

**SOUTH EAST AUSTRALIA GAS PTY LTD**

**ABN 73 096 437 900**

as agent for and on behalf of the SEA Gas Partnership (ABN 81 366 072 976), a partnership of:

APT SPV2 Pty Ltd (ACN 095 483 453)

APT SPV3 Pty Ltd (ACN 095 483 462)

ANP SEA Gas SPV2 Pty Ltd (ACN 099 332 368)

ANP SEA Gas SPV3 Pty Ltd (ACN 099 332 395)

REST SEA Gas SPV1 Pty Ltd (ACN 095 483 444)

REST SEA Gas SPV2 Pty Ltd (ACN 099 332 331)

**PORT CAMPBELL TO ADELAIDE PIPELINE**

**FACILITY SPECIFIC TERMS**

## Contents

<b>1</b>	<b>Definitions and interpretation</b>	<b>1</b>
1.1	Definitions	1
1.2	Interpretation	3
<b>2</b>	<b>Scheduling</b>	<b>4</b>
2.1	Notification of Scheduled Quantities	4
<b>3</b>	<b>Priority Principles</b>	<b>5</b>
3.1	Capacity Shortfall due to act or omission of a Transportation Facility User	5
3.2	Other Capacity Shortfalls – Shortfalls identified prior to commencement of a Day	5
3.3	Other Capacity Shortfalls – Shortfalls identified on a Day	6
3.4	Auction Services and Lower Tier Services – Nomination and Scheduling	6
3.5	Impact of Renominations	7
3.6	Operational Constraints	7
3.7	Hourly Curtailment	7
3.8	Interaction of this clause with Code and National Gas Rules	8
<b>4</b>	<b>System Use Gas</b>	<b>8</b>
4.1	Types of System Use Gas	8
4.2	General System Use Gas	9
4.3	Compressor Fuel Gas Requirement	9
4.4	Excess Take Compressor Fuel Gas	11
4.5	Heater Fuel Gas	11
<b>5</b>	<b>Hourly Limits Across Facility</b>	<b>11</b>
5.1	Non-Application to Backhaul Quantities	11
5.2	Receipt Points - Hourly Limitation	12
5.3	Delivery Points - Hourly Limitation	12
5.4	Minimum Flow Rates	12
5.5	Twelve Hourly Limitation	12
5.6	Adjusted Forward Haul MDQ	13
<b>6</b>	<b>Hourly Limits At Delivery Points and Receipt Points</b>	<b>13</b>
6.1	Definitions	13
6.2	Receipt Point Restrictions	14
6.3	Delivery Point Restrictions	15
6.4	Lateral Restrictions	16
6.5	Notification	16
6.6	Trading of Reserved Hourly Entitlement	18
<b>7</b>	<b>Unauthorised Overrun Charge</b>	<b>19</b>
7.1	Liability for Overrun Charge	19
7.2	Quantum of Overrun Charge	19
7.3	Hourly Unauthorised Overrun Quantity	20
7.4	Daily Unauthorised Overrun Quantity	20
7.5	12 Hourly Unauthorised Overrun Quantity	20
<b>8</b>	<b>Pressure and Temperature</b>	<b>20</b>
<b>9</b>	<b>Charges</b>	<b>20</b>
9.1	Charges set out in Schedule	20
9.2	Escalation	21
9.3	Nomination Variation Charge for Forward Haul	22

9.4	Nomination Variation Charge for Backhaul Auction Service	22
9.5	Nomination Request Charge	22
9.6	Interaction with Flow Procedures	23
<hr/>		
<b>10</b>	<b>Imbalance</b>	<b>23</b>
<b>11</b>	<b>Odourisation</b>	<b>23</b>
<b>12</b>	<b>Metering</b>	<b>23</b>
12.1	Measurement and Testing	23
12.2	Pipeline Compressor and Gas Heater Metering	23
12.3	Access Rights	24
12.4	Records and Charts	24
12.5	Measurement and Testing Procedures	24
12.6	Shared Points	24
12.7	Langley Receipt Point	24
12.8	Third Party as Responsible Party	25
12.9	Interaction with clause 15.2 Operational Transportation Service Code	25
<hr/>		
<b>13</b>	<b>Electronic Communications System</b>	<b>25</b>
<b>14</b>	<b>Trading of Entitlements</b>	<b>26</b>
14.1	Nature of Imbalance and Hourly Entitlements	26
14.2	Trading Procedure	26
14.3	Other Trades	27
14.4	Charges	27
<hr/>		
<b>15</b>	<b>Specific Facility Issues</b>	<b>27</b>
15.1	Application	27
15.2	MDQ Adjustment	27
15.3	Compressor MDQ and Free Flow MDQ	28
15.4	Flow Procedures	28
15.5	Pressure Differential	28
<hr/>		
<b>Schedule 1 – Receipt Points and Delivery Points</b>		<b>30</b>
<b>Schedule 2 – Charges</b>		<b>35</b>
<b>Annexure 1 – Gas Measurement</b>		<b>37</b>
<hr/>		

## Recitals

- A** This document sets out Version 1 of the Facility Specific Terms for the Port Campbell to Adelaide Gas Pipeline (as defined in clause 1.1).
- B** This document is published on 22 January 2019 and will commence operation on 22 January 2019 and will apply until revised Facility Specific Terms are issued by Service Provider.
- 

## 1 Definitions and interpretation

### 1.1 Definitions

In this document, unless a contrary intention appears:

**Adjusted Forward Haul MDQ** is defined in clause 16.2(e).

**Cavan Delivery Point** means the Delivery Point, in the vicinity of Magazine Road, Cavan, at which the Facility connects to the Reticulation System and includes both the Cavan 1 Delivery Point and Cavan 2 Delivery Point.

**Cavan 1 Delivery Point** means the two northern metering runs at the Cavan Delivery Point.

**Cavan 2 Delivery Point** means the two southern metering runs at the Cavan Delivery Point.

**Compressor Capacity** means that part of the Capacity of the Facility attributable to the operation of the Pipeline Compressors (and, to avoid doubt, excludes the Free Flow Capacity).

**Compressor Fuel Gas** means the Gas required to operate the Pipeline Compressors.

**Compressor MDQ** means:

- (a) for Shipper, that part of Shipper's Forward Haul MDQ for the relevant Day determined to be Compressor MDQ in accordance with the principles in clause 16.3; and
- (b) for another Transportation Facility User, that part of that other Transportation Facility User's MDQ attributable to the operation of the Pipeline Compressors (as determined in accordance with that other Transportation Facility User's Facility Agreement).

**Defaulting User** is defined in clause 4.1.

**Delivery Point MHQ** is defined in clause 6.3.

**Electronic Communications System** is defined in clause 14.

**Facility MDQ** means:

- (a) where used in relation to services provided under an OTSA, the Forward Haul MDQ under that OTSA; and
- (b) where used in relation to services provided under a Facility Agreement which is not an OTSA, the Capacity determined under that Facility Agreement as representing the "MDQ" of the Transportation Facility User who is party to that Facility Agreement.

**Firm Service** means a service provided on a Firm basis.

**Flow Procedures** is defined in clause 16.4(a).

**Forward Haul MDQ** means the sum of Shipper's Traded Forward Haul Service MDQ and Forward Haul Auction MDQ for transportation of Gas between Receipt Points and Delivery Points.

**Foundation Shipper** means the Transportation Facility User from time to time under the restated Transportation Agreement between Origin Energy Retail Limited ABN 22 078 868 425 and Service Provider which restatement was executed on or about April 2003.

**Foundation Shipper Agreement** means the agreement referred to in the definition of Foundation Shipper.

**Free Flow Capacity** means, for a period of time, the Capacity of the Facility to receive and deliver Gas during that period of time without operation of the Pipeline Compressors.

**Free Flow MDQ** means:

- (a) for Shipper, Shipper's Forward Haul MDQ for the relevant Day less Shipper's Compressor MDQ for the relevant Day; and
- (b) for another Transportation Facility User, that part of that other Transportation Facility User's MDQ determined to be Free Flow MDQ in accordance with that other Transportation Facility User's Facility Agreement.

**Gas Heater** means gas fired heating equipment installed at a Delivery Point for the purposes of increasing the temperature of Gas delivered at that Delivery Point.

**Gross Heating Value** means the number of gigajoules produced by the complete combustion of one cubic metre of Gas with air, at a temperature of 15° Celsius and at an absolute pressure of 101.325 kilopascals, with the Gas free of all water vapour, the products of combustion cooled to a temperature of 15° Celsius and the water vapour formed by combustion condensed to the liquid state.

**Heater Fuel Gas** means the Gas required to operate the Gas Heaters.

**Iona Gas Plant** means the underground Gas storage facility operated (as at the date of publication of these Facility Specific Terms) by Lochard Energy (Iona Operations) Pty Ltd ABN 67 608 441 729 located at Iona, Victoria and known as the Iona Gas Plant (and formerly known as the Western Underground Storage Facility).

**Langley Receipt Point** means the point at which the Facility connects to the PCI Pipeline System.

**MAPS** means the Moomba to Adelaide Pipeline System operated as at the date of publication of these Facility Specific Terms by Epic Energy South Australia Pty Ltd ABN 54 068 599 815.

**M12HQ** is defined in clause 6.5.

**Minerva Processing Plant** means the Gas processing plant at Minerva, Victoria operated (as at the date of publication of these Facility Specific Terms) by, or on behalf of, BHP Billiton Petroleum (Victoria) Pty Ltd ABN 12 006 466 486 which plant is located approximately 5 kilometres northwest of Port Campbell.

**Minerva Receipt Point** means the point at which the Facility connects to the Minerva Processing Plant.

**Operational Transportation Service Code** means the code of that name published under the National Gas Law.

**OTSA** has the meaning given to that term in the National Gas Rules.

**PCI Pipeline System** means the high pressure steel pipeline system for the transportation of Gas in either direction between the Facility and the South West Pipeline and all related facilities including laterals owned and operated by Service Provider together with all structures for protecting or supporting that pipeline system and associated facilities for the compression of Gas, the maintenance of that pipeline and the receipt and delivery of Gas, and all fittings, appurtenances, appliances, compressor stations, scraper stations, mainline valves, telemetry systems (including communications towers), works and buildings used in connection with that pipeline system and, except where the context otherwise requires, includes any extension or enlargement of that system.

**Pipeline Compressors** means those compressor stations installed on the Facility from time to time.

**Port Campbell to Adelaide Gas Pipeline** (being the Facility to which these Facility Specific Terms relates) means the high pressure steel pipeline system for the transportation of Gas from Port Campbell to Adelaide and all related facilities including laterals owned and operated by Service Provider (including the WUGS Lateral) together with all structures for protecting or supporting the pipeline system and associated facilities for the compression of Gas, the maintenance of the pipeline and the receipt and delivery of Gas, and all fittings, appurtenances, appliances, compressor stations, scraper stations, mainline valves, telemetry systems (including communications towers), works and buildings used in connection with the pipeline system and, except where the context otherwise requires, includes any extension or enlargement of the system and which pipeline system is subject to licences PL239 (in Victoria) and PL13 (in South Australia).

**Receipt Point MHQ** is defined in clause 6.2.

**Reticulation System** means the South Australian Gas reticulation system operated, as at the date of publication of these Facility Specific Terms, by Australian Gas Networks (SA) Limited ABN 45 008 139 204.

**Shipper's OTSA** means the operational transportation service agreement (as that term is defined in the National Gas Law) between Service Provider and Shipper (of which these Facility Specific Terms form part).

**South West Pipeline System** means that part of the Victorian transmission system known as the "South West Pipeline".

**Standard Temperature and Pressure** means a temperature of 15 degrees Celsius and an absolute pressure of 101.325 kilopascals.

**Total Auction Backhaul Scheduled Delivery Quantity** is defined in clause 3.2(e).

**Total Auction Backhaul Scheduled Receipt Quantity** is defined in clause 3.2(e).

**Total Forward Haul Scheduled Delivery Quantity** is defined in clause 3.2(d).

**Total Forward Haul Scheduled Receipt Quantity** is defined in clause 3.2(c).

**WUGS Lateral** means the approximately 9 kilometre, 450 millimetre (nominal) diameter lateral connecting to the Iona Gas Plant.

Other terms are defined in the clause in this document in which they are used.

## **1.2 Interpretation**

Words in these Facility Specific Terms which are capitalised but not defined have the meaning given to them in the Operational Transportation Service Code.

---

## 2 Scheduling

### 2.1 Notification of Scheduled Quantities

- (a) The Scheduled Quantities notified by Service Provider to Shipper for the Traded Forward Haul Service will include:
- (i) the quantity of Gas to be supplied by Shipper to each Receipt Point (for each such Receipt Point, **Traded Forward Haul Scheduled Receipt Quantity** and in aggregate for all Receipt Points **Total Traded Forward Haul Scheduled Receipt Quantity**);
  - (ii) the quantity of Gas to be delivered to Shipper at each Delivery Point (for each such Delivery Point, **Traded Forward Haul Scheduled Delivery Quantity** and in aggregate for all Delivery Points **Total Traded Forward Haul Scheduled Delivery Quantity**).
- (b) The Scheduled Quantities notified by Service Provider to Shipper for the Forward Haul Auction Service will include:
- (i) the quantity of Gas to be supplied by Shipper to each Receipt Point (for each such Receipt Point, **Auction Forward Haul Scheduled Receipt Quantity** and in aggregate for all Receipt Points **Total Auction Forward Haul Scheduled Receipt Quantity**);
  - (ii) the quantity of Gas to be delivered to Shipper at each Delivery Point (for each such Delivery Point, **Auction Forward Haul Scheduled Delivery Quantity** and in aggregate for all Delivery Points **Total Auction Forward Haul Scheduled Delivery Quantity**).
- (c) The sum of the Total Traded Forward Haul Scheduled Receipt Quantity and the Total Auction Forward Haul Scheduled Receipt Quantity is referred to in this document as the **Total Forward Haul Scheduled Receipt Quantity**.
- (d) The sum of the Total Traded Forward Haul Scheduled Delivery Quantity and the Total Auction Forward Haul Scheduled Delivery Quantity is referred to in this document as the **Total Forward Haul Scheduled Delivery Quantity**.
- (e) The Scheduled Quantities notified by Service Provider to Shipper for the Backhaul Auction Service will include:
- (i) the quantity of Gas to be supplied by Shipper to each Backhaul Receipt Point (for each such Receipt Point, **Auction Backhaul Scheduled Receipt Quantity** and in aggregate for all Receipt Points **Total Auction Backhaul Scheduled Receipt Quantity**);
  - (ii) the quantity of Gas to be delivered to Shipper at each Delivery Point (for each such Delivery Point, **Auction Backhaul Scheduled Delivery Quantity** and in aggregate for all Delivery Points **Total Auction Backhaul Scheduled Delivery Quantity**).

---

### **3 Priority Principles**

#### **3.1 Capacity Shortfall due to act or omission of a Transportation Facility User**

(a) To the extent that there is insufficient Capacity in the Facility on a Day to meet the requirements of all Transportation Facility Users on that Day due to a Transportation Facility User (**Defaulting User**):

- (i) breaching its contractual obligations to Service Provider;
- (ii) taking delivery, without the consent of Service Provider, of a quantity of Gas on a Day or in an hour in excess of that quantity allowable under that Transportation Facility User's Facility Agreement;
- (iii) exceeding the "Imbalance Allowance" under its Facility Agreement (as "Imbalance Allowance" is defined in that Facility Agreement); or
- (iv) performing an action negligently or making a negligent omission,

then, subject to clause 4.1(b), Service Provider must interrupt or curtail deliveries of Gas to, or the supply of Gas from (or reduce the quantities of Gas scheduled for), the Defaulting User to the extent necessary to remedy the effects of the acts or omissions referred to in clauses 4.1(a)(i) to 4.1(a)(iv) on the Capacity of the Facility prior to interrupting or curtailing deliveries of Gas to or receipts of Gas from any other Transportation Facility User (including, to avoid doubt, under clause 4.7).

(b) Shipper acknowledges that it will not always be possible for Service Provider to determine if and the extent to which a shortfall in the Capacity of the Facility is caused by the act or omission of a Defaulting User and consequently:

- (i) Service Provider will have no liability for failure to interrupt or curtail deliveries of Gas to or receipts of Gas from a Defaulting User to the extent required by clause 4.1(a); and
- (ii) where Service Provider reasonably considers that Shipper is a Defaulting User, Service Provider will have no liability for interrupting or curtailing Shipper pursuant to clause 4.1(a),

provided that Service Provider acts in good faith as a Reasonable and Prudent operator and on the basis of the best information available to Service Provider.

#### **3.2 Other Capacity Shortfalls – Shortfalls identified prior to commencement of a Day**

Where Service Provider, acting Reasonably and Prudently, forms the view that, after having curtailed all Defaulting Users (if any), there will be insufficient Capacity in the Facility on a Day (for any reason) to provide the services nominated by or scheduled for all Transportation Facility Users on that Day and that shortfall in Capacity is identified by Service Provider prior to the commencement of the relevant Day, then the available Capacity for that Day must be allocated by Service Provider as follows:

(a) the quantities of Gas nominated by, or scheduled for, Transportation Facility Users for Firm Services will have priority over the provision of any other services in the Facility and Auction Services and Lower Tier Services will be curtailed on a Day as required to enable the provision of Firm Services on that Day;



- (b) if the available Capacity of the Facility is insufficient to meet all Transportation Facility Users' nominated or scheduled quantities for transportation pursuant to Firm Services and the shortfall in Capacity affects all such Transportation Facility Users equally, the following provisions will apply:
  - (i) the available Compressor Capacity of the Facility will be allocated in priority between the Transportation Facility Users entitled to Firm Services pro-rata based on the Compressor MDQ of each such Transportation Facility User; and
  - (ii) the amount of Free Flow Capacity of the Facility available for the provision of transportation services pursuant to Firm Services will be allocated in priority between Transportation Facility Users entitled to Firm Services pro-rata based on the Free Flow MDQ of each such Transportation Facility User; and
- (c) if the available Capacity of the Facility is insufficient to meet all Transportation Facility Users' nominated or scheduled quantities for transportation pursuant to Firm Services but the shortfall only affects Service Provider's ability to provide such services to certain Transportation Facility Users (for each such Transportation Facility User, **Affected Firm User**), the following provisions will apply:
  - (i) the amount of Compressor Capacity available for the provision of transportation services to those Affected Firm Users will be allocated in priority between those Affected Firm Users pro-rata based on the Compressor MDQ of each Affected Firm User; and
  - (ii) the amount of Free Flow Capacity of the Facility available for the provision of transportation services to those Affected Firm Users will be allocated in priority between those Affected Firm Users pro-rata based on the Free Flow MDQ of each Affected Firm User.

### **3.3 Other Capacity Shortfalls – Shortfalls identified on a Day**

Where:

- (a) Service Provider, acting Reasonably and Prudently, forms the view that, after having curtailed all Defaulting Users (if any), there will be insufficient Capacity in the Facility on a Day (for any reason) to provide services in respect of the quantity of Gas nominated by or scheduled for all Transportation Facility Users on that Day; and
- (b) that shortfall in Capacity is not identified by Service Provider prior to the commencement of the relevant Day,

then the available Capacity for the remainder of that Day (that is, after the time of identification of the Capacity shortfall) must, to the extent reasonably practicable (including having regard to the quantities of Gas already transported for Transportation Facility Users on that Day pursuant to services other than Firm Services as determined by Service Provider as a Reasonable and Prudent operator), be allocated by Service Provider in accordance with the procedures set out in clause 4.2.

### **3.4 Auction Services and Lower Tier Services – Nomination and Scheduling**

Where Service Provider, acting Reasonably and Prudently, forms the view that, after having curtailed all Defaulting Users (if any), there will be insufficient Capacity in the Facility on a Day (for any reason) to provide the services nominated by or scheduled for all Transportation Facility Users on that Day, then the available Capacity for that Day (after the requirements of Firm Services have been met) must be allocated by Service Provider as follows:

- (a) in accordance with rule 651(1)(b) of the National Gas Rules, Auction Services have priority to available Capacity over Lower Tier Services;
- (b) where (once Lower Tier Services have been curtailed to the extent required by clause 4.4(a)) there is:
  - (i) insufficient Capacity to meet the quantities scheduled for all Forward Haul Auction Services then the Capacity available for Forward Haul Auction Services will be allocated between Transportation Facility Users entitled to receive Forward Haul Auction Services on the relevant Day pro-rata based on the Forward Haul Auction MDQ of each Transportation Facility User (using the Forward Haul Auction MDQ (that is for a Receipt Point, for a Delivery Point or between Receipt Points and Delivery Points) which Service Provider, as a Reasonable and Prudent operator, assesses as most appropriate given the available Auction Capacity;
  - (ii) insufficient Capacity to meet the quantities scheduled for all Backhaul Auction Services then the Capacity available for Backhaul Auction Services will be allocated between Transportation Facility Users entitled to receive Backhaul Auction Services on the relevant Day pro-rata based on the Backhaul Auction MDQ of each Transportation Facility User (using the Backhaul Auction MDQ (that is for a Backhaul Receipt Point, for a Backhaul Delivery Point or between Backhaul Receipt Points and Backhaul Delivery Points) which Service Provider, as a Reasonable and Prudent operator, assesses as most appropriate given the available Auction Capacity.

### **3.5 Impact of Renominations**

- (a) An Auction Service may be curtailed due to a renomination for Firm Services in the circumstances set out in rule 651(1)(c) of the National Gas Rules.
- (b) Lower Tier Services which are scheduled to use Auction Capacity must be curtailed in the circumstances set out in rule 651(1)(d) of the National Gas Rules due to a renomination for use of an Auction Service.

### **3.6 Operational Constraints**

The Service Provider is not required to comply with the principles in clauses 4.1 to 4.5 and clause 4.7 to the extent it is not operationally and technical feasible to do so on the relevant Day in accordance with accepted good industry practice taking into account the operational circumstances (including operational constraints) impacting the Facility on the Day.

### **3.7 Hourly Curtailment**

Where due to a shortfall in the Capacity of the Facility on a Day Service Provider (acting Reasonably and Prudently) forms the view that, in addition to the allocation of that Capacity in accordance with clauses 4.1 to 4.4, it is necessary, for the purpose of preserving the operational integrity of the Facility, to restrict the quantity of Gas which may be supplied by, or delivered to, Transportation Facility Users in one or more hours of that Day, then Service Provider may by notice to Shipper limit the maximum quantity of Gas which Shipper may supply to the Receipts Points or take delivery of at the Delivery Points in those hours, provided that (to the extent reasonably practicable having regard to the circumstances of the shortfall in Capacity):

- (a) receipts or deliveries of Gas pursuant to services other than Firm Services must be first interrupted or curtailed prior to any interruption or curtailment in the receipt or delivery of Gas pursuant to Firm Services; and
- (b) the extent of the reduction in the quantity of Gas which may be supplied to the Receipt Points or delivered to the Delivery Points in an hour must (to the extent reasonably practicable having regard to the circumstances of the shortfall in Capacity) be allocated between Transportation Facility Users entitled to Firm Services using the same procedures as are used under clauses 4.2 and 4.3 to allocate shortfalls in Capacity on a Daily basis; and
- (c) Capacity will be allocated between Auction Services and Lower Tier Services in accordance with clause 4.4.

**3.8 Interaction of this clause with Code and National Gas Rules**

- (a) To the extent of any inconsistency between the binding requirements of the National Gas Rules and this clause 4, the National Gas Rules prevail.
- (b) This clause 4 applies subject to the allocation procedures in clause 14.2 of Part 3 of the Operational Transportation Service Code.

**4 System Use Gas**

**4.1 Types of System Use Gas**

- (a) The Facility has three types of System Use Gas:
  - (i) **Heater Fuel Gas** being Gas required by Service Provider to operate Gas Heaters at Delivery Points;
  - (ii) **Compressor Fuel Gas** being Gas required by Service Provider to operate Pipeline Compressors;
  - (iii) **General System Use Gas** being Gas (other than Compressor Fuel Gas and Heater Fuel Gas) required by Service Provider to operate the Facility and provide services to Transportation Facility Users including:
    - (A) such quantity of Linepack Gas as Service Provider (acting as a Reasonable and Prudent operator) determines is required to keep the linepack of the Pipeline at a level consistent with the efficient and safe operation of the Pipeline and to meet Service Provider's contractual obligations to all Transportation Facility Users;
    - (B) Gas unaccounted for; and
    - (C) instrument Gas.
- (b) This clause 5 sets out how the quantities of each type of System Use Gas Shipper must supply on a Day are determined.
- (c) The quantity of System Use Gas Shipper is required to supply on a Day will be notified to Shipper at the same time as Shipper is first notified of its Scheduled Quantities for a Day and updated if there is any change to those Scheduled Quantities (including due to the scheduling of Auction Services for Shipper).

## 4.2 **General System Use Gas**

- (a) The quantity of General System Use Gas Shipper is required to supply to Service Provider on a Day (**Daily System Use Gas Requirement**) is the amount determined in accordance with the following formula:

$$\text{SDSQ/TDSQ} * (\text{SUG} - \text{FSSUG})$$

Where:

**SDSQ** is the total quantity of Gas scheduled for delivery to Shipper on the Day

**TDSQ** is the total quantity of Gas scheduled for delivery to all Transportation Facility Users on the Day (other than the Foundation Shipper)

**SUG** is Service Provider's determination (as a Reasonable and Prudent operator) of the total quantity of General System Use Gas required by Service Provider for the Day

**FSSUG** is the General System Use Gas required to be supplied by the Foundation Shipper on the Day.

- (b) Service Provider may, at Service Provider's absolute discretion, return General System Use Gas to Transportation Facility Users on a Day. Where Service Provider determines to return General System Use Gas then it will allocate the General System Use Gas it is to return across Transportation Facility Users in such manner as determined by Service Provider in its reasonable discretion, provided that Service Provider will not return to a Transportation Facility User a quantity of General System Use Gas above the quantity of Gas the Transportation Facility User nominates to take delivery of on the relevant Day.
- (c) References in this clause 5.2 to quantities of Gas scheduled to be delivered do not include quantities of Gas scheduled to be delivered pursuant to backhaul swap services (including the Backhaul Auction Service).
- (d) Where due to Shipper:
- (i) supplying to the Receipt Points on a Day a quantity of Gas in excess of the quantity scheduled by Service Provider to be supplied by Shipper on that Day; and/or
  - (ii) taking delivery at the Delivery Points on a Day of a quantity of Gas in excess of the quantity scheduled by Service Provider to be delivered to Shipper on that Day,

Service Provider uses a greater quantity of General System Use Gas than it would have used had Shipper not supplied or taken delivery of that excess Gas (**Additional System Use Gas**) then Service Provider may increase the Daily System Use Gas Requirement for the following Day (or a Day subsequent to that following Day) by such amount as necessary to provide to Service Provider any additional System Use Gas required to remedy the effects of Shipper exceeding its Scheduled Quantities.

## 4.3 **Compressor Fuel Gas Requirement**

- (a) On each Day Shipper must supply to Service Provider a quantity of Compressor Fuel Gas equal to the sum of the following quantities:

- (i) Service Provider's best estimate of what the Positive Imbalance Compressor Fuel Gas will be for that Day (as defined in clause 5.3(b));
  - (ii) Service Provider's best estimate of what the Delivery Compressor Fuel Gas will be for that Day (as defined in clause 5.3(c)); and
  - (iii) the Excess Take Compressor Fuel Gas for that Day (as defined in clause 5.3(d)),
- in aggregate **Shipper's Compressor Fuel Gas**.

(b) The Positive Imbalance Compressor Fuel Gas for a Day is:

- (i) where as at the beginning and end of a Day Shipper's Accumulated Imbalance is zero, negative or is positive but less than or equal to 8% of the Forward Haul MDQ for that Day, zero; and
- (ii) where as at the beginning and/or end of a Day Shipper's Accumulated Imbalance is positive and in excess of 8% of the Forward Haul MDQ for that Day, the amount determined (in GJ) in accordance with the following formula:

$$0.01 * [PI - (0.08 * \text{Forward MDQ})]$$

Where **PI** is the greater of the level of Shipper's positive Accumulated Imbalance at the beginning of the relevant Day (if any) and Shipper's positive Accumulated Imbalance at the end of the relevant Day (if any).

(c) The **Delivery Compressor Fuel Gas** for a Day is the quantity of Gas determined in accordance with the following formula:

$$\text{If } (CF - PCF - OSCF) < 0 \text{ then } (CF - PCF - OSCF) * SPCF/PCF$$

$$\text{If } (CF - PCF - OSCF) > 0 \text{ then } (CF - PCF - OSCF) * SR/TR$$

Where:

**CF** is the total quantity of Gas consumed by the Pipeline Compressors on the relevant Day;

**PCF** is the total quantity of Gas required to be supplied on account of Compressor Fuel Gas by Transportation Facility Users on account of the quantity of that Transportation Facility User's Gas currently in the Facility;

**SPCF** is the Shipper's share of PCF, being the total quantity of Compressor Fuel Gas required to be supplied by Shipper on account of the quantity of Shipper's Gas currently in the Facility;

**OSCF** is the total quantity of Gas required to be supplied on account of Compressor Fuel Gas by Transportation Facility Users on that Day because those Transportation Facility Users have supplied, or taken delivery of, Gas on a previous Day in excess of the quantity permitted by their Facility Agreements;

**SR** is the total quantity of Gas supplied by Shipper to the Receipt Points on the relevant Day;

**TR** is the total quantity of Gas supplied by all Transportation Facility Users to the Receipt Points on the relevant Day.

- (d) The **Excess Take Compressor Fuel Gas** for a Day is any quantity of Compressor Fuel Gas which Shipper is required to supply to Service Provider on that Day under clause 5.4.

#### **4.4 Excess Take Compressor Fuel Gas**

Where due to Shipper:

- (a) supplying to the Receipt Points on a Day a quantity of Gas in excess of the quantity scheduled by Service Provider to be supplied by Shipper on that Day; and/or
- (b) taking delivery at the Delivery Points on a Day of a quantity of Gas in excess of the quantity scheduled by Service Provider to be delivered to Shipper on that Day,

Service Provider uses a greater quantity of Compressor Fuel Gas than it would have used had Shipper not supplied or taken delivery of that excess Gas (**Additional Compressor Fuel**) then, at the election of Service Provider:

- (c) that Additional Compressor Fuel will be added to the Shipper's Compressor Fuel Gas for the Day (**Determination Date**) following the Day on which Service Provider determines the quantum of that Additional Compressor Fuel (or, at the election of Service Provider, for a Day subsequent to the Determination Date); or
- (d) Shipper must reimburse Service Provider the cost of purchasing that Additional Compressor Fuel from a third party (provided that such Additional Compressor Fuel is purchased on an arm's length basis).

#### **4.5 Heater Fuel Gas**

Where, on a Day, Gas is scheduled to be delivered to Shipper at a Delivery Point at which one or more Gas Heaters is installed then Shipper must supply to Service Provider a quantity of Heater Fuel Gas determined in accordance with the following formula:

**SD/TD \* HF**

Where:

- SD** is Service Provider's best estimate of the total quantity of Gas to be delivered to Shipper at the relevant Delivery Point on that Day;
- TD** is Service Provider's best estimate of the total quantity of Gas to be delivered to all Transportation Facility Users at the relevant Delivery Point on that Day; and
- HF** is Service Provider's best estimate of the quantity of Heater Fuel Gas which will be consumed by the Gas Heaters at the relevant Delivery Point on that Day.

---

## **5 Hourly Limits Across Facility**

### **5.1 Non-Application to Backhaul Quantities**

This clause 6 does not apply to quantities of Gas transported pursuant to the Backhaul Auction Service.

### 5.2 **Receipt Points - Hourly Limitation**

Subject to the remaining terms of Shipper's OTSA, the maximum quantity of Gas which Shipper may supply to the Receipt Points in an hour (**Receipt Point MHQ**) is 4.4% of the Adjusted Forward Haul MDQ.

### 5.3 **Delivery Points - Hourly Limitation**

Subject to the remaining terms of Shipper's OTSA, the maximum quantity of Gas which Shipper may take delivery of at the Delivery Points in an hour (**Delivery Point MHQ**) is 5% of the Adjusted Forward Haul MDQ.

### 5.4 **Minimum Flow Rates**

(a) Where:

- (i) due to operational requirements at a Receipt Point or Delivery Point a minimum hourly flow rate must be achieved to allow Gas to be received at or delivered to that Receipt Point or Delivery Point; and
- (ii) the scheduled quantities of Transportation Facility Users using the point on a Day are such that if the flow was profiled evenly (or approximately evenly) over the Day this minimum hourly flow rate would not be achieved,

then Service Provider may reprofile the hourly flows so that the minimum hourly flow rate is achieved (in a manner consistent with receiving or delivering the scheduled quantities), and:

- (iii) Shipper will not be in breach of this clause 6 to the extent the exceeding of the Receipt Point MHQ, Delivery Point MHQ or M12HQ is caused by the action taken by Service Provider under this clause 6.4; and
- (iv) any Gas taken in excess of the Receipt Point MHQ, Delivery Point MHQ or M12HQ due to the action taken by Service Provider under this clause 6.4(a) is excluded from the calculation of the Hourly Unauthorised Overrun Quantity (under clause 8.3) and the 12 Hourly Unauthorised Overrun Quantity (under clause 8.5).

(b) Service Provider will from time to time advise Shipper which Receipt Points and Delivery Points have a minimum hourly flow rate and of the quantum of that flow rate.

### 5.5 **Twelve Hourly Limitation**

- (a) The quantity of Gas delivered to Shipper at the Delivery Points in each rolling period of 12 consecutive hours may not exceed the M12HQ for that 12 hour period.
- (b) To avoid doubt, a reference to a rolling 12 hour period includes a period of 12 hours which commences on one Day and ends on the following Day.
- (c) The M12HQ for a period of 12 hours occurring wholly within a Day is 56.4% of the Adjusted Forward Haul MDQ.
- (d) The M12HQ for a period of 12 hours (**Relevant 12 Hour Period**) which period expires on the Day following the Day in which the period commenced, is the amount determined in accordance with the following formula:

$$(X/12 * M12HQ1) + (Y/12 * M12HQ2)$$

Where:

- X** is the number of hours of the Relevant 12 Hour Period in the Day in which the Relevant 12 Hour Period commences;
- M12HQ1** is Shipper's M12HQ (as determined in accordance with clause 6.5(c)) for a 12 hour period occurring wholly within the Day in which the Relevant 12 Hour Period commences;
- Y** is the number of hours of the Relevant 12 Hour Period in the Day in which the Relevant 12 Hour Period ends; and
- M12HQ2** is Shipper's M12HQ (as determined in accordance with clause 6.5(c)) for a 12 hour period occurring wholly within the Day in which the Relevant 12 Hour Period ends.

### **5.6 Adjusted Forward Haul MDQ**

References in this clause 6 to the Adjusted Forward Haul MDQ are to the last Adjusted Forward Haul MDQ for a Day notified to Shipper prior to the commencement of that Day (and which notice will be given at the same time as Shipper is notified of its Scheduled Quantities for that Day).

---

## **6 Hourly Limits At Delivery Points and Receipt Points**

### **6.1 Definitions**

In this clause 7, unless a contrary intention appears:

- (a) **Acquiring Shipper** is defined in clause 7.6(d).
- (b) **Capacity Trade** is defined in clause 7.6(a).
- (c) **Delivery Scheduled Shipper** is defined in clause 7.3(c).
- (d) **Hourly Capacity Constrained Delivery Point** means each Delivery Point on the Facility but excluding any point which Service Provider notifies Shipper, from time to time, is not subject to this clause 7.
- (e) **Hourly Capacity Constrained Lateral** means each Lateral but excluding any Lateral which Service Provider notifies Shipper, from time to time, is not subject to this clause 7.
- (f) **Hourly Capacity Constrained Receipt Point** means each Receipt Point on the Facility but excluding any point which Service Provider notifies Shipper, from time to time, is not subject to this clause 7.
- (g) **Hourly Delivery Capacity** means, for an hour and an Hourly Capacity Constrained Delivery Point, the maximum quantity of Gas which may be delivered to that Delivery Point (as determined by Service Provider acting as a Reasonable and Prudent operator) in that hour having regard to the physical capacity and configuration of that Delivery Point.
- (h) **Hourly Lateral Capacity** means, for an hour and an Hourly Capacity Constrained Lateral, the maximum quantity of Gas which may be transported through that Lateral (as determined by Service Provider acting as a Reasonable and Prudent operator) in that hour having regard to the physical capacity and configuration of that Lateral.



- (i) **Hourly Receipt Capacity** means, for an hour and an Hourly Capacity Constrained Receipt Point, the maximum quantity of Gas which may be supplied to that Receipt Point (as determined by Service Provider acting as a Reasonable and Prudent operator) in that hour having regard to the physical capacity and configuration of that Receipt Point.
- (j) **Lateral** means a lateral of the Facility.
- (k) **Lateral Scheduled Shipper** is defined in clause 7.4(c).
- (l) **Receipt Scheduled Shipper** is defined in clause 7.2(c).
- (m) **Reserved Hourly Entitlement** means, for a Transportation Facility User and (as applicable):
  - (i) an Hourly Capacity Constrained Delivery Point;
  - (ii) an Hourly Capacity Constrained Lateral; and
  - (iii) an Hourly Capacity Constrained Receipt Point,
 the hourly Capacity at that Delivery Point, Lateral or Receipt Point (as applicable) which is defined in that Transportation Facility User's Facility Agreement as its "Reserved Hourly Entitlement" for the relevant point or Lateral.
- (n) **Shipper's Share of the Hourly Delivery Capacity** is defined in clause 7.3.
- (o) **Shipper's Share of the Hourly Lateral Capacity** is defined in clause 7.4.
- (p) **Shipper's Share of the Hourly Receipt Capacity** is defined in clause 7.2.
- (q) **Transportation Restriction** is defined in clause 7.6(e).

## 6.2 **Receipt Point Restrictions**

- (a) The maximum quantity of Gas which Shipper may supply to an Hourly Capacity Constrained Receipt Point in an hour is Shipper's Share of the Hourly Receipt Capacity for that hour.
- (b) Where immediately prior to an hour, Shipper is the only Transportation Facility User scheduled to supply Gas to an Hourly Capacity Constrained Receipt Point for the Day in which that hour occurs, then Shipper's Share of the Hourly Receipt Capacity for that hour is equal to the amount of that Hourly Receipt Capacity.
- (c) Where immediately prior to an hour, Shipper and one or more other Transportation Facility Users are scheduled to supply Gas to an Hourly Capacity Constrained Receipt Point, then Shipper's Share of the Hourly Receipt Capacity for that hour is equal to the amount determined in accordance with the following formula for that hour:

$$[HC * (SRE/TRE)] + [(HRC - TRE) * (SMDQ/TMDQ)]$$

Where:

**HC** is the lesser of the Hourly Receipt Capacity and the sum of the Reserved Hourly Entitlement of each Transportation Facility User who is scheduled (immediately prior to the commencement of that hour) to supply Gas to the Hourly Capacity Constrained Receipt Point on the Day in which the hour occurs (each such Transportation Facility User, a **Receipt Scheduled Shipper**);

**SRE** is Shipper's Reserved Hourly Entitlement;

**TRE** is the sum of the Reserved Hourly Entitlements of the Receipt Scheduled Shippers;

**HRC** is the Hourly Receipt Capacity;

**SMDQ** is Shipper's Forward Haul MDQ; and

**TMDQ** is the sum of the Facility MDQs of the Receipt Scheduled Shippers,

but where:

"TRE" exceeds "HRC" then "HRC – TRE" will be deemed to equal zero; and

"TRE" is equal to zero then "SRE/TRE" will be deemed to equal zero.

### **6.3 Delivery Point Restrictions**

(a) The maximum quantity of Gas which Shipper may take delivery of at an Hourly Capacity Constrained Delivery Point in an hour is Shipper's Share of the Hourly Delivery Capacity for that hour.

(b) Where immediately prior to an hour, Shipper is the only Transportation Facility User scheduled to take delivery of Gas at an Hourly Capacity Constrained Delivery Point for the Day in which that hour occurs, then Shipper's Share of the Hourly Delivery Capacity for that hour is equal to the amount of that Hourly Delivery Capacity.

(c) Where immediately prior to an hour, Shipper and one or more other Transportation Facility Users are scheduled to take delivery of Gas at an Hourly Capacity Constrained Delivery Point, then Shipper's Share of the Hourly Delivery Capacity for that hour is equal to the amount determined in accordance with the following formula for that hour:

$$[HC * (SRE/TRE)] + [(HDC - TRE) * (SMDQ/TMDQ)]$$

Where:

**HC** is the lesser of the Hourly Delivery Capacity and the sum of the Reserved Hourly Entitlement of each Transportation Facility User who is scheduled (immediately prior to the commencement of that hour) to take delivery of Gas at the Hourly Capacity Constrained Delivery Point on the Day in which the hour occurs (each such Transportation Facility User, a **Delivery Scheduled Shipper**);

**SRE** is Shipper's Reserved Hourly Entitlement;

**TRE** is the sum of the Reserved Hourly Entitlements of the Delivery Scheduled Shippers;

**HDC** is the Hourly Delivery Capacity;

**SMDQ** is Shipper's Forward Haul MDQ; and

**TMDQ** is the sum of the Facility MDQs of the Delivery Scheduled Shippers,

but where:

"TRE" exceeds "HDC" then "HDC – TRE" will be deemed to equal zero; and

"TRE" is equal to zero then "SRE/TRE" will be deemed to equal zero.

#### 6.4 Lateral Restrictions

- (a) The maximum quantity of Gas which Shipper may obtain transportation of in an Hourly Capacity Constrained Lateral in an hour is Shipper's Share of the Hourly Lateral Capacity for that hour.
- (b) Where immediately prior to an hour, Shipper is the only Transportation Facility User scheduled to obtain transportation of Gas through an Hourly Capacity Constrained Lateral for the Day in which that hour occurs, then Shipper's Share of the Hourly Lateral Capacity for that hour is equal to the amount of that Hourly Lateral Capacity.
- (c) Where immediately prior to an hour, Shipper and one or more other Transportation Facility Users are scheduled to obtain transportation of Gas through an Hourly Capacity Constrained Lateral for the Day in which that hour occurs, then Shipper's Share of the Hourly Lateral Capacity for that hour is equal to the amount determined in accordance with the following formula for that hour:

$$[HC * (SRE/TRE)] + [(HLC - TRE) * (SMDQ/TMDQ)]$$

Where:

**HC** is the lesser of the Hourly Lateral Capacity and the sum of the Reserved Hourly Entitlement of each Transportation Facility User who is scheduled (immediately prior to the commencement of that hour) to obtain transportation of Gas through the Hourly Capacity Constrained Lateral on the Day in which the hour occurs (each such Transportation Facility User, a **Lateral Scheduled Shipper**);

**SRE** is Shipper's Reserved Hourly Entitlement;

**TRE** is the sum of the Reserved Hourly Entitlements of the Lateral Scheduled Shippers;

**HLC** is the Hourly Lateral Capacity;

**SMDQ** is Shipper's Forward Haul MDQ;

**TMDQ** is the sum of the Facility MDQs of the Lateral Scheduled Shippers,

but where:

"**TRE**" exceeds "**HLC**" then "**HLC - TRE**" will be deemed to equal zero; and

"**TRE**" is equal to zero then "**SRE/TRE**" will be deemed to equal zero.

#### 6.5 Notification

- (a) By not later than 6.00pm on each Day (or if at such time the Scheduled Quantities are not known, then at the time the Scheduled Quantities are known), Service Provider must notify Shipper, for each Hourly Capacity Constrained Receipt Point to which Shipper is scheduled to supply Gas on the following Day, of Service Provider's determination (for that Receipt Point) of:
  - (i) the Hourly Receipt Capacity for each hour of that following Day; and
  - (ii) Shipper's Share of the Hourly Receipt Capacity for each such hour.
- (b) By not later than 6.00pm on each Day (or if at such time the Scheduled Quantities are not known, then at the time the Scheduled Quantities are known), Service Provider must notify

Shipper, for each Hourly Capacity Constrained Delivery Point at which Shipper is scheduled to take delivery of Gas on the following Day, of Service Provider's determination (for that Delivery Point) of:

- (i) the Hourly Delivery Capacity for each hour of that following Day; and
  - (ii) Shipper's Share of the Hourly Delivery Capacity for each such hour.
- (c) By not later than 6.00pm on each Day (or if at such time the Scheduled Quantities are not known, then at the time the Scheduled Quantities are known), Service Provider must notify Shipper, for each Hourly Capacity Constrained Lateral through which Shipper is scheduled to obtain transportation of Gas on the following Day, of Service Provider's determination (for that Lateral) of:
- (i) the Hourly Lateral Capacity for each hour of that following Day; and
  - (ii) Shipper's Share of the Hourly Lateral Capacity for each such hour.
- (d) Service Provider must notify Shipper of any change to the information notified by Service Provider to Shipper under clauses 7.5(a) to 7.5(c) (including where that change arises due to the rescheduling by Service Provider of the quantities of Gas to be supplied by a Transportation Facility User to a Receipt Point, taken delivery of by a Transportation Facility User at a Delivery Point or transported for a Transportation Facility User through a Lateral).
- (e) Where, for a Day, there is a change to the quantities of Gas:
- (i) scheduled to be supplied by Shipper to an Hourly Capacity Constrained Receipt Point, such that Shipper is scheduled to supply Gas to an Hourly Capacity Constrained Receipt Point to which Shipper was not previously scheduled to supply Gas on that Day;
  - (ii) scheduled to be delivered to Shipper at an Hourly Capacity Constrained Delivery Point, such that Shipper is scheduled to take delivery of Gas at an Hourly Capacity Constrained Delivery Point at which Shipper was not previously scheduled to take delivery of Gas on that Day; or
  - (iii) scheduled to be transported for Shipper through an Hourly Capacity Constrained Lateral, such that Shipper is scheduled to obtain transportation of Gas through an Hourly Capacity Constrained Lateral through which Shipper was not previously scheduled to obtain transportation of Gas on that Day,

then, within 30 minutes of that change taking effect, Service Provider must notify Shipper of (as applicable):

- (iv) the Hourly Receipt Capacity, the Hourly Delivery Capacity or the Hourly Lateral Capacity for the Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral (as applicable) for each hour of the relevant Day (occurring on and from the time Shipper is first scheduled to supply Gas to, take delivery of Gas at or obtain transportation of Gas in, the Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral (as applicable)); and
- (v) Shipper's Share of the Hourly Receipt Capacity, the Hourly Delivery Capacity or Hourly Lateral Capacity (as applicable) for that Hourly Capacity Constrained

Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral (as applicable) for each such hour.

- (f) Despite the preceding provisions of this clause 7.5:
- (i) Service Provider is not required to give a notice for a Day in respect of an Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral if Service Provider considers that it will be able to accept or deliver Gas at the relevant Receipt Point, Delivery Point or Lateral in the quantities of Gas scheduled for Shipper on the relevant Day at the hourly rates referred to in clause 6; and
  - (ii) if Service Provider has not issued a notice under this clause 7 in respect of an hour and a Delivery Point, Receipt Point or Lateral, this clause 7 does not apply to Shipper in respect of that hour and that Delivery Point, Receipt Point or Lateral.

## **6.6 Trading of Reserved Hourly Entitlement**

- (a) Subject to clause 7.6(b), Shipper may for an hour:
- (i) dispose of to another Transportation Facility User all or any part of its Reserved Hourly Entitlement for an Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral; or
  - (ii) acquire from another Transportation Facility User all or any part of its Reserved Hourly Entitlement for an Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral,
- (a **Capacity Trade**) on such terms as Shipper may agree with that other Transportation Facility User. Upon such a disposal or acquisition being effected, Shipper's Reserved Hourly Entitlement for the relevant hour and for the relevant Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral will be adjusted accordingly by the amount of the relevant exchange.
- (b) A Capacity Trade will not be effective unless Service Provider receives a notice from Shipper and the other Transportation Facility User of the Capacity Trade, by not later than 2 hours prior to the hour for which the Capacity Trade is to be effected, specifying the quantity the subject of the Capacity Trade.
- (c) Where a Capacity Trade for an hour occurs after notification has been given under clause 7.5(a), clause 7.5(b) or clause 7.5(c) (as applicable) then within 30 minutes of that Capacity Trade being notified to Service Provider, Service Provider must notify Shipper of any change to Shipper's Share of the Hourly Receipt Capacity, the Hourly Delivery Capacity or Hourly Lateral Capacity (as applicable) for the relevant Hourly Capacity Constrained Receipt Point, Hourly Capacity Constrained Delivery Point or Hourly Capacity Constrained Lateral (as applicable) as a result of that Capacity Trade.
- (d) Where a Capacity Trade will, in Service Provider's reasonable opinion, give rise to a Transportation Restriction (as defined in clause 7.6(e)) then Service Provider may impose such reasonable conditions on the **Acquiring Shipper** (being the Transportation Facility User acquiring Reserved Hourly Entitlement pursuant to the Capacity Trade) so as to avoid giving rise to such Transportation Restriction.
- (e) A **Transportation Restriction** is a circumstance in which giving effect to a Capacity Trade (without the imposition of conditions under clause 7.6(d)) will prevent Service Provider,

acting as a Reasonable and Prudent operator and having regard to the configuration of the Facility and PCI Pipeline System and the delivery points, fulfilling its contractual obligations to Transportation Facility Users of the Facility and the PCI Pipeline System.

- (f) To avoid doubt, the conditions imposed by Service Provider under clause 7.6(d) may limit the quantity of Gas which the Acquiring Shipper may supply to one or more receipt points, take delivery of at one or more delivery points or obtain transportation of through a Lateral.
- (g) Where Shipper is an Acquiring Shipper, then Shipper must comply with any restrictions imposed by Service Provider under clause 7.6(d) in respect of the relevant Capacity Trade pursuant to which Shipper is an Acquiring Shipper.
- (h) Service Provider must notify Shipper of any conditions imposed under clause 7.6(d), with which conditions Shipper is required to comply, by not later than:
  - (i) where the Capacity Trade is notified to Service Provider more than 13 hours prior to the Day in which the hour for which the Capacity Trade is to be effected occurs, 12 hours prior to the commencement of that Day; and
  - (ii) otherwise, 2 hours prior to the hour for which the Capacity Trade is to be effected.
- (i) To avoid doubt, nothing in this clause 7.6 gives Shipper the right to use a receipt point, delivery point or lateral unless Shipper has acquired rights to use that receipt point, delivery point or lateral in accordance with Shipper's OTSA or the National Gas Law.

---

## **7 Unauthorised Overrun Charge**

### **7.1 Liability for Overrun Charge**

Where, on a Day, Shipper (without the consent of Service Provider):

- (a) supplies a quantity of Gas in an hour (excluding Gas supplied pursuant to the Auction Backhaul Service) at the Receipt Points in excess of the Receipt Point MHQ; or
- (b) supplies a quantity of Gas on that Day at the Receipt Points in excess of the sum of the Total Forward Haul Scheduled Receipt Quantity and the Total Auction Backhaul Scheduled Receipt Quantity; or
- (c) takes delivery of a quantity of Gas in an hour (excluding Gas delivered pursuant to the Auction Backhaul Service) in excess of the Delivery Point MHQ; or
- (d) takes delivery of a quantity of Gas on that Day at the Delivery Points in excess of the sum of the Total Forward Haul Scheduled Delivery Quantity and the Total Auction Backhaul Scheduled Delivery Quantity; or
- (e) takes delivery of a quantity of Gas in a 12 hour period (excluding Gas delivered pursuant to the Auction Backhaul Service) in excess of the M12HQ,

then Shipper will be liable to pay an Unauthorised Overrun Charge (as determined in accordance with the provisions of this clause 8).

### **7.2 Quantum of Overrun Charge**

The Unauthorised Overrun Charge for a Day is equal to the Unauthorised Overrun Charge Rate (as set out in Schedule 2 and escalated under clause 10.2) multiplied by the greater of:

- (a) the Hourly Unauthorised Overrun Quantity for that Day (as defined in clause 8.3);
- (b) the Daily Unauthorised Overrun Receipt Quantity for that Day (as defined in clause 8.4);
- (c) the Daily Unauthorised Overrun Delivery Quantity for that Day (as defined in clause 8.4);  
and
- (d) the 12 Hourly Unauthorised Overrun Quantity for that Day (as defined in clause 8.5).

### **7.3 Hourly Unauthorised Overrun Quantity**

The Hourly Unauthorised Overrun Quantity for a Day is the sum for each hour of that Day of the greater of the quantity of Gas (if any):

- (a) taken by Shipper at the Delivery Points in that hour in excess of the Delivery Point MHQ;  
and
- (b) supplied by Shipper to the Receipts Points in that hour in excess of the Receipt Point MHQ.

### **7.4 Daily Unauthorised Overrun Quantity**

- (a) The Daily Unauthorised Overrun Receipt Quantity is the quantity of Gas supplied by Shipper on a Day in excess of the quantity of Gas referred to in clause 8.1(b).
- (b) The Daily Unauthorised Overrun Delivery Quantity is the quantity of Gas taken by Shipper on a Day in excess of the quantity of Gas referred to in clause 8.1(d).

### **7.5 12 Hourly Unauthorised Overrun Quantity**

- (a) The 12 Hourly Unauthorised Overrun Quantity for a Day is the sum for each 12 hour period of that Day of the amount (if any) by which the deliveries of Gas for that 12 hour period (excluding Gas delivered pursuant to the Backhaul Auction Service) exceeds the M12HQ.
- (b) Where a 12 hour period ends on a different Day to the Day in which that 12 hour period began, then for the purposes of calculating the 12 Hourly Unauthorised Overrun Quantity that 12 hour period will be deemed to have occurred in the Day in which that 12 hour period ends.

---

## **8 Pressure and Temperature**

- (a) For the purposes of clause 8 of Part 5 of the Operational Transportation Service Code the pressure and temperature range for each Receipt Point and Delivery Point are set out in Table 1 of Schedule 1.
- (b) For the purposes of clause 8 of Part 5 of the Operational Transportation Service Code the pressure and temperature range for each Backhaul Receipt Point and Backhaul Delivery Point are set out in Table 2 of Schedule 1.

---

## **9 Charges**

### **9.1 Charges set out in Schedule**

For the purposes of clause 9 of Part 5 of the Operational Transportation Service Code the charges payable by Shipper (or the rates by which charges are determined) are set out in Schedule 2.

## 9.2 Escalation

- (a) All charges and charge rates set out in Schedule 2 are expressed as at 1 January 2019 and are subject to escalation from each 1 January (commencing on 1 January 2020) in accordance with the formula set out below.

$$P_n = P_{n-1} \left( 1 + \left( \frac{CPI_n - CPI_{n-1}}{CPI_{n-1}} \right) \right)$$

Where:

- P<sub>n-1</sub>** is the relevant charge or charge rate immediately prior to the 1 January for which the calculation is made;
- P<sub>n</sub>** is the relevant charge or charge rate to apply as from the 1 January for which the calculation is made;
- CPI<sub>n</sub>** is the CPI for the September quarter ending immediately prior to the 1 January for which the calculation is made;
- CPI<sub>n-1</sub>** is the CPI for the September quarter ending 15 months prior to the 1 January for which the calculation is made; and
- CPI** is the Consumer Price Index, (weighted average eight capital cities, all groups index) as published by the Australian Bureau of Statistics.

- (b) If the CPI is discontinued or its basis of assessment is changed so that it no longer accurately reflects changes in the prevailing level of prices substantially in the same manner as it did prior to the change in basis, then such other index in substitution for the CPI:

- (i) as may be provided by the Australian Bureau of Statistics; or
- (ii) if no index is provided by the Australian Bureau of Statistics, as may be agreed by the parties (who must use their reasonable endeavours to agree upon an index); or
- (iii) if no index is provided by the Australian Bureau of Statistics and the parties are unable to agree within 1 month of commencing discussions, as is determined by Service Provider acting reasonably,

will be, as from the time of the discontinuance or change in basis of assessment of the CPI, treated as the CPI for the purposes of Shipper's OTSA and Service Provider will (acting reasonably and having regard to any advice provided by the Australian Bureau of Statistics) determine a method for transitioning from the old index to the new index.

- (c) To avoid doubt, clause 10.2(b) will apply (with the necessary modifications) if any replacement CPI measure determined in accordance with that clause is subsequently discontinued or its basis of assessment is changed so that it no longer accurately reflects changes in the prevailing level of prices substantially in the same manner as it did prior to the change in basis.



### **9.3 Nomination Variation Charge for Forward Haul**

- (a) Where the Scheduled Quantities for a Day for the Traded Forward Haul Service or Forward Haul Auction Service are varied under clause 4.7 of Part 3 of the Operational Transportation Service Code Shipper must pay the Nomination Service Charge (as calculated in accordance with clause 10.3(b)) for the greater of:
- (i) the quantity by which the Total Forward Haul Scheduled Receipt Quantity for that Day is varied; and
  - (ii) the quantity by which the Total Forward Haul Scheduled Delivery Quantity for that Day is varied.
- (b) The Nomination Service Charge payable under this clause 10.3 is the amount determined in accordance with the following formula:

$$VR * X$$

Where:

- VR** is the Variation Rate (set out in Schedule 2 and as escalated under clause 10.2);
- X** is the number of GJ by which the Total Forward Haul Scheduled Delivery Quantity or Total Forward Haul Scheduled Receipt Quantity for the relevant Day (as applicable) is varied up.

### **9.4 Nomination Variation Charge for Backhaul Auction Service**

- (a) Where the Scheduled Quantities for the Backhaul Auction Service for a Day are varied under clause 4.7 of Part 3 of the Operational Transportation Service Code Shipper must pay the Nomination Service Charge (as calculated in accordance with clause 10.4(b)) for the greater of:
- (i) the quantity by which the Total Auction Backhaul Scheduled Receipt Quantity for that Day is varied; and
  - (ii) the quantity by which the Total Auction Backhaul Scheduled Delivery Quantity for that Day is varied.
- (b) The Nomination Service Charge payable under this clause 10.4 is the amount determined in accordance with the following formula:

$$VR * X$$

Where:

- VR** is the Variation Rate (set out in Schedule 2 and as escalated under clause 10.2);
- X** is the number of GJ by which the Total Auction Backhaul Scheduled Delivery Quantity or Total Auction Backhaul Scheduled Receipt Quantity for the relevant Day (as applicable) is varied up.

### **9.5 Nomination Request Charge**

Where Shipper makes a request under clause 4.7 of Part 3 of the Operational Transportation Service Code for a Day it must pay the Nomination Request Charge (as set out in Schedule 2 and escalated

under clause 10.2) irrespective of whether and the extent to which the request is accepted. A separate Nomination Request Charge is payable in respect of each request made for a Day.

#### **9.6 Interaction with Flow Procedures**

A change to Shipper's flow profile made in accordance with Flow Procedures is not a renomination by Shipper for the purposes of this clause 10.

---

### **10 Imbalance**

- (a) For the purposes of clause 10 of Part 5 of the Operational Transportation Service Code the Imbalance Allowance for Traded Forward Haul Services is 8% of the Traded Forward Haul MDQ for transportation of Gas between Receipt Points and Delivery Points.
- (b) For the purposes of clause 10(b) of Part 5 of the Operational Transportation Service Code the Imbalance Charge for a Day is equal to the Imbalance Charge Rate (specified in Schedule 2 and as escalated under clause 10.2) multiplied by the number of GJs by which Shipper's Accumulated Imbalance exceeds the Imbalance Allowance referred to in clause 11(a).
- (c) The Unauthorised Imbalance Charge referred to in clauses 10(d) and 10(e) of Part 5 of the Operational Transportation Service Code is set out in Schedule 2 (and will be escalated under clause 10.2) and is payable each Day until such time as the Accumulated Imbalance is reduced to zero.

---

### **11 Odourisation**

- (a) Shipper must supply Gas into the Facility with the level of odorant required by applicable Victorian legislation.
- (b) Service Provider must use its reasonable endeavours to ensure that Gas delivered by Service Provider from the Facility to Shipper has the level of odorant required by applicable Victorian legislation but nothing in this clause 12(b) requires Service Provider to install any odorising facility on the Facility (or elsewhere).
- (c) Subject to clause 12(b), Shipper is solely responsible for entering into such arrangements as required to ensure that any Gas it takes at the Delivery Points has such level of odorant (if any) required by Law.

---

### **12 Metering**

#### **12.1 Measurement and Testing**

Subject to clause 13.7, all measurements and tests for the quantity and quality of Gas received at a Receipt Point and delivered at a Delivery Point will be accomplished through equipment provided and maintained by or on behalf of the party designated in Schedule 1 as being responsible for measurement at that Receipt Point or Delivery Point (as applicable) (**Responsible Party**).

#### **12.2 Pipeline Compressor and Gas Heater Metering**

Service Provider must ensure that measuring equipment complying with the requirements of Annexure 1 is installed at each Pipeline Compressor and Gas Heater for the purpose of measuring and accurately recording the quantity of Gas consumed by that Pipeline Compressor and Gas Heater (as applicable).

### **12.3 Access Rights**

The Responsible Party will ensure that the other party has:

- (a) access to the measuring and testing equipment at the Receipt Points and the Delivery Points for which it is the Responsible Party at all reasonable hours for inspection purposes; and
- (b) an entitlement to be present during all tests for quantity and quality of Gas and at the cleaning, installing, changing, repairing, inspecting, calibrating or adjusting of the equipment (which will be done only by duly qualified employees or duly qualified agents of the Responsible Party or duly qualified employees or duly qualified agents of the owner or operator of the equipment).

### **12.4 Records and Charts**

Upon request by the other party, the Responsible Party must promptly submit to that other party records and charts from the measuring equipment together with calculations therefrom for inspection and verification and the other party must return the same within 10 days after their receipt (provided that the other party may, at its own cost, make and retain copies of those records and charts). The Responsible Party must preserve for a period of at least 4 years all test data, charts and other similar records.

### **12.5 Measurement and Testing Procedures**

The measurement and testing of Gas supplied at the Receipt Points, delivered at the Delivery Points and used by the Pipeline Compressors and Gas Heaters will be governed by the provisions of Annexure 1.

### **12.6 Shared Points**

Shipper agrees that where it is the Responsible Party for a Receipt Point or Delivery Point used by other Transportation Facility Users that:

- (a) records, charts and data relating to the measurement of receipts or deliveries at that point may be provided by Service Provider to those other Transportation Facility Users; and
- (b) Shipper will ensure those other Transportation Facility Users are able to exercise equivalent access and attendance rights to those granted by Shipper to Service Provider under clause 13.3.

### **12.7 Langley Receipt Point**

- (a) Measuring equipment will not be installed at the Langley Receipt Point to measure the quantity or composition of Gas supplied or delivered at that point.
- (b) The quantity of Gas supplied by Shipper to the Langley Receipt Point on a Day and in an hour (as applicable) will be:
  - (i) where Shipper is the sole Transportation Facility User entitled to use the Langley Receipt Point, the total quantity of Gas, determined under the transportation agreements relating to the use of the PCI Pipeline System, as having been delivered by Service Provider to the Langley Receipt Point on that Day (Supply Quantity) or in that hour (Hourly Supply Quantity) as applicable; and
  - (ii) where Shipper and one or more other Transportation Facility Users are entitled to use the Langley Receipt Point, that portion of the Supply Quantity and the

Hourly Supply Quantity (as applicable) determined in accordance with the apportionment procedures applying to the Langley Receipt Point.

**12.8 Third Party as Responsible Party**

Where Annexure 1 provides a third party is the Responsible Party for a Receipt Point or Delivery Point, Service Provider must use reasonable endeavours to ensure the Responsible Party complies with the requirements of Annexure 1 and the relevant requirements of this clause 12

**12.9 Interaction with clause 15.2 Operational Transportation Service Code**

- (a) To the extent of any inconsistency between this clause 13 and clause 15.2 of Part 3 of the Operational Transportation Service Code, clause 15.2 prevails.
- (b) Any rights of Shipper under Annexure 1 to have metering equipment tested apply in addition to the rights under the Operational Transportation Service Code.

---

**13 Electronic Communications System**

- (a) Service Provider has established an electronic communications system (**Electronic Communications System**) which is used (amongst other things) to:
  - (i) provide data relating to the supply and delivery of Gas at certain of the Receipt Points and Delivery Points on the Facility; and
  - (ii) allow the electronic communication of nominations, scheduling and other operational matters.
- (b) Except during periods in which the Electronic Communications System is not operational, Shipper must use the Electronic Communications System for those communications provided for in the operating protocols (referred to in clause 14(e)).
- (c) Shipper must bear all costs of connecting to the Electronic Communications System and of ensuring its communications equipment is compatible with the requirements of the Electronic Communications System.
- (d) Shipper acknowledges that it has no proprietary interest of any nature (including intellectual property rights) in the Electronic Communications System.
- (e) Shipper must comply with:
  - (i) those operating protocols for use and functioning of the Electronic Communications System notified by Service Provider to Shipper prior to Shipper's execution of Shipper's OTSA; and
  - (ii) any variation to those operating protocols from time to time, or new operating protocols introduced by Service Provider, provided the varied or new operating protocols are reasonable.
- (f) The Electronic Communications System is to be used for operational notices (as defined in clause 27.4 of Part 3 of the Operational Transportation Service Code).

---

## 14 Trading of Entitlements

### 14.1 Nature of Imbalance and Hourly Entitlements

- (a) The majority of hourly and imbalance entitlements of Primary Facility Users on the Facility are expressed as a percentage of Facility MDQ, which mechanism reflects the technical limitations of the Facility and has been used to preserve the operational integrity of the Facility. By trading Facility MDQ, a Facility User may increase (or decrease) its imbalance and hourly entitlements.
- (b) Certain Facility Users may, from time to time, have imbalance or hourly entitlements which, in whole or in part, are expressed as absolute numbers. Those absolute number entitlements (**Tradeable Entitlements**) may be traded in accordance with clause 15.2.

### 14.2 Trading Procedure

- (a) If Shipper wishes to acquire a Tradeable Entitlement from a Facility User or sell a Tradeable Entitlement it holds under Shipper's OTSA (due to a previous trade under this clause 15) then Shipper and the other Facility User must jointly submit to Service Provider a proposal for how the Tradeable Entitlement will be adjusted between them (including the length of the trade).
- (b) Service Provider will not unreasonably withhold its consent to any such trade provided Service Provider is not required to give such consent if:
  - (i) the terms of the trade cannot operate in a consistent and workable manner with each party's Facility Agreement;
  - (ii) the trade will adversely affect the operational integrity of the Pipeline System;
  - (iii) the trade will adversely affect the ability of Service Provider to comply with Facility Agreements;
  - (iv) Shipper is in breach of Shipper's OTSA or the other Facility User is in breach of its Facility Agreement;
  - (v) either Shipper or the other Facility User is an externally-administered body corporate (as defined in the Corporations Act) or under a similar form of administration under the laws of some other jurisdiction.
- (c) A trade will terminate if Shipper's OTSA or the Facility Agreement of the other Facility User expires or is terminated.
- (d) Shipper may only onsell a Tradeable Entitlement which has been acquired from a Primary Facility User (directly or indirectly) if the terms upon which the Primary Facility User made the original trade permit such onselling.
- (e) If Service Provider is not required to give consent due to the operation of clause 15.2(b)(i) or clause 15.2(b)(iii) but would be required to give consent if the terms of the trade were modified (including if limitations or restrictions were placed on the manner in which the Tradeable Entitlement were used) then Service Provider must notify Shipper of the modifications to the terms of the trade which would lead to consent being given and Shipper and the other Facility User may accordingly amend and resubmit their request for consent.

- (f) A request for a trade must be made not less than 10 Business Days before the first Day on which the trade is to take effect and Service Provider must respond to the request no later than 5 Business Days after receipt of the request.
- (g) Each party must act reasonably and respond with due expedition to facilitate agreement of the terms upon which the trade will take effect.
- (h) Where Shipper sells a Tradeable Entitlement to a Facility User, Shipper is not liable to Service Provider for the manner in which the Facility User uses that Tradeable Entitlement (including for any charges accrued due by that Facility User through its use of the Tradeable Entitlement).

### **14.3 Other Trades**

Service Provider will act reasonably and with due expedition in considering any other proposal for the trade of entitlements under a Facility Agreement (and not unreasonably withhold consent to any such proposal) but Service Provider is not required to consent to any proposal which will have an effect referred to in clause 15.2(b)(i) to clause 15.2(b)(iii).

### **14.4 Charges**

If a request is made for the trading of Tradeable Entitlements or under clause 15.3 Service Provider may levy the relevant charge set out in Schedule 2 for the consideration of a request under this clause 15.2 or clause 15.3.

---

## **15 Specific Facility Issues**

### **15.1 Application**

The provisions of this clause 16 apply for the purposes of clause 20 of Part 5 of the Operational Transportation Service Code.

### **15.2 MDQ Adjustment**

- (a) The Forward Haul MDQ of Shipper represents the maximum quantity of Gas for which Shipper may request the Traded Forward Haul Service and Forward Haul Auction Service (in aggregate) for a Day where the Standard Facility Conditions exist and assuming that, in the 48 hour period ending 24 hours prior to that Day, the volume weighted average of the Gross Heating Value of the Gas (if any) supplied by Shipper at the Receipt Points was 38.2 MJ/m<sup>3</sup>.
- (b) Standard Facility Conditions means Facility conditions where the air temperature at each Pipeline Compressor on the Facility is 20 degrees Celsius and the ground temperature along the entire route of the Facility is 17 degrees Celsius.
- (c) Where the actual Facility conditions on a Day vary from those Standard Facility Conditions and/or the volume weighted average of the Gross Heating Value of the Gas supplied by Shipper at the Receipt Points varied from 38.2 MJ/m<sup>3</sup>, the Forward Haul MDQ will increase or decrease as determined in accordance with the Available MDQ Model.
- (d) The Available MDQ Model is the model maintained by Service Provider to determine the Available MDQ.
- (e) The Forward Haul MDQ as adjusted in accordance with the Available MDQ Model for a Day is the Adjusted Forward Haul MDQ.

- (f) The Available MDQ for a Day will be determined in advance of that Day based upon Service Provider's good faith determination of Facility conditions for that Day and based on the volume weighted average of the Gross Heating Value of the Gas supplied by Shipper at the Receipt Points.

### **15.3 Compressor MDQ and Free Flow MDQ**

- (a) The Facility MDQ of all Transportation Facility Users using the Facility is subdivided into Free Flow MDQ and Compressor MDQ.
- (b) Subject to clause 16.3(c), 75% of Shipper's Facility MDQ is taken to be Free Flow MDQ and 25% of Shipper's MDQ is taken to be Compressor MDQ.
- (c) Where Shipper holds Facility MDQ acquired directly or indirectly from a Primary Facility User and such Primary Facility User nominated to Service Provider different portions than 25% and 75% to apply to the Facility MDQ it sold, then Service Provider may adjust the allocation of Shipper's Facility MDQ between Free Flow MDQ and Compressor MDQ to reflect this.
- (d) Where Shipper acquires a quantity of MDQ from a Primary Facility User by way of a Bilateral Trade and that Primary Facility User validly notifies Service Provider (in accordance with the terms of the Primary Facility Agreement of that Primary Facility User) of the portion of that MDQ which represents Free Flow MDQ and Compressor MDQ sold by it, then that quantity of MDQ will be allocated between Free Flow MDQ and Compressor MDQ in accordance with that notification.

### **15.4 Flow Procedures**

- (a) Flow Procedures are procedures for regulating the flow rate at which Gas is delivered at a Delivery Point (including a Backhaul Delivery Point) and are required for the Cavan 2 Delivery Point, other delivery points which connect to the Reticulation System and such other delivery points which Service Provider determines require such procedures.
- (b) The Flow Procedures applicable to a Delivery Point referred to in clause 16.4(a) from time to time will be those determined by Service Provider (acting reasonably) and notified to Shipper.

### **15.5 Pressure Differential**

- (a) Where a Delivery Point is listed in Table 3 of Schedule 1 then Service Provider's ability to deliver Gas to that Delivery Point (and in the case of the Langley Receipt Point/Delivery Point the Service Provider's ability to deliver Gas or receive Gas) is subject to either:
  - (i) the pressure limits of the Reticulation System (in the case of the Cavan 1 (Delivery Point) and Cavan 2 (Delivery Point));
  - (ii) the pressure differential between that Delivery Point and the Iona Gas Plant (in the case of the Iona (Delivery Point));
  - (iii) the pressure differential between that Delivery Point and the MAPS (in the case of the Pelican Point (Delivery Point)); and
  - (iv) the pressure differential between the Delivery Point/Receipt Point and the PCI Pipeline System (in the case of the Langley Receipt Point/Delivery Point).

- (b) Service Provider is not liable to Shipper to the extent a quantity of Gas is not delivered at a Delivery Point due to, as applicable, the pressure limits or pressure differentials referred to in clause 16.5(a).



## Schedule 1 – Receipt Points and Delivery Points

**Table 1 – Receipt Points and Delivery Points**

Point	Location	Pipeline Zone	Responsible Party	Minimum and Maximum Temperature	Minimum and Maximum Pressure	Daily Capacity Limitation	Hourly Capacity Limitation
Langley (Receipt Point)	Connection between the Facility and the PCI Pipeline System	PCA-RZ-01	N/A	N/A	N/A	314TJ/day	N/A
Langley (Delivery Point)	Connection between the Facility and the PCI Pipeline System	PCA-DZ-01	N/A	N/A	N/A	314TJ/day	N/A
Iona (Receipt Point)	Connection between the Facility and the Iona Gas Plant, in the vicinity of Waarre Road, Port Campbell	PCA-RZ-01	Service Provider	Min: 2°C Max: 50°C	Min: n/a Max: 15.3MPa	310TJ/day	12.9TJ/hour
Iona (Delivery Point)	Connection between the Facility and the Iona Gas Plant, in the vicinity of Waarre Road, Port Campbell	PCA-DZ-01	Service Provider	Min: 2°C Max: 50°C	Min: n/a Max: 15.3MPa	100TJ/day	4.2TJ/hour

Point	Location	Pipeline Zone	Responsible Party	Minimum and Maximum Temperature	Minimum and Maximum Pressure	Daily Capacity Limitation	Hourly Capacity Limitation
Otway (Receipt Point)	Connection between the Facility and the Otway Gas Plant, in the vicinity of Waarre Road, Port Campbell	PCA-RZ-01	Service Provider	Min: 2°C Max: 50°C	Min: n/a Max: 15.0MPa	250TJ/day	10.4TJ/hour
Minerva (Receipt Point)	Connection between the Facility and the Minerva Gas Processing Plant	PCA-RZ-01	3rd Party	Min: 2°C Max: 50°C	Min: n/a Max: 15.0MPa	135TJ/day	No Hourly Capacity Limitation
Poolaijelo (Delivery Point)	Connection between the Facility and the SESA Pipeline in the vicinity of Hennigs Road, Poolaijelo	PCA-DZ-02	Service Provider	Min: -10°C Max: 55°C	Min: n/a Max: 15.3MPa	40TJ/day	No Hourly Capacity Limitation
Naracoorte (Delivery Point)	Connection between the Facility and offtaker's facility at Naracoorte.	PCA-DZ-02	Service Provider	Min: 2°C Max: 50°C	Min: 25kPa Max: 100kPa	663GJ/day	27.6GJ/hour
Bolivar (Delivery Point)	Connection between the Facility and offtaker's facility at Bolivar.	PCA-DZ-03	Service Provider	Min: -10°C Max: 40°C	Min: 1,750kPag Max: 2,000kPag	1.92TJ/day	80GJ/hour

Point	Location	Pipeline Zone	Responsible Party	Minimum and Maximum Temperature	Minimum and Maximum Pressure	Daily Capacity Limitation	Hourly Capacity Limitation
Jervois (Delivery Point)	Connection between the Facility and offtaker's facility at Jervois.	PCA-DZ-03	Service Provider	Min: -8°C Max: 50°C	Min: 150kPa Max: 340kPa	0.945TJ/day	39GJ/hour
Cavan 1 (Delivery Point)	The two northern metering runs at the Cavan Delivery Point	PCA-DZ-03	Service Provider	Min: 2°C Max: 50°C	Min: 1,750kPag Max: 1,900kPag	72TJ/day	9TJ/hour
Cavan 2 (Delivery Point)	The two southern metering runs at the Cavan Delivery Point	PCA-DZ-03	Service Provider	Min: 2°C Max: 50°C	Min: 1,750kPa Max: 1,900kPa	72TJ/day	6TJ/hour
Pelican Point (Delivery Point)	Connection between the Facility and the Power Station / MAPS at Pelican Point	PCA-DZ-03	Service Provider / 3rd Party	Min: 0°C Max: 50°C	Min: 3,100kPa Max: 7,322kPa MAPS: n/a	90TJ/day	8.5TJ/hour
Torrens Island (Delivery Point)	Connection between the Facility and the Torrens Island Power Station	PCA-DZ-03	Service Provider	Min: 2°C Max: 50°C	Min: 1,650kPa Max: 2,000kPa	165TJ/day	15TJ/hour

Point	Location	Pipeline Zone	Responsible Party	Minimum and Maximum Temperature	Minimum and Maximum Pressure	Daily Capacity Limitation	Hourly Capacity Limitation
Quarantine (Delivery Point)	Connection between the Facility and the Quarantine Power Station	PCA-DZ-03	Service Provider	Min: -3°C Max: 60°C	Min: 3,000kPa Max: 4,500kPa	104TJ/day	4.33TJ/hour

**Table 2 – Backhaul Receipt Points and Backhaul Delivery Points**

Point	Location	Pipeline Zone	Responsible Party	Minimum and Maximum Temperature	Minimum and Maximum Pressure
Cavan 1 (Backhaul Receipt Point)	The two northern metering runs at the Cavan Delivery Point	PCA-BS-01	Service Provider	Min: 2°C Max: 50°C	Min: 1,750kPa Max: 1,900kPa
Cavan 2 (Backhaul Receipt Point)	The two southern metering runs at the Cavan Delivery Point	PCA-BS-01	Service Provider	Min: 2°C Max: 50°C	Min: 1,750kPa Max: 1,900kPa

### Allocation Agreements

For the purposes of clause 16(b)(vii) of Part 5 of the Code there are existing allocation agreements for all Delivery Points and Receipt Points (including the Backhaul Receipt Points) to which Shipper must accede before commencing use of the point, other than Naracoorte, Bolivar and Jervois.

### Park Service Point

The Park Service Point is a notional point on the Facility. For the purposes of clause 16(b)(vii) of Part 5 of the Code, Gas supplied at any Receipt Point can be stored at this notional point and Gas can be withdrawn from this point for delivery at any Delivery Point.

**Table 3 – Pressure Differential**

Cavan 1 (Delivery Point)	Deliveries into the Reticulation System subject to pressure limits.
Cavan 2 (Delivery Point)	Deliveries into the Reticulation System subject to pressure limits.
Iona (Delivery Point)	Deliveries into Iona Gas Plant subject to pressure differential.
Pelican Point (Delivery Point)	Deliveries into MAPS subject to pressure differential.
Langley (Receipt Point) / (Delivery Point)	Deliveries/receipts from PCI Pipeline System subject to pressure differential

## Schedule 2 – Charges

All charges/charge rates in this Schedule 2 will be escalated under clause 10.2.

**Table 1 –General Charges**

Charge/Charge Rate	Quantum
Delivery and Receipt Point Charges	Refer to Table 2
Unauthorised Overrun Charge Rate	\$3.59 per GJ
Imbalance Charge Rate	\$1.79 per GJ
Unauthorised Imbalance Charge	\$3.59 per GJ of Accumulated Imbalance at the end of the relevant Day.
Nomination Request Charge	\$362.71
Variation Rate	\$0.04075 per GJ
Standardisation Cost Charge	As per schedule of OTSA charges published by Service Provider on its website
Bilateral Trade Charge	As per schedule of OTSA charges published by Service Provider on its website
Clause 15 Trade Charge	As per schedule of OTSA charges published by Service Provider on its website

**Table 2 – Delivery and Receipt Point Charges**

Point	Monthly Charge (\$/month)
Iona (Receipt Point) / (Delivery Point)	\$65,984.87
Otway (Receipt Point)	\$35,567.07
Minerva (Receipt Point)	\$9,570.07
Poolaijelo (Delivery Point)	\$14,433.04
Naracoorte (Delivery Point)	Nil
Jervois (Delivery Point)	Nil
Bolivar (Delivery Point)	Nil
Cavan 1 (Delivery Point/Swap Receipt Point)	\$90,330.31
Cavan 2 (Delivery Point) / (Swap Receipt Point)	\$65,054.65
Pelican Point (Delivery Point)	\$60,220.21

Point	Monthly Charge (\$/month)
Quarantine (Delivery Point)	\$32,965.93
Torrens Island (Delivery Point)	\$64,845.79

Each Month, Shipper will pay an amount for its use of each of the points listed in Table 2, above, determined in accordance with the following formula:

$$\mathbf{SD/TD * MC}$$

Where:

**SD** is the sum (for each Day of that Month) of the total deliveries and receipts (as applicable and expressed in GJ) allocated to Shipper at the relevant point during that Month;

**TD** is the sum (for each Day of that Month) of the total deliveries and receipts (as applicable and expressed in GJ) allocated to all Transportation Facility Users at the relevant point during that Month; and

**MC** is the rate per month set out in Table 2, above, subject to escalation under clause 10.2.

## Annexure 1 – Gas Measurement

---

### Gas Measurement at Compressor Stations, Gas Heaters, Receipt Points and Delivery Points

#### 1 General

- 1.1** The Responsible Party for a Delivery Point or Receipt Point must provide and maintain, or ensure that there is provided and maintained, in satisfactory working order and condition at that Delivery Point or Receipt Point (as applicable) a measuring station with such meters, gauges and other equipment as will make possible the determination of the instantaneous, Daily and hourly quantities of Gas supplied at, or delivered to, that Delivery Point or Receipt Point. All equipment installed for these purposes must comply and be maintained in compliance with all applicable Laws and good high pressure Gas industry practices as applied by Reasonable and Prudent operators.

Subject to clause 3.1, the equipment must be capable of measuring data concerning quality, quantity and condition of Gas available for instantaneous transmission to the Service Provider's pipeline control centre. SCADA and communications equipment and protocols must be included and must be compatible with the equipment at that pipeline control centre.

---

#### 2 Standards

- 2.1** All fundamental constants, observations, records and procedures involved in determining and/or verifying the quantity and other characteristics of Gas supplied by Shipper to Service Provider and delivered by Service Provider to Shipper must, except as otherwise specified in this Annexure 1, be in accordance with such standards as are or may hereafter from time to time be approved and recommended by the American Gas Association and the International Organisation for Standardisation (as qualified by the requirements of all applicable Australian Standards, codes and regulations) or such standards as may be agreed in writing by the parties.
- 2.2** Measurement of the quantities of Gas supplied by Shipper and delivered by Service Provider must be computed in accordance with the methods prescribed in the standards agreed in this Annexure 1.

---

#### 3 Measuring and Recording Equipment

##### 3.1 Gas Chromatograph

The heating value and specific gravity of Gas must be measured by an on-line Gas chromatograph (or other means as agreed) located at each Receipt Point and each Delivery Point and designed to take a sample of Gas from the Receipt Point or Delivery Point no less frequently than every 5 minutes.

A sample probe will be used to extract the sample from the Facility and the dead volume between the line and the analyser will be minimised. Sample condensation will be prevented. The samples will be analysed in accordance with ASTM D1945 'Standard Method for Analysis of Natural Gas by Gas Chromatography', and the calculations for Gross Heating Value and relative density will be determined in accordance with ISO 6976 'Natural Gas – Calculation of Calorific Value, Density and Relative Density' and American Gas Association Report No 8 'Compressibility and Super compressibility for Natural Gas and other Hydrocarbon Gases'.

The Gas chromatograph will provide instantaneous outputs of dry Gross Heating Value in MJ/m<sup>3</sup>, real and ideal relative density, and compositions of inerts.



The Gas chromatograph will be factory tested and calibrated using a certified natural Gas gravimetric standard and will perform with an accuracy of  $\pm 0.08$  MJ/m<sup>3</sup> for Gross Heating Value and  $\pm 0.003$  for relative density. The Gas chromatograph will include the facility for recalibrating itself automatically against a certified calibration Gas no less frequently than required by Law (where the obligation is set out under applicable Law) or otherwise at a frequency reasonably determined by Service Provider.

Gas chromatographs are not required at Compressor metering stations, Gas Heater metering stations or Delivery Points at which the flow rate does not exceed 1TJ per Day. Heating values, densities and other data required in the determination of Gas consumption at Compressor metering stations or Gas Heater metering stations will be estimated by Service Provider from data acquired at relevant Receipt Points and Delivery Points.

### **3.2 Flow Measurement Devices**

Metering systems at Receipt Points and Delivery Points will be constructed in compliance with all applicable Laws and in accordance with good high pressure Gas industry practice consistent with the standards of Reasonable and Prudent operation, and will have an error in volume of mass flow not exceeding  $\pm 0.7\%$  at any flow within the intended range of use.

- Orifice metering systems will be constructed and installed in accordance with the provisions of American Gas Association Report No.3.
- Turbine metering systems will be constructed and installed in accordance with the provisions of American Gas Association Report No.7.
- Positive displacement metering systems will be constructed and installed in accordance with the provisions of ANSI B109-3.
- Ultrasonic metering systems will be constructed and installed in accordance with the provisions of American Gas Association Report No. 9.
- Other metering systems will be constructed and installed in accordance with good pipeline engineering practice and established industry standards.

Metering systems at Compressor metering stations or Gas Heater metering stations must have an error not exceeding + or – 2% in volume or mass at any flow within the intended range of use.

### **3.3 Differential Pressure Measurement for Orifice Metering**

Differential pressure will be measured using microprocessor based ‘smart’ type transmitters, with 4-20 mA analog output signals temperature compensated to minimise the effect of inaccuracies due to ambient temperature changes. The uncertainty of transmitters will be a maximum of 0.1% or better of the calibrated range. Calibrated ranges will be selected to minimise the uncertainty of readings. The Responsible Party may install high and low pressure differential pressure transmitters based on turn down requirements of metering. If fitted, the Responsible Party must ensure that the appropriate transmitter is automatically selected for flow calculations.

### **3.4 Pressure Measurement**

Pressure will be measured using microprocessor based ‘smart’ type transmitters, with 4-20 mA analog output signals temperature compensated to minimise the effect of inaccuracies due to ambient temperature changes. Uncertainty of transmitters will be a maximum of  $\pm 0.1\%$  of the calibrated range. Calibrated ranges will be selected to minimise the uncertainty of readings.

### 3.5 *Temperature Measurement*

The temperature transmitter uncertainty will be a maximum of  $\pm 0.1\%$  of the calibrated range and the calibration range will be selected to minimise the uncertainty of readings.

### 3.6 *Flow Calculations*

Instantaneous values for at least the flowing inputs and outputs will be recorded and available for display from SCADA trends:

Inputs	Outputs
Differential pressure (high) (orifice meter)	Differential pressure (orifice meter)
Differential pressure (low) (orifice meter)	Pressure
Pressure	Temperature
Temperature	Density
Relative density (ideal)	Instantaneous volumetric flow (corrected and uncorrected)
Relative density (real)	Cumulative volumetric flow (corrected and uncorrected)
Carbon dioxide	Instantaneous energy flow
Nitrogen	Cumulative energy flow
Dry Gross Heating Value (real)	Instantaneous mass flow (ultrasonic meter)
Frequency (turbine meter)	Cumulative mass flow (ultrasonic meter)
Pulse count (positive displacement meter) (cumulative)	Control valve position
	Gas quality

Flow calculations will be based on input data for calculation factors, constants and Standard Temperature and Pressure as well as fall back values for out of limit input signals and alarm outputs. Configuration data will be available on a local display. The flow calculation input and output circuits and central processing unit will not increase the uncertainty of any measurement or calculation by more than  $\pm 0.1\%$  of the range of that measurement or calculation.

---

## 4 **Determinations**

### 4.1 *Volumetric Determination*

Volumetric flow rate in cubic meters per hour (m<sup>3</sup>/hr) will be calculated by a flow computer from flow meter signals, associated instruments and density and composition signals from an on-line Gas chromatograph. The volumetric flow rate will be continuously recorded and integrated.

All measurements, calculations and procedures used in determining volume, except for the correction for the deviation from the Ideal Gas Law, will be made in accordance with the instructions contained in:

- AGA 3 for the Orifice Plate Metering Systems;
- AGA 7 for Turbine Metering;
- ANSI B109-3 for Positive Displacement (PD) Metering;
- AGA 9 for Ultra Sonic Metering; and

- relevant industry standards and such other standards as may be specified by Service Provider for any other metering system,

together with all presently existing supplements and appendices to those reports or any revisions made to the reports which the parties agree will apply to Shipper's OTSA.

Those instructions will be converted where necessary for compliance with Australian Standard AS1000 'The International System of Units (SI) and its Application', the Commonwealth National Measurement Act 1960 and regulations under that Act and the Australian Gas Association publication 'Metric Units and Conversion Factors for use in the Australian Gas Industry'.

The correction for deviation from the Ideal Gas Law will be determined from the data contained in AGA 8, or any revision of that report which the parties agree will apply to Shipper's OTSA. The compositional data used in these calculations will be primarily derived from the on-line Gas chromatograph.

#### **4.2 Energy Flow Rate**

The energy flow rate will be calculated by the flow computer in GJ per hour (GJ/hr) from the product of Gross Heating Value and the volumetric flow, all at Standard Temperature and Pressure. The heating value will be continuously derived from the same on-line Gas chromatograph used for determining the relative density and composition used in the volumetric flow calculation. The energy flow rate will be recorded and continuously integrated.

---

## **5 Testing and Verification of Measuring Equipment Accuracy**

### **5.1 Periodic Tests**

The accuracy of the measuring equipment at each Receipt Point and each Delivery Point must be verified once every 3 months or as otherwise agreed and at other times upon request of a party. The Responsible Party must give the other party notice of the time of such tests of meters sufficiently in advance of the holding of the test that the other party may, if it desires, have representatives present. Such tests and adjustments must be made in the presence of representatives of the Responsible Party and if required by the other party in the presence of representatives of the other party.

### **5.2 Special Tests**

Where a party gives verbal notice to the other (to be confirmed in writing as soon as reasonably practicable) that it has reason to believe that any measuring equipment may not be within the degree of tolerance specified for equipment in this Annexure 1, then notwithstanding the provisions of paragraph 5.1, the Responsible Party must as soon as reasonably practicable carry out a test upon that measuring equipment. The other party must reimburse the Responsible Party for the cost of any tests (other than the periodic tests set out in paragraph 5.1) carried out at that other party's request unless it is shown from the results of such tests that the equipment being tested is not operating within the permissible limits of tolerance set out in this Annexure 1.

### **5.3 Chromatographs**

When a test reveals that the heating value measured by the Gas chromatograph is in error by 0.5 per cent or less it will be deemed to be accurate but must be adjusted as soon as possible to eliminate the error that does exist.

#### **5.4 Other Measuring Equipment**

All other items of measuring equipment referred to in paragraph 3 of this Annexure 1 must be tested for accuracy of measuring and recording of their respective values over their design range of operation using American Gas Association procedures or such other procedures as agreed to by the parties for determining their accuracy.

Following all tests, measurement equipment will be adjusted to eliminate all errors found.

#### **5.5 Tolerance**

If the values recorded by any inaccurate measuring equipment have been used in the calculation of Gas quantity supplied by Shipper to Service Provider or delivered by Service Provider to Shipper then the quantity calculated for the Day immediately preceding the Day of discovery of the inaccuracy or inaccuracies will be compared with the quantity recalculated for the same Day using corrected and accurate values from the measuring equipment tested. If the difference in the quantity so calculated and recalculated is 2% or less of the first of these quantities then all readings of such measuring equipment since the previous test thereof will be considered correct for such period but all calculations from the Day of the current test onwards to the date of the next test must use the measurements and recordings of the measuring equipment tested and corrected. The value of 2% for recalculation of quantity can be altered by mutual agreement between the parties if operating experience indicates this tolerance to be unacceptable to both parties.

#### **5.6 Correction Of Earlier Readings**

If the limits of errors as set out in paragraph 5.5 are exceeded then any previous readings of such measuring equipment must be corrected for any period of inaccuracy which is definitely known or agreed upon and the quantities for such period must be corrected by recalculation using the corrected readings provided that the period for which such correction will apply must not extend back over a period further than the date of the previous test.

If the period of inaccuracy is not definitely known or agreed upon then the correction of the quantities must be calculated for the period elapsed since the Day of the previous test of the inaccurate measuring equipment but the measure of correction will be half of the extent of the inaccuracy discovered at the test showing the same.

Where quantities are corrected pursuant to this paragraph 5.6, the corrected figure or figures will be regarded as the quantity delivered during the period of correction.

#### **5.7 Failure Of Measuring Equipment**

If for any period of time any measuring equipment fails to make any measurement or record necessary for ascertaining or computing the quantity supplied or delivered during that period so that the quantity cannot be ascertained or computed from the reading (if any) of such measuring equipment the quantities supplied or delivered during such period of failure must be estimated as nearly as reasonably possible by using the first of the following methods which is feasible:

- by using the registration of any check measuring equipment if such measuring equipment has been installed and is being operated in such a manner that the correct measurement of the quantity of Gas during the period of the failure can be reliably determined from the check measuring equipment;
- by using all reliable data available relating to the period of the failure of the measuring equipment;

- by making the appropriate correction if the deviation from the accurate reading is ascertainable by calibration test or mathematical calculation; and
- by estimating the quantities delivered from deliveries during preceding periods under similar conditions when the measuring equipment was registering accurately.

#### **5.8 Certified Inspection Report**

The Responsible Party must deliver to the other party within a reasonable time after the cleaning, installing, changing, repairing, inspecting, calibrating or adjusting of any of the measuring equipment for which it is the Responsible Party a certified inspection report for that equipment.

---

### **6 Multiple Shippers**

Where Shipper and one or more other Transportation Facility Users are entitled to use a Receipt Point or Delivery Point, those other Transportation Facility Users are entitled to attend tests of the measuring equipment at the Receipt Point or Delivery Point and Service Provider may provide records, charts and reports relating to that measuring equipment to those Transportation Facility Users (including where Shipper is the Responsible Party for the Receipt Point or the Delivery Point).

