Penetapan Tarif Gas

Seminar Keselamatan dan Perundangan Gas Berpaip
13 April 2017
1. **Tariffs and charges** under third party access regulatory framework
2. **Main changes** on gas pricing and tariff under third party access regulatory framework
3. Determination of existing GMB’s natural gas selling price
4. **Information on gas prices and facility tariffs**
Tariffs and charges under third party access regulatory framework
Tariffs and charges under third party access regulatory framework
- Power to fix tariffs and charges

LEGISLATION BEFORE ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

13. (1) A licensee may, in relation to the service of supplying gas, levy such tariffs as may be approved in writing by the Minister from time to time having regard to any condition in the licence which relates to the supply of gas in different areas and circumstances.

LEGISLATION AFTER ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

13. (1) The Commission, with the approval of the Minister, may determine tariffs and charges to be levied, by –

(a) a regasification, transportation or distribution licensee in respect of the utilization of their facilities for regasification, transportation or distribution of gas; and

(b) a retail licensee in respect of the sale or use of gas through the retail licensee’s piping system to the premises of a consumer.
### Tariffs and charges under third party access regulatory framework
- Definition of tariffs

<table>
<thead>
<tr>
<th>Definition of Tariff Before Enforcement of Gas Supply (Amendment) Act 2016</th>
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</thead>
<tbody>
<tr>
<td><strong>DEFINITION OF TARIFF BEFORE ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016</strong></td>
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<tr>
<td>Section 13(1) - Tariff refers to <strong>service price</strong> imposed by regasification/transportation/distribution licensee to the user of the gas facility (tolling fee).</td>
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<td>Section 13(1)(a) - Tariff refers to <strong>service price</strong> imposed by gas utility licensee.</td>
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<tr>
<td>Section 13(1)(b) - Tariff refers to <strong>gas selling price</strong> imposed by retail licensee to the retail customers.</td>
</tr>
</tbody>
</table>
Tariffs and charges under third party access regulatory framework
- Relevant licensees

### TYPE OF LICENSEE BEFORE ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

- Regasification licensee
  - e.g. Regas Terminal (Sg. Udang) Sdn Bhd

### TYPE OF LICENSEE AFTER ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

- Gas utility licensee
  - e.g. Gas Malaysia Bhd, Sabah Energy Corp. Sdn Bhd

- Regasification licensee
  - e.g. Regas Terminal (Sg. Udang) Sdn Bhd

- Transportation licensee
  - e.g. Petronas Gas Bhd, Petronas Carigali Sdn Bhd

- Distribution licensee
  - e.g. Gas Malaysia Bhd, Sabah Energy Corp. Sdn Bhd

- Retail licensee
  - e.g. Owner of piping system at shopping complex, residential area, etc.
Main changes on gas pricing and tariff under third party access regulatory framework
Main changes on gas pricing and tariff under third party access regulatory framework
- Transition period

Before Enforcement of Gas Supply (Amendment) Act 2016

GMB’s natural gas selling price is regulated

Government decisions:
- Increase of RM1.50/mmBtu every 6 months for regulated gas price (input gas cost) until it reaches “reference market price”.
- GMB’s gas selling prices in RP1 (2017-2019) have been determined on 21 December 2016.
- GCPT mechanism to be implemented every 6 months to pass-through the differential in input gas cost.

After Enforcement of Gas Supply (Amendment) Act 2016

GMB’s natural gas selling price will be based on willing buyer – willing seller.
Main changes of third party access regulatory framework on gas pricing and tariff
- Transition period

**BEFORE ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016**

- LPG selling price is determined by market (excl. GMB’s low-end residential customers)

**AFTER ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016**

- LPG selling price to be determined by retail licensee based on market force (willing buyer-willing seller)
- Retail licensee to submit information on monthly LPG selling price on quarterly basis.

If LPG selling price is not reasonable, the LPG selling price may determined by ST with approval of Minister.
(To protect the consumer’s interest as the retail consumers do not have the choice to buy gas from other gas supplier)
Main changes of third party access regulatory framework on gas pricing and tariff
- Transition period

BEFORE ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

Facility tariffs (e.g. regasification tariff, transportation tariff and distribution tariff) are determined by owner of the facility

- Existing players have 12 months grace period to apply relevant licence.
- The existing facility tariffs to be used until further revised after relevant licence granted.

AFTER ENFORCEMENT OF GAS SUPPLY (AMENDMENT) ACT 2016

Facility tariffs (e.g. regasification tariff, transportation tariff and distribution tariff) to be determined by ST with approval of Minister
Determination of existing GMB’s natural gas selling price
GMB’s natural gas selling price
- Natural gas selling price is reviewed every 6 months (H1 2017- H2 2019)

**Implementation of Gas Cost Pass-Through (GCPT) Mechanism**
- GMB selling price will be reviewed every 6 months to reflect changes in input gas cost.
GMB’s natural gas selling price
- Components in natural gas selling price

2 COMPONENTS

1. **Base tariff:**
   - Base tariff is to reflect forecast cost and required return on investment in carrying out gas distribution activity in a regulatory period.
   - Base tariff will be reviewed in next regulatory period for changes in cost parameters.

2. **GCPT:**
   - Tariff revisions made to reflect gas cost differential (between the forecast and actual gas price/volume) that is beyond the control of utility.
   - GCPT to be implemented every 6 months to pass through the gas cost differential for the preceding 6-month period.
GMB’s natural gas selling price

- **Component 1: Base tariff** is derived from annual revenue requirement’s building block

\[
\text{Base tariff} = \frac{\text{ARR}}{\text{Volume delivered}}
\]

Where:

- **ARR** = Annual Revenue Requirement
- **Volume delivered**

**Key Formulae**

\[
\text{ARR} = \text{Operating expenses (incl. gas cost)} + \text{Depreciation} + \text{Taxation} + \text{Efficiency Carry-over amount}
\]

**Diagram Details**

- **WACC** (Weighted Average Cost of Capital)
- **Return on Regulated Asset Base (RAB)**
- **Operating expenses (incl. gas cost)**
- **Depreciation**
- **Taxation**
- **Efficiency Carry-over amount**

**Note:**

- Base tariff = ARR / Volume delivered
- WACC is weighted average cost of capital
GMB’s natural gas selling price

- Gas cost is the biggest component in GMB’s base tariff

Component of base tariff (H1 2017)

- Operating expenses, 95.5%
  - Taxation, 1.0%
  - Depreciation, 1.2%
  - Return on RAB, 2.3%
  - Return on RAB, 2.3%

Component of operating expenses (H1 2017)

- Gas Cost, 96.6%
- Administration, HR, etc., 2.5%
- Unaccounted for Gas/Losses, 0.9%
### GMB’s natural gas selling price

- Regulated and LNG indexed prices in Gas Cost (Weighted average gas cost)

#### LNG indexed price
- Linked to weighted average Malaysia’s LNG export price ex-Bintulu with discount and delivery cost
- Fluctuate every month
- Price for Mar 2017 -
  - Projected: RM29.15/mmBtu
  - Actual: RM31.78/mmBtu

#### Regulated price
- Increase RM1.50/mmBtu every 6 months until it reaches market price
- Price for Jan-June 2017 period – RM23.05/mmBtu

### Gas Volume (mmscfd)

<table>
<thead>
<tr>
<th></th>
<th>Volume at LNG indexed price</th>
<th>Volume at regulated price</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 2016</td>
<td>71</td>
<td>382</td>
</tr>
<tr>
<td>H2 2016</td>
<td>101</td>
<td>362</td>
</tr>
<tr>
<td>H1 2017</td>
<td>109</td>
<td>342</td>
</tr>
<tr>
<td>H2 2017</td>
<td>136</td>
<td>322</td>
</tr>
<tr>
<td>H1 2018</td>
<td>166</td>
<td>300</td>
</tr>
<tr>
<td>H2 2018</td>
<td>187</td>
<td>300</td>
</tr>
<tr>
<td>H1 2019</td>
<td>190</td>
<td>300</td>
</tr>
<tr>
<td>H2 2019</td>
<td>209</td>
<td>300</td>
</tr>
</tbody>
</table>
GMB’s natural gas selling price
- Trend of regulated price and GMB’s selling price since October 2002

Regulated Price/GMB’s Selling Price (RM/mmBtu)

Note:
1. In 2011, gas subsidy rationalisation programme was launched by government whereby gas prices were to be increased by RM3.00/mmBtu every 6 months.
2. Effective 2014, gas prices were increased by RM1.50/mmBtu every 6 months.
3. GMB tariff comprised of regulated gas cost, LNG cost (effective 2014), distribution cost and return.
4. : Regulated gas price revision under gas subsidy rationalisation programme.
GMB’s natural gas selling price
- Base tariff and GCPT components for H1 2016 - H1 2017 period

1. Base Tariff (RM/mmBtu)

   - H1 2016: 22.59
   - H2 2016: 25.98
   - H1 2017: 26.71

   Trial Period

2. GCPT (RM/mmBtu)

   - H1 2016: 2.94
   - H2 2016: 1.07

   Trial Period

- GMB's natural gas selling price - Base tariff and GCPT components for H1 2016 - H1 2017 period

   - Effective Selling Price (RM/mmBtu)
     - H1 2016: 25.53
     - H2 2016: 27.05
     - H1 2017: 26.31

   - Base Tariff (RM/mmBtu)
     - H1 2016: 22.59
     - H2 2016: 25.98
     - H1 2017: 26.71

   - Surcharge
     - H1 2017: 0.40

   - Rebate
     - H1 2017: 0.40

   Current Average Tariff
   - H1 2017: 26.31

   Effective Selling Price
   - H1 2016: 25.53
   - H2 2016: 27.05
   - H1 2017: 26.31

   % Change
   - H1 2016: 5.95%
   - H2 2016: -2.72%
Information on gas prices and facility tariffs
Information on Gas Prices and Facility Tariffs
- Available at ST’s website

Tariff for the utilization of gas facilities

1. Regasification terminal

<table>
<thead>
<tr>
<th>Gas Facility</th>
<th>Location</th>
<th>Tariff</th>
<th>Applicable Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regasification terminal</td>
<td>Sungai Udang, Melaka</td>
<td>-TBUs -</td>
<td>-TBUs -</td>
</tr>
</tbody>
</table>

2. Transmission pipeline

<table>
<thead>
<tr>
<th>Gas Facility</th>
<th>Location</th>
<th>Transportation Tariff</th>
<th>Applicable Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission pipeline</td>
<td>Peninsular Malaysia</td>
<td>RM1.248/GJ(^1)</td>
<td>Until further revised by Commission</td>
</tr>
</tbody>
</table>

3. Distribution pipeline

<table>
<thead>
<tr>
<th>Gas Facility</th>
<th>Location</th>
<th>Distribution Tariff</th>
<th>Applicable Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution pipeline</td>
<td>Peninsular Malaysia</td>
<td>RM1.86/immBtu</td>
<td>January 2017 - June 2017</td>
</tr>
</tbody>
</table>

Notes:
\(^1\) source: PETRONAS Gas Berhad Network Code for Peninsular Gas Utilisation Transmission System

As of March 31, 2017
Information on Gas Prices and Facility Tariffs
- Available at ST’s website
Thank You