Circular No.: IGX/MO/60/2022 May 12, 2022

Commencement of Domestic gas trading at IGX Platform

Dear Members,

In pursuance to Ministry of Petroleum and Natural Gas (MoPNG) office memorandum ('OM') dated 19.08.2021 and 22.11.2021, Hon'ble PNGRB vide its letter dated 11.05.2022 in the matter of Public Notice vide No. PNGRB/Fin/9-Gas Ex(2)/2021/(P3668) has approved Contract parameters for **Domestic Gas trading** at IGX platform.

Accordingly, the Members are hereby informed that the domestic gas trading can be done at IGX platform as per below provisions:

a) Domestic Gas Producers (hereinafter referred as Domestic Producers) with marketing and pricing freedom gas (hereinafter referred as Domestic Gas) can sell up to 500 mmscm or 10% of annual production whichever is higher, per year through the gas exchange from the contract area. Also, the sale of ad-hoc/test gas/extended well test (EWT) gas, wherever feasible, is allowed through Gas Exchange.
MoPNG's OM attached as Annexure – I.

b) Following are new Delivery Points available for trading of Domestic Gas:
Mallavaram, Gadimoga, Barmer, Shahdol, Suvali, Bokaro.
Further details at Annexure – II.

c) Price discovery mechanism for Ceiling Price Gas[1] will be on Price-Pro rata-Time basis for all types of contracts. For all other Domestic Gas with marketing and pricing freedom, the current mechanism of Price-Time priority will continue.
Details of price discovery mechanism and settlement mechanism at Annexure – III.

[1] Ceiling price gas means the natural gas where ceiling price are notified by PPAC in accordance with MoPNG directives on *'Marketing, including pricing freedom for the gas to be produced from Discoveries in Deepwater, Ultra Deepwater and High Pressure – High Temperature areas'* dated 21.03.2016.

d) The applicability of exposure margin and post trade margins will be similar to the existing contracts and there are no changes in the financial and delivery settlement mechanism as defined under contract specifications mentioned in IGX Market Rules.

The exact changes made in Market Rules are attached under Annexure - IV with this Circular. The amended copy of PNGRB approved Market Rules is available at IGX website.

Members are requested to kindly make note of all above changes and act accordingly.

This Circular will come into effect from trading date 16th May 2022.

For and on behalf of
Indian Gas Exchange Limited

(Sd/-)

Prasanna Rao
Head - Market Operations

Annexure - I

F. No.14015(15)/7/2020-ONG-V (E-33916)
Government of India
Ministry of Petroleum & Natural Gas

Shastri Bhavan, New Delhi
Dated 19th August, 2021

OFFICE MEMORANDUM

Subject:- Additional option to sell domestically produced natural gas on the PNGRB authorized gas exchange(s), in addition to the e-auction platforms empanelled by DGH-Reg.

The undersigned is directed to refer to the Notifications of this Ministry dated 15.10.2020 on 'Natural Gas Marketing Reforms' and dated 03.12.2020 on 'Discovery of Market Price for Domestically Produced Natural Gas through e-bidding' respectively.

2. In continuation of these Notifications, the Government of India with the objective of promoting gas based economy and ease of doing business, has decided to provide an additional mechanism to the domestic gas producers who have been granted pricing and marketing freedom. The Contractor may sell small quantity of gas, upto 500 (Five hundred only) mmscm (Million Standard Cubic Meter) or 10% of annual production from Contract Area, whichever is higher, per year through gas exchanges (s) authorised by Petroleum and Natural Gas Regulatory Board (PNGRB).

3. The Contractor shall intimate to Directorate General of Hydrocarbons (DGH) at the end of every financial year complete details of gas sold through gas exchange(s) certifying that it has fulfilled all requisite conditions to undertake such a trade on gas exchange as per the policy guidelines stipulated by MoPNG related to sale of gas.

4. All other terms and conditions of the sale shall be in agreement & consonance with the applicable law and policies. These guidelines shall be read harmoniously with the provisions of all other applicable laws and policies relating to marketing and pricing freedom of gas.

5. These guidelines issue with the approval of the competent authority.

AKmehta

(Awdhesh Kumar Mehta)
Under Secretary to the Government of India
011-23381984

No. 19025/9/2006 (Vol. II)-ONG-D-V (P-29522/E-9657)
GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM & NATURAL GAS
(EXPLORATION DIVISION)

Shastri Bhawan, New Delhi
Date: 22nd November, 2021

OFFICE MEMORANDUM

Subject: Monetization of Ad-hoc/Test Gas produced during the Testing of Well

The issue of monetization of Ad-hoc/Test Gas produced during the Testing of Oil and Gas/CBM Well, has been examined in this Ministry.

2. It is observed that if Ad-hoc/Test Gas is allowed to be monetized, such gas can be avoided to be flared or released in environment. This will not only be a step towards mitigating harm to the environment but will also add to the country's production potential of gas.

3. Accordingly, with a view to minimise flaring and optimise utilization of produced gas, the following is decided in supersession of all earlier guidelines on the subject, in respect of monetization of Ad-hoc/Test Gas from Blocks/Fields under PSC/CBM/RSC and Nomination regimes:

I. Test Gas can be produced upto a maximum of three months:

   i. The Ad-hoc/Test Gas/Extended Well Test (EWT) Gas will be allowed for sale to customers.

   ii. Management Committee/Steering Committee to be informed before commencement of gas supplies.

   iii. The sale value of gas, to be considered under Contract, shall be calculated considering higher of the following:

      a. Actual Sale Price; or

      b. Existing Contract Price, if any; or

      c. Prevailing Price as per New Domestic Natural Gas Pricing Guidelines, 2014

II. Test Gas produced for more than three months but less than six months:

   i. The Ad-hoc/Test Gas/Extended Well Test (EWT) Gas will be allowed for sale on Arm's Length Sales basis.

   ii. Prior approval of Management Committee/Steering Committee to be taken.

   iii. The sale value of gas, to be considered under Contract, shall be calculated considering higher of the following:

      a. Actual Sale Price; or

      b. Prevailing Price as per New Domestic Natural Gas Pricing Guidelines, 2014

III. Test Gas produced after six months:

i. The Ad-hoc/Test Gas /Extended Well Test (EWT) Gas may be allowed for sale on Arm's Length Sales basis.

ii. The Contractor shall submit a proposal with approval of MC/SC to DGH with complete justification for continuation of production on gas on ad-hoc/well testing/extended well testing basis and DGH, after examining it from techno-commercial perspective and extant Government policies, shall submit it to Government for approval.

Other Terms:

i. Contractor shall pay all applicable contractual payments (Profit Petroleum, Production Level Payments, Revenue Share), Royalty, taxes to Government, based on the higher of the price arrived at, by the following methods:

a. Actual Sale Price; or
b. Existing Contractual Price, if any; or
c. Price arrived through competitive bidding process; or
d. Price calculated as per the guidelines prescribed by the Government (at present, New Domestic Natural Gas Pricing Guidelines, 2014).

ii. In case of Ad-hoc/Test Gas/Extended Well Test (EWT) Gas from Nomination fields from discoveries after 28.02.2019, ONGC/OIL shall inform DGH before commencement of gas supplies. Royalty and other taxes shall be as per i) of Other Terms.

4. In addition to above, sale of Ad-hoc/Test Gas/Extended Well Test (EWT) Gas through Gas Exchange, wherever feasible, shall also be allowed subject to conditions mentioned above and also stipulated in this Ministry's OM dated 19.08.2021.

5. All other terms and conditions shall be as per relevant Contract/applicable Law/Policies. These guidelines shall be read harmoniously with the provisions of all other applicable laws and policies related to safety, marketing and pricing freedom of gas and gas utilization.

6. This has the approval of the Competent Authority.

AKMehta

(Awdhesh Kumar Mehta)
Under Secretary to the Govt. of India
☎ 011-23381984

Annexure – II

Delivery Points for Domestic Gas trades

PNGRB has approved regional Hubs and for the purpose of title-transfer and trading, the Delivery Points are identified. PNGRB has besides, other Delivery Points, approved following Delivery Points for Domestic Gas: -

i. Mallavaram Delivery Point (Southern Hub)
ii. Gadimoga Delivery Point (Southern Hub)
iii. Barmer Delivery Point (Northern Hub)
iv. Shahdol Delivery Point (Central Hub)
v. Suvali Delivery Point (Western Hub)
vi. Bokaro Delivery Point (Eastern Hub)

Trading at specific Delivery Points will be made live in due course as per advice from the Domestic Producers. The same will be informed through separate circular(s).

Also, in order to ensure annual compliance of the MoPNG's OM dated 19.08.2021 and 22.11.2021, Domestic Producers have to submit the Contract Area wise details along with quantity sold at IGX within 7 days of end of the relevant financial year.

Further details of the Delivery Points are mentioned under Table 1 below.

Table 1: Details of Delivery Points at IGX Platform

Particulars	Shahdol delivery point (M.P.)	Barmer delivery point (Rajasthan)	Suvali delivery point (Gujarat)	Bokaro delivery point (Jharkhand)	Mallavaram delivery point (A.P.)	Gadimoga delivery point (A.P.)
Gas supply sources	RIL's CBM blocks in Sohagpur East (SP-E) and Sohagpur West (SP-W) located in Shahdol district.	Raageshwari Gas Terminal (RGT) at Barmer, Rajasthan	Cairn's onshore facility at Suvali (Hazira)	ONGC's Bokaro CBM Gas Collecting Station (GCS)	ONGC's onshore Mallavaram Terminal	RIL's onshore Gadimoga Terminal
Pipeline Connectivity & Injection points	Shahdol – Phulpur p/l of Reliance Gas Pipelines Limited (RGPL) which connects to HVJ pipeline at Phulpur, U.P.	RGT connected by Barmer - Pali-Palanpur p/l of GIGL & GSPL's high pressure Gujarat grid at Palanpur.	GSPL's high pressure gas grid through Cairn-Mora sub section (part of GSPL's Low Pressure Gujarat gas grid).	Jagdishpur Haldia Bokaro Dhamra Pipeline (JHBDPL) which further connects with GAIL's HVJ pipeline (National Gas Grid)	Mallavaram Terminal is connected to PIL's pipeline	Gadimoga Terminal is connected to PIL's pipeline
Delivery Point location	RIL's CBM facilities connecting with RGPL's Shahdol-Phulpur Gas Pipeline at Tehsil Burhar, District Shahdol, Madhya Pradesh	Exit point of RGT connecting with GIGL' Barmer-Pali-Palanpur p/l	Exit point of the facility at Suvali (Hazira) connecting with GSPL's Low Pressure Gujarat Gas Grid	Exit point of Bokaro GCS facility connecting with JHBDPL	Exit point of ONGC's Mallavaram Terminal connecting with PIL's Pipeline.	Exit point of RIL's Gadimoga Terminal connecting with PIL's Pipeline.

Annexure - III

Price Discovery and Settlement Mechanism for Domestic Gas Trading

For Domestic Gas trading, following changes in the Contract specifications are made.

1. **Price Discovery and Matching Rules:**

   a) For Domestic Gas under no ceiling price category: For Domestic Gas falling under this category, price discovery mechanism will continue to remain same as per the existing methodology.

   b) For Domestic Gas under ceiling price category: Following will be pricing methodology:

      i. The price discovery mechanism will be double sided open auction and on **Price-Prorata-Time basis for all types of contracts** viz., Monthly, Fortnightly, Weekly, Weekday, Daily and Day-ahead contracts.
      At the time of auction outcome, if price discovered is Ceiling Price (Total Buy>Total Sale), then in order to ration the limited sale available among buyers, pro-rata methodology will be adopted. Also, at the time of pro rata allocation, any positive difference of total rounding off error will be adjusted to selected quantity based on the time priority[2] of the bids received by the exchange on first come first serve basis i.e., any additional lot due to rounding off will be allotted to that bid which came first in the exchange system. Similarly, any negative difference of total rounding off error will be adjusted from selected quantity based on the time priority of the bids received by the exchange on last come first serve basis i.e., any lot to be reduced due to rounding off will be deducted from that bid which came last in the exchange system.

      ii. At the time of auction outcome, if price discovered is Ceiling Price, then each buyer's bid volume which is greater than the total sell bid volume, that will be restricted to total sell bid volume, and available sell volume will be allocated among the buyers on Pro-rata - Time basis on such restricted sell volumes. In case, price discovered is below Ceiling Price, then there will be no change in buyers' bid volumes.

[2] For any bid, the time priority is changed in case if its price is changed and/or the bid volume is increased.

iii. In case any bid is received/cancelled/ modified in last 5 minutes of market closure, the market time will be extended by 15 minutes from the closure time. Such extension will be allowed for a maximum period of up to 1 hour not exceeding 03:00 pm. Also, the market participants will be able to view market depth i.e., top 5 buy and top 5 sell bids in terms of price with the identity of bidders kept anonymous.

An illustration of Price-Prorata-Time allocation of quantity in case the clearing price comes out to be the ceiling price, is mentioned as below:
In the below example, the ceiling price is kept at INR 100/MMBtu, where three buyers and the single seller has submitted bids at the ceiling price, except buyer 'B1':

Seller S, q = 23 lots at Bid Price = 100
Buyer B1, q = 20 lots at Bid Price = 90, bid time = t
Buyer B2, q = 23 lots at Bid Price = 100, bid time = t+1
Buyer B3, q = 25 lots at Bid Price = 100, bid time = t+2
Buyer B4, q = 30 lots at Bid Price = 100, bid time = t+3

Since max. tradable volume is happening at the ceiling price, hence the clearing price will be equal to the Ceiling price. Also, the buy bid quantity of Buyer 'B3' and 'B4' will be restricted to total sell bid quantity of 23 lots available at the ceiling price. Accordingly, Seller's 23 lots will be pro-rated among buyers B2, B3 and B4 as below:

Buyer	Step 1: Price basis	Step 2: Buy quantity restriction	Step 3: Pro-Rata basis	Step 4: Time basis
B1	Rejected			
B2	Selected	23	8	8
B3	Selected	23	8	8
B4	Selected	23	8	7
			24	23

Due to rounding off error, the negative difference of 1 lot will be adjusted from Buyer 'B4' on last cum first serve basis. These details are also mentioned under Annexure B, part B.3 of IGX Market rules.

2. **Settlement Process for Ceiling Price Gas trading at IGX:**

According to terms of MoPNG OMs/orders, the Ceiling Price is declared in USD/MMBTU, whereas IGX trading is carried in INR/MMBTU terms. Hence, for exchange rate conversion at different stages of trading cycle, following methodology will be adopted:

i. **At the time of Bidding:** Ceiling Price would be indicated by the Domestic Producers based on provisional USD/INR rate at the time of bidding. The provisional ceiling in INR/MMBtu at bid stage (at the time of placing the order in the trading system) will be arrived at based on the average (rounded off to two decimal places) of the TT (Telegraphic Transfer) buying and selling rates for converting USD to INR, as quoted by State Bank of India (SBI) on the day immediately preceding the trade date, 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 on the applicable day, the Exchange Rate available for the latest quoted day shall be used. The provisional Ceiling Rates in INR (rounded off to 0 decimal place) will be informed to Members at their Trader Workstation (TWS).
Further, SBI Forex Card Rates for transactions above Rs 10 Lacs shall be considered for the purpose of Exchange Rate and Final Exchange Rate. In case multiple slabs for transactions are available, then the highest transaction slab shall be considered for Exchange Rate and Final Exchange Rate.

ii. **At the time of Settlement:** In case the price discovered is at ceiling price in INR terms, final invoicing would be done based on actual USD/INR rate at the time of invoicing. The seller will raise the invoice amount adjusted as per Exchange Rate at ceiling USD price in INR at the time of final settlement/invoicing of trades and the buyer will make the payment accordingly. Accordingly, following process will be adopted at the time of price settlement:

a. In case the price discovered is at Ceiling Price, the seller will raise the invoice at Ceiling Price in USD/MMBtu converted into INR/MMBtu using Exchange Rate as calculated at below point (c).

b. In case the price discovered is below Ceiling Price in INR/MMBtu, applicable price in USD/MMBtu will be derived using Exchange Rates as per the methodology mentioned in para '2(i)' above. The price in USD/MMBtu will be used for the purpose of settlement. The final invoice value for settlement will be calculated by multiplying this price in USD/MMBtu with INR/USD Exchange Rate as calculated at sub-para (c) below.

c. Exchange Rate would be the average (as rounded off to two decimal places) of the TT (Telegraphic Transfer) buying and selling rates for converting USD to INR, as quoted by SBI on the date of invoice, 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 on the applicable day, the Exchange Rate available for the latest quoted day shall be used. Further, SBI Forex Card Rates for transactions above Rs 10 Lacs shall be considered for the purpose of Exchange Rate and Final Exchange Rate. In case multiple slabs for transactions are available, then the highest transaction slab shall be considered for Exchange Rate and Final Exchange Rate.

3. **Risk Management, Margining mechanism and Penalty for Contractual deviation:** As a part of risk management mechanism the exchange will continue the current process, where the exchange will collect the 'Exposure margin' at the time of bidding and then Post Trade margin based on trade value as defined under Contract Specifications of IGX Market Rules. The Margins will be collected in the form of cash or non-cash or combination thereof. In case a party defaults then the Margins collected shall be utilized to pay the compensation to the counterparty as defined in Market Rules under clause 11.5 'Buyer Default Remedy Mechanism' and clause 11.6 'Seller Default Remedy mechanism'.

4. Other contract terms like Bidding and Trading Process, Price Tick, Lot Size, Gas Specifications, Delivery and Settlement process will remain same as mentioned under Market Rules and Master Circular and amendments issued from time to time.

Annexure - IV

Exact changes made in Market Rules

1. In Chapter 2. 'Definitions and Interpretation', following definitions are inserted -

   ***"14.b. Ceiling Price Gas** means the ceiling price of domestic natural gas as advised by the Seller from time to time pursuant to notification by Petroleum Planning and Analysis Cell (PPAC) in accordance with MoPNG directives on "Marketing including pricing freedom for the gas to be produced from Discoveries in Deepwater, Ultra Deepwater and High Pressure – High Temperature areas" dated 21st March 2016."*

   ***"15.b.** Clearing member is defined in Clause 4.6"*

2. In Chapter 4. 'Membership and Client Registration', definition of Clearing member added -

   "4.6 c) Clearing Member: The Member shall have the clearing rights and will be entitled to clear and settle trades executed at exchange platform."

3. In Chapter 14. 'Contract Specifications', following changes are made:

Page No.	Clause No.	Current Clause	Revised Clause
58, 62	Annexures: A-2 (Day-ahead), A-3 (Daily)	11. Matching Model: Continuous Trading as explained in Annexure-B	11. Matching Model: i. Double sided Uniform Price Auction method on Price Pro-rata Time basis: For Ceiling Price Gas ii. Continuous Trading basis: For others The matching rules is explained under Annexure-B
66, 70, 74, 78	Annexures: A-4 (Weekday), A-5 (Weekly), A-6 (Fortnightly) A-7 (Monthly)	11. Matching Model: Double sided Uniform Price Auction method as explained in Annexure-B	11. Matching Model: Double sided Uniform Price Auction method and i. Price Pro-rata Time basis: For Ceiling Price Gas ii. Price time basis: For others

Page No.	Clause No.	Current Clause	Revised Clause
			The matching rules is explained under Annexure-B

4. In Chapter 15. 'Matching Methodology (Annexure B)', after the illustration on 'Price-Time Priority', following shall be inserted:

PRICE-PRORATA-TIME PRIORITY (Applicable for Ceiling Price Gas)

The Bid Priority for matching purpose would be determined on 'Price-Prorata-Time' basis. For Ex. as mentioned under Table 8, two Buy Bids C & D each of 20 lots at same price point of 600 is available: -

Buy Bid				Sell Offer			SELECTION		
Buyer	Buy Qty.	Cum. Buy (CBO)	**Price**	Cum. Sell (CSO)	Sell Qty.	**Seller**	Max. Tradable Volume= MAX[MIN(CBO,CSO)]	Buy Bid Selected	Sell offer Selected
A	50	50	**720**	250	50	K	**50**	50	
B	60	110	**660**	200	60	J	**110**	60	
C & D	40	150	**600**	140	40	I	**140**	30	40
D	50	200	**540**	100	60	H	**100**		60
E	50	250	**480**	40	40	G	**40**		40

Table 8

Since only 30 lots of buy bid can be selected at the Market Clearing price, hence 15 lots each will be allocated to buyers C and D.

In addition to this, at the time of auction outcome, if price discovered is Ceiling Price, then each buyer's bid volume which is greater than the total sell bid volume will be restricted to such total sell bid volume, and available sell volume will be allocated among the buyers on Price Pro-rata Time basis on the restricted volumes. In case, price discovered is below ceiling price, then there will be no change in buyers' bid volumes.

Also, at the time of pro rata allocation, any positive difference of total rounding off error will be adjusted to selected quantity on first cum first serve basis. Similarly, any negative difference of total rounding off error will be adjusted from selected quantity on last cum first serve basis.

An illustration of Price-Prorata-Time allocation of quantity in case the clearing price comes out to be the ceiling price, is mentioned as below:

In the below example, the ceiling price is kept at INR 100/MMBtu, where three buyers and the single seller has submitted bids at the ceiling price, except buyer 'B1':

i. Seller S, q = 23 lots at Bid Price = 100
ii. Buyer B1, q = 20 lots at Bid Price = 90, bid time = t
iii. Buyer B2, q = 23 lots at Bid Price = 100, bid time = t+1
iv. Buyer B3, q = 25 lots at Bid Price = 100, bid time = t+2
v. Buyer B4, q = 30 lots at Bid Price = 100, bid time = t+3

Since max. tradable volume is happening at the ceiling price, hence the clearing price will be equal to the Ceiling price. Also, the buy bid quantity of Buyer 'B2', 'B3' and 'B4' will be restricted to total sell bid quantity of 23 lots available at the ceiling price. Accordingly, Seller's 23 lots will be pro-rated among buyers B2, B3 and B4 as below:

Buyer	Step 1: Price basis	Step 2: Buy quantity restriction	Step 3: Pro-Rata basis	Step 4: Time basis
B1	Rejected			
B2	Selected	23	8	8
B3	Selected	23	8	8
B4	Selected	23	8	7
			24	23

Table 9

Due to rounding off error, the negative difference of 1 lot will be adjusted from Buyer 'B4' on last cum first serve basis.

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