Presentation on City Gas Distribution (CGD) Pipeline Network Projects in Smart Cities

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Ministry of Petroleum & Natural Gas
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CGD network supplies natural gas to

- Domestic PNG
- CNG (Transport)
- Industrial PNG
- Hotels /Commercial PNG
Potential Benefits of Natural Gas (NG) Usages through CGD networks

• Natural gas is used as a low carbon cooking and transportation fuel compared to alternative fuels like LPG, Petrol, Diesel, and other traditional fuels.

• CGD networks ensure uninterrupted supply of ecofriendly cooking fuel in form of PNG and transportation fuel to vehicle in the form of CNG and thus benefiting public health at large.

• Underground CGD networks will help in freeing up congested urban city roads from LPG cylinder distribution tempos/Motor vehicles.

• PNG expansion will free up subsidized LPG cylinders from urban areas so that the same can be further distributed to rural/remote areas and it will ensure the continuous cooking fuel supplies to households.

• PNG expansion have a potential to generate new employment opportunity.
Evolution of CGD Projects in India

- Way back in 1857, Piped Coal Gas distribution started in Kolkata by Oriental Gas Company Ltd. (OGCL) to industries and domestic consumers.
- In 1950’s, Vadodara Mahanagar Seva Sadan (VMSS) developed PNG network for domestic households in the city of Vadodara (Gujarat).
- In 1980, British Gas (BG) group established Gujarat Gas Company Ltd for developing CGD networks in the city of Surat and Bharuch (Gujarat).
- In 1990, Tripura Natural Gas Corporation Ltd (TNGCL) started PNG network in Agartala (Tripura).
- In mid-1990’s, GAIL formed 2 JVs with other companies, namely, IGL & MGL for developing CGD networks in Delhi and Mumbai respectively.
- Later on, CGD networks in other cities namely Kanpur, Pune, Lucknow, Agra, Bareilly, Hyderabad, Indore and Gwalior were also approved.
- In 2005, GSPC Gas Co. Ltd, established by Gujarat State Govt., started development of CGD network in Hazira (Surat) and other part of Gujarat.
CGD network and its expansion

- At present, 25 CGD Entities are either operating or developing CGD networks in 67 Cities/Geographical Areas (GAs) in 18 States/UTs of the country -

  - Present CGD infrastructure in the country -
    - PNG (Domestic) household connections : 30.22 Lakh
    - PNG (Industrial & Commercial) connections : ~ 28,800
    - CNG Stations : ~ 1015
    - No. of CNG Vehicles : ~ 25.5 Lakh
    - Domestic Gas consumption in PNG and CNG: ~ 9.16 MMSCMD*
    - Imported RLNG consumption in industries : ~ 7.14 MMSCMD *
        (* in FY 2014-15)

  - Under Petroleum & Natural Gas Regulatory Board (PNGRB) Act, 2006, PNGRB has invited bids for 34 more new GAs under 6th CGD bidding round. This round is expected to be concluded by Dec.-2015/Jan.2016.
Trends of PNG (Domestic) Connections

Cumulative progress of PNG connections

At the end of Financial Year

Cumulative PNG(D) connections (in Lakh)

- 2011: 15.67
- 2012: 18.9
- 2013: 22.22
- 2014: 25.42
- 2015: 28.69
- Oct-15: 30.22

Region-wise PNG(D) distribution

- Delhi & NCR: 20%
- Mumbai & Pune: 28%
- Gujarat: 47%
- Others: 5%
Actions initiated by MoP&NG to expedite CGD networks roll-out

- Accorded Highest priority in domestic gas allocation to PNG(D) and CNG(T) segments of CGD networks and placed under No-cut category.

- Presently, Domestic gas is being supplied to meet entire requirement of PNG(D) and CNG(T) segments of CGD networks at Uniform prices (excluding transportation tariff and Taxes).

- Expedited the process of granting new CGD networks in synchronization with the availability of nearby trunk gas pipeline so as to ensure gas supplies to CGD network.

- CGD entities are developing customer interactive web-portals with online facilities, like application for PNG connection, tracking the status of application, grievance lodging and redressal, e-billing and e-payment etc.
### Smart Cities covered or proposed to be covered with CGD networks

<table>
<thead>
<tr>
<th>Nos. of Cities approved under Smart City Plan in Stage 1</th>
<th>Exiting nos. of Cities covered/approved for CGD networks</th>
<th>Proposed to be covered in 6th Round of CGD Bidding</th>
</tr>
</thead>
<tbody>
<tr>
<td>98</td>
<td>35</td>
<td>3</td>
</tr>
</tbody>
</table>

- Remaining potential Smart Cities will be considered for development of CGD networks in synchronization with development of envisaged National Gas Grid.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of State/UT</th>
<th>Existing and proposed Cities with CGD</th>
<th>Proposed in 6th round</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>Kakinada</td>
<td>-</td>
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<tr>
<td>2</td>
<td>Chandigarh</td>
<td>Chandigarh</td>
<td>-</td>
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<tr>
<td>3</td>
<td>Dadra &amp; Nagar Haveli</td>
<td>Silvasa (Dadra &amp; Nagar Haveli)</td>
<td>-</td>
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<tr>
<td>4</td>
<td>Delhi</td>
<td>NDMC (Delhi)</td>
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<tr>
<td>5</td>
<td>Goa</td>
<td></td>
<td>Panaji (North Goa)</td>
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<tr>
<td>6</td>
<td>Gujarat</td>
<td>Gandhinagar, Ahmedabad, Surat</td>
<td>Dahod</td>
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<td></td>
<td></td>
<td>Vadodara, Rajkot</td>
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<td>7</td>
<td>Haryana</td>
<td>Faridabad</td>
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<td>8</td>
<td>Karnataka</td>
<td>Belagaum, Dharwad, Tumakuru</td>
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<td>9</td>
<td>Kerala</td>
<td>Kochi (Ernakulum)</td>
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<td>10</td>
<td>Madhya Pradesh</td>
<td>Indore including Ujjain, Gwalior,</td>
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<td>11</td>
<td>Maharashtra</td>
<td>Navi Mumbai, Thane, Greater Mumbai,</td>
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<tr>
<td></td>
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<td>Kalyan-Dombivali, Pune</td>
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<td>12</td>
<td>Punjab</td>
<td>Ludhiana, Jalandhar, Amritsar</td>
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<td>13</td>
<td>Rajasthan</td>
<td>Kota</td>
<td></td>
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<tr>
<td>14</td>
<td>Telangana</td>
<td>Greater Hyderabad (Hyderabad)</td>
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<tr>
<td>15</td>
<td>Tripura</td>
<td>Agartala</td>
<td></td>
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<tr>
<td>16</td>
<td>Uttar Pradesh</td>
<td>Moradabad, Bareilly, Jhansi, Kanpur,</td>
<td>Saharanpur</td>
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<tr>
<td></td>
<td></td>
<td>Allahabad, Lucknow, Ghaziabad, Agra</td>
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Key Support required from State/Municipal/Local Authorities

• Need to take a rational view for levying Permission charges:
  - At present, State/Municipal/Local Authorities are levying exorbitantly high permission charges from CGD network which is costing about Rs15000 to Rs 20000 per PNG connection to CGD entities.
  - However, CGD entities are recovering only Rs 5,000/- per PNG connection as one time refundable security deposit from house holds.

• Need to expedite process for granting permissions to lay CGD network.

• Rationalize the differential taxes (i.e. VAT on natural gas) in adjoining states which leads to differential pricing of PNG and CNG in adjoining states.
QUESTIONS?
Thank You