Circular No.: IGX/MO/169/2025 30th January 2025

COMMENCEMENT OF TERM AHEAD –
3-MONTH AND 6-MONTH CONTRACTS FROM 3rd FEBRUARY 2025

Hon'ble Petroleum and Natural Gas Regulatory Board (PNGRB) through its order dated January 22, 2025, in the matter of public notice vide ref. no. PNGRB/Fin/9-GasEx(2)/2021, granted approval for introduction of Term-Ahead Contracts at Gas Exchange for 3-Months and 6-Months contract durations (collectively referred to as Long Duration Contracts (LDCs)).

Accordingly, IGX is pleased to start trading in LDC Contracts from 3rd February 2025.

The terms and conditions governing the trading of LDCs are detailed in the PNGRB approved Market Rules, which are available on our website link www.igxindia.com/documents/market-rules-and-byelaws as well as in the attachment accompanying this circular.

IGX wishes all the best to the Participants and look forward towards a successful endeavor together.

For and on behalf of

Indian Gas Exchange Limited

(Sd/-)
Mritunjay Srivastava
Vice President
(Regulatory and Surveillance)

Contents

1. INTRODUCTION

1.1 This Circular is issued for 3-Month and 6-Month Contracts and is in accordance with PNGRB approved IGX Market Rules (Market Rules) and the Contract Specifications set forth in Chapter 14, Annexure A-8 (hereinafter referred to as "Contract Specifications"). Members are advised to review the Contract Specifications in their entirety prior to acting upon this Circular.

1.2 This Circular has effect only for the purposes set out in the Market Rules including Contract Specifications, and the Market Rules prevail over these Circulars to the extent of any inconsistency.

1.3 Terms defined in the Market Rules have the same meaning in this Circular, unless otherwise specified in the Circular. Terms that are capitalized, but not defined in this Circular, have the meaning given in the Market Rules.

1.4 This Circular is to be read in conjunction with the following documents, which also provide essential background information relevant hereto:

a) PNGRB (Gas Exchange) Regulations 2020, and further amendments;
b) IGX Bye-Laws;
c) IGX Market Rules;
d) Membership registration documents viz., Membership Undertaking, Membership Form, Board Resolution/Authorization Letter and KYC documents;
e) Non-Cash collaterals like Bank Guarantee/LC/SBLC;
f) Margin Undertaking; and
g) User Guide.

1.5 All existing Members and Clients registered in the existing Pipeline Natural Gas Market (PNG) Segment are eligible to participate in trading under the LDCs without the requirement of any additional Admission Fees, Annual Fees, or Security Deposit. Trades executed in LDC Contracts are non-transferrable.

2. BIDDING, TRADING AND PRICE DISCOVERY

Prior to proceeding with this section, Members are advised to note the following clauses of Contract Specifications:

a) Clause 1: Basic Parameters of Contract Specifications
b) Clause 2: Bidding and Trading Mechanism
c) Clause 3: Price Discovery Mechanism

2.1 Contracts availability and Trading Timelines: -

Four series of 3-Month Contracts shall be available for trading in the current month ('M') across all four benchmarks, namely JKM, WIM, Dated Brent, and GIXI. The delivery tenures for each series shall be as follows:

a) 1st Series: From M+1 month to M+3 month;
b) 2nd Series: From M+2 month to M+4 month;
c) 3rd Series: From M+3 month to M+5 month;
d) 4th Series: From M+4 month to M+6 month.

Only one series of 6-Months Contract shall be available for trading in the current month ('M') across all four benchmarks, namely JKM, WIM, Dated Brent, and GIXI. The delivery tenure for this series shall be from M+1 month to M+6 month.

Trading window for the above Contracts will be available as below -

a) Trading begins: First trading day of the current month ‘M’
b) Trading ends: Last trading day of the current month ‘M’.

Trading timelines will be from 10:00 AM to 2:00 PM on Monday to Friday. Members will be permitted to place, modify or cancel their bids during the designated bidding hours. In case any bid is received/cancelled/ modified in the last 5 minutes of market closure, the market time will be extended by 15 minutes from the scheduled closure time. Such 15-minute extension will be done iteratively every time a bid is received/cancelled/modified within the last 5 minutes before scheduled closure. Such extensions will be allowed for a maximum period of up to 1 hour not exceeding 03:00 PM.
Exchange may intimate about special trading sessions through Circular.

2.2 Description of Delivery Points – For Delivery Points - Gadimoga, KG Basin, and Mallavaram, trades shall be conducted subject to gas price ceiling notified by the Petroleum Planning and Analysis Cell (PPAC), herein referred to as "Ceiling Price Gas."
Trades conducted at all other Delivery Points, where no gas price ceiling is applicable, shall be referred to as "Free Market Gas."
The detailed list of Delivery Points where Contracts will be available for trading on any given trading day is provided under **Annexure 1**. Exchange may intimate about new Delivery Points and any special conditions on trades through Circular.

2.3 Description of Contract codes - The Contracts shall be distinguished based on Contract codes as below –

a) Three-Months Contract:
3M-<Index>-<BidPara>-<DelP>-<MMM[1]/MMM[2]>

b) Six-Months Contract:
6M-<Index>-<BidPara>-<DelP>-< MMM[1]/MMM[2]> where,

3M and 6M – 3-Months and 6-Months Contracts;
Index – Either of JKM/WIM/BRENT/GIXI;
BidPara – Bid Price in USD/MMBtu or INR/MMBtu or %;
Delp: Delivery Point;
MMM[1]/MMM[2] – Delivery start and end Month.

Index prices used for trading will be as below –

Index Price (Index)	Contract Price	Bid/Trade Price Parameter	Minimum Ticker size
Index 1 - JKM Linked Price, Bid at Variable ‘P’	JKM ± P	P (in $/MMBtu)	0.01 $/MMBtu
Index 2 - WIM linked price, Bid at Variable ‘P’	WIM ± P	P (in $/MMBtu)	0.01 $/MMBtu
Index 3 - Dated Brent linked price, slope ‘S’ fixed, Bid at Variable ‘P’	%S of Brent Price ± P	P (in $/MMBtu)	0.01 $/MMBtu
Index 4 - Dated Brent linked price, Bid at slope ‘S’, constant P fixed	%S of Brent Price ± P	%S	0.01 %
Index 5 - GIXI linked price, Bid at Variable ‘P’	GIXI ± P	P (in INR/MMBtu)	1 INR/MMBtu

Table 1 – Indices for LDCs

The trading calendar for the month of February is available under **Annexure 2**.

2.4 Other Trade Parameters

a) Lot Size of Bids: - Members may submit bids to buy or sell in multiples of one (1) Lot, where one (1) Lot is equivalent to 50 MMBtu/day.
b) Price Tick –
   i. For ‘JKM’, ‘WIM’ and ‘Dated Brent’ linked Contracts where price is bid parameter - US$ 0.01/MMBtu
   ii. For Dated Brent’ linked Contracts where slope is bid parameter - 0.01%.
   iii. For ‘GIXI’ linked Contracts - INR 1/MMBTU
c) Bid Price and Trade Price on GCV basis
d) Bid quotation at Delivery Point exclusive of taxes

3. RISK MANAGEMENT

Margin Methodology: The Exchange will require Members to deposit margins for all trades executed on the Exchange, to be cleared and settled by its Clearing House. The Exchange will accept cash, and non-cash margins, viz. letters of credit ('LC'), standby letter of credit ('SBLC') and Bank Guarantee ('BG') as margins issued by a bank that is approved by the Exchange and that are in the form approved by the Exchange. The list of approved banks and the required formats for such non-cash margins are available at https://igxindia.com/participation/other-documents. Any non-cash collateral deposited with the Exchange should have a minimum claim period of 15 days after the Contract end date including the Recovery Period. The following sections detail the specific margin requirements for Members:

3.1 Pre-Trade Margin:

Before proceeding with this section on Pre-Trade Margin, Members are advised to review the following documents:

a) Market Rules - Contract Specifications, Clause 4.2.1 (Pre-Trade Margin); and

b) Section 3.1 of the Explanatory Note (Margin and Settlement Procedure).

Pre-Trade Margin will be calculated as below:

i. For 3-Months Contract = 3% of Bid Value in Cash/Noncash from Seller and Buyer
$= 3\% \times M_P \times B_Q \times D_D$

ii. For 6-Months Contract = 2% of Bid Value in Cash/Noncash from Seller and Buyer
$= 2\% \times M_P \times B_Q \times D_D$

where, B_Q = Bid Quantity per day, in MMBtu
D_D = No. of delivery days in a Contract
M_P = Reference Margin Price (M_P). Reference Margin Price (M_P) codes for trade month February 2025 is attached at **Annexure 3**, which will be used to calculate Pre Trade Margin. Going forward, these codes will be provided in monthly Trading and Settlement Calendar.

3.2 Post-Trade Margin:

Post-Trade Margin: Post execution of trade, Members will be required to pay the Post-Trade Margin. The Post-Trade Margin shall consist of the following components:

a) Contract Performance Margin (CPM);
b) Payment Security Margin (PSM);
c) Additional Margin (if applicable).

The Post-Trade Margin may be deposited either in cash or non-cash form.

Before proceeding with this section on Post Trade Margin, Members are advised to review the following documents:
a) Market Rules - Contract Specifications, Clause 4.2.2.1 (Contract Performance Margin);
b) Market Rules - Contract Specifications, Clause 4.2.2.2 (Payment Security Margin); and
c) Section 3.2 of the Explanatory Note (Margin and Settlement Procedure).

Below will be the Post Trade Margin –

Contract Type	Contract Performance Margin (CPM)		Payment Security Margin (PSM) – Ex-Hub Transaction		Payment Security Margin (PSM) – Delivered Transaction	
	in % trade value	equivalent Gas Days	in % trade value	equivalent Gas Days	in % trade value	equivalent Gas Days
3-Months: Seller	15% of trade value	~14 Gas Days	-	-	-	-
3-Months: Buyer	15% of trade value	~14 Gas Days	26% of trade value + tax	~24 Gas Days	26% of trade value + tax + transport	~24 Gas Days
6-Months: Seller	10% of trade value	~18 Gas Days	-	-	-	-
6-Months: Buyer	10% of trade value	~18 Gas Days	13% of trade value + tax	~24 Gas Days	13% of trade value + tax + transport	~24 Gas Days

Table 2 – Post Trade Margin Structure

Following are further details on –

a) Contract Performance Margin (CPM) – Member will have to deposit the CPM by whichever occurs first: within 2 working days after trade (T+2) or 2 days before the delivery start date. Furthermore, depending on the type of Contract, CPM will be derived on trade date basis as below:

Contract Price	Contract Performance Margin = 15%(3-Months) / 10%(6-Months) of Trade Value
JKM ± P	= (15% in 3-Months & 10% in 6-Months) * (M_{PJKM} ± P) * T_Q* D_D
WIM ± P	= (15% in 3-Months & 10% in 6-Months) * (M_{PWIM} ± P) * T_Q * D_D
GIXI ± P	= (15% in 3-Months & 10% in 6-Months) * (M_{PGIXI} ± P) * T_Q * D_D
%S of Brent Price ± P	= (15% in 3-Months or 10% in 6-Months) * (%S of M_{PBRENT} ± P) * T_Q * D_D

Table 3 – Contract Performance Margin Structure

where, T_Q = Trade Quantity per day, in MMBtu
D_D = No. of delivery days in a Contract
M_P = Reference Margin Price (M_P), Reference Margin Price (M_P) codes for trade month February 2025 is attached as Annexure 3, which will be used to calculate Contract Performance margins.

b) Payment Security Margin (PSM) – PSM will have to be deposited by Buyer members at least two days before the delivery start date, where following types of margins will be required from Buyers -

i. PSM for Commodity and Tax – Depending on the type of Contract, the PSM shall be derived on trade date basis as below: -

Contract Price	Payment Security Margin = 26%(3-Months) / 13%(6-Months) of Trade Value
JKM ± P	= (26% in 3-Months & 13% in 6-Months)*(M_{P1JKM} ± P)*(1+Tax%)*T_Q*D_D
WIM ± P	= (26% in 3-Months & 13% in 6-Months)*(M_{P1WIM} ± P)*(1+Tax%)*T_Q *D_D
GIXI ± P	= (26% in 3-Months & 13% in 6-Months)*(M_{P1GIXI} ± P)*(1+Tax%)* T_Q*D_D
%S of Brent Price ± P	= (26% in 3-Months & 13% in 6-Months) * (%S of $M_{P1BRENT}$ ± P)*(1+Tax%) *T_Q*D_D

Table 4 – Payment Security Margin Structure

where, T_Q = Trade Quantity per day, in MMBtu

D_D = No. of delivery days in a Contract

M_{P1} = Reference Margin Price (M_{P1}). Reference Margin Price (M_{P1}) codes for trade month February 2025 is attached as Annexure 4, which will be used to calculate payment security margins. Going forward, these codes will be provided in monthly Trading and Settlement Calendar.

ii. PSM for Transport in Delivered Transactions – In case of Delivered transactions, an additional transport margin will be required from Buyer Members, calculated as below:
PSM for Transport = (26% in 3-Months & 13% in 6-Months) * Transport Tariff including tax * T_Q*D_D

c) Additional Margin for VAT – In case of Ceiling Price gas Contracts, the Buyer member will have to deposit additional VAT margin which will be the difference between the full tax rate (without concession) and the tax rate availed by the Buyers through C or I Form. The Additional VAT margin must be deposited by the Buyer Member at least two (2) days before the delivery start date in the form of cash or non-cash collaterals, such as BG, LC, or SBLC.
In the case of Free Market Gas Contracts, the Exchange may collect the necessary tax amount (in cash or non-cash form) in addition to the Post Trade Margin, which will be communicated to Members separately.

3.3 Mark-to-Market settlement process: Members are advised to refer to the following documents for detailed guidelines on the Mark-to-Market (MtM) settlement process:
a) Market Rules – Contract Specifications, Clause 4.3.1 (Mark-to-Market); and
b) Section 3.4 'Mark-to-Market Settlement' of the Explanatory Note.

Each Friday, the Exchange shall provide MtM reports to the Buyer and Seller Members. In the event that additional margin is required, both Buyer and Seller Members shall be required to furnish the same accordingly.

3.4 Release of Post-Trade Margin: -

The release of Post Trade Margin for each Contract shall be governed by the type of collateral (cash or non-cash), the duration of the Contract, and other relevant factors, as detailed below:

a) Release of Contract Performance Margin (CPM) - Exchange will be releasing CPM on a weekly basis as per the timelines mentioned in Market Rules and Section 3.2 of the Explanatory Note titled 'Contract Performance Margin'.

b) Release of Payment Security Margin (PSM) – Exchange will reconcile the Contracts upon completion of delivery to close the contractual obligations of Sellers and Buyers, hereinafter referred to as the 'Final Settlement'. Final Settlement shall be conducted by the Exchange within four (4) bank working days (excluding all Saturdays) from the receipt of the Seller's invoice and quantity reconciliation, provided that the invoicing is correct, and sufficient funds have been made available by the Buyer and Seller Members/Direct Clients. Upon Final Settlement, the PSM shall be released to the Buyer Members.

c) Release of Additional VAT Margin - Once the C Form or I Form is issued by the Buyer and receipt is confirmed by the Seller, the withheld amount of tax will be released to the Buyer within 2 bank working days.

4. CLEARING AND SETTLEMENT

4.1 Taxation: -

a) Members are advised to refer to Clause 7 on Taxation in the Contract Specifications for detailed provisions related to taxation.

b) In continuation with Clause 7.2 of the Contract Specifications, and for the avoidance of doubt, it is expressly clarified that the Buyer shall be solely responsible for paying all taxes, whether current, past, or future, that are associated with or arise from the sale, purchase, and delivery of gas under any Contracts traded on the Exchange. Such taxes shall include, but are not limited to, all taxes that are paid, levied, accrued, payable, assessed, demanded, or imposed through interim orders, provisional assessments, revisional assessments, judicial or executive reviews, final assessments, or any other orders issued by Governmental Authorities, courts, or judicial bodies.
Furthermore, the Buyer explicitly assumes full responsibility for all associated fines, penalties, and interest on taxes originally required to be paid by Sellers under any order from Governmental Authorities, courts, or judicial authorities, thereby establishing a comprehensive and unambiguous framework for tax liability and financial accountability. The Exchange retains the right to recover from the Buyer all taxes, costs, and expenses incurred by the Exchange or Seller in connection therewith.

c) In continuation with Clause 7.5 of the Contract Specifications, in case of non-submission of documents required by Sellers like Form C within a period of 90 days from end of each financial quarter to which the transaction pertains, the Buyer member has to deposit with Exchange the necessary margin amount (in cash/ non-cash form) which shall not be less than the differential amount (i.e., the amount of concession availed by the Buyer through Form C or I).

d) The Seller shall send the Tax invoice of the commodity directly to the Buyer and shall share one copy of the same with the Exchange. Based on receipt of the copy of invoice, the Exchange shall release the tax amount to the Seller.

e) If the Buyer fails to submit the Form C within the stipulated time period as mentioned above, or in case of rejection of Form C by the assessing tax authority on any later date, Exchange will recover the differential tax amount from Buyer member along with applicable penalties and interest and pay it to the Seller.

f) For trades happening at Gadimoga and Sellers are RIL-BPEAL, nil Withholding Tax (WHT) is applicable for BPEALs share of revenue (nil WHT certificate will be shared with Buyers). An additional 0.1% TCS would be added to the Seller's invoice value for BPEAL's share.

4.2 Clearing and Settlement Process: - Members are advised to refer to the following clauses for detailed provisions on the Clearing and Settlement Process**:**

a) Contract Specifications- Clause 6.1 on Clearing
b) Contract Specifications- Clause 6.2 on Settlement Price
c) Contract Specifications- Clause 6.3 on Pay-In and Pay-Out Settlement Process. In continuation to Clause 6.3.2 –

Conversion Rate means the average (as rounded off to two decimal places) of the TT (Telegraphic Transfer) buying and selling rates of exchange for converting USD to INR, as quoted by SBI on last day of fortnight basis or else, provided that: (a) if SBI releases more than one quote on the applicable day, the first quote of the day shall be used; and (b) if such rate is not available as to any day, the Conversion Rate available for the last quoted day preceding such day shall be used. Further, SBI Forex Card Rates for transactions above Rs 10 Lakhs shall be considered for the purpose of Conversion Rate. In case multiple slabs for transactions are available, then the highest transaction slab shall be considered for Conversion Rate.

5. DELIVERY

Before proceeding with this section, Members are advised to refer to Clause 5 of the Contract Specifications on Delivery for detailed provisions and requirements.

5.1 Capacity Booking Process –

a) CT Booking Responsibility -

In case of Ex-Hub transactions, Buyer will book CT against the Daily Trade Quantity (DTQ) across the connected pipeline(s) immediately after the trade execution.

In case of Delivered transactions, the Exchange will facilitate the CT booking against the DTQ and act on behalf of the Buyer for gas transportation, but the Buyer remains responsible to coordinate with both Exchange and the Transporter for all transport related matters like timely CT booking, daily nominations, scheduling and daily imbalance management etc. Any transportation charges or penalty charges claimed by the Transporter will be paid by the Buyer to the Exchange, where the Exchange will then pass these charges to the Transporter. For avoidance of doubt, it is expressly clarified that the Buyer is solely responsible for paying all transport related charges as mentioned in the respective Gas Transmission Agreements, whether current, past, or future, that are associated with or arise from transportation of Exchange-traded Contracts.

b) Trades with Delivery Commencing Within 3 Working Days-

In case of Ex-Hub transactions, Buyer will be required to have CT booking in place at time of bidding.

In Delivered transactions, Buyer and/or its member require pre-confirmation from the Exchange and the concerned Transporter(s) for CT booking before bidding.

In both cases, the Daily Contract Quantity[1] 'DCQ' will be equal to the Daily Trade Quantity 'DTQ' and the trade cannot be cancelled due to any capacity denial by the Transporter. Also, due to reasons solely attributable to the Buyer, if the CT is not booked or partially booked, then the Buyer Member has to compensate the Seller Member as per the compensation provisions mentioned in Clause 8.2 and Clause 8.3 of the Contract Specifications (Annexure A-8) of IGX Market Rules.

c) Trades with Delivery Commencing Beyond 3 Working Days - Buyer will make arrangement for CT booking immediately after trade for the entire delivery period.

If the Transporter denies the CT application, due to Transporter related reasons as per Clause 10.1.5 of Market Rules, then the trade will be null and void, with no further obligations on either party. However, in such cases, the Buyer will notify the Exchange of this denial immediately on same day, failing which, they will compensate the Seller Member as per the compensation provisions mentioned in Clause 8.2 and Clause 8.3 of the Contract Specifications (Annexure A-8) of IGX Market Rules.

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[1] Maximum contracted quantity that can be supplied by Seller and offtake by Buyer on daily basis as per the terms of Market Rules and Circular(s) of Gas Exchange.

If the CT is not booked or partially booked, due to reasons solely attributable to the Buyer, then the Buyer Member will compensate the Seller Member as per the compensation provisions mentioned in Clause 8.2 and Clause 8.3 of the Contract Specifications (Annexure A-8) of IGX Market Rules.

The approved CT quantity, up to the DTQ, will be referred to as the Daily Contract Quantity (DCQ). Unless the Buyer notifies the Exchange by 12 noon on the working day before the gas delivery start date about full or partial trade cancellation, the CT will be deemed to be in place for the executed trade, and DCQ will be equal to DTQ. The Exchange will schedule the quantity equivalent to DCQ for supply or offtake by the Seller or Buyer, as applicable, at the Delivery Point.

5.2 Nomination and Scheduling Procedure at Delivery Point -

a) The Buyer must submit the CT copy or CT details of the pipeline connected to the Delivery point to the Exchange and to the Seller before start-up of gas supplies, otherwise the Daily Nominated Quantity[2] (DNQ) of Buyer for the respective Gas Days shall be considered as Zero.

b) DNQ by the Buyer and the Seller's Confirmation Quantity[3] (DSQ) by the Seller on each Gas Day shall be equal to the respective DCQ in normal circumstances.
In case of any reduction in gas requirements, the Buyer shall no later than 12:00 hours of previous day (D-1), may intimate the Exchange and Seller to modify DNQ. Any revised DNQ received after the above timeline will be accepted subject to Seller's approval. The Buyer can nominate quantity more than DCQ subject to acceptance by Transporter and Exchange. In case, DNQ by Buyer is less than the DCQ, Seller will schedule the quantity equal to the reduced DNQ for supply at the Delivery Point. In the event Buyer nominates a quantity more than DCQ, then such request of Buyer for higher nomination is subject to Seller's acceptance. Seller will send such acceptance (in writing) to both Buyer and EXCHANGE latest by 13:00 hours on D-1 failing which Buyer's request for increase in DCQ will be rejected. Buyer may be required to pay additional post trade margins for any quantity more than DCQ. If the delivery start date of any Contract occurs immediately after the trade date, the DNQ for that delivery start date will be considered same as DCQ.

c) In case of reduction in gas supplies at facilities of the Seller, Seller will inform the revised Confirmation Quantity (DSQ) to the Buyer and Exchange immediately. Seller will supply gas at the Delivery Point as per the daily Scheduled Quantity (SQ)[4].

d) In case of any increase in gas requirements arising because of negative imbalance in the pipeline, DNQ by Buyer can be more than the DCQ. Seller has the right to accept or reject the request from Buyer regarding the additional nomination quantity over and above DCQ.

5.3 Allocation Procedures and treatment of over-supply at Delivery Point:

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[2] Request for quantity of gas by Buyer for offtake at Delivery Point on daily basis.
[3] Quantity of gas confirmed by the Seller for supply at the Delivery Point on daily basis.
[4] Lower of DNQ, SCQ and quantity scheduled or confirmed by the Transporter connected to the Delivery Point.

a) By 13:00 hours of next day of Gas Delivery Day (D+1), Seller will inform Buyer of the Allocated Quantity[5] (AQ) at the Delivery Point with delivery proof. In case, Seller does not inform the AQ by the above timelines, proof of delivery from Buyer or its Transporter shall be considered final for the determination of AQ.

b) Buyer has an obligation to pay against the total allocation quantity supplied by the Seller at the Delivery Point at the corresponding Settlement Price.

c) Any quantity allocated over and above 105% of DSQ of any Gas Day shall be termed as "Extra Allocated Quantity" (EAQ).

d) Post receipt of information on EAQs, the DCQ of the following Gas Day(s) immediately following the date of receipt of information on EAQ shall be reduced by the quantity equal to the cumulative EAQs. In case of any residual EAQs post adjustment of above mentioned DCQ, the DCQs of subsequent Gas Days shall be adjusted sequentially till the cumulative EAQs become Zero.

   Buyer will initiate the curing of positive imbalances on a priority basis in the pipeline arising because of EAQs in line with reduction of DCQ as mentioned in Clause 5.3(d). Seller will compensate Buyer for imbalance charges including taxes paid by Buyer arising because of supply of EAQs. The Buyer will make all efforts to minimize such imbalance charges. Buyer will submit the imbalance statement and transportation invoices along with detailed day-wise EAQ and imbalance curing to Exchange and Seller, no later than three working days from the date of respective fortnight transportation invoice. In case of any residual cumulative EAQ in the pipeline as positive imbalances post expiry of the CT period, the reconciliation of quantity will be done as per the provisions of respective GTA/Operating Code. Any direct loss including taxes attributed to Buyer because of the above reconciliation shall be compensated by Seller to Buyer.

5.4 Quantity Obligation on Buyer:

a) "**Take or Pay Quantity"** for any period refers to 85% of the sum of the DCQs for that Contract Quarter[6], minus any quantity that the Buyer could not offtake during the period for the following reasons:

   i. Any quantity of Gas up to DNQ for the relevant Gas Day that the Buyer could not offtake due to Force Majeure.
   ii. Any quantity of Gas up to DNQ for the relevant Gas Day where the Seller failed to make it available for delivery, unless such failure resulted from the Buyer's non-compliance with the IGX Bye-laws and Market Rules.
   iii. Any quantity up to DNQ for the relevant Gas Day that the Buyer rejected because it did not meet the Gas Specification.
   iv. Any quantity up to DCQ for the relevant Gas Day that the Buyer did not nominate because Extra Allocated Quantity had already been supplied by the Seller during the previous Gas Day.
   v. Any quantity up to DCQ for the relevant Gas Day that a Buyer did not nominate or schedule due to Planned Maintenance.
   vi. Any quantity up to DNQ for the relevant Gas Day that the Transporter(s) connected between Delivery point and Buyer's facilities, curtailed due to limitations at the Transporter's facility.

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[5] Actual quantity of gas supplied by the Seller to the Buyer against the trade executed on Gas Exchange.

[6] "Contract Quarter" means a period of three consecutive delivery months. For 3-Month Contracts, it covers M+1 to M+3, while 6-Month Contracts include two quarters: M+1 to M+3 and M+4 to M+6, where 'M' is the first delivery month.

b) **“Deficiency Quantity”** for any period is the positive difference between:
   i. the Take or Pay Quantity and
   ii. the Seller’s Allocated Quantity at the Delivery point.

c) **Additional Margin applicable on Buyer and Default Provision for Non-Submission –** For each month, Buyer will be required to make available the Additional Margin in the cash or non-cash form equivalent to the value of fortnightly Deficiency Quantity at the rate of Settlement Price for that Month, within two working days from the end date of the fortnight. Failure of the Buyer to make available such margin will trigger default provisions on them and compensation provisions to the seller as per Clause 8.2 and Clause 8.3 of the Contract Specifications (Annexure A-8) of IGX Market Rules.

d) Quarterly Deficiency Payment:

i. The Buyer is obligated, in each Contract Quarter, to take and pay for, or pay for if not taken, a quantity of Gas at least equal to the Take or Pay Quantity for that Contract Quarter.

ii. If the Buyer fails to take the Take or Pay Quantity in any Contract Quarter, they have to pay the Seller an amount for the relevant Quarterly Deficiency Quantity (calculated for quarter period under Clause 5.4(b) above), mentioned as Quarterly Deficiency Payment which will be calculated as: the Weighted Average Settlement Price[7] applicable during such Contract Quarter, multiplied by the Quarterly Deficiency Quantity for that Contract Quarter.

iii. Any additional margin held by the Exchange on behalf of the monthly Deficiency Quantity, as specified in Clause 5.4(c) above, will be returned by the Exchange after the payment of the Quarterly Deficiency Payment.

e) Make Up Gas:

i. Eligibility and Duration - Any quantity of Gas corresponding to the Quarterly Deficiency Quantity for which the Buyer has made a Quarterly Deficiency payment shall be considered as "Make Up Gas" accrued in the Contract Quarter in which the Quarterly Deficiency Quantity occurred.

ii. When a Buyer earns Make Up Gas rights in a Contract Quarter, they can claim credit for these quantities in subsequent quarter, but only after meeting that subsequent quarter's Take or Pay Quantity. The amount of Make Up Gas that can be taken in the subsequent quarter is limited to whichever is lower of: a) the remaining Make Up Gas balance at the quarter's start, and b) the positive difference between the Allocated Quantity and Take or Pay Quantity for that quarter. Once credit is received for Make Up Gas quantities, the Buyer's right to that gas expires.

iii. Pricing and Payment Structure - When taking Make Up Gas in any Contract Quarter, the Buyer has to first pay the payment obligations for current Contract Quarter and any other applicable delivery related charges. At quarter-end, the Buyer will receive a credit calculated by multiplying the Make Up Gas quantity by whichever is lower:

   1. The Weighted Average Settlement Price for the quarter when Make Up Gas was delivered, or

[7] "Weighted Average Settlement Price" is the volume-weighted average of daily settlement prices over the contract period, calculated in INR per MMBtu, where volume is daily contract quantity ‘DCQ’.

2. The Weighted Average Settlement Price previously paid for the Quarterly Deficiency Quantity that created the Make Up Gas right

For such Make Up Gas delivered, Buyer shall have no rights to any amount previously paid in respect of the Quarterly Deficiency Quantity above the Gas Price prevailing at the time the Make Up Gas is delivered.

f) Recovery Period:

i. Eligibility and Duration – If Make Up Gas remains unused at Contract end, a Recovery Period immediately following the end date of the Contract is granted which will be 10 days for 3-Months Contract and 15 days for 6-Months Contract. During Recovery Period, operational parameters like DCQ, DNQ will remain the same as it was during the contract period. All Gas supplied during the Recovery Period shall be Make Up Gas. During this period, Take or Pay Obligations are suspended while Seller's Liquidated Damages provisions remain applicable. The Recovery Period is not available if the Contract is terminated under Market Rules and Bye-Laws, and will end once all Make Up Gas is delivered by the Seller to the Buyer.

ii. Pricing and Payment Structure – During the Recovery Period, Buyer will pay for all gas delivered at the Settlement Price when the Gas is delivered, with Buyer paying through Fortnightly invoices. Buyer will then receive credits calculated as Make Up Gas quantity taken during the Recovery Period multiplied by the lower of:
1. Current Fortnight's Settlement Price and
2. Weighted Average Settlement Price previously paid in respect of the Quarterly Deficiency Quantity that gave rise to the Make Up Gas right. Credits will be applied in the same sequence as the Make Up Gas was accumulated.

iii. Limitations and Obligations: Buyers must nominate and take scheduled Make Up Gas, as Sellers will have no obligations for unscheduled or untaken quantities. All unused Make Up Gas rights expire after the Recovery Period with no refunds or adjustments for forfeited quantities. The Recovery Period automatically expires once all remaining Make Up Gas is delivered, with no further rights to take gas thereafter.

A detailed example is attached in **Annexure 5**.

E. Planned Maintenance –

a) "Planned Maintenance" will mean any maintenance activities scheduled at Buyer's Facilities, Sellers' Facilities or Transporter's Facilities in accordance with the requirements of any applicable equipment manufacturer or otherwise in accordance with the owner or operator of such facilities to act as a Reasonable and Prudent Operator, that may temporarily restrict capacity to consume, produce, deliver or transport Gas (as the case may be) in Buyer's Facilities, Sellers' Facilities or Transporter's Facilities. Buyer and Seller shall have the rights to reduce or make nominations/ scheduling up to zero MMBtu in case of Planned Maintenance of its facilities.

b) For 3-Months contract, there shall be no provisions of Planned Maintenance. For 6-Months contract, the Seller and Buyer may each designate up to 10 days of Planned Maintenance in a single period by informing the counterparty as well as Exchange 30 days in advance from the start date of Planned Maintenance. The Buyer's Take or Pay obligation quantity and Seller's LD obligations shall be reduced to the tune of reduction in nominated/ scheduled quantity from the DCQ on account of Planned Maintenance.

c) The Parties shall use all reasonable endeavours to synchronise Planned Maintenance among Buyer's Facilities, Transporter's Facilities and Sellers' Facilities.

E. Liquidated Damages (LD) on Seller: -

"Seller's Shortfall Gas Quantity" shall mean the positive difference between 85% of lower of DCQ and DNQ of each Gas Day and aggregate actual quantity delivered by the Seller at the Entry Point.

Provided that Seller's Shortfall Gas Quantity shall exclude quantities that Seller could not deliver due to the following reasons:

i. Any quantity of Gas not delivered by Seller due to Force Majeure event;
ii. The Buyer's failure to accept delivery of Gas tendered for delivery by the Seller in accordance with IGX Bye laws and Market Rule.

Liquidated Damage on Sellers shall be applicable for each Contract Quarter as well as for the recovery period calculated as mentioned below:

- For 3-Months Contract - Fifteen percentage (15%) of the Weighted Average Settlement Price for the Contract Quarter including Recovery Period multiplied by the Seller's aggregate Shortfall Gas Quantity for the contract period, and

- For 6-Months Contract - Ten percentage (10%) of the Weighted Average Settlement Price multiplied by the Seller's aggregate Shortfall Gas Quantity for the 1st Contract Quarter contract period and subsequently for the 2nd Contract Quarter including Recovery Period.

Additionally, Seller will pay the Buyer the positive difference between 90% of the summation of lower of DCQ and DNQ of each Gas Day & total Allocated Quantity of the contract period at the rate of the applicable tariff/s of the pipelines of the pipeline/s connected between the delivery point and Buyer's facilities, in which the capacity has been booked by the respective Buyer or Exchange. Seller will also be responsible for payment of imbalance charges arising because of Extra Allocated Quantities as mentioned in Clause 5.3(c) above.

F. Curing of Gas in Pipeline during and after Contract Period in case of Delivered Transactions:

a) On daily basis, the Buyer or its member must send all operational information (including regular and imbalance nominations etc.) required by the pipeline operator to cure the gas across the pipelines against the positive or negative imbalances, overrun and over-drawls etc. In case of any non-receipt of such information from Buyer, Exchange shall have the right to cure the gas in the connected pipeline/s as per the available information received from the pipeline operator/s. In case of any delay in receipt of relevant information from the pipeline operator/s related to curing of gas resulting into various charges like imbalances, overrun and over-drawl etc., the Buyer or its member shall be responsible for payment of the said charges.

b) In case of any remaining imbalances in the pipeline/s after the end of the CT period, Buyer shall cure such imbalance within three (3) days after the completion of the Contract Period.

c) In case of any negative imbalances lying in the pipeline post completion of CT period, the Buyer shall negotiate with the counter party Seller or new Seller about all the related the terms and conditions on its own and inform Exchange about the quantity of gas to be delivered at Delivery Point along with date of supply. Any charges claimed by transporter including but not limited to imbalance charges or any charges arising on account of failure of the Buyer shall be payable by Buyer to Exchange along with applicable taxes and duties. Exchange shall pass on such charges to the respective Transporter.

6. MEMBER COMMUNICATION

Exchange will provide the following trade, settlement, and delivery related reports to the Members through Member Portal and/or through SFTP and/or via e-mail.

i. Trade and Margin Report on trade date basis
ii. Mark to Market Report on weekly basis
iii. Provisional Fortnight Statement for Buyers on fortnight basis
iv. Final Fortnight Statement post completion of Fortnight settlement
v. Exchange Fees Invoices

For any assistance, all members may kindly contact on following numbers: -

1. **Membership |** igx-membership@igxindia.com | 0120-4648139/135
   Contact Person- Mr. Deepak Mittal (9810376897); Ms. Priyanshi Mangal (7290018102)

2. **Trading & Surveillance |** igx-surveillance@igxindia.com | 0120-4648149/150
   Contact Person-Mr. Deepak Mittal (9810376897); Mr. Subham Bharadwaj (7098384000)

3. **Margining and C Form |** igx-cns@igxindia.com | 0120-4648154/135
   Contact Person- Mr. Deepak Mittal (9810376897); Ms. Gunjan Bansal (7290097658)

4. **Clearing & Settlement |** igx-cns@igxindia.com | 0120-4648128/129/138
   Contact Person - Mr. Saroj Mohapatra (7799778252), Ms. Himashree Bole (7290097657), Mr. Vipin Taliyan (9716485433), Mr. Neeraj Bisht (8860835339)

5. **Delivery |** igxdelivery@igxindia.com | 0120-4648126/130/131
   Contact Person - Mr. Saroj Mohapatra (7799778252), Mr. Nilesh Gupta (9913570956), Mr. Vivek Bharadwaj (7339834551), Mr. Shaurya Tripathi (9910377366)

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7. Annexures

Annexure 1

Description of Delivery Points

#	Hub - State	Delivery Point Name	Delivery Point Code (DelP)	Gas Category	Location
1	Western - Gujarat	Dahej	DH	Free Market gas	PLL Dahej (Petronet LNG Terminal)
2	Western - Gujarat	Hazira	HZ	Free Market gas	Mora Delivery Point (Hazira LNG Terminal)
3	Western - Gujarat	Chhara	CH	Free Market gas	HPCL LNG Terminal connected to GSPL HP pipeline
4	Western - Maharashtra	Mhaskal	MS	Free Market gas	Interconnection point of GAIL's DUPL/DPPL and PIL - Kakinada to Bharuch Pipeline (PIL Pipeline) in Maharashtra at Mhaskal
5	Western - Gujarat	Suvali	SV	Free Market gas	Exit point of the facility at Suvali (Hazira) connecting with GSPL's Low Pressure Gujarat Gas Grid
6	Western - Gujarat	Jaya	JA	Free Market gas	Jaya gas field connected to South Gujarat main sub-network of GAIL's Gujarat Natural Gas Pipeline network
7	Eastern - Jharkhand	Bokaro	BK	Free Market gas	CBM block at Bokaro connected with GAIL's Jagdishpur -Haldia Bokaro-Dhamra Natural Gas Pipeline (JHBDPL)
8	Eastern - Jharkhand	Jharia	JH	Free Market gas	Jharia CBM block connected with GAIL's Jagdishpur -Haldia Bokaro-Dhamra Natural Gas Pipeline (JHBDPL)
9	Southern - AP	KG Basin	KG	Free Market gas	Any Tie-in point in the GAIL's KG basin Natural Gas p/l
10	Central – MP	Shahdol	SH	Free Market gas	Entry point into RGPL's Shahdol – Phulpur p/l.
11	Southern – AP	KG Basin	KC	Ceiling Price gas	Any Tie-in point in the GAIL's KG basin Natural Gas p/l
12	Southern – AP	Gadimoga	GC	Ceiling Price gas	Exit point of RIL's Gadimoga Terminal connecting with PIL's Pipeline
13	Southern – AP	Mallavaram	ML	Ceiling Price gas	Exit point of ONGC OGT connecting with PIL's Pipeline

Annexure 2

Trading Calendar February'25 for LDCs

#	Delivery Tenure	Index Price	Free Market Gas Category	Bid Parameter	Trading begins	Trading ends
1	3 Months	Index 1 – JKM Linked Price, Bid at Variable 'P'	4 Contracts: 1. 3M-JKM-P-DelP-MAR/MAY 2. 3M-JKM-P-DelP-APR/JUN 3. 3M-JKM-P-DelP-MAY/JUL 4. 3M-JKM-P-DelP-JUN/AUG	P (in $/MMBtu)	03-02-2025	28-02-2025
2	3 Months	Index 2 – WIM Linked Price, Bid at Variable 'P'	4 Contracts: 1. 3M-WIM-P-DelP-MAR/MAY 2. 3M-WIM-P-DelP-APR/JUN 3. 3M-WIM-P-DelP-MAY/JUL 4. 3M-WIM-P-DelP-JUN/AUG	P (in $/MMBtu)	03-02-2025	28-02-2025
3	3 Months	Index 3- Dated Brent linked price, slope 'S' fixed*, Bid at Variable 'P'	4 Contracts: 1. 3M-BRN-P-DelP-MAR/MAY 2. 3M-BRN-P-DelP-APR/JUN 3. 3M-BRN-P-DelP-MAY/JUL 4. 3M-BRN-P-DelP-JUN/AUG	P (in $/MMBtu)	03-02-2025	28-02-2025
4	3 Months	Index 4 – Dated Brent linked price, Bid at slope 'S', constant P fixed^	4 Contracts: 1. 3M-BRN-S-DelP-MAR/MAY 2. 3M-BRN-S-DelP-APR/JUN 3. 3M-BRN-S-DelP-MAY/JUL 4. 3M-BRN-S-DelP-JUN/AUG	%S	03-02-2025	28-02-2025
5	3 Months	Index 5 – GIXI	4 Contracts: 1. 3M-GIX-P-DelP-MAR/MAY 2. 3M-GIX-P-DelP-APR/JUN 3. 3M-GIX-P-DelP-MAY/JUL 4. 3M-GIX-P-DelP-JUN/AUG	P (in INR/MMBtu)	03-02-2025	28-02-2025

#	Delivery Tenure	Index Price	Free Market Gas Category	Bid Parameter	Trading begins	Trading ends
6	6 Months	Index 1 – JKM Linked Price, Bid at Variable ‘P’	6M-JKM-P-DelP-MAR/AUG-DelP	P (in $/MMBtu)	03-02-2025	28-02-2025
7	6 Months	Index 2 – WIM Linked Price, Bid at Variable ‘P’	6M-WIM-P-DelP- MAR/AUG-DelP	P (in $/MMBtu)	03-02-2025	28-02-2025
8	6 Months	Index 3- Dated Brent linked price, slope ‘S’ fixed*, Bid at Variable ‘P’	6M-BRE-P-DelP- MAR/AUG-DelP	P (in $/MMBtu)	03-02-2025	28-02-2025
9	6 Months	Index 4 – Dated Brent linked price, Bid at slope ‘S’, constant P fixed^	6M-BRE-S-DelP- MAR/AUG-DelP	%S	03-02-2025	28-02-2025
10	6 Months	Index 5 – GIXI	6M-GIX-P-DelP- MAR/AUG-DelP	P (in INR/MMBtu)	03-02-2025	28-02-2025

*For Index 3, fixed parameter ‘S’ will be informed through e-mail communication and TWS.

^For Index 4, fixed parameter ‘P’ will be informed through e-mail communication and TWS.

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Annexure 3

Index codes to calculate Reference Margin Price (M_P) for Trade Month February 2025

#	Reference Margin Price, M_P	Trading date	3-Months - MAR/MAY	3-Months - APR/JUN	3-Months - MAY/JUL	3-Months - JUN/AUG	6-Months - MAR/AUG
1	M_{PJKM} (JKM Linked Price, Bid at Variable 'P')	3rd Feb to 15th Feb	Avg (AAOVS00,LJKMO01,LJKMO02)	Avg (LJKMO01,LJKMO02,LJKMO03)	Avg (LJKMO02,LJKMO03,LJKQR02)	Avg (LJKMO03,LJKQR01,LJKQR02)	Avg (AAOVS00,LJKMO01,LJKMO02,LJKMO03,LJKQR02,LJKQR02)
2	M_{PJKM} (JKM Linked Price, Bid at Variable 'P')	16th Feb to 28th Feb	Avg (AAOVS03,LJKMO00,LJKMO01)	Avg (LJKMO00,LJKMO01,LJKMO02)	Avg (LJKMO01,LJKMO02,LJKMO03)	Avg (LJKMO02,LJKMO03,LJKQR01)	Avg (AAOVS03,LJKMO00,LJKMO01,LJKMO02,LJKMO03,LJKQR01)
3	M_{PWIM} (WIM Linked Price, Bid at Variable 'P')	3rd Feb to 15th Feb	Avg (AALIC00,AWIMM01,AWIMM02)	Avg (AWIMM01,AWIMM02,AWIMM03)	Avg (AWIMM02,AWIMM03,AWIMQ02)	Avg (AWIMM03,AWIMQ02,AWIMQ02)	Avg (AALIC00,AWIMM01,AWIMM02,AWIMM03,AWIMQ02,AWIMQ02)
4	M_{PWIM} (WIM Linked Price, Bid at Variable 'P')	16th Feb to 28th Feb	Avg (AAWIC03,AWIMM00,AWIMM01)	Avg (AWIMM00,AWIMM01,AWIMM02)	Avg (AWIMM01,AWIMM02,AWIMM03)	Avg (AWIMM02,AWIMM03,AWIMQ01)	Avg (AAWIC03,AWIMM00,AWIMM01,AWIMM02,AWIMM03,AWIMQ01)
5	M_{PBRENT} (Dated Brent linked price)	3rd Feb to 28th Feb	Avg (BDLM001,BDLM002,BDLM003)	Avg (BDLM002,BDLM003,BDLM004)	Avg (BDLM003,BDLM004,BDLM005)	Avg (BDLM004,BDLM005,BDLM006)	Avg (BDLM005,BDLM006,Avg (BDLM001,BDLM002,BDLM003))
6	M_{PGIXI} (GIXI)	3rd Feb to 28th Feb	GIXI - Weightage avg. price for Delivery Months or latest available Prices of current month	GIXI - Weightage avg. price for Delivery Months or latest available Prices of current month	GIXI - Weightage avg. price for Delivery Months or latest available Prices of current month	GIXI - Weightage avg. price for Delivery Months or latest available Prices of current month	GIXI - Weightage avg. price for Delivery Months or latest available Prices of current month

Annexure 4

Index codes to calculate recent Reference Margin Price (M_{P1}) for Trade Month February 2025

#	Reference Margin Price, M_{P1}	Trading date	3-Months - MAR/MAY	3-Months - APR/JUN	3-Months - MAY/JUL	3-Months - JUN/AUG	6-Months - MAR/AUG
1	M_{P1JKM} (JKM Linked Price, Bid at Variable 'P')	3rd Feb to 15th Feb	AAOVS00	LJKMO01	LJKMO02	LJKMO03	AAOVS00
2	M_{P1JKM} (JKM Linked Price, Bid at Variable 'P')	16th Feb to 28th Feb	AAOVS03	LJKMO00	LJKMO01	LJKMO02	AAOVS03
3	M_{P1WIM} (WIM Linked Price, Bid at Variable 'P')	3rd Feb to 15th Feb	AALIC00	AWIMM01	AWIMM02	AWIMM03	AALIC00
4	M_{P1WIM} (WIM Linked Price, Bid at Variable 'P')	16th Feb to 28th Feb	AAWIC03	AWIMM00	AWIMM01	AWIMM02	AAWIC03
5	$M_{P1BRENT}$ (Dated Brent linked price)	3rd Feb to 28th Feb	BDLM001	BDLM002	BDLM003	BDLM004	BDLM001
6	M_{P1GIXI} (GIXI)	3rd Feb to 28th Feb	GIXI - Weightage avg. price for Delivery Month or latest available Price	GIXI - Weightage avg. price for Delivery Month or latest available Price	GIXI - Weightage avg. price for Delivery Month or latest available Price	GIXI - Weightage avg. price for Delivery Month or latest available Price	GIXI - Weightage avg. price for Delivery Month or latest available Price

Annexure 5

Example- Make Up Gas and Recovery Period

(Below examples are only for illustration purposes)

Scenario 1- Make Up Gas but no recovery period; 6-Months Contract with Take or Pay Quantity (ToP) = 100 units per quarter (no taxes or factors considered)

Quarter 1:

- Allocated Quantity = 80 units
- Quarterly Deficiency Quantity = ToP - Allocated (100 - 80) = 20 units
- Weighted Average Gas Price = $10/unit
- Quarterly Deficiency Payment = 20 units × $10 = $200
- Make Up Gas right earned = 20 units

Quarter 2:

- Actual Allocated Quantity = 120 units
- Weighted Average Gas Price = $12/unit
- Make Up Gas used = 20 units (from Q1)
- Payment calculation:
    - Pays for 120 units at $12/unit = $1,440
    - Receives credit for Make Up Gas: 20 units × $10 (lower of $12 and $10) = $200 credit
    - Final payment = $1,440 - $200 = $1,240

Scenario 2 - Make Up Gas with recovery period; 6-Months Contract with Take or Pay Quantity (ToP) = 100 units per quarter (no taxes or factors considered)

Quarter 1:

- Allocated Quantity = 80 units
- Quarterly Deficiency Quantity = ToP - Allocated (100 - 80) = 20 units
- Weighted Average Gas Price = $10/unit
- Quarterly Deficiency Payment = 20 units × $10 = $200
- Make Up Gas right earned = 20 units

Quarter 2:

- Actual Allocated Quantity = 70 units
- Weighted Average Gas Price = $15/unit

- New Quarterly Deficiency = 30 units
- Quarterly Deficiency Payment = 30 units × \$15 = \$450
- Make Up Gas right accrued = 50 units

Recovery Period (15 days after contract end):

- Remaining Make Up Gas = 50 units from Q2
- Current Gas Price during Recovery Period = \$18/unit

If Buyer takes 40 units during Recovery Period:

- Initial Payment: 40 units × \$18 = \$540
- Credit Calculation: 20 units × \$10 (lower of \$18 and \$10) + 20 units × \$15 (lower of \$18 and \$15)
- Final Payment for Recovery Period = \$540 - \$500 = \$40