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# ENERGY POLICY PROGRAM

## SEPTEMBER 2015

### REDLINED POLICIES/GUIDELINES INCORPORATING PROPOSED MODIFICATIONS

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Work Area – 2

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# Contents

<b>PETROLEUM EXPLORATION &amp; PRODUCTION POLICY 2012.....</b>	<b>III</b>
<b>MARGINALFIELDS-GUIDELINES, 2013 .....</b>	<b>58</b>
<b>LOW BTU GAS PRICING POLICY, 2012.....</b>	<b>66</b>
<b>TIGHT GAS (EXPLORATION &amp; PRODUCTION) POLICY-2011 .....</b>	<b>73</b>

## **REDLINED POLICIES/GUIDELINES INCORPORATING MODIFICATIONS**

### **CONTEXT**

The Consultants have previously developed a report “Review of Policies, Evaluation & Recommendations” which addresses issues identified during Consultants discussions held with the stakeholders that included the regulator and a spectrum of the upstream E & P industry. These issues are broadly the key provisions not yet implemented and other problem areas of the various Policies/Guidelines issued by GoP during the last 3-5 years. The key documents which were reviewed by the Consultants included the 2012 Petroleum Policy, the Low BTU Gas Pricing Policy, the Tight Gas Policy and the Marginal/Stranded Gas Field Guidelines (Policies/Guidelines). The Consultants completed this work with recommendations as well as a rationale for suggested improvements needed to address the identified issues and ways & means for effective implementation of these Policies/Guidelines. That work also identified the regulatory impediments slowing down the E&P activities and recommended steps/actions needed to overcome such impediments.

### **PROCESS**

This document “Redlined Policies/Guidelines Incorporating Modifications” reflects the work carried out by the Consultants as a follow-up to the above referred work to develop a document that incorporates the recommendations/suggestions made in the Policies/Guidelines as part of the earlier work. A redline version each Policy / Guidelines has therefore been developed. All changes as identified and agreed with AEAI in respect of the 2012 Petroleum Policy, Low BTU Gas Pricing Policy, Tight Gas Policy and Marginal/Stranded Gas Fields Guidelines for improvement and effective implementation have therefore been incorporated in this document.

### **STRUCTURE**

The redline version of Policies/Guidelines is structured such that the original text of the each Policy/Guidelines is modified by incorporating changes /improvements where needed, captured in redline. It is therefore possible to create a final document for Policies/Guidelines by accepting all changes that are approved by the Competent Authority and rejecting those that are not acceptable to obtain a final document.

### **WAYFORWARD**

This document can therefore now be reviewed within the DGPC team as well as the Competent Authority for finalization, and approval resulting in an improved set of Policies/Guidelines for all the stake holders including regulator and the E & P industry.



# **PETROLEUM EXPLORATION & PRODUCTION POLICY 2012**

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GOVERNMENT OF PAKISTAN  
Ministry of Petroleum & Natural Resources

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(August 2012)

# **I. Introduction**

## **I.1 Background**

The importance of the domestic petroleum industry to the economy of Pakistan is a core issue of national security, national self reliance and as a major source of government revenue.

Pakistan's average daily production of crude oil and gas in 2009-10 was 65,000 barrels and 4,063, million cubic feet, respectively. Pakistan's indigenous oil and gas production meet around 53% of its total energy requirements while other indigenous sources provide 19%. As a result around 27% of the country's energy needs are currently being met through imports. Even at conservative estimates of economic growth over the next decade, Pakistan's total energy requirements are expected to grow substantially. While the Government of Pakistan (GOP) is focused on securing its energy future through gas imports, it is also conscious of minimizing its energy import bill through maximizing development of its indigenous resources. Domestic gas production and supply presently fails to meet the demand of domestic users, the industrial sector and power generation. Furthermore, gas supply may soon become insufficient due to increasing demand and depletion of present reserves. This, in turn, will force Pakistan to soon begin importing large volumes of gas at international prices to feed the domestic market.

Furthermore the GOP is cognizant of the dramatic changes that have taken place in the pricing and cost environment of the international oil and gas industry. The drastic increase in the crude oil prices in the international market has changed the complexion of the E&P sectors which requires drastic changes in the approach towards the sector. In addition, the GOP recognizes the operating challenges and considerations for the Pakistan oil exploration and development industry. Today, more than ever before, the GoP stands committed to providing fiscal and regulatory incentives that would enhance and facilitate E&P companies in accelerating their exploration and development programmes in order to maximize domestic oil and gas production in the coming years.

## **I.2 Previous Policies**

In 1991, GOP introduced the first petroleum Policy document. This was then followed by new Petroleum Policies of 1993, 1994, 1997, 2001 and 2007 and 2009. Whenever previous policies were superseded by a subsequent Policy document, the existing rights granted under licences/Petroleum Concession Agreements (PCAs) / Production Sharing Agreements (PSAs) were not affected.

The 1997 Policy, while preserving the provisions of the 1994 Policy with respect to onshore areas, introduced a new offshore package of terms based on production sharing arrangements. Under the 1997 Policy, existing licence holders in offshore areas were given an option to convert their concession agreements into Production Sharing Agreements (PSAs).

The 1997 Policy was replaced in 2001 by Petroleum Policy 2001, coupled with Petroleum (Exploration and Production) Rules 2001, a model offshore Production Sharing Agreement and a model onshore Petroleum Concession Agreement. In 2003, a revised model offshore production sharing agreement was introduced complemented by the Offshore Petroleum (Exploration and Production) Rules 2003.

Policy 2009 had to be amended by this Petroleum Policy 2012 as the new market conditions warranted urgent changes required for investment promotion in view of increasing international energy prices. It also reflects the resolve of Government of Pakistan to accelerate exploitation of indigenous natural resources by attracting foreign investment with technology as well as promoting local companies to participate in E&P activities on a level playing field.

There has been paradigm shift in the natural gas scenario due to higher trend of consumption of natural gas in the country and overall energy requirement was changing so therefore there was great need to bring new policy with additives.

The purpose of this Petroleum Exploration and Production Policy 2012 (Policy) is to establish the policies, procedures, tax and pricing regime in respect of petroleum exploration and production (E&P) sector.

### **1.3 Policy Objectives**

The principal objectives of this Policy are:

1. **To accelerate E&P activities in Pakistan** with a view to achieve maximum self sufficiency in energy by increasing oil and gas production.
2. **To promote direct foreign investment in Pakistan** by increasing the competitiveness of its terms of investment in the upstream sector.
3. **To promote the involvement of Pakistani oil and gas companies** in the country's upstream investment opportunities.
4. **To train the Pakistani professionals in E& P sector to international standards** and create favourable conditions for their retaining within the country.
5. **To promote increased E&P activity in the onshore frontier areas by providing globally competitive incentives.**
6. **To enable a more proactive management of resources** through establishment of a reorganized Directorate General of Petroleum Concessions (DGPC) comprising of a Federal and Provincial representatives with Federal Director as ex-officio Director General and providing the necessary control and procedures to enhance the effective management of Pakistan's petroleum reserves. Role of reorganized Directorate General of Petroleum Concessions is given in Appendix – A.
7. To ensure the energy secure of the country by enhancing domestic exploration
8. To decrease reliance on imported energy by providing additional incentives to exploration and production companies for enhancing indigenous production
9. To undertake exploitation of oil and gas resources in a socially, economically and environmentally sustainable and responsible manner.

### **1.4 Requirements of Policy**

In order to achieve these objectives, it is necessary for this Policy to:

1. Provide stimuli for increasing exploration and production investment by modifying current contracting terms and incentives while taking into consideration the market conditions.
2. Adopt licensing terms, conditions and processes to attract newcomers including oil and gas majors and independents, National Oil Companies (NOCs), and Pakistani private companies.
3. Provide a balance between prices and incentives through the rationalization of the pricing formula so as to suitably compensate exploration and production risk.
4. Implement pro-active Policy management.
5. Successfully align the Policy with GOP's objective to achieve maximum self sufficiency in domestic energy resources for the larger public good.
6. Provide a transparent and non-discriminatory licensing and contracting system managed by DGPC.

## **1.5 Outline of Pakistan’s 2012 E&P Policy**

The Petroleum Exploration & Production Policy 2012 maintains a system based upon the two different types of agreements to obtain E&P rights in Pakistan:

For onshore operations, a system based upon a **Petroleum Concession Agreement (PCA)**

For offshore operations, a system based upon a **Production Sharing Agreement (PSA)**

This document is structured in six Sections:

Section I: Licensing Process;

Section II: Exploration and Production Regimes;

Section III: Regulatory Process and Obligations;

Sections IV: Pricing and Incentives for Petroleum Exploration & Production;

Section V: Implementation and Removal of Difficulties;

Section VI: Conversion to 2012 Policy.

This Policy has incorporated the significant achievements of the Pakistani petroleum industry with established good international oilfield practices.

This Policy will be enhanced by DGPC’s continued active support of:

1. The implementation of best practices for assessing petroleum projects and efficient regulatory process.
2. Vigorously promoting exploration and production investment opportunities within Pakistan to both the domestic and the international petroleum industry.
3. Vigorously promote the access to and sale of public domain upstream geological and engineering data sets both in Pakistan and abroad.

## **1.6 Promoting Involvement of Pakistani Companies in the Country’s Upstream Petroleum Industry**

GOP is also committed to promoting the active participation of Pakistani companies in oil and gas activities in order to stimulate growth of domestic industry and capture the maximum economic benefit for the country and its workforce.

Furthermore, GOP views the increased involvement of Pakistani companies in partnerships with foreign companies, combined with the involvement of the local stakeholders, to be one of the keys to unlocking the potential of the petroleum reserves in the frontier areas for the benefit of the country.

## **Section I – Licensing Process**

### **Map of Licensing Zones**

For the purposes of petroleum licensing, Pakistan will continue to be divided into three onshore and one offshore Zones as shown in the Map, on the basis of risk and investment requirements.

This Map (Fig - --) will be reviewed and revised by the regulator from time to time in consultation with the industry.

Any such revision will be prospective only and shall not have any effect on the terms and conditions of the existing Petroleum Concession Agreement (PCA) or Production Sharing Agreement (PSA) executed prior to the revision of the Map.

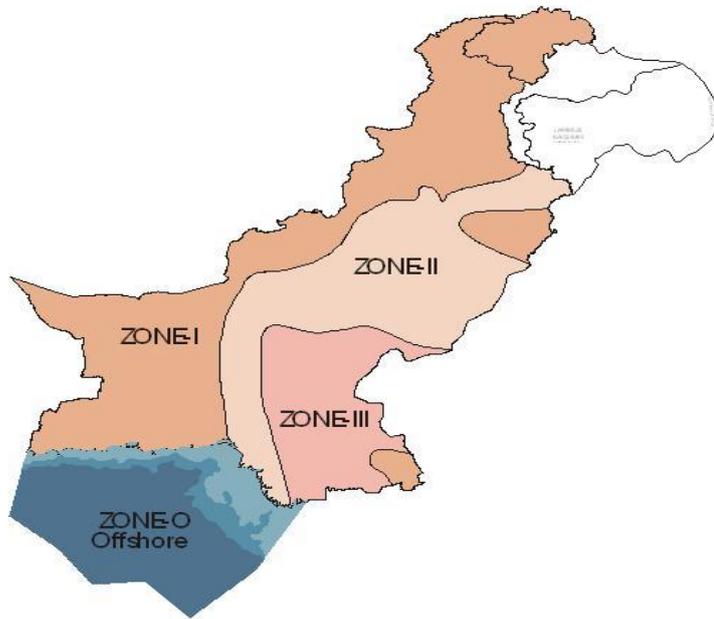


Figure ---- : -----

## 2. Companies entitled to acquire petroleum right:-

1. Every company interested to acquire petroleum right will be required to furnish the details as to the nature of and the principal place of business of the company, the authorized, subscribed and paid-up capital of the company, the names and nationality of the directors thereof and the names and holdings of the principal shareholders. In addition, every company other than the existing operator of a license/lease shall also furnish evidence as to his financial and technical qualifications and as to his ability to conduct the activities under the relevant petroleum right in accordance with the good oilfield practices.
2. All local and foreign companies presently operating in Pakistan will be eligible to acquire petroleum right.
3. Foreign companies not operating in Pakistan but having operated concessions in other geographical areas of the world will also be eligible to acquire petroleum right subject to demonstration of technical and financial capability.
4. All companies having joined a consortia of companies in a concession and have gained at least three years of experience as a non-operator will be eligible to become operator subject to demonstration of technical and financial capability except as provided in Paragraph 2.1.

### 2.1 New Local Entrants

a. Smaller local Pakistani companies will be allowed to join consortia with other E&P companies as non operator in order to gain the necessary industry experience to allow them to expand their capacity to take on operating roles in future. In the event, local Pakistani company does not have requisite past operating experience, such company shall be required to either produce an agreement with an internationally renowned E&P/ services company acceptable to DGPC or a high calibre technical and management team with proven track record of overseeing and managing operations in the international petroleum industry.

b. The bar contained in para (a) shall not apply to Provincial Holding Exploration and Production Companies (PHCs)~~Provincially-owned E&P company~~. However, all other requirements given in para 2.2 shall be adhered to mutatis mutandis.

## 2.2 Requirements for an Applicant

### 2.2.1 Legal Capacity and Residence Requirements

The applicant company must:

1. Be eligible to apply for a petroleum right in accordance with the applicable Rules and to execute any subsequent agreement, and that such status is likely to remain valid for a period longer than the life of any subsequent agreement plus one year;
2. Declare that there is no pending litigation, legal process or other circumstance that might cause it to breach its obligations; and
3. Provide a sworn statement that it is not incapable of contracting with GOP and/or Government Holdings (Private) Limited (GHPL).
4. Within a period not exceeding ninety days after award of petroleum right to a qualified company, it must either become incorporated in Pakistan or obtain permission to operate as a registered branch office of a foreign company to operate in Pakistan.

### **2.2.2 Submission of Misleading Information or an Adverse Material Change in Status**

1. DGPC reserves the right to disqualify any company should there be an adverse material change in the status of a company after filling of an application.
2. DGPC reserves the right to refuse authorisation to participate should erroneous or misleading information be supplied by the applicant.

### **2.3 Direct Negotiation with Strategic Partners**

GOP may assign the status of “Strategic Partner” to national oil companies representing foreign governments. GOP will promote direct negotiations with selected strategic partners in order to:

1. Explore and develop specific acreage selected by DGPC for strategic partnerships.
2. Develop acreage of significant petroleum potential identified by DGPC in regard to which GOP considers that a strategic partnership would improve the exploitation of any petroleum resources.
3. The party to whom block is awarded would remain the majority share holder of such block(s). The block awarded to the strategic partner can only be farmed out to Public Sector Companies of the same country acceptable to the GOP or Pakistani Public Sector E&P companies including GHPL.

Strategic partners will be required to undergo the same procedure as other companies outlined above; however, they will be given privileged award of petroleum rights without following competitive bidding for certain blocks selected by DGPC on mutually acceptable terms and conditions.

### 3. Licensing System

#### 3.1. Types of Exploration and Production Rights

Four different types of E&P rights will be available, as outlined in the table below:

Type	Name	Petroleum Right Granted	Term	Maximum Acreage
1.	<b>Reconnaissance Permit</b>	Non-exclusive right for geophysical, geochemical & geological operations, including the drilling of stratigraphic wells.  No rights to negotiate or convert into onshore Licence or offshore PSA	1 year initial term with possible renewal of 1 year.	Unlimited in open areas.
2.	<b>Petroleum Exploration Licence – Onshore</b>	Exclusive right for exploration, including drilling and production testing, on terms specified in the licence, Rules and related agreement.	Five years initial term (Phase-I of 3 years and Phase-II of 2 years) plus two renewals of one year each.  For appraisal operations, a separate application can be made under the Rules allowing a maximum period of appraisal renewal for one year.  Plus a possible additional five years retention period <sup>1</sup> for gas market.	Maximum 2,500 km <sup>2</sup> with subsequent progressive area relinquishment of 30% of the original area after Phase-I of initial term, 20% of the remaining area after Phase-II of the initial term and 10% of the remaining area on or before the start of second one year renewal <u>However the License holder(s) can continue to keep entire area if they commit before the end of:</u> <u>a) Phase-I additional work units equivalent to 30% of the work units committed for Phase-I in PCA,</u> <u>b) Phase-2 additional work units equivalent to 20% of the work units committed for Phase-I in PCA,</u> <u>c) First Renewal additional work units equivalent to 10% of the work units committed for Phase-I in PCA.</u>
	<b>Development and Production Lease</b>	Exclusive right to develop and produce hydrocarbons from within a designated portion of a Petroleum and Exploration Licence, issued when conditions laid down in the Rules are satisfied.	Up to 25 years with a possibility of a renewal for five years.	Maximum acreage retained under development and production lease as defined in the Rules.
3.	<b>Petroleum Exploration Licence – Offshore Shallow Water</b>	Exclusive right for exploration, including drilling and production testing, on terms specified in the licence, Rules and related PSA	Five years initial term (Phase-I of 3 years and Phase-II of 2 years) plus two renewals of one year each.  For appraisal operations, a separate application can be made under the Rules allowing a maximum period of appraisal renewal for one year.	Maximum 2,500 km <sup>2</sup> with subsequent progressive area relinquishment of 30% of the original area after Phase-I of initial term, 20% of the remaining area after Phase-II of the initial term and 10% of the remaining area on or before the start of second one year renewal <u>However the License</u>

			Plus a possible additional five years retention period <sup>1</sup> for gas market.	<u>holder(s) can continue to keep entire area if they commit before the end of:</u> <u>a) Phase-I additional work units equivalent to 30% of the work units committed for- Phase-I in PCA.</u> <u>b) Phase-2 additional work units equivalent to 20% of the work units committed for Phase-I in PCA.</u> <u>c) First Renewal additional work units equivalent to 10% of the work units committed for Phase-I in PCA.</u>
	<b>Development and Production Lease</b>	Exclusive right to develop and produce hydrocarbons from within a designated portion of a Petroleum and Exploration Licence, issued when conditions laid down in the Rules are satisfied.	Up to 25 years with a possibility of a renewal for five years.	Maximum acreage retained for development and production as defined in the Rules.
4.	<b>Petroleum Exploration Licence – Offshore Deepwater and Ultra Deep Water</b>	Exclusive right and PSA for exploration, including drilling and production testing, on terms specified in the licence, Rules and related PSA	Five years initial term (Phase-I of 3 years and Phase-II of 2 years) plus two renewals of one year each.  For appraisal operations, a separate application can be made under the Rules allowing a maximum period of appraisal renewal for one year.  Plus a possible additional five years retention period <sup>1</sup> for gas market.	Maximum 2,500 km <sup>2</sup> with subsequent progressive area relinquishment of 30% of the original area after Phase-I of initial term, 20% of the remaining area after Phase-II of the initial term and 10% of the remaining area on or before the start of second one year renewal.  <u>However the License holder(s) can continue to keep entire area if they commit before the end of:</u> <u>a) Phase-I additional work units equivalent to 30% of the work units committed for Phase-I in PCA.</u> <u>b) Phase-2 additional work units equivalent to 20% of the work units committed for Phase-I in PCA.</u> <u>c) First Renewal additional work units equivalent to 10% of the work units committed for Phase-I in PCA.</u>
	<b>Development and Production Lease</b>	Exclusive right to develop and produce hydrocarbons from within a designated portion of a Petroleum and Exploration Licence, issued when conditions laid down in the Rules are satisfied.	Up to 25 years with a possibility of a renewal for five years.	Maximum acreage retained for development and production as defined in the Rules.

<sup>1</sup> For details of the retention period for gas market arrangements, please see 4.1.7 below

<sup>2</sup> For details of the retention period for gas market arrangements, please see 5.13 below

## **3.2. Procedure for the Granting of E&P Rights**

Onshore and Offshore E&P rights will be awarded via three distinct procedures:

1. The granting of Petroleum Exploration Licences for entering into PCA or PSA in relation to onshore and offshore blocks offered through competitive bidding as per procedure laid down herein below.
2. The granting of Petroleum Exploration Licences for entering into PCA or PSA in relation to onshore and offshore blocks without competitive bidding to Strategic Partner Companies on Government to Government basis.
3. The granting of non-exclusive Reconnaissance Permits for undertaking studies and multi-client surveys after direct negotiation.

An application for any offshore permit or licence will be filed to DGPC. However, GHPL will hold the rights to such permit or licence and will contract the applicant company to perform the required work via a contractor agreement (PSA).

In order to further streamline the procedure for expeditious disposal of applications for the grant of exploration licences for both onshore and offshore; DGPC will continue the competitive bidding process as given below. In addition, the existing procedure for clearances by Provincial Governments and security agencies through an updated and predefined "White and Green Area Map" will continue. No area clearance would be required for concession blocks falling inside white/green areas.

### **3.2.1 Invitation to Bid**

1. DGPC will issue an Invitation to Bid as per the format at Annexure 6, in national newspapers, the MPNR website. Invitation to Bid may cover the nominated blocks and such additional blocks as DGPC may deem appropriate.
2. An Invitation to Bid will remain valid for at least 60 days and all companies providing the requisite information would be eligible to contest Invitation to Bid.
3. It is a pre-requisite that the standard Model Petroleum Concessions Agreement and Model Production Sharing Agreement are followed by all companies participating in Invitation to Bid. All the economic terms and conditions will remain fixed as defined in this Policy, unless mutually agreed by the parties and approved by GOP. All participating companies will be required to furnish an undertaking to the effect that in the event, they are considered for the award of petroleum right by DGPC, they will not seek any change or modification or amendment or revision to terms and conditions applicable to Invitation to Bid including that of Model Petroleum Concessions Agreement and Model Production Sharing Agreement.
4. Upon a written request of an interested company, DGPC will make every effort to provide bid documents within 15 days of the request, which will include but not be limited to copies of: (a) the Policy; (b) the applicable Rules; (c) Model Petroleum Concessions Agreement and Model Production Sharing Agreement, whichever is applicable; and (d) information which is available or can be purchased.
5. Bids will be invited based on criteria of the highest work programme determined on the basis of Work Units above as set-out in Annexure 5 and the minimum threshold indicated in PCA.
6. Any company can submit a bid for any block included in Invitation to Bid in accordance with the Policy/Rules.
7. All Bids will be opened publicly in the presence of authorized representatives of the bidders should they chose to be present. If only one bid is received, the bidding company can be considered for award in accordance with the Rules provided the

company offers a reasonable Work Programme commensurate with the prospectivity of the area.

8. Award of petroleum rights to Pakistani state owned companies will also be subject to the same process mentioned herein above: and shall provide the necessary guarantees, like other bidders, to ensure a level playing field for all.
9. DGPC will ensure that the conditions and requirements concerning the exercise or termination of the Invitation to Bid are established and made available to interested companies along with the bid documents. Furthermore, any changes made to the conditions and requirements in the course of the bid procedure are to be notified to all interested registered companies immediately by means of bulletins posted to the website and through registered mail to the companies buying bid documents.
10. Bids are to be submitted in a sealed envelope.
11. All bids are to be made in accordance with the applicable Rules.
12. All bidders are required to notify DGPC should there be an adverse material change in their status after the bidding. GOP will retain the right to refuse the granting of any rights when there is adverse material change in the information provided.
13. DGPC will make every effort to conclude and sign a Petroleum Concession Agreement or Production Sharing Agreement as the case may be based strictly on the model provided with the bid documents within 15 days after the closing date of Invitation to Bid subject to completion of all documents to be submitted by the applicant companies.
14. The Government on the recommendation of DGPC reserves the right to exercise the powers to accept or reject any application and cancel or annul the bidding process.
15. DGPC reserves the right to call bidding rounds as and when required.
- ~~15-16.~~ In case where the highest (successful) bidder declines to sign the PCA/PSA for any reason whatsoever the regulator can invite the 2nd highest bidder to sign the exploration license- EL (and PCA/PSA as the case may be) for the Block based on the work units offered by such a bidder.
17. If a successful bidder is reluctant or refuses to sign the EL (and PCA/PSA, as the case may be) then such a bidder shall be disqualified to participate directly or indirectly or through any joint venture consortium in the next three (3) bidding rounds.

### **3.2.2 Direct Negotiation of Non-Exclusive Rights**

A potential investor may apply, in accordance with the Rules, for a non-exclusive Reconnaissance Permit via direct negotiation with DGPC in any area currently open and considered by DGPC to be suitable for this purpose.

### **3.3 Bid Evaluation Procedure**

1. Each bid must contain the necessary information regarding Work Units for Phase I of the initial term of the licence that the bidder offers as a firm commitment. The bid with the highest firm Work Units for Phase I of the initial term will be declared the winner.
2. If more than one bidder offer the same number of Work Units and there is a draw, then the successful bidder will be decided on the basis of following process:
  - a. Within 15 days of bid opening date, the bidders offering the equal number of the highest Work Units will be asked to re-bid the Work Units and the bidder offering the higher Work Units in the re-bidding will be declared the

winner, provided however, bidders cannot offer Work Units lower than the one previously offered.

- b. The above process will be repeated until there is a clear winner.

### **3.4 Post Award Process**

Following a successful bid, either a PCA for onshore acreage or a PSA for offshore acreage, will be concluded between Government/ GHPL and the successful bidder as per the Model PCA/PSA made available to the applicants at the time of the announcement of the invitation for bids. No modification to the terms of the model agreement nor to the terms of the bid will be allowed during the finalisation of execution copies of the PCA or PSA.

## Section II – Exploration and Production Regimes

### 4 Onshore Petroleum Concession Agreement (PCA)

The economic package for onshore licensing Zones I, II and III is detailed below and will be included in a model PCA to be released in line with this Policy (see map of licensing Zones in Section I above).

- Zone I West Balochistan, Pashin and Potowar Basins
- Zone II Kirthar, East Balochistan, Punjab platform and Suleman Basins
- Zone III Lower Indus basin

The onshore PCA will apply to all new licences in onshore areas.

The onshore fiscal package contained in this Policy as applied to future awards will be reviewed from time to time in the light of additional information and may be adjusted to maintain international competitiveness.

#### 4.1 Royalty, Income Tax and Windfall Levy

1. Royalty will be payable at the rate of 12.5% of the value of petroleum at the field gate.
2. The royalty will be paid in cash or kind by the Federal Government to Provinces to the extent of their share of liquid and gaseous hydrocarbons (such as LPG, NGL, Solvent oil, gasoline and others) as well as all substances including sulphur, produced in association with such hydrocarbon. The option to choose between 'cash' or 'kind' will rest with the Province however when the option of "kind" is to be exercised, the respective Province will consult with the Federal Government. The lease rent paid during the year shall not be deductible from the royalty payment.
3. Tax on income will be payable at the rate of 40% of profit or gains in accordance with the Fifth Schedule of the Income Tax Ordinance, 2001. Royalties will be treated as an expense for the purpose of determination of income tax liability.
4. Windfall Levy (WLO) will be applicable on crude oil and condensate using the following formula:

$$\mathbf{WLO = 0.4 \times (M-R) \times (P-B)}$$

Where:

- WLO - Windfall Levy on crude oil and condensate;
- M - Net production (petroleum produced & saved);
- R - Royalty;
- P - Market Price of crude oil and condensate as set out in paragraph 11 below;
- B - Base Price, which will be as under:
  - a. The base price for crude oil and condensate will be USD 40 per bbl.
  - b. This base price for crude and condensate will escalate each calendar year by USD 0.5 per barrel starting from the date of first commercial production in contract area.

All the benefit of windfall levy may be equally divided between the Federal Government and Provincial Government concerned. The ceiling would be reviewed as and when pricing dynamics significantly change in the international market.

5. 10% of the royalty will be utilized in the district where oil and gas is produced for infrastructure development.
6. For sale of natural gas to parties other than GOP, Windfall Levy (WLG) will be applicable on the difference between the applicable GOP Zone price and the 3<sup>rd</sup> party sale price using the following formula:

$$\mathbf{WLG = 0.4 \times (PG - BR) \times V}$$

Where:

- WLG - Windfall Levy on share of natural gas;
- PG - Third Party Sale Price of natural gas;
- BR - Base Price;
- V - Volume of gas sold to third party excluding royalty.

The Base Price will be the applicable Zone price for sale to GOP as outlined in section IV (10) below. Where the 3<sup>rd</sup> party sale price of gas is less or equal to the base price, the windfall shall be zero. The windfall levy shall not apply on sales of natural gas made to Government of Pakistan and the Provincial Government.

#### **4.1.1 Import Duties, Taxes and Fees**

- a. Incentives in respect of Import Duties/Taxes and Fees for the E&P companies and the “service companies” are as per applicable SRO on the effective date of execution of the Exploration Licences/PCAs. .

#### **4.1.2 Production Bonuses**

Production bonuses will be payable on a contract area basis as follows:

<b>CUMULATIVE PRODUCTION (MMBOE)</b>	<b>AMOUNT (USD)</b>
At start of commercial production	600,000
30	1,200,000
60	2,000,000
80	5,000,000
100	7,000,000

1. Local Operator companies will pay their share of production bonuses in the Pakistan Rupees equivalent of United States Dollar converted at the prevailing exchange rate on the day of transaction.
2. ~~GHPL/Provincial GHPL will not pay the production bonuses as long as GOP/Provincial Government is the majority shareholder of this company.~~
3. It is intended that production bonuses will be expended on social welfare projects in and around the respective contract areas according to guidelines to be issued by the Provincial Government from time to time.

#### **4.1.3 Incentives for Exploration and Production Companies incorporated in Pakistan**

There is a need to develop a strong indigenous base in Exploration and Production sector and to minimize foreign exchange outlays. Therefore, the following incentives will continue to be offered to qualified E&P Companies incorporated in Pakistan, which pay dividends and receive payments for petroleum sold in Pakistani currency.

1. Such E&P companies will be encouraged to operate exploration blocks with 100% ownership.

2. In case of joint ventures with foreign E&P companies, local E&P companies shall have working interest of 15% in Zone-I, 20% in Zone-II and 25% in Zone-III on full participation basis (hereinafter referred to as “required minimum Pakistani working interest”). The local E&P companies shall contribute their share of exploration expenditure in Pakistani currency upto required minimum Pakistani working interest. In the event any local E&P company subsequently intends to reduce its working interest in a joint venture whereby the collective working interest(s) of local E&P companies becomes lower than the above threshold specified for required minimum Pakistani Working Interest, GHPL/Provincial Government Holding Company shall have the first right to make up the balance required minimum Pakistani working interest on point forward basis without reimbursement or payment of any past cost.
3. Consortia of companies not meeting the minimum required Pakistani working interest can still be granted an exploration licence provided such companies advertise in the press within 15 days of the grant, inviting Pakistani incorporated companies to participate in the joint venture on the full participation basis under standard Joint Operating Agreement. The Pakistani incorporated companies GHPL/Provincial Government Holding Company shall have the option to participate in the joint venture within 30 days.
4. The foreign E&P companies shall be deemed to have fulfilled their obligation with respect to the minimum Pakistani participation if Pakistani incorporated companies and/or GHPL/Provincial Government Holding Company do not take any interest fully or partially.
5. Local E&P companies will, on a case to case basis, be entitled during the exploration phase to receive foreign exchange against payment in Pakistani currency to meet their day to day obligations under permits, licences and PCAs/PSAs. After commercial discovery, local E&P companies would be paid up to 30% of their sale proceeds in foreign currency to meet their day to day operational requirements. For project financing after commercial discovery, local E&P companies will be required to make their own foreign exchange arrangements except for companies in which GOP or Provincial Government holds majority shareholding.
6. There shall be a working interest of 5% on full participation basis i.e., 2-1/2% each of GHPL and Provincial Government Holding Company where the block will be located. GHPL/Provincial Government Holding Company shall have option to accept the participating working interest.

#### **4.1.4 Local Employment of Pakistani nationals, Training and Social Welfare**

Local Employment of Pakistani nationals, training and social welfare obligations will be applicable as per Annexure-3.

#### **4.1.5 Exploration Period**

See paragraph 3.1.above.

Upon a written request of an Operator DGPC may, on a case to case basis, extend the term of the licence on the following grounds only:

- a. If seismic and drilling services are not readily available in the country for the timely discharge of minimum work obligation, a proof to this effect will be required before the Government considers accepting or denying a request for extension of an exploration licence. Such a request for extension will be required to be made after the holder of the exploration licence has exhausted all other options including but not limited to pooling resources to undertake coordinated activities with other petroleum right holders, if possible;

- b. If a holder of an exploration licence commits to undertake additional work which is equivalent to at least 10% more than the minimum work obligation of subsequent phase or renewal;
  - c. If a holder of an exploration licence makes additional accelerated area relinquishment equivalent to 10% of the original licence area; or
  - d. Notwithstanding above, in no circumstances shall an extension or extensions cumulatively exceed 24 months during the currency of an exploration licence.
2. If the party was unable to perform work because of circumstances beyond his control such as law and order situation or for unforeseeable reasons including but not limited to a flood or earthquake etc.

Notwithstanding above, in no circumstances shall an extension or extensions cumulatively exceed 24 months during the currency of an exploration licence.

#### 4.1.6 Extended Well Testing

1. Subject to approval from DGPC, an Operator may be permitted to undertake extended well testing (EWT) during the appraisal phase and before declaration of commerciality and approval of the development plan. Such approval will be granted provided that the Operator inter-alia complies with the requisite royalty, tax, rentals, and training/social welfare commitments as applicable to commercial production under a lease such that the payments to the Government are not adversely affected.
2. A request for approval of EWT (including associated temporary production facilities) will be made to DGPC providing information with regard to (a) technical justification for EWT; (b) proposed duration for EWT and (c) a plan with regard to disposal of gas during the proposed EWT period. ~~The duration of EWT will be allowed keeping in view the reservoir uncertainty and the proposed investment outlay on EWT.~~
3. ~~DGPC will not grant approval to undertake flaring for EWT for a period longer than 30 days, unless under exceptional circumstances.~~
- ~~2.4. The EWT will be allowed for a specified period keeping in view the reservoir uncertainty and the proposed investment outlay on EWT. However under no circumstances the total volume produced during EWT period shall be more than 10% of the Original- Gas- in Place.~~
5. Where the specifications and quality of the gas from an approved EWT is acceptable to the buyer, the gas price shall entail a 5% discount from the applicable gas price for on- spec gas and 10% discount for off- spec gas for that Zone.
- ~~3.6. In case of revenues from sale of gas produced under EWT exceed \$6 Million, the first production bonus of US\$ 600,000 due at the start of commercial production from a concession area will be payable to the Government.~~
- ~~4.7. The facilities that are required to undertake EWT shall be constructed and operated in accordance with good international oilfield practices.~~

#### 4.1.7 Retention Period

1. In the case of a significant gas discovery in Zone I or Zone II, a retention period of up to 5 years will be considered for onshore licences, on a case to case basis, provided such discovery can be declared a commercial discovery when inter-alia adequate gas pipeline transportation facilities are installed and gas markets have been sufficiently developed for sale of natural gas on commercial basis. In case the discovery is of low BTU for which outlet is not readily available or gas infrastructure cannot be utilized, the Government can consider extension in above mentioned retention period on case to case basis.

2. A discovery containing oil and gas or oil, gas and condensate is considered to be a gas discovery for the purposes of obtaining a retention period only when liquids production is not considered economic without marketing the gas stream.

#### **4.1.8 Total Lease Term**

Total term of an onshore development and production lease will be up to 25 years plus five years renewal subject to paragraph 4.1.9 below.

#### **4.1.9 Five Year Term Renewal**

So as to provide the Operator with a suitable return on late term investment in the lease, the production period of a lease may be renewed for one term of five years. A revised field development plan will be required to be submitted for approval by DGPC. In order to obtain such a renewal the Operator must meet the following conditions:

1. The submission of a request for a renewal has been submitted not less than three years in advance of the expiry of initial term of the production period; and
2. That the exploitation area has been producing on a regular basis on the date of the request.

#### **4.1.10 Policy for Grant of Lease after Expiry of Lease Term**

1. For grant of petroleum rights after the expiry of lease period, DGPC can renew the lease term for another five years term in case the existing lease holder agrees to pay an amount equivalent to 15% of the wellhead value to the Government otherwise DGPC will invite bids using the call for bids one year before the end of the lease period from pre-qualified companies seeking to have a petroleum right over the lease area, in relation to any producing field for an additional ten years. The bids will be evaluated on the basis of Signature Bonus, which would be spent for social welfare of the area in which the field is located. A procedure for transfer of funds generated through signature bonus would be the same as being applicable for transfer of royalty.
2. Each bidder(s) shall provide a bid bond of 10% of the offered signature bonus at the time of bidding.
3. DGPC shall be under no obligation to grant any extension.
4. The above Policy for grant of lease after expiry of lease term shall also apply to leases granted under Pakistan Petroleum (Exploration & Production) Rules of 1986 and 2001.

## 4.2 Block System

A block system based on latitudes and longitudes as indicated in Annexure 1 and 2 will be followed for grants and relinquishments of all onshore / offshore acreage.

## 4.3 Rentals

1. All holders of exploration licence will be required to pay an advance rental charge at the following rates:
  - a. In respect of the five years of the initial term of the licence; Rs.3500 per square kilometre or part thereof; or in respect of each year of the initial term of the licence; Rs.800 per square kilometre or part thereof;
  - b. In respect of each renewal of the licence; Rs.5000 per square kilometre or part thereof; or in respect of each year of the renewal of Licence; Rs.2750 per square kilometre or part thereof.
2. During the lease period, the following annual advance rental charges will apply:
  - a. Rs.7,500 per square kilometre or part thereof covering the lease area during the initial lease period.
  - b. Rs.10,000 per square kilometre or part thereof covering the lease area during the renewal period of a lease and further lease term extension.

## 4.4 Non Fulfilment of Work Obligations

A holder of a reconnaissance permit or exploration licence will be liable to pay the Government financial compensation for non-performance of work obligations (work units), within the stipulated timeframe. In respect of an exploration licence, the compensation to be paid will be calculated based upon the number of work units unfulfilled multiplied by the applicable USD rate for work units whereas for a reconnaissance permit, such compensation will be based on minimum expenditure obligation specified in the permit deed.

Transfer of undischarged work obligation committed under an exploration licence to another area will be allowed if it is demonstrated to the satisfaction of the regulator that there is no drillable prospect in such a licence area. In the event a petroleum right is held by more than one company, the undischarged work obligations shall be monetized, based on liquidated damages obligations and divided between the working interest owners prorata to their working interests to enable them to either transfer their share of obligations to the area of their interest or pay their pro rata share of liquidated damages.

## 5. Offshore Production Sharing Agreement (PSA)

The economic package for Offshore Licenses Zone is detailed below and will be included in a model PSA to be released in line with this Policy. Offshore Licenses Zone covers three distinct offshore areas; shallow, deep and ultra-deep as defined in Annexure 2.

This Policy will apply to all new grants of offshore PSAs.

### 5.1 Royalties, Corporate Tax and Windfall Levy

#### 5.1.1 Royalties

Following Royalty schedule will be applied:

- |   |                           |
|---|---------------------------|
| <input type="checkbox"/> First 48 Calendar Months after Commencement of Commercial Production | No royalty                |
| <input type="checkbox"/> Months 49 to 60 inclusive  | 5% of field gate price    |
| <input type="checkbox"/> Calendar Months 61 to 72 inclusive                                   | 10% of field gate price   |
| <input type="checkbox"/> Calendar Months 73 and greater                                       | 12.5% of field gate price |
1. The royalty will be paid in cash or kind at the option of Federal Government in consultation with Province in case if it is in kind to the extent of their share only if the block falls within the territorial waters on liquid and gaseous hydrocarbons (such as LPG, NGL, Solvent oil, gasoline and others) as well as all substances including sulphur, produced in association with such hydrocarbon. The lease rent paid during the year shall not be deductible from the royalty payment.
  2. Royalties will be treated as an expense for the purpose of determination of income tax liability.
  3. If the majority of the Block falls beyond the territorial waters of Pakistan the royalty will be paid to the Federal Government.

#### 5.1.2 Corporate Income Tax

Subject to any incentives offered to Operators by GOP, corporate tax will be payable at the rate of 40% of profit or gains in accordance with the Fifth Schedule of the Income Tax Ordinance, 2001.

#### 5.1.3 Windfall Levy

Windfall Levy (WLO) will be applicable on crude oil and condensate using the following formula:

$$\text{WLO} = 0.4 \times (\text{P}-\text{R}) \times \text{SCO}$$

Where:

- WLO - Windfall Levy on share of crude oil and condensate;
- P - Market Price of crude oil and condensate as set out in paragraph 10 below;
- SCO - Share of crude oil and condensate allocated to a Contractor;
- R - Base Price, which will be as under:
  - a. The base price for crude oil and condensate will be USD 40 per

bbl.

- b. This base price for crude and condensate will escalate each calendar year by USD 0.5 per barrel starting from the date of first commercial production in contract area.

All the benefit of windfall levy may be equally divided between the Federal Government and Provincial Government concerned to the extent of territorial waters. The ceiling would be reviewed as and when the pricing dynamics significantly change in the international market.

For sale of natural gas to parties other than GOP, Windfall Levy (WLG) will be applicable on the difference between the applicable GOP Zone price and the 3<sup>rd</sup> party sale price using the following formula:

$$\mathbf{WLG = 0.4 \times (PG-BR) \times V}$$

Where:

- WLG - Windfall Levy on share of natural gas;
- PG - Third Party Sale Price of natural gas;
- BR - Base Price;
- V - Volume of gas sold to third party excluding royalty.

The Base Price will be the applicable Zone price for sale to GOP as outlined in section IV (10). Where the 3<sup>rd</sup> party sale price of gas is less or equal to the base price, the windfall shall be zero. The windfall levy shall not apply on sales of natural gas made to GOP and Provincial Government when the block is located in territorial waters.

## 5.2 Depreciation

The following depreciation rates will apply:

- On successful exploration and development wells 33% on Straight Line
- On dry holes (exploratory wells) Will be expensed immediately upon commencement of commercial production or relinquishment whichever is earlier.
- Non-commercial well (exploration wells) Expensed upon relinquishment of licence
- On facilities and offshore platforms 25% Declining Balance

Carry forward of any unabsorbed depreciation until such depreciation is fully absorbed.

## 5.3 Direct Government Participation

A sliding scale production sharing arrangement will be used instead of direct government participation.

## 5.4 Production Sharing

1. The agreement will be a sliding scale production sharing arrangement.
2. The production sharing agreement will be executed by the Contractor with GHPL who will be granted the Exploration Licence and Development and Production Lease. The Contractor will therefore initially receive the profit oil and profit gas shares and will be responsible for the management of the production sharing agreements.

## 5.5 Cost Limit

Cost limit is 85% including the royalty of 12.5%. The Contractor can recover 100% of the costs from up to a maximum of 85% of the gross revenues.

## 5.6 Profit Oil and Profit Gas Splits

The profit split is set on the basis of a sliding scale for shallow, deep and ultra deep grid areas as shown in Annexure 2. The sliding scale is based on cumulative production permitting a rapid recovery of investments and a higher net present value.

1. **Profit oil & gas share for wells in shallow grid area of less than 200m water depth and depth to reservoir shallower than 4,000m**

Cumulative Available Oil/ Available Gas from Contract Area	Government Holdings Share of Profit Oil/Profit Gas in Contract Area		Contractor Share of Profit Oil/Profit Gas in Contract Area	
	Crude Oil/LPG/ Condensate	Natural Gas	Crude Oil/LPG/ Condensate	Natural Gas
0 – 100	20%	10%	80%	90%
> 100 – 200	25%	15%	75%	85%
> 200 – 400	40%	35%	60%	65%
> 400 – 800	60%	50%	40%	50%
> 800 – 1200	70%	70%	30%	30%
> 1200	80%	80%	20%	20%

2. **Profit oil & gas share for wells in deep grid area of more than or equal to 200m and less than 1,000m water depth or deeper than 4,000m to reservoir in shallow grid area**

Cumulative Available Oil/ Available Gas from Contract Area	Government Holdings Share of Profit Oil/Profit Gas in Contract Area		Contractor Share of Profit Oil/Profit Gas in Contract Area	
	Crude Oil/LPG/ Condensate	Natural Gas	Crude Oil/LPG/ Condensate	Natural Gas
0 – 200	5%	5%	95%	95%
> 200 – 400	10%	10%	90%	90%
> 400 – 800	25%	25%	75%	75%
> 800 – 1200	35%	35%	65%	65%
> 1200 – 2400	50%	50%	50%	50%

> 2400	70%	70%	30%	30%
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**3. Profit oil & gas share for wells in ultra-deep grid area of more than or equal to 1,000m water depth**

Cumulative Available Oil/ Available Gas from Contract Area	Government Holdings Share of Profit Oil/Profit Gas in Contract Area		Contractor Share of Profit Oil/Profit Gas in Contract Area	
	Crude Oil/LPG/ Condensate	Natural Gas	Crude Oil/LPG/ Condensate	Natural Gas
<b>MMBOE</b>				
0 – 300	5%	5%	95%	95%
> 300 – 600	10%	10%	90%	90%
> 600 – 1200	25%	25%	75%	75%
> 1200 – 2400	35%	35%	65%	65%
> 2400 – 3600	45%	45%	55%	55%
> 3600	60%	60%	40%	40%

## 5.7 Production Bonuses

Production Bonuses will be as outlined in the table below.

CUMULATIVE PRODUCTION	AMOUNT (USD)
<input type="checkbox"/> Within 90 days of start of commercial production	600,000
<input type="checkbox"/> Upon reaching 60 MMBOE	1,200,000
<input type="checkbox"/> Upon reaching 120 MMBOE	2,000,000
<input type="checkbox"/> Upon reaching 160 MMBOE	5,000,000
<input type="checkbox"/> Upon reaching 200 MMBOE	7,000,000

- I. The Production Bonus amount for offshore would be expensed in accordance with the guidelines to be issued by the Government from time to time.

## 5.8 Import Duties and Taxes

- b. Incentives in respect of Import Duties/Taxes and Fees for the E&P companies and the “service companies” are as per applicable SRO on the effective date of execution of the Exploration Licences/PSAs. .

## **5.9 Marine Research and Coastal Area Development Fee**

A marine research and coastal area development fee will be applicable as per the following schedule:

- USD 50,000 per year - until first discovery
- USD 100,000 per year - thereafter until declaration of commerciality
- USD 250,000 per year - during development phase
- USD 500,000 per year - during production phase.

Out of the above fee 75% would be expensed on coastal area development and 25% for marine research.

## **5.10 Local Employment, Training and Social Welfare Contributions**

Details of local employment, training and social welfare contributions for Pakistani nationals are given in Annexure 3.

## **5.11 Exploration Period**

*See paragraph 3.1.above.*

Upon a written request of an Operator DGPC may, on a case to case basis, extend the term of the licence on the following grounds only:

- c. If seismic and drilling services are not readily available in the country for the timely discharge of minimum work obligation, a proof to this effect will be required before the Government considers accepting or denying a request for extension of an exploration licence. Such a request for extension will be required to be made after the holder of the exploration licence has exhausted all other options including but not limited to pooling resources to undertake coordinated activities with other petroleum right holders, if possible;
- d. If a holder of an exploration licence commits to undertake additional work which is equivalent to at least 20% more than the minimum work obligation of subsequent phase or renewal;
- e. If a holder of an exploration licence makes additional accelerated area relinquishment equivalent to 20% of the original licence area; or
- f. If the party was unable to perform work because of circumstances beyond his reasonable control such as law & order situation, unforeseeable reasons including but not limited to flood, earthquake etc.

Notwithstanding above, in no circumstances shall an extension or extensions cumulatively exceed 24 months during the currency of an exploration licence.

## **5.12 Extended Well Testing**

1. Subject to approval from DGPC, a Contractor may be permitted to undertake extended well testing (EWT) during the appraisal phase and before declaration of commerciality and approval of the development plan. Such approval will be granted provided that the Operator inter-alia complies with the requisite royalty, tax, rentals, marine research & coastal development fee and training/social welfare commitments as applicable under the lease.
2. A request for approval of EWT (including associated temporary production facilities) will be made to DGPC providing information with regard to (a) technical justification

for EWT; (b) proposed duration for EWT and (c) a plan with regard to disposal of gas during the proposed EWT period. The duration of EWT will be allowed keeping in view the reservoir uncertainty and the proposed investment outlay on EWT. DGPC will not grant approval to undertake flaring for EWT for a period longer than 30 days, unless under exceptional circumstances.

3. Where the specification and quality of the gas from an approved EWT is acceptable to the buyer, the gas price shall entail a 5% discount from the applicable gas price for on spec gas and 10% for off spec gas for that Zone.
4. The facilities that are required to undertake EWT shall be constructed and operated in accordance with good international oilfield practices.

### **5.13 Retention Period**

1. In the case of a significant gas discovery, a retention period of up to 5 years will be considered for offshore licences, on a case to case basis, provided such discovery can be declared a commercial discovery when inter-alia adequate gas pipeline transportation facilities are installed and gas markets have been sufficiently developed for sale of natural gas on commercial basis. A further period of up to 5 years will be available subject to justification acceptable to DGPC. No such retention provision is available for an oil discovery.

2. A discovery containing oil and gas or oil, gas and condensate is considered to be a gas discovery for the purposes of obtaining a retention period only when liquid production is not considered economic without marketing the gas stream.

### **5.14 Total Lease Term**

Initial term of the development and production lease will be up to 25 years in offshore area with one possible renewal of up to 5 years, subject to paragraph 5.15 below.

### **5.15 Five Year Lease Term Renewal**

A Contractor may, on behalf and with the consent of GHPL, apply to DGPC for the production period of a lease to be renewed for one term of five years. A revised field development plan will be required to be submitted for approval by DGPC. In order to obtain such a renewal the Operator must meet the following conditions:

1. The submission of a request for a renewal has been submitted not less than three years in advance of expiry of initial term of the production period; and
2. That the exploitation area has been producing on a regular basis on the date of the request.

### **5.16 Policy for Grant of Lease after Expiry of Lease Term**

1. DGPC can renew the lease term for another five years term in case existing lease holder agrees to pay an amount equivalent to 15% of the wellhead value to the Government otherwise DGPC will invite bids using the call for bids from pre-qualified companies seeking to act as Contractor to GHPL, over the lease area, in relation to any producing field for an additional ten years either one year before the end of the initial term of a lease or if a renewal has been granted, one year before the end of the lease renewal. The bids will be evaluated on the basis of Signature Bonuses, which would be spent in accordance with the guidelines issued by GOP from time to time.
2. Each bidder(s) shall provide a bid bond of 10% of the offered signature bonus at the time of bidding.
3. DGPC shall be under no obligation to grant any extension.

## **5.17 Block System**

A block system based on latitudes and longitudes as indicated in Annexure 1 & 2 will be followed for grants and relinquishments of all offshore acreage.

## **5.18 Rentals**

Contractors will be required to pay an advance annual acreage rental for the area covered under the PSA of fifty thousand US dollars plus a further rate of ten dollars per square kilometre or a part thereof every year.

## **5.19 Non Fulfilment of Work Obligations**

A Contractor working under an Exploration licence will be liable to pay GHPL financial compensation for non-performance of work obligations (work units) not accomplished within the stipulated timeframe. Such compensation will be deposited in Federal treasury by GHPL within fortnight of receipt from defaulting Contractor. The compensation to be paid will be calculated based upon the number of work units unfulfilled multiplied by applicable USD amount for work units.

## **5.20 Incentive for Offshore Discovery**

A bonanza of US \$ 1/MMBTU shall be given for first three discoveries in offshore area.

## **Section III - Regulatory Process & Obligations**

### **6. Regulatory Process**

#### **6.1 Miscellaneous**

1. This Policy will be applicable to all petroleum operations including but not limited to seismic activities, exploration, drilling, development and production, except coal bed methane for which the concerned provincial regulator will be responsible for all matters related thereto.
2. The Operator shall conduct all petroleum operations in accordance with Good international oil field practices and the principles and standards as laid down in the Rules. Consistent with this requirement, the Operator shall endeavour to minimize exploration, development, production and operation costs and maximize the ultimate economic recovery of Petroleum.
3. All definitions/terms in this document will be interpreted in line with the Rules, which will prevail in case of any conflict.
4. In order to expedite commercialization of discoveries, model Sale and Purchase Agreements for Gas, Condensate and Crude Oil will be finalized in consultation with the industry and made part of bidding documents.
5. A mechanism would be introduced for quality discount on sale of natural gas to Government nominated buyer whereby producers would not be overly penalized.
6. Regulator would play the role as a facilitator and performance increment would be given to regulatory staff on the basis of field activities generated through their efforts like number of wells drilled, quantum of seismic, new production fields added.
7. ~~Those E&P companies who opt for conversion to this policy would not be entitled to tight gas policy and/or low BTU policy.~~

#### **6.2 Application Fees**

The following fees will be payable on application for the following rights:

Reconnaissance Permit - Rs 50,000

Exploration Licence - Rs 100,000

Development and Production Lease – Rs 200,000

In addition, the Government may require Contractor or Company holding petroleum right to bear the cost of third party independent evaluation/assessment of notice of commercial discovery and proposed development plan submitted by the concerned party for consideration and approval

#### **6.3 Non-compliance**

Any company non-compliant with the terms of a permit, licence, lease, agreement and/or the Rules will result in enforcement action by DGPC.

Grounds for the suspension and/or revocation of any permit, licence or lease will be set out in detail as part of the rules, permit, licence or lease.

#### **6.4 Confidentiality of Data and Records**

1. All data and records concerning operations within the permit area, licence area or lease area are required to be submitted to DGPC. All data is to be treated as confidential and may not be disclosed by the parties except as provided for in the agreement or where the data is in the public domain.

2. The parties may disclose data except seismic and drilling data to the Provincial Government affiliates and subcontractors, banks, bona fide intending assignees and their employees, consultants, etc. in connection with petroleum operations, and as required by laws and the applicable stock exchange regulations.

#### **6.4.1 Geological & Geophysical Data**

1. All data, including, but not limited to, well logs, maps, magnetic tapes, cores, samples and any other geological and geophysical information obtained as a result of petroleum operations under a permit, licence, lease or an agreement is the property of GOP and must be delivered to DGPC as soon as it becomes available. The Operator/Contractor and other interest owners retain the right to make use of such data, free of cost, in connection with petroleum operations.
2. Geological and geophysical data is to be kept confidential by GOP for a period of three years from the date of its acquisition, with the exception of disclosure required by the laws and Rules of Pakistan. However, GOP may disclose data earlier if the Agreement terminates or upon relinquishment of the area to which the data relates.
3. DGPC may agree to keep the data confidential for longer period if such data is gathered for commercial purposes under a multi client arrangement with DGPC provided; however, all such data will be made available by DGPC within five years.
4. DGPC reserves the right to charge a reasonable fee for the purchase of this data by third parties to cover data storage, handling, reproduction and marketing costs.

#### **6.4.2 Operational, Commercial & Financial Data**

Operators and Contractors have the obligation to provide DGPC with relevant information related to exploration and production activities.

DGPC will disclose following information as into the public domain ~~according to the following conditions:~~

- ~~1. Operational: daily, monthly and annually.~~
- ~~2. Commercial & financial: after five years, except commercial sensitive information which may give unfair advantage to third parties.~~
1. Daily/Monthly/Annual reports compiled by DGPC on G&G activities, wells drilled and petroleum produced on a field/country basis
2. All data related to a relinquished area shall become available immediately for use by interested parties
3. Commercial and financial reports except sensitive company specific financial reports after three years from approval of FDP

#### **6.5 Performance Guarantees**

DGPC shall require successful applicants for petroleum exploration licences to furnish, in an acceptable form, a guarantee or guarantees, with respect to its work commitments on or before the execution of the petroleum exploration licence. In the event, the successful applicant elects to provide any guarantee other than a Parent Company Guarantee during exploration phase, the guarantee so provided would only be released in case all work obligations including but not limited to social welfare, training, data, rental etc. are fully discharged. DGPC reserves the right to deduct payment for non-performance of all such obligations from the performance guarantee.

The guarantee will be irrevocable and unconditional and in a standard format satisfactory to DGPC such as the following:

1. Bank guarantee equal to ~~25~~100% of the minimum financial obligation from a bank of international repute acceptable to the Government on the prescribed format in PCA/PSA.

2. Parent Company Guarantee of a multinational exploration and production Company of international repute with a proven track record or a corporate guarantee of a local exploration and production company having Operatorship with majority working interest in a producing field within Pakistan against its own financial commitment.
3. Petroleum production lien equal to 100% of the minimum financial obligation.
4. First and preferred assets lien equal to 100% of the minimum financial obligation.
5. Escrow Account equal to ~~25~~100% of the minimum financial obligation in a bank of international repute acceptable to the Government.

## **6.6 Profit Sharing**

The Provincial Government shall develop an appropriate mechanism for revenue sharing with locals of the area, its revenues of , windfall production sharing, windfall levy on crude oil, condensate and natural gas rentals etc., or revenues raised through any other method i.e., increase of gas price etc., whereby the profitability of the E&P Companies are not affected.

## **7 Foreign Exchange**

1. Contractor/Operator will be required to contribute all funds required for the Expenditure in respect of petroleum operations in foreign exchange and in Pakistani Rupees as required.
2. Subject to domestic supply obligations and export duties, each foreign E&P Companies shall be entitled to export its share of the petroleum acquired under an agreement, in accordance with the applicable laws. Each foreign Contractor/Operator (and its registered branch in Pakistan) shall have the right to retain abroad and to freely make use of sale proceeds from the export of its share of petroleum.
3. Foreign E&P companies shall have the right to remit sale proceeds from the sale of petroleum within Pakistan in foreign currency abroad in accordance with applicable regulations of the State Bank of Pakistan. GOP shall ensure that the State Bank of Pakistan shall permit all remittances of funds without any delay or additional cost to such companies.
4. If a foreign working interest owner assigns its interest in a licence, lease and/or agreement to a foreign entity with the consent of GOP, such working interest owner will be allowed to retain abroad all proceeds resulting from such assignment.
5. E&P company shall have full right of control over movement of funds out of bank accounts established for the purpose of petroleum operations but may be required to provide to the State Bank of Pakistan or any Government designated office, bank statements with an explanation of each deposit, or payment from such account, and shall supply on a quarterly basis, in a form acceptable to the State Bank, or such designated office full particulars of foreign exchange transactions related to an agreement.
6. For all currency conversion transactions and calculations in relation to petroleum operations the rate of exchange shall be at the rate as established by the State Bank of Pakistan (SBP) prevailing on the date of each transaction. In case SBP ceases to publish this rate, the arithmetic average of the average inter-bank mid rate may be used.
7. For foreign currency provisions relating to Local Pakistani Companies, please refer to sub-paragraph 4.1.3.5 above.

## **8 Assignment or Transfer of Interest**

1. The working interest owner shall not sell, assign, transfer, convey or otherwise dispose of all or any part of its rights and obligations under a licence, lease and/or an agreement, to a third Party or any of its affiliates without the previous written consent of DGPC, which shall not be unreasonably withheld.
2. In giving this consent DGPC may impose any such conditions as DGPC considers appropriate including but not limited to conditions which are for the purpose of ensuring full payment of royalty, corporate tax and windfall levy by the assignee in respect of the interests assigned or transferred.
3. DGPC will require payment of an administration fee of Rs 50,000 in relation to any one application for assignment or transfer of interest.

## **9 Domestic Supply Obligation & Gas Allocation**

### **9.1 Domestic Supply Obligation**

Subject to the considerations of internal requirements and national emergencies, E&P companies will be allowed to export their share of crude oil and condensate as well as their share of gas based on export licences to be granted by the concerned regulator. The Wind Fall price levy shall be applicable on such export licences. For the purpose of the grant of such export licenses for gas, the export volumes will be determined in accordance with “L15” concept provided a fair market value for such gas is realized at the export point. Under the “L15” concept the gas reserves that exceed the net proven gas reserves in Pakistan including the firm import commitments vis-à-vis the projected gas demand for next fifteen years can be considered for export. Once gas has been dedicated for exports, licenses for such export volumes shall not be subsequently revoked.

### **9.2 Remittance of Proceeds Abroad**

1. If the foreign E&P Companies sell gas to third parties in Pakistan and want to remit sale proceeds in foreign currency abroad, GOP shall allow these companies to freely remit a “guaranteed percentage” of their sale proceeds.
2. The “guaranteed percentage” shall be 75% of the total gross revenues from any Lease in Zone O and I, 70% of the total gross revenues from any Lease in Zone II and 65% of the total gross revenues from any Lease in Zone III. The remaining gross income in Rupees can be used to pay royalties, taxes, windfall levy and any other payments to the Government as well as to meet local operating costs.

### **9.3 Delivery Point and Field Gate for Natural Gas**

1. For the purpose of pricing and delivery obligations for natural gas, the gas will be delivered at outlet flange (Field Gate/Delivery Point) and it will be the responsibility of M/s Sui Southern Gas Company Limited (SSGCL) and Sui Northern Gas Company Limited (SNGPL) for laying of pipelines for which they will get tariff on transportation of gas as approved by OGRA. For offshore, the gas will be delivered at the nearest access point to an existing regulated transmission system; or at the shore within coastal locations.
2. In the event there is more than one field located in a block; the secondary or subsequent fields will be connected to either the transmission system, any point inside the outlet flange of the production facility of the primary field or the pipeline connecting the primary field to transmission system, as may be approved by DGPC.

3. All field gate locations will be approved by DGPC on case to case basis within the above criteria following the submission of proposed field development plan by the concerned company.

## 9.4 Sale of Natural Gas within Pakistan

1. E&P companies operating in Pakistan will be allowed to contract with gas transmission and distribution companies and third parties, other than residential and commercial consumers, for the sale of their share of gas in Pakistan at negotiated prices in accordance with the applicable laws, rules, and regulations.
2. Subject to overall market demand, E&P Companies shall be free to sell 90% of their share of production of gas to any buyer. However if E&P Companies offer to GoP up to 90% of their share of production of pipeline specification gas, may request and GoP will purchase 90% of their share of pipeline specification gas through a nominated buyer which is effectively controlled by it in acceptable daily, monthly and yearly volumes to meet the internal demand in an economical manner provided there are no infrastructure constraints. For remaining 10% of their production of pipeline specification gas, the E&P Companies shall have the right to sell sale 10% of their share of pipeline specification of gas such gas to any buyer with the prior consent of the Provincial Government. The delivery point shall be at the outlet flange as outlined in paragraph 9.3 (above). GoP/gas buyer nominated by GoP shall pay the price for gas at the outlet flange as set out in this Policy. In addition, the "guaranteed percentage" for foreign exchange remittance as contained in sub paragraph 9.2.2 above will apply to such sales.

## 9.5 Pipeline Construction and Operation

1. E&P companies operating in Pakistan will be allowed to construct and operate pipelines for local requirements and for exports of their share of petroleum which shall be regulated by the regulator concerned in accordance with applicable laws, rules, regulations and the Policy based on an open-access (third party) regime. The E&P Companies constructing such pipelines would be allowed priority access based on a firm utilization plan.
2. Whether a connecting pipeline from outlet flange to the nearest transmission system, is constructed and operated by a producer, a third party or a government nominated entity; such a pipeline shall be regulated pursuant to the provisions of sub paragraph 9.5.1 above, unless the regulator concerned decides that the pipeline shall be a non-regulated pipeline.
3. If an inter-connecting pipeline is proposed to be constructed by a third party or the buyer, the producer will be required to confirm the requisite gas supply volumes, pressures, reserves and other technical parameters on standard supply term contract basis for a period to be agreed between the parties.
4. Subject to sub paragraph 9.5.8 below, the basis of the tariff allowed and paid monthly for delivery from outlet flange into the transmission system will be determined by the regulator based upon a 'rate of return on equity' basis at the rate of 12% with the capital cost being amortized over a minimum of 15 years. Allowable costs will include operating cost and interest payable on the initial capital over the minimum 15 year amortization period. Post the repayment period the Operator will be able to make a 12% margin over operating costs. If such pipeline is used by more than one shipper, the calculation basis for each year shall be done on an overall pipeline volume nomination basis at the start of each year, through the aggregation of all shippers nomination. Any shortfall or excess of volume delivered from the nomination in the year shall be deducted/ received from the tariff payment of that year or charged to the party responsible for such a shortfall.
5. Unless a pipeline is specifically constructed in order to facilitate a third party access agreement agreed between Operators/Contractors and a third party duly approved

by the regulator; all pipelines from field to outlet flange, in case of offshore, shall be constructed with an excess capacity equal to thirty percent, depending upon projected plateau rates unless otherwise allowed by DGPC based on an objective assessment of future likely use of such capacity.

6. E&P companies are expected to exhaust options to make efficient use of the current transmission system and may co-operate in the construction and operation of pipelines upstream of the outlet flange or transmission system. Shared ownership and spare capacity shall be based upon the combined planned coincidental shared plateau of the Operators unless otherwise agreed by DGPC or the regulator concerned. Companies are encouraged to co-operate in any extension of an initial system to ensure economies of scale, maximum utilization and to ensure that the overall pipeline stays below the tariff limit as specified in para 9.5.8 hereunder.
7. In the event such pipeline is located in offshore area and the excess capacity is subsequently utilized by a third party, the tariff will be charged by the party providing access to such pipeline as approved by DGPC and revenues generated therefrom will be treated as a part of profit oil/profit gas for its production sharing purposes.
8. The tariff payable to any third party or the producer for pipeline connecting the outlet flange to the transmission system shall not exceed \$0.5/MMBTU in aggregate. Any tariff in excess of this limit will be determined by the regulator on a case to case basis but only in exceptional circumstances, and subject to the approval of GOP. The indexation of the tariff limit will be based on OGRA's recommendation and approved by GOP. The public utility companies will continue receiving tariff under a separate tariff regime within the frame work of OGRA Ordinance.
9. Ownership/operation of the pipeline connecting field to the outlet flange and the outlet flange to the transmission system shall pass to the government consequent upon the expiry or early termination of the lease that initiated the pipeline unless such pipeline is not used for shipment of gas from another adjacent area for which specific approval of the Government and/or the regulator concerned will be required. The transfer should be free of any lien or encumbrance or other liabilities.

10. Technical committee or Operating committee meetings will be conducted quarterly and will be chaired by the representative of the DGPC and Director of concerned Provincial Government on behalf of the President of the Islamic Republic of Pakistan.
11. Assignment, change of effective control or acquisition of company whether in Pakistan or anywhere outside the Pakistan shall entail Capital gain and other liabilities.

## **Section IV – Pricing and Incentives for Petroleum Exploration & Production**

### **10 Oil and Gas Pricing**

#### **10.1 Crude Oil, Condensate and Liquefied Petroleum Gas (LPG) Pricing**

##### **10.1.1 Crude Oil**

The Producer Policy Price for crude oil delivered at the nearest refinery gate shall be equal to C&F price of a comparable crude oil or a basket of Arabian/Persian Gulf crude oils (Reference Crude or RC) plus or minus a quality differential between the RC and the local crude oil. No other adjustment or discount will apply other than Windfall Levy. C&F price will be arrived at on the basis of FOB price of imported crude oils into Pakistan plus freight on AFRA, which is deemed chartered rate.

##### **10.1.2 Condensate**

The Producer Policy Price for condensate will be the FOB price of internationally quoted comparable condensate delivered at the nearest refinery gate plus or minus a quality yield differential, based on the value in the Arabian Gulf spot products market of the crude oil/condensate. No other adjustment or discount will apply other than Windfall Levy.

##### **10.1.3 Liquefied Petroleum Gas**

For new projects, the LPG producer price will be a deregulated subject.

### **10.2 Gas Pricing**

The price for Associated or Non Associated Gas will be indexed to the C&F price of a basket of Arabian/Persian crude oil import in Pakistan during the first six months period of the seven months period immediately preceding the relevant price notification period (import Basket) as published in an internationally recognized publication acceptable to the parties for various zones is illustrated at annexure 7 to 12.

C&F Price will be arrived at on the basis of FOB price of imported crude oils into Pakistan plus freight on AFRA, which is deemed chartered rates.

The RCP ceiling of USD 110/barrel would be reviewed after every five years or as and when the pricing dynamics significantly change in the international market, as provided in the applicable rules.

### **10.3 Associated Gas Pricing**

The price for associated gas shall be equal to the price of non-associated gas.

### **10.4 Low BTU and Shale Gas Pricing**

Low BTU and Shale Gas Policies are being prepared and will be notified separately

### **10.5 Tight Gas Price**

Tight Gas Exploration and Production Policy 2011 has already been notified.

## **10.6 Royalty Calculation in case of Sale of Gas to Third Parties**

For the purpose of calculating the amount due by way of royalty, the value of the petroleum produced and saved shall be determined by using actual selling price in the following manner, namely:-

- (a) If the petroleum is sold to the national market, the actual selling price means the price determined in accordance with the relevant sale and purchase agreement between the petroleum right holder and the Government or its designee less allowed transportation cost beyond the delivery point.
- (b) In all other cases, the actual selling price means the greater of-
  - (i) the price at which the petroleum is sold or otherwise disposed of less allowed transportation costs; or
  - (ii) the fair market price received through arm's length sales of the petroleum less the allowed transportation costs; or
  - (iii) the price applicable to the sales made under sub-rule (a) above.

## **10.7 Extended Well Testing Gas Pricing**

Gas from Extended Well Tests (EWT) will be priced as per paragraphs 4.1.6 and 5.12 above.

## **10.8 Ring Fencing**

In accordance with the Fifth Schedule of the Income Tax Ordinance 2001, there will be no ring fencing for the purpose of calculation of corporate tax.

## **Section V:- Implementation and Removal of Difficulties:-**

### **11 Implementation of the Policy, removal of difficulties, addressing of anomalies, framework for institutional development and strengthening of the Policy Wing**

1. A Committee shall be constituted to address the issues of the implementation of this Policy, removal of difficulties, addressing of anomalies and approving framework for institutional development and strengthening of the Policy Wing to enhance its professional competence for Policy formulation and upstream regulation. The committee shall comprise of the following:

Chairman	Minister for Petroleum and Natural Resources
Member	Deputy Chairman Planning Commission
Member	Secretary, Finance Division
Member	Secretary, Petroleum and Natural Resources
Member	Provincial Nominees
Member	Director General Petroleum Concessions Member/Secretary

2. In order to meet the deadlines, a separate cell headed by Director General Petroleum Concessions {DG (PC)}, as already provided in Petroleum (Exploration & Production) Policy 2001, shall be maintained comprising the following professionals on contract basis:

- (a) Legal Advisor,
- (b) Financial Consultant,
- (c) Petroleum Economist,
- (d) Petroleum Explorationist and
- (e) Other professionals on need basis.

3. The funds generated through sale of technical data and unspent training amount generated under PCAs and PSAs shall be utilized for capacity building, strengthening of the Policy Wing of Ministry of Petroleum and Natural Resources, Provincial Government, relevant Government agencies remunerations of outside professionals engaged on contract, part time legal advisors/technical consultants, Policy promotional activities, workshops, seminars, conferences & symposia etc.
4. Separate procedures/guidelines will be issued by the Ministry of Petroleum and Natural Resources in relation to the provisions at paragraph 11.2 and 11.3 above.
5. A Technical Committee under the chairmanship of Secretary Petroleum and Natural resources and comprising of a nominee each of all the Provinces, DGPC, DG (Gas), OGRA, distribution and transmission companies, nominee of the Provinces, PPEPCA and the concerned E&P companies be empowered to resolve the key issues between E&P and gas marketing companies.

## **12 Applicability and Effect of Policy**

1. This Policy supersedes the 1991 Petroleum Policy, the 1993 Petroleum Exploration and Production Policy, the 1994 Petroleum Policy, the 1997 Petroleum Policy, the 2001 Petroleum Policy and the 2007 Petroleum Policy and the 2009 Petroleum Policy to the extent applicable to exploration and production sector only, without affecting the rights that may have accrued under the aforesaid policies.
2. In addition to the protection of the Policy under Regulation of Mines and Oilfields and Mineral Development (Government Control) Act, 1948 and the Economic Reforms Act, 1992, GOP will ensure/facilitate implementation of the agreements by the Ministries/Divisions and Organizations concerned.
3. For implementation of this Policy appropriate changes will be made in relevant rules, regulations and model agreements.
4. GOP reserves the right to change terms of this Policy in response to changes in national energy Policy or significant changes in the domestic or international energy market. These changes will not affect any rights that may have previously accrued under this Policy.
5. This Policy may be reviewed by GOP after 5 years for appropriate adjustments keeping in view the then prevailing conditions.
6. The incentives of this Policy shall apply to E&P companies who will apply for new petroleum rights after this Policy comes into effect as well as to those E&P companies who opt for conversion to this Policy in accordance with section VI hereof.

## Section VI – Conversion to 2012 Policy

### 13 Conversion of Regimes

1. The option for conversion to this Policy will be available to all new exploration efforts made under the exploration licences & D&PL/Mining leases. (Note: for Mining leases the sub surface boundary shall have to be defined):
  - (a) that stand granted/executed; or
  - (b) for which provisional award has already been made; or
  - (c) for which applications are pending and bids have been invited before the date of approval of the Policy.
2. <sup>1</sup>[For the purpose of this section, new exploration efforts mean “Exploration Wells” under drilling and/or spudded, after the Effective Date of the Petroleum Exploration and Production Policy, 2007]
3. <sup>2</sup>[For all conversions pursuant to paragraph 13.1 of Section VI of the Petroleum Policy 2012, the gas price allowed for new exploration effort under the respective exploration licences & D&PL and Mining leases shall be as under:

EXPLORATORY EFFORTS	APPLICABLE PRICE
For all the exploratory efforts made between 27-11-2007 and 19-03-2009	Price as provided in Petroleum Policy 2007 for conversion regime
For all the exploratory efforts made between 20-03-2009 and 29-08-2012	Price as provided in Petroleum Policy 2009 for conversion regime
For all the exploratory efforts made after 30-08-2012	Price as provided in Petroleum Policy 2012 conversion regime

The above indicated applicable pricing regime will be made effective from the date of discovery of respective field irrespective of date of execution of Supplemental Agreement.

4. All pending applications for which bidding process has not been initiated will be processed under this Policy. However, nothing contained herein will be construed to have created any right for the applicant.
5. This Policy will not affect any obligation with regard to already agreed minimum work programme and minimum expenditure obligation and the State participation in an existing joint venture, if any.
6. <sup>3</sup>[The conversion under this Policy will be opted as a package (Section II Para 4 for Onshore and Section II Para 5 for Offshore of this Policy) and the companies desirous of opting for conversion to this Policy shall be required to submit their written request to DGPC within 90 days from the date of announcement of the Policy failing which they will not remain eligible for the conversion. Similarly, for

<sup>1</sup> Subs by Notification no. SRO 813(I)/2013 dated 23<sup>rd</sup> September 2013, see Gazette of Pakistan Ext., 23<sup>rd</sup> September 2013; PP 2699-2701.

<sup>2</sup> Subs by Notification no. SRO 813(I)/2013 dated 23<sup>rd</sup> September 2013, see Gazette of Pakistan Ext., 23<sup>rd</sup> September 2013; PP 2699-2701.

<sup>3</sup> Subs by Notification no. SRO 813(I)/2013 dated 23<sup>rd</sup> September 2013, see Gazette of Pakistan Ext., 23<sup>rd</sup> September 2013; PP 2699-2701.

those blocks for which the exploration licences have not yet been granted and PCAs/PSAs have not been executed as mentioned in sub-paragraph 13.1 (b) and (c), the company concerned will have the option to apply, in writing, for conversion under this Policy within 90 days from the date of grant of such block. The option once exercised shall be final for such block. However the opting companies shall have flexibility to decide at the time of discovery of the field in such block as to whether they wish to opt for conversion of that field or otherwise.

7. <sup>4</sup>[Subject to clause (3) above, the Companies who have already exercised the option under Policy 2007 and/or Policy 2009 shall be deemed to have opted unless it specifically wishes to opt out in writing for conversion under this Policy but would get conversion price of respective policies and]
  
8. The gas price of Policy 2012 will also be extended to the entire incremental gas production, subject to meeting the minimum threshold of 10% addition ~~in the current production or the volumes committed in approved development plan, whichever is higher. For this purpose the current production will mean maximum gas production of any day during last six months immediately preceding the date of approval of this Summary by the CCI i.e. 31st July, 2013. The producer will be required to produce third party certification that the said activities will not adversely affect the total recoverable reserves or damage the reservoir as a whole. The third Party Consultants will be appointed by Ministry of Petroleum and Natural Resources for which cost will be borne by the concerned E & P Company over the estimated optimum production achievable from the installed/to be installed infrastructure/wells as per approved Field Development Plan for the life of field as determined through a 3rd party review. The above incentive price will be available for the entire period that such additional sales continue during the life of the field i.e. while the sales volumes continue to be higher than those determined by the above referenced 3rd party assessment and also subject to 3rd party certification that such sales can be achieved without adversely affecting the total recoverable reserves or damaging the reservoir. The third Party Consultants will be appointed by Ministry of Petroleum and Natural Resources for which cost will be borne by the concerned E & P Company.~~

**Comment:** The E&P Company should not be required to convert to the 2012 Policy to receive this incentive and therefore this paragraph, 13.8 should be moved outside of the Conversion section of the Policy.

9. ~~The first right of refusal will be granted to the company who has quoted the lowest rate for supply of rig during last five years in the award of contract for drilling rigs by JV partners.~~

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<sup>4</sup> Subs by Notification no. SRO 813(I)/2013 dated 23<sup>rd</sup> September 2013, see Gazette of Pakistan Ext., 23<sup>rd</sup> September 2013; PP 2699-2701.

# **Annexure I - The Block System**

## **All Zones**

1. Blocks:
  - a. The Offshore/Onshore area will be divided into Blocks.
  - b. Blocks shall be bounded on the east and west sides by successive integer meridians of longitude.
  - c. Blocks shall be bounded on the north and south sides by successive integer parallels of latitude.
  - d. A Block shall be referred to by the degree latitude and longitude of the southwest corner of the Block; for example, the Block with a southwest corner at 25 degrees latitude and 64 degrees longitude would be referred to as Block 2564.
2. Grid Areas:
  - a. Every Block shall be divided into 144 Grid Areas
  - b. Grid Areas shall be bounded on the east and west sides by meridians spaced at intervals of five minutes between the east and west boundaries of the Block.
  - c. Grid Areas shall be bounded on the north and south sides by parallels spaced at intervals of five minutes between the north and south boundaries of the Block.
  - d. A Grid Area shall be identified by the letters to which it corresponds in the following diagram:

NW  
NE

L	La											Li
K	Ka										Kk	
J	Ja									Jj		
I	Ia								li			
H	Ha							Hh				
G	Ga						Gg					
F	Fa					Ff						
E	Ea				Ee							
D	Da			Dd								
C	Ca		Cc									
B	Ba	Bb										
A	Aa	Ab	Ac	Ad	Ae	Af	Ag	Ah	Ai	Aj	Ak	Al
	a	b	c	d	e	f	G	h	i	j	k	l

SW  
SE

**3. Sections:**

- a. Every Grid Area shall be divided into 100 Sections.
- b. Sections shall be bounded on the east and west sides by meridians spaced at intervals of thirty seconds between the east and west boundaries of the Grid Area.
- c. Sections shall be bounded on the north and south sides by parallels spaced at intervals of thirty seconds between the north and south boundaries of the Grid Area.
- d. A Section shall be identified by the number to which it corresponds in the following diagram:

9	90										99
8	80									88	
7	70								77		
6	60							66			
5	50						55				
4	40										
3	40				44						

2 1 0	30			33						
	20		22							
	10	11								
	00	01	02	03	04	05	06	07	08	09
	0	1	2	3	4	5	6	7	8	9

NW

NE

SW

SE

4. Naming of Agreements, Sections and Wells:

- a. An Agreement shall be referred to by the southwest corner of the Block in which the southwest corner of the Original Contract Area of the Agreement is located, separated by a hyphen, followed by the number (by historical signing date) of the Agreement in that Block; for example, the fourth Agreement having its southwest corner in Block 2564 would be referred to as "Production Sharing Agreement 2564-4".
- b. Sections shall be referred to by specifying the Block, Grid Area and Section number, separated by hyphens, in declining order of size; for example, the Section 81 located in Block 2564, Grid Area Bb would be referred to as "2564-Bb-81".
- c. A well will be described by the Section location of its wellhead. If there is more than one well drilled from the same Section, each well will be described by its Section location, separated by a hyphen, followed by the number (by historical spud-in date) of the well in that Section; for example, the first well drilled in Section 2564-Bb-81 will be referred to as "2564-Bb-81.1".

**Offshore Zones**

1. The map of the Offshore of Pakistan (Annexure 2) shows each Grid Area as being either "shallow" (having an average water depth of less than 200 metres) or "deep" (having an average water depth greater than 200 metres) or ultra deep having an average water depth greater than 1,000 metres.

2. Maximum Size

A Reconnaissance Permit may be granted for an offshore area of any size.

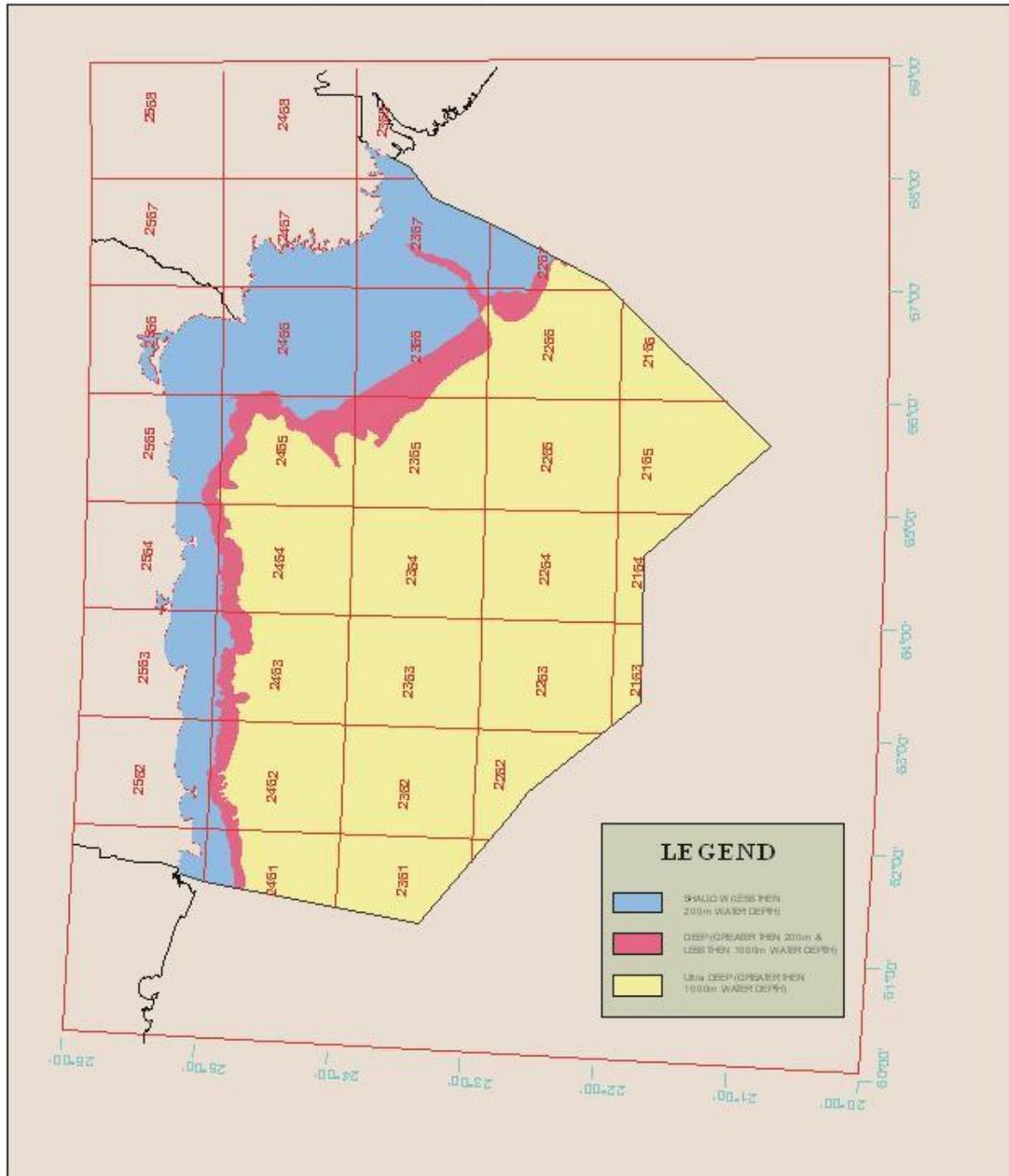
A Licence shall not be granted in respect of any area of more than 3,200 Sections.

A Lease shall not normally be granted in respect of any area of more than 150 Sections and the maximum acreage assigned to any one field shall be defined as the vertical projection to the surface of the outer limit of the reservoir(s).

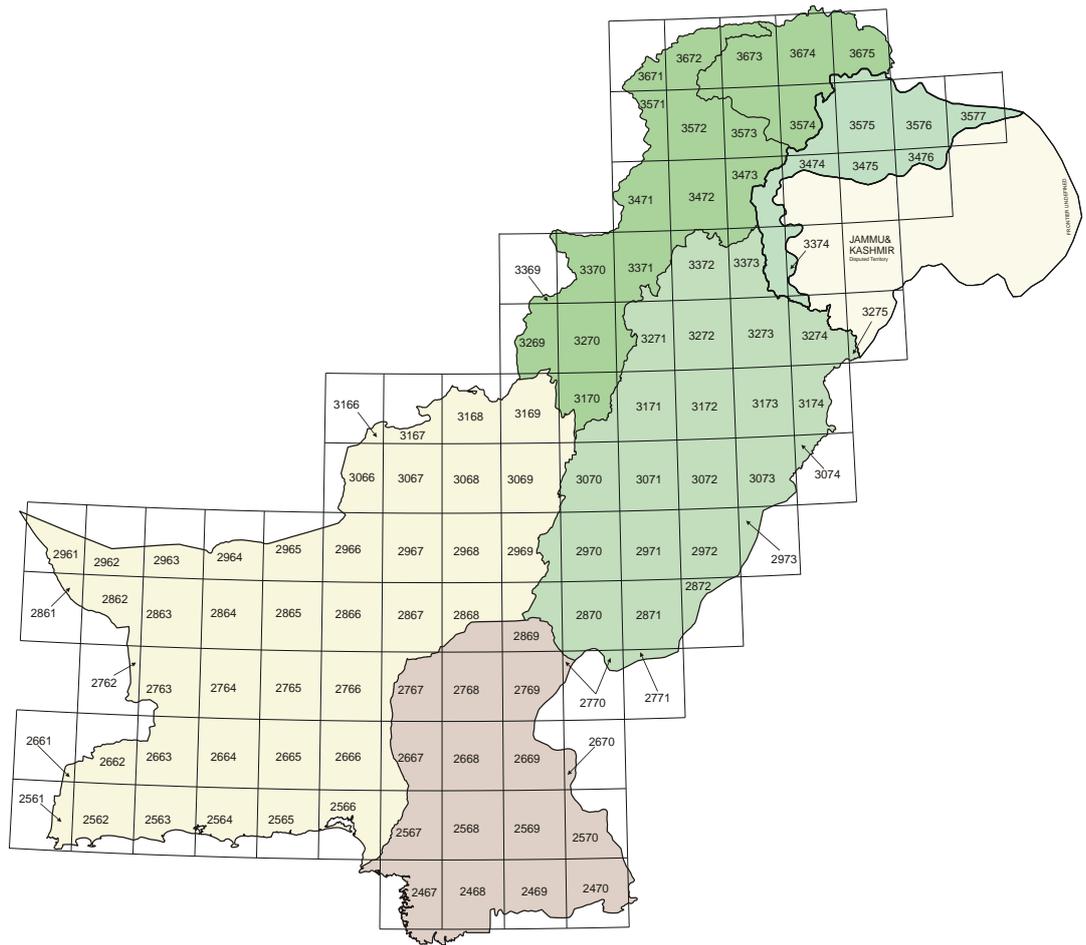
# Annexure 2 – Block Maps of Pakistan

## Block Map of Offshore Pakistan

### Geological Description of Offshore Area



# Block Map of Onshore Pakistan



# Annexure 3 - Employment, Training and Social Welfare Program

## EMPLOYMENT

The positions of professional, technical and secretarial staff shall be filled by Pakistani nationals as per agreed program. Whereas unskilled labour shall be taken from the respective concession area. Employment programs for Pakistani nationals for professional and technical positions shall be agreed upon with DGPC on an annual basis as per guidelines issued from time to time.

## TRAINING

Training shall be provided for capacity building of Pakistani employees and GOP and Provincial Government concerned officials by foreign and local E&P companies including internship/scholarships and training of the local inhabitants in different institutions, as per guidelines issued by DGPC from time to time. The E&P companies shall incur following expenditures at different levels of their activity:

### Onshore Zones

- USD 25,000 per year - during exploration phase
- USD 50,000 per year - during development and production

### Offshore Zone O

- USD 50,000 per year - during exploration phase
- USD 250,000 per year - during development and production

This shall not form part of Government revenue and shall be used primarily for capacity building and to meet expenditures connected with infrastructure development as mentioned in Section V above for which separate guidelines shall be issued with the approval of the Principal Accounting Officer.

## SOCIAL WELFARE PROGRAM

The amount of social welfare funds pledged by the companies (local and foreign) in their respective agreements must be utilized to give lasting benefit to the communities. Social welfare projects must be agreed with the local community and the civil administration as per guidelines issued by GOP from time to time.

The following minimum expenditure shall be incurred on welfare projects:

- a. **During exploration stage until Commercial Production** USD 30,000 per Licence Year
- b. **During Commercial Production Phase (BOE/d)** Amount/Lease Year (USD) (For all Zones)
 

Less than 2,000	50,000 (Zones O & I); 37,500 (Zones II & III)
2,000 - 5,000	100,000 (Zones O & I); 75,000 (Zones II & III)
5,000 - 10,000	200,000 (Zones O & I); 150,000 (Zones II & III)
10,000 - 50,000	400,000 (Zones O & I); 300,000 (Zones II & III)
More than 50,000	700,000 (Zones O & I); 525,000 (Zones II & III)

These amounts will be subject to review from time to time. Local E&P companies will incur these expenditures in equivalent Pak Rupees.

## Annexure 4 – Information required from an interested company

The list below represents the necessary information DGPC will require in order to process an application.

1. **Company name and contact details:** the name, address and nationality of the applicant including information as to the identity of the person who will serve as liaison with the Pakistani authorities.
2. **Company Registration:** A copy of the charter or constitution of the applicant and information concerning its place of incorporation, its principal place of business, its board of directors, the domicile and nationality of board members, its share capital and shareholdings.
3. **Company Structure:** A management structure showing clear lines of responsibility and clear processes for upstream operations is essential. DGPC will look for, as applicable to the acreage and licence type, strong exploration experience and success and a strong reservoir management team with considerable experience and the minimum of vacancies in key positions. The key operations staff should be based in Pakistan.
4. **Health, Safety and Environmental Management (HSE):** It is essential that all operations within Pakistan are carried out in a manner that conforms to current HSE legislation and regulations. Companies seeking new operatorship in Pakistan, therefore, will need to demonstrate that their HSE management systems are compatible with all national requirements.
5. **Management System:** Other than the existing licence/lease operator, the applicant should describe, as relevant, how it will manage in practice an exploration, development or production operation, clearly describing the division of responsibility between the company's own staff and sub-contractors, if the latter are to be employed.
6. **Worldwide Operating Experience:** Companies without substantial operating experience within Pakistan should demonstrate their operating experience overseas to indicate track record of effective exploration and/or field management.
7. **Companies with no Previous Operating Experience:** Companies with no previous operating experience will be subject to particular scrutiny dependent on the type of licence they are applying for and will need to demonstrate that they have an agreement with an internationally renowned E&P/ services company acceptable to DGPC or have a high calibre technical and management team with proven track record of overseeing and managing operations in the international petroleum industry.
8. **Field Management Resources:** Other than the existing licence/lease operator, the applicant when relevant, provide details of the technical resources available to the prospective Operator. The applicant's own capacity to analyse all technical and financial data including the potential of a field should also be explained.
9. **Training Policy:** Well trained staff is considered essential for effective operatorship of a block in Pakistan. In this regard, a brief description of the company's training policy for appropriate human resource development may be provided.

10. **Reserves and Economics Calculation:** Other than the existing licence/lease operator, the applicant should provide methodology adopted by the company for reserve estimation and field economics should be outlined.
11. **Additional information:** Additional information may be sought by DGPC following the receipt of application.

## Annexure 5 – Concept of Work Units

1. A "Work Unit" is a unit of work for the purpose of measuring the compliance with the minimum work obligation under an agreement. Work Units are defined in terms of kilometres of seismic or numbers of exploration wells drilled. However keeping in view that R&D work in petroleum upstream sector is continuously resulting in emergence of new technologies, the regulator may, from time to time, after consultation with industry, include such technologies in the categories of work which can comprise Work Units. Regulator shall specify the Zone wise equivalency of Work Units for such new technologies after consultation with industry.
2. A work unit equates to an approximate expenditure of USD 10,000 and the units defined for each Zone and sub zone are considered generic averages for those Zones. The current value of USD 10,000 represents the 2012 base value for each work unit. The value will be updated at a rate to be decided by the Government from time to time before any bidding round. The value of USD10,000 (or future equivalent value) will be used where units have not been fulfilled to calculate the WIOs/Contractors unfulfilled obligations.
3. For the purposes of calculating work units only, "Well Depth" shall mean the well depth measured along the well bore from the seabed/ocean floor to the total depth for offshore wells; and the well depth measured along the well bore from the rotary table to the total depth for onshore wells. In case the well is a deepening of an existing well, the well depth is measured from the deepest point in the existing well to the new total depth. In case a well is side-tracked, the depth shall not include any depth drilled below the kick off point of the side track, but shall include the redrilled part of the well from the kick off point to the total depth. In case a well is horizontally drilled or deviated, the length of the horizontal/deviated segment well shall be added to the vertical well depth.

4. Equivalency of Work Units for Zone O (Offshore)		
Type of Work		Equivalent Work Unit
1 line-kilometre of 2D seismic (acquired, processed, interpreted & mapped)		0.3
1 square kilometre of 3D seismic (acquired, processed, interpreted & mapped)		1.0
1 exploration well with a surface location in shallow water (<	1,000 metres	300
	2,000 metres	550

200m) grid area with the following well depths:	3,000 metres	1,000
	4,000 metres	1,800
	5,000 metres	3,200
	6,000 metres	5,800
	7,000 metres	10,000
I exploration well with a surface location in deep water (=> 200m & < 1,000m Water Depth) grid area with the following well depths:	1,000 metres	500
	2,000 metres	900
	3,000 metres	1,600
	4,000 metres	2,800
	5,000 metres	5,100
	6,000 metres	9,200
	7,000 metres or more	16,000
I exploration well with a surface location in ultra deep water area (=> 1000m) with the following well depths:	1,000 metres	700
	2,000 metres	1,300
	3,000 metres	2,200
	4,000 metres	3,600
	5,000 metres	6,400
	6,000 metres	12,000
	7,000 metres or more	21,000

Equivalency of Work Units for Zone I and II	
Type of Work	Equivalent Work Unit

1 line-kilometre of 2D seismic (acquired, processed, interpreted & mapped)		0.3
1 square kilometre of 3D seismic (acquired, processed, interpreted & mapped)		1.0
1 exploration well with a surface location in onshore with the following well depths:	1,000 metres	100
	2,000 metres	200
	3,000 metres	400
	4,000 metres	600
	5,000 metres	1,000
	6,000 metres	2,000
	7,000 metres	3,000

<b>Equivalency of Work Units for Zone III</b>		
<b>Type of Work</b>		<b>Equivalent Work Unit</b>
1 line-kilometre of 2D seismic (acquired, processed, interpreted & mapped)		0.3
1 square kilometre of 3D seismic (acquired, processed, interpreted & mapped)		1.0
1 exploration well with a surface location in onshore with the following well depths:	1,000 metres	50
	2,000 metres	80
	3,000 metres	100
	4,000 metres	200
	5,000 metres	330
	6,000 metres	600

	7,000 metres	900
--	--------------	-----

Equivalency of Work Units mentioned in Annexure-5 may be updated on a yearly basis taking into account of the Seismic and Rig rates prevalent at the start of the year. Similarly the Minimum Work Units indicated above may also be revised by DGPC before Invitation to Bid according to size and prospectivity of the area.

## **Annexure 6 - Documentation for Block Award Process**

**Government of Pakistan**  
**Ministry of Petroleum & Natural Resources**  
(Directorate General of Petroleum Concessions)

### **Invitation to Bid for Grant of Petroleum Exploration Rights (Date:-----)**

Applications are invited for grant of Petroleum exploration rights (Exploration Licence) over the following blocks: -

Block No.

Block No.

Block No.

2. Bid Documents can be obtained from the office of Directorate General Petroleum Concessions (DGPC) 1019-A, Pak Plaza, Fazal-e-Haq Road, Blue Area, Islamabad on a written request and payment of a non-refundable fee of US \$ 100(or equivalent in Pak Rupees) in favour of DGPC through a bank draft.
3. Sealed applications should be submitted by the interested exploration and production companies to DGPC, 1019-A Pak Plaza Fazal-e-Haq Road, Blue Area, Islamabad, by ---- a.m. (PST) on ----, 200-. Applications will be opened publicly by the Bid Opening Committee the same day at ---- a.m. in DGPC office in the presence of the applicants or their representatives.
4. Bids submitted by all applicants will be considered as irrevocable and unconditional. In case any applicant states otherwise, his bid will not be accepted and will be treated as “non-responsive”

5. The bidding process will be governed by and construed under laws of Pakistan and any question or dispute regarding grant of a Petroleum Right or any matter or thing connected therewith shall be resolved by arbitration in Pakistan and in accordance with Pakistan laws as per applicable Rules of Pakistan Onshore Petroleum (Exploration and Production) Rules, 2012 (in case of onshore areas) and applicable Rules of Pakistan Offshore Petroleum (Exploration and Production) Rules, 2012 (in case of Offshore areas).
6. The successful applicant will be selected in accordance with the provisions of the Petroleum Exploration and Production Policy 2012 and Pakistan Onshore Petroleum (Exploration and Production) Rules, 2012/Pakistan Offshore Petroleum (Exploration and Production) Rules, 2012 and the Bid Documents. The successful applicant will be notified as soon as possible.
7. Any bidder offering Work Unit lower than the minimum threshold specified in the policy or the bid documents would be treated as non responsive and his bid would not be further evaluated.
8. In the event, any of the bidder(s) attempts to influence the DGPC in any manner whatsoever, it shall result in the disqualification of such bidder(s).
9. The Government reserves the right to exercise the powers to accept or reject any application. In the event of refusal to grant such petroleum right, the Government shall as far as possible provide the reasons thereof. The Government also reserves the right to cancel or annul the bidding process without specifying any reason thereof.

Director General, Petroleum Concessions  
Ph: +92-51-9204176  
Fax: +92-51-9213245

**Annexure-7**

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF POLICY 2012 FOR ZONE III**

**\$/BBL**

**A. Weighted average imported Crude Oil C & F Price (Assumed RCP)**  
**140.00**

**Floor Price C & F**  
**10.00**

**Ceiling Price**  
**110.00**

**B. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

<b>US\$/BBL</b>	<b>Applicable % of C&amp;F Price</b>	<b>US\$/BBL</b>
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Onshore Zone III	63.33% of applicable C&F price	\$34.2

Conversion Factor \* assumed (MM Btu/bbl) 5.7

Zone III producer price for pipe line quality specification gas in US\$/MMBtu 6

**Annexure-8**

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF  
POLICY 2012 FOR ZONE II**

**\$/BBL**

**A. Weighted average imported Crude Oil C & F Price (Assumed RCP)**

**140.00**

**Floor Price C & F**

**10.00**

**Ceiling Price**

**110.00**

**B. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

<b>US\$/BBL</b>	<b>Applicable % of C&amp;F Price</b>	<b>US\$/BBL</b>
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Onshore Zone II	66.5% of applicable C&F price	\$35.91

Conversion Factor \* assumed (MM Btu/bbl) 5.7

Zone II producer price for pipe line quality specification gas in US\$/MMBtu 6.3

**Annexure-9**

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF  
POLICY 2012 FOR ZONE I**

**\$/BBL**

**A. Weighted average imported Crude Oil C&F Price (Assumed RCP)**

**140.00**

**Floor Price C & F**

**10.00**

**Ceiling Price**

**110.00**

**C. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

<b>US\$/BBL</b>	<b>Applicable % of C&amp;F Price</b>	<b>US\$/BBL</b>
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Onshore Zone I	69.66 of applicable C&F price	\$37.616

Conversion Factor \* assumed (MM Btu/bbl) 5.7

Zone I producer price for pipe line quality specification gas in US\$/MMBtu 6.6

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF POLICY 2012 FOR ZONE O (SHALLOW)**

**\$/BBL**

**A. Weighted average imported Crude Oil C & F Price (Assumed RCP)**  
**140.00**

**Floor Price C & F**  
**10.00**

**Ceiling Price**  
**110.00**

**B. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

US\$/BBL	Applicable % of C&F Price	US\$/BBL
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Offshore Zone OII (Shallow)	73.88% of applicable C&F price	\$39.8952

Conversion Factor \* assumed (MM Btu/bbl)

5.7

Zone OI (Shallow) producer price for pipe line quality specification gas in US\$/MMBtu

7

Annexure-I I

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF  
POLICY 2012 FOR ZONE O (DEEP)**

\$/BBL

**C. Weighted average imported Crude Oil C & F Price (Assumed RCP)**

**140.00**

**Floor Price C & F**

**10.00**

**Ceiling Price**

**110.00**

**D. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

<b>US\$/BBL</b>	<b>Applicable % of C&amp;F Price</b>	<b>US\$/BBL</b>
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Offshore Zone OII (Deep)	84.44% of applicable C&F price	\$45.5976

Conversion Factor \* assumed (MM Btu/bbl)

5.7

Zone OI (Deep) producer price for pipe line quality specification gas in US\$/MMBtu

8

**Annexure-12**

**WELL HEAD GAS PRICE ILLUSTRATION AS PER PRICING PROVISIONS OF  
POLICY 2012 FOR ZONE O (ULTRADEEP)**

**\$/BBL**

**E. Weighted average imported Crude Oil C & F Price (Assumed RCP)**  
**140.00**

**Floor Price C & F**  
**10.00**

**Ceiling Price**  
**110.00**

**F. Apply sliding scale discounts to C&F crude oil price after floor & upto ceiling.**

<b>US\$/BBL</b>	<b>Applicable % of C&amp;F Price</b>	<b>US\$/BBL</b>
0 to 30	100%	30
Above 30 to 50	Plus 50% of incremental increase	10
Above 50 to 70	Plus 30% of incremental increase	6
Above 70 to 110	Plus 20% of incremental increase	8
Applicable C&F Price	(A+B+C+D)	54
Marker Price Offshore Zone <u>OH</u> <u>(Ultra Deep)</u>	95% of applicable C&F price	\$51.3

Conversion Factor \* assumed (MM Btu/bbl)

5.7

Zone OH (Ultra Deep) producer price for pipe line quality specification gas in US\$/MMBtu

9

**Role of reorganized Directorate General of Petroleum Concessions**

- a. Decide the matters of grants, regulation, annulment and monitoring of all Petroleum Concessions and E&P activities in the country.
- b. Issues of the strategic nature of the inter-provincial importance/inter-governmental.
- c. Overseeing the development plans and work progress of E&P companies on work awarded.
- d. Facilitation to the E&P companies in respective Provinces by concerned Director.
- e. To oversee and monitor the revenue regime of each concession awarded.
- f. To address operational issues faced by the company in various concessions and assist for development.
- g. To give proposals for facilitation of E&P activities in the awarded concessions and goal development of the sector.
- h. Dispute resolution between the E&P companies and Provinces.
- i. Put up suggestions/recommendations for dispute resolution arising out of the felt needs of the E&P companies.
- j. Periodic review, evaluation and upgrading of the policy recommendation for the Petroleum Policy.
- k. The Provincial Directors and CFO will draw their pay from a separate fund to be established for this purpose.

**[No. Expl-7(3) (Petroleum Policy 2012)/2012-Vol-V]**

**Waqar Masood Khan  
Secretary**

MARGINAL/~~STRANDED~~ GAS FIELDS-  
~~GAS PRICING CRITERIA~~  
AND GUIDELINES, 2013

**GOVERNMENT OF PAKISTAN  
MINISTRY OF PETROLEUM & NATURAL  
RESOURCES**

**JANUARY, 2013**

## **A. Introduction**

Pakistan is facing big challenge in meeting its ever growing energy requirements due to expanding population and economic growth. Energy demand is projected to grow from 64.91 Million tons of oil equivalent (MTOE) in 2010 to 147 MTOE by 2022 reflecting a phenomenal increase of 126%. Gas being the largest component of energy supply (48%) is projected to decline from existing 4.2 BCFD to 1.6 BCFD in 2022. Serious efforts are, therefore, needed to explore, discover and produce additional oil and gas reservoirs for a long term sustainable energy security of Pakistan. Thus every molecule of energy discovered in any form has to be exploited to bridge the ever increasing demand /supply gap.

The Government of Pakistan (GOP) is committed to accelerate exploratory efforts and to expand production from producing fields that is uneconomic at the valid contract prices of the respective fields/ D&P Leases. GOP intends to accelerate exploratory efforts to reverse the decline in crude oil production, increase the domestic gas supplies and reduce the burden of imported energy which otherwise will have serious impact on the balance of payments and trade. In the current global energy price environment, E&P Policy has to be dynamic to meet the new challenges faced in meeting energy needs of the country and to minimize the adverse effects on the economy.

During the course of oil and gas exploration, the E&P companies come across gas discoveries with Marginal Reserves which may not be economically viable for development. There are gas fields in the country with proven reserves but could not be exploited due to poor economic viability. Furthermore, there is huge potential of discovering large number of marginal fields, which Companies are not currently targeting due to poor economics. Due to heavy capital investment required for drilling of additional number of wells because of lower productivity from Marginal Fields the cost of production from these fields is extremely high as compared to a normal gas field.

In view of the above, additional financial incentives are required for E&P companies to attract them in developing and producing from the Marginal Fields discoveries making their investment economically viable to accelerate the E&P activities in the country.

The purpose of these Guidelines is to establish policies, procedures and pricing mechanism to accelerate the development and production from Marginal Field discoveries and from re-development efforts from such discoveries in Pakistan.

## **B. Guidelines Objectives**

These Marginal Field Guidelines, 2013 are aimed at achieving the following principal objectives:

1. Fast track development and production of hydrocarbons from the existing discovered Marginal reservoirs which have remained dormant due to poor economics.
2. Encourage field re-developments/ infield drilling in order to expand production from producing fields that is uneconomic at the valid contract prices of the respective fields/ D&P Leases.
3. Opportunity for the investors for exploration, development and production of Marginal Fields which would help to reduce the energy deficit.
4. Additional revenues for the Government in the form of Royalty and Taxes.

5. Improving balance of payments position by reducing the need for import of other fuels such as LNG and Fuel Oil requiring massive foreign exchange outflow.
6. Producing additional hydrocarbons to make indigenous energy at affordable tariff for the consumers by using indigenous gas resources.
7. Increasing security of energy supplies.

### C. Applicability and Effect of the Guidelines

The Marginal Field Guidelines, 2013 shall come into effect from the date of its notification in the official Gazette. The incentives of the ~~these~~ Guidelines shall however, apply to fields/ discoveries that qualify and are accepted as "Marginal Fields" under the existing and future exploration licences, PCAs, D&P leases and Mining leases but are not in production prior to the notification of these Guidelines.

### D. Definition of Marginal Field

~~The 'Marginal Field' or 'Marginal Discovery' means a field which is uneconomical for development (including re-development efforts like infield drilling) and production using current technologies based on the terms of the current Petroleum Concession Agreements applied to the size of the reserves.~~

~~For further clarity a marginal field is defined as an oil or gas reservoir that cannot be exploited economically under the existing E&P Policies, pricing structure and available technologies.~~

~~Marginal Fields shall be categorized as under:~~

- ~~1. Reservoir size of Stranded Fields for Zones (Zones as marked in Petroleum Policy 2012)
 
  - a. Zone I – [25] Bcf
  - b. Zone II – [20] Bcf
  - c. Zone III – [15] Bcf
 (For Oil discoveries the above gas volumes will be converted in equivalent oil barrels)~~
- ~~2. Reservoirs' that are certified to be compartmentalized and where the size of the individual compartments is smaller than the reservoir size mentioned hereinabove (and the compartment cannot be exploited economically under the existing E&P Policies, pricing structure and available technologies).~~
- ~~3. Depleting Fields already nearing the end of economical production life requiring secondary / tertiary recovery methods.~~

~~The Government may also approve a field or discovery as Marginal taking into consideration the following:~~

- Initial well Productivity
- Recoverable Volume
- Lack of appropriate technology
- Remote Area
- Distance to infrastructure
- Economics of field development at current policy price

The expression “Marginal Field’ or ‘Marginal Discovery means a field/discovery including a stranded field which cannot be developed to produce commercially either on standalone basis or under a joint development plan with other fields, using current technologies and on the terms of the applicable concession regime.

The threshold for fields/discoveries to be categorized as Marginal Field or Marginal Discovery shall be as under:

1. The maximum in place gas reservoir size (proven + probable i.e. 2P) on geological Zone basis (Zones as marked in Petroleum 2012 Policy) is as follows:

Zone I - 25 Bcf

Zone II - 20 Bcf

Zone III - 15 Bcf

2. For Gas/Condensate fields/ discoveries, the above 2P in place gas reserves threshold for reservoir size shall be applicable. However, while determining commerciality the revenues from condensate shall also be accounted for to determine whether the development of such a field/discovery is commercially viable without availing the incentives of these Guidelines.

3. These Guidelines shall not be applicable to Oil Fields/Discoveries encountering or producing associated gas.

4. In case a field or discovery does not fall within the above threshold for each Zone, the Government may on a case to case basis allow the incentives of these Guidelines to commercialize such fields or discoveries taking into consideration any or a combination of the following factors:

– Low well productivity

– Lack of appropriate technology for exploitation

– Remote Area which is not in close proximity to the main infrastructure

– Applicable gas price for the field

5. Gas fields already nearing the end of production life requiring secondary/tertiary recovery methods to continue commercial gas production (defined as Depleted Fields for the purpose of these Guidelines) may also be considered to avail the incentives of these Guidelines on a case to case basis, keeping in view that:

– Remaining field reserves are within the limits of the above mentioned reserves threshold for each Zone.

– Technology required and the investment to be made to commercially drain the remaining gas reserves.

– Escalated unit production costs (operator using available infrastructure i.e. low volumes being processed using large equipment at tail end of producing life).

The following clarity/mechanism is provided to incentivise production from Marginal-fields/ discoveries or Depleted Fields:

- Fields Size or the remaining reserves in case of Depleted Fields shall not be the key criteria for price incentive.
- No automatic price movement from currently applicable price to \$6.25/MMBTU (at a reference oil price of \$110/bbl) for such fields except- where the applicable price

is already \$6.00/ MMBTU (i.e. 2012 Policy price). For other cases where the applicable price is below \$6 per MMBTU (at a reference oil price of \$110/bbl), the provision given below shall apply.

Where the applicable price is below the 2012 Policy price of \$6 per MMBTU, the price offered by GoP for such fields will be such that it offers a reasonable rate of return to the producer subject to the provisions below:

The mechanics to implement the above recommendations would be as follows:

- The original applicable price for the field will need to be revised upward such that an acceptable ROR (which can be say 18%, subject to GoP approval) is generated for the project at the time of processing of such request by the regulator.
- The industry/regulator approved economic evaluation model will be utilized to determine this ROR.
- The applicable price i.e. 2012 Policy price plus \$0.25/MMBTU offered in the Guidelines shall be the ceiling for the incentive price determined from the above calculations.

## E. Marginal Fields Certification by Independent Consultant

1. In order to become eligible to claim incentives given in this Guidelines, the producers of Marginal Fields shall be required to obtain a certification from an independent consultant for (i) confirmation that such gas field qualifies as Marginal Gas Field as defined in this policy, and (ii) assessment of Marginal Gas reservoir and Marginal Gas reserves to be done in accordance with best international petroleum industry methods, and (iii) certification that such gas cannot be produced naturally through conventional methods at commercially rates.
2. In case the Marginal Field is producing Low BTU gas, the price incentive of either Marginal or Low BTU gas will apply. In no case the two prices can be applied simultaneously.

## F. Gas Price Incentives for Marginal Fields/Discoveries Gas Pricing

The Marginal Fields Gas prices for Marginal Field will be set in accordance with the applicable price Petroleum Exploration & Production Policy 2012 with an additional premium of US\$ 0.25 MMBTU for the three zones as defined in the said Policy. Petroleum Exploration & Production Policy 2012. The Price determined in accordance with this clause will be hereinafter referred to as "Base Price" and will be allowed for pipeline quality gas specifications.

The price offered to E&P companies through these Guidelines will be limited to the total in place reserves volume used as a basis for determination for the applicability of the gas price for Marginal Fields. If additional reserves become available from the field subsequently (based on reservoir performance, field optimization, application of technology, etc.) then these incremental reserves will attract a Windfall Levy (WL) as described in 2012 Policy. The WL will be applicable on the difference between gas price being received through the application of these Guidelines and the original applicable gas price for that EL/D&PL area.

An Illustration is provided below:

- Marginal gas price is \$6.00 + \$0.25 = \$6.25/MMBTU
  - Original applicable price per PCA \$3.25/MMBTU
  - Difference in price (6.25-3.25)= \$3.00/MMBTU
  - WVL in 2012 Policy 40%  
Price for gas production beyond reserves volumes used for Marginal gas price incentive(3.25+3\*(100%-40%) \$5.05/MMBTU
  - WVL will be (3.00\*40%)\$1.20/MMBTU\*
- \* per unit volume, where volume determination is post royalty adjustment

## G. Royalty

Royalty shall be payable as per applicable Petroleum (Exploration & Production) Policy.

## H. Retention Period

The E&P companies shall be entitled for a minimum of 5 years retention period to determine various development options and marketing of gas from the date of approval of development plan. The retention period may further be extended for another ~~3~~5 years to implement the development plan. [Such a retention period of 5 years or ~~8+0~~ years as the case may be, shall not form part of total lease period.

## I. Gas Pricing / Third party sale

- i. The Government shall have the first right to purchase pipelines specification gas from the **Marginal Gas Fields** at a price to be determined in accordance with the above clause F
- ii. The Government shall exercise this right within ninety (90) days from the date of application for declaration of a **Marginal Gas-Field** under these Guidelines this Policy by the E&P Company.
- iii. In case the Government does not exercise its rights, the E & P Company will be free to sell the gas to the third party at negotiated rates either through pipeline or virtual pipeline.
- ~~iv. In case of third party sale there would be no requirement of further review by any other Authority or Government body.~~

## J. Windfall levy

For the sale of gas from Marginal field/ gas discovery to third parties, windfall levy ~~above the base price of US\$ 8/MMBTU~~ will be payable to the extent of ~~54~~40% of the difference between the applicable base price under 2012 Policy i.e. US\$ 8/MMBTU and the 3rd party sale price. All the benefits of windfall levy may be equally divided between the Federal Government and provincial Government concerned.

## K. Import duties and other levies & taxes:

As per applicable SRO under 2012 Policy.

## L. Remittance of Proceeds Abroad:

The provisions of Petroleum (Exploration & Production) Policy 2012 Guidelines, 2013 shall be applicable.

#### **M. Production Bonus:**

The first production bonus applicable to Development & Production lease as per 2012 Policy shall be waived for of a Marginal Field and Depleted Fields shall be waived.

#### **N. Delivery Point and Field Gate**

For the purpose of pricing and delivery obligations for natural gas from Marginal Marginal Fields/Discoveries, the gas will be delivered at outlet flange (Field Gate/Delivery Point). ~~All field gate locations, for Marginal discoveries, will be anywhere within a [3] Km radius from the outlet flange of a production facility~~

In case of sale to third parties where SSGCL/SNGPL network is not available for use, the delivery would be through a pipeline laid for the purpose or through a virtual pipeline e.g. CNG transport vehicle and tariff for the pipeline will be settled between the producer and the buyer on a case to case basis on commercial terms.

#### **Re-Grant of Relinquished Old Areas with fields/ discoveries**

DGPC may invite bids from E&P companies, to re-grant old relinquished areas with possible Marginal fields/ discoveries. The bids will be evaluated based on the basis of signature bonus, which would be spent for social welfare of the area, in which the field is located. ~~The previous licensee shall be allowed to match the highest bid.~~

#### **O. Review of Marginal Field Guidelines**

This Marginal Field Guidelines, 2013 may be reviewed by the Government every five years in the light of additional information obtained as a result of development of gas fields, Technological advancements and changes in circumstances including change in business dynamics. The existing producers of gas from Marginal Fields/ discoveries at that point in time may also avail the benefit of any Guidelines review. However, no change shall be made which is detrimental to their existing economic rights.

#### **Implementation and Removal of Difficulties:-**

I. A Committee shall be constituted to address the issues of the implementation of these Guidelines, removal of difficulties and addressing of anomalies. The Committee shall comprise of the following:

- Minister for Petroleum and Natural Resources Chairman
- Secretary, Petroleum and Natural Resources Member
- Provincial Nominees
- Member

- Director General Petroleum Concessions Member/Secretary

The Committee should meet within one month of receipt of request from PPEPCA to hold a meeting to resolve an issue.

# LOW BTU GAS PRICING POLICY, 2012

**GOVERNMENT OF PAKISTAN  
MINISTRY OF PETROLEUM & NATURAL  
RESOURCES**

**April, 2012**

## Introduction

Pakistan is facing big challenge in meeting its ever growing energy requirements due to expanding population and economic growth. Energy demand is projected to grow from 64.91 Million ton of equivalent (MTOE) in 2010 to 147 MTOE by 2022 reflecting a phenomenal increase of 126%. Gas being the largest component of energy supply (48%) is projected to decline from existing 4.2 BCFD to 1.6 BCFD in 2022 reflecting a deficit of 7 BCFD. Serious efforts are, therefore, needed to explore, discover and produce additional oil and gas reservoirs for a long term sustainable energy security of Pakistan. Thus every molecule of energy discovered in any form has to be exploited to bridge the ever increasing demand /supply gap.

2. The Government of Pakistan (GOP) is committed to accelerate exploratory efforts to reverse the decline in crude oil production, increase the domestic gas supplies and reduce the burden of imported energy which otherwise will have serious impact on the balance of payments and trade. In the current global energy price environment, E&P Policy has to be dynamic to meet the new challenges faced in meeting energy needs of the country at least cost option and to minimize the adverse effects on the economy.
3. During the course of oil and gas exploration, the E&P companies come across gas discoveries with energy content (British Thermal Units or BTU) ranging from almost 100 BTU/SCFT to 1200 BTU / SCFT. The normal economy context of the pipeline quality gas is considered to be any thing above 900 BTU/SCFT. If the heating value is lower, the cost of producing energy increases manifolds for producing the same amount of energy. The producers are required to incur additional cost on drilling of more wells and oversized gas gathering systems. In simple terms, in the case of a normal heating value gas containing 1000 BTU/SCFT, for producing 1 MMBTU energy, it will require production of 1 MCFT gas as against 2 MCFT for 500 BTU/SCFT gas and 5 MCFT for a gas containing 200 BTU/SCFT. **Obviously, the cost of producing and supplying energy from Low BTU Gas fields in any case is much higher than a normal gas field.**
4. In addition to the cost of production, the utilization of Low BTU Gas also poses a big challenge. In most cases, Low BTU Gas contains large volume of undesirable gases like Carbon Dioxide, Nitrogen and Hydrogen Sulfide with low contents of Methane. The adverse composition of gas renders it highly corrosive as well as poisonous and development of such gas fields requires special and costly equipment and materials for well completion/production and gathering systems. The best utilization of Low BTU Gas is for power generation near the gas field. It would, therefore, require a special pricing mechanism which is economically sustainable for the investors as well as the country.
5. The gas fields discovered so far with an average heating value of around 140/250 BTU/SCFT could not be exploited due to poor economic viability and non-availability of low BTU driven gas Turbines for power generation.

The power generation technology is now available, but the economic viability remains an impediment. However, due to heavy capital investment required for drilling of 10-12 wells and use of specialized materials for handling acidic gases, the cost of producing energy

from these fields will be extremely high as compared to a normal gas field.

6. In view of the above, and in line with the Petroleum (Exploration & Production) Policy, 2009 (Para 7.1.5 Schedule III) additional financial incentives are required for the producers of Low BTU Gas to make their investment economically viable and to accelerate the E&P activities in the country.
7. The purpose of this Policy is to establish a reasonable framework of policies, procedures and pricing to accelerate the exploration and production of Low BTU Gas in Pakistan.

## 2. **POLICY OBJECTIVES**

The Low BTU Gas Pricing Policy, 2012 is aimed at achieving the

following principal objectives:

- 1) Fast track development and production of gas from the existing discovered Low BTU Gas reservoirs which have remained dormant due to poor economics.
- 2) Opportunity for the investors for exploration and production of Low BTU Gas which would help increase the power generation capacity of the country and reduce the energy deficit.
- 3) Additional revenues for the Government in the form of Royalty and Taxes.
- 4) Improving balance of payments position by reducing the need for import of other fuels such as LNG and Fuel Oil requiring massive foreign exchange outflow.
- 5) Producing additional power at affordable tariff for the consumers by using indigenous gas resources.
- 6) Boosting local manufacturing of equipments for production of Low BTU Gas.
- 7) Increasing security of energy supplies

## 3. **Applicability and Effect of the Policy**

- I. The Low BTU Gas Pricing Policy, 2012 shall come into effect from the date of its notification in the official Gazette. The incentives of this Policy shall however, apply to the Low BTU Gas discoveries that qualify and are accepted as “Low BTU Gas” under the existing rights granted in terms of Exploration Licences/Petroleum Concession Agreements (PCA’s) D&P leases but are not in production prior to the notification of this Policy and future exploration licences, PCAs and D&P leases

granted under subsequent Petroleum (Exploration and Production) Policy, 2012.

2. Low BTU Gas discovered from the licences granted after promulgation of 18<sup>th</sup> amendment shall vest jointly and equally in that Province and the Federal Government.

#### 4. Definition of Low BTU Gas

The Low BTU Gas means “Gas produced from the well-heads in raw form which ~~does not contain Methane as its primary constituent and~~ has a gross heating value of less than 450 BTU/SCFT” as certified by a third party consultant approved by the regulator“.

The threshold of 450 BTU/SCFT has been selected on the basis of the definition of natural gas which is contained in various Laws /Rules as explained below:

*“natural gas” means hydrocarbons or mixture of hydrocarbons and other gases which at sixty 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”.*

In order to implement this policy necessary changes will be suggested to be made in the relevant laws to cover the definition of Low Btu Gas for the purpose of price notification.

#### Measurements and Certification of Chemical Composition of Low BTU Gas from a 3<sup>rd</sup> party

- I. In order to become eligible to claim incentives given in this Policy, the producers of Low BTU Gas shall be required to obtain a certificate of the chemical composition of the gas from at least ~~one of from~~ the following three of independent laboratories:-

i) HDIP ii) Core Lab

iii) Weatherford Lab

- iv) or any other party having World Class standing and ~~subsequently~~ subsequently approved by the ~~Regulator-Federal Government and the Provincial Government concerned.~~

The producers shall ensure that a representative composite sample from the entire producing area of the field is collected. -This will ensure reasonable representation of gas due to possible variation in gas composition in different wells within same field.

During the entire producing life of the Low BTU gas field, an online determination of gas quality supplied to buyer through use of a chromatograph shall be ensured so as to capture any ongoing changes in the gas composition that will impact price of the gas being sold.

The producer shall reasonably ensure that all wells drilled in a low BTU gas field are produced as per their deliverability. This shall be managed through 3<sup>rd</sup> party certification of

the production profile in the Field Development Plan (FDP) with rationale/basis for proposed production mix for the life of the field.

In the particular situation where the initial heating value determination, prior to the execution of the FDP, is less than 450 BTU/Scf but it goes above 450 BTU/Scf after the composite heating value becomes available (after development of the field) and the field was classified as a LBG field then this classification shall remain valid for 5 years from commencement of production. Thereafter an updated FDP shall be required for re-classification of such field.

2. Each producer of Low BTU Gas shall install online gas chromatograph before the injection of raw gas into any processing facility or any buyer's facility. For purpose of pricing raw Low BTU Gas shall be measured prior to its injection into any processing facility. However, the producer shall provide necessary processing facilities at his cost for delivery of gas to the buyer as per the specifications agreed between the producer and the buyer.

### **Allocation of pipeline quality for commingling with Low BTU**

#### **Gas:**

The Government may as per wide policy framework approved by EEC case no: 57/4/2007 dated 10<sup>th</sup> may 2007, may allocate pipeline quality gas for the purpose of commingling with Low BTU gas on case to case basis after giving due consideration to all relevant factors such as availability of gas in the system and infrastructure development by the producer provided that the producer commits to contribute at least 50% of gas on heating value basis in commingled gas stream. to be supplied to IPP.

#### **Gas Pricing**

~~Gas prices are always calculated on the basis of its BTU contents. The Low BTU Gas of 450 BTU/SCF has been assigned the price of US \$ 6 per MMBTU, which shall be increased by US \$ 0.01/MMBTU for each BTU/SCF reduction below 450BTU/SCF up to 175BTU/SCF for making it pipeline Gas. The maximum price at 175 BTU/SCF shall be US \$ 8.75/MMBTU. Similarly the Low BTU Gas ranging from 450 to 600 MMBTU/SCF would also entail price of US \$ 6 per MMBTU for making it pipeline quality gas.~~

- In case the gas buyer is the Government or any of its designee gas utility companies i.e. SSGCL or SNGPL, the Low BTU Gas of 450 Btu/SCF shall be assigned a price of US \$ 6/MMBtu, which shall be increased by US \$ 0.01/MMBTU for each BTU/SCF reduction below 450 Btu/Scf up to 175 Btu/SCF for making it Pipeline line quality gas. The maximum price at 175 Btu/SCF shall be US \$ 8.75/MMBtu.
- For Low Btu Gas which cannot be converted to Pipeline Quality Gas due to technical or financial constraints, the working interest owners will be free to sell it to a third party at a mutually agreed price which can be higher than the price applicable for sale to the Government backed up by the economic viability.

### **Royalty**

Royalty shall be payable as per Petroleum (Exploration & Production) Policy, 2012.

### **Retention Period**

The E&P companies shall be entitled for a minimum of 5 years retention period to determine various development options and marketing of gas from the date of approval of development plan. The retention period may further be extended for another 5 years to implement the development plan subject to provision of technical justification and milestones to be achieved during the extended period. Such a retention period of 5 years or 10 years as the case may be, shall not form part of total lease period.

### **Third party sale**

The working interest owners after commercial discovery will make a written request to the Government indicating the recoverable reserves, daily supply volumes, quality, pressure as well as relevant information's for purchase of the gas, for which gathering pipelines may be laid by the buyers under mutual agreement with the producer. The Government shall have the First right to purchase 90 % of Low BTU Gas converted to Pipeline Quality Gas by the Producer. However, the producer will be allowed to sell 10 % of the remaining Gas to any other buyer on its own choice of consumer, for which the gas distribution companies will levy tolling charges if pipeline is used. In case indication about the specified buyer is not notified by the Government is not given within 2 months of the request by the Working Interest owners, the working interest owners will be free to sell sale it to a the third party or parties for which the gas distribution company will charge tolling charges if their pipeline is used,any.

### **Windfall levy**

For the sale of Low BTU Gas to parties other than government, windfall levy equal to 25% amount will be paid to government on the difference between the applicable Low BTU Gas policy price & the price for its sale to a third party.

### **Import duties and other levies / taxes:**

As per applicable SRO: under Petroleum (Exploration & Production) Policy 2012

### **Remittance of Proceeds Abroad:**

The provisions of Petroleum (Exploration & Production) Policy, 2012 shall be applicable.

### **Production Bonus:**

The first production bonus applicable to the grant of a Development & Production lease of a Low BTU Gas field shall be waived.

### **Review of Low BTU Gas Pricing Policy:**

The Low BTU Gas Pricing Policy, 2012 may be reviewed by the Government every five years in the light of additional information of development of gas fields, Technological advancements and changes in circumstances including change in business dynamics. The existing producers of Low BTU Gas at that point in time

may also avail the benefit of any policy review. However, no change shall be made which is detrimental to their existing economic rights.

# TIGHT GAS (EXPLORATION & PRODUCTION) POLICY-2011

**GOVERNMENT OF PAKISTAN  
MINISTRY OF PETROLEUM & NATURAL  
RESOURCES**

May, 2011

## I. Introduction

With a dimming possibility of economically viable alternative sources of energy in near future, ever widening gap between the energy demand and supply and the decline of production of conventional fossil-fuel in future, the thrust on unconventional sources such as tight gas is glowingly increasing world-over.

Pakistan is facing big challenge in meeting its ever growing energy needs due to expanding population and economic growth. Energy demand is projected to grow to 147 MTOE by 2022 reflecting a phenomenal increase of 245% compared to 2008. Gas being largest component of energy supply is also projected to decline from existing 4.2 BCFD to 1.6 BCFD in 2022 giving rise to deficit of 7 BCFD. To meet the targets identified, Pakistan's oil and gas industry will need to explore, discover and produce greater volumes of oil and gas than we are producing today. Increasing exploration is the first and essential step in this process. Exploration and development activity is critical to the long-term energy security of Pakistan and the growth of Pakistan's oil and gas industry.

The ~~Government~~Federal Government and the Provincial Government concerned ~~are~~ is committed to accelerate an exploration and development programme in order to reverse the decline in crude oil production, to increase the domestic gas production and supply and to reduce the burden of imported energy which otherwise will have adverse effect on the balance of payments & trade. In the current global energy price environment, E&P Policy has to be dynamic to meet the new challenges faced in meeting energy needs of the country at least cost option and to minimize the adverse effects.

The ~~Government~~Federal Government and the Provincial Government concerned recognises that extracting value from tight gas reservoirs represents a challenge for the entire oil and gas industry; it requires the use of state-of -the-art technologies for seismic acquisition and processing, drilling, reservoir stimulation and development plans entailing massive investments with longer recovery cycle. Under ideal conditions, a single conventional well produces around 50 MMSCFD gas whereas same production of tight gas may require 10 to 50 wells giving rise to manifold increase in the production costs for the same level of production.

The purpose of this Tight Gas Exploration & Production Policy 2011 (Policy) is to establish the policies, procedures, tax and pricing regime in respect of exploration and production of tight gas in Pakistan.

The requirement of this policy is also reflected in clause 7.1.5, Section-III, Regulatory Process and Obligations of the Petroleum Exploration & Production Policy, 2009.

## 2. Objectives

Promulgation of the "Tight Gas (Exploration & Production) Policy 2011" is based on achievement of the following principle national objectives.

- i. Start of fast track development and production of gas from the existing tight gas reservoirs that are not being produced due to non-commerciality;
- ii. To open new frontiers for exploration of tight gas which would help increase the

- production level for reducing the energy deficit;
- iii. Raising additional revenues of ~~the Government~~~~Federal Government and the Provincial Government concerned~~ ;
  - iv. Improving balance of payment position by reducing the need for import of alternative fuels (LNG/Fuel Oil) which requires massive foreign exchange;
  - v. Reducing recourse to sovereign debts by saving foreign currency;
  - vi. Keeping the local gas prices at affordable level to the consumers by producing cheaper gas vis-à-vis imports ;
  - vii. Generating employment for the nationals;
  - viii. Boosting local manufacturing industry for supply of equipments for production of tight gas by international collaboration and transfer of technology;
  - ix. Increase dependability and security of supply and its sustained availability.

### **3. Applicability & Effect of the Policy**

The Tight Gas policy shall come into effect from the date of its announcement as published in the official Gazette. The incentives of this Policy shall apply to the tight gas discoveries that qualify and are accepted as “tight gas” under the existing and future exploration licences, Petroleum Concessions Agreements (PCAs) and Development & Production (D & P) leases and that are not in production prior to notification of this Policy

In case of conflict in the general terms of the PCA and this Policy, the provisions of this Policy shall hold precedence in respect of tight gas. However, the rights of Working Interest Owners will continue to prevail as per PCA of respective block.

### **4. Definition of Tight Gas**

The Tight Gas is defined as a natural gas that:

- (i) the company demonstrates to the satisfaction of the ~~Regulator~~~~Federal Government and the Provincial Government concerned~~ that it can not flow naturally at commercial rates with conventional methods despite ~~of~~ having hydrocarbon reserves; and
- (ii) requires advanced technologies for its exploitation/production such as high performance perforation, hydraulic fracturing, horizontal wells, multilateral wells &/or infill drilling or combination of these technologies or any new technology acceptable to the Regulator; and

- (iii) has estimated value of effective permeability less than “1.0 milli Darcy (mD)” as determined pursuant to clause-5 of this policy.

Reservoir hosting Tight Gas in -situ is defined as “Tight Gas Reservoir” and gas reserve trapped therein is defined as “Tight Gas Reserve” Wells having effective permeability of more than”1.0 mD” shall be classified as conventional wells.

(The definition of Tight Gas should be developed by a reputable 3rd party Consultant as per the recommendations of the Consultants provided in the report entitled 'PAKISTAN PETROLEUM POLICIES – review and recommendations').

#### **5. Measurement of Permeability and Certification of Tight Gas Reservoir through 3<sup>rd</sup> Party.**

In order to become eligible to claim incentives given in the Policy, the Working Interest Owners encountering Tight Gas Reservoir (TGR) shall be required to adopt the following procedure:

- (a) All relevant data and supporting material including but not limited to logs, cores, ditch cutting, seismic, VSP will be provided to a recognized third party, included in list in clause-6 or as amended from time to time, and who has been selected through competitive bidding by the company with the consent of the ~~Regulator Federal Government and the Provincial Government concerned~~ for an accurate measurement of permeability and independent certification of both Tight Gas Reservoir and Tight Gas Reserves;
- (b) Such third party shall determine effective Permeability of the Tight Gas Reservoir based on i) core data/analysis corrected to reservoir conditions (ii) well test data/analysis – DST, build up and draw down (iii) Nuclear Magnetic Resonance (NMR) method, Pressure Transient Analysis (PTA) or (iv) any other method or combination of the methods as required by the Regulator;
- (c) To facilitate an accurate estimation of effective Permeability as well as to conduct the independent certification of both Tight Gas Reservoir and Tight Gas Reserves, the operator will be required to gather and obtain as much data and supporting material as is reasonably possible and which is sufficient to generate reliable reports with high degree of accuracy.
- (d) The third party certification shall be needed for; (i) confirmation that such gas qualifies as Tight Gas as defined in this policy; and (ii) assessment of Tight Gas Reservoir and Tight Gas Reserves to be done in accordance with best international petroleum industry methods; and (iii) certification that such gas can not be produced naturally through conventional methods at commercial rate.

- (e) As required under clause-7 below, production allocation of Tight Gas and conventional gas being produced from the same lease will be based on the recommendations of the third party referred to in the sub-Para-(d).
- (f) In the event a well is capable of producing both Tight Gas as well as conventional gas, such well shall be completed in one interval so as not to allow commingle of Tight Gas and conventional gas from the same well unless recommended process as set out in clause-8 hereof is strictly followed.
- (g) The cost of all such tests/certification shall be borne by the Working Interest Owners/company and to this effect a pay order or bank draft shall be submitted to the Regulator for payment to the 3<sup>rd</sup> party selected out of the approved list of such Labs having world class standing.
- (h) The company and its contractor, where applicable, shall electronically transmit all relevant data/information to the Regulator within two days and in the event of wilful submission of wrong data/information, the company shall be liable to pay a penalty of US\$ 5 million for such one time offence. Any subsequent repeated act of wrongful submissions will lead to termination of petroleum rights. In case of unsatisfactory report regulator may ask for re-evaluation of TGR and gas reserves from the approved list at clause-6 below and all the cost will be borne by the Working Interest Owners.

## **6. List of Consultants/Laboratories for Testing of Tight Gas Reservoir**

The certification of "Tight Gas"/nature of reservoirs, gas reserves and allocation of "Tight Gas" to total production in case it is produced from Conventional Reservoir/field may be obtained from 3<sup>rd</sup> party consultants having World Class standing and approved by the Regulator, either of the following parties:

- ~~1. DeGolyer and MacNaughton Petroleum Consultant~~
- ~~2. Gaffney Cline and Associates Ltd.~~
- ~~3. Ryder & Scott~~
- ~~4. Tracks International~~
- ~~5. PGS Reservoir Consultant (UK) Limited~~

~~6. RPS Energy~~

~~7. PTS Laboratories Inc. USA~~

~~8. IPR International Limited~~

~~9. Exploration Consultants Limited~~

~~10. Client Support Laboratory, Schlumberger KL, Malaysia~~

~~11. \_\_\_\_\_ or any other party having World Class standing and subsequently approved by the Federal Government and the Provincial Government concerned.~~

## **7. Declaration of Commerciality of Tight Gas Reservoir**

Declaration of Commerciality shall be as per following mechanism:

Upon discovery of reservoir sequence in a well which in the opinion of the Working Interest Owners can be designated as tight gas reservoir, the operator concerned shall immediately notify the ~~Regulator Federal Government and the Provincial Government concerned~~ with details of such reservoir sequence and by a further notice within 6 months thereafter, intimate the ~~Regulator Federal Government and the Provincial Government concerned~~ whether tight gas reservoir merits appraisal. In the event, it is decided that tight gas reservoir merits appraisal, the company concerned shall present an appraisal programme for the approval of the ~~Regulator Federal Government and the Provincial Government concerned~~. The company concerned shall diligently undertake the approved appraisal programme within the allowed time period. Within 8 months of completion of such programme, third party certification shall be carried out to define the nature of the reservoir and reserve potential of the field. Third party reserves certification along with Commercial Discovery notice shall be furnished to the ~~Regulator Federal Government and the Provincial Government concerned~~ for approval. If TGR does not merit appraisal, the reservoir should not be declared as TGR.

- ii) Following approval of the Commercial Discovery, the Company concerned shall submit Development Plan comprising comprehensive requirement for the development of entire tight gas reservoir for approval of the ~~Regulator Federal Government and the Provincial Government concerned~~. In case of Tight Gas discovery in the conventional lease area, an addendum to development plan for conventional lease will be submitted after appraisal for approval of the ~~Regulator Federal Government and the Provincial Government concerned~~ to carry development and production substantially in accordance with the Development Plan for Tight Gas as well.

- iii) In case of an already known “Tight Gas” Reservoir in an existing D&P Lease the lease for TGR shall be granted to existing working interest owners after appraisal of reservoir and submission of a supplemental Field Development Plan accompanied by 3<sup>rd</sup> party certification.
- iv) If the tight gas is discovered on drilling of development wells of the conventional D&P lease, the Tight Gas discovery would be appraised for its development in case the working interest owners are of the opinion that the reservoir can be designated as Tight Gas reservoir, the operator shall immediately notify the Regulator with details of such reservoir sequence. Production of such well shall be classified based on approval of the Regulator subject to fulfilling requirements of clause-4 & 5 above.
- v) Notwithstanding the above, for the tight gas reservoir already discovered before the announcement of this Policy but not produced, the working interest owners through operator shall submit the appraisal program followed by development plan within twelve months from the date of Gazette notification of this Policy. Remaining process shall be as stipulated above.
- vi) If the working interest owners do not submit appraisal and development plan within the timeframe specified in this Policy and the PCA, the said rights on Tight Gas shall be deemed to be lapsed.

## **8. Management of mixed production from single well**

If ~~a~~-tight gas and/or conventional gas are produced from the same well or from the different zones of ~~one~~the D&P lease, the allocation of the tight and conventional gas shall be done on the basis of flow rates supported with third party determination. No commingled production shall be allowed from the same well unless produced through dual completions or other internationally acceptable method as approved by the Regulator. In case of production of tight and conventional gas from the same D&P lease, the operator shall provide daily wellhead gas production from each well as per requirements specified by the Regulator. ~~Furthermore, operator shall put in place mechanism for observation of the wellhead gas flow rates by the representative(s) of the Regulator.~~

If tight gas and/or conventional gas are produced from the same well or from the different zones of one D&P lease, the allocation of the tight and conventional gas shall be done on the basis of flow rates supported with third party determination.

Commingled production shall also be allowed from the same well if produced through dual completions or other internationally acceptable method as approved by the Regulator.”

### **Delivery point**

For the purpose of pricing and delivery obligations for tight gas, the field gate shall be outlet flange of the gas processing facilities. However, if the tight gas is discovered subsequent to the already developed conventional field and the tight gas is processed and delivered from the existing facilities and infrastructure, then the delivery point for tight gas shall be same as for the conventional gas delivery. Subsequently, if normal gas volume is injected in the Tight Gas delivery point, then the tariff will be applied if the pipeline is constructed by the ~~Federal Government and the Provincial Government concerned~~ Government/ or its designated

buyer.

## 10. Gas pricing

10.1 In order to exploit Tight Gas Reserves, 40% premium would be given over the respective zonal price of Petroleum Policy 2009.

However in order to encourage the companies to fast track development & production of tight gas, an additional 10% premium would be given for those volumes that are brought into production within 2 years of announcement of this policy. For example if a field "A" produces 300MMCFD within two years of the announcement of this Policy, it would be entitled to 50% premium for 300 MMCFD gas only. Any subsequent addition in volumes after expiry of the two years period would be entitled to 40% premium only.

### 10.2. Third Party Sale

~~The working interest owners shall have the right to sell the gas to third parties within Pakistan at mutually negotiated prices between the Seller and the Buyer. Subject to overall market demand, E&P Companies shall be free to sell 90% of their share of production of gas to any buyer. However if E&P Companies offer to GoP 90% of their share of production, GoP will purchase 90% of Companies' share of pipeline specification gas through a nominated buyer which is effectively controlled by it in acceptable daily, monthly and yearly volumes to meet the internal demand in an economical manner provided there are no infrastructure constraints. For remaining 10% of their production of pipeline quality gas, the E&P Companies shall have the right to sell to any buyer with the prior consent of the Provincial Government.~~

## 11. Lease Term & Renewal

~~Initial term of the development and production "Tight Gas lease" will be up to 30 years. The lease may be renewed for a period, not exceeding 10 years subject to justifications acceptable to the Regulator Federal Government and the Provincial Government concerned. In case Tight Gas Reservoir is extending into a free area then the lease area for tight gas shall be extended to the adjoining free area on submission of technical justifications~~

In case of discovery of the tight gas under the existing D&P lease, the lease shall be amended to separately include the D&P rights for the Tight Gas Reservoir or issue a separate lease subject to justifications. However the gas produced from the well within Tight Gas discovery area not classified as Tight Gas shall not be eligible for Tight Gas price.

On the expiry of the D&P right for the conventional gas under the existing lease, the area held for the production of conventional reservoir (excluding surface area vertically above TG reservoir boundaries) shall be relinquished, if it does not impede the production operation of the tight gas wells and relevant amendments shall be incorporated in the lease on approval of Regulator.

However in case common facilities are being used for the production and/or processing of both conventional gas and Tight Gas, such facilities shall not be taken over by the Government till expiry of both conventional and Tight Gas leases and if required rules

would be modified accordingly.

## **12. Royalty**

Royalty shall be payable as per Petroleum (Exploration & Production) Policy 201209.

## **13. Tax Loss Carry Forward**

Operating loss can be carried forward to a period not exceeding fifteen (15) years.  
(Comment: For implementation GoP to ensure this is also incorporated in the 5<sup>th</sup> Schedule)  
Income Tax Ordinance 2010.

## **14. Abandonment Costs**

As per Finance Act 2010.

## **15. Windfall levy**

No windfall levy will be applicable to the tight gas production, except the sale to third parties. The windfall levy in that case shall be applicable as per 2012 Policy

## **16. Other fiscal levies**

If both conventional and tight gases are produced from the same D&P lease, lease rental, production bonus, training fee and community welfare shall be levied once and shall not be duplicated. In case the lease for conventional and tight gases is separate covering the same area, then levies will be applicable on individual leases.

## **17. Production Suspension**

Suspension of production for a cumulative period of one year will be allowed to working interest owners subject to technical and economic justifications. A company shall deem to have suspended the production in a month if the production is suspended for more than 15 days on account of reasons other than (i) force majeure and (ii) planned plant shutdown for maintenance in accordance with the provision of the Gas Sales Agreements. After expiry of the said period, Federal Government and the Provincial Government concerned may grant further extension on case to case basis subject to justification acceptable to the Regulator.

The lease may be revoked if regular commercial production has not commenced within five years from the grant of the lease. The lease may also be revoked if production has terminated for more than ninety days without prior written approval of the Regulator unless this is due to force majeure or any other reason beyond the control of a holder of a lease and acceptable to the Regulator.

In case there is no production from a field for more than 90 days the JV shall provide a work program (including any exploration within the D&PL) to DGPC within 90 days after the completion of the 90 day period with no production i.e. submission of a work program within a total of 180 days without production. The work program for re-initiating

production from the field or exploration for new discovery shall be commenced within another 180 days. In case a work program is not submitted or commenced within the periods specified above then the D&PL shall be revoked and the JV shall surrender the D&PL.

#### **18. Remittance of Proceeds Abroad**

The provisions of Petroleum Policy 2009 shall be applicable.

#### **19. Review of Tight Gas Policy**

The Tight Gas Policy would be reviewed after two years.

#### **20. Implementation of Tight Gas Policy**

A Committee shall be constituted to address the issues of the implementation of this policy, removal of difficulties and addressing of anomalies. The \_\_\_\_\_ Committee shall comprise of the following:

Minister for Petroleum and Natural Resources Chairman

Secretary, Petroleum and Natural Resources Member \_\_\_\_\_

Provincial Nominees Member

Director General Petroleum Concessions Member/Secretary

The Committee should meet within one month of receipt of request from PPEPCA to hold a meeting to resolve an issue.

~~A separate institutional mechanism will be provided to oversee the implementation of Tight Gas Policy and the Authority consisting of DGPC and one representative of each Province will also act as main forum for the matters related to Oil & Gas exploration. A sub-committee would be setup comprising a representative of the Province concerned and DGPC to resolve tight gas implementation issues in that Province. The implementation committee would be an umbrella body overseeing general matters only.~~

