

# Pre-Rulemaking Discussion

## Gas Storage Operations

The Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Division) is preparing to undertake rulemaking to make significant revisions to the regulations governing the Division's Gas Storage Program. This rulemaking effort will build upon the requirements adopted by emergency rulemaking to update regulations governing the Gas Storage Program to address concerns identified by the Division and other key stakeholders. The purpose of this document is to outline the Division's immediate regulatory goals, and to solicit specific input on how best to accomplish these goals. Although the Division is looking for any and all input on these questions, suggestions about a specific regulatory approach are most useful if they are supported by discussion of the costs and benefits associated with the approach.

### **Regulatory Goals and Questions**

#### **Regulatory Goal # 1: *Clarify standards for gas storage project data requirements***

- What type of unique geology and reservoir data, outside of what the Division requires for all injection projects, should the Division receive to perform a thorough review?
- Should there the Area of Review analysis for a gas storage project address any particular concerns other than ensuring the injected gas is confined to the intended zone?
- Currently the Division receives monthly reports regarding the injection and withdrawal of natural gas, including days in operations during the month, volumes of gas injected or withdrawn, and casing and tubing pressures. Does any other data need to be collected regarding the injection or withdraw of stored natural gas?

#### **Regulatory Goal # 2: *Clarify well construction standards for gas storage wells***

- What specific casing cementing standards should gas storage wells be required to meet? Cement from casing shoe to surface? All casing strings?
- Should all gas storage wells be required to inject and withdrawal through tubing and packer?
- Should all gas storage wells be required to have safety shut-in valves? Should these be surface safety valves or subsurface safety valves, or both? Are there other types of failsafe devices that should be considered as an alternative?

#### **Regulatory Goal # 3: *Clarify testing and monitoring standards and other risk mitigation protocols to ensure safe operations***

- What type of inspection and leak detection protocol should be required for gas storage operations?
- What type of mechanical integrity testing should be required?
- What type and frequency of corrosion testing should be required?
- What type and frequency of master valve testing should be required?

- Should a Supervisory Control and Data Acquisition (SCADA) be required?
- What type of cementing evaluation standards should be required?
- What types of risk mitigation protocols should be expressly required in the risk management plan for a gas storage project?
- How often should risk management plans be reviewed and re-evaluated? When operation conditions change?

**Regulatory Goal # 4: Clarify emergency response plans standards to ensure rapid and safe responses when emergency situations arise**

- What type of emergency contingency standards must be included in the plan?
- What type of emergency equipment and deployment standards must be included in the plan?
- What type of notification standards must be included in the plan?
- How will the operator be folded into an incident command system controlled by a regulatory agency?
- How often should the plans be reviewed and re-evaluated? When operation conditions change?