

ENo.O-32011/41/2009-ONG-I  
Ministry of Petroleum & Natural Gas  
Government of India

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Shastri Bhawan, New Delhi-110 001  
Dated, the 14<sup>th</sup> October 2013

To

✓ The Director General  
Directorate General of Hydrocarbon  
OIDB Bhawan, Sector-73  
Noida (UP)

Subject : Policy Guidelines for Exploration and Exploitation of Shale Gas and Oil by National Oil Companies under Nomination regime-reg.

Dear Sir,

I am directed to refer to the above mentioned subject and to state that the Government has approved the following policy guidelines for the Exploration and Exploitation of Shale Gas & Oil by National Oil Companies (NOCs) under Nomination regime:

1. The policy guidelines will be applicable to onland Oil & Gas Nomination acreages with NOCs.
2. The terms and conditions of the policy would be as per the model permission letter to be issued by the Government to the concerned PEL/PML holding NOC, a copy of which is placed at Annexure.
3. The right to exploration and exploitation of Shale Gas & Oil will lie with the NOCs holding PEL/PML granted under the Nomination regime. Subject to provisions of section 1(I) of permission letter for grant of Shale Gas and Oil rights, NOCs shall apply for grant of Shale Gas/Oil rights for ML/PELs to be taken up in first phase of assessment within six months of notification of this policy. Permission for ML/PELs to be taken up in subsequent phases shall be applied six months before the respective phase begins. Phasing is proposed since it may not be feasible for NOCs to take up E&P activities for Shale Gas and Oil simultaneously in all nomination blocks.
4. The NOC will be required to undertake a mandatory Minimum Work Program (MWP) in

a fixed timeframe for Shale Gas & Oil exploration and exploitation, so that there is optimum accretion and development of Shale Gas & Oil resources from the area already granted to them.

5. Tax incentives:

- i. Income tax will be payable under IT Act, 1961 at par with the provisions applicable to the Nomination acreages held by the National Oil Companies (ONGC & OIL).
- ii. Full exemption from basic customs duty and additional duty of customs for specified goods required in connection with petroleum operations undertaken under petroleum licenses or mining leases issued on nomination basis, would be available for exploration and exploitation of Shale Gas and Oil under notification No. 12/2012-Custom, dated 17th March, 2012 (Sl. Nos. 356) subject to conditions specified thereunder.
- iii. All goods supplied against International Competitive Bidding are fully exempt from excise duties subject to the condition that such goods are fully exempt from basic customs duty and additional duty of customs when imported into India.

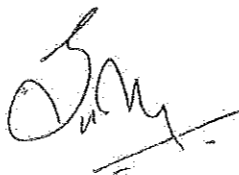
6. The NOC shall submit, on a monthly and annual basis, a report regarding production & sale of Shale Gas and Oil to Directorate General of Hydrocarbon (DGH).

7. The production of Shale Gas and Oil, if any, in such areas would be treated at par with the production of conventional oil & gas for all purposes of exploration license and Mining Lease.

8. Holder of PEL/PML will be responsible for ensuring Health, Safety and Environment (HSE), site restoration and adoption of best industry practices and follow statutory requirements for all purposes under Licence and Mining Lease.

9. Royalty, cess and taxes for Shale Gas and Oil would be payable at par with conventional gas/oil being produced from the respective areas, at the prevailing rate, as applicable.

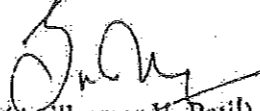
10. As per policy for extension of exploration phases under NELP and pre-NELP Production Sharing Contracts (2006) demonstrable delays on account of getting the Government approvals



/permits/clearances are to be counted as excusable delays. This provision is extended to Shale Gas and Oil exploration by NOCs, in view of the fact that NOCs have been prescribed time limit for appraisal programme as in NELP Contracts.

11. A committee comprising DG-DGH, Joint Secretary and Director concerned in the MOP&NG shall address unforeseen circumstances owing to technical, operational and other impediments, which may adversely affect the timelines proposed in the permission letter. This committee is empowered to approve relaxations to any of the timelines, as may be required for expeditious exploration, development and production of Shale Gas and Oil, with proper justification.

Yours sincerely,

  
(Anilkumar V. Patil)  
Director  
Tel. 23388764

Copy to :

1. CMD, ONGC, New Delhi
2. CMD, OIL, NOIDA, UP

ANNEXURE

PERMISSION LETTER

**PERMISSION FOR GRANT OF SHALE GAS AND OIL  
EXPLORATION/EXPLOITATION RIGHTS**

(For Exploration and Exploitation of Shale Gas and Oil from existing  
Petroleum Exploration Lease (PEL) / Petroleum Mining Lease (PML)  
areas awarded to National Oil Companies (NOCs) under Nomination  
Regime)

Name of PEL/PML :

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PREAMBLE

This permission is granted on \_\_\_\_ day of \_\_\_\_ by the President of India, acting through the \_\_\_\_\_, Ministry of Petroleum and Natural Gas (hereinafter referred to as "the Government") to ONGC / OIL, a Company incorporated under the laws of India having its registered office at \_\_\_\_\_

WHEREAS

1. The Oilfields (Regulation and Development) Act, 1948 (53 of 1948) (hereinafter referred to as "the Act") and the Petroleum and Natural Gas Rules, 1959, made there under (hereinafter referred to as "the Rules") make provision, inter alia, for the regulation of Petroleum Operations and grant of Licenses and Leases for exploration, development and production of Petroleum in India;
2. The Rules provide for the grant of Licenses and Leases in respect of land falling within State boundaries by that State Government with the prior approval of the Central Government;
3. Accordingly a Petroleum Exploration License (PEL) / Petroleum Mining Lease (PML) was granted by the State Government on \_\_\_\_ with respect to the Area referred to as Licensed Area herein after for carrying out petroleum operations;
4. Shale Gas & Oil resources exist in source rocks where permeability of the surrounding rock is too low to enable commercial production, using standard drilling, completion and production techniques and require special techniques for exploitation.
5. The Government desires that Petroleum resources which may exist in the shale formations within the Licensed/leased Area be expeditiously discovered on a fast track and exploited by the Company with the utmost expedition in the overall interest of energy security in accordance with modern oilfield and petroleum industry practices

6. NOW, THEREFORE, in consideration of the premises and covenants and conditions herein contained, IT IS HEREBY conveyed by virtue of this permission that:

i. Under the "Shale Gas and Oil Policy" of Government of India, that provides, inter alia, the terms and conditions for the regulation of Exploration, Development and Production of Shale Gas and Oil, this permission is granted with the exclusive purpose of promoting Shale Gas and Oil operations in existing onland PEL/ PML areas under Nomination acreages with NOCs.

ii. Shale Gas and Oil operations shall be carried out under the terms and conditions stipulated in this Permission Letter.

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SECTION-1

Assessment Phase and Work Programme for Shale Gas and Oil

- I. The Company is permitted three Assessment Phases of a maximum period of 3 (three) years each. Phase-I will commence from the date of this agreement granting permission to the Company. Phase-II will begin after expiry of Phase-I, and Phase-III after expiry of Phase-II. Company shall apply for permission for assessment and exploitation of Shale Gas/Oil at least in the number of blocks specified in the following table:

Company/ Phase	ONGC	OIL
Phase-I	50	5
Phase-II	75	5
Phase-III	50	5

Company will be at liberty to take up PEL/PML areas for assessment in addition to the above. For the purpose of phasing, each PEL/ PML area will be treated as a block.

- II. The Company shall carry out the following with respect to target shale sections, towards the assessment work program during the period:
- A baseline Environment Impact Assessment (EIA) Study, including sourcing of water and its subsequent disposal;
  - G&G studies;
  - Drilling of pilot / test wells;
  - Coring, Hydro-fracturing etc;
  - Geo-Chemical studies;
  - Geo-Mechanical / Geo-Hazard / Geo-technical studies;
  - Resource Assessment for Shale Gas and Oil.

The company may also carry out assessment work in addition to the above, if required for proper assessment. The Assessment phase will be for exploration and deciding the commercial viability of Shale Gas / Oil in the block.

- III. During the Assessment Phase, the Company shall drill, as Committed Work Program, at least 1 (one) Pilot well in single PEL/PML block having a contiguous area up to 200 sq. km and at least 2 (two) Pilot wells in single PEL/PML block having a contiguous area of more than 200 sq. km. These



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- wells constituting the Committed Work Program shall penetrate the target shale horizon(s) to assess the potential for Shale Gas and Oil.
- IV. The Company undertakes to complete the Committed Work Programme during the Assessment Phase. In the event that the Company fails to fulfil the Committed Work Programme for any reason whatsoever, the Company shall pay to the Government, within 60 days following the end of Assessment Phase an amount which shall be equivalent to Liquidated Damages (LD) of US\$ 0.25 MM per PEL/ PML area. Assessment Phase can be extended by 1 year by payment of LD as stated.
- V. Withdrawal from Shale Gas and Oil operations after G&G studies, without LD would be permitted in case the assessment does not establish Shale Gas and Oil resources. Withdrawal would be permitted in consultation with DGH.
- VI. The work program during the Assessment Phase shall be submitted to DGH for monitoring and at the end of Assessment Phase; the Company shall submit to DGH, a report along with all the required data giving details of the work carried out in the Assessment Phase.
- VII. Upon completion of Assessment Phase, the Company shall prepare an estimate of potential production of Shale Gas and Oil envisaged to be achieved vis-a-vis WP, if any, and submit Field Development Plan (FDP) to DGH within a period of 12 (twelve) months. The yearly production profile with number of producing wells shall also be submitted.
- VIII. Upon submission of the yearly production profile vis-a-vis WP, the Company shall commence development activities within 6 months. In case the Company is unable to commence the development and production operations within the stipulated time period, unless agreed otherwise, the Company shall be liable to pay an amount equivalent to 1/10<sup>th</sup> royalty amount on the total quantity of committed Annual production on pro-rata basis to GOI.
- IX. The Company may revise production profile, as required by the geological behaviour of shale formation and such revised production profile shall be submitted to DGH.

**SECTION-2**  
**OTHER TERMS AND CONDITIONS**

Shale Gas and Oil operations shall be subject to following other terms and conditions:

- I. If the PEL / PML is approaching the end on the date of this Agreement for Shale Gas and Oil operations, then in such cases, the PEL / PML shall be automatically extended and will become co-terminus with the Assessment Phase for Shale Gas and Oil operations. However, this extended period will only be meant for exploration related to Shale Gas and Oil, while exploration for conventional oil and gas would be as per the existing PEL/PML terms and conditions;
- II. Exploration relating to Shale Gas and Oil will be allowed to continue during the PML even after the Assessment Phase is over ;
- III. The Company shall submit, on a monthly and annual basis, a report regarding production & sale of Shale Gas & Oil to DGH;
- IV. Production of Shale Gas and Oil, if any, shall be treated at par with the production of conventional oil and gas. The revenues and expenditures relating to Shale Gas & Oil operations shall be clubbed with those relating to conventional oil and gas and the provisions of PEL / PML shall apply mutatis mutandis;
- V. **Tax incentives:**
  - a. Income tax will be payable under IT Act, 1961 at par with the provisions applicable to the Nomination acreages held by the National Oil Companies (ONGC & OIL).
  - b. Full exemption from basic customs duty and additional duty of customs for specified goods required in connection with petroleum operations undertaken under petroleum licenses or mining leases issued on nomination basis, would be available for exploration and exploitation of Shale Gas and Oil under notification No. 12/2012-Custom, dated 17<sup>th</sup> March, 2012 (Sl. Nos. 356) subject to conditions specified there under.
  - c. Although there is no specific excise duty exemption in respect of domestic procurements for conventional oil and gas blocks , all goods

supplied against International Competitive Bidding are fully exempt from excise duties subject to the condition that such goods are fully exempt from basic custom duty and additional duty of customs when imported to India.

**SECTION-3**  
**RESPONSIBILITIES AND LIABILITIES**

The Company shall be liable to conduct safe petroleum operations and shall adhere to Health, Safety and Environment (HSE), site restoration and best industry practices as under:

- I. Petroleum operations shall be subject to guidelines, practices and regulations laid down by statutory agencies (DGMS etc.). New rules / guidelines, whenever notified by competent authority, in this regard, shall also become applicable. The installations/ areas where Shale Gas and Oil will be produced / processed shall be subject to audit by statutory agencies, for ensuring compliance of all safety measures and standards set for the industry.
- II. The Company shall be responsible for all activities related to Health, Safety and Environment (HSE) and site restoration in respect of Shale Gas and Oil operations in line with guidelines/ rules stipulated by MoPNG, Ministry of Environment and Forests (MoEF) or by any statutory authority from time to time.
- III. Multiple casing programme with competent and reliable cementing (at least 2 casings) as per Good International Petroleum Industry Practices (GIPIP), at a depth deeper by 100m or as specified from time to time than the deepest fresh water aquifer, shall be a mandatory requirement across all sub-surface fresh water aquifers identified by local / government bodies, in all the Shale Gas and Oil wells, as well as, the effluent disposal wells.
- IV. The Company shall follow GIPIP as being brought out by reputed international organizations viz. American Petroleum Institute (API), Society of Petroleum Engineers (SPE), International Standards Organization (ISO), etc., including API Guidance document HF3, January 2011 "Practices for Mitigating Surface Impacts Associated with Hydraulic Fracturing", along with API HF2-June 2010 and API HF1-October 2009, as amended and updated from time to time.
- V. The Company shall disclose the fracture fluid content, volume and chemical composition for both injection and flow back fluids to the statutory agencies such as MoEF, State Pollution Control Board-SPCB etc. and DGH on a

regular basis and may also disclose such details on the Company's website for public viewing.

- VI. EIA studies would be carried out by Competent agencies from the list of agencies authorised by MOEF, at the cost of the project proponent.
- VII. Company will need to take care of the following before Shale Gas and Oil exploration and exploitation in any field:
- (i) Adequate availability of water suitable for fracking. Approval of the Central Ground Water Authority (CGWA), State Ground Water Authority (SGWA) and other regulatory institutions will be a pre-requisite.
  - (ii) Taking approval of the concerned State Pollution Control Board (SPCB) for the proposed treatment and disposal of waste water and ensuring required action. This should be monitored on continuous real time basis. The project proponent will need to disclose the chemical composition of fracking fluid upfront.
  - (iii) In case of any seismic effects on account of fracking, the project would need to be reviewed by DGH in consultation with concerned expert agencies.
- VIII. In addition to above, Para 1.3 of guidelines issued under the Forest (Conservation) Act, 1980 provides as below:
- (i) Provisions of the Forest (Conservation) Act, 1980 will not be applicable as long as Shale Gas and Oil exploration and exploitation activities do not involve any clearing of forest or cutting of trees and operations are restricted to clearing of bushes and lopping of tree branches for purpose of sighting.
  - (ii) Prior permission of the Central Government is mandatory if, Shale Gas and Oil exploration activities involve clearing of forest area or felling of trees.
  - (iii) Shale Gas and Oil exploration and exploitation activities shall not be carried out in wildlife sanctuaries, national parks and sample plots demarcated by the Forest Department without obtaining the prior

approval of the Central Government whether or not felling of trees is involved.

- (iv) Prior clearance of the Central Government needs to be obtained wherein actual construction activity is to be carried out even if such work does not require felling of trees.
  - (v) Prior approvals of Standing Committee of the National Board for Wildlife (NBWL) and Hon'ble Supreme Court also need to be obtained in case exploration and exploitation of Shale Gas and Oil involve use of land located within the protected areas (National Parks and wildlife sanctuaries).
  - (vi) Prior approval of Standing Committee of the NBWL would be required, in case exploration and exploitation of Shale Gas and Oil involve use of land located within eco-sensitive zones around the boundaries of protected areas (National Parks and wildlife sanctuaries).
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