



INTEROFFICE MEMO

EUGENE WATER & ELECTRIC BOARD
CORPORATE SERVICES DIVISION

Rely on us.

May 12, 2009

TO: Commissioners Farmer, Brown, Cassidy, Cunningham, and Ernst

FROM: Gene Austin, Compliance Auditor

RE: NERC Reliability and Compliance Update

Issue Statement

This is the second quarterly update of EWEB's NERC Reliability and Compliance activities for 2009. Currently activities include the addition of Transmission Operator to EWEB's list of registered functions with NERC, and the Critical Infrastructure Protection compliance effort.

Background

FERC – Federal Energy Regulatory Commission

NERC – North American Electric Reliability Corporation

WECC – Western Electricity Coordinating Council

BPA – Bonneville Power Administration

The Energy Policy Act of 2005 gave the Federal Energy Regulatory Commission (FERC) broad powers to regulate and improve the reliability of the bulk power system (BPS) and provided for penalties and sanctions for non-compliance. In 2006, FERC authorized the North American Electric Reliability Corporation (NERC) to develop mandatory Reliability Standards, monitor for compliance, determine and levy penalties and sanctions for non-compliance, and determine remedial actions for owners, operators, and users of the bulk power system relative to compliance violations. For the western region of the continent, NERC conducts its work through the Western Electricity Coordinating Council (WECC); EWEB's reporting agency.

Reliability Standards are a compilation of best industry practices that have been written from within the electric industry. The applicability of the Standards (and their associated Requirements) to an entity correlates to each entity's registered function(s) as described below.

Discussion

Today, these mandatory Reliability Standards define the obligations and specific Requirements of electric utilities and other related entities that operate, plan, and use the bulk power system (BPS) in North America.

After two years of discussion and review, EWEB received notice, by letter dated April 6, 2009, from the Bonneville Power Administration (BPA) – attached – that it would not enter into an agreement to perform the Transmission Operator function for EWEB. Promptly, EWEB submitted an application to NERC for the addition of the Transmission Operator function to its mix of registered functions. Upon NERC approval, EWEB's eight registered functions will include:

Generator Owner, Generator Operator, Transmission Owner, Transmission Operator, Purchasing Selling Entity, Load Serving Entity, Transmission Planner, and Distribution Provider

Although the formal letter from NERC has not been received it is expected during May 2009. Upon receipt, EWEB will be compelled to Self-Report all non-compliance associated with an additional 33 Standards consisting of 112 individual Requirements. A Gap Analysis is underway to determine EWEB's initial state of compliance with these new and additional Standards and Requirements. The result is expected to identify as many as 60 areas of non-compliance related to operational activities and requirements that were previously not required to be performed by EWEB or that were assumed to be performed by BPA. Mitigation Plans and corrective actions will commence immediately and extend well into 2010.

In another area of reliability compliance activity, EWEB will engage a specialized consulting firm to assist in compliance with newly revised Critical Infrastructure Protection (CIP) Standards. By the end of 2009, EWEB is required to comply with eight (8) CIP Standards comprised of 41 individual Requirements. CIP Standards address the security of EWEB's critical cyber assets and systems. Not meeting these regulatory requirements can result in significant civil penalties for EWEB resulting in meaningful financial impact to the utility and its customers.

Initially, EWEB believed that existing staff could facilitate compliance with these regulations along with normal workloads. Recent participation in cyber security workshops and a detailed analysis of the work tasks made it clear that without specialized consulting support, EWEB will not be able to meet the expectations of these regulations by the end of the calendar year. Work is expected to commence in May.

Recommendations/ Requested Action

No action requested at this time. Staff will provide additional Board updates on the NERC Reliability Standards Compliance during 2009.



Department of Energy

Bonneville Power Administration
P.O. Box 61409
Vancouver, WA 98666-1409

TRANSMISSION SERVICES

April 6, 2009

In reply refer to: TSE/TPP-2

Mr. Dean Ahlsten
Systems Engineering & Substation Reliability Manager
Eugene Water & Electric Board
P.O. Box 10148
Eugene, Oregon 97440-2148

Dear Mr. Ahlsten:

Bonneville Power Administration Transmission Services (BPA) has been engaged in an evaluation of customer transmission facilities to determine whether BPA should assume the Transmission Operator NERC registration function for such customers and facilities. At our January 30, 2009 meeting, Lorissa Jones, BPA Transmission Reliability Program Manager, Kelly Johnson, Customer Service Engineering Manager, John Schaad, Customer Service Engineer, and I informed you that BPA does not currently perform the Transmission Operator function for any of Eugene Water & Electric Board (EWEB) facilities, and that BPA will not enter into an agreement with EWEB to perform this function.

When the Transmission Operator (TOp) registration issue first came up over two years ago, BPA sought guidance from WECC regarding who should be registered as a TOp. At that time WECC indicated that only Control Area operators needed to register for the TOp function. Because EWEB is in the BPA Control Area, you were told at that time that EWEB did not need to register as TOp.

Since then, the industry gained a better understanding of the registration requirements, informed in part by the FERC ruling on Harquahala. *See* New Harquahala Generating Co., LLC, 123 FERC P61173 (May 16, 2008). That ruling overturned the previous interpretation that the Control Area operator would serve as TOp for all facilities in its Control Area. This placed BPA in the position of needing to reassess its responsibility with regard to non BPA-owned transmission facilities to determine whether we would perform the TOp function for such facilities.

To determine whether BPA would serve as TOp, BPA undertook an evaluation of customer transmission facilities on a case-by-case basis using a consistent assessment methodology. One important factor was whether BPA was already performing the TOp function for each facility. Another factor was whether BPA needed control of the facility to maintain system reliability.

The evaluation of EWEB's facilities has determined that BPA is not currently performing the TOp function for any of EWEB's facilities and that BPA does not need control of those facilities for system reliability. Therefore, BPA made the decision not to assume TOp responsibility for EWEB's facilities.

I hope this adequately describes the basis of BPA's decision to not become the Transmission Operator for EWEB facilities. We look forward to collaboratively working with EWEB to assist in the development of your Transmission Operator program. If you would like to discuss this further, please do not hesitate to call me at (360) 619-6013.

Sincerely,

A handwritten signature in blue ink, appearing to read "Young S. Linn".

Young S. Linn
Transmission Account Executive
Transmission Sales

cc: Kelly Johnson
Lorissa Jones



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD
PUBLIC AFFAIRS

Rely on us.

TO: Commissioners Farmer, Brown, Cassidy, Cunningham and Ernst
FROM: Lance Robertson, Public Affairs Manager
DATE: May 11, 2009
SUBJECT: League of Women Voters “Water in Oregon” report

In early 2008, EWEB Public Affairs helped to fund the first part of a study by the League of Women Voters of Oregon on water, water supplies and water regulations in the state. Our aim was to assist an organization with an excellent reputation as an independent, non-biased provider of information to further the knowledge of our customers and all Oregonians about issues of vital importance to our continued mission as a water provider.

Part 1 of the League’s report has now been completed and is available to the public. The report, “Water in Oregon – Not a Drop to Waste,” focuses on regulating water supplies. Part 1 provides an overview of the current situation in Oregon. The second part of the report, which will be issued in 2010, will focus on issues and gaps in water quantity and quality regulations. EWEB provided \$500 in funding for Part 1 and has pledged to match that amount for the 2010 report.

The League’s interest in water issues grew from deepening concerns about climate change and the impact it may have on our water supplies, as well as recent low-precipitation or drought conditions across much of Oregon. Gov. Ted Kulongoski also initiated the Headwater to Ocean (H2O) strategy to address the complexities of Oregon’s water issues.

I am attaching the executive summary of the Part 1 report. Copies of the full report, a slideshow presentation (PowerPoint) and the executive summary also are available at <http://www.lwvor.org/recentstudies.htm>. The report has been sent to all League members in the state and delivered to local government leaders and state legislators.

No action is required. This is an informational item only.



WATER IN OREGON – NOT A DROP TO WASTE
PART 1: REGULATING WATER IN OREGON
EXECUTIVE SUMMARY

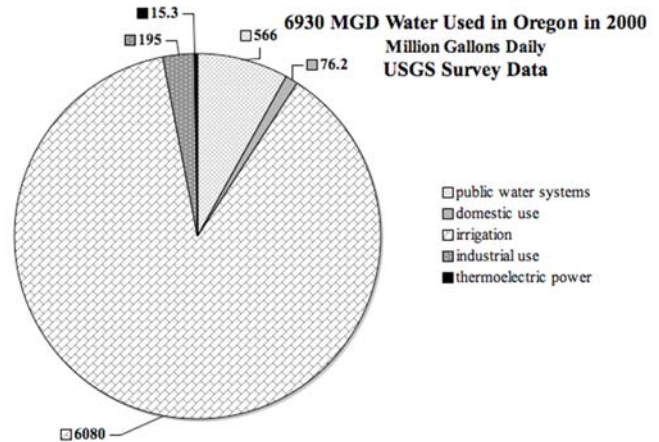
Since water has always been key to development in Oregon, the members of the League of Women Voters of Oregon recently voted to restudy it. Part One presents an overview of the current status of Oregon’s water laws and regulations. Part Two of the report, scheduled for release in 2010, will address current concerns.



In Oregon the water belongs to the people; however, rights to use water are based on the Prior Appropriation Doctrine that prioritizes water use to the first claimant (first in time, first in right). All later users must defer to the first, with some exceptions, such as emergency declarations of drought. Tribal treaty rights and court settlements can also complicate water rights.

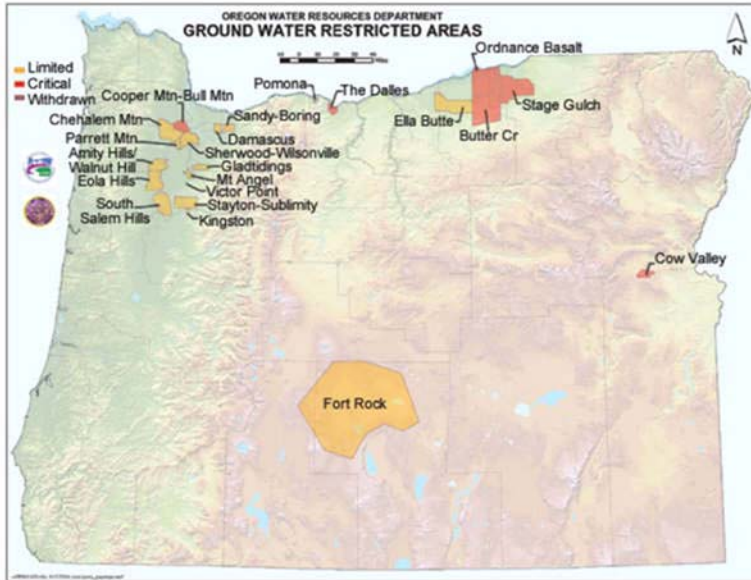
Today about 87% percent of Oregon’s water is used for irrigation and about 8% for domestic consumption. About 86% of the water used is taken from surface sources such as rivers or lakes, and 14% is from groundwater. Permits are generally required to withdraw surface water for defined beneficial uses. The Department of Water Resources (WRD) and the Water Resource Commission (WRC) administers permits. In 20 districts across the state, district watermasters work locally to enforce the laws. Recognizing the importance of fish habitat, aesthetics, and transportation, an in-stream right certificate protects the base water level in streams. Initially established for minimal stream flows in 1955, the In-Stream Water Rights Act of 1987 reinforced in-stream water rights. In the 1990s, the Scenic Waterways Act recognized the beneficial uses of fishing, recreation, and wildlife by providing more protection to scenic waters.

State and federal laws regulate wetlands, with a goal of “no-net-loss,” and require mitigation if wetland loss cannot be avoided. In 1859, Oregon had an estimate 2.4 million acres of wetland, but that had diminished to 1.4 million acres by 1995. The Army Corps of Engineers, the Department of State Lands and the Department of Land Conservation and Development and local planning departments work to prevent additional losses.



Source: <http://pubs.usgs.gov/circ/2004/circ1268/pdf/circular1268.pdf>

To address the variability of water supply, dams and reservoirs have been built to store water. Most dams are controlled by the Army Corps of Engineers and the Bureau of Land Reclamation. Twenty-four dams store approximately 1922 billion gallons of water for drinking. Approximately 15,000 reservoirs store more water, but Acts of Congress are needed to change the use of federal reservoirs. Recently, Oregon has started to examine the feasibility of aquifer storage and recovery.



Used with permission of the Oregon Water Resources Department

The use of groundwater from wells was regulated in 1955, with the WRD charged with safeguarding Oregon's groundwater.

Approximately 70% of Oregon's population receives some or all of its drinking water from groundwater sources, including 90% of the rural population. Groundwater is a limited resource, and its extraction may affect surrounding water sources. The state has established "critical groundwater areas" where pumping of groundwater exceeds natural replenishment and restricts water use. The WRC also has established "groundwater limited

areas" to take preventive action before declines in well levels occur.

In 2000, the WRC began to improve tracking of water use. Since 1995, new water rights permits require annual measuring and reporting of use of both surface and groundwater rights. About 46% of the diverted water is now being reported.

Significant water is used to generate hydroelectric power. The Federal Energy Regulatory Commission and the WRD regulate it and require the protection, mitigation and enhancement of wildlife.

In the 1930s, Oregon recognized that the discharge of waste into a nearby water body degraded its water quality and began regulating dischargers. By 1968, it regulated all identified sources of direct water pollution discharges. In 1972, the federal Clean Water Act (CWA) passed. In Oregon, the Department of Environmental Quality (DEQ) oversees compliance with the CWA and on-going monitoring. Its measurements provide base values to determine if water quality of a water body meets the standards for its identified use(s). If any pollutants are found at levels that prevent the waters' beneficial uses, the waters are placed on the federal 303(d) impaired waters list for the specific pollutants. As of 2006, 1,397 Oregon water bodies were listed. Once a water body is listed, the federal CWA requires that study must be completed to establish a Total Maximum Daily Load (TMDL), which is defined as the maximum amount of the specific pollutant that can enter the water without interfering

with its beneficial use. When the TMDL is set, each identified discharger to the water is allocated a portion of the TMDL, with a safety portion being maintained. The DEQ looks at the entire river or watershed as it progressively completes the TMDLs. Most are targeted to be completed by 2010. Once TMDLs are identified, plans must be made to comply with the TMDL.



Point source pollution is the direct discharge of polluted water from the ends of pipes or ditches from sources such as industrial or waste treatment plants. It must be covered by a permit from the DEQ, who administers National Pollution Discharge Elimination System Permits (NPDES) and Water Pollution Control Facility Permits (WPCF). NPDES permits are federal and are used for direct discharges to national waters. WPCF permits are issued for land irrigation and lagoon discharges. All public wastewater treatment facilities must have a permit that specifies discharge limits and requires monitoring and reporting. Permitted industries must monitor their discharges and provide monthly reports to

the DEQ. The DEQ encourages industries, if possible, to discharge through the sewers to waste treatment facilities; however, the industrial discharge must meet the waste treatment facility's standards. Authorized by the U. S. EPA, the DEQ regulates Oregon's pretreatment programs. In addition, the DEQ prioritizes pollutants and identifies sources and available strategies for pollution prevention and reduction. Although permits are not required for septic systems, the DEQ regulates them, also.

Non-point source pollution results from water flowing over surfaces, picking up contaminants and carrying them to bodies of water as the result of storms or on site activities such as irrigation. Runoff comes from agriculture, roads, industrial sites, forests, rooftops, parking lots, and other impervious surfaces. Since the early 1990s, federal CWA regulations have addressed stormwater and other runoff pollution. Agriculture accounts for as much as 41% of non-point source pollution. The Oregon Department of Agriculture (ODA) via the Agricultural Water Quality Management Act of 1993 has jurisdiction over agricultural water quality programs. ODA works with agricultural producers to encourage voluntary participation, as well as investigates complaints and works to achievement compliance. The ODA addresses animal waste through the Confined Animal Feeding Operations program and can issue NPDES and WPCF permits. All permitted facilities are required to have an animal waste management plan. Forestry practices may affect water quality, and the Board of Forestry has goals and strategies to protect it, using in part the state's Plan for Salmon and Watersheds and TMDL requirements. Much non-point source runoff comes from stormwater runoff in municipalities, industries and construction sites. Under the federal CWA, the DEQ issues NPDES stormwater permits to municipalities above a certain population density, construction sites disturbing more than one acre, and industrial sites in specific Standard Industrial Codes. All permits require yearly reporting and tracking of progress.

Knowledge of groundwater pollution is limited and regulated by the Oregon Groundwater Quality Protection Act of 1989 and the DEQ. Monitoring data from ambient groundwater studies and public water supplies shows that 35 to 45 areas have some impairment or reason

for concern. DEQ can declare Groundwater Management Areas if wide contamination due in part from non-point sources exceeds specific standards.

Drinking water must be of the highest standard, and the Department of Human Services, Public Health Division (PHD) oversees it. The Oregon Drinking Water Program sets standards for drinking water systems, and the PHD regulates public water systems. About 75% of Oregon’s citizens get their water from public systems. Source water assessments have been completed for all public water systems across the state.

Current issues

The state’s land use planning program acknowledges the need to protect the state’s waters. In 2005, the state began a review of Oregon’s planning efforts, “The Big Look,” and its report recently became available. Infrastructure needs, including drinking water and wastewater treatment systems have been reviewed. The estimated cost to repair or replace antiquated water systems or make improvements exceeds \$4.48 billion.



The state is assessing the impacts of climate change and is working to develop strategies for reducing greenhouse gases, to examine cap and trade systems, to develop educational strategies and to track its impacts in Oregon. In 2007, the Legislature funded the Oregon Water Supply and Conservation Initiative to assess existing and long-term water supply needs, inventory potential storage sites, analyze conservation opportunities, calculate basin yield and provide grant funding for community and regional-based water planning. In 2008, the Water Conservation, Reuse and Storage Grant Program funded initial planning studies that evaluate the feasibility of developing water conservation, reuse or storage projects.

Oregon has an extensive and complex network of regulations that are designed to conserve and protect its waters. An increasing population, land use plans, and climate change challenge the success and relevance of these regulations.

The full report *Water in Oregon-Not a Drop to Waste, Part 1: Regulating Water in Oregon* is available on the web at <http://www.lwvor.org/recentstudies.htm#Water> or by contacting the League of Women Voters of Oregon.

Production of this report was supported by Eugene Water and Electric Board and the League of Women Voters members and friends. Thank you.