Mexico’s Expansion of the Natural Gas Transportation System

February 2016
A new SOE to transport gas and act as TSO

Constitutional Energy Reform (2013, 16th transitory)

Hydrocarbon Law (August 2014)

Creation Decree (August 2014)

Published the five-year plan (October 2015)

Transfer and OMA contracts with PEMEX (Effective Jan 1st 2016)
A new SOE to transport gas and act as TSO

Transfer of:
1. All the pipelines systems’ assets
2. Surface facilities
3. Property rights
4. Rights of way
5. Surface occupation contracts
6. Transport permits
7. Contracts with users
8. Other rights and obligations related to such systems.

Transfer contracts with PEMEX (Effective Jan 1st, 2016)
A new SOE to transport gas and act as TSO

Services provided for the year:

1. Operation and maintenance
2. Financial and accounting
3. Commercial
4. Rights of way
5. Security
6. Trade
7. Regulatory compliance
8. Legal

All services have 90 day early termination clauses, except for O&M

OMA contracts with PEMEX (Effective Jan 1st, 2016)
New market model

Independent technical system operator

Production and processing

Transport

No vertical integration

Commercialization

End users

No vertical integration

PRIVATE COMPANIES

PRIVATE COMPANIES

Imports

PRIVATE COMPANIES

PRIVATE COMPANIES

PRIVATE COMPANIES

PRIVATE COMPANIES

PRIVATE COMPANIES
Objectives:

1. Better planning
2. Bidding projects transparently
3. A system’s approach to day to day operations
Objectives:

Efficiency

1. Reliable
2. Low Cost
3. Safe

Designing a future state operating model and standards in all O&M aspects.
Main Responsibilities

Planning for the mid-term tendering natural gas infrastructure

Technical operation of the System

Natural gas transportation

Launch gas storage projects

Achieve global best practices

Clean for improved operations

Implement best operational standards

Enhance investors’ certainty

Increase investors’ interest in projects

Attract more transportation companies

Reliable, efficient, and secure operations
Gas Security: Then, Now, and Future

Pre Reform
- No formal mandate to PEMEX
- Unable to fulfill demand on occasions
- No reliability, shortages and alarms

Now
- Explicit mandate to CENAGAS
- Formal framework for TSO
- Mid-term Planning
- Strategic project bidding
- Day to day operations

Future
- Reliable, efficient, and safe gas supply
- Natural gas storage will be available
- Redundancies in the infrastructure
The objective is to achieve natural gas security in the most safe and efficient manner.

**BASE SCENARIO:**
- Today’s system plus everything in construction

**ALTERNATE SCENARIOS:**
- Several combinations of new pipelines.
FIVE-YEAR PLAN 2015-2019 (APPROVED BY SENER)

12 pipelines and 1 compression station:
5,159 kilometers of new pipelines.
Estimated investment of 9,794 million dollars.

11 strategic projects and 2 social coverage projects.
## Strategic Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Bid status</th>
<th>Winning company</th>
<th>Bidder</th>
<th>Planned or actual investment (MMUSD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipeline Tuxpan-Tula</td>
<td>Awarded</td>
<td>TransCanada</td>
<td>CFE</td>
<td>400</td>
</tr>
<tr>
<td>Pipeline La Laguna-Centro</td>
<td>In process</td>
<td>-</td>
<td>CFE</td>
<td>1,000</td>
</tr>
<tr>
<td>Pipeline Tula-Villa de Reyes</td>
<td>In process</td>
<td>-</td>
<td>CFE</td>
<td>948</td>
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<tr>
<td>Pipeline Villa de Reyes-Guadalajara</td>
<td>In process</td>
<td>-</td>
<td>CFE</td>
<td>962</td>
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<tr>
<td>Pipeline San Isidro-Samalayuca</td>
<td>Awarded</td>
<td>IEnova</td>
<td>CFE</td>
<td>109</td>
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<tr>
<td>Pipeline Samalayuca-Sásabe</td>
<td>Awarded</td>
<td>Carso Electric</td>
<td>CFE</td>
<td>571</td>
</tr>
<tr>
<td>Pipeline Jáltipan-Salina Cruz</td>
<td>Planning</td>
<td>-</td>
<td>PEMEX</td>
<td>643</td>
</tr>
<tr>
<td>Pipeline Sur de Texas-Tuxpan</td>
<td>In process</td>
<td>-</td>
<td>CFE</td>
<td>3,100</td>
</tr>
<tr>
<td>Pipeline Colombia-Escobedo</td>
<td>Planning</td>
<td>-</td>
<td>CENAGAS</td>
<td>Not available</td>
</tr>
<tr>
<td>Pipeline Los Ramones-Cempoala</td>
<td>Planning</td>
<td>-</td>
<td>CENAGAS</td>
<td>1,980</td>
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<tr>
<td>Compression station “El Cabrito”</td>
<td>Planning</td>
<td>-</td>
<td>CENAGAS</td>
<td>60</td>
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</tbody>
</table>
# Strategic Projects

**Under bidding process:**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>1</td>
<td>La Laguna-Centro</td>
<td>Deadline</td>
</tr>
<tr>
<td>2</td>
<td>Tula-Villa de Reyes</td>
<td>Deadline</td>
</tr>
<tr>
<td>3</td>
<td>Villa de Reyes-Aguascalientes-Guadalajara</td>
<td>Deadline</td>
</tr>
<tr>
<td>4</td>
<td>Sur de Texas-Tuxpan</td>
<td>Deadline</td>
</tr>
</tbody>
</table>
Social Coverage Projects

- The social projects are considered necessary in order to provide social benefits and as mechanisms to promote the economic development (social coverage).

<table>
<thead>
<tr>
<th>Pipeline</th>
<th>Length (km)</th>
<th>Estimated bidding date</th>
<th>Start of operation date</th>
<th>Bidding status</th>
<th>Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lazaro Cardenas-Acapulco</td>
<td>331</td>
<td>2016</td>
<td>2018</td>
<td>Planning</td>
<td>To be defined</td>
</tr>
<tr>
<td>Salina Cruz-Tapachula</td>
<td>440</td>
<td>2016</td>
<td>2018</td>
<td>Planning</td>
<td>To be defined</td>
</tr>
</tbody>
</table>

- In 2014, SENER determined Salina-Cruz - Tapachula and Lazaro Cardenas - Acapulco, as projects of social coverage.

- The favorable opinion of the Finance Ministry is currently in process.
Thank you
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