Gas Electric Webinar
Nomination and Scheduling Process

May 23, 2013
Agenda

- Terminology
- Design Versus Operational Capacity
- NAESB Nomination Timelines
- Capacity Scheduling Process
- Keeping to the Schedule
• Shipper – Entity owning transportation contract

• Point operator – Interconnecting party operating the physical receipt or delivery point – e.g. pipeline, producer, LDC, directly connected power generator

• Entitlements – Contractual capacity rights of the shipper’s transportation contracts; specified receipts, deliver points and throughput path quantity
Pipeline Design Capacity versus Operational Capacity

• Design capacity is based on a *static set* of assumptions designed to meet contractual obligations
  – Assumes all primary firm contracts are flowing coincidentally at 100% load factor

• Operational capacity is calculated on a *set of dynamic* operating variables
  – Impacts to operational capacity include:
    ▪ Outages / maintenance
    ▪ Seasonal effects or
    ▪ Other operational considerations
### NAESB Nominations Timelines

<table>
<thead>
<tr>
<th>Nomination Deadline for Shippers</th>
<th>Point Operator Confirmation Deadline</th>
<th>Receipt of Final Scheduled Quantities by Shippers &amp; Point Operators</th>
<th>Effective Start Time for Gas Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30 a.m. CCT Timely</td>
<td>3:30 p.m. CCT</td>
<td>4:30 p.m. CCT</td>
<td>9:00 a.m. CCT on the next gas day</td>
</tr>
<tr>
<td>6:00 p.m. CCT Evening</td>
<td>9:00 p.m. CCT</td>
<td>10:00 p.m. CCT</td>
<td>9:00 a.m. CCT on the next gas day</td>
</tr>
<tr>
<td>10:00 a.m. CCT Intraday 1</td>
<td>1:00 p.m. CCT</td>
<td>2:00 p.m. CCT</td>
<td>5:00 p.m. CCT on the same gas day</td>
</tr>
<tr>
<td>5:00 p.m. CCT Intraday 2</td>
<td>8:00 p.m. CCT</td>
<td>9:00 p.m. CCT</td>
<td>9:00 p.m. CCT on the same gas day</td>
</tr>
</tbody>
</table>

Certain pipeline systems, at their discretion, can exceed the NAESB cycles by having additional nomination cycles.
Capacity Scheduling Process

• Shippers submit nominations
  – Shippers request transportation service on their particular contract(s)
    ▪ Information contained includes date, quantity, receipt and delivery locations as well as
      other pertinent information
  – Pipeline will validate transactions per its Gas Tariff to determine if Shippers have
    contractual rights to make such nomination

• Prioritize nominations per Pipeline’s Gas Tariff
  – Priorities include:
    ▪ Primary Firm
    ▪ Secondary Firm
    ▪ Interruptible
    ▪ Imbalance Make-up
    ▪ Park and Loan

• Pipeline accounts for demand potential from Shippers that hold “No Notice” contract rights
Capacity Scheduling Process

• Confirm with interconnecting operators
  – Operator to operator confirmation of quantity scheduled to flow between pipeline/storage systems at a point

• Schedule available capacity
  – Pipeline will schedule nominations up to its capacity each cycle
  – Nominations that exceed capacity will be reduced per pipelines’ scheduling priorities
    ▪ If pipeline is at capacity, reduced Shippers must source supply downstream of point(s) of restriction or alter flow consumption to match scheduled quantities

• Post restrictions on Electronic Bulletin Board to notify Shippers/public of constraint locations on system and scheduled quantities at each location

• Consult with Gas Control to have physical operating plan to deliver

• Process continues again for next nomination cycle
Capacity Scheduling Process

Nominations

Validation & Prioritization

Confirmations

Scheduling

(Adjust) Gas Flows

Process Repeats For Each Nomination Cycle
Keeping to the Schedule

• Expectation is point operators’ physical consumption will match scheduled commitments
  – Imbalances: Difference between scheduled and measured quantities

• Deviations from schedule may happen

• Pipelines employ various tools to respond to deviations when system integrity is jeopardized
  – Communications with point operators and shippers
  – Implement Gas Tariff provisions if firm service and system integrity jeopardized
    ▪ Flow control devices where installed
    ▪ Operational Flow Orders (OFOs)
    ▪ Other items per the pipeline’s Gas Tariff
Questions?