



#### **Low Impact Hydropower Institute (LIHI)**

- Non-profit, 501(c)(3) incorporated in 1999 – Tenth Anniversary!
- Governing Board (majority must be from environmental organizations)
  - Hydropower Industry Advisory Panel
  - Renewables Advisory Panel
  - Natural Resource Technical Advisor

#### **LIHI Purposes**

- To provide a market incentive to reduce the impacts of hydropower generation
- To provide a credible and accepted standard for consumers to use in evaluating hydropower

#### **LIHI Origins**

- **Initiated by**
  - American Rivers, Green Mountain Energy, and CRS/Green-e
- **In response to**
  - Deregulation at the state level
  - Emergence of “green” power programs and products
  - Concerns over assertions that all hydro is “green”
  - Concerns with the “small hydro” standard

#### **Program Focus**

- Develop criteria to identify those existing hydropower dams whose impacts are low, relative to other hydropower facilities ---“Low Impact” does not mean no impact
- Applies to existing dams only, but those with new capacity eligible in certain cases

#### **Low Impact Criteria Areas**

- River Flows
- Water Quality
- Fish Passage and Protection
- Watershed Protection
- Threatened and Endangered Species Protection
- Cultural Resources Protection
- Recreation Use and Access
- Not Recommended for Removal

#### **General Standard: Most Recent, Most Stringent Resource Agency Recommendation**

- Most recent=post 1986 (FPA amendments)
- Most stringent=most environmentally protective
- Resource Agency=state, tribal, or federal resource protection agency (not FERC)
- Recommendation=formal recommendation made in relevant administrative proceeding
- Settlement agreements can serve as standard

#### **Standards**

- Tough, but achievable, and gives rationale for price premium for existing hydro

### **Eligible Facilities**

- All existing hydropower facilities (including federal dams) except:
  - Pumped storage facilities
  - Facilities outside the United State
- Some “new” hydro (new generation at existing dams- Aug. 1998):
  - No new dam construction
  - Flows can’t be altered to make conditions worse
  - Dam can’t have been recommended for removal

### **Certification Process: Public & Transparent**

- Pre-Application Screening
- Application posted to web site, 60 days for public comment
- Application Reviewer (technical consultant): review and report
- Staff review and recommendation (policy issues)
- Preliminary Certification Decision (Governing Board)
- Appeals (if any)
- Process time: approx. 4-6 months (without complications)
- Term of certification: 5 years with option to renew
- Application fee: based on production, low is \$1,600, high is \$50,000+

### **Program Benefits**

- Based on actual impacts, not size/capacity
- Process is transparent and public

### **Experience So Far**

- *42 Projects (110 Dams) in 22 states with an installed capacity of 2600MW*
- *We have 15 projects pending and a number of projects currently in discussion and pre-application consultation phase*

### **Why certify a facility?**

- Assure customers of environmental credibility
- Provide basis for seeking price premium for existing hydro
- Gain access to other green certification programs or tag trading
- Minimal cost or effort for most existing qualifying projects

### **Challenges**

Size Standard as Default

How to accommodate micro, tidal, and other non-traditional types of hydropower while not lowering standards

How to help electricity customers understand the difference between “renewable” and “low impact”

Making small Projects more LIHI friendly

Improving Outreach and Program Documents

For More information about LIHI please Contact:

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