Small Hydro Workshop

NW HYDROELECTRIC ASSOCIATION



The FERC Process

Regular License Process

- > Preliminary Permit
- > Full License Process
- > Permanent Condition

Review Process

- > Integrated License Process
- > Traditional Licensing Process
- > Alternative Licensing Process

FERC Exemption Process

SMALL HYDRO EXEMPTION

- Project of 5 MW or less
- Install at non-federal pre-existing dam or at a natural water feature
- On federal lands, any applicant
- On non-federal lands, applicant must have a land interest (ownership, lease, control)
- Project area is diversion and all components of the project

FERC Exemption Process

SMALL CONDUIT HYDRO FACILITY

- Up to 15 MWs, generally
- Obtain real property interest
- Cannot occupy federal lands
- Categorically exempt from EA or EIS
- Project area is only the power generation portion of the project area



EXISTING DIVERSION PROJECTS

HB 2785

Proposes expedited process for projects

- ✓ Part of artificial delivery system
- Existing water right
 - ✓ Cannot exceed current quantity rate and duty
 - ✓ Cannot exceed season of use
- Qualifies for a FERC Exemption
- Applicant owns or controls conveyance system
- √ Fee of \$500
- Map and drawing of project and project area
- Evidence of use over past 5 years
- ✓ Fishscreen or by-pass as required by ODFW.

HB 2785 continued

- ✓ Measured diversion
- ✓ No priority date
- ✓ Expedited process
- √ 50 year review

OTHER INCENTIVES



STATE INCENTIVES

Already discussed:

State Programs

- **□**BETC Credit
- ☐ Small Scale Energy Loan Program
- OECDD
- ☐ Energy Trust of Oregon

ADDITIONAL INCENTIVES

- FEDERAL INCENTIVES
- □ Energy Policy Act of 2005 and 2006 Amendments

- Production Tax Credits
 - --in service by January 2009 (proposal to extend date)
 - --.9 cents credit (proposal to change to 1.8 cents)
 - --for a period of 10 years

Additional Federal Incentives

- □ Clean Renewable Energy Bonds (CREBS)
 - --for municipal governments, coops, tribes and others
 - --bonds must be issued before December 31, 2008 (extended)
 - --\$800 million authorized for 2007 \$400 million more authorized for 2008

Additional Federal Incentives

- □ Hydroelectric Production Incentives
 - --new hydro at existing dams or conduits
 - --cannot enlarge impoundment or diversion
 - --for non-federal entity applicants
 - --new hydro development at federal dams by non-federal entities
 - --1.8 cents per kwh

☐ Hydroelectric Production Incentives (continued)

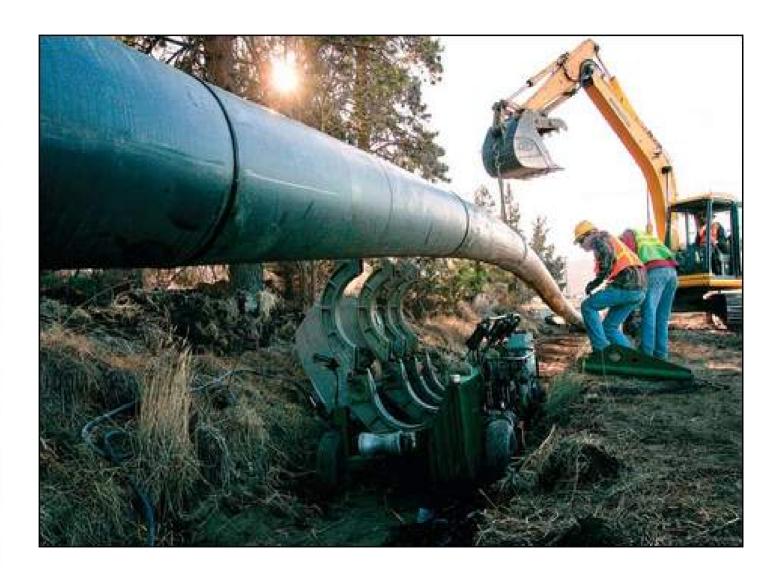
- --must be on-line by 2015
- --credit available for 10 years
- --no more than \$750,000 per year
- --\$10 million per year availablebetween 2006-2015(not appropriated yet for current year)

IRRIGATION PROJECTS

For farmers and irrigation districts with existing diversions, renewable hydropower provides an opportunity to

- □ Expand on existing facilities and secure additional income
- ☐ Farmers can provide energy for their own use (districts can't; precluded by statute)
- ☐ Districts can generate new revenues to displace loss of lands to urbanization

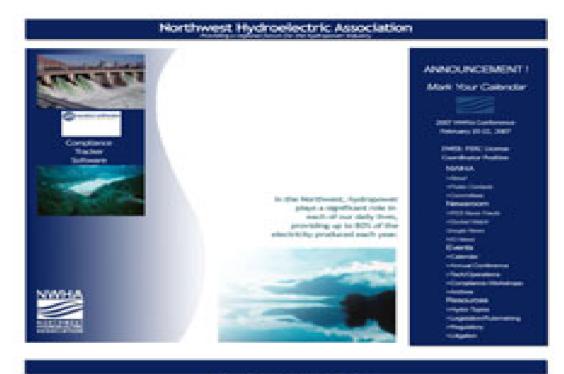
EXAMPLE



Swalley Irrigation District

- Pipe 5.1 miles of open canal
- Conserve 27 cubic feet per second of irrigation water and place permanently instream
- Minimizes maintenance
- Conserves energy at each turnout by providing pressurized water for users
- Generate about 1 MW of energy
- Net income of approximately \$250,000 annually

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