct contract for compression with Santos which it wishes to sell. Buyer: May already have a stand-alone CGP transportation service with APA, or may combine with the purchase of a stand-alone CGP transportation service. Must have arrangement in place with Santos.
CTP	Stand-alone CGP transportation	APA	As per CGP section.
CTP	Bundled compression and CGP transportation	APA	Seller: Has a contract with APA for a bundled service of Ballera compression and CGP transportation. Buyer: Wishes to purchase both Ballera compression and CGP transportation, and their OTSA with APA facilitates this purchase.
DAA	Compression service	Santos	Santos will be responsible for providing the auction service as the facility operator of the compressor, and will receive proceeds from the auction. CBU capacity on the compression facility calculated by Santos, including all nominations from shippers with direct contracts and nominations from APA. To use the auctioned compression service, a shipper would need to have an OTSA in place with Santos.

26.2 Service points

Name	Type	Zone Name	Description
Ballera inlet point	Compression Receipt	BCF-CRZ-01	Point of interconnection of the SWQP and the inlet to the Ballera Compression Facilities
Ballera outlet point	Compression Delivery	BCF-CDZ-01	Outlet from the Ballera Compression Facilities into the CGP

26.3 Proposed zones

Name	Type	Description
BCF-CRZ-01	Compression Receipt	Includes Ballera inlet point
BCF-CDZ-01	Compression Delivery	Includes Ballera outlet point

27 Iona Compression

27.1 Key facility information

Table 27.1: Key facility information

Key information	Detail
Facility name	Iona Compression Facility (ICF)
Facility operator/owner	Lochard Energy
Location	Victoria
What the compression services are used for	Used to compress gas delivered from the SWP or Iona storage into the PCA and vice versa
Services that will be available through the CTP and DAA	Compression
Subject to CTP?	Yes
Subject to DAA?	Yes

The Iona Underground Storage facility provides bundled storage and compression services to its shippers. An unbundled compression service will be available for trading through the CTP and DAA. The compression service will allow gas to be transferred between facilities connecting to the Iona Underground Storage Facility.

27.2 Service points

Name	Type	Zone Name	Description
Mortlake Withdrawal	Compression Receipt	ICF-CRZ-01	
Otway Withdrawal	Compression Receipt	ICF-CRZ-01	
SEA Gas Withdrawal	Compression Receipt	ICF-CRZ-01	
SWP Withdrawal	Compression Receipt	ICF-CRZ-01	
Mortlake Injection - D	Compression Delivery	ICF-CDZ-01	
Otway Injection - D	Compression Delivery	ICF-CDZ-01	
SEA Gas Injection	Compression Delivery	ICF-CDZ-01	
SWP Injection	Compression Delivery	ICF-CDZ-01	

27.3 Proposed zones

Name	Type	Description
ICF-CRZ-01	Compression Receipt	
ICF-CDZ-01	Compression Delivery	