

BOARD OF DIRECTORS BOARD MEETING 8:30 a.m. OPALCO Board Room 1034 Guard Street, Friday Harbor Thursday, February 20, 2014

<u>TRAVEL</u>



Via Island Air 378-2376 / 378-8129 (cell)

To: Leave Lopez 8:00 a.m.

Arrive FH 8:15 a.m.

From: Leave FH 2:00 p.m.

Arrive Lopez 2:15 p.m.



Via Ferry:

To: Leave Shaw 7:00 a.m. Leave Lopez 7:10 a.m. Leave Orcas 7:20 a.m.

From: Leave FH 2:05 p.m. Arrive FH 8:10 a.m. Arrive FH 7:40 a.m. Arrive FH 8:10 a.m.

Arrive Orcas 2:55 p.m. Shaw 3:10 p.m. Lopez 3:30 p.m.

Orcas Power & Light Cooperative Board of Directors Regular Board Meeting 1034 Guard Street, Friday Harbor 376-3549 February 20, 2014 8:30 a.m.

PAGES

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WELCOME GUESTS/MEMBERS

Jim Giglione, San Juan Fire District #4 (Lopez) RED-L check presentation Kevin Smit, EES Consulting discusses the CPA

Art Butler, Joel Paisner

CONSENT AGENDA

- 3-5 Approval of January Minutes
 - Admission of New Members

ACTION ITEMS

- Capital Credits
- 8 o RUS Form 219s
- **9-11** Member Initiated Bylaw Revisions**Attorneys find no conflict with placing the following on the ballot for the Annual Meeting**
 - Article II Meeting of Energy Members Section 9 Informational Meetings
 - Article IV Meetings of Directors add videoconferencing
 - Policy 1 Functions of the Board of Directors Revisions
- 12-21•Policy 1 Functions of the Board of Dire22-33•Policy 23 Conflict of Interest Revisions
- **34-45** Tariffs
- **46-65** Bylaw Revisions Art Butler and Joel Paisner

DISCUSSION ITEMS

- 66-67 OMEMBER Initiated Bylaw Revision Article VIII Nonprofit Operation Section 7
 Attorneys advise that this revision would be in conflict with the Articles of Incorporation
- 68-120 Conservation Potential Assessment Report Kevin Smit

REPORTS

- 121 o Cash Recap
- 122 o Total Fund Balances Chart
 - Outages
- Safety
- **125-135** General Manager

INFORMATION ITEMS

- 136 o New Services
- 137 o Historical MORE Revenue
- **138** Member Billing Revenue History
- **139-140** Northwest River Partners Salmon Protection is Working

ADJOURNMENT

MINUTES OF THE BOARD OF DIRECTORS MEETING **ORCAS POWER & LIGHT COOPERATIVE**

Thursday, January 16, 2014

President Chris Thomerson called the meeting to order at 8:20 a.m. at the Lopez Island fire hall. Directors Winnie Adams, Glenna Hall, Jim Lett and Bob Myhr were present. Vince Dauciunas was absent. Also present were General Manager Randy Cornelius, Manager of Engineering and Operations Russell Guerry and Executive Assistant Bev Madan, serving as recording secretary.

Member/Guests

Gray Cope (San Juan), Steve Ludwig (Lopez), Dwight Lewis (Lopez), Jay Kimball (Orcas), Sandy Bishop (Lopez), Chom Greacen (Lopez), and Chris Greacen (Lopez).

Dwight Lewis handed out CenturyLink flyers advertising broadband.

Gray Cope spoke in favor of meetings being available via video conference. Sandy Bishop reported that the Energy Services/Conservation program is off to a good start with San Juan Islands Conservation District working as the umbrella for the nonprofits.

Chom Greacen handed out a report Considerations for OPALCO's Tariff Adjustments coauthored by Chom and the Islands Energy Coalition.

Consent Agenda

Motion made by Hall to approve the December minutes and the new members as listed; motion was seconded and carried by voice vote.

New members:

Center

1. Morgan, Valorie & Coulson, Cesilee

Crane

2. Crowell, Kimberly

Lopez

- Bostick, John H
 Czaja, Elayne
 Green, Filicity A
- 6. Hamlin, Jackie & Bill
- 7. Sather, David & Mary

Orcas

- 8. Brueckner, Phoebe & Douglas, John
- 9. Budnick, M George
- 10. Cichy, Stephanie
- 11. Graminski, John
- 12. Grato, Erin
- 13. HUD c/o Sentinel Field Services
- 14. Lanham, Russell
- 15. Lotioncrafters LLC
- 16. McGerty, Emily
- 17. Myers, Robyn M
- 18. Nicol, James D
- 19. Orcas Food Coop
- 20. Rose, Jennifer
- 21. Williamson, Dan & Chapp, Colleen

San Juan

22. Alsdurf, David 23. Arevalo, Julie 24. Brown, Jeffrey C 25. Cole, Michelle 26. Dell Veneri, Patricia K 27. Frost, D. Whitney 28. Hinkle, Kenneth 29. Hoglund, Dan & Sue 30. Jensen, Leslie 31. Johnson, Thomas H 32. Mc Govern, Nancy & Robert 33. Off Island Girl LLC 34. Reynolds, Jennifer K 35. Roberts, Mary 36. Scarff, Mike 37. Schubert, Elizabeth 38. Simons, Karma 39. Sowers, Kimberlee M & Paul A 40. Stewart, Sandra 41. Streeter, Tristian 42. Thomaswerks 43. Wittkopp, P 44. Woods, Brenna L

Shaw

45. Anderson, Carl & Debbie

Policy 28 Collaborating with Nonprofits to Accelerate Energy Efficiency

The San Juan Islands Conservation District (SJICD) has agreed to serve as an "umbrella" group for nonprofits working collaboratively with OPALCO on energy conservation. The revisions to Policy 28 establish guidelines for collaboration between the nonprofits and OPALCO.

Discussion included a revision to Section 28.3.5: "Any use of OPALCO's name or reputation in communications, advertising, marketing, branding, logos, etc must be specifically approved, in writing, by senior OPALCO management the General Manager or his/her designee."

Motion made by Hall to waive the first reading of the Policy revision; the motion was seconded and carried by voice vote.

Motion made by Hall to approve the version of Policy 28 presented by staff as amended; motion was seconded and carried by voice vote.

Cornelius stated it would be advantageous to have additional discretionary funds to use for grant matching, marketing, etc. A quarterly report will be presented to the Board to show how the money is used; reporting must be done to IRS standards and will follow the Scope of Work.

Motion by Myhr to approve an additional \$50,000 of discretionary funds to be used for energy efficiency and conservation. The motion was seconded and carried by voice vote.

Capital Credits

Motion made by Hall and seconded to approve \$24,950.54 in payments to the estates of deceased members; motion carried by voice vote.

Elaine Beaubien	\$658.42
Eileen Brady	\$2,201.07
Belinda Kay Landon	\$13,730.60
Robert and Mary Lee Langan	\$595.35
M.E. Nicol	\$1,236.19
Louise Smith	\$2,289.92
Helen Elizabeth Stone	\$1,377.91
Dominick J. and Rose J. Tarabochia	\$808.35
Rose J. Tarabochia	\$91.21
Joan M. Twitchell	\$1,736.88
Louis B. Wachter	\$224.64

RUS 219

Motion made by Myhr and seconded to approve submittal of RUS 219s representing work completed during November in the amount of \$217,174.24. Motion carried.

Member-Initiated Bylaw Revisions

Two petitions were received from members requesting bylaw revisions to:

Article XIV, Section 1 "Board Initiated Amendments – The power to make, alter, amend, or repeal the bylaws or adopt new bylaws shall be vested in the Board of Directors voting members. Notice of the board's action in making, altering, amending or repealing the bylaws or adopting new bylaws shall be given to the voting members within thirty (30) days of such action." and

Article X Disposition of Property – proposed to add Section 4 "Limits to Indebtedness. The maximum total of long-term debt plus current liabilities of the cooperative, including all subsidiary corporations controlled by the cooperative, shall not exceed \$30,000,000.00 (thirty million U.S. Dollars). (a) To exceed the above maximum total of indebtedness the Board of Directors shall present a proposed U.S. Dollar amount to be approved by the energy members. Each energy member shall be entitled to one (1) vote. Voting shall be by absentee ballot only. Absentee ballots shall be delivered to each energy member not less than ten (10) days before the date of the vote in accordance with Article II, Section 6 of the Bylaws. Any proposed amount receiving a simple majority of "yes" votes from the energy members shall be approved." Both petitions met the 90-days submission in advance of the annual meeting requirement and had the required number of member signatures.

The opinion of OPALCO's attorneys is that both revisions are in conflict with the Articles of Incorporation and will not be placed on the ballot for member vote at the annual meeting.

Resolution 1-2014 Approving use of Eastsound Substation for Solar Array Resolution 2-2014 Approving use of Friday Harbor Substation for Solar Array Resolution 3-2014 Approving use of Lopez Substation for Solar Array

RUS requires a Board resolution any time real property is used by others. The purpose of the resolutions is to allow a nonprofit to have a solar array as long as they abide with and follow established covenants and restrictions. OPALCO will follow the US Department of Energy's *A Guide to Community Solar* for operation of the array. **Motion** made by Lett and seconded to approve Resolutions 1-2014, 2-2014 and 3-2014 for use of community solar through perpetuity, contingent on the parties signing proper covenants that will protect the property from misuse. The motion carried by voice vote.

Committee on Nominations

An email vote was held January 8-10 whereby a majority of the Board approved District 1 members Mark Madsen, Pete Kilpatrick and Victoria Compton to serve on the 2014 Committee on Nominations.

Resolution 4-2014 Authorizing Application for Rural Economic Development Loan

As part of the loan processing, a Board resolution is required by RUS before funds can be disbursed for an RUS loan to Lopez Fire District. The resolution authorizes the General Manager to apply for \$80,000 for the Rural Economic Development Loan.

Tariffs

A rate adjustment of six percent (6%) was approved for the existing tariffs during the 2014 budget process. The "basic charge" terminology was revised to "facility charge" to accommodate the way the industry has redefined facility use of distributed generation. This is the first read of the tariff adjustments; they will be presented for a vote at the February meeting.

Video Conferencing of Board Meetings

Discussion was held regarding the pros and cons of video conferencing the board meetings to improve attendance by members. Cornelius recommended starting with a policy to ensure that all implications have been well thought out. Staff will be assigned to thoroughly research the costs and feasibility.

Reports

The Cash Recap, Total Fund Balances, Outages and Safety reports were reviewed. The Board reiterated that Safety is our number one priority.

Cornelius reviewed the Manager's Report.

Adjournment

The meeting adjourned at 10:20 a.m.

Chris Thomerson, President

Jim Lett, Secretary-Treasurer

Decatur

1. Foss, Forrest A

Lopez

Orcas

- 2. Biggs, Colleen
- 3. Danielson, Charlotte
- 4. Lovejoy, Stephen & Holly
- 5. Pearson, Mark
- 6. Peter. Rebecca & Lucas
- 7. Steinhouse, Duane & Tamara

13. Jacczak, Rubiselia D & Ethan

19. Vukelich, David & Laycock, Margaret

14. Jauregui, Jose Armondo

18. Strollo, Richard & Diane

8. Troy, James J
 9. Worsh, Lauren

11. Bridge, Margaret

12. Day, Lynn M

15. Orcas 78 LLC

17. Previs, Ashley

16. Orcas Art Studios

- 10. Zantop, Mariana & Rothgeb, Dan

San Juan

- 20. Basta Tony
- 21. Benedict, Skip
- 22. Brillon, Tim & Maureen
- 23. Clifford Jeffries Revocable Living Trust
- 24. Dean Marine LLC
- 25. Evans, Heidi
- 26. Feldmiller, Susan L
- 27. Fenstermacher. Patricia
- 28. Fowler, Robert D
- 29. Gilmore, Carl P
- 30. Hackworth, Judith
- 31. Herb's Tavern
- 32. Hubbard, Louise D
- 33. Hudson, John Ryan
- 34. Korman, Todd & Nicole
- 35. Lopez, Sonja M Coronado
- 36. Low, Robert
- 37. Mansueto, Robert
- 38. Popham, Doug
- 39. Powell Management LLC
- 40. Sanabria, Antonio
- 41. Sanabria, Guadalupe
- 42. Stafford, Nicole & Marriett, Matt
- 43. Strategic Nationwide Funding
- 44. Sweet Water Farm Akhal-Teke LLC
- 45. Tarabochia, Nick J
- 46. Trefethen, John & Thea
- 47. Ware, Beth & Mariscal, Alejandro
- 48. Woody, Jill
- 49. Zacci, Alejandra

CAPITAL CREDITS FEBRUARY 2014

Application has been received for payment of capital credits to the estates of the following deceased members:

Roy Branstetter	\$762.46
Kenneth Day	\$676.37
Clarence W. Estenson	\$808.90
Bruce Jacobs	\$1,269.96
Clark O. Lovejoy	\$1,070.25
Orpa A. Turpen	\$1,155.95

And from organizations no longer in business:

Pacific Gem Seafoods, Co	\$3,501.41
Tarabochia LLC	\$180.98

Total\$9,426.28

MEMORANDUM

February 13, 2014

TO: Board of Directors

FROM: Randy Cornelius, General Manager

RE: RUS Form 219s Inventory of Work Orders

Projects completed during December from the Construction Work Plan:

Inventory #1312	\$675,176.83
Inventory #1312 (minor projects)	\$85,510.00

Staff requests a motion from the Board to approve submittal of RUS Form 219s totaling \$760,686.83.



MEMORANDUM Confidential Attorney Client Communication

TO:	OPALCO Board of Directors
FROM:	Mr. Joel Paisner, Ascent Law Partners, LLP Mr. Arthur Butler, Ater Wynne, LLP
DATE:	January 30, 2014
RE:	Member Proposed Bylaw Amendments For Informational Meetings

INTRODUCTION

We have been asked to review the proposed bylaw amendments offered by petition from OPALCO members in advance of the annual meeting of members. This memorandum will address the amendment regarding a proposal to have a set number of informational membership meetings throughout the year.

PETITION FOR INFORMATIONAL MEMBERSHIP MEETINGS

A proposed membership petition has been offered to amend Article II, adding a new section 9, that seeks to require the Board of Directors to schedule:

...three (3) Energy Member Informational Meetings. Said meetings shall be scheduled every third month following the Annual Meeting and in the following order: Orcas, San Juan and Lopez. Said meetings shall be held on a Saturday, at a time coordinated with the ferry schedule and in a facility to be selected by the Board.

The remainder of the proposed bylaw amendment establishes the purpose and manner of notice for such informational meetings.

Meetings of the membership are to be held as provided in the bylaws. RCW 24.06.100. The bylaws currently provide for an annual meeting, and the ability to call for a special meeting. Article II, Sections 1 and 2. There is no limitation on the ability to provide for purely informational meetings beyond that. Thus, as long as the petition meets the time requirements and the proper number of members signing it, it is in proper form and can be offered for a vote of the membership.



M E M O R A N D U M Confidential Attorney Client Communication

TO:	Board of Directors, Orcas Power & Light Cooperative
FROM:	Mr. Joel Paisner, Ascent Law Partners, LLP Mr. Arthur Butler, Ater Wynne, LLP
DATE:	February 6, 2014
RE:	Member Proposed Bylaw Amendment to Web Stream Board Meetings

INTRODUCTION

This memorandum reviews whether a member proposed bylaw amendment requiring that all non-executive session portions of an open Board meeting be streamed over the Internet.

OPALCO'S ARTICLES OF INCORPORATION AND BYLAWS DO NOT RESTRICT STREAMING BOARD OF MEETINGS OVER THE INTERNET

As discussed in our previous opinions regarding the member-proposed bylaw amendments, each bylaw amendment must be proper as to form and consistent both with the Articles of Incorporation, as amended ("Articles"), and state law Chapter 24.06 RCW, the Mutual Corporations Act. See RCW 24.06.025. To the extent the Bylaws conflict, the Articles of incorporation are controlling.

A member submitted petition seeks to add a new section to OPALCO's Bylaws, Article IV, Meetings of Directors, that states as follows:

The cooperative shall allow member-owners access to open board meetings (nonexecutive sessions) through Internet web-based streamed audiovisual (AV) and optionally videoconference. All AV will be presented unedited (except to excuse breaks and executive sessions) and made available on demand through a web server to energy members within 7 days of the meeting. Such AV will remain available for at least 24 months from the date of first posting. The board may restrict access to the AV to include only member-owners and set terms of use restrictions.

Board of Directors, Orcas Power & Light Cooperative

The statutes are generally silent regarding the Internet broadcast of board of director meetings. The only reference to communications and meetings is in RCW 24.06.100, which provides, if the articles of incorporation or bylaws so provide, members may participate in any member meetings by any means of communication so long as all persons participating in the meeting can hear each other during the meeting. This does not address meetings of the Board of Directors, and the proposed bylaw amendment only addresses broadcasting of those meetings, not meetings of the membership. Thus, this section does not prohibit the proposed bylaw amendment.

The Articles do not specifically address meetings of the Board of Directors. All of the rules regarding membership meetings and Board of Director meetings are contained in OPALCO's Bylaws. The Bylaws generally address regular meetings, special meetings, notice requirements, voting rules, and manner of attendance.

CONCLUSION

Based upon a review of state law, the OPALCO Articles and Bylaws, we find no legal objection to this member-proposed Bylaw amendment or its form. We do note that it specifically exempts any executive sessions conducted by the Board of Directors. This is an important exception because by law Directors are entitled to rely on opinions of legal counsel, as well as accountants, to fully discharge his or her duties to the corporation. RCW 24.06.153. Any limitation on the right of the Board of Directors to limit consultation with its lawyers or accountants would be contrary to statute. By excluding the executive session portion of all meetings of the Board of Directors, this proposed amendment avoids that issue.

MEMORANDUM February 12, 2014 TO: Board of Directors FROM: Randy J. Cornelius RE: Policy 1 *Functions of the Board of Directors* and Policy 23 *Conflict of Interest*

Policies 1 *Functions of the Board of Directors* and 23 *Conflict of Interest* have been reviewed and revised by our attorneys. They are recommending the revisions as indicated. These policy revisions were initially presented at the October 2013 board meeting. The Board reviewed the revisions at that time and made additional suggestions. Art Butler and Joel Paisner have been working on the revisions and will be in attendance to discuss the revisions.

This is the second reading of Policies 1 and 23. Staff suggests a motion to approve the revisions.

ORCAS POWER & LIGHT COOPERATIVE POLICY 1 FUNCTIONS OF THE BOARD OF DIRECTORS Draft Revisions

Preamble

This policy is the responsibility of the Board and it may only be changed or amended by the Board.

Board Governance policies are intended to define the Governance activities of the Board of Directors and their functioning within the Organization.

Board-authorized documents such as Mission and Values Statements and Strategic Directives will provide further guidance and instructions to the Organization.

All of the powers of the Cooperative are conferred upon and may be exercised by the Board of Directors, except as reserved to or conferred upon its members by law, the Articles of Incorporation, or the Bylaws.

This policy establishes Board of Director duties, roles, and policies to enable it to effectively and efficiently fulfill its purposes on behalf of the members it serves. The Board seeks to develop policies consistent with its Articles of Incorporation, Bylaws, and the general law. It seeks to conduct business at the highest ethical level, hire appropriate consultants and counsel, and establish an operating structure that will provide its members with the highest service levels. OPALCO shall be managed by a General Manager who reports directly to the Board of Directors, who is responsible for the implementation of policies developed and approved by the Board of Directors. The Board of Directors seeks to communicate its policies clearly and directly to the General Manager, its membership, and other important stakeholders involved in the Cooperative. It is the purpose of this policy to identify and establish standards whereby the Board's power may be exercised in the best interests of the Cooperative.

1. FIDUCIARY RELATIONSHIP

1.1 Legal Duties

Directors hold a fiduciary duty and responsibility to the Cooperative. These responsibilities include the duties of care and loyalty.

- 1.1.1 Under the duty of care, directors are required to:
 - 1.1.1.1 Exercise that degree of care that an ordinarily prudent person would exercise under similar circumstances.
 - 1.1.1.2 Have or acquire the minimum knowledge and skills necessary to direct the afairs of the Cooperative.
 - 1.1.1.3 Make every effort to attend all meetings of the Board and to study materials sent prior to each Board meeting.
 - 1.1.1.4 Study and adhere to all obligations imposed by the Articles of Incorporation, the bylaws, contractual agreements and Board policies.
- 1.1.2 Under the duty of loyalty, directors are required to:
 - 1.1.2.1 Act only in the best interest of the Cooperative and its members.
 - 1.1.2.2 Place the interests of the Cooperative over any personal and personal business interests.

- 1.1.2.3 Avoid conflict of interest and the appearance of any conflict of interest, as further defined in Policy 23 and consistent with Cooperative policies.
- 1.1.2.4 Represent and support the interests of the Cooperative to elected and public officials.
- 1.1.2.5 Publicly support decisions of the Board except in extraordinary circumstances where the director believes that there is a clear and present threat to the survival of the Cooperative.
- 1.2 If the Board should determine that an incumbent, nominee or potential appointee lacks, or has lost any of the necessary legal qualifications, it is the duty of the Board to remove such incumbent or to declare such nominee or potential appointee ineligible for election, whichever may be the case. By adopting, publishing and appropriately disseminating this Policy, it is the Board's intent that the Board member incumbents, nominees or potential appointees will not only be fully apprised of these requirements, but mindful of their importance in deciding whether to continue or commence service on the Board.

2. BOARD ETHICAL STANDARDS

The Board may neither cause nor allow any Organizational practice or event that is imprudent or unethical, or that could damage the short-term or long-term viability of OPALCO. Board members should conduct themselves, personally and professionally as well as in their representative capacity for the Cooperative, in accordance with the highest ethical standards. This policy shall be consistent with the general ethics policy adopted by the Board of Directors.

3. CONFIDENTIALITY

Directors are entitled to reasonable access to Organizational data and information.

Directors are required to keep confidential all matters involving the cooperative that have not been disclosed to the public. Information received by a director shall not be disclosed to any other persons unless the director reasonably believes that he or she must do so to fulfill his fiduciary duty. This confidentiality obligation shall continue after the director completes the term of service.

4. DIRECTOR CONDUCT

Regardless of any personal differences, directors are required to:

- 4.1 Foster an environment where expression of individual experience, expertise and point of view shall be encouraged where relevant to the discussion at hand.
- 4.2 Demonstrate mutual respect and allow opportunity for every other director to be heard on any matter being considered by the Board.
- 4.3 Publicly support decisions of the Board such that the Board speaks with one voice except in extraordinary circumstances where the director can demonstrate that a decision or action will bring substantial harm to the Cooperative or threaten the Cooperative's survival.
- 4.4 Refrain from revealing to persons other than directors, the General Manager, or the Cooperative's attorney any differences of opinion among directors on matters either considered by and or acted upon by the Board in executive session. (This standard does not preclude fair and accurate publication of such differences to the Cooperative's members in relation to contests for director elections or other matters to be voted upon by

the members. Nor does it impinge upon a director's right to dissent and to have his dissenting vote recorded in the minutes.)

- 4.5 Recognize that personal notes taken during meetings are legally discoverable unless intended to be and identified as Attorney/Client Privileged communications.
- 4.6 Recognize that the Board acts as a collective body at regularly scheduled and special Board meetings and that the development of policy and direction to the General Manager is best done at those regularly scheduled and special meetings when all Board members can be present.
- 4.7 Each Board member has an obligation to help members of the Cooperative, the media, and the general public to put the Cooperative in the best light. Public comment, whether to a group or an individual, must be supportive of the Cooperative's initiatives, activities, and personnel. When in executive session, any disagreements are to be held in confidence, in the Board room, and once a decision has been reached, the Board is to speak with one voice.

5. CONFLICT OF INTEREST DISCLOSURE

Board members are required to disclose any potential possible conflicts of interest between their non-OPALCO interests and the interests of OPALCO with regard to ongoing or specific transactions on any matters before the Board and to fully comply with Policy 23 *Conflict of Interest*. Board members shall attest annually in writing that they have no material undisclosed conflicts of interest situations in writing annually with OPALCO.

6. BOARD MEMBER ACCESS TO INFORMATION

Any Board member is entitled to have access to any data or information of the Cooperative, at reasonable times during business hours and for a proper purpose that is germane to his or her standing as a Board member. This principle is subject to and will be honored in accordance with the following standards:

- 6.1 All requests for such information or data shall be made to and through the General Manager. In no case whatever (unless after consultation with and being advised otherwise by the Cooperative's counsel because an actual or potential criminal activity of the General Manager is involved) shall such information or data be sought by a Board member through other employees, agents, or independent contractors.
- 6.2 In any instance in which a Board member has sought access to information or data not generally or ordinarily made available or reported to the Board, the General Manager shall so report in detail to the next succeeding meeting of the Board.
- 6.3 Information or data received by a Board member pursuant to this policy shall not be revealed by him to any other persons (the remaining Board members and General Manager excepted) unless he is compelled by law, or to fulfill his or her fiduciary duty.
- 6.4 In no case should a Board member reveal to others information and data he receives because of his inside position in the Cooperative if the actual or potential effect of such revelation is to damage the Cooperative, including its image.

7. BOARD MEMBER QUALIFICATIONS

7.1 Board members shall be competent to sign legal contracts and shall exercise their best business judgment in performing their duties as Directors.

- 7.2 Board members are required to attend Board meetings as specified in other governing documents and to travel and perform other reasonably required duties in a safe and competent manner.
- 7.3 Board members are required to complete an initial orientation conducted by the Board President and General Manager within 45 days and are encouraged to achieve NRECA Credentialed Cooperative Director status or equivalent within 24 months of first election to the Board.
- 7.4 Board members are required to complete one or more relevant ongoing one day educational sessions during each additional three years of tenure.
- 7.5 Board members are encouraged to attend conferences and other activities designed to improve their skills and knowledge. The expenses of enrollment and attendance at Board training programs are paid by the cooperative. Board training programs shall be conducted within the confines of an annual budget established by the Board of Directors for this purpose.

8. BOARD POLICIES AND STRATEGIC DIRECTIVES

- 8.1 The Board shall whenever possible formally and explicitly express the Board's expectations and standards regarding General Manager, Board, and Organizational performance.
- 8.2 Board Policies shall address matters that are expected to be permanent and pervasive in nature and define the limitations imposed on the General Manager and the Cooperative.
- 8.3 Board Strategic Directives shall address matters that may be impermanent in nature, address specific circumstances, may terminate when complete or rendered obsolete by changing circumstance and provide guidance in addressing the goals and objectives of the Cooperative.
- 8.4 Any Board member may propose a new policy or strategic directive or amendment to a current policy.
- 8.5 All Board Policies and Strategic Directives shall be maintained up-to-date in a format that is available to every Board member,
- 8.6 The Board shall review its own Policies and Strategic Directives for relevance, appropriateness and benefit to OPALCO at least annually.

9. STRATEGIC PLANNING

The Board shall set the Cooperative's mission and purposes, engage in strategic planning on a regular basis and produce Strategic Directives, to be reviewed and updated at least annually.

10. OVERSIGHT

The Board shall provide oversight of the Cooperative including the adoption of policies and monitoring for compliance with legal and regulatory requirements as well as the adequacy of internal controls, primarily through appropriate use of Auditors and Legal Counsel.

11.BOARD INTERACTION WITH AUDITORS

The Board shall approve an engagement agreement for annual audit services to be provided to the cooperative that:

11.1 Requires pre-approval by the Board for all services to be provided by the audit firm.

- 11.2 Sets out the scope of the audit, its objective and purposes, and deadlines for work to be performed.
- 11.3 Specifies all fees to be paid for all audit, audit-related and tax work provided by the audit firm.
- 11.4 If a multi-year agreement, provides for regular rotation of the lead-audit partner personnel.
- 11.5 Complies with all RUS Policies and/or other applicable regulatory standards on Audits.

12. BOARD INTERACTION WITH LEGAL COUNSEL

The Board shall: This policy shall outline the Board and Cooperative's relationship with its legal counsel.

- 12.1. The Board shall make all decisions regarding retaining, employing, and discharging attorneys for the Cooperative.
- 12.2. The Board reaffirms that the attorney represents the Cooperative and does not represent individual directors, officers, employees, or members or affiliated entities of the Cooperative, unless the Board consents to such representation and the attorney has complied with applicable conflict of interest requirements.
- 12.3. The Board shall require the attorney to keep the Board and the General Manager informed of matters for which the attorney is providing legal services.
- 12.4. The Board shall require the attorney to report evidence of any actual or intended material violation of law or material breach of duty that would likely cause substantial harm.

13. BOARD INTERACTION WITH THE COMMITTEE ON NOMINATIONS

This policy is intended to provide guidance for the Board and the Committee on Nominations and in no way overrides nor or supersedes any requirement in OPALCO Bylaws or Articles of Incorporation, or other applicable state or federal requirements.

Committee on Nominations Purpose

To facilitate the ability of the membership to elect board members most qualified and appropriate to serve in the best interests of OPALCO as a member-owned non-profit cooperative.

To both recruit members who are both competent and willing and able to commit to serve on the OPALCO board if elected.

13.1 The Board will act to minimize conflict of interest exposure of staff in the Board election process.

13.2 Committee on Nominations Appointment

The OPALCO Board as a whole will propose and consider suitable qualified members from the Voting District and will appoint the members of each Committee on Nominations.

13.3 Committee on Nominations Preparation

The Board will instruct members of the Committee on Nominations to meet with OPALCO staff for a Board approved orientation.

13.4 Election Notifications

The Board will direct the General Manager to have notices placed on appropriate visible public bulletin boards, newspapers, websites, and other appropriate media as soon as

practicable after the Committee on Nominations appointment. These notices will serve to attract and facilitate interested candidates to contact the Committee on Nominations.

13.5 The Board will require each proposed nominee to the board to acknowledge and agree to this policy in writing.

14. GENERAL MANAGER

The Board selects the General Manager, and regularly evaluates performance, and sets his compensation. The Board shall retain a competent General Manager to whom it delegates authority and responsibility for the operation of the Cooperative within the limits of the Bylaws, this and other approved policies, programs and budget. Policy 2 elaborates the specific delegations to the General Manager from the Board.

- 14.1 Board Interaction with General Manager
 - 14.1.1 The Board develops the policies of OPALCO, consistent with the Articles of Incorporation, Bylaws, general law and these policies. The Board will directs the General Manager to achieve specific results within these laws and policies. The General Manager restraint of specific limitations. He is authorized to make all further decisions, take all actions, and establish all practices to achieve these specified results that do not transgress the limitations imposed are consistent with Board policies.
 - 14.1.2 The Board may change its policies and thus the expectations or limitations imposed on the General Manager. The Board shall communicate any changes clearly to the General Manager. So long as any particular delegation is in place, the Board members will respect and support the General Manager's choices.
 - 14.1.3 All Board authority is delegated through to the General Manager. The General Manager is to be considered the only employee of the Board. It is understood that the "flow" of authority for the management of the Cooperative shall pass through the General Manager, and the General Manager shall be the connecting link between the Board of Directors and the employees. The Board of Directors shall require full and complete information from the General Manager concerning all matters in connection with the management of the Cooperative as set forth in these Board policies. The General Manager shall establish an organizational structure, a budgetary framework, and schedule to implement Board approved policies that effectively and efficiently achieve Cooperative's aims, purposes and objectives.
 - 14.1.4 Only decisions of the Board acting as a body are binding upon the General Manager. The Board understands that it acts as a collective body, and that each director understands that he or she must not individually exert pressure upon the General Manager.
 - 14.1.5 Decisions or instructions of individual Board members, officers, or committees are not binding on the General Manager except in circumstances where the Board has specifically authorized such exercise of authority.
 - 14.1.6 In the case of Board members requesting information or assistance without Board authorization, the General Manager can refuse such requests that require in his judgment a material amount of staff time or funds or are disruptive and any such requests are to be consistent with the director's role as established in this Policy.

14.2 General Manager Relationship Review

The Board shall ensure that the General Manager knows and understands the expectations and limitations it has placed on discretionary decision-making. These expectations and limitations shall be identified in approved policies or directives. Such policies and directives shall be used as the foundation for the annual appraisal of the General Manager's performance.

15. BOARD SELF-EVALUATION

The Board shall complete an annual self-evaluation of its performance and accomplishments in relation to the goals and mission of OPALCO, to confirm its compliance with all relevant policies and procedures, and to review its working methods and contribution to OPALCO.

16. BOARD SUBCOMMITTEES

- 14.1 Board subcommittees will be formed, defined, controlled, and dissolved by action of the Board;
- 14.2 Authority of any subcommittee will be limited to reporting findings to the Board, unless specifically authorized by the Board. No action may be taken by a subcommittee unless authorized specifically or in general by the Board;
- 14.3 Board member participation in any subcommittee will be determined and controlled by the Board. There will be no more than three Board members on any subcommittee;
- 14.4 Employee involvement with a subcommittee will only be with the agreement of the General Manager;
- 14.5 The General Manager shall be kept informed of the work of the subcommittee;
- 14.6 Communications with employees will be copied to the General Manager.
- 14.7 Purpose may include a review of methods, plans, or results, propose solutions, strategic directives;
- 14.8 Duration of the subcommittee shall be at the pleasure of the Board.

APPENDIX 1

BYLAWS MANDATED BOARD WORK

Annual Meeting

Date Selection

The Board selects the date for Annual Meeting according to Bylaws, Article II Section1.

Report

The Officers report the condition of the cooperative at the Annual Meeting according to Bylaws, Article V Section12.

<u>Audit</u>

The Board provides for an annual audit. The Officers present an audit summary at the next annual meeting which follows after completion of each audit according to Bylaws Article III Section 7.

Board of Directors

Committee on Nominations

The Board appoints a Committee on Nominations for each election according to Bylaws, Article III Section 3.

Compensation

The Board sets a fixed sum and expenses for attendance of meetings on behalf of the Coop. according to Bylaws Article III Section 5.

Vacancy Replacements

The Board fills vacancies according to Bylaws, Article III Section 4.

<u>Bylaws</u>

Amendments

The Board shall make necessary Bylaws amendments according to Bylaws Article XIV Section1.

Contracts

The Board may authorize any officer or agent to enter into contracts on behalf of the Coop in general or in specific instances according to Bylaws Article VII Section1.

Capital Credits

The Board shall be responsible for establishing policies for the retirement of capital credits and shall review and approve the payout of retired capital credits.

At the Board's discretion, discounted rate retirements may be used to reduce outstanding or delinquent billing amounts. Board approval is required for retirement payments according to Bylaws Article VIII Section 2.

The Board may distribute forfeit capital credits to the "Education and Promotion Fund" or the "Retirement and Replacement Fund" according to Bylaws Article VIII Section 5.

OPALCO Policy 1 Functions of the Board of Directors Page **9** of **9**

Disposition of Assets

The Board may dispose of unnecessary property not exceeding 10% of the value of all property of the Cooperative according to Bylaws Article X Section 1.

Members

Expulsion

The Board shall expel any member according to Bylaws Article I Section 6.

Membership fee

The Board sets the initial membership fee according to Bylaws Article I Section 3.

New Members

The Board approves new memberships according to Bylaws Article I Section 2

Other Organizations

The Board shall authorize membership in other organizations according to Bylaws Article XII.

Effective Date _ August 15, 2013_____

Christopher Thomerson, Board President

POLICY 23

CONFLICT OF INTEREST

23.1 GOALS AND OBJECTIVES

This policy addresses conflict of interest issues relevant to the Board of Directors, Management, and staff of OPALCO.

The Board of Directors of Orcas Power & light Cooperative (OPALCO or Cooperative) has adopted the following Policy designed to avoid any possible conflict between the personal interests of Board members (Directors) or staff and the interests of the Cooperative.

The purpose of this Policy is to ensure that decisions about Cooperative operations and the use or disposition of Cooperative assets are made solely in terms of the benefits to the Cooperative and are not influenced by any private profit, interest, or other personal benefit to the individuals affiliated with the organization who take part in the decision. In addition to actual conflicts of interest, Directors and staff are also obliged to avoid actions that could be perceived or interpreted to be in conflict with OPALCO's interest.

Conflicts of interest may occur when the Cooperative or one of its subsidiaries enters into transactions with not-for-profit organizations as well as those that are undertaken with profit-making entities. The best way to deal with this problem is to make known one's connection with organizations doing business with the Cooperative or one of its subsidiaries and to refrain from participation in decisions affecting transactions between OPALCO or its subsidiary and the other organization. Such relationships do not necessarily restrict transactions so long as the relationship is clearly divulged and non-involved individuals affiliated with the Cooperative make any necessary decisions.

23.2 DEFINITIONS FOR PURPOSES OF THIS POLICY

As used in this Policy, and unless the context requires otherwise: For purposes of this policy the following definitions apply:

- 23.2.1 Board means the Orcas Power & Light Cooperative Board of Directors. "Involved in a Cooperative Business Transaction" means initiating, making the principal recommendation for, or approving a purchase, sale, or contract; recommending or selecting a vendor or contractor; drafting or negotiating the terms of such a transaction; or authorizing or making payments from Cooperative accounts. That language is intended to include not only transactions for the Cooperative's procurement of goods and services, but also for the disposition of the Cooperative's property, and the provision of services, facilities, or space by the Cooperative.
- 23.2.2 Business Opportunity means an opportunity to engage in a business activity, other than an opportunity offered to all similarly situated Cooperative members, of which: A "Conflict of Interest" means an

interest that might affect, or might reasonably appear likely to affect, the judgment or conduct of an individual associated with the Cooperative or a subsidiary. For example, a Conflict of Interest is deemed to exist

- 23.2.2.1 Where a Director, or staff member, or a relative, or a member of that person's household, is an officer, director, employee, holder of a proprietary interest, partner, or trustee of, or, with relatives and members of that person's household, holds issued stock in the organization seeking to do business with the Cooperative or one of its subsidiaries. A Conflict is also considered to exist where such a person is (or expects to be) retained as a paid consultant or contractor by an organization which seeks to do business with the Cooperative, and whenever a transaction will entail a payment of money or anything else of value to the Director, the staff member, a relative, or a member of that person's household.
- 23.2.2.2 When an individual affiliated with OPALCO has an interest in an organization which is in competition with the Cooperative or a subsidiary or with a firm seeking to do business with the Cooperative or one of its subsidiaries, if the individual's position gives him or her access to proprietary or other privileged information which could benefit the firm in which he or she has an interest.
- 23.2.2.3 When an individual affiliated with OPALCO is a trustee, director, officer, or employee of a not-for-profit organization which is seeking to do business with or have a significant connection with the Cooperative or is engaged in activities which could be said in a business context to be "in competition with" the programs of OPALCO.
- 23.2.2.4 When an individual affiliated with OPALCO receives gifts, hospitality, or other favors from any third party on the basis of his or her position with the Cooperative other than occasional gifts of nominal value (\$100), or, in the case of gifts valued at more than \$100, the gift is made available in a team space or common areas for others to share—e.g., fruit baskets, boxes of candy. Gifts of money should never be accepted and will always be considered a Conflict of Interest, no matter what the value. Modest hospitality is an accepted courtesy in a business relationship. Coffee, pastry, soft drinks and similar refreshments of nominal value provided other than as part of a meal are not considered to be gifts under this Policy. However, with regard to any gift, hospitality, or favor, the recipient should never allow himself or herself to be in a position where his or her decision-making might appear to have been influenced by accepting such gift, hospitality, or favor.

- 23.2.2.5 When an individual affiliated with OPALCO derives remuneration or other financial gain from a transaction involving the Cooperative (other than salary reported on a W-2 or W-9 or salary and benefits expressly authorized by the Board). To avoid the possibility and perception of a Conflict of Interest, a Director may not be employed as a staff member by the Cooperative or a subsidiary while that person serves on the Board and for a period of five years after leaving the Board.
- 23.2.2.6 When an individual affiliated with OPALCO gives or releases, without proper authority, to anyone not authorized to receive such information, any data or other information of a confidential nature secured through his or her relationship to the Cooperative.
 - An Official becomes aware in connection with performing Official functions; under circumstances reasonably indicating that the opportunity was expected to be offered to Cooperative or a Subsidiary; or through using Cooperative or Subsidiary information or property if the Official should reasonably expect the opportunity to interest Cooperative or the Subsidiary; or
 - An Official becomes aware and knows or is closely related to a business in which Cooperative or a Subsidiary is engaged or expects to engage.
- 23.2.3 Conflicting Interest Transaction means a transaction or proposed transaction by Cooperative or a Subsidiary, other than the payment of Official compensation or provision of Official benefits, and other than a transaction offered to all similarly situated Cooperative members:
 - To which an Official is a party; or
 - For which, at the time the Board considers the transaction, or at the time Cooperative or the Subsidiary becomes legally obligated regarding the transaction, an Official had knowledge and a Material Financial Interest known to the Official; or an Official knew that a Related Person was a party or had a Material Financial Interest.
- 23.2.4 Cooperative means Orcas Power & Light Cooperative
- 23.2.5 Director means a member of the Board.

- 23.2.6 Disinterested Director means a Director who, at the time the Board acts regarding income, employment, competition, a Conflicting Interest Transaction, or a Business Opportunity:
 - Is not associated with the income, employment, or compensation; is not engaged in the Transaction; and is not taking advantage of the Opportunity; and
 - Does not have a relationship with an Official associated with the income, employment, or compensation; engaged in the Transaction; or taking advantage of the Opportunity, which relationship would reasonably be expected to impair the objectivity of the Director's judgment regarding the income, employment, competition, Transaction, or Opportunity.
- 23.2.7 Key Employee means a Cooperative employee, other than a Director or Officer, who:
 - Receives more than \$150,000 in compensation reported to the Internal Revenue Service on Form W-2;
 - Has responsibilities, powers, or influence over Cooperative similar to a Director or Officer; manages a segment or activity of Cooperative representing ten percent or more of Cooperative's activities, assets, income, or expenses; or has or shares authority to control or determine ten percent or more of Cooperative's capital expenditures, operating budget, or employee compensation; and
 - Is one of the twenty employees with the highest compensation reported to the Internal Revenue Service on Form W-2.
- 23.2.8 Manager means the individual with ultimate responsibility for implementing the Board's decisions or supervising Cooperative's management, administration, or operation, regardless of job title.
- 23.2.9 Material Financial Interest means a financial interest in a transaction reasonably expected to impair the objectivity of an Official's judgment regarding the transaction.
- 23.2.10 Officer means an individual:
 - Appointed by the Board, or by another Officer authorized by the Board or by Cooperative's articles of incorporation or bylaws; and

- Serving as a chief executive, operating, financial, legal, or accounting officer; being in charge of a principal business unit; or performing a major policymaking function.
- An Officer includes the Manager and the individual with ultimate responsibility for managing Cooperative's finances.
- 23.2.11 Official means a Director, Officer, or Key Employee.
- 23.2.12 President means a Director who is Chair of the Board.
- -23.2.13 Policy means Orcas Power & Light Cooperative's Conflict of Interest Policy.
- 23.2.14 Related Entity means an entity, other than Cooperative, a Subsidiary, or an entity of which Cooperative is a member:
 - Controlled by an Official or an Official's Related Individual;
 - In which an Official owns more than <u>ten percent</u> of the entity's shares or interests;
 - For which an Official is a member of the governing body;
 - For which an Official is a trustee, guardian, personal representative, or similar fiduciary;
 - Employing an Official; or
 - Controlled by an entity employing an Official.
- 23.2.15 Related Individual or person means an individual or person:
 - Who is the spouse of an Official;
 - Who is, or is the spouse of, a child, stepchild, grandchild, parent, step parent, grandparent, sibling, step sibling, half sibling, aunt, uncle, niece, or nephew of an Official or the Official's spouse;
 - Residing with an Official;
 - For whom an Official is a trustee, guardian, personal representative, or similar fiduciary; or
 - \circ Employing an Official.

23.2.16 Subsidiary means an entity Controlled by Cooperative.

23.3 EMPLOYMENT AND INCOME PROCEDURES FOR DEALING WITH CONFLICTS OF INTEREST

- A Director may not be employed by the Cooperative or subsidiary. Unless an
- Official discloses income or employment to the Board and a majority of
- Disinterested Directors authorizes or ratifies the income or employment, the
- -Official:
 - 23.3.1 Other than retirement or insurance income from Cooperative, and other than Director or employment compensation from Cooperative, may not directly or indirectly receive more than ten percent of the Official's annual gross income from Cooperative, a Subsidiary, or a Cooperative or Subsidiary employee;

Directors. Any member of the Board of Directors who may be Involved in a Cooperative Business Transaction in which there is a possible Conflict of Interest shall promptly notify the President of the Board and disclose in writing all material facts relating to the possible Conflict. Furthermore, the disclosing Director, or the Board President in the Director's absence, shall disclose the possible Conflict of Interest to the other members of the Board before any discussion or vote on the Cooperative Business Transaction, and such disclosure shall be recorded in the Board minutes of the meeting at which it is made. After discussion with the disclosing Director, the remaining disinterested Directors shall determine whether a Conflict of Interest exists. This discussion with the disclosing Director may be held in an open or executive session in the discretion of the Board. The disclosing Director then shall refrain from voting on any transaction in which a majority of the disinterested Directors determines there is a Conflict of Interest, participating in deliberations concerning it, or using personal influence in any way in the matter. It shall be within the discretion of the Board to decide whether the Director shall be permitted to be present during the discussion or decision on the matter. In any case the Director's presence may not be counted in determining the guorum for any vote with respect to a Cooperative Business Transaction in which he or she has a Conflict of Interest. Any Cooperative Business Transaction which involves a Conflict of Interest with a member of the Board shall have terms which are at least as fair and reasonable to OPALCO as those which would otherwise be available to the Cooperative if it were dealing with an unrelated party.

23.3.2 May not directly or indirectly receive more than twenty-five percent of the Official's annual gross income from another Official; and Staff. Any staff member who may be Involved in a Cooperative Business Transaction in which there is a possible Conflict of Interest shall promptly report the possible Conflict of Interest to the General Manager and disclose in writing all material facts relating to the Conflict. If the possible Conflict of Interest involves the General Manager, the possible Conflict shall then be reported to the Assistant General Manager and the Board President.

23.3.3 May not have a Related Individual employed by Cooperative or a Subsidiary.

The General Manager, or, where applicable, Assistant General Manager or Board President, after receiving information about a possible Conflict of Interest, shall determine whether a Conflict of Interest exists and, if he or she determines that one does exist, take such action as is necessary to assure that the transaction is completed in the best interest of the Cooperative without the substantive involvement of the person who has the Conflict of Interest. This does not mean that the purchase, sale, or other transaction must necessarily be diverted, but simply that persons other than the one with the Conflict of Interest shall make the judgments involved and shall control the transaction.

- 23.3.4 If a Director or member of the staff discovers any information about a possible Conflict of Interest or other violation of this Policy on the part of another Director or staff member, then that person must promptly report the information to the Board President or General Manager.
- 23.3.5 If the General Manager or Board President receives or discovers any information indicating that a Director or staff member has failed to disclose a possible Conflict of Interest as required by this Policy or has otherwise violated this Policy, then, respectively, the General Manager must disclose this information to the Board President, and the Board President must disclose this information to the Board.
- 23.3.6 If the Board has reasonable cause to believe that a Director has failed to disclose a possible Conflict of Interest or has otherwise violated this Policy, the Board shall inform the Director of the basis for such belief and afford the Director an opportunity to explain the alleged failure to disclose or other violation. If, after hearing the Director's response and after making further investigation as warranted by the circumstances, the Board determines by a majority vote of the disinterested Directors that a Conflict of Interest exists and the Director has failed to disclose the Conflict of Interest or has otherwise violated the Policy, it shall take appropriate

disciplinary and corrective action. Such action may include, but is not limited to, imposition of sanctions, termination of a contract, disqualification from voting, or dismissal from the Board.

- 23.3.7 If the General Manager has reasonable cause to believe that a staff member has failed to disclose a possible Conflict of Interest or has otherwise violated this Policy, the General Manager shall inform the staff member of the basis for such belief and afford the staff member an opportunity to explain the alleged failure to disclose or other violation. If, after hearing the staff member's response and after making further investigation as warranted by the circumstances, the General Manager determines that a Conflict of Interest exists and that the staff member has failed to disclose the Conflict of Interest or has otherwise violated the Policy, the General Manager shall take appropriate disciplinary and corrective action. Such action may include, but is not limited to, imposition of sanctions, termination of a contract, removal from any involvement in any Cooperative business transaction to which the Conflict or other violation is relevant, or termination of employment.
- 23.3.8 In dealing with any violation of this Policy by a staff member other than a Director, the Board shall act through the General Manager.
- 23.3.9 Each staff member who is regularly involved in the initiation, negotiation, review, or approval of significant Cooperative contracts or other commitments and each Board Member and candidate to be a Board Member shall complete and sign the attached Conflict of Interest Certification and Disclosure Form on an annual basis. That Form includes an acknowledgment that the signee has read and understood OPALCO's Conflicts of Interest Policy and agrees to report promptly any possible Conflicts of Interest which arise in the conduct of Cooperative business and, in other respects, to comply with the Policy and its procedures. The signed Forms shall be delivered to the General Manager or the President.
- 23.3.10 A written record of any report of Conflicts of Interest and of any adjustments made or other actions taken to avoid Conflicts of Interest shall be kept by the General Manager or, where applicable, the Board President.

23.4 COMPETITION

An Official may not advance the Official's pecuniary interests, or have a Related Person that advances the Related Person's pecuniary interests, by competing with Cooperative or a Subsidiary, unless:

- 23.4.1 There is no reasonably foreseeable harm to Cooperative or the Subsidiary from the competition;
- 23.4.2 Any benefit that Cooperative or the Subsidiary may reasonably expect to derive from the competition outweighs any reasonably foreseeable harm to Cooperative or the Subsidiary from the competition; or
- 23.4.3 The Official discloses the competition to the Board and a majority of Disinterested Directors authorizes or ratifies the competition.

23.5 CONFLICTING INTEREST TRANSACTION

- An Official may not engage in a Conflicting Interest Transaction unless:

- 23.5.1 To the extent unknown by Disinterested Directors, the Official discloses the existence and nature of the Official's conflicting interest and all facts known to the Official regarding the Transaction that a Disinterested Director would reasonably believe to be material in acting regarding the Transaction; Disinterested Directors deliberate and vote regarding the Transaction outside the presence of, and without participation by, the Official; and a majority of Disinterested Directors, but not less than two, authorizes the Transaction; or
- 23.5.2 According to the circumstances at the time the Board

considers the Transaction, or at the time Cooperative or the

- Subsidiary becomes legally obligated regarding the
- Transaction, the Transaction, as a whole, benefits

Cooperative or the Subsidiary, considering, as appropriate,

- whether the Transaction was fair in terms of the Official's
- dealings with Cooperative or the Subsidiary and whether the
- Transaction was comparable to what might have been
- consideration paid or received by Cooperative or Subsidiary.

23.6 BUSINESS OPPORTUNITY

An Official may not directly or indirectly take advantage of a Business

- Opportunity unless, before the Official becomes legally obligated regarding the
- Opportunity:

23.6.1 The Official informs the Cooperative or Subsidiary of the Opportunity; and

23.6.1.1 To the extent unknown by Disinterested Directors, the

- Official discloses the existence and nature of the Opportunity
- and all facts known to the Official regarding the Opportunity
- that a Disinterested Director would reasonably believe to be
- material in acting regarding the Opportunity; Disinterested
- Directors deliberate and vote regarding the Opportunity
- outside the presence of, and without participation by, the
- Official; and a majority of Disinterested Directors, but not
- -less than two, disclaims interest in the Opportunity.

23.7 INSIDER PECUNIARY BENEFIT

An Official may not use Cooperative or Subsidiary property, material private information, or position to secure pecuniary benefit unless:

23.7.1 Value is given for the use and assuming the use is a

 Conflicting Interest Transaction, the Official could engage in the Transaction under this Policy;

23.7.2 The use is payment of compensation or provision of benefits;

23.7.3 The use is of information only and the use is not connected with trading securities, is not a use of proprietary information, and does not harm Cooperative or Subsidiary;

23.7.4 Assuming the use is a Conflicting Interest Transaction, a

majority of Disinterested Directors authorizes the

- Transaction under this Policy; or

23.7.5 The benefit is received as a Cooperative member; made available to all other similarly situated Cooperative members; and lawful.

23.8 COMPLIANCE AND ENFORCEMENT

The Board interprets and enforces this Policy. Cooperative's legal counsel must annually review this Policy with all Officials. The minutes of all Board meetings should record all disclosures, votes, authorizations, and other actions taken under this Policy. Each Official must annually complete and sign the Conflict of Interest Certification and Disclosure Form attached to this Policy and deliver the completed and signed Form to President or Manager. If an Official discovers any information or fact that could impact another Official's compliance with this Policy, then the Official must disclose the information or fact to President or Manager immediately.

If Manager or President receives a Form disclosing any information or fact that could impact an Official's compliance with this Policy, then, respectively,

Manager must deliver the Form to President and President must distribute the Form to the Board. If Manager or President receives or discovers any other information or fact that could impact any Official's compliance with this Policy, then, respectively, Manager must disclose this information or fact to President and President must disclose this information or fact to the Board.

Upon receiving or discovering any information or fact that could impact a Director's compliance with this Policy, the Board must:

- Provide the Director an opportunity to comment orally and in writing regarding the information or fact, and an opportunity to be represented by legal counsel; and
- o Determine whether the Director complies with this Policy.
- If the Board determines that a Director does not comply with this Policy, then:
- The Board must provide the Director an opportunity to comply with this Policy within thirty days; and
- If the Director does not comply with this Policy within thirty days, then, as allowed by law, the Board must sanction, disqualify, and/or remove the Director.

Upon receiving or discovering any information or fact that could impact any other Official's compliance with this Policy, the Board must act as appropriate or authorize the Manager to act as appropriate.

RESPONSIBILITY

It shall be the responsibility of the general manager and his staff to implement this policy. Deviations there from shall be reported to the Board of Directors.

Conflict of Interest Certification and Disclosure Form

As defined in the Orcas Power & Light Cooperative Conflict of Interest Policy 23 (Policy), the undersigned person:

- Affirms that he or she has received or has access to, has read, and understands the most current version of the Policy;
- Agrees to comply with the Policy;
- Based upon his or her good faith belief, to the best of his or her knowledge, and except as disclosed below, certifies that he or she currently complies with the Policy;
- Discloses, on behalf of himself or herself and any relative or member of his or her household, the following information or facts regarding any possible Conflict of Interest that relates to any Cooperative Business Transaction:

- Upon discovering any information or fact regarding any possible conflict between the personal interests of the undersigned person and the interests of OPALCO that could impact the undersigned person's compliance, or another person's compliance, with the Policy, agrees to disclose this information or fact in writing to the Cooperative's Board President or General Manager; and
- Upon not complying with the Policy, agrees to any sanction, disqualification, removal, or other action taken under the Policy.

Printed Name

Signature

Position

Date

MEMORANDUM

January 29, 2014

TO: Board of Directors

FROM: Randy J. Cornelius

RE: Tariff Increases

During the budget process, a rate adjustment of 6% was approved for the existing tariffs. The basic charge is now named "facility charge" to accommodate the way the industry has redefined facility use of distributed generation.

This is the second presentation of the Tariffs showing the 6% increase. Staff requests the Board make a motion to approve the tariff increases as shown.

ORCAS POWER AND LIGHT COOPERATIVE TARIFF CS – 14 COMMERCIAL SERVICE

SEVENTEENTH REVISION - REPLACING SIXTEENTH REVISION

AVAILABILITY

Available to all non-residential members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase or three phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

General Service for heating, lighting, etc., for marinas for commercial use, and non-residential members.

FACILITY CHARGE\$40.40ENERGY CHARGEFirst 5,000 kWh @ 0.0866 per kWh
Over 5,000 kWh @ 0.0781 per kWh

DEMAND CHARGEFirst 20 kW @ \$0.00 per kWOver 20 kW @ \$3.15 per kW

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$40.40 per month or prorated if service is provided for less than a full month.

DETERMINATION OF BILLING DEMAND

The billing demand shall be the maximum kilowatt demand established by the member for any period of fifteen (15) consecutive minutes during the month for which the bill is rendered as indicated or recorded by a demand meter and adjusted for power factor as provided below.

POWER FACTOR ADJUSTMENT

Demand charges may be adjusted to correct for average power factors lower than 95%. Such adjustments will be made by increasing the measured demand 1% for each 1% by which the average power factor is less than 95% lagging.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.

Orcas Power & Light Cooperative Tariff CS 14– Commercial Service Page **2** of **2**

- 2. Except for bed and breakfast establishments, service under this rate shall not be provided to locations with occupied residential facilities unless such facilities are insignificant with respect to the business operations at the location.
- 3. Bed and breakfast establishments will be served under this rate tariff if the owner or manager does not live in a building served by this meter.
- 4. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP (single phase) are subject to requirements in Member Service Policy 3-Technical Provisions.
- 5. No single resistive 3-phase loads (examples: ovens, heaters, kilns) of over 45kW shall come on line simultaneously.
- 6. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
- 7. See Member Service Policy 3-Technical Provisions for additional requirements.

Randy J. Cornelius, General Manager

Effective Date March 2014 Billing Period
ORCAS POWER AND LIGHT COOPERATIVE TARIFF ICM-14

INTERIM COMMERCIAL MARINA SERVICE

FOURTEENTH REVISION – REPLACING THIRTEENTH REVISION

NOTE: This is a temporary rate used for members who will eventually move to the Commercial Tariff.

AVAILABILITY

Available to all boats taking service in a marina, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage.

APPLICATION

Service for all uses on boats, regardless of whether anyone is living aboard.

FACILITY CHARGE \$16.70

ENERGY CHARGE First 200 kWh @ \$0.1783 per kWh Next 2,800 kWh @ \$0.0719 per kWh Over 3,000 kWh @ \$0.1062 per kWh

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$16.70 per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Service under this tariff is available only to members taking service in a marina where the secondary conductors from the OPALCO transformer are maintained by the marina.

Effective Date: March 2014 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE TARIFF LR - 14 LINE RETENTION

FIFTEENTH REVISION - REPLACING FOURTEENTH REVISION

AVAILABILITY

Available for individual residential, marina, and general service accounts where the primary and transformer only serve one member and the removal of the equipment will not affect the service to other members, and/or no service has been taken for a period of twelve (12) months.

TYPE OF SERVICE

Single-phase, 7200 GrdY primary or 120/240 secondary voltage.

APPLICATION

Payment of the line retention rate will ensure that the facilities remain in place for future use.

FACILITY CHARGE \$15.60

ENERGY CHARGE

No energy may be used under this rate.

MINIMUM MONTHLY CHARGE

The monthly charge, under the above rate, shall be \$15.60 per month or prorated if service is provided for less than a full month.

GENERAL PROVISIONS FOR MEMBERS ON LINE RETENTION

- 1. The above rate is not available where energy is being used or where a meter is installed.
- 2. OPALCO normally retires and/or removes facilities that have not been used for twelve (12) months. Payment of the line retention rate will ensure that the facilities remain in place for future use. If OPALCO removes any equipment and the member wants it reinstalled, the member shall be required to apply for a new service or line extension in accordance with the current member service policy.
- 3. Members who have discontinued service for a period of twelve (12) months or have made a formal request for service and have not connected to the system after a period of twelve (12) months are subject to the line retention rate, provided that OPALCO has determined that the facilities are causing ongoing expenses, such as line losses or line maintenance to the system.

Effective Date: March 2014 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE TARIFF NM- 14 UNMETERED SERVICE

NINTH REVISION - REPLACING EIGHTH REVISION

AVAILABILITY

Available to small fixed loads such as cable television amplifiers.

TYPE OF SERVICE

Single-phase, 60 cycles, 120 volts, 20 amps or less.

APPLICATION

For electrical loads that are unchanging during the day and operate at 120 volts with 20 amps or less.

FACILITY CHARGE: \$33.30

ENERGY CHARGE: All kWh @ \$0.0769

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$33.30 per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power or transmission charged by the Bonneville Power Administration.

GENERAL PROVISIONS

- 1. The member must install a disconnect switch that can be locked by OPALCO.
- 2. The member must provide suitable fusing to protect their equipment.
- 3. Kilowatt hour usage shall be calculated based on the device drawing rated current (as determined by the manufacturer's recommended fuse size) at 120 volts at unity power factor for 720 hours per month.

Effective Date: March 2014 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE TARIFF P-14 PUMP SERVICE

SEVENTEENTH REVISION - REPLACING SIXTEENTH REVISION

AVAILABILITY

Available to all members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

Service for pumping water for domestic use and/or irrigation.

FACILITY CHARGE 25.30

ENERGY CHARGE	First 370 kWh @ 0.0978 per kWh
	Next 4,630 kWh @ 0.0752 per kWh
	Over 5,000 kWh @ 0.0900 per kWh

DEMAND CHARGE First 20 kW @ \$0.00 per kW Over 20 kW @ 3.15 per kW

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$27.03 per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

- 1. All pumps served under this tariff shall be metered separately.
- 2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.
- 3. See Member Service Policy 3-Technical Provisions for additional requirements.

Effective Date: March 2014 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE TARIFF POL- 14 PRIVATE OUTDOOR LIGHTING

SEVENTEENTH REVISION – REPLACING SIXTEENTH REVISION

AVAILABILITY

New service under this tariff is not available after March 1, 1998. Those members receiving service under this tariff prior to March 1, 1998 may continue to do so.

TYPE OF SERVICE

OPALCO will own, maintain and operate suitable fixtures on brackets, with refractors and controls, and supply energy for sodium vapor lamps at locations agreed upon with the member, the service distance not to exceed 150 feet/2 wire, or 300 feet/3 wire.

APPLICATION

Non-metered or metered street, yard or security lighting service.

BILLING CHARGE * \$1.70 per month

FIXTURE CHARGE \$7.26 per month

ENERGY CHARGE ** 100 Watts \$2.92 per month 200 Watts \$5.93 per month

- * Applies only when not included on a bill for other energy usage.
- ** Applies only when energy is not metered.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by Bonneville Power Administration.

GENERAL PROVISIONS

- 1. All lamp replacements and other maintenance will be provided by OPALCO, except that lamps and fixtures broken by vandalism will be charged to the member.
- 2. The member shall notify OPALCO if a lamp does not operate. OPALCO agrees to repair lamps as soon as possible, but, in any event, within five (5) working days.
- 3. A timing device and/or photo electric cell may be installed by OPALCO in order to limit the time interval that the lamp is turned on each night.
- 4. During the periods of energy shortage, lamps may be disconnected by request of either the cooperative or member, with no charge to member. The member will not be charged for the period the light has been disconnected.

	Effective Date:	March 2014 Billing Period
Randy J. Cornelius, General Manager		

ORCAS POWER AND LIGHT COOPERATIVE TARIFF R-14 RESIDENTIAL SERVICE

SIXTEENTH REVISION - REPLACING FIFTEENTH REVISION

AVAILABILITY

Available to all small farm and home members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

Service for home and farm uses, such as cooking, lighting, heating, private docks not used for commercial purposes, etc. Residences qualifying as "cottage industries" by San Juan County shall be served under this tariff.

FACILITY CHARGE \$28.60

ENERGY CHARGE First 5,000 kWh @ \$0.0852 per kWh Over 5,000 kWh @ \$0.1006 per kWh

DEMAND CHARGE None

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$28.60 per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

- 1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.
- 2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.
- 3. No single resistive loads (examples: ovens, heaters, kilns) over 15 kW shall come on line simultaneously.
- 4. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
- 5. See Member Service Policy 3 Technical Provisions for additional requirements.

OPALCO Tariff R-14 Residential Service Page **2 of 2**

6. Bed and breakfast establishments will be served under this rate if the owner or manager lives in a building served by this meter.

Randy J. Cornelius, General Manager

Effective Date: March 2014 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE TARIFF TOU-14 TIME OF USE RATE

(Formerly known as "ESR-08 Energy Saving Rate) FIFTEENTH REVISION – REPLACING FOURTEENTH REVISION

AVAILABILITY

Effective September 17, 2009 Tariffs ESR-08 and CI-08 shall be frozen to members. All members who have received service under these tariffs before September 17, 2009, are grandfathered under TOU. This tariff will be adjusted along with all other tariffs for increases in cost of service.

Effective November 19, 2009 this tariff shall be known as Time of Use Tariff.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage. Equipment subject to automatic load management controls.

APPLICATION

Service for small farms, homes, pools, greenhouses and other non-essential loads. Limited to single phase loads.

FACILITY CHARGE: \$32.20

ENERGY CHARGE:

On Peak (6 a.m. - noon) – \$0.1294 per kWh Mid Peak (noon - 6 p.m.) – \$0.0590 per kWh Off Peak (6 p.m. - 6 a.m.) –\$0.0507 per kWh

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$32.20 per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

- 1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.
- 2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.

- 3. No single resistive loads (examples: ovens, heaters, kilns) over 15 kW shall come on line simultaneously.
- 4. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
- 5. Loads served under this tariff shall not be capable of being switched to another meter served under a different tariff.
- 6. See Member Services Policy 3 Technical Provisions for additional requirements.

Randy J. Cornelius, General Manager

Effective Date: March 2014 Billing Period



BYLAWS

and

ARTICLES OF INCORPORATION

ORCAS POWER & LIGHT COOPERATIVE

183 Mt. Baker Road

Eastsound, Washington 98245

Established 1937 Articles of Incorporation amended March 19, 1998 Bylaws amended November 17, 2011

STATEMENT OF NONDISCRIMINATION

Orcas Power and Light Cooperative (Cooperative) is the recipient of Federal financial assistance from the U.S. Department of Agriculture (USDA) and complies with the USDA's Non-Discrimination policy. The full USDA Non-Discrimination Policy can be found online at: http://www.usda.gov/wps/portal/usda/usdahome?navtype=FT&navid=NON DISCRIMINATION.

This institution is an equal opportunity provider and employer.

The USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at http://www.ascr.usda.gov/complaint filing_cust.html or at any USDA office, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call toll free or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at US Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W. Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov. (voice) or (800) 877-8339 (TDD) or (866)377-8642 (relay voice users).

USDA is an equal opportunity provider and employer.

The objective of the ORCAS POWER AND LIGHT COOPERATIVE is to serve San Juan County by providing electrical utility service that is efficient, economical and adequate for our members.

BYLAWS

Including amendments adopted by the Board of Directors (<mark>Board)</mark> at the Board meeting held November 17, 2011.

ARTICLE I - MEMBERS

Section 1. Any person residing and/or owning, leasing or possessing real property in San Juan County, Washington or other counties in Washington, and desiring to become an ENERGY MEMBER of the Cooperative and receive electrical energy and service, communication and other services from it (hereinafter "member" or "energy member") by connection to its physical system is eligible for energy membership and may apply therefor. Such applicant may become an energy member upon approval of his/her application, agreeing to purchase energy services from the Cooperative, and to be bound by the Articles of Incorporation, Bylaws, tariffs and rules of the Cooperative, together with any future amendments thereto, and payment of the current fee fixed by the Board of Directors. Energy members may also purchase and receive communications and other services from the Cooperative where they are available and the member is connected to the Cooperative's communications system.

Membership in any class may be assigned to another member or reacquired by the Cooperative by following the procedure established by the Board of Directors.

Every member shall be responsible for payment of any and all services received from the Cooperative, and failure to pay for any of the services will be grounds for termination of all services received from the Cooperative and for termination and/or forfeiture of membership.

No member shall ever become the holder or owner of more than one membership in any class, and memberships held by a member in excess of one shall be redeemed by the Cooperative by repayment of the membership fee.

Section 2. Qualifications and Obligations. Any person, partnership, corporation or body politic may become an energy member in the Cooperative by:

- (a) signing and submitting an application for membership form;
- (b) paying the membership fee hereinafter specified or as adopted by the Board of Directors;
- (c) agreeing to purchase from the Cooperative electric energy and service as hereinafter specified by the Cooperative; and

(d) agreeing to comply with and be bound by the Articles of Incorporation, Bylaws, tariffs and rules of the Cooperative and any future amendments thereto; provided, however, that no person, partnership, corporation or body politic shall become a member unless and until he or it has been accepted for membership by the Board of Directors. Each member agrees to grant any necessary access to real property in order to allow the Cooperative to provide electric

energy, communications and other services requested by the member, and further agrees to provide written easements recorded in favor of the Cooperative, as necessary.

(e) A married couple husband or wife, in becoming a member, shall automatically have a joint tenancy membership with right of survivorship, unless otherwise designated by them at the time he or she becomes a member. In the event of dissolution of the marital community between a married couple husband and wife, the membership will follow the property and the person awarded the property in any decree of dissolution, in absence of which the membership will be awarded to that member of the former marital community who resides upon or has control of such real property. A married couple husband and wife may join as a single member, designating which one of them is to be the member, in which event, upon death of either of the married couple husband or wife, the membership shall be treated as any other membership under Article I, Section 8 of these Bylaws.

Section 3. Membership Fee. The membership fee shall be \$5.00 or as set by the Board of Directors. Upon approval of the membership application by the Board and payment of the membership fee, the member shall be eligible for services. Fees for providing connections shall be established by the regulations adopted by the Cooperative that are applicable at the time the connections are made.

Section 4. Purchase of Electric Energy, Communications and Other Services. Each member shall, as soon as electric energy shall be available, purchase from the Cooperative all electric energy purchased for use on the premises specified in his or her application for membership, and shall pay therefor monthly at rates which shall from time to time be fixed by resolution of the Board of Directors; provided, however, that the electric energy which the Cooperative shall furnish to any member may be limited to such an amount as the Board of Directors shall from time to time determine. Production or use of electric energy on such premises, regardless of the source thereof, by means of facilities which shall be interconnected with Cooperative facilities, shall be subject to appropriate regulations as shall be fixed from time to time by the Cooperative. It is expressly understood that amounts paid for electric energy in excess of cost of service are furnished by energy members as capital, and each energy member shall be credited with the capital so furnished as provided by these Bylaws. Each member shall pay to the Cooperative a facility charge, which shall be a such-minimum amount per month as shall be fixed by the Board of Directors from time to time, regardless of the amount of electric energy consumed, but in no case, less than said minimum amount. Energy members may also purchase communications and other services from the Cooperative where such services are available and the member is connected to the Cooperative's communications system. Members purchasing communications or other services shall pay at rates and on terms and conditions, which shall from time to time be fixed by the Cooperative. Each member shall also pay all obligations which that may from time to time become due and payable by such member to the Cooperative as and when the same shall become due and payable. The Cooperative reserves the right to discontinue any or all service, including but not limited to electric service, to any member who has not paid the amounts owed by the member.

Section 5. Non-Liability for Debts of the Cooperative. The private property of the members of the Cooperative shall be exempt from execution for the debts of the Cooperative, and no member shall be individually liable or responsible for any debts or liabilities of the Cooperative.

Section 6. Expulsion of Members. The Board of Directors of the Cooperative may, by the

affirmative vote of not less than two-thirds (2/3) of the members thereof, expel any member who shall have has violated or refused to comply with any of the provisions of the Articles of Incorporation, the Bylaws, the tariffs or any rules or regulations adopted from time to time by the Board of Directors or any future amendments thereto. Any member so expelled may be reinstated as a member by a vote of the energy members at any annual or special meeting of the energy members. The action of the members with respect to any such reinstatement shall be final.

Section 7. Withdrawal of Membership. Any member may withdraw from membership upon payment in full of all debts and liabilities of such member to the Cooperative and upon compliance with such terms and conditions as the Board of Directors may prescribe.

Section 8. Transfer and Termination of Membership.

- (a) Membership in the Cooperative shall not be transferred except as hereinafter otherwise provided; and upon the death, cessation of existence, expulsion or withdrawal of a member, or if a member has received no electrical service for a continuous period of twelve (12) months when it was available to him, the membership of such member shall thereupon terminate. Termination of membership shall not release the member or the member's estate from the debts or liabilities of such member to the Cooperative.
- (b) A membership may be transferred by a member to himself or herself and his or her spouse, as the case may be, jointly upon the written request of such member and compliance by such husband and wife the spouses jointly with the provisions of subdivisions (b) and (c) of Section <u>4 2</u> of this Article. Such transfer shall be made and recorded on the books of the Cooperative.
- (c) When a membership is held jointly by a married couple husband and wife, upon the death of either, such membership shall be deemed to be held solely by the survivor with the same effect as though such membership had been originally issued solely to the surviving spouse him or her, as the case may be, provided, however, that the estate of the deceased shall not be released from any membership debts or liabilities to the Cooperative.
- (d) One whose membership has been terminated for any reason, but who requires service again, may again become a member by complying with the procedure outlined in Article 1, Section 2. Such a reinstated member, however, shall be required to pay a connection fee equivalent to that required of an existing member, in addition to the membership fee.

Section 9. New Classes of Memberships. The Board of Directors, by majority vote of a quorum of the Board, may adopt, by resolution, additional classes of memberships, together with the rights, responsibilities and duties of such additional classes of members.

Section 10. Removal of Directors and Officers. Any energy member may seek removal of a director or officer by bringing charges of malfeasance or misfeasance against an officer or director by filing them in writing with the secretary at least 30 days prior to any annual or special meeting of the Cooperative, together with a petition signed by ten percent (10%) of the energy members, requesting the removal of the officer or director in question. The removal request must state sufficient facts to support the charge of malfeasance or misfeasance to be considered. The Board of Directors, excluding the director or officer subject to the charges, with the advice of the Cooperative's counsel, shall determine whether the removal request states sufficient facts to support the charges. The A removal request that has been found to be sufficient shall be voted upon considered at the next regular or special meeting of the energy members, and any vacancy created by such removal may be filled by the energy

members at such meeting. The director or officer against whom such charges have been brought shall be informed in writing of the charges previous to the meeting and shall have an opportunity at the meeting to be heard in person or by counsel and to present evidence; and the same person or persons bringing the charges against him or her shall have the same opportunity. Following the presentations, all members shall be entitled to vote on the requested removal pursuant to the procedures established in Article II, Sections 5 and 6. In the event a director or officer is removed, a replacement director shall be appointed pursuant to Article 3, Section 4 to complete any of the removed director or officer's unexpired term.

hereinafter provided, elect a successor or successors thereto without compliance with respect to nominations.

ARTICLE II - MEETING OF ENERGY MEMBERS

Section 1. Annual Meeting. The annual meeting of the energy members shall be held on a date selected by the directors each year, at such place as the directors shall designate, for the purpose of electing directors and transacting such other business as shall come before the meeting. Unless the laws of the State of Washington, the Articles of Incorporation of the Cooperative, or the Bylaws provide otherwise, no business requiring a vote of the energy members shall be acted upon at such meeting unless notice of the business to be transacted has been given to energy members in accordance with notice provisions contained in Article II, Section 3 of these Bylaws. If the election of directors shall not be held on the day designated herein for such annual meeting, or at any adjournment thereof, the Board of Directors shall cause the election to be held at a special meeting of the energy members as soon thereafter as conveniently may be. Failure to hold the annual meeting at the designated time shall not work a forfeiture or dissolution of the Cooperative.

Section 2. Special Meetings. Special meetings of the energy members may be called by at least three (3) directors or the president, or upon a written request signed by at least $\frac{40 \text{ ten}}{10\%}$ percent (10%) of all the energy members entitled to vote, and it shall thereupon be the duty of the secretary to cause notice of such meeting to be given as hereinafter provided. Special meetings of the energy members may be held at any place in the County of San Juan, in the State of Washington, specified in the notice of the special meeting.

Section 3. Notice of System Energy Members' Meetings. Written or printed notice of a meeting stating the place, day and hour of the meeting, and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered not less than ten (10) days nor more than fifty (50) days before the date of the meeting, either personally, by electronic transmission, or by mail, by or at the direction of the secretary, or by the persons calling the meeting, to each energy member provided, however, that with respect to all meetings at which directors are to be elected, such notice shall be so delivered not less than ten (10) days nor more than fifty (50) days before the date of the meeting. Such notice may be transmitted by mail or by <mark>electronic transmission or by mail If mailed, such notice shall be deemed delivered when</mark> deposited in the United States mail, addressed to the energy member at his or her address as it appears on the records of the Cooperative, with postage thereon prepaid. If sent by electronic transmission, the notice is deemed to be delivered when sent, addressed to the member or shareholder at his or her electronic transmission address as it appears on the records of the Cooperative. The failure of any energy member to receive notice of an annual or special meeting of the members shall not invalidate any action which may be taken by the members at any such meeting. Each member and director shall be responsible to provide advance written notice to the Cooperative of any address change.

Section 4. Quorum. At least one hundred (100) energy members present in person shall constitute a quorum for the transaction of business at all meetings of the energy members, unless otherwise provided by law. If less than a quorum is present at any meeting, a majority of those present in person may adjourn the meeting from time to time without further notice, provided that the secretary shall notify any absent energy members of the time and place of such adjourned meeting. At such reconvened meeting at the original of which meeting a quorum shall have been present or represented, any business may be transacted which might have been transacted at the meeting as originally notified. The energy members present at a duly organized meeting may continue to transact business at such meeting and at any adjournment of such meeting (unless a new record date is or must be set for the adjourned meeting), notwithstanding the withdrawal of enough energy members from either meeting to leave less than a quorum.

Section 5. Voting. Each energy member shall be entitled to one (1) vote and no more upon each matter submitted to a vote at a meeting of the members. At all meetings of the energy members at which a quorum is present, all questions shall be decided by a vote of a majority of the energy members voting thereon in person or by absentee ballot, provided that the proposition submitted is exactly the same as the measure voted on at the meeting, except as otherwise provided by law, the Articles of Incorporation of the Cooperative, or these Bylaws. If a husband and wife married couple hold a joint energy membership, they shall jointly be entitled to one (1) vote and no more upon each matter submitted to a vote at a meeting of the energy members. Issues submitted to the energy membership for vote will be objectively stated and as free from bias as possible.

Section 6. Voting by Absentee Ballot. Any energy member who is absent from any annual or special meeting of the energy members may vote electronically or by written absentee ballot upon any motion or resolution to be acted upon at any such meeting, except that motions regarding procedural matters involving the conduct of the meeting, such as approval of the minutes, may be made from the floor, and shall be acted upon solely by the energy members in attendance at the meeting. The secretary shall enclose with the notice of such meeting an exact copy of all motions or resolutions. In the event of an election of directors, the notice shall include a list of all candidates by position according to Article III, Section 3 of the Bylaws, that have been predetermined to be acted upon.-and Such absentee energy member shall express his or her vote thereon by either voting electronically following the written instructions provided by the Cooperative, or by writing "Yes" or "No" on each such motion or resolution in the space provided therefore, and enclose each such ballot so marked in a sealed envelope marked "Ballot" and then place said envelope in another envelope addressed to the Orcas Power and Light Cooperative at Eastsound, Washington, and print or type his or her name and affix a signature to the outside thereof, and cause the same to be delivered by mail, electronically or otherwise to the Orcas Power & Light Cooperative at Eastsound, Washington by such time as may be fixed by the Board of Directors, but in no event later than the day before the annual or special meeting...

When such written absentee ballots is are enclosed and received from any absent energy member, it shall be accepted and counted as a vote of such absent energy member at the meeting. Any energy member who is absent from any meeting where there is to be an election of directors may also vote electronically or by absentee ballot in the election of directors as hereinafter provided in these Bylaws. If a husband or wife married couple hold a joint membership and are absent from any annual or special meeting of the members, they shall

jointly be entitled to vote by absentee ballot, whether provided in the mail or electronically by the Cooperative, as provided in this section. The failure of any such absentee energy member to receive a copy by mail or electronically, of any such motion or resolution or ballot shall not invalidate any action which may be taken by the members at any such meeting. The Board may adopt voting procedures to facilitate electronic voting. In the event electronic voting procedures are adopted, the Board shall provide advance notice of those procedures in the manner provided for in this Article II, and as provided by law.

Section 7. Order of Business. The order of business at the annual meeting of the energy members, and, so far as possible, at all other meetings of the energy members, shall be essentially as follows:

- 1. Call of the roll;
- 2. Reading of the notice of the meeting and proof of the due publication or mailing thereof, or the waiver or waivers of notice of the meeting, as the case may be;
- 3. Reading of unapproved minutes of previous meetings of the energy members and the taking of necessary action thereon;
- 4. Presentation and consideration of, and acting upon, reports of officers, directors and committees;
- 5. Election of directors;
- 6. Unfinished business;
- 7. New business; any new business raised at the annual or special meeting shall be continued until the next member meeting set according to these Bylaws;
- 8. Adjournments.

Section 8. Robert's Rules of Order. The most recent edition of Robert's Rules of Order shall serve as the governing rules for any official meeting of the energy members.

ARTICLE III – DIRECTORS

Section 1. General Powers. The business and affairs of the Cooperative shall be managed by a Board of seven (7) directors which shall exercise all of the powers of the Cooperative except such as are by law or by the Articles of Incorporation of the Cooperative or by these Bylaws conferred upon or reserved to the members.

Section 2. Qualifications and Tenure. The territory served by the Cooperative shall be divided into four districts, and the directors shall be energy member residents of the respective districts as hereafter provided.

Alternative Districts for Section 2.

District No. 1. San Juan, Brown, Henry, Pearl and Spieden Islands.

District No. 2. Orcas, Armitage, Big Double, Blakely, Fawn, Little Double and Obstruction Islands.

District No. 3. Lopez, Decatur, Center and Charles Islands.

District No. 4. Shaw, Bell, Canoe and Crane

District No. 1 shall include all territory lying South and West of a line beginning at the boundary between the United States and Canada, Northeast of Stuart Island; thence running in a Southeasterly direction to the East of Stuart and Spieden Islands through San Juan Channel; thence proceeding Southerly between Cattle and Davis Points through Middle Channel.

District No. 2 shall include all territory lying East and North of a line beginning on the boundary between the United States and Canada Northeast of Stuart Island and running thence Southeasterly to the East of Stuart and Spieden Islands and West of Flattop Island to a point West of Jones Island; thence Easterly to the North of Jones Island through Spring Passage and thence Easterly through North Pass and Pole Pass to the South of Orcas Island through Harney Channel; thence Southeasterly to the West of Blakely Island and through Thatcher Pass to the Skagit County line.

District No. 3 shall include all territory lying West of the Skagit County line and North of the Island County line and East of the East boundary of District No.1, with the North boundary thereof commencing at the Skagit County line East of Blakely Island and running thence Westerly through Thatcher Pass; thence Northwesterly to the intersection of Harney Channel and Upright Channel North of Upright Head; thence Southwesterly through Upright Channel to its intersection with San Juan Channel.

District No. 4 shall include all territory, which is bounded on the South and West of District No. 1, on the North by District No. 2 and on the Southeast by District No. 3.

Each director shall serve for a term of three years, or until his successor shall have been elected and qualified, subject to the provisions of these Bylaws with respect to the removal of directors. The election of directors and their terms of office shall be staggered as follows: upon the expiration of the terms of the present directors, new directors shall be elected who are residents of their districts for three year terms and shall be elected every third year thereafter (at this time the terms are: District No. 1 Directors, 2 years; District No. 2 Directors, 3 years; District No. 3 Directors, 1 year; and District No. 4 Director, 1 year.)

Nominations for directors shall be made each year as hereafter provided from persons residing in the respective districts from which directors are to be elected in that year. No energy member shall be eligible to become or remain a director of the cooperative who is not a bona fide resident in the district of the cooperative he is to represent, or who is employed by the cooperative, or was employed by the cooperative in the last five (5) years, or who has a contract to provide goods or services to the cooperative, or who in the last five (5) years had a dispute with the cooperative over the performance and termination of a contract to supply goods or services to the cooperative, or who is in any way employed by or financially interested in a competing enterprise or business. primarily engaged in selling electrical or plumbing appliances, fixtures, or supplies to members of the cooperative.

When a membership is held jointly by a husband and wife married couple, either one, but not both, may be elected a director, provided, however, that neither one shall be eligible to become or remain a director or to hold a position of trust in the Cooperative unless both shall meet the qualifications hereinabove set forth. Nothing in this section contained shall, or shall be construed to, affect, in any manner whatsoever, the validity of any action taken at any

meeting of the Board of Directors.

Section 3. Nominations and Election of Directors.

(a) Nominations: It shall be the duty of the Board of Directors to appoint, not less than one hundred twenty (120) days before the date of a meeting of the energy members at which directors are to be elected, a committee on nominations consisting of not less than three (3) nor more than five (5) energy members from each of the voting districts for which a director is to be elected. No officer or member of the Board of Directors shall be appointed a member of such committee. The committee shall prepare and post in the lobby at the principal office of the Cooperative at least sixty (60) days before the meeting a list of its nominations for directors.,-but Any fifteen (15) or more energy members may make other nominations from their particular district, but not otherwise, by petition with their signatures, filed with the Board of Directors at the principal office of the Cooperative at Eastsound, Washington, not less than forty-five (45) days prior to the meeting., and The secretary shall cause the same to be posted at the place where a list of nominations made by the committee is posted, including electronic postings on the Cooperative's website. The secretary shall publish a legal notice in the local newspaper(s), which carries legal notices, said notice to announce names of director candidates. The notice must be submitted to the newspaper(s) within three working days of the posting of nominations. The Cooperative, in the alternative, may post the list of director candidates on its website in order to provide the notice required in this section. The committee, if possible, should nominate at least two (2) but not more than five (5) members for each position for which a director is to be elected, one of whom shall be the incumbent director, unless such director does not wish to be considered for reelection. The secretary shall mail with the notice of the meeting a statement of the number of directors to be elected from each district and showing separately the nominations made by petition, if any, or in the alternative, the Cooperative may provide such notice electronically.

(b) Election of Directors. Not less than ten (10) nor more than thirty-five (35) days before an annual or special meeting of the energy members at which directors are to be elected, the secretary of the Cooperative shall mail to each energy member a printed ballot marked "Ballot for Directors" containing the names of all nominees for the respective districts to be arranged alphabetically, together with a notice of said meeting, containing appropriate information and instructions relative to voting by absentee ballot or at the meeting. The ballot shall indicate thereon the number of directors to be elected from each district and shall also show separately nominations made by the nominating committee and the nominations made by petition. In the alternative, the Cooperative may provide ballots to each energy member electronically. Each energy member of the Cooperative present at the meeting shall be entitled to cast his a vote for the election of directors unless he had heretofore voted voting had been completed by an absentee ballot. Absentee voting shall be conducted by Any energy member who is absent from any such meeting may vote by absentee ballot for directors by recording on the ballot a mark opposite the names of the number of candidates to be elected in each district under the procedures established in Article II, Section 6.

Each energy member is entitled to vote for each position for which a director is to be elected, and the candidate receiving the most votes in each position is deemed to be elected; provided, where two directors are to be elected for a particular district, the two persons receiving the greatest number of votes shall be deemed elected.

Section 4. Vacancies. Subject to the provisions of these Bylaws with respect to the removal of directors, A vacancy occurring in the Board of Directors shall be filled by the election of an energy member resident of the same district as the director whose office is vacated, by a majority vote of the remaining directors, and a director thus elected shall serve for the

unexpired portion of the term or until his successor shall have been elected and shall have qualified.

Section 5. Compensation. Directors as such shall not receive any salary for their services, but by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, may be allowed for serving as a director at meetings on behalf of the Cooperative. Close relatives of a director shall not receive compensation for serving the Cooperative, unless such compensation shall be specifically authorized by a vote of the members Board of Directors.

Section 6. Rules and Regulations. The Board of Directors shall have power to make and adopt such rules and regulations, not inconsistent with law, the Articles of Incorporation of the Cooperative or these Bylaws, as it may deem advisable for the management, administration and regulation of the business and affairs of the Cooperative.

Section 7. Accounting System and Reports. The Board of Directors shall hire a qualified firm to provide financial reporting of the Cooperative's business and accounts and cause to be established and maintained a complete accounting system, which, among other things, subject to applicable laws and rules and regulations of any regulatory body, shall conform to such accounting system as may from time to time be designated by the Administrator of the Rural Utilities Service of the United States of America. The Board of Directors shall review and approve such reports and documentation that the General Manager establishes and maintains on a quarterly and annual basis. The Board shall also, after the close of each fiscal year, cause to be made an audit of the accounts, books, records and the financial condition of the Cooperative. Said audit is to be conducted by a certified public accounting firm that is acceptable to the Rural Utilities Service.

A summary of such audit report shall be submitted to the members at the following annual meeting. Accounts of the Cooperative may be examined by a committee of the Board of Directors at any time it feels it advantageous to do so.

Section 8. Changes in Rates. Written notice shall be given to the Administrator of the Rural Utilities Service of the United States of America within ninety (90) days after Board approval of any change in the rates charged by the Cooperative for electric energy.

Section 9. Absences of Directors. In the event that any director shall miss three (3) consecutive regular meetings without a valid excuse, at the discretion of the remaining directors, the seat of the absent director may be declared vacant and a replacement named by the remaining directors.

ARTICLE IV - MEETINGS OF DIRECTORS

Section 1. Regular Meetings. A regular meeting of the Board of Directors shall may be held without notice other than this Bylaw, immediately after, and at the same place as the annual meeting of the members. A regular meeting of the Board of Directors shall also be held monthly at such time and place in San Juan County, Washington, as the Board of Directors may provide by resolution. Such regular monthly meetings may be held without notice other than such resolution fixing the time and place thereof. Such regular meetings may be held in Districts 1, 2, or 3 without further notice.

Section 2. Special Meetings. Special meetings of the Board of Directors may be called by the president or any three (3) directors. The person or persons authorized to call special meetings of the Board of Directors may fix the time and place for the holding of any special meeting of the Board of Directors called by them.

Section 3. Notice. Notice of the time, place and purpose of any special meeting of the Board of Directors shall be given at least five (5) days previous thereto, by written notice, delivered personally or mailed, to each director at his last known address. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail so addressed, with postage thereon prepaid. In the alternative, any special meeting of the Board of Directors can be posted on the Cooperative's website, and electronic email notice shall also be provided. The attendance of a director at any meeting shall constitute a waiver of notice of such meeting, except in case a director shall attend a meeting for the express purpose of objecting to the transaction of any business because the meeting shall not have been lawfully called or convened.

Section 4. Quorum. A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board of Directors provided that, if less than a majority of the directors is present at said meeting, a majority of the directors present may adjourn the meeting from time to time without further notice. The directors present at a duly organized meeting may continue to transact business at such meeting and at any adjournment of such meeting, notwithstanding the withdrawal of enough directors from either meeting to leave less than a quorum.

Section 5. Manner of Acting. The act of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

Section 6. Actions by Written Consent and Telephone. Any corporate action required or permitted by the Articles of Incorporation, Bylaws, or the laws under which this Cooperative is formed, to be voted upon or approved at a duly called meeting of the directors or of a committee of directors, may be accomplished without a meeting if unanimous written consents of the respective directors, setting forth the actions so taken, shall be signed, either before or after the

action taken, by all the directors or committee members, as the case may be. Action taken by unanimous written consent is effective when the last director or committee member signs the consent, unless the consent specifies a later effective date. Further, any director may participate in any meeting by telephone, or other electronic network with the consent of all the directors personally present at the meeting. Any director participating by telephone shall be counted for purposes of the quorum.

ARTICLE V – OFFICERS

Section 1. Number. The officers of the Cooperative shall be a president, vice president, secretary and treasurer, and such other officers as may be determined by the Board of Directors from time to time. The officers of secretary and treasurer may be held by the same person.

Section 2. Election and Term of Office. The officers shall be elected by ballot, annually by and from the Board of Directors at the first meeting of the Board of Directors held after each annual meeting of the members. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. Each officer shall hold office until the first meeting of the Board of Directors following the next succeeding annual meeting of the members or until his successor shall have been duly elected and shall have qualified, subject to the provisions of these Bylaws with respect to the removal of officers.

Section 3. Removal. Any officer or agent elected or appointed by the Board of Directors may be removed by the Board of Directors whenever, in its judgment, the best interests of the Cooperative will be served thereby.

Section 4. Vacancies. Except as otherwise provided in these Bylaws, a vacancy in any office may be filled by the Board of Directors for the unexpired portion of the term.

Section 5. President. The president:

- (a) shall be the principal executive officer of the Cooperative and shall preside at all meetings of the members and of the Board of Directors; and
- (b) shall sign with the secretary any deeds, mortgages, deeds of trust, notes, bonds, contracts or other instruments authorized by the Board of Directors to be executed, except in cases in which the signing and execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Cooperative, or shall be required by law to be otherwise signed or executed; and
- (c) in general shall perform all duties incident to the office of president and such other duties as may be prescribed by the Board of Directors from time to time.

Section 6. Vice President. In the absence of the president, or in the event of his inability or refusal to act, the vice president shall perform the duties of the president and, when so acting, shall have all the powers of and be subject to all the restrictions upon the president and shall perform such other duties as from time to time may be assigned to him by the Board of Directors.

Section 7. Secretary. The secretary shall:

- (a) keep the minutes of the members and the Board of Directors in one or more books provided for that purpose;
- (b) see that all notices are duly given in accordance with these Bylaws or as required by law;
- (c) be custodian of the corporate records and of the seal of the Cooperative;

(d) keep a register of the post office address of each member, which shall be furnished to the secretary by such member;

- (e) have general charge of the books of the Cooperative in which a record of the members is kept;
- (f) keep on file at all times a complete copy of the Bylaws of the Cooperative containing all amendments thereto, which copy shall always be open to the inspection of any member, and at the expense of the Cooperative, forward a copy of the Bylaws and of all amendments thereto 18 each member; and
- (g) in general, perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to him by the Board of Directors;
- (h) The secretary or the Board of Directors may delegate to another or others any of the duties hereinbefore assigned to this officer.

Section 8. Treasurer. The treasurer shall:

- (a) have charge and custody of and be responsible for all funds and securities of the Cooperative;
- (b) in general, perform all duties incident to the office of treasurer and such other duties as

from time to time may be assigned to him by the Board of Directors.

(c) the treasurer or the Board of Directors may delegate to another or others any of the duties hereinbefore assigned to this officer.

Section 9. General Manager. The Board of Directors may appoint a general manager who shall serve at the pleasure of the Board and who may be, but who shall not be required to be, a member of the Cooperative. The general manager shall report directly to the Board of Directors and shall manage the Cooperative and be responsible for the implementation of policies developed and approved by the Board of Directors. The general manager also shall perform such other duties as the Board of Directors may from time to time require of him or her and shall have such authority as the Board of Directors may from time to time vest in him or her.

Section 10. Bonds of Officers. The Board of Directors may require any officer, agent or employee of the Cooperative to give bond in such amount and with such surety as the Board of Directors shall determine, the premium for which will be paid by the Cooperative.

Section 11. Compensation. The compensation, if any, of any officer, agent or employee who is also a director or close relative of a director shall be determined by the members, as provided elsewhere in these Bylaws, and the powers, duties and compensation of any other officer, agents, and employees of the General Manager shall be fixed by the Board of Directors consistent with utility industry standards, and the Board shall approve employee compensation, salary and benefits, as presented in the annual budget prepared by the General Manager.

Section 12. Reports. The officers of the Cooperative shall submit at each annual meeting of the members reports covering the business of the Cooperative for the previous fiscal year and showing the condition of the Cooperative at the close of such fiscal year.

Section 13. Indemnification Against Liability. Each person who, as an officer or director of the Cooperative, is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal or administrative, by reason of the fact that he or she is or was a director or officer of the Cooperative, shall be indemnified and held harmless by the Cooperative to the fullest extent authorized by Washington law as the same exists or may hereafter be amended, against all expense, liability and loss, including but not limited to attorney's fees, judgments, fines, taxes or

penalties, or amounts paid in settlement reasonably incurred or suffered by such indemnitees in connection therewith, and such indemnification shall continue as to an indemnitee who has ceased to be a director or officer and shall inure to the benefit of the indemnitee 's estate, heirs and personal representatives.

The right to indemnification conferred in this article shall be a contract right and shall include the right to be paid by the Cooperative the expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that an advancement of expenses incurred by an indemnitee in his or her capacity as a director or officer in which service was or is rendered by such indemnitee, including without limitation service to an employee benefit plan, shall be made only upon delivery to the Cooperative of a written undertaking by or on behalf of such indemnitee to repay all amounts so advanced if it shall ultimately be determined by final judicial decision that such indemnitee is not entitled to be indemnified for such expense by virtue of acts or omissions precluding indemnification as set forth in Section 14 hereafter. Notwithstanding the above, nothing herein shall eliminate or limit the liability of a director for acts or omissions that involve intentional misconduct by a director or a knowing violation of law by a director, for conduct violating RCW 23B.08.310, or for any transaction from which the director will personally receive a benefit in money, property or services to which the director is not legally entitled.

The indemnification provided by this section shall not be deemed exclusive of any other rights to which a person may be entitled as a matter of law or by contract.

Section 14. Exception. No person serving as a director or officer shall be indemnified by the Cooperative in any instance in which he shall have been adjudged by final judicial decision to have engaged in intentional misconduct or a knowing violation of law or from or on account of any transaction with respect to which it was determined that such director or officer personally received a benefit in money, property or services to which the director or officer was not legally entitled.

Section 15. Right of Indemnitee to Bring Suit. If a claim under Section 13 of this Article is not paid in full by the Cooperative pursuant to the Cooperative's determination that indemnification of the director or officer is precluded pursuant to Section 14 of this Article, the indemnitee shall, upon the expiration of sixty (60) days after a written claim has been received by the Cooperative, be entitled to bring suit against the Cooperative to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Cooperative to recover advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall also be entitled to be paid the expenses of prosecuting or defending such suit.

Section 16. Insurance. The Cooperative may maintain insurance at its expense to protect itself and any director, officer, employee or agent of the Cooperative.

Section 17. Indemnification of Employees and Agents. The Cooperative may, by action of its Board of Directors, provide indemnification, including advance of expenses to an officer, employee or agent of the Cooperative, to the extent that such indemnification is consistent with the laws of the State of Washington.

Section 18. Compliance with Ethical and Conflict of Interest Policies. All members of the Board of Directors and all officers of the Cooperative shall comply with ethical and conflict of interest policies adopted by the Board of Directors.

ARTICLE VI - BOOKS AND RECORDS

Books of Account, Minutes and Member Register. The Cooperative shall keep at its principal office the following: current Articles of Incorporation and Bylaws; a record of members, including names, addresses and classes of membership, if any; correct and adequate records of accounts and finances; a record of officers' and directors' names and addresses; minutes of the proceedings of the members, if any, the Board of Directors, and any minutes which may be maintained by a committee of the Board of Directors. Records may be written or electronic, if capable of being converted to writing. The records shall be opened at any reasonable time to inspection by any member of more than three (3) months standing or a representative of more than five ten percent (5% 10%) of the members. Costs of inspecting or copying shall be borne by such member except for costs for copies of Articles of Incorporation or Bylaws. Any such member must have a purpose for inspection reasonable

related to membership interests. Use or sale of members' lists by such member, if obtained by inspection, is prohibited. Notwithstanding this Article, no member shall be entitled to review or obtain Cooperative confidential information, employee records, competitive bidding materials, or member confidential information, or information subject to statutory protections.

ARTICLE VII - CONTRACTS, CHECKS AND DEPOSITS

Section 1. Contracts. Except as otherwise provided in these Bylaws, the Board of Directors may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name and on behalf of the Cooperative, and such authority may be general or confined to specific instances.

Section 2. Checks, Drafts, etc. All checks, drafts, or other orders for the payment of money, and all notes, bonds or other evidences of indebtedness issued in the name of the Cooperative shall be signed by such officer or officers, agent or agents, or employee or employees of the Cooperative and in such manner as shall from time to time be determined by resolution of the Board of Directors.

Section 3. Deposits. All funds of the Cooperative shall be deposited from time to time to the credit of the Cooperative in such bank or banks as the Board of Directors may select.

ARTICLE VIII - NONPROFIT OPERATION

Section 1. Interest or Dividends on Capital Prohibited. The Cooperative shall at all times be operated on a Cooperative non-profit basis for the mutual benefit of its members. No interest or dividends shall be paid or payable by the Cooperative on any capital furnished by its members.

Section 2. Members' Patronage Capital in Connection with Furnishing Electric Energy. Except as provided in Article I, Section 4, in the furnishing of electric energy, the Cooperative's operations shall be so conducted that all members will, through their patronage, furnish capital for the Cooperative. In order to induce patronage and to assure that the Cooperative will operate on a non-profit basis, the Cooperative is obligated to account on a patronage basis to all its members for all amounts received and receivable from the furnishing of electric energy. All such amounts in excess of operating costs and expenses at the moment of receipt by the Cooperative are received with the understanding that they are furnished by the members as capital. The Cooperative is obligated to pay by credits to a capital account for each member all such amounts in excess of operating costs and expenses.

The books and records of sthe Cooperative shall be set up and kept in such a manner that at the end of each fiscal year, the amount of capital, if any, so furnished by each member is clearly reflected and credited in an appropriate record to the capital account of each member, and the Cooperative shall, within a reasonable time after the close of the fiscal year, notify each member of the amount of capital so credited to his account. Notwithstanding the patronage capital provisions by these Bylaws, any member who fails to remain an active member for twelve consecutive months shall forfeit all rights to patronage capital received or receivable. All such amounts credited to the capital account of any member shall have the same status as though they had been paid to the member in cash in pursuant of a legal obligation to do so and the member had then furnished the Cooperative corresponding amounts for capital.

In the event of dissolution or liquidation of the Cooperative, after all outstanding indebtedness of the Cooperative shall have been paid, outstanding capital credits shall be retired without priority on a pro rata basis before any payments are made on account of property rights of energy members. Thereafter, any payments made on account of property rights of members shall be made to all energy members (including former members) in the proportion which the aggregate patronage of each member bears to the total patronage of all such members. If, at any time prior to the dissolution or liquidation, the Board of Directors shall determine that the financial condition of the Cooperative will not be impaired thereby, the capital then credited to energy members' accounts may be retired in full or in part. Each such retirement of capital shall, in the sole discretion and determination of the Board of Directors, be made pursuant to resolution of general application of the Board of Directors in the following manners:

- 1. By payment to members in order of priority according to the year in which the capital was furnished and credited, the first received by the Cooperative being the first retired; or
- 2. By payment to all members on the basis of the ratio that the unpaid capital credits standing in the name of each member on the books of the Cooperative bears to the total unpaid capital credits of all members as shown on the books of the Cooperative. No active member who fails by this method to get a check for the minimum amount would have that amount deducted from his capital credit account; or
- 3. By discounting of estate payments to dissolved corporations or associations when capital credits are to be retired prior to the time such capital credits would otherwise normally be retired; or
- 4. By the Board of Directors determining the method, basis, priority and order of retirement.

Capital credited on the account of each energy member shall be assignable only on the books of the Cooperative pursuant to written instruction from the assignor and only to successors in the interest or successors in occupancy in all or a part of such member's premises served by the Cooperative unless the Board of Directors, acting under policies of general application, shall determine otherwise.

Notwithstanding any other provisions of these Bylaws, the Board of Directors, at its sole discretion, shall have the power at any time upon the death of any energy member, or upon the dissolution of any corporation or association, to authorize payment of capital credits to the party or parties in title thereto; if the Board authorizes payment of capital credits pursuant to this section, the remittance of those credits shall take place in a manner agreed upon by the Board of directors and the representative; if the legal representatives of the estate, the dissolved corporation or the association be retired prior to the time such capital credit would otherwise be retired under the provisions of these Bylaws, to retire capital credited to any such member, corporation or association immediately upon such terms and conditions, including such discount as the Board shall deem proper, provided, however, that the financial condition of the Cooperative shall not be impaired by the payments herein permitted as determined by the Board of directors in its sole discretion.

Section 3. Binding Effect of Articles of Incorporation, Bylaws, Tariffs and Rules of the Cooperative. All members of the Cooperative, by dealing with the Cooperative, acknowledge that the terms and provisions of the Articles of Incorporation, Bylaws, tariffs and rules of the Cooperative and any future amendments thereof, shall constitute and be a contract between the Cooperative and each member, and both the Cooperative and such members are bound by such contract, as fully as though each member had individually signed a separate instrument containing such terms and provisions. The provisions of this article of the Bylaws

shall be called to the attention of each member of the Cooperative by posting in a conspicuous place in the Cooperative's office. As a condition of membership, each member also agrees to respect and give legal effect to any utility easements for any services offered by the Cooperative, and grant any necessary access and easements as necessary to furnish all services offered by the Cooperative.

Section 4. Patronage Refunds in Connection with Furnishing Other Services. All other amounts received by the Cooperative from its operations in excess of costs and expenses shall, insofar as permitted by law, be (a) used to offset any losses incurred during the current or any prior fiscal year and (b) to the extent not needed for that purpose, allocated to its members on a patronage basis, and any amount so allocated shall be included as a part of the capital credited to the accounts of members, as herein provided.

In the event that the Cooperative should engage in the business of furnishing goods or services other than electric energy, all amounts received and receivable therefrom which are in excess of costs and expenses properly chargeable against the furnishing of such goods or services shall, insofar as permitted by law, be prorated annually on a patronage basis and returned to those members from whom such amounts were obtained. Such goods and services may include, without limitation, the provision of fiber optic and other telecommunications infrastructure and services.

Section 5. Transfer of Credits or Refunds to "Education and Promotion Fund" or "Retirement and Replacement Fund". In the event total capital credits or membership fee refund due any active or inactive member is less than \$5.00, or the member has forfeited his rights to capital credits, or in the event the Cooperative is unable to make payment to any active or inactive member of capital credits or membership fee refund due such active or inactive member because of inability to locate the active or inactive member, the incapacity of the active or inactive member to receive the same, or any other cause beyond the control of the Cooperative, then, after the lapse of a period of two (2) years from the date prescribed for payment or delivery of such capital credit or membership fee refund, such capital credit or membership fee refund shall be transferred by the Cooperative to either a special fund known as the "Education and Promotion Fund" or to a special fund known as the "Retirement and Replacement Fund," as the Board of Directors shall by resolution determine. Each member and each member of the Cooperative hereby grants and gives to the Cooperative as a free and voluntary gift of all such moneys, rights, and interests as of said date of transfer. The moneys transferred to the "Education and Promotion Fund" shall be used by the Cooperative for such research and educational purposes as the Cooperative's Board of Directors may determine to be for the benefit and advance of the industry in cooperation and in the effective use and marketing of electricity. The moneys transferred to the "Retirement and Replacement Fund" shall be used to pay_{T} for losses sustained as a result of retirement and replacement.

Section 6. Priority of Cooperative's Claim for Amounts Due from Member. Nothing contained in this article shall be construed to deprive the Cooperative of its first lien against any capital credits to satisfy any unpaid bill of the energy member. Only that portion of a capital credit or payment which is not needed to satisfy any unpaid bill shall be paid to the energy member, provided that the financial condition of the Cooperative shall not be impaired by the payments herein permitted as determined by the Board of directors in its sole discretion.

ARTICLE IX - WAIVER OF NOTICE

Any member or director may waive, in writing, any notice of meetings required to be given by these Bylaws.

ARTICLE X - DISPOSITION OF PROPERTY

Section 1. Sale or Transfer. The Cooperative may not sell or transfer or otherwise dispose of any of its property other than property which in the judgment of the Board of Directors neither is nor will be necessary or useful in operating and maintaining the Cooperative system and facility; provided, however, that all sales of such property shall not in any one year exceed in value ten (10%) percent of the value of all the property of the Cooperative.

Section 2. Sales or Encumbrance. The Cooperative may not sell, mortgage, lease or otherwise dispose of or encumber any property except in the normal course of business of the Cooperative in accordance with sound fiscal judgment so as not to impair the financial condition of the Cooperative.

Section 3. Borrowing Authority. Notwithstanding the limitations set forth in Sections 1 and 2 above, the Board of Directors, without authorization by the members, shall have full power and authority to borrow money from the United States of America, or from a national financing institution, organized on a Cooperative plan for the purpose of financing its members' programs, projects and undertakings in which the Cooperative holds membership, and in connection with such borrowing, to authorize the making and issuance of bonds, notes or other evidence of indebtedness and to secure the payment thereof, to authorize the execution and delivery of a mortgage or mortgages, or a deed or deeds of trust upon, or the pledging or encumbering of any or all of the property, assets, rights, privileges, licenses, franchises and permits of the Cooperative, whether acquired or to be acquired, and wherever situated, all upon such terms and conditions as the Board of Directors shall determine. Nothing in this section is to be construed as a limitation upon the Board of Directors to borrow money from such other entities, institutions or sources as may be permissible under the laws of the State of Washington.

ARTICLE XI - FISCAL YEAR

The fiscal year of the Cooperative shall begin on the first day of January of each year and end on the thirty-first day of December of the same year.

ARTICLE XII - MEMBERSHIP IN OTHER ORGANIZATIONS

The Cooperative may become a member of such other organizations as the Board of Directors determine will be beneficial.

ARTICLE XIII - SEAL

The corporate seal of the Cooperative shall be in the form of a circle and shall have inscribed thereon the name of the Cooperative and the words "Corporate Seal, Washington."

ARTICLE XIV - AMENDMENTS

Section 1. Board Initiated Amendments. The power to make, alter, amend, or repeal the Bylaws or adopt new Bylaws shall be vested in the Board of Directors provided however, voting members may also adopt proposed changes to the Bylaws as provided in Section 2. Notice of the Board's action in making, altering, amending or repealing the Bylaws or adopting new Bylaws shall be given to the voting members within thirty (30) days of such action.

Section 2. Member Initiated Amendments. Voting members may propose changes to the Bylaws as follows:

(a) Bylaw Amendments Proposed by Members. Any group of fifty (50) ten percent (10%) or

more voting members may propose, in writing, a resolution to make, alter, amend or repeal a bylaw or to adopt new Bylaws. Any such proposed resolution must be submitted to the Board of Directors no less than ninety (90) days prior to the date of the next annual meeting of the members, as described in Article II, Section 1 of the Bylaws.

- (b) Review by Directors. After review by the directors, the proposed amendment to the Bylaws shall be placed upon the agenda of the annual meeting of the energy members, and notice of the proposed amendment shall be provided to the energy members in accordance with the notice provisions contained in Article II, Section 3 of the Bylaws.
- (c) Voting on Proposed Amendment. Any proposed amendment shall be voted upon at the annual meeting of the energy members. Voting shall be in accordance with Article II, Sections 5 and 6 of the Bylaws. Any proposed amendment receiving a simple majority of votes from the energy members shall be approved.

ARTICLE XV - GENDER

Whenever masculine, feminine, neuter, singular or plural terms are used in these Bylaws, such terms shall be construed to include all persons in whatever form is appropriate to make the Bylaws applicable to all members, unless the context of the Bylaws clearly indicates otherwise.

Note: there was a general edit to capitalize the following words: Cooperative, Articles of Incorporation and Bylaws

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MEMORANDUM Confidential Attorney Client Communication

TO:	OPALCO Board of Directors
FROM:	Mr. Joel Paisner, Ascent Law Partners, LLP Mr. Arthur Butler, Ater Wynne, LLP
DATE:	January 30, 2014
RE:	Member Proposed Bylaw Amendment Regarding Charges for Non-Electric Service

INTRODUCTION

We have been asked to review the proposed bylaw amendment offered by a petition from OPALCO members in advance of the annual meeting of members. This memorandum will address the amendment regarding a proposed limitation on certain charges for non-electric services.

PETITION LIMITING NON-ELECTRIC CHARGES FOR SERVICES

A member petition was submitted to the Board of Directors that proposes in material part as follows:

NEW SECTION 7 TO ARTICLE VIII. If the Cooperative...engages in the business of furnishing goods or services, including, but not necessarily limited to: administration, advertising, equipment, maintenance, and operation other than for the specific purposes of purchase and/or distribution of electric energy to energy members or to non-energy members, all costs of such goods and services shall be borne solely by the users of such goods and services. Energy members and non-energy members using such goods and services shall be billed separately from the costs of purchasing and/or distributing electric energy.

The proposed bylaw amendment has several defects. First, by its terms it would effectively establish distinct classes of memberships – energy members and non-energy members. Any and all costs related to the sales of electric energy may be charged to all members of the cooperative. Any and all costs incurred for the sale of goods or services other than electric energy, may only be borne by subscribers of those services. By its terms, the petition contemplates that non-cooperative members may subscribe to such services, unlike energy members, who must be accepted as

members of the cooperative before receiving energy services. ¹ The amended articles of incorporation specifically grant to the Board of Directors the ability to create different classes of members, not the bylaws.

There shall be one class of memberships called "Energy Members" as hereinafter defined, and such other classes of memberships *as shall be established by resolution of the Board of Directors*. Article VII, Section 1. (emphasis added).

This is consistent with RCW 24.06.065 that allows creation of new membership classifications, but only as prescribed in the articles of incorporation.

Thus, absent such a resolution of the Board of Directors – as required by the amended articles of incorporation, the proposed bylaw amendment will be in conflict with the amended articles of incorporation. The bylaws must not conflict with the articles of incorporation. Provisions of the articles will control over provisions of the bylaws where they are inconsistent. See RCW 24.06.020.

Additionally, this amendment is confusing, and seeks to amend the wrong section of the bylaws. Both of these flaws introduce confusion into the cooperative's bylaws. As drafted, the amendment states that OPALCO furnishes the following goods and services: "administration, advertising, equipment and operation." Those are certain costs incurred by OPALCO, but are not specific goods and services provided by it to its membership. The cooperative provides electric energy services to its membership, but, for example, it does not provide advertising services for sale. It is difficult to determine the exact meaning of this proposed amendment. The proposed bylaw amendment also seeks to amend Article VIII of the bylaws which solely addresses the nonprofit aspects of the corporation, such as patronage capital, treatment of capital credits, and refunds. This section has nothing to do with allocating costs to certain classes of members. As a result, the offered bylaw amendment would create confusion in the bylaws, and potentially create inconsistencies where there are none.

¹ Article VII, Section 1 of the amended articles of incorporation defines Energy Members.

Conservation Potential Assessment

Orcas Power and Light February 20, 2013

> Kevin Smit 425-889-2700



What is a Conservation Potential Assessment?

- It is an estimate of energy efficiency that could be achieved in the Orcas Power and Light service territory over a 20-year period. (With a focus on the near term 5-10 years).
- Treats energy efficiency as a resource and evaluates the cost effectiveness relative to other sources of electricity
- It looks at the building characteristics and estimates how many and what type of energy efficiency measures/products could be achieved
- The results can be used for planning and implementing programs sponsored by the utility and others
- Near term results can be uses for setting goals, targets, and budgets

Conservation Potential Assessment Overview



3

Residential Data

RESIDENTIAL							
Heating Zone	Cooling Zone	Solar Zone	POWER &	lin			
1	1	1	-SPONSO	South Co			
			8	- F			
Residential Households		Total Population	Caliner Cal	1937			
13,313		15,769	SHANG THE	AN JUNE			
Housing Stock	Existing Homes	New Homes	Regional %	Housing Appliances	Existing	New	Regional %
House Type				Water Heating			
Single Family	84%	90%	72%	Electric	81%	81%	64%
Multi-Family	8%	0%	18%	Natural Gas	19%	19%	36%
Manufactured Homes	8%	10%	10%	Appliance Saturation			
Housing Vintage				Refrigerator	112%	112%	112%
Pre-1980	40%	0%	57%	Freezer	57%	57%	57%
1980 - 1993	25%	0%	14%	Clothes Washer	87%	87%	87%
Post 1993	32%	100%	28%	Electric Dryer	82%	82%	82%
Heat Fuel Type				Dishwasher	67%	67%	67%
Natural Gas Homes	19%	19%	37%	Electric Oven	82%	82%	82%
Electric Homes	53%	53%	53%	Room AC	11%	11%	11%
Other Fuel Homes	28%	28%	10%	Central AC	50%	50%	8%
Electric Heat System Type							
Forced Air Furnace	18%	18%	34%				
Heat Pump	10%	10%	20%				
Zonal (Baseboard)	62%	62%	44%				
Electric Other	10%	10%	2%				
Single Family Foundation Type			100				
Crawlspace	70%	70%	64%				
Full Basement	23%	23%	23%				
Slab on Grade	7%	7%	13%				

Energy Efficiency Measures

- "Traditional" Energy Efficiency Measures
 - Insulation upgrades
 - New windows
 - Efficient showerheads
 - Efficient lighting Compact Fluorescent Lamps
 - Heat pumps
 - Commercial building lighting upgrades
 - Grocery and convenience store refrigeration improvements
- More recent or emerging measures
 - Heat pump water heaters
 - Ductless heat pumps
 - Consumer electronics LED TV's
- Related technologies
 - Solar PV
 - Other distributed generation


Results: 10-Year Potential by Type



Results: Shares of 10-year Potential



8

Note: "Community Programs" includes NEEA, distribution system efficiency, and naturally occurring energy efficiency



Residential Program Potential



Commercial Program Potential



Ten-Year Potential by End-Use

Ten-Year Residential Potential by End-Use MWh									
10-Year Action Plan 10-Year Achievable 10-Year Technica									
End-Use	(Utility Program) ¹	(Above Utility Program) ²	(Above Achievable) ³						
Lighting	899	1,362	0						
HP / DHP	4,495	4,122	0						
Envelope Retro	2,896	1,384	1,871						
Water Heat	779	3,950	3,916						
Consumer	Consumer								
Electronics	0	3,024	1,582						
Appliances	766	692	968						
Envelope New	1,021	612	10						
Solar PV	0	0	1,283						
Solar WH	0	0	2,055						
Total	10,856	15,146	10,561						

What Can be Accomplished Beyond the Utility Programs?

- Expand Existing programs
 - Weatherization
 - Heat Pumps
- Distribution System Efficiency
- Solar PV and Water Heating
- Premium HVAC (Commercial)
- LED street lighting and some exterior building lighting



Summary

- OPALCO has a strong history of promoting energy efficiency
- A wide range of incentives are offered through the utility program
- This potential assessment shows there is significant energy efficiency potential available beyond existing program levels
- Additional energy efficiency can be achieved with additional funding, either in-house or through grants and partnerships
- Data from the potential assessment can be used for program planning, both internal and external.
- Thank you. Questions? Comments?

Orcas Power and Light Cooperative

Orcas Power and Light Cooperative Conservation Potential Assessment 2013

Final Report

December 27, 2013

Prepared by:



570 Kirkland Way, Suite 100 Kirkland, Washington 98033

A registered professional engineering corporation with offices in Kirkland, WA and Portland, OR

Telephone: (425) 889-2700 Facsimile: (425) 889-2725



December 27, 2013

Mr. Randy Cornelius Orcas Power & Light Cooperative 183 Mount Baker Rd Eastsound, WA 98245-9413

SUBJECT: Conservation Potential Assessment – Final Report

Dear Mr. Cornelius:

EES Consulting is pleased to submit this final Conservation Potential Assessment Report to Orcas Power and Light Cooperative (OPALCO).

Thank you to you and your staff for the support in developing the data and providing feedback throughout this process. We hope this report is useful for planning your near and long term conservation programs.

Very truly yours,

Kein I. Sat

Kevin Smit Manager, Energy Efficiency/DSM

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Executive Summary

This report describes the results of the Orcas Power and Light Cooperative (OPALCO) 2013 Conservation Potential Assessment (CPA). This assessment provides estimates of energy savings potential by sector for the period 2014 to 2033. The CPA evaluated a wide range of conservation resources that are reliable, available, and cost-effective within the 20-year study period.

OPALCO is a rural electric cooperative serving 20 islands in San Juan County including Orcas, San Juan, Shaw, and Lopez. OPALCO serves approximately 14,500 residential, commercial, and lighting customers. Due to the rural nature of their service territory, OPALCO's customer base is primarily residential. OPALCO is a full requirements customer of the Bonneville Power Administration (BPA). The vast majority of OPALCO's power supply requirement is provided by BPA with the exception of approximately 113 member-owned resources. OPALCO has a combination of solar and micro-hydro projects located in their service territory. Solar projects are most prominent. Annual energy from member-owned resources is estimated at 219 MWh.

In July 2013, OPALCO's Board approved a new policy, Policy 28, which encourages non-profit organizations to collaborate with the utility to create opportunities for energy efficiency and renewable energy in San Juan County. Currently, OPALCO's energy efficiency and renewable energy programs are funded by BPA; however, these programs limit some benefits to homes or businesses heated with electricity. Policy 28 has no such restrictions on energy efficiency and conservation programs.

Utility-specific data and assumptions are used to ensure a custom, applicable assessment for each member. Most of the measures included in this assessment are regionally approved and should be available through Bonneville Power Administration programs. OPALCO's service territory information (e.g. number of electrically heated homes) was used to build up an accurate estimate of market potential for energy efficiency measures.

The results of this assessment show that there is significant energy efficiency potential available in the OPALCO service area. Figure 1 below shows the overall results for three different levels of potential:

- Program Potential the potential that can and will likely be achieved through the current BPA funding levels. These include all of the standard BPA measures such as heat pumps, insulation upgrades, lighting (residential and commercial), and custom commercial projects.
- Maximum Achievable Potential this includes all cost-effective potential. The difference or gap between the Program Potential and the Max Achievable Potential includes savings achieved from the Northwest Energy Efficiency Alliance, distribution system efficiency, and expanding the standard BPA programs and measures.

 Technical Potential – all potential regardless of cost; achievable but not cost-effective. This level includes the solar water heating, residential photovoltaic panels, some heat pump water heater configurations, and various high-cost commercial building measures.



Figure 1 – Comparison of Technical, Maximum Achievable, and Program Potential

The program potential starting point is based on the average of the previous three years' worth of OPALCO achievements. Depending on available budget and program infrastructure (e.g., available contractors), the program potential could be expanded. Other more expensive measures such as solar water heating and PV are available in the technical potential.

Introduction

This report describes the results of the Orcas Power and Light Cooperative (OPALCO) 2013 Conservation Potential Assessment (CPA). This assessment provides estimates of energy savings potential by sector for the period 2014 to 2033. The CPA evaluated a wide range of conservation resources that are reliable, available, and cost-effective within the 20-year study period.

Background

OPALCO is a rural electric cooperative serving 20 islands in San Juan County including Orcas, San Juan, Shaw, and Lopez. OPALCO serves approximately 14,500 residential, commercial, and lighting customers. Due to the rural nature of their service territory, OPALCO's customer base is primarily residential. Friday Harbor, located on San Juan Island, is the only incorporated town in the county. Tourism is the largest employer in San Juan County and tourism related services compose the majority of service related employment. The population in San Juan County nearly doubles during the peak of the tourist season (in the summertime). OPALCO's members consumed 215,961 MWh in 2012. The system peak is approximately 55 MW and occurs in December.

OPALCO is a full requirements customer of the Bonneville Power Administration (BPA). The vast majority of OPALCO's power supply requirement is provided by BPA with the exception of approximately 113 member-owned resources. OPALCO has a combination of solar and micro-hydro projects located in their service territory. Solar projects are most prominent. Annual energy from member-owned resources is estimated at 219 MWh.

Energy Efficiency and Renewable Energy Policy

In July 2013, OPALCO's Board approved a new policy, Policy 28, which encourages non-profit organizations to collaborate with the utility to create opportunities for energy efficiency and renewable energy in San Juan County. Currently, OPALCO's energy efficiency and renewable energy programs are funded by BPA; however, these programs limit some benefits to homes or businesses heated with electricity. Policy 28 has no such restrictions on energy efficiency and conservation programs.

Regional Planning

The methodology used in developing this CPA is consistent with the Northwest Power and Conservation Council's (Council) methodology used to develop the Northwest Power Plans (more specifically, the latest plan is the Sixth Power Plan). The Council develops regional power plans that evaluate regional loads and resources over a 20-year time period. As part of regional power planning energy efficiency resources are evaluated alongside supply-side resources. OPALCO loads and resources are included in the regional valuation.

While the Council evaluates resource potential, another organization, Northwest Energy Efficiency Alliance (NEEA), leverages regional partnerships to affect market transformation for energy efficiency resources. NEEA is an alliance of over 100 Northwest utilities and energy efficiency organizations. OPALCO is a member of NEEA and the utility achieves energy efficiency through its support of NEEA efforts. Example NEEA efforts include the following:

- Working with the Environmental Protection Agency to increase TV efficiency standards.
- Created availability and incentive for retailers to carry high-efficiency televisions
- Developed Continuous Energy Improvement (CEI), a framework that embeds strategic energy management into businesses and manufacturing processes.
- NEEA programs helped identify new Northwest hospital buildings that are 35-65 percent more efficient than current local codes.

As a member of NEEA, OPALCO benefits from NEEA efforts.

Overview of CPA

Utility-specific data and assumptions are used to ensure a custom, applicable assessment for each member. Most of the measures included in this assessment are regionally approved and should be available through Bonneville Power Administration programs.

OPALCO's service territory information (e.g. number of electrically heated homes) was used to build up an accurate estimate of market potential for energy efficiency measures. The results of this analysis can assist with defining the magnitude and cost of conservation potential, and the report also describes the measures and end-uses that will provide the most savings.

This is the first CPA conducted by OPALCO. It is an excellent starting point for building a foundation for ongoing, enhanced assessments and plans.

Methodology

The methodology used for this assessment is illustrated in Figure 2. A key factor is the kilowatt hours saved annually from the installation of an individual energy efficiency measure. The savings from each measure is multiplied by the total number of measures that could be installed over the life of the program. Savings from each individual measure is then aggregated to produce the total potential.



The characterization of efficiency measures includes measure savings (kWh), demand savings (kW), measure costs (\$), and measure life (years). Other features, such as measure load shape, operation and maintenance costs, and non-energy benefits are also included in the cost/benefit calculations. The avoided cost (price forecast) is used to determine the conservation energy savings benefits.

The customer characteristics include: housing structure types, fuel types, heating system types, and others. These data are used to determine the number of units available for a given conservation measure. The result is a detailed accounting of potential savings by individual measure, end-use, and sector.

Energy Efficiency Measure Data

The characterization of efficiency measures includes measure savings (kWh), demand savings (kW), measure costs (\$), and measure life (years). Other features, such as measure load shape, operation and maintenance costs, and non-energy benefits, are also important for measure definition. The primary source referenced for conservation measure data is the Council's *Sixth Power Plan*.

The measure data include adjustments from raw savings data for several factors. The effects of space-heating interaction, for example, are included for all lighting and appliance measures, where appropriate. For example, if an electrically heated house is retrofitted with efficient lighting, the heat that was originally provided by the inefficient lighting will have to be made up by the electric heating system. These interaction factors are included in measure savings data to produce net energy savings.

Other financial-related data needed for defining measure costs and benefits include: current and forecasted loads, growth rates, discount rate, avoided costs, line losses, and deferred capacity-expansion benefits.

The avoided cost of energy is represented as a dollar value per MWh of conservation. Avoided costs are used to value energy savings benefits when conducting cost effectiveness tests and are generally included in the numerator in a benefit-cost test. These energy benefits are often based on the cost of a generating resource, a forecast of market prices, or the avoided resource identified in the integrated resource planning process. Figure 3 shows the price forecast used in evaluating measure energy benefits.





In addition to the market price forecast, the avoided cost includes other components including the Regional Power Act credit of 10%, the avoided transmission and distribution benefit, and risk mitigation credit.

Avoided costs for transmission and distribution, as well as peak winter demand, are also valued (\$/kW). A local distribution credit value of \$23/kW-yr was applied to peak savings from conservation measures. This is the value used in the regional Fifth and Sixth Power plans for the avoided cost of upgrading the T&D system.

The Risk Mitigation Credit was defined by the Council in the Sixth Power plan to represent the added value to conservation for mitigating the volatility of future market prices. Through the use of their portfolio model, the Council defined two risk credit values: \$58/MWh for lost opportunity measures, and \$43/MWh for non-lost opportunity (retrofit) measures.

Building Characteristic Data

Building characteristics, baseline saturation data, and appliance saturation influence OPALCO's total conservation potential. One of the most accurate methods to obtain these data is through original research such as end-use surveys. End-use surveys can be designed to provide all the detailed housing and commercial building data requirements. For this analysis, the characterization of OPALCO's baseline was determined using data developed by staff and local researchers. Details of data sources and assumptions are described for each sector later in the report. Baseline measure saturation data is determined using historic conservation achievements and the results of the customer survey. The modeling also includes regional measure saturations for conservation accomplishments over the past years; these values were used where OPALCO-specific information was not available.

Historic and Current OPALCO Conservation

OPALCO currently offers several rebates and testing programs for both residential and nonresidential applications. These programs include energy efficient appliance rebates, residential weatherization rebates, heating equipment rebates, and energy audits. OPALCO also offers programs in the commercial sectors. Figure 4 shows the annual levels of past conservation achievements. These data are important in reference to future potential estimates and plans. The year-to-date (YTD) savings for 2013 are through September.



Figure 4 – OPALCO Conservation History

* Breakdown of Residential or Commercial MWh savings was not available for 2011.

Figures 5 and 6 show past conservation by end-use for residential and commercial sectors for the period 2008 through 2013 (YTD).



Figure 5 – Residential Energy Efficiency Achievement by End-Use

Conservation Programs

OPALCO offers a wide range of conservation programs to its members. These programs include several appliance rebates, energy audits, member-owned renewable energy, commercial lighting rebates and other commercial projects. The current programs offered by OPALCO are detailed below.

Residential

- Energy Star Rebates OPALCO offers a number of rebates for Energy Star appliances. These include \$15 for refrigerators and freezers, \$300 for 50-75 gallon Energy Factor rating heat pump water heaters, \$500 on Energy Factor heat pumps larger than 75 gallons, \$30-\$70 for clothes washers depending on their Modified Energy Factor (MEF) and gallons of water used per cycle.
- Insulation Rebates This program provides insulation rebates from \$0.05 to \$0.85 a square foot depending on location and home type.
- Window (and Glass Door) Replacement Rebates OPALCO offers window and glass door replacement rebates of \$6 to \$8 a square foot for all homes with permanently installed electric heat.
- Air Sealing Rebates of \$30 to \$200 are available depending on the size of home and amount of reduction of air infiltration achieved. To qualify for this OPALCO rebate, a Performance Tested Comfort Systems (PTCS) contractor must perform air sealing.
- Duct Sealing OPALCO offers rebates on duct sealing performed by a PTCS contractor. Rebates are \$400 for new construction and manufactured homes or \$500 for a single family existing residence.
- Heat Pump Rebates This program provides rebates for a variety of heat pump upgrades including: a heat-pump rebate ranging from \$300-\$1,900 and a ductless heat-pump rebate of \$1,500.
- Home Snapshot Energy Assessment This program offers residents an inspection by OPALCO's Building Performance Institute (BPI) certified contractors of insulation, windows and doors, heating system, ventilation and air quality, appliances and lighting. They will prepare a report on your home's energy efficiency status and potential and make recommendations for improvements. There is a \$25 fee for this service.
- Green Power Program OPALCO offers a green power program (member-owned renewable energy or MORE) that enables members to buy blocks of MORE power on their monthly bill. 100% of the MORE funds go towards supporting local, member-owned renewable energy generation such as solar, wind and micro-hydro power; generated by solar panels or windmills to offset the power used in the home.
- CFL Recycling OPALCO offers compact fluorescent light bulb (CFL) recycling stations at its offices around the San Juan Islands.
- The Peak Project Working together, BPA and OPALCO have teamed up to offer a residential demand response pilot program to members called "The Peak Project." This program uses AMI meters to reduce electric load in participating members' homes during peak hours to reduce strain on the utility electric system.

Commercial

 Commercial Lighting – Owners of commercial buildings in OPALCO's service territory can apply for a lighting energy upgrade through BPA's Commercial Energy Efficiency program. Lighting rebates are capped at 70% of total project cost and/or \$0.50/kWh savings.

- Small Commercial Weatherization Window upgrade rebates of \$3 per square foot are available from OPALCO in small (<5,000 sq ft) office or retail buildings, with wood frame construction that are heated by electricity.
- Energy Smart Grocer & Food Service Rebates OPALCO has teamed with BPA and Portland Energy Conservation, Inc. to provide a set of services to businesses with significant refrigeration loads including refrigeration upgrades & retrofits, overhead lighting upgrades, lighting upgrades in refrigerated coolers and cases, and no-cost energy audits. OPALCO also offers reimbursement for high-efficiency commercial kitchen and food service electric equipment including refrigerators, freezers, ovens, fryers, dishwashers, etc.
- Commercial Ductless Heat Pumps Reimbursement of \$250 per ton of installed outdoor unit heating capacity for each DHP unit serving a qualified indoor space is provided by OPALCO.
- Custom Projects Rebates OPALCO offers rebates for special multi-measure projects that improve efficiency or process related systems including, but not limited to, combined HVAC, lighting, windows, and insulation. Rebates for this program vary.

Summary

OPALCO plans to continue offering incentives for energy efficiency investments. The results of this study will help OPALCO program managers decide where best to focus in energy efficiency program offerings, incentive levels, and program review. The baseline characteristics are described in the next section.

Customer Characteristics

OPALCO serves over 11,120 customers with total electricity requirements of 214,865 MWh (2012). This section summarizes high-level customer characteristics utilized in conducting the potential assessment. These customer characteristics were developed by the Islands Energy Coalition (IEC) utilizing mostly local, third party resources.

Residential

For the residential sector, the key characteristics include house type, heat fuel type, and water heating. Table 1 shows relevant data obtained primarily from OPALCO staff and supplemented with census data and other published sources.

	Table 1 – Residential Sector Characteristics								
General Characteristics			Heating Systems	Existing	New				
Residential Housing Units	13,313		Heat Fuel Type						
Population	15,769		Propane Homes	19%	19%				
Heating Zone	1		Electric Homes	53%	53%				
Cooling Zone	1		Other Fuel Homes	28%	28%				
Solar Zone	1		Electric Heat System Type						
Annual Housing Growth Rate	0.8%		Forced Air Furnace	18%	18%				
U U			Heat Pump	10%	10%				
Housing Vintage		Zonal (Baseboard)	62%	62%					
Pre-1980	40%		Electric Other	10%	10%				
1980 - 1993	25%		Water Heating						
Post 1993	32%		Electric	81%	81%				
			Propane	19%	19%				
Housing Structure	Existing	New	Appliance Saturation	Eviation of	N				
Housing Structure House Type	Homes	Homes	Appliance Saturation Refrigerator	Existing 112%	New 112%				
Single Family	84%	90%	Freezer	57%	57%				
Multi-Family	8%	0%	Clothes Washer	87%	87%				
, Manufactured Homes	8%	10%	Electric Dryer	82%	82%				
Single Family Foundation Type			Dishwasher	67%	67%				
Crawlspace	70%	70%	Electric Oven	82%	82%				
Full Basement	23%	23%	Room AC	11%	11%				
Slab on Grade	7%	7%	Central AC	50%	50%				

Commercial

For the commercial sector, building square footage is the key parameter in determining energy efficiency potential; many of the measures are based on savings as a function of building square footage (kWh per square foot). The economy in the San Juan Islands is primarily based on tourism. As such, commercial building types are generally composed of lodging, small retail/office, and restaurants. Table 2 shows commercial square footage in the each of the 18 building categories.

Table 2 – Commercial Square Footage by Segment								
Segment	Current Square Footage	Average Growth Rate						
Large Office	0	1.5%						
Medium Office	64,739	1.5%						
Small Office	640,950	1.5%						
Big Box Retail	0	0.8%						
Small Box Retail	360,957	0.8%						
High End Retail	0	0.8%						
Anchor	0	0.8%						
K-12 Schools	149,762	1.0%						
University	794	1.1%						
Warehouse	75,238	2.7%						
Supermarket	124,956	0.4%						
Mini Mart	22,269	1.0%						
Restaurant	84,191	1.2%						
Lodging	293,234	0.6%						
Hospital	0	1.1%						
Other Health Facilities	14,268	1.7%						
Assembly Hall/Churches	183,252	1.4%						
Other	174,930	0.5%						
TOTAL	2,189,541	1.13%						

Results—**Energy Savings and Costs**

Technical Conservation Potential

Technical potential is the amount of energy efficiency potential that is available regardless of cost or other constraints such as willingness to adopt measures. It represents the theoretical maximum amount of energy efficiency.

Figure 7 shows a supply curve of 20-year technically achievable potential. A supply curve is energy efficiency savings potential (MWh) plotted against the levelized cost (\$/MWh). The technical potential has not been screened for cost effectiveness but rather shows the full range of conservation that may be available without regard to cost. The supply curve facilitates the comparison of demand-side resources with supply-side resources and is often used in conjunction with integrated resource plans (IRPs). Total technical potential for OPALCO is approximately 11.6 aMW over the 20-year study period. Potential can be estimated at any level of cost, for example the figure shows that 7.6 aMW of potential is available for under \$50/MWh.





Economic and Achievable Conservation Potential

Economic potential is the amount of potential that passes an economic cost/benefit test. This means that the present value of the benefits exceeds the present value of the measure costs over the measure's lifetime. Often, the levelized cost of an efficiency measure is compared with levelized market prices or an alternative conventional supply-side energy resource (all referred to as the avoided cost).

The achievability factors used by the Council are 85% for retrofit measures and 65% for lost opportunity measures (e.g., new construction, major equipment). This means that over a 20-year period, 85% and 65% of retrofit and lost opportunity measures can ultimately be implemented leaving 15% and 35% with physical or other constraints, respectively. The results summarized in the remainder of this report are those considered "cost-effective and achievable" which means they have passed the benefit-cost test and the achievability rates have been applied. The cost-effective and achievable potential is also referred to as the "maximum achievable potential."

Table 3 shows the MWh of economically achievable potential by sector in 2, 5, 10 and 20-year increments.

Table 3 – Cost-Effective and Achievable Potential, MWh/year							
	2 Year	5 Year	10 Year	20 Year			
Residential	4,534	12,432	26,003	52,428			
Commercial	668	2,038	4,758	8,725			
Distribution Efficiency	585	1,463	2,927	5,854			
TOTAL	5,788	15,934	33,688	67,007			

Figure 8 shows the achievable potential by sector for each year of the study period. The potential increases from 2,800 MWh in the first year to just over 3,400 in year ten.



Figure 8 – Annual Potential by Sector

Cost

Budget costs can be estimated at a high level based on the incremental cost of the measure (Table 4). The assumptions in this estimate include: 30% of measure cost for administrative cost and 40% of the incremental cost for incentives is assumed to be paid by the utility. Table 4 shows that if OPALCO sets incentives equal to 40% of measure incremental costs, and program administrative costs are 30% of incremental measure costs, then the utility will need to spend \$2 million to acquire of the forecasted available conservation over the next two years. For reference, the overall regional average has been \$1.69 million per aMW, for all sectors and \$2.35 million per aMW for the residential sector.

Table 4 – Cost for Achievable Conservation Potential								
		Utility First Ye	ear Cost (\$2012)	_				
	2 Year 5 Year 10 Year							
Residential	\$1,749,856	\$5,130,912	\$11,046,105	\$22,000,089				
Commercial	\$132,767	\$420,638	\$1,017,356	\$1,904,146				
Distribution Efficiency	\$39,668	\$99,169	\$198,338	\$396,676				
TOTAL	\$1,922,290	\$5,650,718	\$12,261,799	\$24,300,910				
Total (\$/aMW, first year)	\$2,909,501	\$3,106,564	\$3,188,510	\$3,176,923				

Summary

OPALCO's conservation potential is primarily found in the residential sector. The next section provides a breakdown maximum achievable potential by end-use for each sector. This breakdown is then used to inform the utility on which programs/measures make up the savings potential.

Results by Sector

Introduction

Maximum achievable savings potential by end-use is presented in this section. These savings are annual incremental over the first 10 years of the study. Annual savings by end-use are generally not presented as a consistent amount in each year. In this study, the 20-year savings potential for each measure is assigned a "ramp rate." A ramp rate applies a percentage of savings potential in each year of the study. Ramp rates are meant to illustrate the timing of measure adoption (retrofit or lost opportunity) or program type (emerging technologies, or well-established). Using different ramp rates allows planners to estimate the timing of available savings by measure. Various ramp rates are applied to each measure within each end-use. The resulting maximum achievable potential varies from year to year.

Maximum achievable potential by end-use is first described for the residential sector then followed by a description of the commercial sector potential.

Residential

Figure 9 illustrates the maximum achievable potential by end-use for the residential sector. Heat pump upgrades/conversions and envelope retrofits make up considerable share of the potential. Savings from water heating measures (showerheads and water heaters also provide as significant share of the overall potential.





Potential in the residential sector over the next five years is summarized in Table 5 below. Details about each measure category are described below.

Table 5 – Acl	nievable Residentia	l Units by End-Use	e (Incremental U	nits)	
Residential			# of Units		
	2014	2015	2016	2017	2018
Lighting (Number of Homes)	692	692	692	692	692
HP / DHP	133	156	200	245	289
Envelope Retro	283	283	283	283	283
Water Heat	1,176	1,176	1,176	1,176	1,176
Consumer Electronics	2,168	2,168	2,168	2,168	2,168
Appliances	1,936	1,936	1,936	1,936	1,936
Envelope New	219	219	219	219	219
TOTAL	6,608	6,630	6,675	6,719	6,764

Lighting Measures

Table 5 shows the number of lighting units available. Note that in the case of lighting measures, the lighting "Units" in the table is number of homes rather than individual light bulbs. The number of units in Table 5 represents the number of housing units for which higher efficiency bulbs are applicable. The total number of bulbs is estimated later in this report assuming that there are approximately 25 bulbs per available housing unit that can be retrofitted.

Heat Pump Measures

Much of the savings potential available in the residential sector is from heat-pump measures. Over 130 heat pumps per year would need to be installed to achieve the estimated potential savings. A total of 4,120 heat pumps are included in the savings potential estimates over the 20-year study period. Approximately 2,400 of these are ductless heat pump units (2,000 installed on existing homes and 400 on new homes).

Envelope Retrofit Measures

Envelope retrofits also make up a large share of the potential savings. Included in this category are efficient window upgrades, insulated door upgrades, and insulation measures. Table 5 shows the corresponding number of units available for each of these measures over the next five years. For envelope measures, the number of units refers to the number insulation projects for attic, floor, or wall space. A home needing all three insulation upgrades is counted as 3 units. For the most part, retrofit envelope measures are cost-effective with the exception of some window upgrades including upgrade to CL30 from single pane in single family homes and door upgrades (multifamily doors).

To further illustrate potential programs, residential end-use categories that make up a large share of the potential savings are further broken down in Table 6.

Table 6	– Achievable	Residential U	nits by Measu	re Category					
Residential Sub-Categories	# of Units								
	Total	2014	2015	2016	2017	2018			
Water Heat									
Showerhead	6,282	628	628	628	628	628			
Heat Pump Water Heater	4,250	137	137	137	137	137			
Efficient Tank	8,939	411	411	411	411	411			
Subtotal	19,471	1,176	1,176	1,176	1,176	1,176			
Heat Pumps	4,120	133	156	200	245	289			
Appliances									
Clothes Washer	21,903	917	917	917	917	917			
Freezer	5,567	198	198	198	198	198			
Refrigerator	12,085	429	429	429	429	429			
Dishwasher	8,537	392	392	392	392	392			
Subtotal	48,093	1,936	1,936	1,936	1,936	1,936			
Envelope Retro									
Window Upgrade	567	38	38	38	38	38			
Attic Insulation	1,825	122	122	122	122	122			
Door Upgrade	222	15	15	15	15	15			
Floor Insulation	1,171	78	78	78	78	78			
Wall Insulation	466	31	31	31	31	31			
Subtotal	4,251	283	283	283	283	283			
Lighting									
Number of Homes	9,888	692	692	692	692	692			
Number of Bulbs @ 25/Home	247,204	17,304	17,304	17,304	17,304	17,304			

Envelope Measures for New Buildings

Similar to retrofit envelope measures, the vast majority of envelope measures in new buildings are cost-effective.

Appliances

Clothes driers, ovens, and microwave measures were not cost effective and are excluded from Table 6.

Water Heating

Cost-effective water heating measures include low-flow showerheads, heat pump water heaters, and efficient water heater tanks. Measures that did not pass the cost-effectiveness screen include solar water heaters. Several heat pump water heater measures were evaluated; however, only some permutations are cost effective. For example a Tier 1 50-75 gallon heat pump water heater in an interior location is cost effective but the same water heater in an unheated buffer location is not cost effective.

Direct Application Renewable

Customer-side solar PV systems (1 kW) were evaluated; however, these measures were not cost-effective. Despite these measures not passing the cost-effectiveness test, OPALCO may still wish to offer programs to customers interested in direct application renewable energy or distributed generation. Direct application renewable energy is discussed further in the Action Plan section of this report.

Consumer Electronics

Consumer electronics includes efficient televisions, computer monitors, set top boxes, and desktop computers. With the exception of desktop computers, all of the consumer electronics measures are cost-effective.

Commercial

Commercial savings by end-use are shown in Figure 10. Lighting measures account for the largest share of savings potential in the commercial sector.





Similar to the residential sector, the cumulative savings potential in the commercial sector increases steadily over the planning period starting at 300 MWh per year and increasing to around 560 MWh per year by the end of the ten-year planning period. Lighting remains the largest source of potential throughout the planning period. Each measure category is discussed below with an explanation of the differences between the technical and economic potential.

Lighting

Lighting measures include lighting controls, LPD package, streetlights, traffic lights, perimeter and parking lighting. Most lighting measures are cost-effective; however, some permutations of the measures do not pass the cost-effectiveness test. LED traffic signals do not pass the costeffectiveness screening.

Generally, commercial lighting projects are custom projects that are evaluated individually. The individual nature of these projects will ensure that OPALCO is not excluding cost-effective investments; therefore, specific details regarding cost-effectiveness of individual measures are not evaluated further.

Refrigeration

Refrigeration measures include grocery store measures such as LED case lighting, compressors, controls, or night covers. All refrigeration measures are cost effective with the exception of overhead lighting and CFL in walk-in freezers/refrigerators.

HVAC

HVAC measures include demand control ventilation, ECM on VAV boxes, premium HVAC equipment (new and natural replacement), package roof top optimization and repair, variable speed chillers on lodging offices and university buildings, HVAC controls, and ventilation measures. Most premium HVAC measures are not cost-effective. In addition, low pressure distribution (ventilation) and some HVAC controls are not cost-effective.

Food Service

Food service measures include fume hoods, cooking, and refrigeration measures in food service or restaurant applications. The only cost-effective measures are efficient commercial refrigeration and beverage vending machines.

Envelope

Envelope measures for commercial buildings include glass and roof insulation. Most retrofit glass measures do not pass the cost-effectiveness test. However, new and natural replacement glass is cost-effective. Roof insulation for schools and restaurants are not cost effective.

Integrated Design

This measure category includes one measure for new buildings that incorporate integrated design. Integrated design can be applied to any building type. This measure is cost-effective.

PC Network/Supply

This category includes two measures: control of networked computer energy management systems and consolidation and upgrade of servers. Both measures are cost-effective.

Water Heat

Water heating includes pre-rinse spray wash heads in food service. This measure is cost-effective.

Distribution System Savings Potential

The NW region has recently developed conservation measures that apply to the distribution system. Distribution efficiency measures improve the efficiency of utility distribution systems by operating in the lower end of the acceptable voltage range (120-114 volts). The potential in OPALCO's service territory is derived directly from the Council's 6th Power Plan. Measures and savings are show in Table 7. The savings shown here are high level estimates only. A detailed engineering assessment of OPALCO's distribution efficiency potential should be conducted before program planning.

Table 7 – Distribution Efficiency Potential, MWh										
Measure	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 - Reduce System Voltage w/ LDC Voltage Control Method	179	179	179	179	179	179	179	179	179	179
2 -Minor System Improvements	55	55	55	55	55	55	55	55	55	55
3 - Major System Improvements	59	59	59	59	59	59	59	59	59	59
Annual (MWh)	293	293	293	293	293	293	293	293	293	293

 Reduce system voltage w/ LDC voltage control method – This is primarily CVR (conservation voltage regulation)

- Minor system improvements This refers to VAR management, phase load balancing, and feeder load balancing
- Major system improvements This measure includes voltage regulators on 1 of 4 substations and select reconductoring on 1 of every 2 substations
Action Plan

Program Potential

This action plan translates the economic potential, described in the previous section, to program potential. Program potential is defined as energy efficiency potential that is available through utility programs and achievable within a schedule consistent with utility budgeting.

This action plan was created under the assumption that OPALCO would like to achieve higher levels of conservation each year than what has been previously accomplished. Conservation will largely take place through increased activity in the residential sector accompanied by continued efforts in the commercial sector. Increased conservation may require a combination of decreasing cost per MWh and/or increased budget. The starting point for the action plan potential is the average achievements for the previous three years.

Both distribution efficiency measures and consumer electronics measures were removed from the potential as OPALCO does not intend to design programs in these areas. Table 8 shows the breakdown program potential for the next five years.

Table 8 – Cost-Effective and Achievable Potential – Program Potential (MWh/year)											
	2014	2015	2016	2017	2018						
Residential	600	700	800	894	1,001						
Commercial	400	413	428	435	439						
TOTAL	1,000	1,113	1,228	1,330	1,440						

Figure 11 shows the ten-year program potential increasing. Also shown is the maximum achievable potential over the same time period. The ten-year program potential totals 45% of the ten-year maximum achievable potential. The largest share of program potential is in the residential sector. The residential percent share increases each year over the planning period.



Figure 11 – Annual Potential – Program Potential

Residential Program Potential

The residential sector makes up approximately 60 percent of the total program potential in 2014. For total conservation to increase, residential conservation as a percent of total must increase. Figure 12 shows residential potential increasing each year through significant increases in heat pumps, envelope retrofits, and water heating measures. Lighting in residential includes mainly specialty bulbs and LEDs.





The numbers of units associated with the program potential are shown in Table 9.

Table 9 – Residen	tial Units by Mea	asure Category -	- Program Poten	tial	
Residential Sub-Categories		#	of Units		
	2014	2015	2016	2017	2018
Water Heat					
Showerhead	40	48	57	69	83
Heat Pump Water Heater	9	10	13	15	18
Efficient Tank	26	31	38	45	54
	75	90	107	129	155
Heat Pumps	68	82	94	104	114
Appliances					
Clothes Washer	189	226	272	326	391
Freezer	41	49	59	70	84
Refrigerator	88	106	127	152	183
Dishwasher	81	97	116	139	167
	398	478	574	688	826
Envelope Retro					
Window Upgrade	18	19	21	24	26
Attic Insulation	57	63	69	76	83
Door Upgrade	7	8	8	9	10
Floor Insulation	36	40	44	49	53
Wall Insulation	15	16	18	19	21
	132	146	160	176	194
Lighting					
Number of Homes	153	184	211	232	256
Number of Bulbs @ 25 per Home	3,827	4,593	5,282	5,810	6,391

Commercial Program Potential

Figure 13 illustrates the program potential available in the commercial sector over the next 10 years. Customer projects include HVAC, integrated design, water and waste water, envelope, food service, and other miscellaneous categories.



Figure 13 – Annual Potential – Commercial Program Potential

Expanded Program Potential (Maximum Achievable)

The Program Potential summarized in this section is the potential that can be achieved within the expected BPA budget limitations and assuming consistency in staffing and funding moving forward.

However, the analysis shows that there is a significant gap between the program potential and the maximum achievable potential. This gap represents the capacity to expand existing programs and/or recognize efficiency potential being achieved outside the OPALCO programs. The following actions would be needed to expand the program potential to more closely reach the maximum achievable level:

Expand Existing Programs

- Heat Pump Program
- Expanded Weatherization Program

Northwest Energy Efficiency Alliance (Consumer Electronics)

- NEEA, through BPA funding, produces energy efficiency savings in the OPALCO service territory
- The NEEA recent achievements have been primarily through promoting efficient LED televisions at the retail stores and outlets
- Other measures such as efficient computer monitors and TV set top boxes are also sponsored by NEEA

Distribution System Efficiency

- Energy efficiency can also be captured in the distribution system
- Distribution system efficiency measures include voltage reduction (CVR), VAR management, phase load balancing, feeder load balancing, voltage regulators on substations, and reconductoring

Remaining Technical Potential (not cost-effective)

The remaining technical potential, or the potential that is above the cost-effectiveness limit, consists of higher cost measures. However, these items still produce energy efficiency gains and reduce the load on the OPALCO system. Some of the general categories are summarized below.

Residential Solar

- Solar water heating
- Solar photovoltaic

Commercial Measures

- Premium HVAC equipment
- Commercial insulation and windows
- Some LED street lighting and Exterior building lighting
- Some lighting controls

Residential Measures

- Some heat pump water heater configurations
- Drain water heat recovery systems

Member-Owned Generation

OPALCO currently offers incentives for member-owned renewable energy resources such as small hydro, wind, or solar. While this CPA did not find direct use of solar cost-effective, there is a high level of interest in these resources among OPALCO members. Therefore, it may be beneficial for OPALCO to continue offering programs that encourage at member-owned resources. In addition, OPALCO could consider a demonstration pilot for one or more of the most recent technologies. For example, solar shingles might be a project of interest for eco-friendly homes or hotels. Or OPALCO might demonstrate battery storage technologies with wind or solar resources. Solar shingles and battery storage technologies are briefly summarized below.

Solar Shingles

A new residential option for member-owned generation has been the development of photovoltaic (PV) solar shingles. These systems are installed where conventional shingles were previously used. A company called Luma has been installing these solar shingles throughout the U.S., and the product has been praised in several publications. The solar shingle system can be used with existing roofs, or in a partial roofing replacement. Alternatively the solar shingles can be integrated with a matching metal roofing to minimize the visual impact of the solar system. The cost for solar shingles is estimated at between \$6,000 to \$10,000 for 960 watts.

Battery Storage

Another option for demonstration is battery storage. Exergonix Inc., an energy storage company, has multiple battery storage options that can provide electric storage for homeowners (1 kWh to 100 kWh) and to the electric utility (250 kWh to 1 MWh. A 6 kWh system could demonstrate the effectiveness of charging via a solar system with daily discharging and is estimated to cost approximately \$6,000. The batteries would charge during daylight hours and then discharge at night to power lights or other selected loads. There could be other designs which use 24 hour per day load that operate using solar systems during the day and batteries at night. The system can be configured to supply AC or DC voltage. For a demonstration project the utility may want to demonstrate outside DC lighting systems to eliminate the need for inverters.

Summary

There is significant flexibility available with the energy efficiency plan. As was shown in Figure 11, the current plan is below the level of achievable potential. Some of this is due to conservation that will happen through regional efforts of NEEA and others (i.e., consumer electronics). Other measures can be increased or accelerated in a given year if existing programs are not performing as expected. In addition, it is recommended that OPALCO continue to encourage member-owned resources as a low risk supply-side resource and member benefit.

There also may be flexibility in the cost. With the stated assumptions (30% Admin, 40% incentives), there will be an increasing gap between the budgeted amount for conservation and the amount required to meet the MWh goals. Reducing administrative costs and/or reducing incentive levels (without reducing conservation achievements) would close this gap.

Conclusion

OPALCO significantly expanded its energy efficiency and conservation programs in recent years. This potential assessment demonstrates that even though current programs are strong, there is significant potential still remaining. Figure 14 illustrates the three "levels" of conservation potential evaluated in this report.





Similarly, Table 10 summarizes the technical, maximum achievable, and program potential for in 2-, 5-, 10-, and 20-year increments.

Table 10 – Comparison of Technical, Maximum Achievable, and Program Potential									
	2-Year	5-Year	10-Year	20-Year					
Technical	5,761	16,856	45,228	101,463					
Maximum Achievable	5,788	15,934	33,688	67,007					
Program	2,114	6,111	15,166	45,848					

The residential sector represents the majority of energy efficiency potential for OPALCO (Table 11). Therefore, continued focus and expansion of residential programs is necessary to achieve the potential identified. The continued development of commercial programs is also needed. The key residential and commercial measures to consider include the following:

- Residential heat pumps both standard heat pumps and the newer ductless heat pumps
- Residential weatherization both windows and insulation retrofits
- Water heating efficient showerheads and electric tank upgrades in the near term and heat pump water heaters when they become available

- Commercial lighting efficient lighting in existing buildings
- Commercial refrigeration grocery store efficiency upgrades
- Commercial HVAC efficient heating and cooling

Table 11 – Ten-Year Residential Potential by End-Use MWh									
End-Use	10-Year Action Plan (Utility Program) ¹	10-Year Achievable (Above Utility Program) ²	10-Year Technical (Above Technical) ³						
Lighting	899	1,362	0						
HP / DHP	4,495	4,122	0						
Envelope Retro	2,896	1,384	1,871						
Water Heat	779	3,950	3,916						
Consumer Electronics	0	3,024	1,582						
Appliances	766	692	968						
Envelope New	1,021	612	10						
Solar PV	0	0	1,283						
Solar WH	0	0	2,055						
Total	10,856	15,146	10,561						

1. This is the potential to be completed by the utility over 10 years utilizing BPA funding.

2. This is the remaining cost-effective potential (above utility program amount and still cost-effective).

3. This is the potential that is not cost-effective, but still technically achievable.

Figure 15 shows the total ten-year technical potential and from which mechanism the potential might be achieved. It is estimated that close to 40% of the 10-year potential will be achieved through the OPALCO programs. A similar level of potential (37%) could be achieved cost-effectively through additional funding mechanisms and community programs. The final slice of the pie chart is the higher cost items such as Solar PV. While a small amount of funding is available through the utility, the majority of this potential will be self-funded, grant funded, or left for future adoption.

Figure 15 – Ten-Year Technical Potential



Figure 16 illustrates energy efficiency measure/program effectiveness. The quadrants indicate high and low cost as well as high and low impact as the program applies specifically to OPALCO's service area. High impact programs were defined as those programs with more than 3,500 MWh of annual savings by the end of the 20-year study period. High cost programs are those where the direct cost of the measure is above \$50/MWh (levelized). For example, heat pump water heater measures are high cost but have a large impact.



Figure 16 - Energy Efficiency Measure Effectiveness

Cost

While there are numerous other measures and possibilities for custom efficiency projects, the measures/programs listed above represent significant opportunities for achieving energy efficiency in the OPALCO service territory.

Appendix I – Energy Efficiency Potential by End-Use

Energy Efficiency Potential by End-Use

Residential								MWh												-
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Lighting	226	226	226	226	226	226	226	226	226	226	97	97	97	97	97	97	97	97	97	97
HP / DHP	488	569	732	894	1,057	1,138	1,057	976	894	813	609	609	609	609	609	609	609	609	609	609
Envelope Retro	428	428	428	428	428	428	428	428	428	428	214	214	214	214	214	214	214	214	214	214
Water Heat	473	473	473	473	473	473	473	473	473	473	627	627	627	627	627	627	627	627	627	627
Consumer																				
Electronics	302	302	302	302	302	302	302	302	302	302	584	584	584	584	584	584	584	584	584	584
Appliances	146	146	146	146	146	146	146	146	146	146	215	215	215	215	215	215	215	215	215	215
Envelope New	163	163	163	163	163	163	163	163	163	163	297	297	297	297	297	297	297	297	297	297
Cooling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2,226	2,308	2,470	2,633	2,795	2,877	2,795	2,714	2,633	2,551	2,643	2,643	2,643	2,643	2,643	2,643	2,643	2,643	2,643	2,643

Commercial								MWh												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Lighting	67	105	134	156	174	189	201	210	217	222	225	195	137	133	133	134	134	135	83	68
PC Network/Supply	18	19	19	20	21	21	22	23	23	24	24	25	25	26	26	26	27	27	28	29
HVAC Controls	17	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	10	1	1
Refrigeration	118	117	116	115	114	113	112	112	111	110	109	109	108	107	106	46	19	18	18	18
Ext Lighting	3	6	9	12	15	18	20	23	24	24	25	24	24	24	24	24	24	24	3	3
Rooftop Units	15	17	18	20	20	21	22	22	22	23	10	9	10	10	9	9	10	10	10	10
Envelope	5	9	13	16	17	17	17	17	17	17	18	17	17	18	18	18	18	18	18	18
Ventilation	32	33	34	35	35	35	35	34	34	34	12	6	6	7	7	7	7	7	7	8
Food Service	6	13	19	26	28	29	31	32	32	33	33	33	33	34	34	34	35	35	35	35
Chillers	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Integrated Design	5	7	11	13	15	17	19	23	25	25	27	25	27	26	25	25	25	25	24	24
Water Wastewater	12	12	12	12	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	-
Other	3	6	8	11	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14	14
Traffic	2	3	5	6	7	8	8	9	10	10	11	12	12	13	14	14	15	15	15	15
Water Heat	0	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	304	365	418	462	490	513	532	548	560	567	537	499	444	441	440	382	357	352	271	244

Distribution E	fficiency							MWh												
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Reduce system																				
voltage	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179	179
Light system																				
improvements	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Major system																				
improvements	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Total	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293

anuary 31, 2014					Total
GENERAL FUNDS:	Rate	Term	Due Date	Amount	Balance
Cash on Hand				000	
				600	
Cash in Checking - Key Bank				(112,971)	
Cash in Checking/MMDA/Construction - Islanders Bank				1,636,625	
Cash in Checking/Savings/Payroll - Wells Fargo SUBTOTAL GENERAL FUNDS				566,085	0.000.000
SUBTOTAL GENERAL FUNDS					2,090,339
CASH RESERVE FUND: CFC Commercial Paper	0 10%	16	2/14/14	250,000	
CFC Commercial Paper	0.12%	30	2/14/14	250,000 250,000	
SUBTOTAL CASH RESERVE FUND					500,000
					500,000
RESTRICTED FUND: CFC Select Notes	0.3700%	160	2/4/14	350,000	
CFC Select Notes	0.3700%	160	2/5/14	200,000	
CFC Select Notes	0.4600%				
CFC Select Notes		160	3/24/14	351,382	
	0.3700%	160	4/21/14	352,646	
CFC Select Notes		162	5/27/14	279,084	
CoBank - AIM	S. with the	1.10	20.000.0	151,628	
Home Street Bank	0.3490%	547	4/29/15	104,959	
Washington Federal Savings	0.4000%	365	5/19/14	108,866	
Washington Federal Savings	0.4000%	395	12/29/14	107,784	
SUBTOTAL RESTRICTED FUNDS					2,006,348
GRAND TOTAL FUND ENDING BALANCE 1/31/14					4,596,688
Project PAL: Islanders Bank				22,268	
MORE Program: Islanders Bank				148,863	
RUS Cushion of Credit *	5.000%			1,043,441	
ASH PROJECTION: bruary 28, 2014 GENERAL FUNDS: Beginning Cash 1/31/14 Estimated Revenue (based on 95% of billing) Estimated Other Revenue Estimated Transfer From RUS Cushion of Credit Subtotal Cash/Revenue			2,090,339 2,179,319 20,000 19,129	4,308,788	
				1,000,100	
Estimated Accounts Payable REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund			(600,000) (100,000) (50,000) (629,300) (19,129) (700,000)		
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill)			(100,000) (50,000) (629,300) (19,129)	12 000 505	
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund		5	(100,000) (50,000) (629,300) (19,129) (700,000)	(2,863,595)	1,445,193
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses		2	(100,000) (50,000) (629,300) (19,129) (700,000)	(2,863,595)	1,445,193
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14		3	(100,000) (50,000) (629,300) (19,129) (700,000)	(2,863,595)	1,445,193
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund		5	(100,000) (50,000) (629,300) (19,129) (700,000)		
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14		2	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000	1,445,193 1,200,000
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND:		2	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000	
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14		5	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348	
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund		2	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000	1,200,000
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14		-	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348	1,200,000 2,006,348
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14 PROJECTED GRAND TOTAL FUND ENDING BALANCE 2/28/14			(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348	1,200,000 2,006,348 4,651,541
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14		2	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348	1,200,000 2,006,348
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14 PROJECTED GRAND TOTAL FUND ENDING BALANCE 2/28/14 PROJECTED CHANGE IN TOTAL FUND BALANCE ENDING 2/28/14 RUS CUSHION OF CREDIT*:			(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348 0 =	1,200,000 2,006,348 4,651,541
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14 PROJECTED GRAND TOTAL FUND ENDING BALANCE 2/28/14 PROJECTED CHANGE IN TOTAL FUND BALANCE ENDING 2/28/14 RUS CUSHION OF CREDIT*: Beginning Balance 1/31/14			(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348 0 = = 1,043,441	1,200,000 2,006,348 4,651,541
REDL for Lopez Fire District Additional Conservation District Grant Estimated Payroll and Benefits Estimated RUS Principal and Interest Payment Estimated Transfer to Reserve Fund Power and Transmission Bill (January bill) Subtotal Expenses Projected Ending Balance 2/28/14 CASH RESERVE FUND: Beginning Cash 1/31/14 Estimated Transfer From General Fund Projected Ending Balance 2/28/14 RESTRICTED FUND: Beginning Cash 1/31/14 Transfer To General Fund Projected Ending Balance 2/28/14 PROJECTED GRAND TOTAL FUND ENDING BALANCE 2/28/14 PROJECTED CHANGE IN TOTAL FUND BALANCE ENDING 2/28/14 RUS CUSHION OF CREDIT*:		2	(100,000) (50,000) (629,300) (19,129) (700,000)	500,000 700,000 2,006,348 0 =	1,200,000 2,006,348 4,651,541

TOTAL FUND BALANCE



Notes:

1. Add'l liquidity:CFC \$10M LOC, \$5M PV line, and CoBank \$5M LOC

2. 2014 - RUS loan draw \$1.122M @ 3.456% (January 2014)

3. 2014 - RUS loan draw \$878k @ 3.479% (January 2014)

ORCAS POWER & LIGHT COOPERATIVE

UNSCHEDULED OUTAGE REPORT: JANUARY 2014

OUTAGE	CAUSE OF OUTAGE	[[DISTRICT	•	2014 TOTALS			
CODE	CAUSE OF OUTAGE	ORCAS	SJ	LOPEZ	JAN PTD	YTD TOTAL		
001	Power Supplier-Bonneville	-	-	-	0	0		
002	Power Supplier-Puget Power	-	-	-	0	0		
100	OPALCO Construction	-	-	-	0	0		
200	Severe Storm	-	-	-	0	0		
300-303	Faulty Equipment/Installation	-	2	-	2	2		
350	Sectionalizing	-	-	-	0	0		
351	Fuses/Fusing	-	-	-	0	0		
352/353	Electrical/CAL/Transformer Overload	-	1	1	2	2		
400	Underground Cable Failure	1	3	-	4	4		
401	Contamination/Leakage (Equip. Fail.)	-	-	-	0	0		
402/403	Aging Material/Equipment	-	1	1	2	2		
450	Trees/Right of Way	-	-	-	0	0		
500/509	Weather (Other than Severe Storm)	5	-	3	8	8		
600	Small Animals/Rodents	-	-	-	0	0		
601	Birds	-	-	-	0	0		
602	Birds-Endangered (Swans; Eagles)	-	-	-	0	0		
603	Large Animals	-	-	-	0	0		
700/701	Cable Dig-In	-	-	-	0	0		
702	Traffic Accident	-	-	-	0	0		
703	Fire	-	-	-	0	0		
704	Substation Vandalism	-	-	-	0	0		
705	Construction	-	-	-	0	0		
709	Public Caused Outage	-	1	-	1	1		
800	Member Secondary Outage	-	1	-	1	1		
900	Cause Unknown	-	1	-	1	1		
	PTD/YTD OUTAGES: JANUARY 2014	6	10	5	21	21		
	PTD/YTD OUTAGES: JANUARY 2013	4	1	0	5	5		

Date:	February 11, 2014
To:	Randy Cornelius, General Manager
From:	Russell Guerry, Manager of Engineering & Operations
Subject:	Operations Safety Program – January 2014

Jeff Meyers conducted job briefing training to review the frequency of briefings, what hazards need to be addressed, and how to ensure job briefings are effective.

Accidents/Incidents/Near Miss

Date: NA Type: NA Description: NA Action Taken: NA

	January 2014	YTD (2014)
Near Misses	0	0
Incidents	0	0
Accidents	0	0
Loss Time	0	0

Total Hours Worked without Loss Time Accident: 30,192

General Manager's Report February 2014

<u>Finance</u>

REDL Loan for Lopez Fire

Staff received funding from RUS and will present the loan funds to San Juan Fire District #4 at the February board meeting.

2013 Year-End Processes

Staff continues to work on 2013 year end processes in order to finalize the accrual books as a beginning to the year-end reporting and financial statement audit process.

RUS Audit

Staff participated in the two-week long RUS audit fieldwork for the period of February 1, 2009 to February 1, 2014. The audit mainly focused on RUS loan documentation, loan draws, and projects approved for loan funding. Audit results are expected to be provided by the RUS auditor in the near future.

RUS Loan Draw

As projected, staff requested and received \$2M in RUS loan advances comprised of the loan designations of AL8 and AM8. The interest rate of the advances was 3.456% and 3.479%, respectively.

Member and Energy Services

Rebates/EEI Funding

Energy Services submitted a total of \$73,778 in rebates to BPA for the period October – December 2013 (first Quarter FY2014 BPA funding period), with a total reported kWh savings of 272,632. These include commercial lighting upgrades in the amount of \$15,553.

Nonprofit Partnership

The SJI Conservation District nonprofit umbrella has secured an additional \$50,000 in matching grants. Plans are underway for outreach events beginning in the spring, including Energy Fairs, Solar Home Tours, and community energy efficiency projects with Youth Corps. The group will also include the MORE Committee in event planning and outreach efforts.

Website Redesign

Staff is working with PixelSpoke to refresh the Energy Services portion of the website. New features will include engaging, interactive graphics displaying key metrics as well as richer content for rebate programs, efficiency measures, renewable energy, and green technology.

Engineering & Operations

WIP

As of February 7, there are 258 work orders open totaling \$2,720,223. Operations has completed construction on 70 of those work orders, totaling \$866,343.

Projects taking place in the immediate future include the Cattle Point Road project and pulling conductor on Lopez Road and Vista Road.

System Peak

On February 6, our system peaked at 62 MW. This was 16.76 MW above BPA's predicted demand for February. The resulting charges will be about \$182,891. With this additional cost, our estimated February Power/Transmission bill will be \$1,030,000, which will be the highest Power/Transmission bill received for a February billing period.

BPA Planned Power Outage

BPA is planning an outage at the Fidalgo substation on Thursday, May 8 at 11:59 pm until Friday May 9 at 5:00 am. BPA will be conducting switch maintenance within this substation and conducting switching with PSE to accomplish this. During this time, OPALCO will be undertaking routine transmission maintenance.

Staffing

Sébastien Ghizzo, Software Specialist, will be leaving OPALCO in February to pursue professional opportunities on the mainland. Sébastien worked for OPALCO for 3 years and was a terrific asset. The Technical Services Department will miss his great work and dedication. OPALCO is advertising externally for this position. Applications will be accepted through February 20, 2014.

John Graminski, Manager of Information Services will begin work February 18. John comes to us from Pacific Gas & Electric Company in Northern California with more than 20 years' experience in the electric utility industry. John has spent much of his career working with electric cooperatives to develop innovative solutions for information and communication technology initiatives. His expertise is in IT management, managing real time energy management systems, designing and administering large-scale data communications networks, developing multi-layered designs for comprehensive systems security, and managing teams of highly successful technology professionals. He holds an MBA in Technology Management from the University of Phoenix and is completing his Doctor of Management degree in Organizational Leadership. He and his wife Peggi have been visiting the islands for years and look forward to putting down roots.

Dan Vekved, Field Design Engineer will begin work at OPALCO February 21. Dan comes to us from the San Juan County Public Works Department and has more than 25 years' experience with civil, municipal and utility project planning and management. His expertise is in project planning, permitting, design, compliance and construction management. He holds a B.S. in Civil Engineering from Washington State University. He and his wife Michel have lived on Orcas since 2005.



Northwest Requirements Utilities

(503) 233-5823 Fax (503) 233-3076 jsaven(*a* nru-nw.com

February 11, 2014

Elliot Mainzer, Administrator Bonneville Power Administration RE: Transmission Segmentation Discussion and Proposed Principles Via email: <u>techforum@bpa.gov</u>

Dear Administrator Mainzer:

Northwest Requirements Utilities (NRU) appreciates this opportunity to comment on the Bonneville Power Administration's (BPA) segmentation process and proposed segmentation principles. We also offer comments on the *BPA Segmentation Review: Industry Practices Scan*. NRU is a non-profit trade association of 53 public utilities that rely upon BPA as their primary or exclusive supplier of wholesale electric energy. These utilities account for nearly 25% of BPA's wholesale public power sales in the Northwest. NRU's members are all BPA Network Integration Transmission (NT) Service customers.

Segmentation Principles

NRU generally agrees with BPA's proposed set of principles that will guide the segmentation process. However, a few modifications and additions are critical to ensure BPA and its customers appropriately prioritize these principles if alternative proposals are considered. A revised set of segmentation principles is attached, which NRU urges BPA to adopt. A detailed explanation of these revisions is provided below.

First, NRU proposes that BPA's principle number two (lowest possible rates consistent with sound business principles) be merged with principle number nine (encourage widest possible diversified use or "the Widest Use Standard"). Section 9 of the Transmission System Act requires the Administrator to set rates "with a view to encouraging the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles." 16 U.S.C. 838g. This is a single requirement, and each component must be considered in conjunction with the rest. To consider "lowest possible rates to consumers" as separate and distinct from the Widest Use Standard would be contrary to the intent of Congress. When considering whether BPA is providing power at the lowest possible rates to consumers consumers consistent with sound business principles, BPA must consider consumers *throughout the entire*

Northwest, not just in select locations. BPA's principles need to reflect the intent of the Transmission System Act, which makes clear that widest use, lowest cost, and sound business principles are a single obligation BPA must meet when designing transmission rates.

Second, this principle should acknowledge that the baseline for whether a proposal meets the Widest Use Standard is a uniform rate. The Bonneville Project Act and the Transmission System Act specifically provide for a uniform rate, and BPA has used a uniform rate since its establishment 77 years ago. A uniform rate has been essential in ensuring that all of BPA's customers receive transmission service at the same affordable price without regard to location or size, which achieves the Widest Use Standard. In order to also meet the Widest Use Standard, any alternative proposal must result in rates to consumers in all corners of the Northwest that are equal to or lower than those rates would have been under a uniform rates methodology.

Third, the Widest Use Standard, along with BPA's other statutory requirements, should be prioritized above the other segmentation principles. To that end, BPA may want to consider a tiered approach that recognizes some principles are in fact obligations derived from BPA's enabling statutes that BPA *must* achieve while others are important considerations but not obligatory. The first three principles as proposed by NRU – (1) full and timely cost recovery, (2) widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles and (3) equitable allocation between federal and nonfederal uses of the transmission system – are statutory obligations BPA must take into account when designing transmission rates. The other principles deserve substantial consideration, but they do not rise to the same level of consequence as BPA's statutory obligations.

Correspondingly, NRU proposes to move and modify BPA's principle number eight, "Considers a regional perspective." The purpose of the Widest Use Standard is that the entire region should benefit from affordable electricity. BPA's statutes dictate that it must consider how the entire Northwest region would be impacted by a change to its segmentation policy and longstanding uniform rate construct. Therefore, this principle should directly follow the principles dictated by BPA's statutory obligations because it is essential to meeting one of those obligations. NRU also urges BPA to strengthen the language of this principle to inform proponents of alternative segmentation proposals that they *must* demonstrate how the entire region benefits from their proposals.

Fifth, NRU strongly urges BPA to include a principle that any alternative proposal must, "Honor BPA and utility planning and financial decisions based on longstanding segmentation policies." The relationship and development of the transmission facilities in the Integrated Network Segment are an outgrowth of policies and rate designs that date back decades. BPA's customers have built their systems around this longstanding uniform rates construct, and it would be punitive and financially difficult for many of NRU's members to adopt a completely different cost recovery mechanism that runs counter to how BPA and its customers originally planned and built the transmission grid.

Finally, BPA transmission planning and financing policies (e.g., Network Open Season rolled-inrates determinations) must align with any alternative segmentation proposals. BPA plans, operates, and finances its transmission as an integrated whole. If BPA's segmentation policy is modified in a way that this is no longer the case, then BPA's transmission planning financing policies should also be modified to reflect the change in segmentation and the underlying rationale for making such a change.

BPA Segmentation Review: Industry Practices Scan

NRU appreciates the work that BPA staff put into developing its report entitled, *BPA Segmentation Review: Industry Practices Scan.* BPA employed a large sample size of 102 Transmission Providers that are similar to BPA in terms of size as measured by total transmission line miles. NRU believes the *Industry Practices Scan* is both robust and thorough. At its most fundamental level, the *Industry Practices Scan* supports BPA's current segmentation policy from a technical and policy perspective.

BPA's *Industry Practices Scan* reinforces that BPA's use of 34.5kV as the bright line threshold is consistent with the industry benchmark for demarcating Network and Delivery segments. For example, the report found the median threshold for segmenting transmission from distribution is 35kV. Page 2. The report also found that 99% of the sampled Transmission Providers consider 115kV facilities to be part of the Network segment, and 92% consider 69kV facilities to be part of the Network segment. Page 8. Clearly, BPA's use of 34.5kV as the threshold to delineate between the Network and Delivery segment is consistent with the industry standard.

While it is highly illustrative to know that 35kV is the median line of demarcation between transmission and distribution, BPA's industry scan also makes clear that there is not a 'one size fits all' approach to segmentation. Said differently, Transmission Providers tend to base segmentation thresholds on longstanding cost recovery policies and unique system attributes (e.g., historic voltage levels used in particular regions) rather than an industry standard. To this point, every Transmission Provider listed under *Part 7: Treatment of Radial Lines* in BPA's *Industry Practices Scan* treated the direct assignment of radial facilities in a different manner.

The *Industry Practices Scan* also highlights that <u>direct assignment of transmission facilities is</u> <u>considered on a prospective basis only.</u> For example, Duke Energy is revising its treatment of radial lines to directly assign <u>new</u> radial lines to its customers, but according to BPA's report, "the policy was not retroactive—Duke did not remove its radials from its Network rates." Page 19. BPA's own policy is in line with this prevailing industry standard. BPA's *Guidelines for Direct Assignment Facilities* do not allow for BPA to directly assign facilities to an end user <u>after</u> the facilities have been built, rolled into the Network, and paid for by all Network users. This also is consistent with the Network Integration Transmission Contracts that all NRU members hold that provide for direct assignment of facilities *upon execution of the contract* on a mutual consent basis. To this end, it is inconsistent with sound business principles to build and recover costs for its existing transmission system under consistent, long-standing rate design and then propose deploying a completely different cost recovery mechanism that runs counter to how the transmission grid was originally planned and built.

While the *Industry Practices Scan* provides an exhaustive study of FERC jurisdictional Transmission Providers, including the Tennessee Valley Authority (TVA) and the other Power Marketing Administrations (PMAs) in the comparison may also be valuable. In comparison to FERC jurisdictional Transmission Providers, BPA has a unique history, service territory, and statutory obligations, and TVA and the PMAs operate with a similar mission and values. TVA and the PMAs also operate large transmission networks that serve both urban and rural areas. Indeed, BPA notes in the *Industry Practices Scan*, including TVA and the PMAs would move BPA from fourth to sixth in terms of transmission line miles. Page 1. Therefore, while the industry scan of FERC jurisdictional Transmission Providers is valuable and demonstrates that BPA's current segmentation policies are in line with industry practices, including TVA and the PMAs in the analysis may provide a closer "apples to apples" comparison with utilities operating under similar circumstances.

Conclusion

NRU is encouraged by BPA's findings in its *Industry Practices Scan*. The report is thorough, and its findings only reinforce BPA's use of its existing segmentation policies. The inclusion of TVA and other PMAs may bolster the report, and NRU hopes that BPA can include these Transmission Providers in any future updates.

NRU urges BPA to incorporate the proposed segmentation principles attached to this document. It is imperative that BPA's statutory obligations are the primary benchmark used to measure any proposed segmentation alternatives. Prioritizing BPA's statutory obligations ensures that the segmentation workshop process, leading to the Administrator's decision in the FY 2016 – FY 2017 Transmission rate case, will be consistent with BPA's mission, values, and legal obligations.

BPA must also consider its customers have built their electrical systems around the longstanding uniform rates construct. Adopting a completely different cost recovery mechanism to the current transmission infrastructure would run counter not only to BPAs statutory obligations, but would also run counter to prevailing industry practices. Such a mechanism could also have an extremely negative financial consequence for many of our more rural or remotely located communities.

-4-

Thank you for this opportunity to comment. We look forward to working with your staff and other customer representatives to bring this topic to a fair and reasonable conclusion.

Best Regards,

John D. Saven Chief Executive Officer Attachment Members of NRU CC:

Northwest Requirements Utilities Talking Points for BPA Transmission Segmentation Kickoff Meeting 1/28/14 Comments of John Saven, Chief Executive Officer

Thanks for the opportunity to make this initial presentation on behalf of many of BPA's NT customers. We have a good number of Managers and staff from our utilities that have travelled a great distance to participate in this meeting. I look forward to hearing their views.

We appreciate the hard work BPA staff put into addressing segmentation in the Transmission Rate Case. The conclusions BPA reached were very sound and consistent with the Agency's mission.

Nonetheless, we recognize the discretion the Administrator has to engage the region in discussions regarding segmentation. We believe the outcome of a process that gives fair consideration to BPA's mission, to the long standing framework for regional transmission planning, and uses common sense, is one that we will actively support.

One of the primary reasons Congress created Bonneville was to ensure that the most remote and sparsely populated areas of the Northwest have access to affordable electricity.

Congress codified this objective by obligating Bonneville to "promote the widest possible diversified use of its power at the lowest possible rates" in the Bonneville Project Act and in every subsequent Bonneville enabling statute.

In order to meet this statutory obligation, Bonneville has used a postage stamp rate construct. This ensures that all of Bonneville's customers receive transmission service at the same affordable price without regard to location or size.

The relationship and development of the transmission facilities in the Integrated Network Segment are an outgrowth of policies, contractual agreements, and rate designs that date back decades. To change the rules for cost recovery after much of the Network system has been constructed flies in the face of BPA applying sound business practices. It may be useful to highlight comparisons between NT and PTP customers to illustrate some of the underlying differences between urban and rural areas, and the necessity of an equal playing field for BPA transmission service.

Comparing Harney Electric in Eastern Oregon to Snohomish County PUD helps demonstrate the potential differing financial impacts of new segmentation proposals for those geographic areas.

- Harney County Electric serves over 20,000 square miles, almost 10 times the size of Snohomish County at 2,090 square miles,
- Snohomish County's population of 717,000 approaches 100 times the population of Harney County at 7,400,
- Harney Electric Cooperative has less than 0.5 distribution customers per mile compared to Snohomish County PUD at over 100.
- In addition to having an attractive density, Snohomish's median household income of \$68,000 is 72% higher than Harney's at \$39,000.
- Harney's population living below the poverty level at 19.1% is nearly double that of Snohomish at 9.8%.
- Harney County's Unemployment Rate of 11.9% is more than double Snohomish County's unemployment rate at 5.7%

Small utilities are more likely to be harmed by Snohomish's previously suggested modifications to BPA's segmentation policy. They are often served at lower voltages and over longer transmission lines than their more urban counterparts. For example, all of Harney's BPA transmission is below 116 kV.

We could tell a unique story with data for each of our members compared to the utilities along the I-5 corridor. Fortunately Congress and the President recognized these differences when they determined the mission for BPA.

We believe the rate impacts of directly assigning facilities under 116 kV would be disastrous for rural areas in general, for a nominal reduction for BPA's more urban customers' rates along the I-5 corridor.

Carving up the Network would throw a wrench into regional planning for BPA transmission improvements and force us to reconsider the whole cost recovery approach to BPA's capital and operating budgets for transmission service.

I can't begin to explain how BPA would fulfill its transmission obligations to provide load service to customers over the South Idaho Exchange if slicing and dicing of the Network were to proceed.

BPA has too many other important transmission and other policy issues on its plate to undertake studies and analysis that lack general support within the region and unnecessarily create extreme acrimony between our urban and rural communities.

In conclusion Bonneville should not support Network transmission segmentation proposals that would violate its Widest Use Standard, or upend Bonneville's longstanding policy of postage stamp rates. BPA should not penalize small and rural customers for being remotely located or having sparsely populated service territories. Direct assignment should only occur by mutual agreement of the parties at the initiation of new transmission service.

Northwest Requirements Utilities Proposed Segmentation Principles

Date: February 11, 2014

- 1. Full and timely cost recovery
- 2. Any segmentation policy must encourage the widest possible diversified use of electric power at the lowest possible rates to consumers consistent with sound business principles.
 - The baseline for whether a proposal achieves this "Widest Use Standard" is a uniform rate.
- 3. Equitable cost allocation between federal and non-federal uses of the Transmission system
- 4. Emphasizes a regional perspective
 - Alternatives must consider how costs are allocated and recovered.
 - Proponents of alternatives must demonstrate how the region benefits from the alternative compared to status quo.
 - Helps facilitate customers working together with BPA on complex matters
- 5. Honor BPA and utility planning and financial decisions based on longstanding segmentation policies
- 6. Simplicity, understandability, public acceptance, and feasibility of application
- 7. Avoidance of rate shock
- 8. Rate stability from rate period to rate period
- 9. Cost causation
- 10. Must align with BPA's planning and financing policies
- 11. Is not disruptive or delaying to BPA's IPR and CIR processes

NEW SERVICES

January 2014

	Orcas	San Juan	Lopez	Center/ Decatur		Total
Residential		5	1		1	7
Commercial						0
Line Retention						0
Other - OPALCO						0
Total*	0	5	1	0	1	7
2014 YTD	0	5	1	0	1	7
2013 YTD	2	4				6
2012 YTD		2	1			3
2011 YTD		4				4
2010 YTD	5	3	3		1	12

*Figures have been queried from the Service Order billing module and reconciled to the RUS Form 7 New Service numbers.

OPALCO Historical MORE Revenue (All Green kWh and MORE Blocks) For Years 2012 - 2014 YTD

		2012 YTD								2013 YTD							2014 YTD						
		All Green		N	AORE Blocks			All Green			MORE Blocks					All Green			MORE Blocks				
	#		kWh	#	#	Block	Total	#		kWh	#	#	Block	Total	#		kWh	#	#	Block	Total		
Month	Members	kWh	Revenue	Members	Blocks	Revenue	Revenue	Members	kWh	Revenue	Members	Blocks	Revenue	Revenue	Members	kWh	Revenue	Members	Blocks	Revenue	Revenue		
			\$ 0.04			\$ 4				\$ 0.04			\$ 4				\$ 0.04			\$ 4			
lan	44	47 420	1 007	454	970	2 000	5,777	12	F 4 470	2 170	422	921	2.004	F 963		41 070	1.075	411	871	2 404	F 150		
Jan		47,428	1,897	-		3,880		43	54,479	2,179	433		3,684	5,863	44	41,878	1,675	411	8/1	3,484	5,159		
Feb	43	37,664	1,507	452	962	3,848	5,355	43	50,927	2,037	432	918	3,672	5,709		-			-		-		
Mar	42	37,682	1,507	449	953	3,812	5,319	42	42,787	1,711	429	915	3,660	5,371		-			-		-		
Apr	42	27,636	1,105	449	953	3,812	4,917	42	31,063	1,243	427	904	3,616	4,859		-			-				
May	42	21,993	880	448	952	3,808	4,688	41	21,699	868	426	897	3,588	4,456		-			-		-		
Jun	43	20,335	813	448	952	3,808	4,621	41	20,336	813	426	897	3,588	4,401		-			-				
Jul	43	19,649	786	449	953	3,812	4,598	43	17,756	710	425	895	3,580	4,290		-			-		- 1		
Aug	43	22,457	898	446	948	3,792	4,690	42	18,716	749	421	893	3,572	4,321		-			-		- 1		
Sep	42	13,136	525	443	947	2,530	3,055	42	18,786	751	418	890	3,560	4,311		-			-		- 1		
Oct	42	21,162	846	443	947	3,788	4,634	43	23,882	955	415	887	3,548	4,503		-			-		- 1		
Nov	44	30,335	1,213	438	943	3,772	4,985	44	31,535	1,261	414	881	3,524	4,785		-			-		- 1		
Dec	43	43,849	1,754	437	929	3,716	5,470	44	47,347	1,894	412	879	3,516	5,410		-			-		-		
Total	43	343,326	\$ 13,733	446	11,409	\$ 44,378	\$ 58,111	43	379,313	\$15,173	423	10,777	\$43,108	\$ 58,281	44	41,878	\$ 1,675	411	871	\$ 3,484	\$ 5,159		

Notes: 2 members participate in both All Green and Green Blocks. Average blocks per member is 2.1. Beginning June 2011, report reflects combined data for the former Green Power program and MORE. Beginning September 2012, half of the members were transitioned to a mid-month billing cycle; these members were billed for 15 days of consumption, a prorated basic charge, and prorated MORE blocks on 9/14/12.

Month	2010		2011		2012		2013		2014		Average	
January	\$	2,091,129	\$	2,266,724	\$	2,203,319	\$	2,354,732	\$	2,294,020	\$	2,241,985
February		1,684,100		2,018,866		1,980,380		2,190,659				1,968,501
March		1,693,238		2,100,947		2,080,586		2,031,007				1,976,445
April		1,659,771		1,803,095		1,733,543		1,803,826				1,750,059
May		1,453,989		1,634,542		1,536,601		1,580,671				1,551,451
June		1,409,557		1,383,932		1,419,883		1,450,461				1,415,958
July		1,300,950		1,302,528		1,380,472		1,423,753				1,351,926
August		1,342,739		1,360,611		1,450,397		1,448,015				1,400,440
September*		1,297,936		1,421,174		1,005,902		1,458,553				1,295,891
October		1,389,529		1,483,658		1,499,863		1,636,955				1,502,501
November		1,584,909		1,977,782		1,779,353		1,923,857				1,816,475
December		2,123,602		2,375,284		2,085,584		2,480,061				2,266,133
Total**	\$	19,031,449	\$	21,129,143	\$	20,155,885	\$	21,782,552	\$	2,294,020	\$	20,537,766

OPALCO Member Billing Revenue History

Notes:

* September 2012 excluded - half of the membership transitioned to a mid-month billing cycle. These

members were billed for 15 days of consumption and a prorated basic charge on 9/14/12.

**Totals include Island Network billing



salmon, our economy and quality of life

January 17, 2014 FOR IMMEDIATE RELEASE Media Contact Information: Terry Flores, Executive Director Northwest RiverPartners 503.274.7792 office 503.367.9997 cell

Feds Affirm: Salmon Protection Plan Is Working NOAA Fisheries submits to the Court that protective measures are getting the job done for the region's iconic fish

Portland, Ore. – After more than two years of additional work and analysis to strengthen their case, NOAA Fisheries has reaffirmed that measures in the federal salmon plan are working to protect and restore salmon populations in the Columbia Basin. The plan – called the Biological Opinion (BiOp) – is without a doubt the most comprehensive and expensive plan to protect an endangered species in the nation, and likely the world. Today NOAA Fisheries, the agency in charge of salmon protection, submitted the BiOp to U.S. District Court, District of Oregon, which will decide its merits.

NOAA's conclusion is clear: The plan is benefitting listed salmon now and will continue to protect them well into the future. Highlights include:

- \$1.6 billion invested in new technologies at all eight federal dams and operational • changes is helping young salmon survive at very high rates and helping adults return to their spawning grounds
- an unprecedented and massive program that has restored more than 10,000 acres of • habitat in the Columbia Basin is already showing results

"More than one million Fall Chinook salmon returned to spawn last year, the highest numbers since Bonneville Dam opened in 1938," said Terry Flores, executive director of Northwest RiverPartners. "And the plan has worked to bring sockeye back from the brink of extinction."

An earlier version of the BiOp was sent back to the federal action agencies by U.S. District Judge James Redden in 2011, who asked for more assurance that the plans to restore habitat for 13 runs of ESA-listed salmon and steelhead would deliver anticipated benefits. So the agencies (BPA, Army Corps of Engineers, Bureau of Reclamation) reexamined the plan and the progress that has been made over the last decade.

Despite the salmon plan's demonstrated progress, environmental and commercial fishing groups are expected to continue to block the plan in court, as they have done for nearly two decades. "Lawsuits are these groups' bread and butter, and they will continue to sue – no matter what the facts say," Flores said. "They are bent on removing the federal dams, no matter how well the salmon are doing, so it's simply not in their interest to acknowledge the tremendous progress being made."

In fact, the litigants continue to press for radical changes in dam operations, including a tenyear "experiment" to dramatically increase "spill" through dams that would violate state and federal water quality standards established to protect salmon and other aquatic organisms and would significantly increase energy costs for Northwest families and businesses.

"It also would remove several hundred megawatts of clean renewable hydropower that fuels our economy and protects our environment," Flores said. "This radical spill proposal makes no sense – until you understand that their ultimate goal is to reduce the cost-effectiveness of the federal hydro system in order to make the case for dam removal."

With the BiOp, the goal of the federal agencies is to protect the region's iconic fish. NOAA's submittal of the salmon plan to the court starts a legal process that could last up to a year. U.S. District Judge Michael Simon will set the litigation schedule and hear the parties' arguments before deciding on the plan's adequacy.

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Northwest RiverPartners is an alliance of utilities, ports, farmers, and businesses joined together in promoting clean renewable hydropower and salmon restoration policies based in sound science. <u>nwrp.org</u>.