PSCo Gas Transport Phone Line FAQS

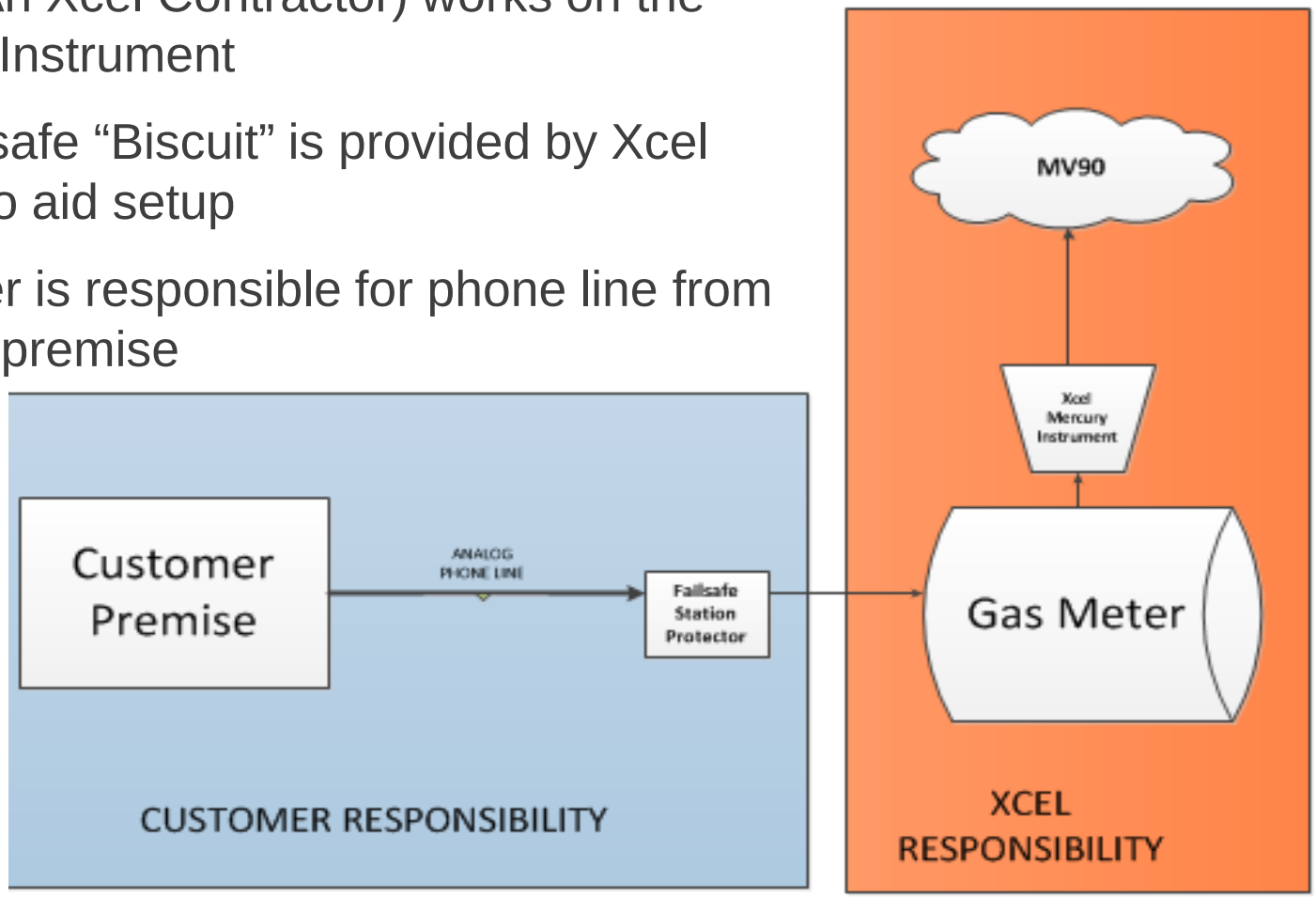
April 2019

Purpose of this Presentation:

- Update to material published in March of 2015 is available on Pronto
- Provide suggestions and trouble shooting tips for solving common communication problems
- Provide MV90 technical details
- Detail line of responsibility
- Help you avoid prolonged phone line outages and fees! Help us better plan our system! Win Win!
- If you have additional questions please contact your technical resource or your phone carrier
- Note that PSCo is exploring other options and will make those available as soon as practicable

Typical Communication Setup:

- PSCo techs work on gas meter
- Faxtel (An Xcel Contractor) works on the Mercury Instrument
- The Failsafe “Biscuit” is provided by Xcel Energy to aid setup
- Customer is responsible for phone line from meter to premise



Tariff Language

Shipper/Receiving Party Responsibilities

- Install prior to Transport Service Start date
- Maintain communications equipment
- Repair any interruption issues within 2 weeks

Xcel Energy Responsibilities

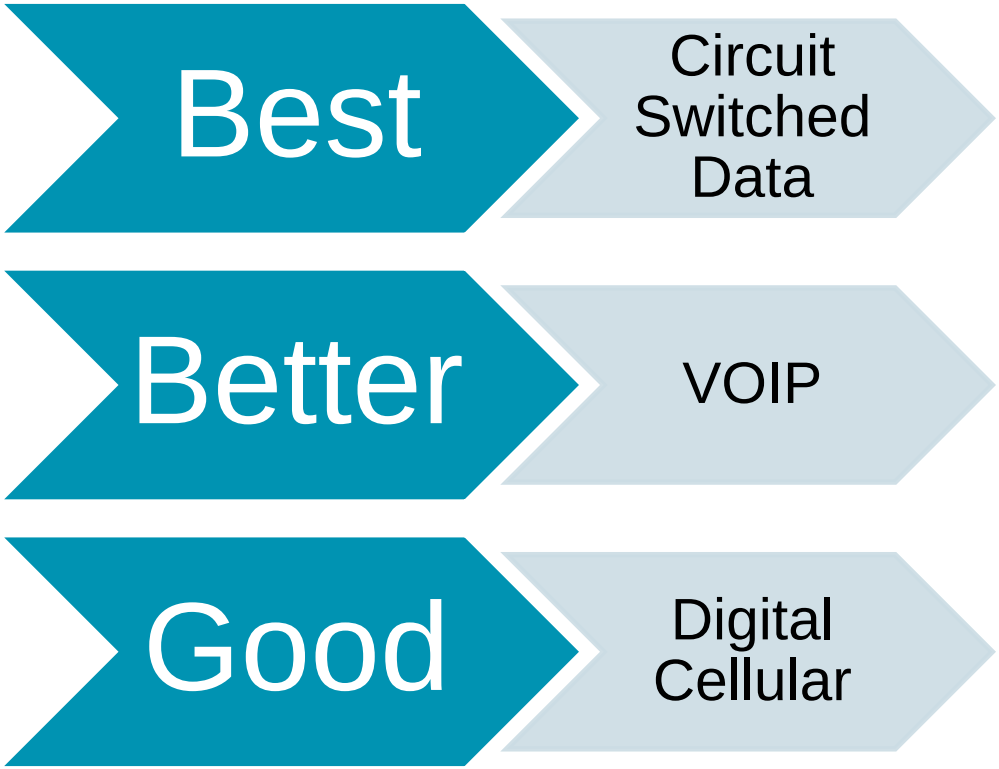
- Coordinate with Shipper/Receiving Party
- Maintain communications equipment for operational and billing purposes
- Send a 3rd party to investigate if error is observed
- Send a 3rd party after Receiving Party/Shipper has repaired phone line

Further Details can be found in the Public Service Company Tariff on sheets (Dependent on type of transport service):
16A, 17B, 19A, 29F-G, 30I, 31F, 31G

*If customer communications are not repaired within 2 weeks from notice, penalty will be incurred

Three Types of Acceptable Communication with Mercury Device

- As of March 2019:



- Ask for a “Biscuit”: a Failsafe Station Protector – To align incoming communication from the premise to the meter – for ease in troubleshooting.
- Email BSOColorado@xcelenergy.com to request one!

Circuit Switch Data (Preferred/ Best):

- 1MB analog line directed to each individual transport meter
  - Devices time out when shared
- Circuit switched technologies operate like land-line phones
  - Creates dedicated circuit end to end, which no one else can use until you hang up
- Please avoid using one phone line for multiple purposes .
  - When the phone line is used to simultaneously connect a gas transport meter AND smart faxes, elevator lines, fire alarms, credit card machines, entry machine systems, communication failure can result

VOiP (Better):

- Requirements:
  - Use of G.711 codec, uncompressed (64K but data)
  - Packet size set to 20 ms
  - Error Control is turned off (including multiple gateways)
  - Maximum trans-coding cycles = 3 (more have worked, but incompatibility increases)
  - Use your analog port for this phone line and keep the fax analog port separate
  - Fire and Burglar alarm separate (absolutely no line sharing allowed here)
  - Please consult with your phone system provider regarding these configurations as they relate to your service

Digital Cellular (Packet Switched Circuit) (Good)

- Cellular Voice/Data Modems are new technology for our Mercury instruments
- Require connectivity at 2400 baud with the ‘fax’ port selected for proper data transmission
  - Configurations outside of these settings could results in incompatible phone line issues
- Please consult with your wireless provider on proper programming for data transmission
- For internet security reasons we cannot accommodate TCP / IP at this time

The Future

- Even though the gas transport industry largely relies on analog technology, PSCo is looking into other measurement tech to support gas transport
- PSCo will provide detail on any future tech options as soon as they are commercially available
- Reliable Communication is important to gauge measured use, properly allocate and bill gas.
- THANK YOU for your business and for helping us maintain good communication with the gas meters!

Questions?

Thank you!