IND AS-106 EXPLORATION FOR AN EVALUATION OF MINERAL RESOURCES
Areas Covered

- Introduction to Oil & Gas Business
- Accounting as per Guidance Note/ Ind AS
- Ind AS 106
- Comparison between Indian GAAP and IND AS
Introduction to Oil and Gas Business...
Oil & Gas Business

Characteristics:

• High exploration risk with low probability of finding reserves.
• Significant environmental risks.
• High Initial Capital outlay.
• CAPEX does not always result in accumulation/creation of assets.
• Exploration rights are given by the Government.
• Subject to rapid market changes in supply and demand.
A fuel which is chemically a complex mixture of hydrocarbons, formed from organic remains by the action of heat and pressure over millions of years; known as natural or crude oil.

A fuel which includes both manufactured gas, derived from solid or liquid fossil fuels, and natural gas, drawn from existing gaseous subterranean accumulations.
Shale gas refers to natural gas that is trapped within shale formations. Shales’ are fine-grained sedimentary rocks that can be rich resources of petroleum and natural gas. Sedimentary rocks are rocks formed by the accumulation of sediments at the Earth's surface and within bodies of water.
Awarding a Block

• The first step in the process is the application to the GOI to bid for blocks. Application is done currently under the NELP (New Exploration Licensing Policy) issued by the Government Of India.

• **Main parameters considered for evaluation of bids are as follows:**
  
  • Technical capability of the bidding company/consortium
  • Operatorship experience
  • Financial capability of the bidding company/consortium
  • Work programme
  • Fiscal package
  • Government may also take into account the past performance of the company including the track record of the company or the consortium in respect of court cases against it or any other basis and on this consideration or any other consideration, at the sole discretion of the Government, it may accept or reject any or all bids.

• A **Production Sharing Contract (PSC)** is entered into with the Government once the block is awarded to the Company.

• The PSC is the base document which mentions all the regulations that needs to be followed.
Activities in Oil & Gas

- Acquisition Activities
- Exploration and Evaluation Activities
- Development Activities
- Production Activities
- Service & Maintenance Activities
- Abandonment of Block
Flow of Activities

- **Acquisition Activities:** Activities carried out by an E&P enterprise towards the acquisition of right to explore, develop and produce oil and gas constitute acquisition activities.

- **Exploration & Evaluation Activities:** Exploration activities cover the prospecting activities conducted in the search for oil and gas. In the course of an appraisal programme these activities include but are not limited to aerial, geological, geophysical and seismic surveys, analysis, studies and their interpretation.

- **Development Activities:** Development activities cover the activity for completion of successful exploration wells, laying of gathering lines, construction of offshore platforms and installations, and other producing and injection facilities required to produce, process and transport oil or gas into main oil storage or gas processing facilities, either onshore or offshore, including laying of infield pipelines, the installation of the said storage or gas processing facilities.

- **Production Activities:** Production activities consist of pre-wellhead (e.g., lifting the oil and gas to the surface, operation and maintenance of wells, extraction rights, etc.) and post-wellhead (e.g., gathering, treating, field transportation, field processing, etc., upto the outlet valve on the lease or field production storage tank, etc.,) activities for producing oil and / or gas.
Guidance Note on Accounting for Oil & Gas Producing Activities
Accounting Methods

Two methods are allowed for accounting of acquisition, exploration and development costs incurred in O&G activities:

• **Successful Efforts Method (SEM):**
  It tries to establish a direct relationship between costs incurred and the identification of reserves and suggest capitalisation of such direct costs.

• **Full cost Method (FCM):**
  All costs incurred are regarded as integral part to the operation of the company and thereby associated with the Company’s proved reserves within a relatively large geopolitical cost center.

• The Successful Efforts Method is internationally recognized and followed by all the major players in the Oil & Gas Business.
Accounting Treatment

Under the “Full Cost Method”, in respect of a cost centre, the following costs should be treated as capital work-in progress or intangible asset under development when incurred:

- All acquisition costs;
- All exploration costs; and
- All development costs

- All costs other than the above should be charged as expense when incurred.

**Cost centre** is a unit identified to capture costs based on suitable criteria such as geographical or geological factors. Cost centre is not larger than a field in case of Successful Efforts Method and under Full Cost Method, the cost centre is not normally smaller than a country except where warranted by major difference in economic, fiscal or other factors in the country.
Accounting Treatment

• Under the “Successful efforts method”, those costs that directly lead to the discovery, acquisition and development of oil & gas reserves are capitalized to that cost centre.

• Generally, cost centre under SEM is not larger than a field.

• The following costs should be treated as CWIP or intangible asset under development as and when incurred:

  ➢ All acquisition costs
  ➢ Exploration costs:
    ✓ costs of drilling and equipping exploratory and appraisal wells and related analysis
    ✓ costs of drilling exploratory-type stratigraphic test wells.
  ➢ All development costs

• All other costs should be charged as expense as and when incurred.
Depreciation/ Depletion Working

• In case of successful efforts method, the depreciation charge or the Unit Of Production (UOP) charge for the *acquisition cost* within a cost centre is calculated as under:

\[
UOP \text{ charge for the period} = UOP \text{ rate} \times Production \text{ for the period}
\]

\[
UOP \text{ rate} = \frac{Acquisition \text{ cost of the cost centre}}{Proved \text{ Oil and Gas Reserves}}
\]

• The depreciation charge or the Unit of Production charge for all *capitalised costs excluding acquisition cost* within a cost centre is calculated as under:

\[
UOP \text{ charge for the period} = UOP \text{ rate} \times Production \text{ for the period}
\]

\[
UOP \text{ rate} = \frac{Depreciation \text{ base of the cost centre}}{Proved \text{ Developed Oil and Gas Reserves}}
\]
• Depreciation base of the cost centre should include:-
  o Gross block of the cost centre (excluding acquisition costs);
  o Estimated dismantlement and abandonment costs net of estimated salvage values pertaining to proved developed oil and gas reserves; reduced by the accumulated depreciation and any accumulated impairment charge of the cost centre.

• Proved Developed Oil and Gas Reserves for this purpose comprise proved developed oil and gas reserves estimated at the end of the period as increased by the production during the period.
Abandonment Cost

• Abandonment costs are the costs incurred on discontinuation of all operations and surrendering the property back to the owner.

• Costs includes plugging and abandoning of wells, dismantling of wellheads, production and transport facilities and restoration of producing areas.

• As per Guidance Note, Abandonment cost should not be discounted to its present value whereas as per Ind AS 37 it should be discounted to its present value.
Time of Capitalization

• When *any well in a “Cost Centre” is ready to commence commercial production for the first time*, the costs referred to all the proved oil and gas reserves in that cost centre should be capitalized from capital work-in-progress/intangible asset under development to the gross block of assets as Producing properties.

• In respect of oil and gas reserves- *proved subsequently* the capital work-in-progress corresponding should be transferred to the gross block of assets as and when so determined.

• Costs incurred in respect of dry wells shall be expensed out under SEM, whereas under FCM it will be capitalised.
Indian Accounting Standard (Ind As) 106-
Exploration for and Evaluation of Mineral Resources
Objective....

To specify the financial reporting for the *exploration for and evaluation of mineral resources.*
Scope

• It applies only to exploration and evaluation expenditures that it actually incurs.

• Ind AS 106 does not apply to:

  ➢ Expenditure incurred in the development of Mineral resources after commercial viability has been determined.

  ➢ Costs incurred before the right to explore has been established.

• The Ind AS 106 does not address other aspects of accounting by entities engaged in the exploration for and evaluation of mineral resources.
Para 10 should be followed compulsory- i.e., in the absence of an Ind AS that specifically applies to a transaction, other event or condition, management shall use its judgment in developing and applying an accounting policy.

Temporary exemption from IND AS 8 paragraphs 11 and 12. As they specify sources of authoritative requirements and guidance that management is required to consider in developing an accounting policy for an item if no Accounting Standard applies specifically to that item.
Examples of Various E&E Costs

- Acquisition of Rights to Explore
- Various studies
- Exploratory Drilling
- Technical Feasibility
- Commercial viability
- Sampling
- Trenching
Measurement...

- **At recognition**
  
- Exploration and evaluation assets shall *be measured at cost*.
  
- An entity shall determine an accounting policy specifying expenditures to be recognised as EEA’s and apply the policy consistently.
After recognition

- Either the *cost model or the revaluation model* in the exploration and evaluation assets.

- It may apply the revaluation model specified in *Ind AS 16, Property, Plant and Equipment, or Ind AS 38, Intangibles*, and shall be consistent with the classification of the assets.
Change in accounting policies

• An entity may change its accounting policies for exploration and evaluation expenditures if the changes make the FS more relevant to the economic decision making needs of users.

• The above change should be as per relevance and reliability criteria as defined in Ind AS 8.
Presentation

• An entity shall classify exploration & evaluation assets as tangible or intangible according to the nature of the assets acquired & apply the same consistently.

• An EEA shall no longer be classified as such when the technical feasibility and commercial viability of extracting a mineral resource are demonstrable and EEA shall be assessed for impairment, and any impairment loss recognised, before reclassification.
Impairment....

• An Entity shall assess the recognized Exploration & Evaluation Assets (EEA) for Impairment *annually* when facts and circumstances suggest that the carrying amount of an EEA may exceed its recoverable amount and it shall also measure, present and disclose any resulting impairment loss in accordance with Ind AS 36.
• One or more of the following facts and circumstances indicate that an entity should test EEAs for impairment (the list is not exhaustive):

  – the period for which the entity has the right to explore in the specific area has expired during the period or will expire in the near future, and *is not expected to be renewed.*

  – substantive expenditure on further exploration for and evaluation of mineral resources *in the specific area is neither budgeted or planned.*
Impairment…..

- exploration for and evaluation of mineral resources in the specific area *has not led to the discovery of commercially viable quantities* of mineral resources and the entity has decided to discontinue such activities in the specific area.

- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, *the carrying amount of the EEA is unlikely to be recovered in full from successful development or by sale.*
Impairment:

- Specifying the level at which EEA’s are assessed for Impairment:
  
  – An entity shall determine an accounting policy for allocating EEA’s to Cash-Generating Units (CGU) or groups of cash-generating units for the purpose of assessing such assets for impairment. *(CGUs can be Aggregated)*

  – Each CGU or group of CGUs to which an EEA is allocated shall not be larger than an Operating segment determined in accordance with Ind As 108- Operating Segments.
Disclosure:

- Accounting policies for exploration and evaluation expenditures including the recognition of exploration and evaluation assets.

- The amounts of assets, liabilities, income, and expense and operating and investing cash flows arising from the exploration for and evaluation of mineral resources.
### Comparison

<table>
<thead>
<tr>
<th>Exploration for and Evaluation of Mineral Resources - primary Literature</th>
<th>Indian GAAP - Guidance Note on Accounting for Oil and Gas Producing Activities (Revised 2013).</th>
<th>Ind AS 106 - Exploration for and Evaluation of Mineral Resources</th>
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<tbody>
<tr>
<td><strong>General</strong></td>
<td>As per the guidance note, there are two alternative methods for accounting for acquisition, exploration and development costs, viz. the Successful Efforts Method or the Full Cost Method. The guidance note recommends the Successful Efforts Method, though full cost method is also permitted.</td>
<td>Exploration and evaluation assets are measured at cost or revaluation less accumulated amortisation and impairment loss. An entity determines the policy specifying which expenditure is recognized as exploration and evaluation assets.</td>
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<td>Impairment</td>
<td>AS 28, Impairment of Assets is applicable irrespective of the method of accounting used.</td>
<td>Ind AS 36 – Impairment of Assets is applicable. However an entity should determine an accounting policy for allocating exploration and evaluation assets to cash-generating units or groups of cash-generating units for the purpose of assessing such assets for impairment. Each cash-generating unit or group of units to which an exploration and evaluation asset is allocated should not be larger than an operating segment determined in accordance with Ind AS 108 – Operating Segments. The standard requires disclosure of information that identifies and explains the amounts recognized in the financial statements arising from the exploration for and evaluation of mineral resources.</td>
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<tr>
<td>Disclosures</td>
<td>Disclosure as per Guidance Note is explained in the next slide.</td>
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Disclosure as per Guidance Note:

- The method of accounting followed.
- Net quantities of an enterprise’s interests in proved reserves and proved developed reserves of (a) oil (including condensate and natural gas liquids) and (b) gas, as at the beginning and additions, deductions, production and closing balance.
- The reporting of reserve quantities should be stated in metric tonnes for oil reserves and cubic meters for gas reserves.
- Description and net quantities of an enterprise’s interest in reserves used as a basis for impairment assessment, if applicable.
- Basis of determination of cash generating unit used for impairment assessment purposes.
- Frequency of reserve evaluation, principal assumptions used and involvement of any external expert(s), if used.
- Exploration cost written-off during the period.
- Explanation of changes in reserve estimates.
Thank You...