8:30 a.m.–5:00 p.m.

**Licensing & Compliance “201”**

In 2011, NWHA presented a half-day workshop on Licensing and Compliance (Licensing “101”). The overwhelmingly positive responses from that workshop prompted us to expand to a full day for 2012 (Licensing “201”) and include additional topics such as amendments and case histories discussing innovative problem-solving.

8:30 a.m.–10:00 a.m.

**Part 1: Introduction – Getting Started**

Overview of how projects are regulated includes information on new project licensing, preliminary permits, streamlining for low impact projects and the relicensing processes. Attendees will receive notebooks providing references and website links.

**Moderator:**
Patti Kroen, California Hydro Practice Lead, URS Corporation

**Presenter:**
Jennifer Hill, Chief, NW Branch, Hydropower Licensing, Federal Energy Regulatory Commission (FERC)

10:00 a.m.–10:30 a.m.

**Break**

10:30 a.m.–11:15 a.m.

**Part 2: Mandatory Conditions and Approvals**

Overview of the role other federal agencies and laws have in FERC processes, such as the National Environmental Policy Act, Endangered Species Act, Clean Water Act, and National Historic Preservation Act.

**Presenters:**
Matt Love, Attorney, Van Ness Feldman, PC, Seattle

11:15 a.m.–Noon

**Part 4: Amendments**

Amendments are a fact of life in the career of a FERC license. Not to be feared and loathed, they can be of great benefit! This panel will include an examination of the amendment process, schedule, timing considerations and perspectives from licensing professionals with experience amending their FERC license.

**Presenter:**
Suzanne Adkins, FERC License Manager, Eugene Water & Electric Board

**Panelists:**
Jennifer Richcreek, Environmental Coordinator, Kodiak Electric Association, Inc. – Terror Lake Project
Jay Maher, Regulatory Manager, Kleinschmidt Associates – Northwest Consultant’s Perspective

Noon–1:30 p.m.

**Lunch on own**

1:30 p.m.–3:15 p.m.

**Part 5: Panel Discussion - Innovative Solutions to Success**

Innovative and creative problem solving in a “rigid” regulatory world: we all feel constrained by the many requirements of the Federal Power Act and other regulatory structures. This panel explores innovative approaches to overcoming challenges and achieving licensees’ goals. When creative interpretation of regulations, collaboration and financing mechanisms are all on the table, (almost) anything is possible.

**Moderator:**
Finlay Anderson, Senior Consultant, Long View Associates, Inc.

**Panelists:**
Barbara Greene, Manager, Boundary Relicensing, Seattle City Light
Keith Binkley, Manager, Natural Resources, Snohomish Public Utility District
Gary Lytle, Manager, Deschutes Valley Water District
Dan Ross, Operations & Maintenance, Project Manager, Energy Northwest

3:15 p.m.–3:45 p.m.

**Break**

3:45 p.m.–5:00 p.m.

**Workshop Q & A**

Presenters and panelists from the workshop will be available to answer questions and respond to comments during this interactive session.

5:00 p.m.–6:30 p.m.

**Social**

Take advantage of this opportunity to unwind and connect with old friends and new.
7:30 a.m.
Registration
FOYER
Continental Breakfast
SALONS A-D

7:30 a.m.–9:00 a.m.
Annual Membership Meeting
SALON F
All members and attendees interested in potential membership are invited.

9:15 a.m.–9:30 a.m.
WELCOME
NWHA President Patti Kroen
URS Corporation
SALON E

9:30 a.m.–10:00 a.m.
KEYNOTE:
Angus Duncan
President, Bonneville Environmental Foundation
SALON E

10:00 a.m.–10:30 a.m.
Break
SALONS A-D

10:30 a.m.–Noon
It's Not Easy Being Green
SALON E
Green hydro projects attract incentives such as Renewable Energy Credits (RECs) and Tradable Energy Credits (TRECs) in the marketplace. Panelists will provide their experiences in the brokering of these credits, the influence of the Renewable Portfolio Standards (RPS) and other strategies. An update on the national hydropower assessment conducted for the U.S. Energy Department and its implementation in the Northwest relative to green projects will be presented.

Moderator:
Steve Johnson, Manager, Central Oregon Irrigation District

Panelists:
Brennan Smith, Water Power Program Manager, Wind & Water Power Technologies, Oak Ridge National Laboratory – National Hydropower Assessment
Ben Rees, V.P., Renewable Energy Markets, Evolution Markets – RECs, TREC, RPS
John Lowe, Director, Renewable Energy Coalition – Developers’ Use of Incentives
John Seebach, Member of Governing Board, Low Impact Hydropower Institute – Green Project Certification

Lunch/NWHA Awards Program and Networking
SALON F

1:30 p.m.–3:00 p.m.
Growing Hydro Capacity
SALON E
Developing new hydro – whether through new construction or upgrades and rehabilitation of existing projects – is more than finding the ideal location and ordering turbines. Panelists present the interests, challenges, and successes of those on the forefront of adding renewable Megawatts into the system. How do regulatory requirements, political/environmental negotiations, feasibility analyses, design considerations, and construction challenges determine the growth of hydro capacity?

Moderator:
Scot Lawrence, Project Manager, Portland General Electric

Panelists:
Norm Bishop, Sr. Vice President, Knight Piésold & Co.
Clay Koplin, CEO, Cordova Electric Cooperative, Inc.
Barbara Stanley, Energy Coordinator, USDA Forest Service, Alaska Region
Steven Fischer, Assistant Generation Manager, Tacoma Power

3:00 p.m.–3:30 p.m.
Break
SALONS A-D

3:30 p.m.–5:00 p.m.
Water Quality: Successful Implementation Strategies
SALON E
Dam operators face the responsibility of mitigating or managing a variety of water quality parameters in licensing and operating their hydroelectric facilities. This panel focuses on four different solutions to four recurring challenges. From total dissolved gas (TDG) to water temperature management, from turbidity management to dissolved oxygen (DO) issues, these four dam operators are successfully addressing a range of water quality issues with creative engineering and operational solutions.

Moderator:
John Esler, Project Manager, Portland General Electric

Panelists:
Lori Campbell, Water Quality Specialist, Portland General Electric – Pelton Round Butte Project (Deschutes River, OR)
Carolyn Fitzgerald, Chief, Hydrology & Hydraulics Branch, US Army Corps of Engineers, Seattle District – Chief Joseph Dam (Columbia River, WA)
Andrew Welch, Support Compliance Professional, PPL Montana - Great Falls Projects (Missouri River, MT)
Erik Steimle, Division Manager, Licensing & Environmental Compliance, Riverbank Power - Dorena Dam (Row River, OR)

5:00 p.m.–5:30 p.m.
NWHA Board of Directors Meeting
SALON G

5:30 p.m.–7:00 p.m.
Social
SALONS A-D
Treat yourself to some specialty Northwest foods.
7:30 a.m.
Registration

FOYER
Continental Breakfast
SALONS A-D

8:15 a.m.
WELCOME
SALON E

8:20 a.m.–8:45 a.m.
KEYNOTE:
Jon Wellinghoff
Chair, Federal Energy Regulatory Commission
SALON E

8:45 a.m.–10:15 a.m.
Is This Project for the Birds?
SALON E
To reach the goal of minimizing environmental impacts of hydroelectric projects, dam operators are finding avian issues are becoming commonplace. Because many birds are protected by federal laws, operating requirements are often devoted to enhancing avian populations by minimizing the effects of project operations. At the same time, these avian safety measures must balance other resource issues such as limiting the predation of ESA listed fishes. This expert panel will explore the role dam operators are being asked to play, the conflicts with multi-species management and competing goals, and strategies for engaging the agencies.

Moderator:
Chris Karchesky, Manager, Normandeau Associates, Inc.

Panelists:
Michael Green, Biologist, Division of Migratory Birds, US Fish & Wildlife Service
Behr Turner, Senior Biologist, Grant County Public Utility District
Mel Walters, Consulting Natural Resource Scientist, Puget Sound Energy
Brent Leonard, Environmental Manager, PacifiCorp

10:15 a.m.–10:40 a.m.
Break
SALONS A-D

10:40 a.m.–12:10 p.m.
Hydro Relicensing Class of ‘93
SALON E
Join us for a licensing class reunion. Find out what happened and learn from our experiences. How did other facility owners, engineers and regulators solve difficult license implementation problems? What technical solutions were devised? How are these challenges similar to your projects or facilities?

Moderator:
Catrin Van Donkelaar, Director of Canadian Operations, McMillen Engineering, LLC

Panelists:
Tim Swant, Clark Fork License Manager, Avista Corporation – Clark Fork River:
Adaptive management, working with stakeholder groups over time
Lewis Wardle, Senior Biologist, Licensing Program, Idaho Power Company – Mid-Snake River Projects:
Potential Jeopardy Opinion and multi-year investigation of snail survival under special operations studies
Bill Christman, Hydro Engineering Manager, Chelan PUD – Lake Chelan & Rocky Reach:
Creative solutions for water temperature & habitat improvements
Lisa McLaughlin, Staff Biologist, Eugene Water & Electric Board – Walterville:
Tailrace barrier fish return channel/meeting regulatory design criteria in dynamic river system

12:10 p.m.–1:15 p.m.
Lunch on own

1:15 p.m.–5:00 p.m.
Development on Federal Facilities
SALON E
The U.S. Army Corps of Engineers (USACE) and the Federal Energy Regulatory Commission (FERC) lead a workshop to improve the coordination of licensing process for development of non-federal hydropower opportunities at USACE facilities. Utilities and other developers will participate in this forum to discuss the process and how to work with the agencies.

Presenters will include:
Matt Cutlip, Division of Hydropower Licensing, FERC
Eric Gaedeke, Division of Hydropower Administration & Compliance, FERC
Marci Johnson, Planning, Programs and Project Management Division, USACE
Ed Perez, Division of Dam Safety and Inspections, FERC

There will be an interactive discussion between participants and agency representatives. This event, following NWHA’s annual conference at the Portland Downtown Marriott Waterfront Hotel, is free of charge.

3:15 p.m.
Break
SALON E
Special thanks to our break sponsor MWH Global

Win a Kindle Touch!

Be sure and return your fully completed Evaluation Form to the Registration Desk by 12:30 on the 23rd, after the last panel, to be entered into the drawing for a Kindle Touch 3G.
Portland Points of Reference

Downtown Portland is convenient and visitor-friendly! Use these points of reference to help make it even more so.

1. **MAX light rail station**
   Yamhill Station
   (Take the Red Line from the airport; $2.35)

2. **Portland Marriott Downtown Waterfront Hotel**
   1401 SW Naito Parkway
   .5 mi. from MAX Yamhill Station
   Estimated taxi fare: $35.00
Hydropower, pumped storage, small hydro and ocean energy.

Regional and national developments affecting traditional energy.

Assist clients with the development and modernization of environmental and regulatory services to complex projects and make sound decisions. HDR is committed to helping clients manage operations effectively, transparently, and focused on the long-term performance of the organization. Since 2000, we have been empowering utilities and hydro generators to make decisions with greater confidence.

Eureka Software

Eureka Software is THE information technology services and products company for the hydropower industry. Eureka’s leading-edge products and services include hydro relicensing process management solutions, SharePoint management, database structures and integration, and software modules: ES Compliance Tracker, ILP Tracker, and NERC Tracker for NERC & Regional Standards’ management.

Golder Associates, Inc.

Founded in Canada in 1960, Golder Associates is a respected, employee-owned, global company providing consulting, design, and construction services in earth, environment, and related areas of energy. Today, our clients span the world’s major economic drivers: oil and gas, mining, manufacturing, power, transportation, water resources, and more. Our 7,000 people deliver deep technical understanding, cross-disciplinary thinking and a passion to help our clients succeed.

Hach Hydromet

Hach Hydromet helps water resource professionals generate reliable data throughout the entire cycle of water, from measuring precipitation to monitoring estuaries and ground water, and everything in between. Hydrolab multi-parameter water quality instruments are built using the industry’s leading sensor technology. OTT products have been leading level, discharge, and precipitation measurement for over 130 years. Our technology, combined with expert technical support and service, delivers results you can depend on.

HDR, Inc.

HDR is an employee-owned firm providing architecture, engineering, consulting, construction and related services. Our more than 7,800 professionals are committed to helping clients manage complex projects and make sound decisions. HDR provides engineering, environmental and regulatory services to assist clients with the development and modernization of hydropower projects and facilities. Consultants in HDR’s Northwest offices are keenly aware of the significant regional and national developments affecting traditional hydropower, pumped storage, small hydro and ocean energy.

Hydrovolts

Hydrovolts’ new hydrokinetic power technology taps a plentiful but overlooked source of renewable energy from water currents in canals, channels, and spillways. Hydrovolts’ Turbines offer an economical and easy way to generate reliable, local, clean power in millions of locations around the world. You’ll never look at water the same way again.

Integrated Power Services

Integrated Power Services, or IPS, specializes in single-source turnkey solutions for hydroelectric generators, including in-shop and on-site repair, engineering services, and the manufacture of stator coils up to 15 kV. Our Hydro services include stator rewinds up to 50MW at 15 kV, rotor and exciter rebuilds, plus extensive machining and repair of shafts. For more information, visit www.ips.us/hydro.

International Water Screens

Traveling water screens by International Water Screens Co. are complete water screen solutions. International Water Screens specializes in designing and manufacturing self-cleaning traveling water screens and self-cleaning fish screens for water debris removal from your canal, river or reservoir. If you have debris in your water … we can remove it.

Kamatics

Kamatics Karon bearings have been utilized in the hydropower industry for wicket gates, linkages, guide bearings Kaplan hubs, radial gates, mooring bit rollers, fish screens, and miter gate pintle bearings.

Knight Construction

Knight Const. and Supply, Inc. is a small business heavy industrial construction contractor with extensive experience working on hydropower facilities, from the navigation locks to fish passage to power generation. Services also include fire protection and rehab/design/build crane projects. Knight’s top priorities are safety and customer satisfaction. Knight’s skilled craftsmen include Millwrights, Certified AWS D1.1, D1.5 and ASME Sect. IX Welders and Pipefitters, Carpenters, Power Equipment Operators, Electricians and Laborers. See more at www.knightconst.com.

Long View Associates

Long View Associates specializes in FERC hydropower licensing. We provide strategic planning, project management, meeting facilitation, agency consultation, studies oversight, document preparation, and negotiations support to meet clients’ licensing needs and objectives. LVA has significant experience with all types of FERC licensing processes, mandatory conditions, Section 401 certification, ESA consultation and settlement agreements. We also provide assistance in new license implementation, with expertise in developing and implementing compliance programs, and preparing fish passage, recreation, historic properties and shoreline management plans.
Mason, Bruce & Girard, Inc.

Mason, Bruce & Girard, Inc. (MB&G) is a natural resources consulting firm headquartered in Portland, OR, currently celebrating our 90th year. MB&G brings credible, cost-effective, and dedicated support for hydro relicensing and implementation of settlement agreements.

**NAES Corporation**

NAES Corporation provides services on turbines/generators and power generation equipment associated with hydroelectric facilities and has extensive experience in hydroelectric projects, including annual maintenance, penstocks, hydraulic valves, draft tubes, wicket gates, turbine disassembly, rebuild and reassembly, retrofit installation, alignment and commissioning, and electrical services.

**Natel Energy, Inc.**

Natel Energy, Inc. is a provider of low head hydropower systems. With Natel’s innovative hydroEngine™ technology, thousands of existing low dams and drops, both in constructed waterways and in streams, can be developed with a minimum of environmental impact to produce a new source of renewable, reliable electricity.

**Peak Hydro Services**

Peak Hydro Services is an industry leader in Hydroelectric Turbine repair, refurbishment, and rehabilitation. Primary services are field (in place) machining and welding with a fleet of specialized machine tools for Coupling Bores, Embedded Components, Runners, Sole Plates, Valves, Wicket gates; manual and semi-automatic welding for Cavitation, Fractures and Overlay; shop fabrications, shaft/component machining and balancing. Provision of Technical Assistance, Scope Writing, Project and Outage Management Services for all makes and types of Hydroelectric Turbines.

**PennWell Hydro Group**

PennWell’s Hydro Group offers immense opportunity for industry professionals to stay in the know and up-to-date on hydro-related developments. Access the latest hydro industry trends, equipment, new development and much more in print with Hydro Review magazine, online at HydroWorld.com, HydroWorld Weekly e-newsletter and HydroWorld Premium Content AND face-to-face through attending the largest hydro-focused event in the world, HydroVision International. Subscribe, stay informed and register to attend at www.hydroworld.com.

**Smith-Root**

Smith-Root is the world leader in electric fish barrier and guidance technology. Having installed over 50 projects over the last 30 years, we have the knowledge, experience, and technology to assist you in any fish barrier or behavioral guidance system application. We have barriers to contain sterile grass carp within powerstation cooling lakes, and barriers to prevent fish from moving upstream into hydropower tailraces. Evaluations of our guidance systems in the peer-reviewed fisheries literature confirm that both juvenile and adult-sized fish can be successfully blocked, guided or deterred.

**Wagstaff Applied Technologies**

Wagstaff Applied Technologies (AT) is a Division of Wagstaff, Inc., located in Spokane, WA. AT provides electrical and mechanical engineering and manufacturing services. Fabrications to 50 tons, CNC machining to 24’ x 14’ x 12’ and turning to 68’ x 70” diameter. Also produce automated control systems with SCADA. Hydro projects: Turbine Rehabs, including Wicket Gate and Hub and Lever machining, Servomotor rebuilds, Runner modifications, Operating Ring machining oversight.

**Whitney Equipment Company, Inc.**

For over a decade Whitney Equipment Company has been the leading provider of equipment for fish collection & bypass systems for hydropower in the Pacific Northwest. Addressing increased regulations by licensing agencies, EPA and the ESA, Whitney developed a solution to move migrating juvenile fish downstream in a safe manner, simultaneously increasing the fish survival rate and facility power generation capacity. Utilizing Xylems Flygt pumps, Norris screens, Plasti-Fabs fiberglass gates and Emerson Rosemounts’ flow and level instrumentation, Whitney created a system approach. See www.wec.com.

**Williams Form Engineering Corp.**

Williams Form Engineering Corporation has been providing threaded steel bars and accessories for rock anchors, soil anchors, high capacity concrete anchors, micro piles, tie rods, tie backs, strand anchors, hollow bar anchors, post tensioning systems, and concrete forming hardware systems in the construction industry for over 85 years.

**Worthington/Tuffboom**

Worthington Products, Inc. is recognized worldwide as the premier suppliers of Dam Safety Barriers, Waterway Security Barriers, Fish Guidance Systems and Log and Debris Booms. If you need a Line of Demarcation, or need to protect your site from a high-level waterborne threat, collect/divert debris, or guide fish for safe passage, Worthington Products has the proper solution for your specific application.

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**Mark Your Calendar!**

**Technical Workshop**

May 17-18, 2012
Tulalip Resort, north of Seattle, Washington

**Small Hydro Workshop**

September 13-14, 2012
Riverhouse Resort & Convention Center, Bend, Oregon

**NWHA 2013 Annual Conference**

February 19-21, 2013
Portland Marriott Downtown Waterfront, Portland, Oregon

**NWHA 2014 Annual Conference**

February 18-20, 2014
Marriott Downtown Waterfront Hotel, Seattle, Washington
### NWHA Panels at a Glance

**Tuesday, February 21**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 8:30 a.m.–10:00 a.m. | Licensing & Compliance 201  
Part 1: Introduction – Getting Started and  
Part 2: Mandatory Conditions and Approvals |
| 10:00 a.m.–10:30 a.m. | Break                                                    |
| 10:30 a.m.–11:15 a.m. | Licensing & Compliance 201  
Part 3: Compliance                                          |
| 11:15 a.m.–Noon   | Licensing & Compliance 201  
Part 4: Amendments                                            |
| Noon–1:30 p.m.    | Lunch on own                                             |
| 1:30 p.m.–3:15 p.m. | Licensing & Compliance 201  
Part 5: Panel Discussion - Innovative Solutions to Success |
| 3:15 p.m.–3:45 p.m. | Break                                                    |
| 3:45 p.m.–5:00 p.m. | Licensing & Compliance 201  
Workshop Q & A                                                  |
| 5:00 p.m.–6:30 p.m. | Social/Exhibits                                         |

**Wednesday, February 22**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
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</tr>
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| 1:30 p.m.–3:15 p.m. | Growing Hydro Capacity                                   |
| 3:15 p.m.–3:45 p.m. | Break                                                    |
| 3:45 p.m.–5:00 p.m. | Water Quality: Successful Implementation Strategies      |
| 5:00 p.m.–5:30 p.m. | NWHA Board of Directors Meeting                          |
| 5:30 p.m.–7:00 p.m. | Social/Exhibits                                         |

**Thursday, February 23**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Registration/Continental Breakfast (Exhibit Area)</td>
</tr>
</tbody>
</table>
| 8:15 a.m.–8:45 a.m. | Welcome and Keynote: Jon Wellinghoff,  
Federal Energy Regulatory Commission |
| 8:45 a.m.–10:15 a.m. | Is This Project for the Birds?                           |
| 10:15 a.m.–10:40 a.m. | Break                                                    |
| 10:40 a.m.–12:10 p.m. | Hydro Relicensing Class of ’93                       |
| 12:10 p.m.–1:15 p.m. | Lunch on own                                             |
| 1:15 p.m.–5:00 p.m. | Development on Federal Facilities                        |
| 3:15 p.m.        | Break                                                     |