

# FERC Application Overview

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USDOT / PHMSA





# FEDERAL ENERGY REGULATORY COMMISSION

## FERC Application Overview

### Process for New Underground Storage Facilities



U.S. Department of Transportation  
Pipeline and Hazardous Materials  
Safety Administration

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# Introduction and Overview

<https://www.phmsa.dot.gov>



U.S. Department of Transportation  
Pipeline and Hazardous Materials  
Safety Administration

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# Quick Introduction

- Worked at FERC from 2015 to 2023
- Petroleum Engineer for DPC
  - Division of Pipeline Certificates
- Project Manager for Commission Orders
  - As well as Delegated Orders and Prior Notices
- Engineering Analyst
  - Completed Internal Engineering Reports



# FERC/PHMSA's Roles

- FERC does the certification of public convenience and necessity but PHMSA enforces the regulations for safety/integrity
- FERC authorizes the construction and authorizes the operation of the underground facilities
- Blank authorization through Prior Notice
- PHMSA has authority to regulate, inspect and enforce 49 CFR Part 191 and Part 192 as applicable





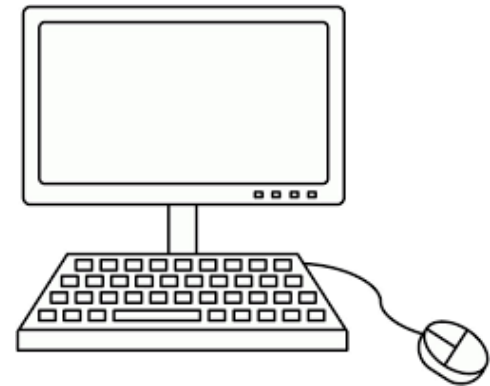
# FERC/PHMSA Interaction

- Two separate government agencies
  - FERC is under Department of Energy
  - PHMSA is under Department of Transportation
- Regulate and inspect similar facilities
- FERC regulates interstate only
- PHMSA regulates intrastate and interstate facilities



# Application Overview

- Pre-Filing
- Application
- Data Requests
- Engineering Report
- Order/Engineering Insert
- Engineering Conditions
- Semi-Annual Reports



# Pre-Filing



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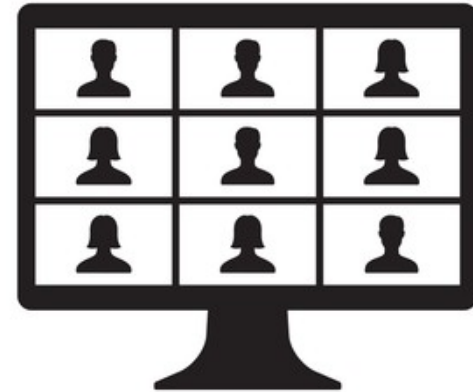
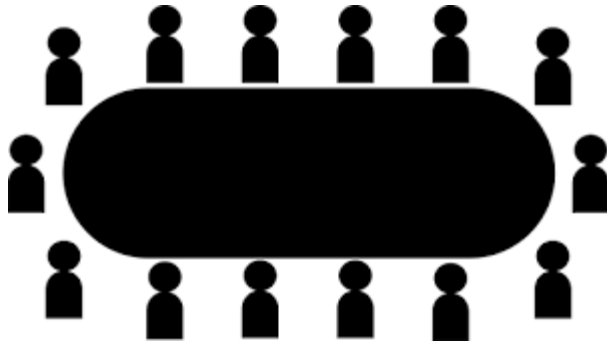
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# Pre-Filing

- Scheduled meeting before Application
- Opportunity for Applicant to present Application
  - FERC offers no direct guidance
- Separate from more involved Pre-Filing process
- Informal before formal review



# Application



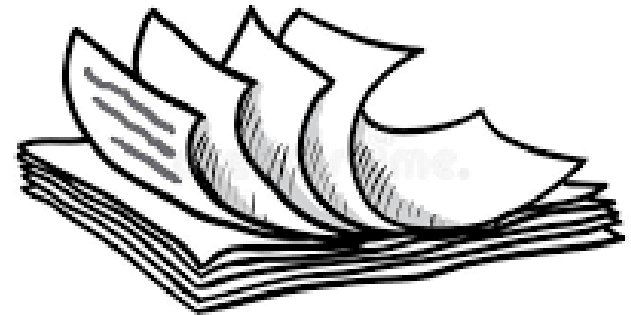
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# Application

- New Underground Storage authorized in Section 7(c)
  - Natural Gas Act (NGA) of 1938
- Application prescribed in §§ 157.6(a), 157.14(a)
- Project Overview
- Description of Facilities
- Exhibits G and G-II



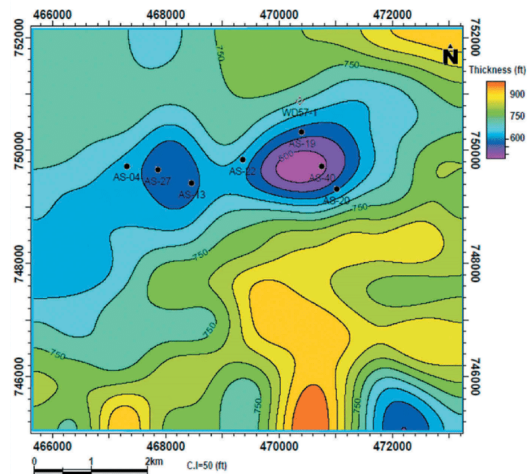
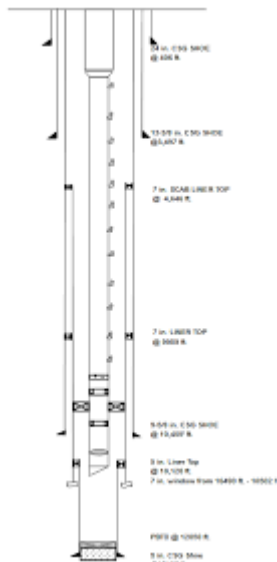
# Description of Facilities

- Location and History of Reservoir
- Define Certificated Parameters
  - Total Capacity, Working Gas, and Base Gas
  - Reservoir Boundaries
  - Maximum Injection and Withdraw Rates

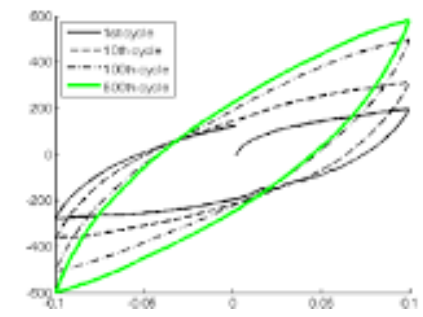


# Exhibits G and G-II

- Isopach and Isobaric Maps, Sonar Data, MITs, Logs, Cross-Section Maps, OGIP, Calculations, Etc.
- Critical Energy Infrastructure Information (CEII)



$$G = \frac{43,560 Ah\phi(1 - S_{wc})}{B_{gi}}$$



# Data Requests



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# Data Requests

- Opportunity for FERC staff to request more detailed information and clarification of provided data
- Official issuance to document correspondence
- Opportunity to make specific information submitted through CEII as Public through Public response



# Engineering Report



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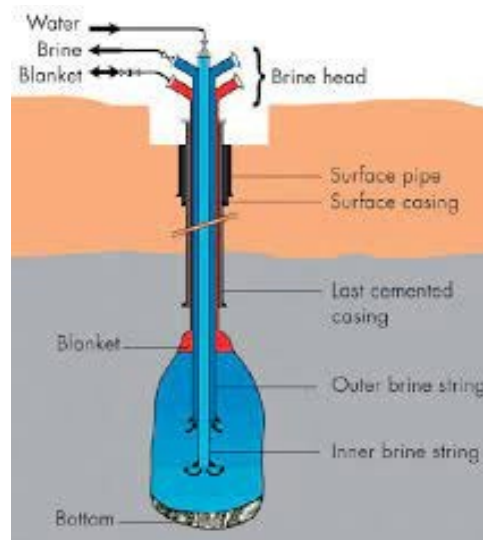
# Engineering Report

- Internal document reviewing provided information
- Reservoir information and certificated parameters compiled for Underground Storage database
- Review and confirm inventory as well as safe operating condition for the Reservoir



# Engineering Report

- Detailed document of the formation
- List the location and history of the field
- Provide map overlay of the field or salt cavern



# Engineering Report

- Review provided reports such as MITs or Sonar
- Review any associate pipeline models
- First engineering analyst compiles the report
- Second engineer reviews the report
  - May suggest additional data request
  - Prepares report for final review
- Final review with most senior subject matter expert



# Order/Engineering Insert



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# Order/Engineering Insert

- Commission Order contain multiple sections
  - Background and Purpose
  - Accounting and Rates
  - Environmental Impact
  - Engineering Insert
- Define Reservoir Parameters in Order
- Directs to Engineering Conditions



# Engineering Conditions



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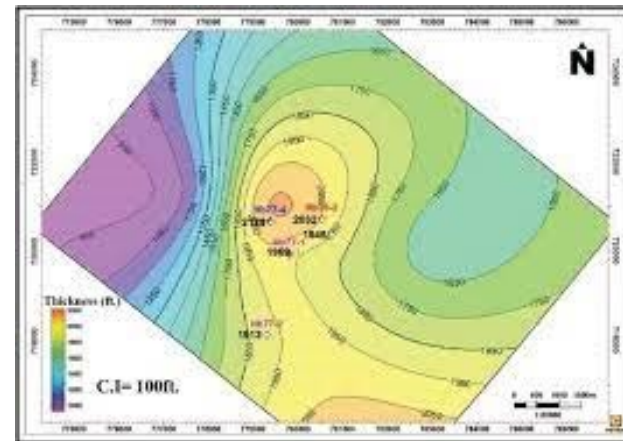
# Engineering Conditions

- More detailed Reservoir Parameters than in Order
- Shall operate the Reservoir in such a manner as to prevent/minimize gas loss or migration
- Shall operate Reservoir in accordance with State rules and regulation
- Shall file an updated Integrity Monitoring Program (IMP) consistent with the design parameters outlined in API RP 1170/1171



# Engineering Conditions

- Intended to bring new storage facilities into operation
- Emphasis on API RP 1170/1171
- Reservoir takes time to reach operation equilibrium



# Semi-Annual Reports



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# Semi-Annual Reports

- Section 157.214(c) of the Commission's regulations
- Daily volumes of natural gas injected into and withdrawn from the storage reservoir
- Volume of natural gas and the shut-in wellhead pressures at the end of the reporting period





# Semi-Annual Reports

- Maximum daily injection and withdrawal rates experienced for the entire storage field during period
  - Average working pressure on such maximum day
- Results of any tests performed
- Discussion of current operating problems and conclusions as well as other data or reports



# Semi-Annual Reports

- File until one year after the storage inventory volume has reached or closely approximates the maximum level defined in the Order



# Summary

- Pre-Filing and Application (Start)
- Data Requests and Engineering Report (Review)
- Order/Engineering Insert and Engineering Conditions (Commission Order)
- Semi-Annual Reports (Final)



# FERC/PHMSA's Roles

- PHMSA has authority to regulate, inspect and enforce 49 CFR Part 191 and Part 192 as applicable
- FERC authorizes the Certificates of Public Convenience and Necessity as well as Annual Reporting of Blanket Authorization work



# Questions



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