آئل اینڈ گیس
ریگولیٹری اتھارٹی

Oil & Gas
Regulatory Authority

GUARDING PUBLIC INTEREST

Case No. OGRA-6(2)-1(4)/2018-Review

# IN THE MATTER OF SUI NORTHERN GAS PIPELINES LIMITED REVIEW OF ESTIMATED REVENUE REQUIREMENT, FY 2018-19

## UNDER

## SECTION 8(2) OF OIL AND GAS REGULATORY AUTHORITY ORDINANCE, 2002 AND NATURAL GAS TARIFF RULES, 2002

## DECISION

**February 27, 2019**

**Before:**

**Ms. Uzma Adil Khan, Chairperson**
**Mr. Noorul Haque, Member (Finance)**
**Dr. Abdullah Malik, Member (Oil)**

Certified True Copy

# Table of Contents

*ANNEXURES*

## 1. Background

1.1. Sui Northern Gas Pipelines Limited (the petitioner) is a public limited company, incorporated in Pakistan, and listed on the stock exchanges at Karachi, Lahore and Islamabad. The petitioner is operating in the provinces of Punjab, Khyber Pakhtunkhwa (KPK) and Azad Jammu & Kashmir (AJ&K) under the license granted by Oil & Gas Regulatory Authority. It is engaged in the business of construction and operation of gas transmission and distribution pipelines, sale of natural gas and sale of gas condensate (as a by-product).

1.2. The petitioner had filed a petition on April 27, 2018 under Section 8(1) of the Oil and Gas Regulatory Authority Ordinance, 2002 (the Ordinance) and Rule 4(2) of the Natural Gas Tariff Rules, 2002 (NGT Rules), for determination of its Estimated Revenue Requirement (ERR) for FY 2018-19 (the said year). The Authority, vide its decision dated June 21, 2018, had determined the Estimated Revenue Requirement (DERR) for the said year at Rs. 286,713 million in order to meet shortfall of Rs. 102,317 million (the amounts have been rounded off to the nearest million here and elsewhere in this document) translating into an increase of Rs. 234.57 per MMBTU in the average prescribed price w.e.f July 01, 2018.

## 2. The Petition:

2.1. The petitioner submitted this review petition on October 16, 2018, under Section 8(2) of the Ordinance, projecting a shortfall of Rs. 89,274 million, translating into an average increase of Rs. 210.37 per MMBTU in its prescribed price for its normal business, w.e.f. July 01, 2018. The said revenue requirement was based on the prescribed prices per DERR FY 2018-19. Subsequently, on 6th November, 2018, the petitioner submitted amended petition after incorporation of Rs. 850 million on account of segregation of Transmission network for operational ease and flexibility. The petitioner vide its application dated 9th November, 2018 further amended the petition after incorporation of estimated expenditure on account of (i) augmentation / bifurcation of Gas Network in Lahore City Phase-1 amounting to Rs. 3,424 million (ii) low gas pressure in Bahawalpur and Lodhran-System augmentation amounting to Rs.1,931 million. The petitioner again submitted the amended petition on 12th November, 2018 (the petition) after incorporating the estimated revenue and capital cost of KMI implementation plan, requesting to determined the revenue requirement at Rs. 320,926 million with a shortfall of Rs. 91,370 million, for which increase in average prescribed price of Rs. 215.31 per MMBTU has been requested w.e.f. 1st July, 2018 for FY 2018-19 (the said year). Besides, the petitioner has claimed estimated increase in average prescribed price for LNG Business at Rs. 103.47 per MMBTU and for LPG business Rs. 4,295.41 per MMBTU for the said year.

2.2. The petitioner being aggrieved with the Authority determination dated June 21, 2018 also submitted Motion for Review on DERR FY 2018-19 on July 17, 2018 and has claimed almost all items of T&D Cost including some other new items. The petitioner has requested the Authority to treat the motion for review as integral part of review petition. Accordingly the Authority while considering the request of the petitioner decides to treat the same as part of the instant petitioner.

2.3. Following items are claimed in the instant review petition:

*i.* Cost of gas sold has been computed at Rs. 220,623 million taking into account the latest actual/estimated oil prices in the international market, impact of rupee US $ exchange rate, revised projection of gas purchase volume based on actual gas availability for the months of July and August, 2018 and latest indications.

*ii.* Transmission and distribution cost has been requested to increase by Rs. 6,719 million.

*iii.* Gas internally consumed has been requested to increase by Rs.312 million.

*iv.* New Regions Operating and HR cost has been projected at Rs. 2,395 million.

*v.* Expenditure of Rs. 14 million on account of foreign training of BOD and senior management.

*vi.* Expenditure for operating cost of technical audit amounting to Rs. 30 million.

*vii.* Insurance cost (loss of profit) amounting to Rs. 115 million.

*viii.* Operating cost of demonstration project for gasification amounting to Rs 4.00 million.



Certified True Copy

*ix.* KMI Implementation Plan (FY 2017-18 & FY 2018-19) amounting to Rs. 1,251 million.

2.4. The Authority admitted the petition for consideration, as a prima facie case for evaluation existed and it was otherwise in order.

2.5. Authority also observes that Estimated Revenue Requirement of the petitioner for said year was determined by the Authority on June 21, 2018 wherein each component was discussed and deliberated in detail. Keeping in view the comments/suggestions of interveners and submissions of petitioner in the public hearing held in this regard, the Authority is of the considered view that adequate rationale has been provided to arrive at a decision in DERR for the said year. Macro aspects and policy related issues raised by the interveners have also been addressed. Further, the decisions taken on each component of revenue requirement are lucid and complete in all respect therefore need no further review.

## 3. Proceedings

3.1. A notice inviting interventions / comments from consumers, general public and other interested / affected persons, intimating time and place of the public hearing was published in daily newspapers. A public hearing was held on December 10, 2018 at Lahore, which was participated by the petitioner and interveners.

**Petitioner:**

i. Petitioner's team led by Mr. Amer Tufail, Managing Director
ii. Legal counsel, Mr. Mirza Mehmood Ahmad.

3.2. The Authority received applications to intervene in the proceedings from the following persons / entities:

**Interveners/Participants**

i. Khyber Pakhtunkhwa Oil & Gas Company Limited (KPOGCL)
ii. Muhammad Aslam Chaudhry, Lahore
iii. Mr. Saleem Parekh, President, Karachi Chamber of Commerce and Industry

3.3. The petitioner made submissions in detail with the help of multimedia presentation explaining the basis of its petition. The petitioner also responded to the comments, observations and objections of the interveners participants.

3.4. The petitioner's legal counsel, during the hearing, submitted that the Authority under the provisions of the Ordinance is obligated to promote and ensure the observance of the efficient practices, safeguard the public interest including the national security interests of Pakistan in relation to regulated activities and protect the interests of all stakeholders inter-alia the people of Pakistan in general, the licensee and the Government of Pakistan. The public interest would mean something in which public at large had some interest or by which their rights or liabilities were affected, but would not mean interest to a particular person.

3.5. The counsel further stressed that Section 7 of the Ordinance provides that the Authority shall determine or approve the tariff for regulated activities keeping in view the cost of alternate or substitute source of energy. The counsel contended that in tariff determination process, the Authority is not only obligated to protect the interests of gas consumers, but the interests of public at the large.

3.6. The counsel also argued that total revenue requirement under Section 8(6)(h) ensures guaranteed return and provides that total revenue requirement of the licensee shall be determined so as licensee may achieve 17.5% return (17.43% in new tariff regime). Legal counsel, during the hearing, further argued that the Authority treats the rate of return as a ceiling item rather than a floor item and proceeds to make deductions from the same.

3.7. The legal counsel The Authority is obligated under Section 7(1) of the Ordinance, to determine or approve tariff for regulated activities whose licenses provide for such determination or such approval, or where authorized by this Ordinance, subject to policy guidelines. License Condition No. 5.2 of license granted to the petitioner clearly states that subject to the efficiency related benchmarks adjustments, the Authority shall determine total revenue requirement of the licensee to ensure that it achieves 17.5% (17.43% in new tariff regime) return on its average net fixed assets in operation for each financial year. The Authority, accordingly, has been determining the revenue requirement of the petitioner, providing return on net operating assets in accordance with the said provision of the Ordinance as well as the petitioner's license, while including various income & expenditure heads as part of prescribed price.

3.8. Section 6(2)(s) of the Ordinance requires the Authority to prescribe, review, approve and regulate tariffs for regulated activities pertaining to natural gas and operation of the licensees for natural gas. In this connection, Section 6(2) (t) of the Ordinance and License Condition 5.3 of license granted to the petitioner provides that the Authority, in consultation with the FG and licensees for natural gas, shall determine for each such licensee a reasonable rate which may be earned by such licensees in the undertaking of its regulated activity pertaining to natural gas keeping in view all the circumstances. Accordingly, in pursuance of new tariff regime, which is a complete package to deal the tariff for regulated natural gas sector, the Authority has allowed both gas utilities a reasonable market based rate of return on WACC model on the value of their net regulated fixed in operation.

3.9. Written submissions were also received from some of the interveners. The Authority accepted all the above mentioned applications for intervention.

3.10. The petitioner made submissions in detail explaining the basis of its petition and also responded to the comments, observations, objections, questions, and suggestions of the participants.

3.11. The substantive points made by the interveners, representatives of general public, and participants during hearings are summarized below:

3.12. The officials, representing, Energy Department, Government of Khyber Pakhtunkhwa alongwith other concerns highlighted that UFG of 10.87% (56,543 MMCF) , claimed by the petitioner is an arbitrary figure with no calculation. They are of the view that UFG losses are above 15% (77, 783MMCF) for the said year. OGRA is requested to share the basis/ calculations for 10.87 % claimed UFG losses and also disallow UFG of 45,114 MMCF i.e. Rs. 19,016 Million.

3.13. Mr. Muhammad Aslam Ch raised the point of application of pressure factor by the Company. He also requested to produce UFG statement without sales to bulk consumers to find out results achieved against the cost being spent to control UFG but no action has been seen in the decision.

3.14. The details of UFG percentage i.e. 10.87 % including others may please be seen in the UFG Calculation Sheet in Table 25 of the Determination of Estimated Revenue Requirement of SNGPL for FY 2018-19.

3.15. As regards the issue relating to Pressure Factor raised by Mr. Muhammad Aslam Chaudhry, the Authority in its decision for DFRR for FY 2017-18 dated 15-1-2019 directed the petitioner to re-examine the application of correct pressure factor in the domestic consumers' gas bills and make any adjustment on this account to ensure the compliance of provision of clause 11 of the standard supply contract with the consumers. Further, the compliance of said clause may be ensured henceforth to avoid the deviation from the standard supply contract viz a viz actual bills. The UFG Sheet contains the bifurcated arrangement in respective FRR.

3.16. Mr. Saleem parekh criticized the Federal Government policy linkage of well head prices of local gas with the international oil prices. The intervener emphasized that the demand supply gap of natural gas can be narrowed down by enhancing the exploration activities particularly shale and tight gas by giving an example of USA where natural gas has become so abundant due to exploration of shale gas resultantly the gas prices have reduced to 2 dollars per MMBTu. Contrarily, even if shale gas is explored in Pakistan, the gas price will be doubled due to linkage with high international oil prices. Furthermore, Pakistan buy crude oil from middle eastern resources at reduced price and on credit but the purpose of calculation of wellhead gas prices the international oil price at New York and London are quoted. The intervener has further argued that capping on international oil price earlier introduced by GoP was a tool to protect the local industry against price fluctuation in the oil market. However, in the last petroleum policy the capping system was removed for new explorations. Due to increase in capping from $45 to $100 the wellhead gas prices have increased from $2.99 in 2001 to $4.08 at present.

3.17. The intervener has further submitted that Government should resolve the disputes with the local people who are creating law and order situation and pending cases are lingering on in the courts. So that huge reserves lying in different fields like Kohlu and Manzalai can be explored and brought into the system. Moreover, the intervener has criticized the subsidy on fertilizer on the cost of whole industry, Government should grant such subsidies through budgetary allocation directly to the users and not to the fertilizer plants. Even if the fertilizer sector has to be given subsidy the same should be a percentage of actual cost of gas and not at a fixed rate.

3.18. The issue related to exploration of gas and law & order situation is the Federal Government domain and does not fall under the purview of OGRA. Wellhead gas prices are determined in accordance with the lifelong agreements between the Federal Government and the producers based on the petroleum policies approved from time to time with the Federal Government. The wellhead gas prices are linked with the international oil prices prevalent in Middle East and not in New York or London. OGRA has to compute and notify the wellhead gas prices in accordance with the said agreements under the Ordinance. Furthermore, the matter of subsidy on natural gas rate is also Federal Government subject.

## 4. Authority's Jurisdiction, Determination Process and Discussion about Related Points

4.1. The Authority is obligated to determine total revenue requirement /prescribed prices of the petitioner in accordance with Section 8(1) and 8(2) of the Ordinance and relevant License conditions of its integrated License. Section 8(1) of the Ordinance empowers the Authority to determine an estimate of the total revenue requirement of its licensees for a financial year and on that basis, advises the FG, the prescribed price of natural gas for each category of retail consumers.

4.2. GoP, pursuant to Section 8(3) of the Ordinance, is legally empowered to advise the Authority for notification in the official gazette, the minimum charges and sale price for each category of retail consumers. The Federal Government further decides the Gas Development Surcharge and the subsidy to be enjoyed/extra amount to be paid with respect to average cost of service, by various categories of consumers. Accordingly, it requires that macro-economic indicators as well as the cost of alternate and substitute source of supply be considered by the FG as well while fixing the sale prices. The Authority, in principle, is of the view that all the category of consumers must at least pay the average cost of service, keeping in view the existing cost of alternative or substitute source of energy. Accordingly, in the instant determination prescribed prices have been set keeping in view the provisions of Section 7 of the Ordinance. This shall provide a level playing field for all concerned.

4.3. The Authority examines all applications and petitions in the light of relevant rules. Public notices are issued and all the stakeholders are provided full opportunity to intervene / comment upon the issues pertaining to determination of revenue requirement, in writing and at public hearings, which are duly taken into account. The operating revenues, operating expenses and changes in asset base are scrutinized in depth, keeping in view the justification and provision of the law. Accordingly, the decision is always based on the logic and rationale striking a balance among the divergent interests of stakeholders. Further, GoP's attention is specifically drawn to the pleas relating to policy matters for consideration, before deciding the retail prices for various categories of consumers. The Authority further, wherever necessary, issues directions to the petitioner to streamline/resolve the matters under the regulatory and legal framework.

4.4. The decisions issued by the Authority have always been strictly in accordance with the relevant provisions of Law. All the statutory requirements are firmly complied with before issuing any Order. The Authority, throughout the determinations since inception, ensures transparency in the process while balancing the interest of all stakeholders, including general public, gas utilities, industrial consumers, etc. The checks and balances implemented by the Authority to improve the quality of service to consumers and to bring efficiency in the overall management of the company have proved to be beneficial for the whole nation in measurable terms.

## 5. Addition in Operating Fixed Assets

5.1. The petitioner has claimed addition in assets including Gas Internally Consumed at Rs. 19,696 million as under:-

Certified True Copy

## Summary of Addition RERR FY 2018-19

| S.No | Description | ERR 2018-19 (Rs. Million) | DERR 2018-19 (Rs. Million) | RERR 2018-19 (Rs. Million) |
|---|---|---|---|---|
| 1 | **New Pipeline/Other Projects** | | | |
| i | Requirement of Additional Budget for Utilization of Additional Gas from Adhi Gas Field in Rawalpindi / Islamabad Regions (Distribution lines) | - | - | 509 |
| ii | Low Gas Pressure in Tehsil Jalalpur Jattan District Gujrat-System Augmentation: | - | - | 654 |
| iii | Project for segregation of transmission network for operational ease and flexibility at Bhong, | - | - | 850 |
| iv | Low Gas Pressure in Bahawalpur and Lodhran | - | - | 1,931 |
| v | Augmentation / Bifurcation of Gas Net Work in Lahore City Phase-I | - | - | 3,424 |
| vi | Upgradation of SMS's | - | - | 1,349 |
| vii | Establishment of Component Centre at Haroon-abad(Bahawalpur Region) | - | - | 3 |
| viii | Approval of Demonstration Project and budget for gasification system for 1000 households | - | - | 50 |
| ix | KMIS Implementation Plan | - | - | 1,130 |
| X | Laying of 8" Dia. x 14.50 Km Pipeline to Receive gas from OGDCL | - | - | 226 |
| | **Other Assests** | | | **10,127** |
| 2 | Installation 300, 000 additional New Connections | 14,467 | 4,666 | 4,666 |
| 3 | Replacement of Defective/Old Meters: | 3,035 | 2,126 | 909 |
| 4 | Computer Hardware and I.T | 541 | 346 | 195 |
| 5 | LPG Air Mix Cost | 1,192 | - | 1,192 |
| 6 | Gas Internally Consumed (GIC) | 1,221 | 1,253 | 1,565 |
| 7 | Creation of New Regions | 804 | - | 804 |
| 8 | Regional Office Sahiwal Building | 300 | 185 | 238 |
| | Total | **21,560** | **8,576** | **19,696** |

### 5.2. New Pipeline and other Projects

5.2.1. The petitioner has submitted the following new projects through its RERR 2018-19

### 5.3. Requirement of Additional Budget for Utilization of Additional (60-90 MMCF) Gas from Adhi Gas Field in Rawalpindi /Islamabad Regions (Distribution Lines)

5.3.1. The petitioner has informed that its Board of Directors (BOD), in its 507th meeting held on May 05, 2018, has also accorded approval for additional budget amounting to Rs. 509 million for utilization of additional gas from Adhi Gas Field in Rawalpindi

/Islamabad Regions, under the head "System Augmentation" subject to completion of all relevant codal/procedural, legal and financial pre-requisites and subject to Supreme Court's decision dated March I, 2018 in Human Rights Case No.6464-G of 2017 relating to provision of New Gas connections on turn merit basis and Election Commission of Pakistan's Notification No. F2 (3) /2018-Coord dated April 11 , 2018 and the OGRA's Decision.

5.3.2. The petitioner also informed that in order to utilize additional gas from Adhi Gas Field in Islamabad and Rawalpindi Regions, the following pipelines are required to be laid: -

| Sr. No | Description | Design Capacity MMCFD | Length (Km) | Cost Rs. Million |
|---|---|---|---|---|
| 1. | 8" Diameter Distribution supply main from Athal Chowk, Barakahu to Attaturk Avenue, G-6, Islamabad | 5 | 9.3 | 77 |
| 2. | 16" Diameter Distribution supply main from downstream of SMS Rawat to Soan Bridge along GT Road | 30 | 10.9 | 195 |
| 3. | 10" Diameter Distribution supply main from existing 10" diameter supply main at Military College of Signals (MCS) to Adyala village via Adyala Road | 10 | 17.65 | 204 |
| 4. | 10" Diameter Distribution supply main from existing 10" diameter supply main at Ammar Chowk to Tipu Road top hookup with existing 12" diameter supply main | 5 | 2.2 | 31 |
| 5. | TBS of capacity 150 MCF/Hr. near Nilore Model School, for supply main at Sr. No, 01 | | - | 2 |
| | | | Total Cost | 509 |

5.3.3. The petitioner further stated that cost estimates of the aforementioned supply mains have been prepared based on their unit construction rates for FY 2017-2018. Since the proposed supply mains are to be laid down in areas of Rawalpindi/Islamabad cities having RCC shoulders/footpaths in varying lengths requiring their cutting through jack hammering and their subsequent reinstatements, whereas their unit construction rates are generic and does not account for these special site conditions, therefore, budgetary provisions have been kept in cost estimates to allow for trenching in RCC Shoulders/footpaths by jack hammering and their subsequent reinstatement. In addition to this, some additional costs have also been included for major crossings involved in these supply mains which are to be executed by overhead/ thrust boring, therefore, cost comparison is not available as such.

5.3.4. Keeping in view the national importance of the project, the petitioner has requested the Authority to grant approval of the above-mentioned project.

5.3.5. ***Keeping in view the justifications provided by the petitioner, the Authority allows, in principle, the aforesaid project subject to actualization at the time of respective FRR. The project shall accommodate the additional gas from Adhi Gas Field.***

### 5.4. Laying of Pipelines to resolve Low Gas Pressure Problem in Tehsil Jalalpur Jattan, District Gujrat- System Augmentation (Transmission Lines)

5.4.1. The petitioner has informed that its Board of Directors (BOD), in its 507th meeting held on May 5, 2018, has accorded approval for undertaking construction of 16" diameter x 7 Kms Wazirabad D/S Chenab crossing transmission loopline, laying of a dedicated 8" diameter x 20 Kms transmission spur from River Chenab D/S crossing to Jalalpur Jattan and construction of an SMS of capacity 10 MMCFD at its terminal point i.e. Jalalpur Jattan City at a total budgeted cost of Rs. 654 million. Keeping in view the national importance of the project, the petitioner has requested the Authority to grant approval of the said project. The proposed augmentation project involves obtaining of NOCs from the concerned Departments/ Authorities. It also involves major construction work like 1 Km wide River Chenab crossing and construction of piling work which is very costly, therefore, the cost comparison may not be provided for the said Project. The total capital cost of infrastructure required for proposed system augmentation shall be as follow: -

| Sr. No. | Infrastructure Required for Augmentation | Length (Km) | Estimated Cost Rs. Million |
|---|---|---|---|
| 1 | Construction of 16" diameter x 7 Kms Wazirabad-D/S Chenab crossing loopline | 7 | 293 |
| 2 | Construction of 8" diameter x 20 KM D/S Chenab crossing to Jalalpur Jattan dedicated transmission Spur | 20 | 326 |

| | | | |
|---|---|---|---|
| 3 | Construction of new SMS having 10 MMCFD capacity | 1 | 35 |
| Grand Total | | | **654** |

5.4.2. Keeping in view the national importance of the project, the Authority is requested to grant approval of the above project.

5.4.3. ***Keeping in view the justifications provided by the petitioner, the Authority allows, the above project, in principle, subject to actualization at the time of respective FRR. The said project shall address and resolve the acute low gas pressure problems in Jalalpur Jattan city and adjoining localities/ villages.***

5.5. **Project for Segregation of Transmission Network for Operational Ease and Flexibility**

5.5.1. The petitioner informed that with the injection of RLNG into SNGPL's Transmission Network and in anticipation of Third Party Access Regime, it has become essential to build flexibility in Transmission system for separate operation to supply different gas streams to different consumers. Construction of separate pipeline network under proposed Project - XI (RLNG-III) has been shelved for time being, which would have provided sufficient flexibility to our Transmission Network to meet specific consumer commitments.

5.5.2. The budgeted cost of this arrangement shall be Rs. 850 million. The transmission system segregation work is being carried out for the first time by SNGPL, as such, specific previous cost comparison is not available.

5.5.3. Further, the petitioner has highlighted that transmission pipeline segregation project downstream of Bhong is in fact for facilitation of smooth flow of gas supplies towards RLNG base Power plants and other consumers at contractual specs of gas. It may also be mentioned that the Authority approved in principle, the RLNG Phase-I & II projects at a total cost of Rs. 76,484 million in DERR 2014-15 & 2015-16 respectively. As per the Petitioner it has capitalized the major amount of Rs. 55, 615 million up-to financial year 2017-18 and some of the remaining works are in progress and the amount against these works will be capitalized in due course of time however, the Petitioner expects a saving of round Rs. 14 ,000 million approximately in these projects. The Project has also been approved by Board of Directors of SNGPL in its 513th meeting held on 31-10-2018.

5.5.4. ***Keeping in view the justifications provided by the petitioner, the Authority allows, the above project, in principle, subject to actualization at the time of respective FRR.***

### 5.6. Low Gas Pressure in Bahawalpur and Lodhran System Augmentation

5.6.1. The petitioner informed that presently, gas is being supplied to Bahawalpur city, Lodhran city and adjoining localities through SMS Bahawalpur which exists at the tail end of 8"Ø × 29.91 Miles (48.15 KM) transmission line originating from Repeater Station (A5) at Khairpur Dahaupto Bahawalpur. In addition to SMS Bahawalpur, 4 No. other SMSs i.e. SMS Sama Satta, SMS Khanqahsharif, SMS Mubarakpur and SMS Hatheji have also been constructed on aforementioned transmission pipeline while another 2 No. SMSs i.e. SMS Lodhran and SMS Mandi Yazman are also under construction for bifurcation of distribution networks.

5.6.2. In order to address the acute low gas pressure / no gas issues of Bahawalpur City, Lodhran City and adjoining localities as highlighted above, the petitioner carried out detailed site survey and simulation study on TG NET software in coordination with transmission department which reveals that replacement of existing A5 (Khairpur Daha) - Bahawalpur transmission pipeline with 16"Ø transmission pipeline is required along with up-gradation of A5 valve assembly and up-gradation of existing SMS Bahawalpur upto 100 MMCFD. The petitioner has informed that looping is only feasible if existing 8" dia pipeline successfully withstands/passes the hydrostatic testing after successful commissioning of proposed 16" dia system augmentation and therefore, only replacement results are being considered at this stage as the existing 8" dia pipeline shall be abandoned if it fails during hydrostatic retesting.

Total capital cost of the infrastructure required for proposed system augmentation shall be as follow:-

| Infrastructure Required for Augmentation | Capacity (MMCFD) | Budgeted Cost Rs. Million |
|---|---|---|
| Construction of 16" dia. x 30.43 Miles (49 Km)A5 (Khairpur Daha) - Bahawalpur transmission pipeline | 162 | 1631 |
| Upgradation of SMS Bahawalpur up-to 100 MMCFD capacity | | 300 |
| **Grand Total** | | **1,931** |

5.6.3. It is hereby certified by the management that all procedural codal, legal, and financial perquisites shall be fulfilled for completion of the project.

5.6.4. ***Keeping in view the justifications provided by the petitioner, and public interest at large the Authority allows, the above project, in principle, subject to actualization at the time of respective FRR. The said project shall address and resolve the acute low gas pressure problems in Bahawalpur and Lodhran city and adjoining localities.***

5.6.5. ***The Authority, however, directs the petitioner to ensure economy in all the above projects by optimizing the already available Tools, Equipment, Plant and Machinery and that the spares may be purchased keeping in view the inventory already available in the stores. Moreover, RLNG project based assets should also be utilized properly in such projects.***

## 5.7. Augmentation / Bifurcation of Gas Network in Lahore City

5.7.1. Lahore being the Metropolitan city of Pakistan is being supplied gas through three SMS's i.e. SMS B-3 located at Shahdara, SMS-II & SMS III located at Defence road near Mohlanwal, having capacities of 175 MMCFD, 170 MMCFD and 190 MMCFD respectively. Beside Lahore City, SMS II & SMS III are also supplying gas to Kasur City and its adjoining / surrounding areas through 16"dia supply main. On the average each SMS is supplying gas to around 333,000 consumers and has an average gas network of around 5,000 KM. In the recent winters peak gas load recorded through these SMS's were 300 MMCFD in total. In order to address the operational constraints, low pressure / no gas issues and rapid expansion /

development plans in Lahore city as highlighted / detailed above, an augmentation / bifurcation plan of gas supply to Lahore city has been prepared by considering the operation of gas distribution network at optimum conditions by providing multiple feed points to gas distribution network in Lahore city through detailed site survey and comprehensive analysis/simulation study. As per plan, following infrastructure/remedial measures are required to be undertaken as described below:

i. 24" Ø × 48 KM transmission spur has been proposed from Phool Nagar V/A to Nabi Bakshwala where 2 No SMSs namely SMS Kasur and SMS Ferozepur road shall be constructed.

ii. 16" Ø × 27 KM transmission spur has been proposed from upstream of SMS Kasur/ SMS Ferozepur road to Barki where proposed SMS Barki of capacity 40 MMCFD shall be constructed and subsequently, laying of 16" Ø × 2.5 KM supply main would be required from proposed SMS Barki upto BRB in order to connect 16" Ø existing supply main near BRB with this proposed SMS Barki.

iii. 8" Ø × 16 KM transmission spur has been proposed from upstream of SMS Barki to Dial where proposed SMS Dial of capacity 10 MMCFD shall be constructed and subsequently, laying of 10" Ø × 10 KM supply main would be required from proposed SMS Dial up to Darogha Wala Chowk in order to connect 16" Ø existing supply main with this proposed SMS Dial.

iv. SMS II & SMS III located at Defence Road near Molanhanwal which are presently engulfed in thick population and have become a safety hazard for its surrounding localities, shall be shifted 17.50 Km upstream of its existing location near Manga offtake. Capacity of SMS II & SMS III to be constructed at this new location near Manga offtake shall be 150 MMCFD each.

v. 16" Ø and 18" Ø x 17.50 KM existing transmission lines from newly proposed location of SMS II & III at Manga offtake to current location of SMS II & III near Mohlanwal shall be declared as High-Pressure supply mains which shall be operated at 270 Psig each downstream of this newly proposed SMS II & III at Manga Offtake.

vi. Existing SMS II & III shall be converted into distribution regulating station comprising 4 legs having separate regulation and measurement facilities for each injecting into existing16" Ø, 18" Ø, 24" Ø and 24" Ø supply mains for facilitating their optimal operation as per their dynamics and requirement.

5.7.2. The petitioner has planned to execute the above-mentioned augmentation / bifurcation plan of the Lahore city in two phases. Details of the phases along with cost estimates are as follow: -

**Phase-I**

| Sr. No. | Description | Cost (Rs. Million) |
|---|---|---|
| **Transmission Lines** | | |
| 1 | 24"x 48 Km from Phoolnager to Ferozpur Road | 2332.0 |
| 2 | 16" x 27 Km fromFerozpur road to Barki | 797.0 |
| **SMS'S** | | |
| 1 | Kasur Capacity 20 MMCFD | 90.0 |
| 2 | Barki Capacity 40 MMCFD | 145.0 |
| **Supply Mains** | | |
| 1 | 16" x 2.5 Km from SMS Barki to BRB | 60 |
| **Total Cost (Rs. Million)** | | **3,424** |

**Phase-II**

| Sr. No. | Description | Cost (Rs. Million) |
|---|---|---|
| **Transmission Lines** | | |
| 1 | 8" x 16 Km from Barki to Dial | 306.0 |
| 2 | 16" x 6.5 Km from Manga Mandi to Sunder | 222.0 |
| **SMS'S** | | |
| 1 | Ferozpur road Capacity 30 MMCFD | 100 |
| 2 | Dial Capacity 10 MMCFD | 75 |
| 3 | SMS II & III Capacity150 MMCFD Each | 800 |
| **Regulating and Metering Station** | | |
| 1 | Regulation & Metering Station at Old SMS (4 legs) | 510.0 |
| **Supply Mains** | | |
| 1 | 10" x 10 Km from SMS Dial to G.T. Road | 136 |
| **Land** | | |
| 1 | 10 Acre Land for Office Block, Residential Block & New SMS II & III station | 60.0 |
| **Office & Residential Block** | | |
| 1 | Construction of Office & Residential Block | 154 |
| **Total Cost (Rs. Million)** | | **2,363** |

**Grand Total (Rs. Million) = 5787**

| Tentative Completion Period (Phase-I) | | Tentative Completion Period (Phase-II) | |
|---|---|---|---|
| 1 | 2 Years | 1 | 2 Years |

5.7.3. Phase-II shall be started after the completion of Phase-I. It is hereby certified by the management that all procedural codal, legal, and financial prerequisites shall be fulfilled for completion of the project.

5.7.4. ***The Authority notes that the above project is a mega project and needs detailed deliberations/presentation and may be considered by the Authority subject to cost benefit analysis and its effect on the UFG. Therefore, the petitioner may submit the project separately for consideration by the Authority.***

### 5.8. Up-Gradation of SMSs

5.8.1. The petitioner has informed that presently about 400 SMSs are installed on SNGPL Transmission system for supply of gas to distribution network. These SMSs have installed in accordance with the expansion of SNGPL Transmission and Distribution System. However, due to LNG supplies, now there is operational requirement to modify certain SMSs as current capacity of these SMSs are not sufficient to meet the load requirements.

5.8.2. In view of the above, 63 No SMSs have been identified which require upgradation on immediate basis. However, upgradation and relocation of 63 SMSs is a huge task which involve budgetary requirements of billions of rupees. Therefore, in the first phase 15 No. SMSs have been prioritized to be upgraded during the FY2018-19 with budgetary requirement of Rs. 1,349 million.

The Board of Directors (BOD) at its 510th meeting held on 20.07.2018 has accorded the approval for Rs. 1,349 million for upgradation of 15 SMSs in FY 2018-19 in addition to already approved Rs. 40 million, subject to OGRA's specific approval.

5.8.3. ***In the light of above, the Authority observes that upgradation of SMSs is a mega project which involves billion of rupees, therefore, the Authority pends it for the time being and advises the petitioner to bring the project separately.***

### 5.9. Establishment of Complaint Center at Haroonabad, Bahawalpur Region

5.9.1. The petitioner has informed that currently SNGPL's no office exists at Haroonabad to address the problems of local consumers and therefore, consumers have to travel to Regional Office Bahawalpur or Emergency Complaint center, Chishtian for redressal of their complaints.

5.9.2. The petitioner has therefore proposed / establishment of a complaint center at Haroonabad. The details for Human Resource requirement, annual recurring and capital expenditures for the establishment of Complaint Center. The summary of the total requirement is tabulated below:

| **Human Resource Requirement** | | **Annual Recurring Expenditure other than Salaries & Wages** | **Capital items** |
|---|---|---|---|
| Monthly Expenditure (Million Rs.) | Annual Expenditure (Million Rs.) | Expenditure (Million Rs.) | Expenditure (Million Rs.) |
| 0.193 | 2.316 | 1.380 | 1.670 |

5.9.3. *The Authority pends the matter till the finalization of criteria for establishment of new Regions.*

## 5.10. Approval of Demonstration Project and Budget for Gasification System for 1000 Households:

5.10.1. The petitioner has informed that it is putting all efforts to cope with existing energy crisis. Energy Conservation Initiative is a practical step taken by the Petitioner in this regard by providing energy efficient and gas independent devices to our consumers. To take this effort to next level, an engineering solution for turning waste biomass into a transportable fuel is proposed, which can contribute to meet the energy supply in remote areas where gas network is not available/not feasible. Initially it is proposed that 1,000 homes dedicated gas network is put in place and a demonstration facility is set up in its vicinity. The gasification plant will be designed to operate with most types of biomass and farm residues (cow dung or other farm animal wastes, husks, straws, cotton gin, and other biomass) as a fuel and would generate syn gas that would be stored in the compressed gas cylinders.

5.10.2. The estimated cost for the project is Rs. 50 million which includes Front End Engineering Design (FEED), Feasibility study, Detailed Design, Fabrication, Construction/Installation, Commissioning, Training and Handover. In addition to the plant cost, Rs. 4.3 million per annum has been estimated as operational cost. The Board of Directors (BOD), in its 507thmeeting held on May 05, 2018, has accorded the approval of the above mentioned project subject to OGRA's specific approval and subject to completion of all relevant codal/procedural, legal and financial pre-requisites and subject to Supreme Court decision dated March 1, 2018 in Human Rights Case No. 6465-G of 2017 relating to provision of new gas connections on turn merit basis and Election Commission of Pakistan Notification No. F.2 (3)/2018-Coord dated April 11, 2018 and OGRA's decision dated March 12, 2018 particularly para4.14.9 and all pertinent/ relevant points. The Authority has been requested to grant approval of the above said project.

5.10.3. *The petitioner, vide its letter No. RA-TAR-18-19(P)-033 dated August 29, 2018, informed that Methane content in Natural Gas being handled by the Petitioner is variable and depends upon sources and that at present its value is around 80-90 %. It has also informed that expected methane content in Synthesis Gas is also variable depending upon the feed used to generate it and may comprise of equal amounts of CO, $H_2$, $CH_4$ and 10 % $CO_2$.*

5.10.4. *In the light of above, the Authority appreciates the initiative, however feels that further deliberations are required, keeping in view the different nature of the project. The Authority, therefore, pends the project and advises the petitioner to bring the same separately.*

## 5.11. KMI's Implementation Plan

5.11.1. The Authority forwarded modified KMI's to the petitioner, vide its letter No. OGRA-9(472)/2018 dated February, 2018, for implementation. The Petitioner was also asked vide OGRA's letter No. 9 (472)/2018 dated July 9, 2018.

Certified True Copy

5.11.2. The petitioner has identified the UFG control activities against which routine budget was approved by the Authority through DERR FY 2017-18 and FY 2018-19 which are overlapping with the similar nature activities given in KMIs, the summary has been given as under:

*Rs. Million*

| Description | | 1st Year (FY 2017-18) | | 2nd Year (FY 2018-19) | |
|---|---|---|---|---|---|
| | | Reven | Capital | Revenue | Capital |
| Budget allowed by OGRA pertaining to UFG control activities | A | 616 | 780 | 708 | 503 |
| Budget already allowed by OGRA pertaining to UFG control activities which are common with KMIs (KMI No. 4, 5, 14, 15, 21 & 22) | B | **555.00** | **437.64** | **638.00** | **428.39** |
| Total budget required under the KMI Implementation Plan | C | 1166.26 | 1426.5 | 1277.99 | 570.39 |
| Balance budget required under KMI Implementation Plan, after excluding already approved through DERR | D=C-B | **611.26** | **988.82** | **639.99** | **142** |

5.11.3. It has been stated that capital budget required for underground network replacement against System Rehabilitation Program (i.e. KMI No. 13), Cathodic Protection System (i.e. KMI No. 16) and procurement of meters (i.e. KMI No. 6 to 12) has not been requested under the KMI Implementation Plan as the same will be obtained through routine capital budget in ERR of respective Year. Based on above, the balance Revenue and Capital budget pertaining to FY 2017-18 and FY 2018-19 is required and has been requested under the KMI Implementation Plan, as summarized above.

5.11.4. ***The petitioner has requested Rs. 988.82 million for financial year 2017-18 which has already ended. In this regard, the Authority decides that it may consider the actual expenditure in the FRR of the respective year in which it is budget / capitalized.***

5.11.5. ***Regarding Rs. 142 million, as has been requested for financial year 2018-19, since half of the financial year has already been lapsed at the time of filing of review by the petitioner therefore, 50% of the amount is allowed by the***

***Authority, in principle, subject to actualization at the time of the FRR of the respective year.***

### 5.12. Laying Of 8"Dia X 14.50 Km pipeline To Receive Sales Gas from M/S OGDCL's Dhok Hussain Well # 1

5.12.1. The petitioner informed that a new gas source named Dhok Hussain Well # 1 has been discovered by M/s OGDCL which is located in Baratai Block, Kohat Region. M/s OGDCL, being the operator of Baratai Block ,has informed that a total gas of 12MMscfd from this discovery will be supplied to SNGPL. OGDCL has requested SNGPL to lay the pipeline necessary for connecting Field Gate (Delivery Point) to SNGPL's Transmission system as per Clause 9.3 (Delivery Point and Field Gate for Natural Gas) of "Petroleum Exploration & Production Policy 2012" in order to comply the relevant Petroleum Policy and receive the sales gas, SNGPL is required to lay a pipeline of 8"dia of length 14.5 Km (approx) from OGDCL's Dhok Hussain Well # 1 to Kohat Valve Assembly on SNGPL's transmission network.

5.12.2. Commerciality over Dhok Hussain Well No. 1 has been approved by Directorate General Petroleum Concession, Government of Pakistan vide letter No. Expl-8(3) (OGDCL-Dhok Hussain) / 2018 dated 12.07.2018.Consequently, DG (Gas) vide letter No. NG(1)-2(50)/18-Baratai dated 10.12.2018 has informed that Economic Coordination Committee (ECC) of the Cabinet has approved the allocation of up to 12 MMCFD gas from Dhok Hussain Well No.1 to SNGPL.

5.12.3. To pick up gas supplies from OGDCL's field Dhok Hussain Well # 1, laying of 8"dia x 14.5 Km pipeline from OGDCL's Dhok Hussain Well # 1 to SNGPL's existing Kohat Valve Assembly is required. Line pipe required for this 14.5 KM segment shall be used from the line pipe to be uplifted from 8" dia 54 KM Kohat-Dakhni existing segment after the laying of new 24"dia pipeline in the same segment. BOD and OGRA have already approved the uplifting of aforementioned 8"dia pipeline and its utilization in petitioner's potential projects.

Certified True Copy

5.12.4. The tentative sales gas projections (in MMCFD) provided by M/s OGDCL, vide letter No. PPK-6041/211/1536/18 dated 04.12.2018, from Dhok Hussain Field is initially 12 MMCFD

5.12.5. The petitioner has certified that all procedural codal, legal, and financial prerequisites shall be fulfilled for completion of the project. The budgeted cost of laying of 8"diax 14.5 KM pipeline (approx.) is Rs. 226.281 million. The uplifted line pipe to be used for the instant project was commissioned in 1996 and have 'Nil' book value hence there would be no impact of this uplifted line pipe on the cost of instant project.

5.12.6. The petitioner has requested the Construction of above proposed 8" dia x 14.5 KM (approx.) Pipeline for receiving additional gas from newly discovered Dhok Hussain Well No. 1 by OGDCL at the total capital cost of Rs. 226.281 million.

5.12.7. ***In the light of foregoing, and the justification provided by the petitioner the Authority considered the request of the petitioner and allows the above project in principle. The actual cost will be considered at the time of respective FRR.***

## 5.13. Installation of New additional 300,000 Connections: -

5.13.1. The petitioner informed that the Authority, in its decision has allowed Rs. 4,666 million for 300,000 new domestic connections against 1,000,000 new domestic connections requested in the instant petition. Moreover, the Authority has allowed Rs. 468 million for 300 industrial and 3,000 commercial connections being RLNG based connections under ring fenced mechanism.

5.13.2. It has been stated that the petitioner has installed more than 600,000 new connections during FY 2017-18. Moreover, the total pending domestic gas applications as on 30.06.2018 is approximately two million. Keeping in view the huge pendency of the applications and current pace of new connection installation, the petitioner intends to install 600,000 new domestic gas connections during FY 2018-19.



Certified True Copy

5.13.3. Keeping in view of the above, the petitioner requested the Authority to allow Rs. 4,666 million for additional 300,000 new domestic connections (including 10% connections on urgent fee basis).

5.13.4. It has further been stated that the petitioner was allowed 1,000,000 connections in DRERR 2017-18 and 300,000 connections in DERR 2018-19. The Authority enhanced the new gas connections in DRERR 2017-18 on the plea to reduce the huge pendency and long waiting periods with respect to provision of new gas connections in most of the Regions the Petitioner may carry forward the remaining connection allowed by the Authority in DERR 2017-18.

5.13.5. ***In view of above, the Authority decides that the petitioner may install 100, 000 new domestic gas connections over and above already allowed in DERR FY 2018-19 from the balance allowed by the Authority in FY 2017-18 keeping in view the statement of the petitioner that it has installed (604,099) new domestic connections up-to 30-06-2018 out of total one million. The Authority revalidates 100,000 domestic connections in Principle. The petitioner is also directed to strictly comply with the decision of the Supreme Court of Pakistan dated 1st March, 2018, in Human Rights Case No. 6465-G of 2017, relating to provision of new gas connection on turn-merit basis in a fair, equitable and non-discriminatory manner keeping in view its capacity to undertake and complete the said jobs as well as availability of gas.***

5.13.6. ***The Authority reiterates here that connections must be provided uniformly across its area of operation based on transparent set criteria for all regions. Actual expenditure in this respect shall be assessed accordingly for allowance at the time of FRR.***

## 5.14. Replacement of Defective/Old Meters:

5.14.1. The Authority, in its decision has allowed Rs. 2,126 million, without mentioning numbers, against requested amount of Rs. 3,035 million for replacement of 772,840 Nos. meters. It has been submitted that the requirement of proposed budget i.e. Rs. 3,035 million is very essential to meet replacement of defective and outlived domestic, commercial and industrial gas meters. Keeping in view KMI's assigned by the Regulator, the quantum of replacement activity has been increased significantly in FY 2017-18 and at the same pace would be maintained in FY 2018-19 as well. The Authority while giving decision has not considered current target/magnitude of work as well as increase in exchange rate which will lead to increase in cost of meter. It may also be noted that at the time of preparation of the budget proposals USD to PKR was Rs. 105 whereas it has now reached to Rs. 125 (Interbank rate). In view of the same, the Authority has been requested to allow Rs. 3,035 million for replacement of 772,840 No. of meters.

5.14.2. ***Authority, in its decision, allowed Rs. 2,126 million against requested amount of Rs. 3,035 million by the petitioner for replacement of 772,840 meters. The Authority has only rationalized the cost estimate based on the actual expenditure and past trends basis, however, the number of meters to be replaced has not been reduced i.e. 772,840. Therefore, the Authority maintains its original decision and needs not to be reviewed.***

## 5.15. Computer Hardware and I.T

5.15.1. The Authority has allowed an amount of Rs. 346 million under the head of "Computer Hardware and I.T" on the basis of average capitalization of last three years plus 10% inflation each for the next 2 years' subject to actualization at the time of FRR. It is submitted that the amount is required for additional equipment for facilitating the business users, using Enterprise systems, for smooth execution for their daily operational activities. Further to the above, it is pertinent to mention here that 25% of the proposed budget is required to replace the equipment which has completed its useful life. In view of the above, the Authority has been requested to allow Rs. 541 million under this head.

5.15.2. ***The Authority allowed an amount of Rs. 346 million under the head of "Computer Hardware and I.T" on the basis of average capitalization of the last three years plus 10% inflation each for the next 2 years' subject to actualization at the time of FRR. Since there is no new evidence hence the Authority maintains its original decision and needs not to be reviewed.***

## 5.16. LPG Air Mix Cost

5.16.1. The petitioner has claimed Rs. 1,192 million for construction of LPG Air mix plant at Gilgit resulting a shortfall of Rs. 262 million in respect of LPG Air Mix segment. The Authority has pended the amount claimed under this head claiming that the Company has not provided the details regarding number of plants, their location, licence status etc. The petitioner has submitted that the Authority has already issued the licence for construction of LPG storage, construction of LPG air-mix plant and distribution of LPG Air-Mix through pipeline at Gilgit during December, 2017 The licence also contains the information regarding location of plant and validity of license, summarized as below:-

| | |
|---|---|
| Location of plant: | Chilmis Das, Gilgit |
| Number of Plants: | One (01) |
| License Status: | Already issued by OGRA license No. OGRA-LPG-17(686)/17 dated 26.12.2017 |
| Validity | 25 December, 2019 |

5.16.2. The petitioner further submitted that it has already initiated construction/procurement activities to meet the construction timelines as per licence condition. In view of the above, the Authority has been requested to allow Rs. 1,192 million for construction of LPG Air mix plant at Gilgit.

5.16.3. ***The Authority, keeping in view the details provided by the petitioner, allows the project in principle at an estimated cost of Rs. 1,192 million, however, the expenditure incurred on the project will be accounted for at the time of FRR of the respective year.***

## 5.17. Gas Internally Consumed (GIC)

5.17.1. The petitioner has submitted that the Authority had allowed Rs 1,253 million as GIC. This amount does not include free gas facility, which has always been made part of GIC. This year, it has been made part of HR Cost thereby further increasing the HR disallowance. The petitioner has requested to include free gas facility as GIC, as has always been the case and exclude it from the HR Cost.

5.17.2. It is mentioned that the Authority, in its DERR for FY2018-19, allowed a total volume of 4,109 MMCF based on the actual past trends. However, the petitioner has now informed that the volume of indigenous gases received from different sources has been reduced and accordingly the GIC has also been reduced from 4,109 MMCF to 3,721 MMCF. The Authority has been requested to allow the said volume in respect of GIC.

5.17.3. ***In view of above, the Authority observes that matter of free gas facility has already been discussed and the same is part of HR cost. Further the petitioner has not provided any detail / justification in support of its claim, therefore the Authority maintains its earlier decision and advises the petitioner to submit details in this regard for consideration of the Authority in the FRR for the said year. Accordingly, the Authority for the said year allows GIC pertaining to operating activities at 3,122 MMCF amounting to Rs. 1,126 million under this head for the said year.***

5.18. **Creation of New Regions**

5.18.1. The petitioner has requested to allow Rs. 804 million under this head. The Authority vide its several letters has requested the petitioner to provide data/information and solid grounds for creation of New Regions the petitioner has provided the information/data on 7-12-2018&28-12-2018. The petitioner has provided the information /data regarding the creation of new Regions.

5.18.2. ***The Authority, decided that the data/information provided by the Company will be analysed/evaluated by the Authority keeping in view, the Additional expenditure, genuine need for establishment of new regions, benefit to consumers, additional manpower, and alternate solutions to facilitate the consumers .The Authority first keeping in view the above factors will develop a criteria first then cases for creation of new Regions will considered and analysed. Therefore, the Authority pends the matter for time being.***

5.19. **Construction of Regional Distribution Office Building at Sahiwal**

5.19.1. The petitioner has informed that construction of new Regional Distribution Office Sahiwal was submitted to Finance and Procurement Committee, the Finance and

Procurement Committee at its 294th meeting held on 08.06.2018 conceptually agreed with the plan for construction of Regional Distribution Office building at Sahiwal and recommended the same to the Board of Directors subject to the following caveats:

1. Proper justification/ rationale of the construction cost of Rs. 5,400 per square foot.
2. Revisit per floor as the construction cost for floor 4-7 is the same.
3. Architect needs to be present in person before the Board to give 3-D presentation.
4. Revisit Parking Plan to increase the capacity for car parking.
5. Segregate the cost of grey structure and finished structure.

The Management response to above caveats is summarized below:

| 294th F & PC 08.06.2018 | ACTIONABLE POINTS | MANAGEMENT'S RESPONSE |
|---|---|---|
| 1 | Proper justification/ rationale of the construction cost of Rs. 5,400 per square foot. | |
| 2 | Revisit per floor as the construction cost for floor 4-7 is the same. | Initial estimate was prepared as rough cost estimate based on average rate per square foot for floors from 4th to 7th. However, the initial rough cost estimate has been superseded by detailed cost estimate. The detail cost estimate is based on calculation of quantities of all items instead of average rate per square foot. The average rate of four floors (4th to 7th) is no more applicable and also has not been considered in detailed cost estimate amounting to Rs. 563.00 Million (Five hundred and sixty three million rupees) which is now under consideration. |
| 3 | Architect needs to be present in person before the Board to give 3-D presentation. | 3-D presentation is ready and Architect would be available to deliver the same before the Board of Directors. |
| 4 | Revisit Parking Plan to increase the capacity for car parking. | Parking plan is designed as per standards, however, we have revisited the plan and parking for 3 cars can be added to the previous |

| | | |
|---|---|---|
| | | capacity. |
| 5 | Segregate the cost of grey structure and finished structure. | The detail regarding rate has been with segregation among different items and the impact of working at different floor levels has been considered in the rates of respective items. |

5.19.2. Accordingly the BOD of the petitioner in its 511th Meeting decided that, after due deliberation and subject to adherence of all bye laws and fulfilment of all codal, legal, procedural and financial pre-requisites the BOD accorded approval for construction of Regional Distribution Office Building at Sahiwal subject to provision of additional land as observed in the minutes above .

5.19.3. In view of the foregoing, the petitioner requested an amount of Rs. 238 million in addition to already approved amount of Rs. 325 million for the construction of Regional Distribution Office building at Sahiwal.

5.19.4. ***It may be mentioned here that initially the petitioner requested Rs. 200 million for construction of Regional Office at Sahiwal through ERR FY 2015-16. However, later on in ERR of FY 2016-17 the petitioner informed that approximately a cost of Rs. 400 million would be required to complete the Project. It is worth mentioning here that the Authority had already allowed Rs.325 million for completion of the Project. However, it has been observed by the Authority that the petitioner has gradually increased the cost of the Project from Rs. 400 million to Rs.638 million. Therefore, the Authority disallows the amount additionally requested by the petitioner and advises it to complete the Projected within the approved budget of Rs. 325 million.***

### 5.20. Assets Carried Forward from the previous years

5.20.1. The Authority allowed the petitioner to carry forward Rs. 36,606 million in respect of Fixed Assets which were approved, in principle, in the previous years in the decision of the Estimated Revenue Requirement for FY 2018-19. The same was allowed on the request of the petitioner and on the basis of the information provided. Subsequently the petitioner was requested to provide details of the



Certified True Copy

Physical progress made, Expenditure incurred and the percentage completion in respect of the different heads. The information/ data provided on August 29, 2018, is given hereunder: -

**Detail of Assets claimed as Carry Forward as on 11-12-2018**

| Year of approval of Asset by the Authority | Amount approved in Principle (Rs. Million) | Head of Account | Physical Progress (Kms) | Expenditure incurred (Rs. Million) | % completion* |
|---|---|---|---|---|---|
| FY (2016-17) | 10,000 | Distribution Development | 2,850 Km | 3609.79 | 84 % |
| FY (2017-18) | 6,700 | Illegal Network of KPK | Project yet not initiated | | |
| FY (2017-18) | 8,000 | Distribution Development | 1,750 | 2,164.52 | 63 % |
| FY (2017-18) | 560 | **Laying under cost recovery basis, Ragi Lalma, Peshawar** | Under Process | 145.43 | 91.05% |
| FY (2017-18) | 299 | **Laying under cost recovery basis** | 30.218 | 210.41 | 90 % |
| FY (2017-18) | 1,200 | **Additional budget under cost recovery basis** | 119 km | 388.88 | 73 % |
| FY (2017-18) | 3.0 | Complaint Center Dunya pur and Bhakkar | Hiring of office Building in process | | |
| FY (2017-18) | 161 | Green Office Initiative | Project is at the stage of preparation of specifications and tender documents | | |
| FY (2017-18) | 9,683 | New Connections | Under Process | 6211.36 | Under Process |
| **Total** | **36,606** | | | **12,730.39** | |

* Based on the progress of the petitioner the amount carry forward has been rationalized under:-

5.20.2. *The authority keeping in view the progress of the petitioner, is of the view that the financial impact of Rs. 22,561million which is not being capitalized by the petitioner still may be reversed and be excluded from the rate base of the petitioner. The same amount shall be considered by the Authority subject to actualization at* *the time of FRR FY 2018-19. In case the projects moved to next fiscal years, re-validation in respective ERR's would be required. Moreover, the assets amounting to Rs. 743 million under cost recovery will not be included in the rate base.*

Summary of Additions Allowed by the Authority in DRERR FY 2018-19

| S.No | Description | ERR 2018-19 (Rs. Million) | DERR 2018-19 (Rs. Million) | RERR 2018-19 (Rs. Million) | Allowed by the Authority in Principle (Rs. Million) |
|---|---|---|---|---|---|
| 1 | **New Pipeline /other Projects** | | | | |
| i | Requirement of Additional Budget for Utilization of Additional Gas from Adhi Gas Field in Rawalpindi | - | - | 509.41 | Yes |
| ii | Low Gas Pressure in Tehsil Jalalpur Jattan District Gujrat-System Augmentation: | - | - | 654.20 | Yes |
| iii | Project for segregation of transmission network for operational ease and flexibility at Bhong, | - | - | 850 | Yes |
| iv | Low Gas Pressure in Bahawalpur and Lodhran | - | - | 1,931 | Yes |
| v | Augmentation /Bifurcation of Gas Net Work in Lahore City Phase-I | - | - | 3,424 | Pended |
| vi | Upgradation of SMS's | - | - | 1,349 | Pended |
| vii | Establishment of Component Centre at Haroon-abad(Bahawalpur Region) | - | - | 3 | Pended |
| viii | Approval of Demonstration Project and budget for gasification system for 1000 households | - | - | 50 | Pended |
| ix | KMIS Implementation Plan | - | - | 1,130 | 71 |
| x | Laying of 8" Dia. x 14.50 Km Pipeline to Receive gas from OGDCL | - | - | 226 | Yes |
| | **Other Assists** | | | **10,127** | |
| 2 | Installation 300, 000 additional New Connectior | 14,467 | 4,666 | 4,666 | 100,000 connections revalidated |
| 3 | Replacement of Defective/Old Meters: | 3,035 | 2,126 | 909 | As per DERR |
| 4 | Computer Hardware and I.T | 541 | 346 | 195 | As per DERR |
| 5 | LPG Air Mix Cost | 1,192 | - | 1,192 | Yes |
| 6 | Gas Internally Consumed (GIC) | 1,221 | 1,253 | 1,565 | Allowed Rs.1,126 million |
| 7 | Creation of New Regions | 804 | - | 804 | Pended |
| 8 | Regional Office Sahiwal Building | 300 | 185 | 238 | No. |
| | **Total** | **21,560** | **8,576** | **19,696** | |
| 9 | Assets C.F from Previous Years (Reversal Entery Based on Progress of the Co.) | 36,606 | 36,606 | | (22,561) |

5.20.3. *In view of above, depreciation expense is provisionally determined Rs. 18,632 million as a consequence of reduction in additions to fixed assets for the said year. Accordingly, the Authority provisionally determines closing operating fixed assets for the said year at Rs. 144,546 million as against the petitioner's claim of Rs. 181,180 million. Any adjustment thereof shall be dealt at the time of FRR for the said year.*

# 6. Operating Expenditures

## 6.1. Cost of Gas

6.1.1. The petitioner has projected to increase in cost of gas from Rs. 197,131 million per the DERR to Rs. 220,748 million for the said year on the basis of following parameters:

(i) Actual gas purchases for July and August, 2018 and estimates for September, 2018 to June, 2019.

(ii) US $ exchange rate for payment of monthly invoices of gas producers has been assumed at Rs. 140 for period July-December, 2018 and Rs. 150 for the period January-June, 2019.

(iii) In accordance with provisions of existing GPAs between producers and GoP, the petitioner has adopted actual monthly average rates of HSFO and Crude oil upto 3rd October, 2018 without escalation.

6.1.2. On the basis of above parameters, petitioner has estimated the average C & F prices of crude oil and HSFO for December, 2017 to May, 2018 at US $ 68.0780 per barrel and US $ 383.1059 per ton respectively. For the period June to November, 2018 average C&F prices of crude oil and HSFO have been assumed at US $ 76.4502 per barrel and US$ 448.5650 per ton respectively.

6.1.3. The Authority observes that well-head prices of gas for all fields in Pakistan are computed in accordance with GPAs and/or provisional pricing parameters, available on record, and are notified in exercise of powers vested in it under the Ordinance.

6.1.4. The Authority notes that the actual average C&F prices of crude oil and HSFO for the period June to November, 2018 are close to the petitioner's projections. ***However, on the basis of actual average US $ exchange rate for the period July to December, 2018 Rs. 129.7545 and estimates for the period January to June, 2019 at Rs. 140 the Authority determines cost of gas sold at Rs.195,401 million as against Rs.220,623 million projected by the petitioner for the said year.***

## 6.2. Unaccounted for Gas(UFG)

6.2.1. The petitioner has claimed UFG in RERR for FY 2018-19 at 11.07% (56,043 MMCF). The UFG calculations sheet based on the projection by the petitioner is given as below:-

**UFG CALCULATION SHEET**

| | MMCF | | | |
|---|---|---|---|---|
| Particulars | Natural Gas *(Normal Business)* | | *RLNG Business* | |
| Gas Purchases | As per Petition | Determined by the Authority | Per Petition | Determined by the Authority |
| Metered gas purchased | 506,273 | 506,273 | 438,000 | 438,000 |
| Retainage Allowed | | | -3,285 | -3,285 |
| Less RLNG Volume for Sale | | | | |
| Less RLNG Carried for Third Party | 0 | 0 | 0 | 0 |
| Energy Esquiline | -11,322 | -11,322 | 10,950 | 10,950 |
| **Gas Available for Sale** | **494,951** | **494,951** | **445,665** | **445,665** |
| **Gas Internally Consumed (Metered)** | **3,721** | **3,721** | | |
| **Transmission** | **3,108** | **3,037** | **8,913** | **8,913** |
| **Distribution** | **613** | **85** | | |
| **Net Gas Available for Sale** | **491,230** | **491,230** | **436,752** | **436,752** |
| **Gas Sold (Billed)** | 435,187 | 435,187 | 423,626 | 423,626 |
| **Total Sales** | **435,187** | **435,187** | **423,626** | **423,626** |
| **UFG Volume** | 56,043 | 56,043 | 13,126 | 13,126 |
| **UFG %** | 11.07% | 11.07% | 3.0% | |
| | | | | |
| **Working disallowance for SNGPL** | | | | |
| Metered gas purchased | | 506,273 | | |
| UFG Benchmark (Percentage) | | **5%** | | |
| Provisionl Local Conditions Allowance Percentage (Provisional) | | **1.3%** | | |
| Allowed UFG Percentage | | **6.3%** | | |
| Allowed UFG Volume MMCF | | **31,895** | | |
| Disallowance Volume (MMCF) | | **24,148** | | |
| WACOG (Rs./MCF) | | **445.10** | | |
| Adjustment on Account of disallowed volume (Rs. Million) | | 10,748 | | |

6.2.2. ***In view of the above the Authority adjusts Rs. 10,748 million on account of disallowed over and above allowable UFG volumes.***

## 6.3. Application of Pressure Factor by the Petitioner above 8 inches of W.C. (across the board)

6.3.1. The Authority, vide its Decision on Final Revenue Requirement for FY 2017-18 dated 15-1-2019, directed the petitioner to re-examine the application of correct pressure factor in the domestic consumers' gas bills and make any adjustment on this account to ensure the compliance of provision of Clause-11 of the Standard this account to ensure the compliance of provision of Clause-11 of the Standard Domestic Contract. Further, the compliance of said clause may be ensured. The petitioner has not furnished compliance in this regard.

6.3.2. ***The Authority, therefore, once again directs the petitioner to pass on reversal/ adjustment to the affected consumers due to application of pressure factor above 8 inches of water column across the board for the period from July, 2018 to February, 2019. The petitioner is also directed to strictly follow Clause-11 of the Standard Domestic Contract and stop application of Pressure Factor above 8 inches of W.C. in the domestic consumers' gas bills in future.***

6.3.3. ***In case of non-compliance, the volume booked by the petitioner by application of the said pressure factor, which is not in compliance with Clause-11 of the Contract, shall be reversed in the respective FRR.***

### 6.4. Transmission & Distribution Cost

6.4.1. The petitioner has submitted that it had claimed Rs. 32,185 million under the head "Transmission & Distribution cost" for the said year against which Authority has approved Rs. 25,074 million only. The petitioner has requested the Authority to reconsider its submission on all the items and allow the same.

6.4.2. The Authority notes that the petitioner has not provided any new evidence to consider its claim for increase under all heads of T&D cost. The contended items have already been exhaustively discussed & decided, after considering the petitioner's submissions at the time of DERR. However, the HR cost and free gas facility which is part of the Transmission and Distribution cost is also discussed separately in the succeeding paras.

### 6.5. Human Resource Cost

6.5.1. The petitioner has requested to allow Rs. 19,708 million HR cost as against Rs. 15,206 million allowed in DERR for the said year. The petitioner has contended that the Authority has neither considered the report on HR requirement study nor has given SNGPL the same rates as it is giving to SSGCL. The petitioner also contended

6.5.2. The Authority observes that it had already exhaustively discussed the HR cost at the time of DERR for the said year. Further, regarding the uniform compensation, the Authority has already considered the petitioner's request at the time of DERR FY 2014-15 wherein petitioner' per employee rate was equated with the sister utility to provide level playing field to both the companies. Further, HR study is under evaluation which shall be finalized in due course of time.

6.5.3. ***As no new evidence to revise the HR Benchmark cost has been provided by the petitioner, therefore, the Authority maintains its earlier decision.***

6.5.4. Regarding the matter of free gas facility as part of HR cost after exclusion from the GIC as contended by the petitioner, the Authority observes that the petitioner has not provided any detail / justification in support of its claim, therefore the Authority maintains its earlier decision and advises the petitioner to submit the details in this regard for consideration of the Authority in the FRR for the said year.

## 6.6. New Region Operating and HR Cost

6.6.1. The Petitioner has claimed Rs. 1,078 million as operating cost for creation of new regions and Rs. 1,317 million as HR cost. The Petitioner has further submitted that establishment of new region consequent to bifurcation of existing region requires additional manpower in almost all categories to run the operations of newly established regions.

6.6.2. ***In view of discussion in para 5.18.2 above, the Authority pends the operating cost for creation of new region.*** Furthermore, HR cost over and above the benchmark is inadmissible, as already exhaustively discussed in DERR for the said year.

6.6.3. ***Expenditure for operating cost of technical audit***

6.6.4. ***The Authority has considered the Petitioner's request and decided that the*** expenditure under this head may be considered at the time of FRR for the said year.

## 6.7. Operating cost of demonstration project for gasification

6.7.1. ***In view of observation recorded in para 5.10.4 and 5.10.5 above, the Authority has disallowed the operating cost of demonstration project for gasification.***

### 6.8. Foreign training for Senior Management and BoD

6.8.1. The Petitioner has stated that it intends to arrange foreign training of Directors and Senior Management for at least 4 members in a year. The Petitioner has therefore, requested the Authority to allow estimated expenditure of Rs. 14 million under the said head.

6.8.2. The Authority observes that the Petitioner demanded Rs. 33 million for staff training & recruitment at the time of DERR 18-19, out of which, Rs. 3 million was projected for foreign trainings of Executive and Subordinate staff. Now the Petitioner has claimed Rs. 14 million for foreign trainings of BoDs and Senior Management which is highly exaggerated amount in comparison with Rs. 3 million for foreign training of entire employees of the Petitioner. The Authority believes that well trained employees are assets of a company who work for the betterment of the company throughout the tenure of their service enabling it to achieve its desired objectives. It is worth spending the amount on training of such employees but spending a huge amount of Rs. 14 million for training of Senior management and BoDs is not justified who are already well trained and experienced..

6.8.3. ***The Authority is of considered view that such expense on the cost of consumer is not justified and is disallowed, if the same is deemed necessary, it can be availed from foreign funded projects in this regard.***

### 6.9. Revenue Expenditure for KMI's Implementation Plan

6.9.1. The petitioner has claimed revenue expenditure amounting to Rs. 1,251 million on account of KMI's Implementation plan. The petitioner has explained that an amount of Rs. 611.26 million is required for FY 2017-18 and Rs. 639.99 million is required for the FY 2018-19.

6.9.2. ***The Authority in view of its discussions and decision vide para 5.11.4 and 5.11.5 above, decides to allows Rs. 320 million in principle i.e. 50% of revenue expenditure claimed for FY 2018-19 in respect of KMIs Implementation Plan.***

## 6.10. Cost of Supply of RLNG

6.10.1. The Petitioner has submitted that the Authority determined transportation charges of RLNG as Rs. 61.30/MMBtu against Rs. 79.51/MMBtu claimed by the company. The earlier working of cost of service for RLNG consumers was based on the assumptions that RLNG sales for FY 2018-19 will be 437,454 BBTU. However, the revised estimates show that due to less RLNG input in the system, the estimated sales will be 294,536 BBTU.

6.10.2. Furthermore, the Petitioner has requested that finance cost in respect of RLNG loans may also be treated as operating cost and include interest expense on RLNG loans amounting to Rs. 4,019 million for FY 2018-19.

6.10.3. The Authority, after detailed deliberation and discussion, has already decided the matter and it has achieved finality that claiming financial charges has no justification to be claimed while return is also admissible. Despite clear direction in DERR FY 2018-19 the petitioner has again claimed the financial charges, which is not acceptable. Therefore the same is not allowed to be included in the computation of Transportation charges.

6.10.4. The Authority also observes that the petitioner has worked out the transportation charges of RLNG at average input of 814 MMCFD. However the same were worked out at the time of DERR for the said year on the basis of average input of 1,200 MMCFD. The Authority decides to work out the RLNG transportation charges at average of 1,200 MMCFD subject to actualization at the time of FRR for the said year

6.10.5. In view of the above, the transportation charges are determined at Rs. 65.72 per MMBTU for the said years as under:-

Certified True Copy

| Particulars | Per petitioner | Per OGRA |
|---|---|---|
| **Quantitative Data** | BBtu | |
| RLNG Input | 312,085 | 463,453 |
| Retainage / gas used in FSRU @ 0.7142% (Average of two terminals) | (2,229) | (3,310) |
| GIC - SSGCL network | (2,479) | (3,681) |
| GIC - SNGPL network | (3,689) | (5,478) |
| UFG | (9,111) | (13,530) |
| Net RLNG sold | **294,578** | **437,455** |
| **Cost Components** | *Million Rs.* | |
| Depreciation | 4,480 | 4,480 |
| Return on Assets | 8,777 | 8,777 |
| Gas Internally Consumed SNGPL | 4,730 | 7,024 |
| Transportation charges payable to SSGCL | 8,470 | 8,470 |
| Finance cost on LNG financing | 4,019 | - |
| **Total** | **30,475** | **28,751** |
| **Rs/ MMBTU** | **103.45** | **65.72** |

1. GIC has been assumed as 0.8% for SSGC and 1.2% for SNGPL networks respectively.
2. Consolidated UFG (at Bulk & Retail has been taken at 3% of RLNG input).
3. Input volume have been taken as 1,200 MMCFD at GCV of 1058 Btu/SCF.
4. GIC has been valued at the average purchase price of Rs. 1,282.29/MMBTU.

## 7. Determination

7.1.1. The Authority, after taking into consideration points raised by interveners, clarifications provided by petitioner, scrutiny of petition and available record, provisionally determines the revenue requirement at Rs. 280,347 million while the sales revenue works out to Rs. 229,557 million. Thus there is a shortfall in estimated revenue requirement for said year at Rs. 50,790 million (**Annexure-I**). Accordingly, increase in average prescribed prices works out to Rs. 119.68 per MMBtu effective July 1, 2018.

7.1.2. The Authority observes that in the instant review of estimated revenue requirement for FY 2018-19, the revenue shortfall as mentioned above has primarily emerged owing to inadequate revision in gas prices in respect of DERR FY 2018-19. This backlog on account of insufficient revision in gas sale prices is persistently piling up. In FRR FY 2017-18, it has been determined at Rs. 142 billion and if gas prices are not increased for the year under review i.e FY 2018-19, the total revenue shortfall as on June 30, 2019 would be approximately Rs. 164 billion. Recovery of the said shortfall in the remaining period of FY 2018-19 may require increase the gas prices by the Federal Government manifolds.

7.1.3. The average prescribed prices and the total revenue requirement of the petitioner determined by the Authority for the said year are attached as Annex I & II respectively.

The same under each category of consumers shall be adjusted upon receipt of sale price advice by the FG, under Section 8(3) of the OGRA Ordinance.

## 8. Public Critique, Views, Concerns, Suggestions

8.1.1. The Authority has recorded concerns of interveners and participants in para 3 above, which include matters relating to policy and do not fall under the purview of Authority but affect the consumers. Specific attention of GoP is drawn to these issues for consideration and necessary action.

8.1.2. The Authority observes that petitioner is in violation of License Condition No. 34, wherein it is obligated to ensure continuous and reliable supply of natural gas to its existing consumers. The petitioner should therefore endeavor to ensure early compliance of the said condition.

Abdullah Malik
(Member Oil)

Uzma Adil Khan
(Chairperson)

Noorul Haque
(Member Finance)

Islamabad, February 27, 2019

REGISTRAR
Oil & Gas Regulatory Authority
Islamabad

**Annex-I**

## 1. Computation of Revised Estimated Revenue Requirement FY 2018-19

*Million Rs.*

| | Particulars | Per the Petition for RERR FY 2018-19 | Adjustment | Determined by the Authority |
|---|---|---|---|---|
| | Gas sales volume -MMCF | 435,187 | | 435,187 |
| | BBTU | 424,371 | | 424,371 |
| | Calorific Value | 975.15 | | 975.15 |
| "A" | **Net Operating revenues** | | | |
| | Net sales at current prescribed price | 217,351 | | 217,351 |
| | Rental & service charges | 2,135 | | 2,135 |
| | Late Payment Surcharge and interest on arrears | 4,719 | | 4,719 |
| | Amortization of deferred credit | 3,152 | | 3,152 |
| | Other operating income | 2,200 | | 2,200 |
| | **Total income "A"** | **229,557** | | **229,557** |
| "B" | **Less Expenses** | | | |
| | Cost of gas sold | 220,623 | (25,222) | 195,401 |
| | Adjustment on account of UFG disallowance | (9,974) | 774 | (10,748) |
| | Transmission and distribution cost | 28,324 | (4,502) | 23,822 |
| | Gas internally consumed | 1,565 | (439) | 1,126 |
| | New Regions Operating & HR Cost | 2,395 | (2,395) | - |
| | Operating cost for upgradation of CC&B | 15 | - | 15 |
| | Depreciation | 21,272 | (2,640) | 18,632 |
| | Late Payment Surcharge (Payable) | 1,638 | - | 1,638 |
| | Finance cost for Working capital | 225 | - | 225 |
| | Corporate Social Responsibility (CSR) | 496 | - | 496 |
| | Workers Profit Participation Fund | 1,138 | - | 1,138 |
| | Foreign training of BOD and senior management | 14 | (14) | - |
| | Operating Cost Technical Audit | 30 | (30) | - |
| | Insurance cost (loss of Profit) | 115 | (115) | - |
| | Operating Cost of Demonstraton Project for Gasification | 4 | (4) | - |
| | Revenue Expenditure for KMI's Implementation Plan (FY 2017-18 & FY 2018-19) | 1,251 | (1,251) | - |
| | **Total expenses "B"** | **269,131** | **(37,387)** | **231,744** |
| "C" | **Operating profit / (loss)(A - B)** | **(39,574)** | **37,387** | **(2,187)** |
| | **Return required on net assets:** | | | |
| | Net assets at begining | 117,958 | | 117,958 |
| | Net assets at ending | 181,180 | (36,634) | 144,546 |
| | | *299,138* | (36,634) | *262,504* |
| | **Average fixed net assets (I)** | **149,569** | **(18,317)** | **131,252** |
| | Deferred credit at begining | 20,586 | | 20,586 |
| | Deferred credit at ending | 20,934 | | 20,934 |
| | | **41,520** | | **41,520** |
| | **Average net deferred credit (II)** | **20,760** | | **20,760** |
| "D" | **Average operating assets (I-II)** | **128,809** | (18,317) | **110,492** |
| | Return required on net assets | 17.43% | | 17.43% |
| "E" | Amount of return required | 22,451 | (3,193) | 19,259 |
| "F" | **Excess /(shortfall)** | **(62,025)** | | **(21,446)** |
| "G" | ***Average Ince/(Dec) in Prescribed Price (Rs/MMBTU) pertaining to FY 2018-19*** | *146.16* | (96) | *50.54* |
| "H" | **Cumulated Previous years shortfall (Staggered in 4 years)** | (29,344) | | (29,344) |
| "I" | **Total Shortfall (incl.cumulative)** | (91,369) | 40,579 | (50,790) |
| "J" | **Total increase / (Decrease) in prescribed Price (RS./MMBTU)** | 215.31 | (96) | 119.68 |
| "k" | **Total Revenue requirement (incl. previous years)** | 320,926 | (40,579) | 280,347 |
| "L" | **Average Prescribed Price (Rs/MMBTU)** | **727.48** | **(95.62)** | **631.86** |

**Annex-II**

## 2. Average Prescribed Prices 2018-19

| | | Pariculars | Average Prescribed Prices w.e.f. 01.07.2018 |
|---|---|---|---|
| | | | Rs./MMBTU |
| 1 | | **Domestic consumers** | |
| | A | Stand alone Meters | |
| | B | Mosques, churches, temples, madrassas, other religious places and hostels attached thereto | |
| | | Up to 50 M3 per Month - All take off at flat rate of | 631.86 |
| | | Up to 100 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 200 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 300 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 400 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 500 M3 per Month- All take off at flat rate of | 631.86 |
| | | Over 500 M3 per Month- All take off at flat rate of | 631.86 |
| | C | Government and semi-Government offices, hospitals, Clinics, Maternity Homes, Government guest houses, Armed Forces messes and langars, universities, colleges, schools, private educational institutions, orphanages and other charitable institutionsalong with Hostels and Residential Colonies to whom Gas is supplied through bulk meters including captive power | |
| | | All off-takes at flat rate of | 631.86 |
| 2 | | **Commercial Consumers** | |
| | | All establishments registered as commercial units with local authorities or dealing in consumer items for direct commercial sale like cafes, milk shops, tea stalls, canteens barber shops, laundries, tandours, places of entertainment like cinemas, clubs and theaters, private offices, corporate homes etc. | |
| | | All off-takes at flat rate of | 631.86 |
| 3 | | **Special Commercial Consumer (Roti Tandoor)** | |
| | (a) | | |
| | | Up to 50 M3 per Month - All take off at flat rate of | 631.86 |
| | | Up to 100 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 200 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 300 M3 per Month- All take off at flat rate of | 631.86 |
| | | Up to 400 M3 per Month- All take off at flat rate of | 631.86 |
| | | Over 400 M3 per Month- All take off at flat rate of | 631.86 |
| 4 | | **Ice Factories** | |
| | | All off-takes at flat rate of | 631.86 |
| 5 | | **General Industrial consumers** | |
| | | All consumers engaged in the processing of industrial raw material into value added finished products irrespective of the volume of gas consumed including hotel industry but excluding such industries for which a separate rate has been prescribed. | |
| | | All off-takes at flat rate of | 631.86 |
| 6 | | **Registered manufacturers or exporters of five zero-rated sectors and their captive power namely: Textile (including jute) carpets, leather, sports and surgical goods.** | |
| | | All off-takes at flat rate of | 631.86 |

| | | |
|---|---|---|
| 6 | **CNG Stations** | |
| | All off-takes at flat rate of | 631.86 |
| 7 | **Cement Factories** | |
| | All off-takes at flat rate of | 631.86 |
| 8 | **Fertilizer Factories** | |
| (a) | Pak-American Fertilizer Limited, Daudkhel | |
| (b) | Pak-Arab Fertilizer Limited, Multan | |
| (c) | Dawood Hercules Chemicals Limited, Sheikhupura | |
| (d) | Pak-China Fertilizer Limited/ Hazara Phosphate Plant Limited, Haripur | |
| | **Feed Stock :** All off takes at flat rate of | 631.86 |
| | Gas used for fuel for electrcity Generatoin, Steam and housing colonies | 631.86 |
| (e) | **Engro Fertilizer Company limited** | |
| | **Feed Stock :** All off takes at flat rate of | 631.86 |
| | Gas used for fuel for electrcity Generatoin, Steam and housing colonies | 631.86 |
| 9 | **Power Stations** | |
| (a) | **WAPDA's Power Stations and other electricity utility companies excluding WAPDA's Natural Gas Turbine Station, Nishatabad, Faisalabad** | |
| | All off takes at flat rate of | 631.86 |
| (b) | **WAPDA's Natural Gas Turbine Station, Nishatabad, Faisalabad** | |
| | All off takes at flat rate of | 631.86 |
| | Fixed Charge (Rupee per month) | 390,000 |
| (c) | **Liberty Power Limited** | |
| | All off takes at flat rate of | 631.86 |
| 10 | **Captive Power** | |
| | All off-takes at flat rate of | 631.86 |
| 11 | **Independent Power Plants** | |
| | All off-takes at flat rate of | 631.86 |

Certified True Copy

**Annex-III**

## 3. Abbreviations

| Words | Abbreviations |
|---|---|
| BBTU | Billion British Thermal Unit |
| BOD | Board of Directors |
| CSC | Customer Services Centre |
| CAPEX | Capital Expenditure |
| C.P System | Cathodic Protection System |
| C&F Price | Carriage and Freight Price |
| DERR | Determination of Estimated Revenue Requirement |
| DRS | District Regulator Station |
| DCVG | Direct Current Voltage Gradient |
| DMC | Data Monitoring Committee |
| ECC | Economic Co-ordination Committee |
| FG | Federal Government |
| FRR | Final Revenue Requirement |
| GDS | Gas Development Surcharge |
| GOP | Government of Pakistan |
| GIC | Gas Internally Consumed |
| HSFO | High Sulfur Fuel Oil |
| KMI | Key Management Infrastructure |
| LPS | Late Payment Surcharge |
| LNG | Liquefied Natural Gas |
| MMBTU | Million Metric British Thermal Unit |
| MMCFD | Million Standard Cubic Feet per Day. |
| MPNR | Ministry of Petroleum & Natural Resources |
| NGT Rules | Natural Gas Tariff Rules |
| OGRA | Oil and Gas Regulatory Authority |
| RLNG | Re-gasified Liquefied Natural Gas |
| SNGPL | Sui Northern Gas Pipeline Limited |
| SSGCL | Sui Southern Gas Company Limited |
| SMS | Sale Meter Station |
| TBS | Town Border Station |
| T&D Cost | Transmission and Distribution Cost |
| UFG | Un-accounted for Gas |
| UHF | Ultra High Frequency |
| WACOG | Weighted Average Cost of Gas |
| WPPF | Workers Profit Participation Fund |

Certified True Copy