

Low Impact Hydropower Institute

Certifying Existing Hydropower For the Emerging Green Market

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Low Impact Hydropower Institute (LIHI)

- Non-profit, 501(c)(3) incorporated in 1999
- Governing Board (majority must be from environmental organizations)
 - American Rivers, Trout Unlimited, Environmental Defense, TNC, etc.
- Advisors (Non-Voting)
 - 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
- 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” (30 MW) 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
- Should provide reasonable approximation of environmental impacts
- Applies to existing dams only, but those with new capacity eligible in certain cases
- Does not apply to pumped storage projects, or projects outside the U.S.



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



Certification Process: Public & Transparent

- Application posted to web site, 60 days for public comment
- Application Reviewer (technical consultant or LIHI staff): review and report
- Staff review and recommendation (policy issues)
- Certification Decision (Governing Board)
- Appeals (if any)

Certification Process, (cont'd)

- Process time: approximately 4 months
- Term of certification: 5-8 years with option to renew---LIHI had first re-certification applications in 2006 and have several more coming up in 2007
- Current application fee: based on production, low is \$2,500 high is \$50,000+ US\$

Program Benefits

- Based on actual impacts, not size/capacity
- Standards are science-based, objective, process-tested
- Standards are site specific
- Comprehensive range of resources addressed
- Process is transparent and public

Certified Projects as of July 2007

- Stagecoach Project (CO): 0.8 MW, one dam.
- Island Park (ID), 4.8 MW, @ federal dam
- Putnam Project (CT), 0.575 MW, one dam.
- Falls Creek Project (OR), 4.3 MW, one dam.
- Skagit Project (WA), 690 MW, 3 dams
- Black Creek (WA), 3.7 MW, one dam.
- Beaver River (NY) 44.8 MW, 8 dams
- Nisqually Project (WA) 114 MW, 2 dams
- Strawberry Project (WY) 1.5 MW one dam
- Worumbo Project (ME) 19.4 MW one dam
- Pawtucket Project (RI) 1.3 MW one dam
- Tallasse Shoals (GA) 2.3 MW one dam
- Hoosic River (NY) 18.5 MW 2 dams
- Raquette River (NY) 160.3 MW 14 dams



Certified Projects as of July 2007, (Continued)

- Bowersock Mills (KS) 2.5 MW one dam
- Winooski One (VT) 7.4 MW one dam
- Summersville (WV) 80 MW federal dam
- Tapoco (TN&NC) 326 MW, 4 dams
- West Springfield (MA) 1.4 MW, 1 dam
- Salmon River (NY) 36.25 MW, 2 dams
- Buffalo River (ID) 250kW, 1 dam
- Black Bear Lake, (AK) 4.5 MW, 1 dam
- Raystown, (PA) 21 MW, federal dam
- Mother Ann Lee, (KY) 2 MW, state dam
- Pelton Round Butte, (OR) 366 MW, 3 dams
- Goat Lake, (AK) 4 MW, 1 Dam
- West Branch St. Regis (NY) 6.8 MW, 2 dams



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



Questions ?

