

Before the Arizona Corporation Commission

Arizona Natural Gas Storage Coalition
2011 Winter Readiness/ Natural Gas Storage Workshop

November 1-2, 2011

Arizona Natural Gas Storage Coalition

- ▶ Arizona Based Organizations
 - Salt River Project
 - Southwest Gas
 - Unisource Energy/ Tucson Electric
 - Arizona Public Service
 - Arizona Electric Power Cooperative
 - Arizona Corporation Commission Staff (Bob Gray)
- ▶ Initial Meeting – January 2008
- ▶ Goal: Explore development of natural gas storage in Arizona

Arizona based Natural Gas Storage

History of Natural Gas Storage in Arizona

▶ Copper Eagle

- Location: near Luke Air Force Base– Glendale
- Significant salt cavern storage potential
- Close to consumer demand/load centers
- Development Activity: limited testing 2000/2001
- Current Status: no development planned or expected

▶ Red Lake

- Location: near Kingman, Arizona
- Salt cavern storage potential
- Between Las Vegas and Phoenix load centers
- Development Activity: none
- Current Status: no development planned or expected

Arizona based Natural Gas Storage

▶ Eloy Area Gas Storage Projects

- Location: Eloy, Arizona
- Adequate salt deposits for natural gas storage
- Close proximity to interstate natural gas pipelines.
- Close proximity to power generation (Desert Basin, Sundance)
- Distant to consumer demand/load centers
- Discussions: initiated 2007/2008
- Current Status: on hold pending completion of precedent agreements.

Arizona based Natural Gas Storage

Ongoing challenges to natural gas storage

- ▶ Financial
 - Development of salt dome storage is expensive
 - Load demand growth for natural gas has stabilized since 2008
 - Cost/benefit analysis does not show financial benefit during term of contract (based on current projected storage costs and fuel prices)

- ▶ Environmental/Safety
 - Development risk related to underground brine disposal
 - Overall impact to water quality/water supply
 - Concerns over high pressure gas storage near residential areas
 - Uncertainty related to evaporate pond brine disposal

Arizona based Natural Gas Storage⁶

- ▶ Questions that may need addressing...
 - How do we factor importance of reliability into the decision process?
 - What is an acceptable timeline for gas storage?
 - What (if any) environmental risks should be quantified?
 - How should gas storage costs be funded?
 - To what extent do we secure community involvement in moving gas storage forward?