

Considerations in FERC Licensing of New Projects

USSD Workshop – The Challenges of Dams in Cold
Climates; Design, Construction, Environmental and
Sustainability Issues

Tract B, Part 2 – Environmental
Sustainability – Plans, Studies,
and Permits in Alaska



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Are You Ready for What it Takes to Develop a Dam and Hydro Project?





Owner's Process

Define Project Requirements & Success

Acquire the rights to develop the Projects

Power sales agreement

Financing plans

Interfacing with FERC, Corps and other agencies

Legal Resources

Acquire properties

Insurance policies

Defines Contracting Process – philosophy, approach, requirements for purchasing goods and services

Project Development Process

- Financial and Institutional
- Engineering
- Licensing and Permitting
- Regulatory Review & Outreach
- Contracting
- Implementation
- Construction & Monitoring

PRELIMINARY PERMIT

- ✓ Does not authorize construction or any land-disturbing activities
- ✓ Issued for a term up to 3 years
- ✓ Reserves site for permit holder; includes progress reports
- ✓ No dam or land ownership required

LICENSE

- ✓ Authorizes construction and operation of a hydropower project
- ✓ Issued for a term up to 50 years
- ✓ Includes measures to protect the environment
- ✓ Requires that licensee has or obtains ownership or easement on project lands and waters

Licensing is Different than Relicensing

- Corps and FERC Jurisdictions overlap
- Start fresh on permissions from land owners to perform studies and gain access
- Lack of existing Exhibits and surveys to work from
- Data for environmental baseline conditions, monitoring, past operations data not typically in your files
- Lots of work goes into a PAD when you don't know for sure you really have a project

FERC Licensing

- Prolonged timeline to obtain approvals
- Approvals can help secure financing and allow full design to proceed
- Perception of large environmental impacts
- Water Quality Certification, typically a 404 permit
- 5 Year + FERC process, then other approvals

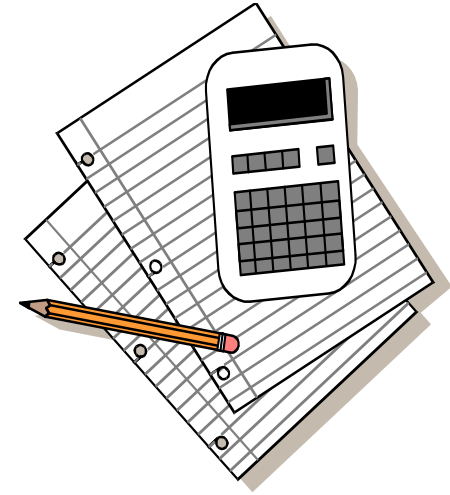
Outreach

- Identify Potential Stakeholders early on
- Develop a Strategic/Media Relations Plan
- Get early conversations going with key stakeholders
- Polling (PAD questionnaire) and media plan warranted
- Develop a rapport with all stakeholders
- Make sure you get information out you promise
- Benchmark PM&Es and highlight Project benefits

Licensing Studies

Potential Issues/Studies:

- Project Operations
- Water Quality (Dissolved Oxygen)
- RTE Aquatic Species
- RTE Terrestrial
- T-Line Avian Mortality
- Fish Entrainment & Passage
- Recreation Demand & Need
- Historic & Cultural Properties
- Project Boundary (Exhibit G)



Engineering Studies

Conceptual – Preliminary – Detailed Design

Geotechnical Studies

Topographical & Bathymetric Surveys

Physical Hydraulic Models

Flood Studies (PMF / PMP)

Transmission Line Studies

Turbine Generator Specifications

Design Memorandums

FERC & USACE Approvals(BOC)

Probable Failure Modes Analysis (PFMA)



Other Permits and Approvals

Section 7 – ESA Compliance

Section 106 – Nat’l Historic Preservation Act
Compliance

Section 10 Rivers & Harbors Act Permit

Section 401 Water Quality Certification & CZM

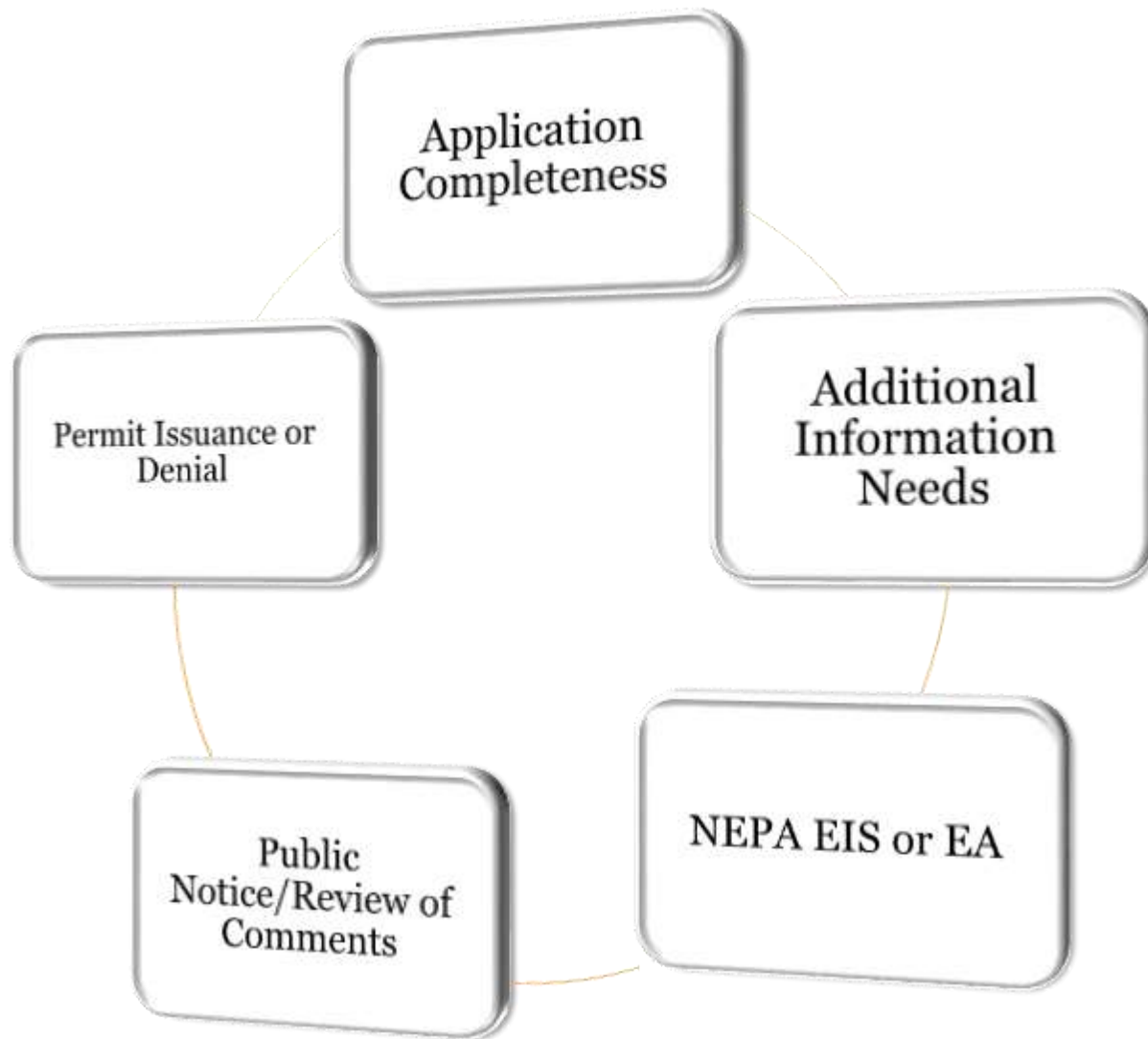
Section 404 Permit – Clean Water Act

Similar to FERC, also need:

- 401 Water Quality Certification
- ESA clearance
- Cultural Clearance (SHPO)
- Navigation/Floodway Protection
- NEPA



FERC Application Processing



Contracting Process

Coordination with other processes

Overall scope into contract bid packages

- Turbine/Generator -Land Clearing - Cofferdam, etc

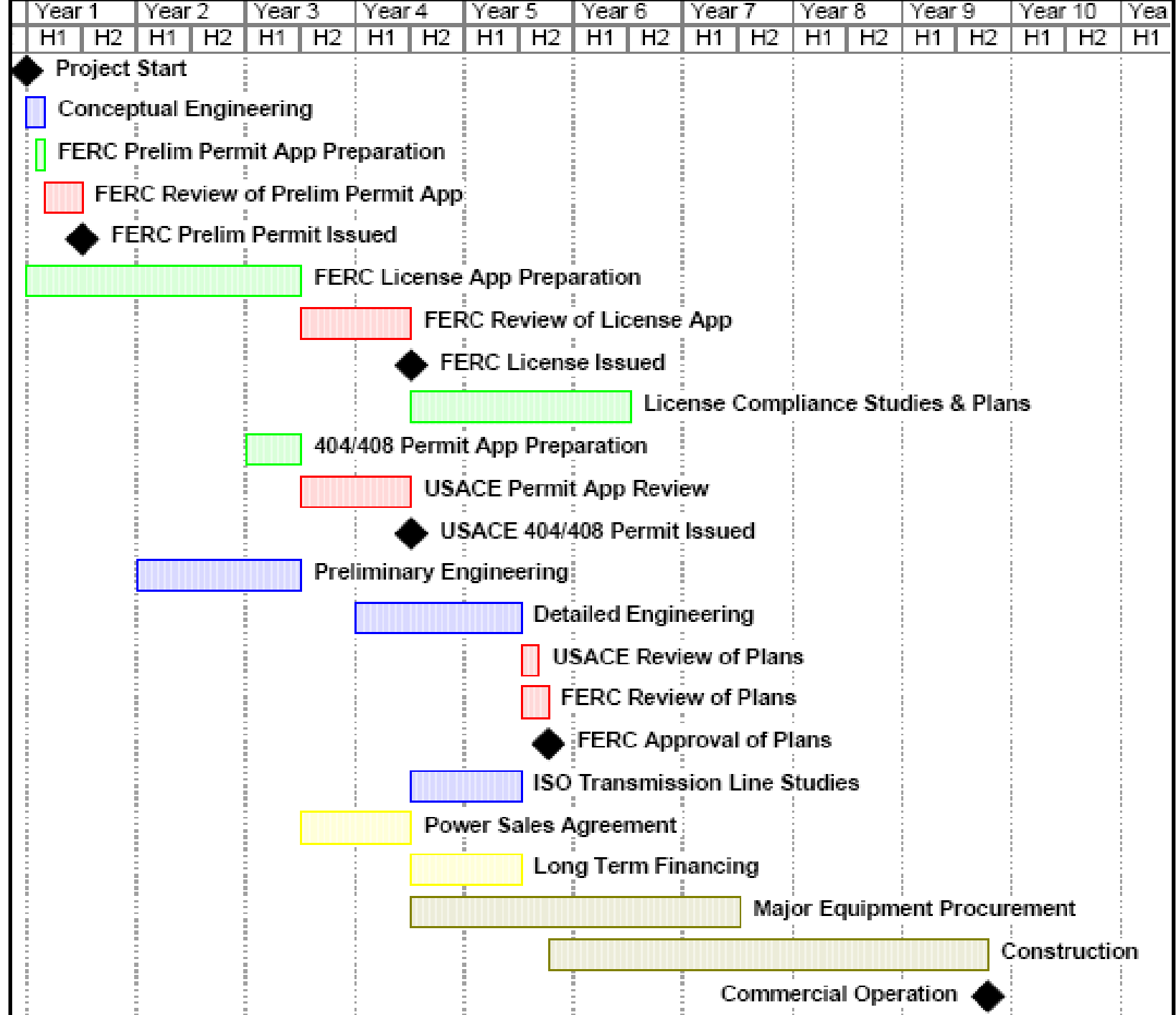
Risks and Mitigation identified

Procurement Process

- Prequalification/competitive bid or single-sourced
- Evaluation & Award Process

Manage Change

Contract Disputes/Obligations



Lessons Learned

Schedule constraints and financial risks are inherent in the development process

Be careful when Benchmarking Other Licensing Proceedings

Encourage Alaska Natives, Agencies and Particularly the Corps in Licensing

Determine Safety and Security Standards early on

Encourage FERC to Participate Actively

Communicate, Communicate, & Coordinate with all Stakeholders

Questions-Comments?

Thank you

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