ISA100
T & D Interest Group Overview

ISA100, Orlando, FL
February 7, 2008
Transmission and Distribution

- ISA100.11a
  - Mesh Network design
  - Campus network (i.e., “plant” environment)
  - Not long-distance or linear
Mesh Network
Mesh Network
Linear Network

Map 2: Caspian Transit Routes

- Yuzhnyy-Brody: 180,000 to 240,000 b/d
- Atyrau-Samara: 300,000 b/d
- Caspian Pipeline Consortium (CPC) Project: 560,000 b/d (first stage)
- Northern Early: 100,000 b/d
- Western Early: 115,000 b/d
- Baku-T'bilisi-Ceyhan: 1 million b/d

Legend:
- Major crude oil export pipeline
- Oil pipeline planned, proposed, or under construction
- Oil, gas, and condensate field

Russia, Ukraine, Kazakhstan, and Turkey are shown with their respective capital cities.
Linear Network
Linear Network

many kilometers
Differentiating Characteristics

• Long-distance linear
  – Not Campus network
  – Not many choices for next-hop routing

• Potential for many other networks
  – Distribution and retail environment where there are many other networks in the same space
  – Uncontrollable by ISA100 network management

• Equipment will be readily accessible by end-user customers (such as an ISA100 connected residential use meter)
  – Fraud detection and prevention will be important.
Next Steps

• Forming Interest Group
• Looking for Volunteers
  – Members of group
  – Co-chair (non-Electric asset owner)