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## PART II

Statutory Notifications (S. R. O.)

GOVERNMENT OF PAKISTAN

CABINET SECRETARIAT

(Cabinet Division)

NOTIFICATION

*Islamabad, the 5th April, 2012*

**S. R. O. 410 (I)/2012.**—In exercise of the powers conferred by section 41 of the Oil and Gas Regulatory Authority Ordinance, 2002 (XVII of 2002) the Oil and Gas Regulatory Authority, with the approval of the Federal Government, is pleased to make the following rules, namely:—

1. **Short title, commencement, extent and applicability.**—(1) These rules shall be called the OGRA Natural Gas (Regulated Third Party Access) Rules, 2012.
  - (2) They shall come into force at once.
  - (3) These rules are applicable to a person who is operating,—
    - (a) natural gas pipelines transmission network as common carrier;
    - (b) natural gas pipelines distribution network beyond the exclusivity period of marketing within the authorized area by the Authority as common carrier; and

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- (c) natural gas transmission and distribution pipeline networks, both existing and new gas pipeline transportation system, which are under the jurisdiction of the Authority.

(4) These Rules shall extend to the whole of Pakistan.

2. **Definitions.**—(1) In these rules unless there is anything repugnant in the subject or context,—

- (i) “access arrangement” means an agreement between transporter and shipper or between transporter and other connected system operator as approved by the Authority;
- (ii) “AHA” means a homogeneous area which means a part of the gas pipeline transportation system within which the same quality of gas is received or delivered, over a specified time period;
- (iii) “available capacity” means the difference between the technical capacity and contracted capacity;
- (iv) “base conditions” means volume and gross calorific value which shall be measured at base conditions of 14,65 PSIA and 60 degree Fahrenheit, however, calorific value calculation shall be as defined in Gas Processing Association (GPA), American Society for Testing and Materials (ASTM) or ISO relevant standard;
- (v) “capacity allocation” means maximum daily quantity (MO) in MMCFD of gas which can be delivered at a certain entry point and exit point, in accordance with relevant access arrangement;
- (vi) “common carrier” means a facility declared to be available by transporter to provide service to all shippers without discrimination;
- (vii) “connected system” means a natural gas transmission or distribution system or a natural gas production facility or an LNG terminal or a natural gas storage facility that is interconnected with transporter’s gas pipeline transportation system;
- (viii) “connected system operator” means operator of any connected system;
- (ix) “contracted capacity” means firm capacity that the transporter committed with gas producers, its consumers, aggregated volumes

contracted with other shippers for transportation or connected system operator at the time of capacity declaration in volumetric terms on daily, monthly or yearly basis under an access arrangement;

- (x) "custody transfer measuring facility" means a facility which measures the quantity (in terms of volume and energy) and quality of natural gas for transfer of custody from one shipper to transporter;
- (xi) "dispute" means any dispute or difference arising between the parties to the access arrangement made under these rules;
- (xii) "entry point" means the flange at downstream of the meter at which the gas delivered by shipper or by connected system operator, is injected into the gas pipeline transportation system of the transporter;
- (xiii) "exit point" means the flange at downstream of the meter at which the gas is withdrawn from the gas pipeline transportation system of the transporter;
- (xiv) "firm basis" means the commitment made by the shipper to avail the capacity and firm commitment made by the transporter to transport the gas on behalf of shipper, default in fulfilling of which may entail the penalties as agreed in the access arrangement;
- (xv) "firm service" means a fixed obligation where the transporter is obligated to provide a specified capacity without interruption;
- (xvi) "gas pipeline transportation system" means all transmission and distribution pipelines, spur pipelines, associated facilities downstream of gas producer's processing plant or shipper's delivery point, re-gasification terminal which are used for transportation of natural gas from one point to another, but shall not include the gas processing plant and re-gasification terminal pipeline within the battery limit of isolation valves of the plant or terminal;
- (xvii) "interconnection and operation arrangement" means the agreement entered into between a transporter and any other transporters or LNG developer or LNG buyer for the purposes of interconnecting two systems and arranging the operational relations between the two, as approved by the Authority;
- (xviii) "interruptible basis" means gas service wherein the transporter shall transport the gas as and when the capacity is available in the gas pipeline transportation system on reasonable endeavor basis;

- (xix) "line pack" means the volume of gas in segment of gas pipeline transportation systems at a certain point of time at a defined gas specification, temperature and pressure;
- (xx) "LNG buyer" means a Government designated buyer, gas utility company, any consumer or supplier of LNG, who import LNG from any other country or purchase LNG from any other supplier under an LNG sale and purchase agreement and enters into a tolling agreement with LNG Terminal owner or operator for the provision of LNG receiving, storage and re-gasification services at its LNG terminal;
- (xxi) "LNG developer" means a private or public sector party, joint venture or consortium which is responsible for purchasing LNG supplies, transporting LNG to its import terminal (comprising receiving, storage and re-gasification facilities) and supplying RLNG to the domestic market under a RLNG sales and purchase agreement or for its own use;
- (xxii) "LNG terminal" means facilities for receiving, storage and regasification of LNG;
- (xxiii) "LNG terminal owner or operator" means a person developing the LNG import terminal for the provision of LNG receiving, storage and re-gasification services at its terminal on a tolling basis;
- (xxiv) "load management" means deliberate actions sponsored by a transporter to reduce peak demands, or curtail gas supply of its own consumer whose supplies are on interruptible or on as and when available basis, or to improve system operating efficiency;
- (xxv) "natural gas" means hydrocarbons or mixture of hydrocarbons and other gases which at 60 degrees Fahrenheit and atmospheric pressure are in the gaseous state (including gas from gas wells, gas produced with crude oil and residue gas and products resulting from the processing of gas) consisting primarily of methane, together with any other substance produced with such hydrocarbons;
- (xxvi) "negative Imbalance" means the imbalance created by the shipper if the shipper off-takes more quantity of gas from the gas pipeline transportation system than injected into it. Shipper shall be allowed a negative imbalance of one percentage of contracted capacity as tolerance limit. Any negative imbalance over the tolerance limit shall be liable to charges as agreed in access arrangement, in addition to transportation charges;

- (xxvii) "nomination" means notification process between the shippers and the transporter to schedule shipper's daily delivery and off-take quantities relating to each entry point and exit point, agreed in the access arrangements;
- (xxviii) "operating pressure" means the pressure corresponding to a particular flow rate at which a pipeline segment is operated;
- (xxix) "Ordinance" means Oil and Gas Regulatory Ordinance, 2002 (XVII of 2002);
- (xxx) "party" include transporter, shipper, connected system operator who has entered into an access arrangement under the rules;
- (xxxi) "positive Imbalance" means the imbalance created by the shipper if he off-takes less quantity of gas from the gas pipeline transportation system than injected into it. Shipper shall be allowed a positive imbalance of two percent of contracted capacity as tolerance limit and any positive imbalance over the tolerance limit shall be liable to charges as agreed in access arrangement, in addition to transportation charges
- (xxxii) "re-gasified liquefied natural gas (RLNG)" means the natural gas obtained after gasification of liquefied natural gas (LNG) conforming to RLNG specifications as set out in Schedule-III;
- (xxxiii) "RLNG end buyer" means person who have contract with LNG developer, RLNG seller or LNG buyer or RLNG reseller to purchase RLNG and consume it in its facilities;
- (xxxiv) "RLNG reseller" means person who purchase RLNG from the RLNG seller for the purpose of reselling to RLNG end buyers;
- (xxxv) "RLNG seller" means LNG developer, LNG buyer who sells RLNG;
- (xxxvi) "RLNG specification" means RLNG supplied by the shipper and (or) connected system operator, and delivered to transporters at the entry point for transportation, which conforms to the specification as agreed in the access arrangement within the limits set out in Schedule-III;
- (xxxvii) "shipper" means a person that has an access arrangement with the transporter to utilize the gas pipeline transportation system capacity, for transportation of natural gas between an agreed entry point and agreed exit points, including but not limited to, producer of natural gas,

- LNG developer, LNG buyer, RLNG seller (as per integrated project or unbundled project structure), RLNG reseller and RLNG end buyer or each singular natural gas consumer.
- (xxxviii) "spur pipeline" is a pipeline, which emanates from another pipeline for transportation of natural gas;
- (xxxix) "system integrity" means any situation in respect of a gas pipeline transportation system in which the pressure and the quality of natural gas remains within the minimum and maximum limits laid down by the transporter so that the transportation of natural gas is guaranteed in accordance with the applicable technical standards;
- (xl) "system use gas (SUG)" means the quantity of gas used by the transporter for the operation and maintenance attributable to the gas pipeline transportation system related to the access arrangement;
- (xli) "technical capacity" means the maximum transportation capacity of a segment of gas pipeline transportation system taking into account the system integrity and the operational requirements;
- (xlii) "transportation tariff" means the charges payable by shipper to transporter, as approved by the Authority from time to time, for transporting unit volume of gas including fixed charges under the access arrangement;
- (xliii) "transportation loss (TL)" means the quantity of gas, which is unaccounted for by a reasonable and prudent operator including but not limited to measurement uncertainty, blow downs, venting or releases during regular operation and maintenance of the gas pipeline transportation system used as common carrier. The volume of such gas would be calculated on the basis of past three years historical data of actual losses in defined transmission pipeline network and distribution or supply main network or segment. In case the historical data is not available the same shall be agreed upon by transporter and shipper through the access arrangement and shall be approved by the Authority;
- (xliv) "transporter" means a person holding valid licenses issued by the Authority, for transportation of natural gas through a gas pipeline transportation system; and
- (xlv) "unit of measurement" means unit of measurement of quantity of gas shall be in Million British Thermal Units (MMBTU) when quantity is

measured in energy terms and shall be in Mulley (thousand) Standard Cubic Feet (MSCF) when quantity is measured in terms of volume at 14.65 PSIA base pressure and 60 degree Fahrenheit base temperature;

(2) The words and expressions used but not defined hereunder shall have the meanings as assigned to them in the Ordinance.

**3. Scope of services.**—(1) The transportation service consists of taking delivery of the gas made available by a shipper, at one or more entry points along the gas pipeline transportation system and delivering an equivalent quantity of gas subject to adjustment on account of System Use Gas (SUG), Transportation Loss (TL) and Line Pack (LP) at one or more exit points in accordance with the terms and conditions laid down in the access arrangement between the shipper and transporter as approved by the Authority.

(2) The Shippers shall have access to the gas pipeline transportation system for each singular natural gas consumer or RLNG end buyer. In case of distribution system the access shall be allowed when such system is opened for competition beyond the exclusivity period of marketing allowed to the person under the Natural Gas Regulatory Authority (Licensing) Rules 2002.

**4. Facilities on gas pipeline transportation system.**—(1) Shipper or connected system operator shall arrange to deliver gas at entry point on the gas pipeline transportation system and shall provide all facilities including measurement equipments required for transfer of custody and delivery of gas to the transporter and such facilities shall be maintained and operated by the shipper. The title of gas delivered at the entry point shall remain vested in the shipper or connected system operator, as the case may be till the gas reaches exit point.

(2) Tie-in of shippers or connected system operator's onshore facility or network to the transporter's onshore gas entry point shall be executed by the transporter and shall be part of the transporter's tariff computation under the rules as agreed under the access arrangement.

(3) Shipper or his authorized nominee shall own, operate and maintain facilities upstream of transporter's onshore entry point at his own cost and risk.

(4) Transporter shall arrange to deliver gas at its exit point to shipper or the connected system operator, natural gas consumer and RLNG end-buyer, as the case may be, and shall provide facilities including measurement equipments at exit point for transfer of custody and delivery of gas unless otherwise agreed amongst them.

(5) Transporter shall own, operate and maintain the exit point facilities including gas measurement facilities at its own cost and risk.

(6) Tie-in of transporter's facility at exit point to the shipper's as connected system operator's facility shall be executed by the transporter at his cost and shall form part of the tariff computation of transporters.

(7) The shipper, connected system operator, natural gas consumer or RLNG buyer, shall provide space, free access and cooperate with the transporter in installing, operating, maintaining and modifying any specific exit point facilities when such exit point facilities are provided in its premises, as the case may be.

(8) The transporter or shipper or connected system operator or natural gas consumer or RLNG end buyer, as the case may be, at its option and cost provide check meter, conforming to the standard and specifications specified by the Authority, at the entry or exit point, on gas pipeline transportation system, however, in case of variation in the readings the transporter's meter shall be taken for accounting purpose subject to conformity assessment as agreed in the access arrangement.

5. **Pipeline capacity.**—(1) The transporter shall declare, in MMCFD, the section wise technical, contracted and available capacity of the gas pipeline transportation system on its website on the commencement of these rules and on the 1<sup>st</sup> of each calendar month basis in the form specified in Schedule-I and shall send this information to the Authority. Such declaration shall also include the technical and available capacity at each segment-wise entry and exit point.

(2) The available capacity shall be approved by the Authority.

(3) The capacity so approved by the Authority shall be available on common carrier basis as per these rules and shall be so allocated by the Authority in a transparent and non-discriminatory manner on "first come first served" (FCFS) basis, as per Schedule-II.

(4) The declared available capacity, if varies materially from actual available capacity the same may be reworked by the transporter with the prior approval of the Authority, in case the variation persists for more than thirty calendar days.

6. **Capacity extension and expansion.**—(1) The capacity extension of existing gas pipeline transportation system shall be undertaken by the transporter in compliance with the relevant provisions of the Ordinance and the applicable rules. The enhanced capacity shall also be declared by the transporter as per the procedure specified above and approved by the Authority.



(2) If additional capacity in the gas pipeline transportation system is not available as per the requirements of the shipper or connected system operator, as the case may be, the transporter at the request of the shipper or connected system operator may expand capacity on economical and technical considerations, subject to the approval of the Authority or the shipper or the connected system operator may construct its own pipeline subject to grant of license by the Authority.

**7. Maintenance cost and risk .—**(1) Transporter shall operate and maintain its own gas pipeline transportation system between entry and exit points including Custody Transfer Gas Measuring Facility at its own cost and risk. Connected system operator or any person designated by him shall operate and maintain its connected system and relevant segment of interconnection pipelines to the gas pipeline transportation system at its own cost and risk.

(2) Transporter may operate and maintain the entry and exit point facilities and interconnection pipelines at the owner's cost and risk. Ownership of such facilities may belong to shipper or connected system operator or transporter, as the case may be, and is to be agreed in the access arrangement or in the interconnection and operation agreement.

**8. RLNG specification.—**(1) Acceptable RLNG specification range at the entry point shall be as agreed between the shipper and the transporter under the access agreement which shall be within the limits specified in Schedule-III.

(2) RLNG delivered by the shipper or by the connected system operator to the transporter at the entry point must comply with the specifications, as set out in sub-rule (1) or as agreed between transporter and shipper.

(3) Transporter may deliver commingled gas of specified quality as agreed under access arrangement, at one or more exit point.

**9. Requests from prospective LNG developer or LNG buyer.—**  
(1) Transporter and connected system operator shall enter into a "Framework Agreement for Access Arrangement" and send it to the Authority for approval within two weeks after capacity allocation by the Authority.

(2) The transporter shall then negotiate and enter into the interconnection and operation arrangement with the connected system operator. The transporter shall also negotiate and initial the access arrangement with LNG developer or LNG buyer as the case may be, and the same shall *inter alia* cover the swap operations, creation of necessary additional capacity, in a tripartite agreement and the same shall be approved by the Authority.

(3) The LNG developer or LNG buyer shall submit application to the Authority for capacity allocation and the Authority shall allocate the capacity as laid down under rule 12 and sub-rule (1) of rule 13 .

**10. Specific requests from prospective shippers other than LNG developer or LNG buyer.**—(1) Each application received by a transporter for access shall be processed in accordance with the procedures set out herein below,—

- (a) capacity may be applied on firm basis or on interruptible basis along with the volume, gas quality range, the period for which it is required and the entry and exit points;
- (b) upon receipt of a request for access from a shipper, the transporter shall, within a reasonable time but not exceeding seven working days after receiving the request from the shipper, respond to the shipper,—
  - (i) confirming that spare capacity exists to satisfy the request and specifying the charges and terms and conditions upon which it shall make the service available;
  - (ii) advising that spare capacity does not exist to satisfy the request;
  - (iii) advising that investigations are required to be undertaken prior to responding to the request. Such time period shall not exceed twenty working days; or
  - (iv) advising that it is not technically or operationally feasible to provide access subject to intimation to the Authority.

(2) Shipper shall convey its acceptance within twenty days of its acceptance of term sheet or state its desire to negotiate on terms. After acceptance of the term sheet, the transporter and shipper shall negotiate and initial the access arrangement and send the Authority for approval.

**11. Capacity allocation.**—(1) Capacity on firm basis shall be made available for a minimum of one year. However, the maximum period for capacity allocation shall be as agreed in the access arrangement between the transporter and shipper.

(2) Capacity on interruptible basis may however, be offered for one day or more by the transporter to all shippers, by way of posting on his website on daily basis. In case when there are more than one shipper, they shall hold capacity at all entry and exit points.

(3) The capacity allocation shall be on point to point basis in volumetric terms. The Authority shall allocate the available capacity, in the gas pipeline transportation system, on first come first served basis, as per the criteria specified in Schedule-II.

**12. Obligation of the party to whom capacity is allocated.—**(1) The party to whom the capacity is allocated shall pay to the Authority the prescribed fee along with the request for capacity allocation.

(2) The capacity allocated to a person shall not be allowed by way of sale, assignment, transfer or surrender to any person during the period of three years from the date of its approval. After expiry of the aforesaid period the shipper may, with the prior approval of the Authority, assign its allocated capacity to another shipper. The said assignment shall however, be subject to the consent of the transporter and in line with the terms and conditions of access arrangement.

(3) The transporter shall be paid for transportation charges for the contracted capacity in terms of volume at the entry point and shall account for this gas in terms of equivalent energy value at exit point irrespective of volume.

(4) The available capacity shall be contracted on a 'use it or lose it basis'. In case the contracted capacity utilization is below seventy per cent in two calendar years, the unutilized part of the contracted capacity may stand cancelled. The relevant terms and conditions in the existing access arrangement shall be modified and approved by the Authority keeping in view the past performance with respect to capacity utilization.

(5) The allocated capacity shall be through a contract between shipper and transporter under access arrangement in form of maximum daily quantity.

(6) The transporter shall submit each access arrangement within twenty calendar days along with the prescribed fee for approval of the Authority under these rules. The authority shall decide the issue within thirty calendar days.

(7) After allocation of available capacity by the Authority to a shipper, the signing of access arrangement between the parties shall not exceed one hundred and twenty days calendar days from the date of such allocation.

**13. Procedure for connections at existing and new entry and exit points.—**(1) The transporter shall publish a standardized term sheet of transportation agreement as part of its access arrangement for considering the requests for new entry and exit points and person seeking access to existing entry and exit point on the gas pipeline transportation system shall use the same to submit the request to the transporter in writing.

(2) The transporter shall respond to the request made under this rule within ten calendar days.

14. **Nominations.**—(1) A shipper shall intimate to the transporter about the quantities that it intends to deliver at a particular entry point and off-take at a particular exit point from the gas pipeline transportation system on weekly basis on every Monday at 0800 hours PST in respect of the week starting from immediate following Monday.

(2) The nomination shall contain the expected gas flow details of daily nominated quantities as per the access arrangements agreed upon between the shipper and the transporter.

15. **Transportation tariff.**—The transporter shall submit the transportation tariff application to the Authority for approval along with the prescribed fee. The Authority shall approve the transportation tariff in accordance with the methodology along with the sample calculation which shall be as specified in Schedule-IV.

16. **System imbalance and charges.**—(1) The transporter shall be responsible for physical balance of its gas pipeline transportation system by maintaining the required pressure for all segments of the system. The shipper is responsible for balancing his daily deliveries at the entry points and daily off-takes from the exit points.

(2) Determination of imbalance (positive or negative) gas quantity between the transporter and the shipper shall be done on daily basis for each gas day and the gas imbalance shall be settled every month as agreed in the access arrangement.

(3) The account receivable party shall be compensated for the imbalance gas quantity in kind, as agreed in the access arrangement.

(4) It shall be the responsibility of the shipper to cure imbalances caused by the shipper in transporter's gas pipeline transportation system on day to day basis. In case, the shipper is unable to cure such imbalances, then, the transporter shall have the right to adjust daily nomination to mitigate such imbalances to ensure safety and system integrity of gas pipeline transportation system.

(5) Other modalities regarding balancing shall be addressed in the access arrangement, if required.

(6) If connected system operator fulfills the delivery responsibilities owed to a shipper at the entry point but the shipper defaults on the exit point responsibilities owed to the transporter for any reason what so ever, then in order to secure continuous

flow of gas in the system, such imbalances shall be settled within two calendar days between the connected system operator and the transporter as per inter-connection and operation arrangements.

**17. Gas, Line Pack and Transportation Losses.**—(1) Quantum of System Use Gas (SUG), Line Pack (LP) and Transportation Loss (TL) (calculated at maximum allowable operating pressure of the pipeline) shall be specified in the access arrangement. A shipper shall provide the natural gas for SUG, LP and TL in proportion to its capacity allocation in the gas pipeline transportation system.

(2) In case of dedicated pipeline the shipper shall provide its gas for LP and at the termination of access arrangement, recoverable volume equivalent to the related LP shall be delivered to the shipper's customer or compensated as per access arrangement.

**18. Planned maintenance.**—(1) The transporter is required to draw up, inform and place on its website a maintenance plan for a defined period identifying those entry and exit points where gas flows may be restricted due to maintenance works, the extent of the restrictions and when they shall occur in accordance with the terms and conditions of the access arrangement. The transporter shall prepare the plan to minimize disruption to affected parties and may request for information from shippers about their intended entry and exit flows.

(2) Dates of maintenance within the plan may be adjusted on one hundred and twenty calendar days notice to the affected shippers but the transporter shall then adhere to the plan.

(3) The planned maintenance period shall not exceed twenty calendar days on annual basis or as per mutual agreement between transporter and shipper.

**19. Operational planning.**—(1) The shipper shall on a periodic basis of at least sixty calendar days provide nomination of quantities that it desires to transport through the gas pipeline transportation system in line with the provisions of rule 6.

(2) The transporter shall schedule the quantities of gas for transportation based on the nominations received. However, in case the total nominations exceed available capacity on a day, the transporter shall schedule the firm quantities on the priority basis.

(3) The quantity or volume of gas measured at entry point shall be attributed to the shippers and connected system operator. Such attribution shall be based on a predetermined methodology as agreed between the transporter and connected system operator and shipper.

(4) The nominated quantity of gas over and above the contracted capacity that was scheduled by the transporter as per the nomination received is termed as authorized overrun quantity, which shall not exceed five per cent of the contracted capacity. Shipper shall be liable to pay transportation charge for overrun quantity as per Schedule-IV.

(5) The transporter shall allocate quantity of gas to various shippers and provide an exit point-wise allocation schedule to each shipper.

**20. Measurement of gas.**—(1) At each entry point, there shall be measurement equipment necessary to measure the quantity of gas flown, pressure and temperature. Either at the entry point or in the AHA before the entry point, there shall be equipments to measure gas composition, heating value, H<sub>2</sub>S content, Water and hydrocarbon dew point. values of such parameters shall be as specified in the Schedule-III.

(2) For the exit point, the network is divided into a homogeneous areas and the quality is continuously measured by gas chromatograph (GC) at each AHA. Measurement equipments to measure, throughout the day, the volume of gas flown, pressure and temperature shall be installed at the exit point. However, the total error limit or accuracy of the measurement equipment shall be as agreed between the parties through the access arrangement.

(3) Verification and calibration shall be carried out, according to the technical standards specified by the Authority or as per access arrangement.

(4) Either Party may install check meters at requisite points with a precondition that the same shall not interfere with the measurement equipment installed by the other party for custody transfer purpose.

**21. Gas accounting and reconciliation.**—(1) The gas accounting at the entry point shall be in the energy terms, on daily basis both by the shipper and the transporter.

(2) Gas reconciliation, billing and penalty and their settlement shall be addressed in accordance with the access arrangement between the parties.

(3) The transporter shall be paid for transportation charges which include capacity charges for the contracted capacity in terms of volume, at entry point and commodity charges for volumes delivered at exit point.

**22. Load management.**—RLNG end buyers for whom shipper and transporter have entered into an access arrangement shall not be subject to any gas load management by the transporter to the extent of access arrangement volumes only.

23. **Obligations.**—(1) At entry point where the shipper delivers gas that does not meet the quality as specified in Schedule-III, the transporter shall have the right to refuse to accept or to accept with certain conditions as agreed in the access arrangement.

(2) At the exit point where the transporter delivers gas that does not meet the quality requirements under the access arrangement the shipper shall have the right to refuse to accept deliveries or to accept deliveries with penalty to the transporter, as per access arrangement.

24. **Emergencies.**—In the event of the emergencies the transporter may take necessary measures as agreed by the shippers and the transporter, or by transporter and connected system operator in the access arrangement and interconnection and operation arrangement on mutually agreed terms, as the case may be.

25. **Information and confidentiality.**—All documentation, information, data, submissions and comments disclosed or delivered whether in writing or otherwise by any person to the transporter, shipper or to any other party either in connection with or in consequence of the requirements of these rules shall be regarded and treated as confidential; and shall not be disclosed either in full or part of any or all of the documentation, information, data, submissions and comments including the contents and copies thereof in any form except, with the prior consent of the contracting parties or unless specifically ordered by any of competent jurisdiction in Pakistan.

26. **Fees.**—The shipper or transporter shall pay the following fees under rule sub rule (1) and (6) of rule 13 and rule 16 respectively, namely:—

TABLE

S/N	Fees applicable for	Rupees per MMSCFD
(1)	(2)	(3)
1.	Processing of applications for capacity allocation	4000
2.	Approval of access arrangements	9000
3.	Determination of transportation tariff	7000

27. **Miscellaneous.**—(1) These Rules shall not have affect on the agreement signed by existing gas utility companies i.e. Sui Northern Gas Pipelines Limited and Sui Southern Gas Company Limited, prior to coming of these rules.

(2) In case of a conflict between an access arrangement and any other agreement under the provisions of these rules, the provisions of these rules shall prevail.

28. **Access arrangements.**—(1) The transporter shall place on its website the following information which *inter alia* includes,—

- (a) available capacity at entry and exit points shall be updated on regular basis, but as at least once a month;
- (b) procedures to apply for capacity allocation and entering into gas transportation agreement;
- (c) RLNG or natural gas (entry) and Gas (exit) quality specifications;
- (d) operational planning and scheduling;
- (e) off-spec gas penalties;
- (f) draft term sheet;
- (g) approved tariff for firm and interruptible services; and
- (h) standardized term sheet of transportation agreement.

#### SCHEDULE - I

[see rule 5(1)]

#### FORMAT FOR DECLARING CAPACITY OF GAS PIPELINE TRANSPORTATION SYSTEM BY TRANSPORTER

S/No.	Description
1.	Name of person:
2.	Name of pipeline segment/ section:
3.	Section wise capacity on the pipeline (to be furnished for each section separately):
	(a) Number of sections
	(b) Name of section with start and end point:
	(c) Capacity —(i) Volume terms



S/No.	Description
4.	Number of AHAs:
5.	Number of entry points on the pipeline route:
6.	Location of entry points:
7.	Number of exit points:
8.	Location of exit points:
9.	Entry point wise capacity (to be furnished separately for each segment)
10.	Exit point wise capacity (to be furnished separately for each segment)
11.	Technical parameters: (a) Inlet pressure at entry point: (b) Calorific value band at entry point: (c) Temperature: (d) Other elements as per Schedule – III
12.	Status of extra capacity available in the gas pipeline transportation system on common carrier basis:
13.	Detail of common carrier capacity being used by transporter itself or on contract carrier basis:
14.	Any demand pending with the transporter for common carrier usage of the gas pipeline transportation system along with duration of such pendency:
15.	Preference on entry and exit points:

For Distribution system Capacities to the extent of Supply mains shall be updated

### SCHEDULE — II

[see rule 5(3) & rule 11(3)]

#### FIRST COME FIRST SERVED (FCFS) CRITERIA

1. In order to ensure transparent and non-discriminatory third party access under these Rules, the prospective shipper shall submit following information and documents along with projected or firm timeline for compliance under First Come First Served Criteria, as set out hereunder, for capacity allocation.

2. For LNG developer or LNG buyer or RLNG buyer:
  - (a) Committed first RLNG delivery date.
  - (b) Implementation agreement (IA) with relevant port authority.
  - (c) Head of Agreement (HOA) with builder or provider of Floating Storage and Re-gasification Unit (FSRU) or Floating Storage Unit (FSU) for the provision of FSRU/FSU in case of FSRU/FSU based projects.
  - (d) HOA in respect of LNG Terminal Usage Agreement (TUA) with Territorial Owner and operator (TO or O) by LNG buyer or RLNG buyer, as the case may be.
  - (e) agreement with credible and established LNG shipper for supply of LNG to meet RLNG end-users purchase commitments.
  - (f) Provisional list of RLNG buyers along with volume and purchase firm commitments to be provided subsequently for the capacity requested.
  - (g) Ramp-up period to achieve full utilization of capacity requested.
  - (h) Financial capacity verified by bankers and or lending institutions of international repute with affiliates in Pakistan.
  - (i) Provisional financial plan (debt and equity) regarding the funding of the project.
  - (j) Detailed design, engineering and construction schedules.
  - (k) Timeline for achieving Financial Close.
  - (l) Engineering and construction contracts (EPC) with reputable companies after achievement of Financial Close.
3. For shipper other than LNG developers or LNG buyers or RLNG buyer.
  - (a) Submission to the Authority :
    - (i) RLNG Purchase and Sales Agreement or HOA signed with RLNG seller or RLNG reseller or and.
    - (ii) Capacity availability letter of transporter.

- (b) The allocated capacity would automatically be waived off if the final RLNG Purchase and Sales Agreement is not signed within fifteen calendar days of capacity allocation by the Authority.

4. The Authority shall undertake a due diligence of the achievement of the above noted requisites and project milestones and award capacity allocation to the applicant on FCFS basis and in terms of price competitiveness.

5. Soon after the capacity allocation and not later than thirty days of dry financial close, the shipper shall furnish to the Authority the performance bank guarantee of US\$ five million from a reputable bank acceptable to the Authority, encashable in Pakistan. Failure to achieve the above milestones may tantamount to cancellation of allocated capacity and encashment of performance bank guarantee.

6. The transporter shall only start their infrastructure development after achieving the wet financial closure or disbursement date by the developers subject to the prior approval of Authority.

7. The Authority shall allocate or book capacity in transporter's gas pipeline transportation system.

- (a) For the connected system operators for the period as per the concession agreement with respective port authority. If either of the below cases happen, then allocated capacity to connected system operator may be cancelled by the Authority.

i. The construction is not completed within the time allocated in the concession agreement with respective port authority save for Force Majeure.

ii. Insolvency of connected system operator.

- (b) The applicant shall be allowed to use allocated capacity for three (3) months beyond the committed "First RLNG" delivery date submitted, and any extension approved by the Authority based on achievement of credible milestones which provide for surety of completion of the LNG terminal and first RLNG delivery in a reasonable time period. In addition to the encashment of performance bank guarantee, failure to achieve RLNG delivery and capacity utilization within the stipulated time shall result in cancellation of allocation, or re-allocation to another LNG developer or LNG buyer, who is next in-line on "First RLNG" delivery date and has achieved the requisite milestones and meet the criteria.

- (i) For the shippers other than LNG developer or LNG buyer, as per the period of the "Gas or RLNG Purchase and Sale Agreement", under which capacity shall be allocated. In case of any of the below, then capacity allocated to shipper shall be cancelled by the Authority in a timely manner:
- i. Early termination of "Gas/RLNG Purchase and Sale Agreement", under which capacity has been allocated.
  - ii. Insolvency or default of the shipper.
  - iii. Insolvency or default of RLNG end buyer.

### SCHEDULE — III

[see rule 8, 20 and 23(1)]

#### RLNG QUALITY SPECIFICATIONS FOR ENTRY TO TRANSPORTER'S GAS PIPELINE TRANSPORTATION SYSTEM

S/No.	Parameters	Limit
1.	Hydrocarbon dew point (Degree Fahrenheit, max.)*	32*
2.	Hydrogen Sulphide (grains/100 SCF, max.)	0.24
3.	Total Sulphur (grains/100 SCF, Max)	3.5
4.	Carbon Dioxide (mole % max.)	3
5.	Nitrogen (mole % max.)	7**
6.	Oxygen (mole % max.)	0.2
7.	Total Inerts (mole % max.)	10
8.	Temperature (Degree Fahrenheit, max.)	120**
9.	Water Content (Lbs/MMSCF, max)	7**
10.	Pressure (PSIG)	**
11.	Calorific value (BTU/SCF)	9251150**
12.	Wobbe Index (BTU/SCF)	1290 ± 5%**
13.	Purity: Be commercially free from foreign materials and dust or other solid matter or environmentally harmful substances, waxes, gums and gum forming constituents which might cause interference with the proper operation of the pipelines and associated facilities.	

\* At all pressure.

\*\* Indicative values maybe negotiated between shippers and transporters in the access arrangements.

## SCHEDULE - IV

*[see rule 15 and 19(4)]*TRANSPORTATION TARIFF—  
DETERMINATION OF TRANSPORTATION CHARGES

1. In order to encourage a level playing field and market development it is important that tariffs for access to and use of gas pipeline transportation systems should be as transparent and non-discriminatory. The tariffs should be cost reflective and they should still provide sufficient incentive for efficient management, system upgrade and expansion *i.e.* send adequate signals for investments.

2. Achieving cost reflective requires separating and allocating correctly the cost element to different functions involved in transportation (accounting segregation of transmission, distribution, sales etc), defining a calculation methodology and design of tariffication.

3. The key practical issues in tariffication design are: the income, the system owner shall be allowed to collect from the shippers and the way this is recovered from the shippers. Due consideration is to be given to the value of assets being used, the appropriate rate of return, depreciation, operating costs (variable and fixed) and other similar financial matters which may arise at the time of determination of tariff.

4. It is essential that the value of regulated assets (RAV) used for transportation is realistically ascertained through accounting segregation and determined to reflect current replacement cost since the original cost has depreciated due to which the allowable revenue declines as the capital base fall, particularly in case of mature pipeline system like SSGCL and SNGPL.

5. In order to recover the annual revenue requirement, the transportation tariff shall consist of following charges:

- (a) Capacity Charge = (Return on Asset) ROA on RAV + Depreciation + Fixed Operating & Maintenance Costs; and
- (b) Commodity Charge = Variable Operating and Maintenance Costs

6. Capacity Charges shall be worked out on basis of contracted capacity in relation to the technical capacity of the relevant segments of gas pipeline transportation system used by the shipper.

7. For return calculation purposes the existing fixed assets involved in transportation shall be valued at replacement cost while additional investments at actual cost. Revaluation of fixed assets in operation including reassessment of their economic life for working out depreciation in respect of gas pipeline transportation system shall be carried out for determining net replacement value as on June 30, 2011 which may be reviewed after every two years.
8. Depreciation on existing fixed assets involved in transportation and used as common carrier shall be based on the revised economic life of such assets.
9. Depreciation on dedicated network or spur lines which may become redundant after expiry of access arrangement shall be based on the tenure of access arrangement.
10. 17% / 17.5% return on replacement value of net fixed assets in operation shall be allowed to SSGCL and SNGPL, subject to changes in rate of return from time to time.
11. Transportation charges shall be for recovery of above costs and return as mentioned above, considering entry and exit point:
  - (a) Firm service access arrangement shall attract fixed charges for contracted capacity and commodity charges for volume handled in MSCF.
  - (b) Interruptible service contracts shall attract charges for capacity utilization and volume handling.
  - (c) A worked example of transportation tariff is made part of this Schedule.
12. Authorized over-run shall be charged at 110% of transportation tariff.
13. The transportation and authorized over-run charges shall be paid monthly by the shipper.

WORKED SAMPLE CALCULATION OF TRANSPORTATION TARIFF UNDER  
SCHEDULE

	(mmcf/d)
Technical capacity of the segment for TPA	200
Shippers' Contracted Capacity	100
Technical capacity actually operated	160
Capacity utilized by the Shipper	80
<b>Revenue Requirements (Total Transportation Cost)</b>	<b>Rupees in Million</b>
<b>Fixed Cost based on Technical Capacity</b>	
Operating & Maintenance Cost	1,000
Depreciation on replacement value of the segment	600
ROA on replacement value of the segment	2,000
<b>Operating expenses and maintenance cost</b>	<b>3,600</b>
Variable Operating & maintenance Cost on Capacity actually operated (160 mmcf/d)	400
	4,000
<b>Transportation Tariff</b>	<b>(Rupees in Million)</b>
Capacity charges based on Shippers' contracted capacity against Technical capacity: [Fixed Cost x Contracted capacity] ÷ Technical capacity = $3600 \times 100 \div 200$	1,800
Commodity charges based on volume actually transported against actual operated Technical capacity: [Variable Operating & Maintenance Cost x Contracted Volume actually transported] ÷ Technical Capacity actually operated = $400 \times 80 \div 160$	200
<b>Total Tariff</b>	<b>2,000</b>
<b>In case of authorized overrun 110 % of total tariff</b>	<b>2,200</b>

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