Buying, Transporting, and Balancing Natural Gas

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for the
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Agenda

- Buying Gas
- Transporting Gas
- Balancing Supply and Demand
- COH's Counterparties

Buying Gas

- Gas Suppliers
  - Affiliates of Large Producers
  - Banks
  - Utility Company Marketing Affiliates
  - Niche and Regional Gas Marketers
- Buyers
  - Gas Utilities
  - Power Companies
  - Gas Marketers
  - Industrial End Users

Tools for Buying Gas

- Base Agreement
  - NAESB Standards (North American Energy Standards Board)
  - Credit Risk Management
- Market Price Indicators
  - Published Indices
  - NYMEX futures market
  - ICE (Intercontinental Exchange)
- Software
  - Pipeline Nomination Web Sites
  - Multiple Customized in House Purchasing and Nominations Systems

Transporting Gas

- Interstate Transportation
  - NAESB Standards
  - Terms / Rules dictated by Pipeline Company Tariffs approved by the Federal Energy Regulatory Commission (FERC).
- Firm and Interruptible Transportation (FT and IT)
  - FT
    - Large Fixed Demand, Low Commodity Charges
    - Primary Receipt and Delivery Points Identified
    - Secondary Point Capability
    - Capacity Release Rights
  - IT
    - Commodity Charge based on 100% Load Factor FT
    - Priority Similar to Secondary Firm Contracts

Transporting Gas (Continued)

Nomination Requirements

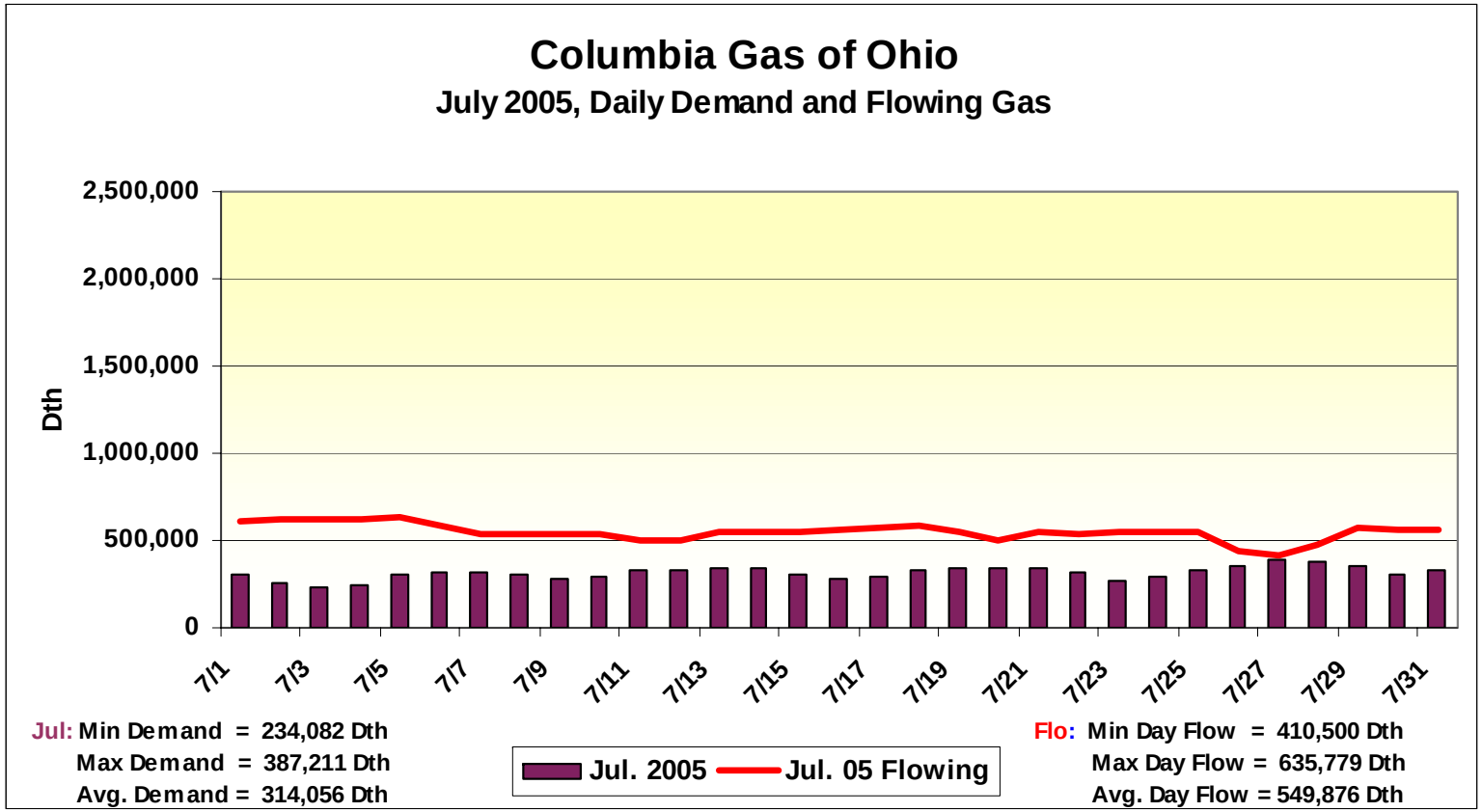
Nomination Type	Nomination Deadline	Gas Flow	Pipeline Confirmation
Timely	12:30 PM	10:00 AM Next Day	4:30 PM
Evening	7:00 PM	10:00 AM Next Day	10:00 PM
Intra-Day 1	11:00 AM	6:00 PM Same Day	2:00 PM
Intra-Day 2	6:00 PM	10:00 PM Same Day	9:00 PM

Intra-day nominations have lower priority, as do IT and secondary FT nominations.

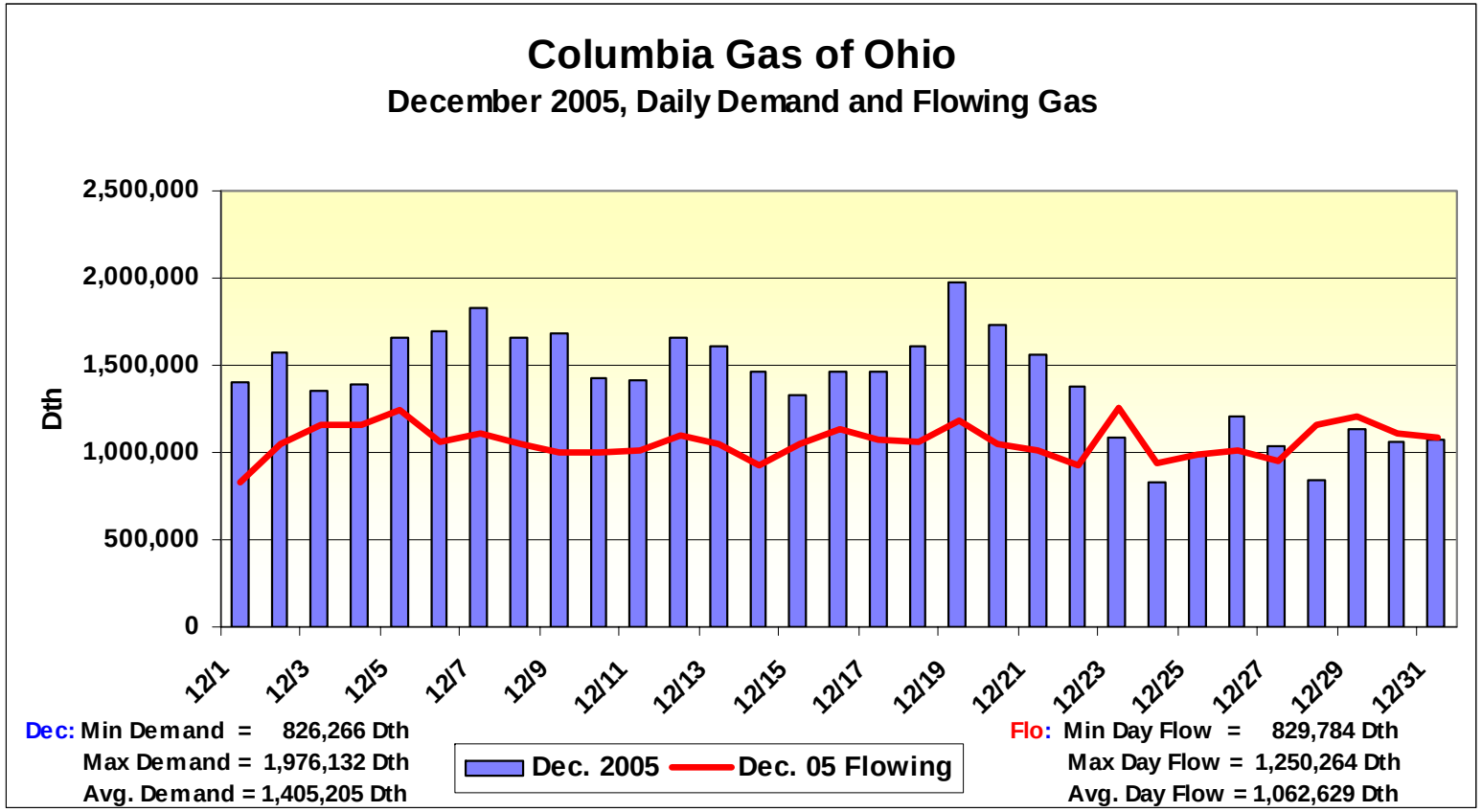
Balancing Supply and Demand

- Gas scheduled to be delivered to the LDC needs to be in balance with consumption behind the LDC's city gate.
- The balance between the nominations by Transporting customers and those customers actual demand need to be managed on a day to day basis.

COH July 2005 Balance



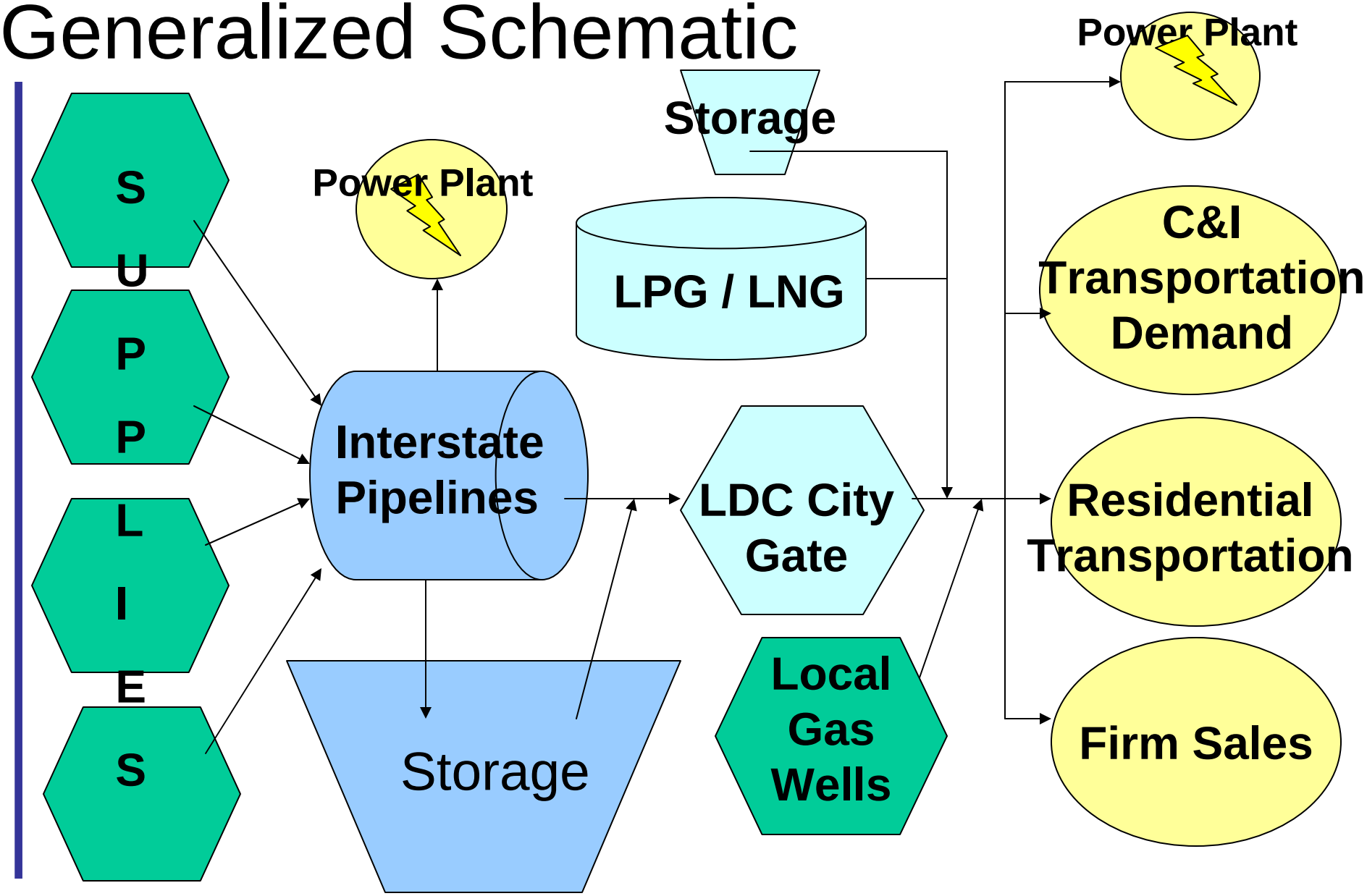
COH December 2005 Balance



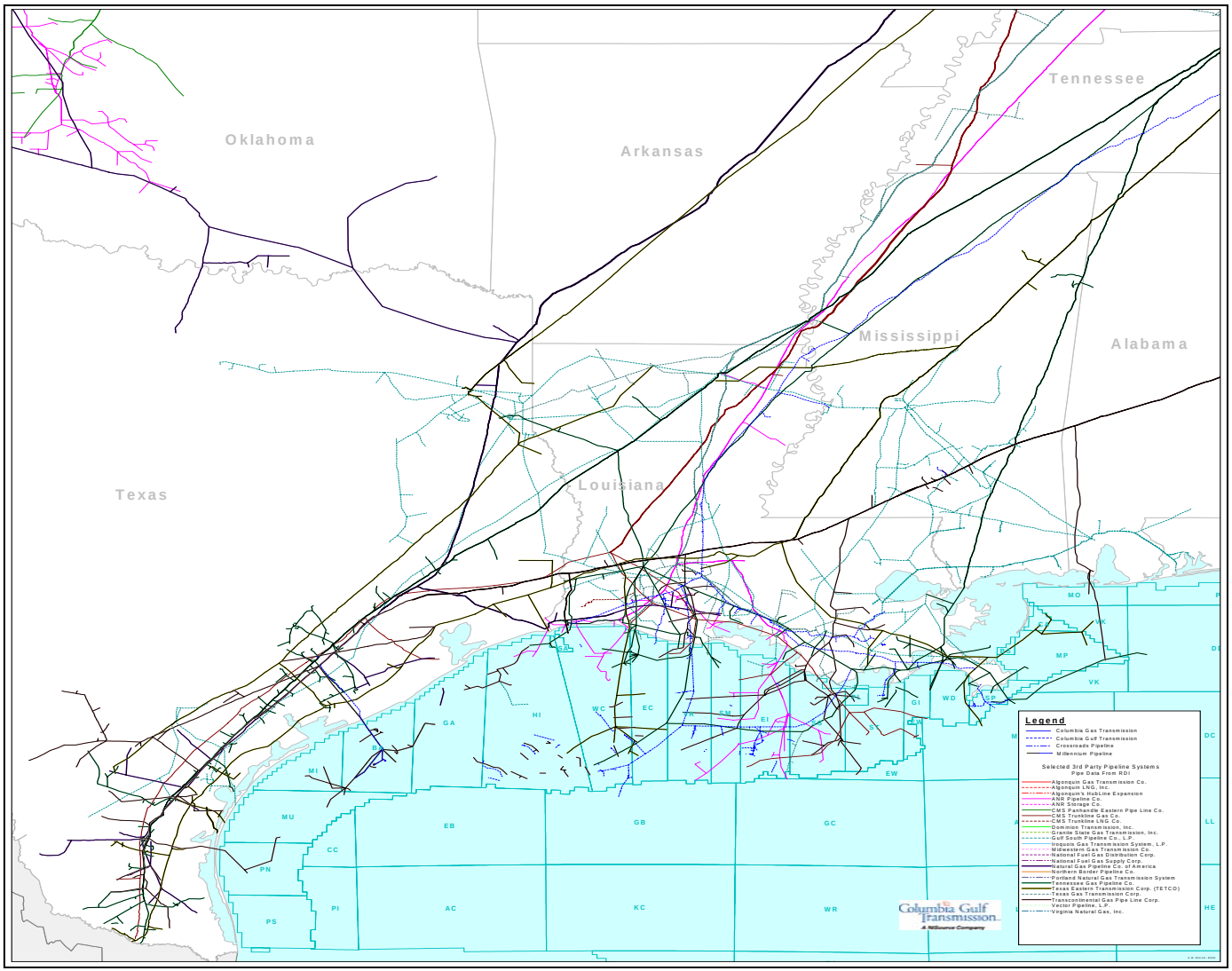
Balancing Tools

- Storage and Related No Notice Services from Interstate Pipelines
- LDC Tariff Rules for Customers that Transport
- Interruption of Lower Priority Demand
- Swing Gas Supply Contracts
- Peaking Assets (i.e. Propane, Local LNG)
- On system storage
- Line Pack on High Pressure Systems

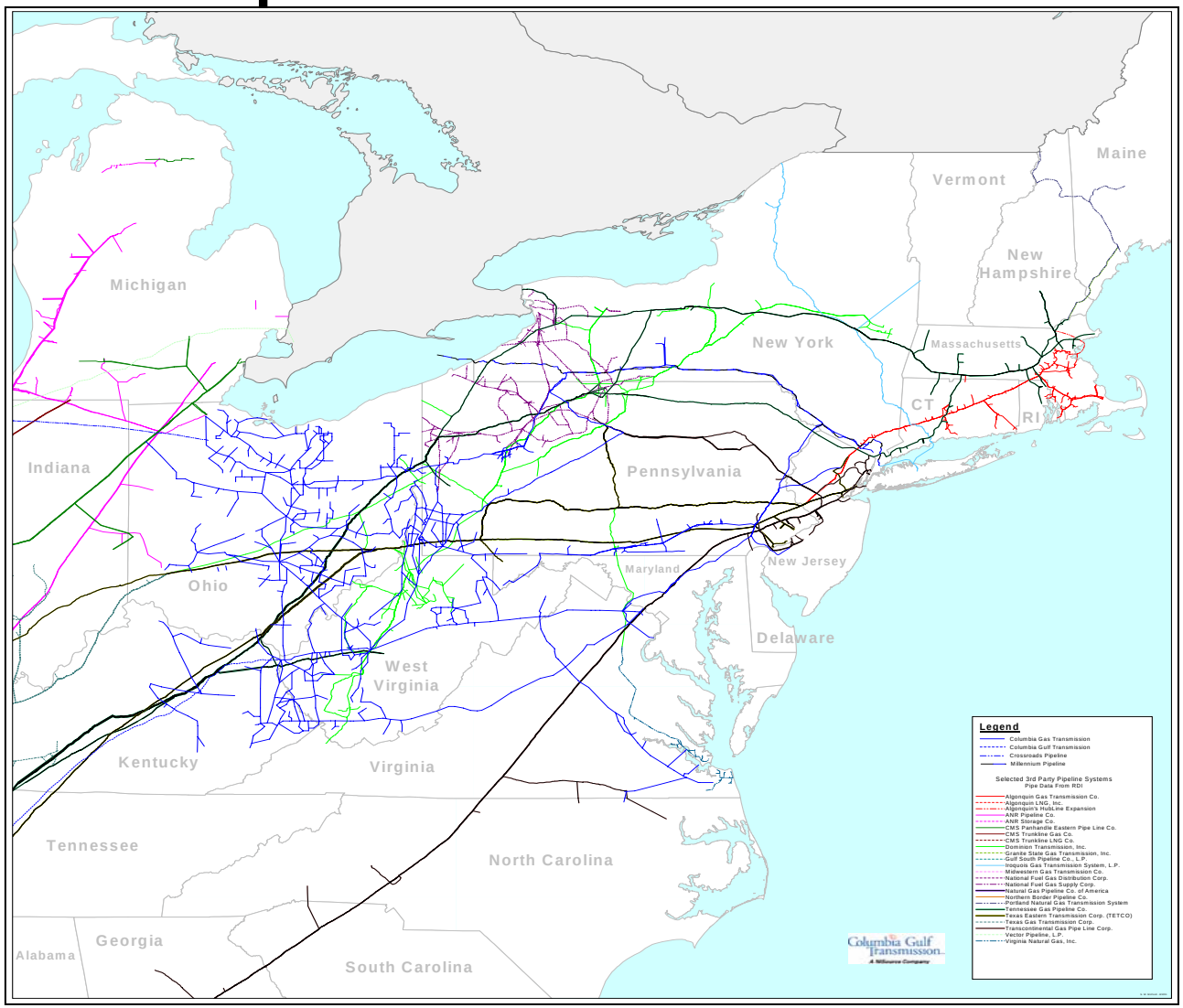
Generalized Schematic



Interstate Pipelines-Gulf Coast



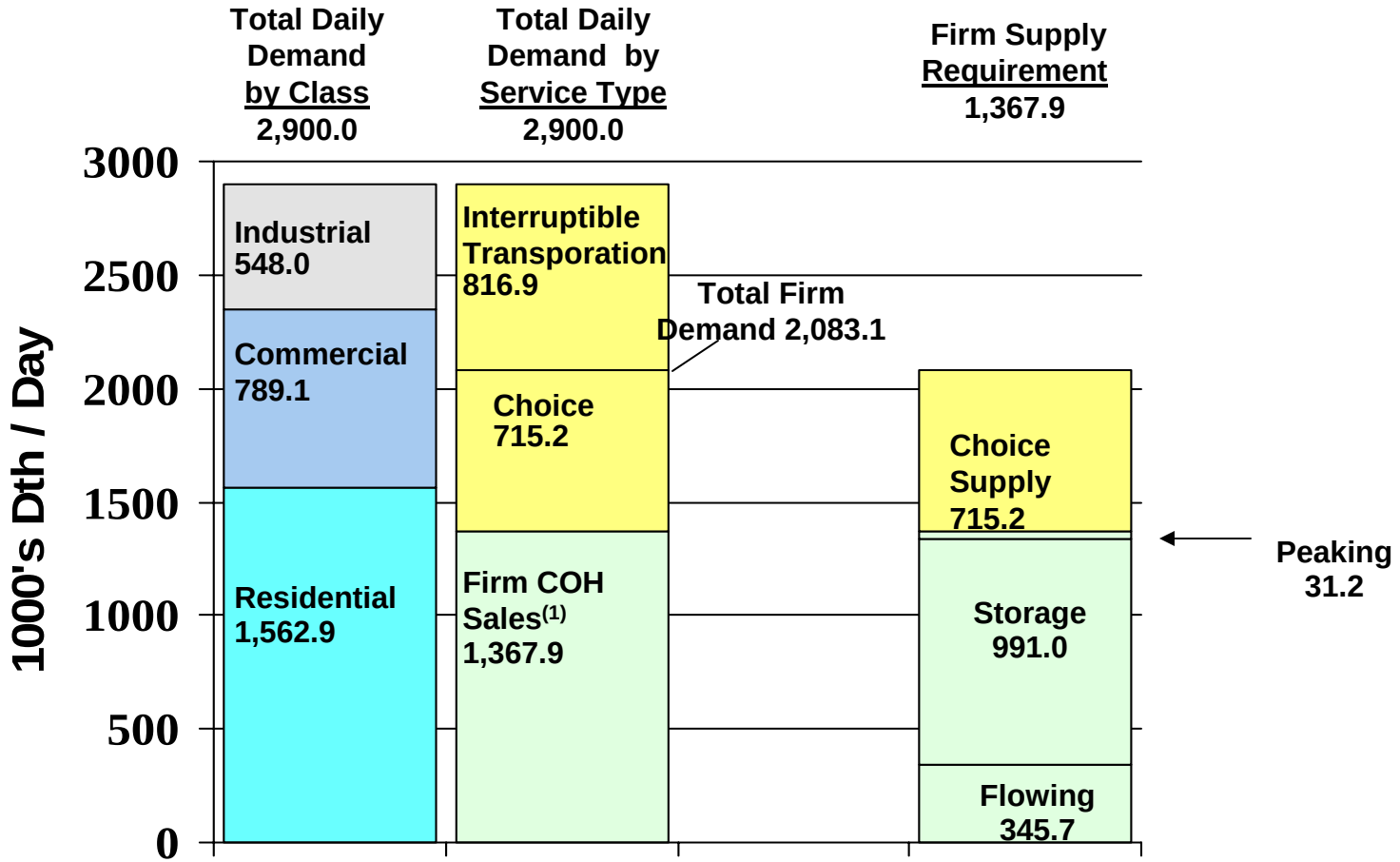
Interstate Pipelines – Columbia Region



NiSource

COH Peak Day Balance

COH 2005-2006 Winter Peak Day Design



1/ Firm Demand Includes Sales and Standby Service for Industrial and Commercial Transportation Customers.

Design based on a temperature that has a 10% chance of occuring in any winter.

COH Counterparties

- Gas Transporters (Interstate Pipelines)
  - Columbia Gulf Transmission - FT
  - Columbia Gas Transmission –FT & FS
  - Tennessee Gas Transmission -FT
  - Panhandle Eastern – FT and FS
  - Northcoast - FT
  - Trunkline – FT
  - Texas Eastern – IT
  - Dominion – IT
  - ANR - IT

COH Counterparties

- Sample of Larger Gas Suppliers
  - BP Energy
  - Cargill
  - Chevron
  - ConocoPhillips
  - Sequent
  - Total
  - Virginia Power

COH Counterparties

- Gas Shippers on the Interstate Pipeline
  - Gas Marketers
  - Industrial Customers
  - COH System Supply Volumes
- Gas Consumers
  - Residential Consumers
  - Commercial & Industrial Customers

Questions?