FERC Process and Evaluation of Wetlands For Natural Gas Projects

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Federal Energy Regulatory Commission
Who is FERC?

• FERC is an independent federal regulatory agency that:
  – Regulates the interstate transmission of natural gas (siting & rates); electricity and oil (rates only);
  – Reviews proposals to build interstate natural gas pipelines and liquefied natural gas (LNG) terminals, and natural gas storage fields (National Enviro. Policy Act)
  – Licenses and inspects non-federal hydropower projects
Presentation Overview

• Federal Energy Regulatory Commission (FERC)
  – Organization
  – Authority
  – Process
  – FERC and Wetlands
  – Permitting
  – Review of Post-construction filings (such as Implementation Plan)
  – Monitoring during Construction and Restoration phases
  – Require an Environmental Inspector for Monitoring
FERC Organization Chart

Chairman
Cheryl LaFleur

Commissioner
Philip D. Moeller

Commissioner
Tony Clark

Commissioner
Norman Bay

Commissioner
Colette D. Honorable

Energy Projects

External Affairs

Enforcement

Electric Reliability

General Counsel

Administrative Litigation

Administrative Law Judges

Energy Market Regulation

Executive Director

Energy Policy & Innovation

Office of Energy Projects
FERC’s Siting Authority

- Section 7 of the Natural Gas Act
  - Determination of public convenience and necessity

- Energy Policy Act of 2005
  - Assigns FERC exclusive siting authority for LNG facilities—does not preempt other required federal authorizations
  - Optional use of Pre-Filing Process for pipeline projects
  - Names FERC lead agency for NEPA review and coordinator of all federal authorizations
Division of Gas (Environment and Engineering)

• Evaluate applications and conduct environmental reviews/siting for *jurisdictional gas facilities*:
  – Import/Export, Storage, Interstate Transmission, Abandonment, LNG

• Conduct inspections of jurisdictional facilities
  – LNG facilities and pipeline construction
Certificate Process

Non-Environmental Review and Analysis
- Engineering – GQI, storage, hydraulic flow
- Tariff – rates, terms & conditions of service
- Policy – precedents, rules, regulations
- Accounting

Preparation of EA or EIS
- Project description/purpose and need
- Water Resources and wetlands
- Ecology – fish, wildlife, vegetation
- Cultural Resources – historic preservation
- Land use/socioeconomics – recreation, aesthetics
- Soils and geology
- Air and noise
- Alternatives
- Cumulative Impacts
Phases of Project Review

- **Marketing and Preliminary Project Design**
  - The applicant working on its own

- **Pre-Filing**
  - FERC staff working with the applicant and stakeholders before the filing of an application

- **Application Review**
  - FERC preparing NEPA document that is reviewed by cooperating agencies prior to public issuance for comment

- **Post-Authorization**
  - FERC staff working to ensure compliance with conditions to the FERC approval
Federal, State and Local Permits

- FERC encourages cooperation between interstate pipelines and Federal, state and local authorities.
- Goal is to work with agencies to identify and minimize conflicting requirements.
- If the Commission approves a project, state or local permits must be consistent with the conditions of any FERC certificate.
- State and local agencies may not prohibit or unreasonably delay the construction or operation of facilities approved by the Commission.
Federal Permits/Approvals

All Federal permits must be obtained prior to receiving Notice to Proceed for Construction. For Example:

- **Clean Water Act (CWA) – Section 404 and Section 10 of Rivers and Harbors Act from the U.S. Army Corps of Engineers, including 401 Water Quality Certification (issued by state)**
- **Endangered Species Act (ESA) – Section 7 ESA consultation**
- **National Historic Preservation Act (NHPA) – Section 106 consultation** with State Historic Preservation Office (SHPO)
- **Clean Air Act (CAA)**
- **Coastal Zone Management Act (CZMA) – Coastal Zone Consistency Determination where applicable**

**NOTE:**
There are other federal regulations that FERC must comply with (such as Migratory Bird Treaty Act and Magnusen Stevens Fisheries Conservation Act. And Executive Orders (EO 13186 MBTA and EO11988 Floodplain)

* Partial construction approval may be given pending FWS and SHPO approvals for certain segments of the project.
EIS Pre-Filing Environmental Review Process

**Applicant Process**
- Studies potential site locations
- Identifies Stakeholders
- Participates in Applicant’s open house
- Issues Notice of Intent for Preparation of an EIS opening the scoping period to seek public comments.
- Analyzes data and prepares Draft EIS
- Issues Draft EIS and opens comment period
- Responds to comments and revises the Draft EIS
- Issues Final EIS
- Files formal application with the FERC
- Holds public scoping meeting(s) and site visits in the project area.
- Consults with interested stakeholders.

**FERC Process**
- Receives Applicant’s request to conduct its review of the project within FERC’s NEPA Pre-Filing Process
- Formally Approves Pre-Filing Process and issues PF Docket No. to Applicant
- Participates in Applicant’s open house
- Issues Notice of Intent for Preparation of an EIS opening the scoping period to seek public comments.
- Issues Notice of Application
- Analyzes data and prepares Draft EIS
- Issues Draft EIS and opens comment period
- Holds public comment meetings on the Draft EIS in the project area
- Responds to comments and revises the Draft EIS
- Issues Final EIS
- Holds open house to discuss project
- Files formal application with the FERC
- Holding scoping meeting(s) and site visit in the project area.
- Consults with interested stakeholders.

**Public Input Opportunities**
- Submits outstanding information to satisfy conditions of Commission Order
- Issues Notice to Proceed with construction.
- Issues Notice to Proceed with construction.
General Wetland Information

APPLICANT:
- Provides Resource Reports 1 to 12
- Wetland information is Included in Resource Report 2 under Water Use and Quality
- All Resource Reports filed with APPLICATION must meet FERC Minimum Filing Requirements

STAFF REVIEW:
- Comments to applicant (Data Request)
- Conducts site visit(s) and consults with interested stakeholders
- Identifies project impacts, site-specific issues, avoidance and minimization measures, and proposed mitigation for unavoidable impacts
FERC’s Plan and Procedures

Upland Erosion Control, Revegetation and Maintenance Plan
Wetland and Waterbody Construction and Mitigation Procedures

• Baseline mitigation measures for construction and maintenance activities at jurisdictional facilities
• Revised versions issued May 2013 (Docket No. AD12-2-000)

FERC Definition

Any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current Federal methodology for identifying and delineating wetlands.
MINIMUM FILING REQUIREMENTS

1. Provide a table (based on NWI maps if delineations have not been done) identifying all wetlands, by Milepost, distance crossed by the project, and total acreage and acreage of each wetland type that would be affected by the project.

2. Discuss construction and restoration methods and compare them to FERC’s Wetland Waterbody Construction and Mitigation Procedures.

3. Provide original NWI maps or appropriate state wetland maps that show all proposed facilities and include milepost locations for the pipeline route Section 380.12(d0(4)).

NOTE: Compensatory mitigation plan is developed in consultation with USACE and appropriate state agency and filed later during our analysis.
Construction and Restoration Phase in Wetlands

• Identify Wetland boundaries and buffers in the field with signs and/or highly visible flagging until construction related ground disturbing activities are complete.

• Do not locate aboveground facilities in wetlands except where location of such facilities outside of wetlands would prohibit compliance with the U.S. Department of Transportation regulations.
Basic Requirements

• Comply with all relevant
  – Permit terms and conditions
  – Approved site-specific crossing plans

• Before installing pipe sections under wetlands or waterbodies
  – Perform non-destructive testing of all welds
  OR
  – Conduct hydrostatic testing
Minimization Measures

• Limit disturbance to the minimum needed to construct the crossing
  – Size of Additional Temporary Work Space (ATWS) areas
  – Number of pieces of equipment operating in wetlands or waterbodies
Additional Temporary Work Spaces (ATWS)

• Locate ATWS areas at least 50 feet away from wetland boundary, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.
Vegetation Protection

• Where wetlands or waterbodies are parallel to the right-of-way (ROW)
  – Maintain at least a 15-foot vegetative buffer

• In Wetlands
  – Cut vegetation just above ground level and remove for disposal
  – Leave root systems in place
Resource Protection

• Install and maintain temporary erosion and sediment control measures
• Maintain vegetated buffers and hazardous materials setbacks
• Plan ahead for dewatering
  – Locations
  – Methods
Wetland Access Options

1. If upland access roads don’t provide reasonable access
   - One pass through wetland using construction ROW

2. If wetland soils are firm enough or if ROW has been appropriately stabilized to avoid rutting
   - Construction ROW

3. If wetlands cannot be stabilized
   - Upland access roads
Wetland Stabilization

• Use low-ground-weight equipment or stabilize construction ROW if
  – Standing water or saturated soils are present
  – Equipment is causing rutting or mixing of topsoil
Wetland Stabilization

• ROW stabilization measures
  – Equipment or terra mats
  – Timber riprap (limit to two layers, if feasible)
  – Do Not
    • Cut trees outside ROW to use as timber riprap
    • Use rock, imported soil, tree stumps, or brush riprap
Crossing Requirements

• Assemble pipe segment in an upland area
  – Unless wetland is dry enough to support skids and pipe
• Segregate top 12 inches of topsoil from trench
  – Except in saturated or frozen soil conditions
  – Treat actively cultivated wetlands as agricultural land
• Minimize duration that
  – Topsoil is segregated
  – Trench is left open

*No trenching in wetland until pipe is assembled and ready for installation.*
Crossing Methods

Open-Cut

Push-Pull/Float
Horizontal Directional Drill
Assembled Pipe
Trenching
Pushing Concrete Coated Pipe in Wetland
Pipe Laying
Trench Plugs

**Why**
- Keep trench water out of waterbodies
- Prevent drainage of wetlands and waterbodies

**Where**
- Wetland and waterbody boundaries

**What**
- Earthen “plugs” (do not use topsoil)
Trench plugs
Trenching from Barge

Silt curtain
Spill Prevention

• Structure project operations to minimize risk of spills to wetlands and waterbodies
  – Identify access roads approved for fuel transport
  – Designate areas at least 100 feet from wetlands, waterbodies, and municipal watersheds for
    • Hazardous materials storage
    • Concrete coating
    • Equipment fueling, maintenance, and parking

With EI approval, parking, refueling, and concrete coating may occur within 100 feet if it is determined in advance that no reasonable alternative exists
Spill Prevention

• Maintain and inspect equipment regularly
• Repair leaks immediately
• Place absorbent pads or plastic on the ground during fueling and maintenance activities
Spill Prevention

• *Use appropriate and adequately sized secondary containment
  – Pumps
  – Fuel tanks
  – Hazardous materials containers

*Secondary containment is required if activities are within 100 feet of a wetland or waterbody
Effective Secondary Containment
Effective Secondary Containment
Ineffective Secondary Containment
Restoration

• Restore segregated topsoil immediately after backfilling
• Remove wetland stabilization materials and equipment mats
• Implement project-specific wetland restoration plan
Restoration

• Construct Trench breakers at the wetland boundaries
• Restore pre-construction contours to maintain wetland hydrology
• Do not use fertilizer, lime or mulch unless required in writing by the appropriate federal or state agency
Subsidence
Revegetation

• Temporarily revegetate with annual rye grass
  – If project-specific wetland restoration plan has not yet been developed
  – At 40 pounds/acre
  – Unless standing water is present

Do not use soil amendments or mulch, unless otherwise required by land managing or state agency
Noxious/Invasive Weed Control/Management Plans

• Wash construction equipment and vehicles before
  – Arriving at project site
  – Crossing county or state lines if required

• Certain Projects May Require
  – Preparation of a Noxious/Invasive Weed Management Plan
  – Identification and control of infestation on the right-of-way
  – Full right-of-way topsoil segregation
  – Use of cleaning stations
Equipment Cleaning
Post Construction Maintenance and Reporting

• No routine vegetation mowing or clearing over the full width of permanent right-of-way.
• Do not use herbicides or pesticides in or within 100 feet of a wetland except as allowed by appropriate federal and state agency.
• ROW mowing shall not be done more frequently than every 3 years.
• No mowing or clearing between April 16 and August 1 unless approved by land management agency or the U.S. Fish and wildlife service.
Post Construction Monitoring and Reporting

• Monitor and record the success of wetland revegetation annually until wetland vegetation is successful.*

• Within 3 years after construction, file a report with the Secretary identifying the status of wetland revegetation efforts and documenting success. *(this does not apply to automatic authorization, prior notice or advance notice provisions in the FERC’s regulations.)*

* Successful if: affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation. See Procedures at VI.D.5), vegetation is 80% of either the cover documented for the wetland prior to construction, or at least 80% of the cover in adjacent wetland areas undisturbed by construction.
Contact Information

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