



75  
OPALCO

**OPALCO** *75 years of electricity*



# OPALCO

1937

2012



# Orcas Power & Light Cooperative celebrates 75 years

*of energy independence in San Juan County*

According to the Rural Electrification News (November 1941), before REA, the power requirements of the various resorts, estates and businesses on the island were supplied by “the most amazing collection of little generating plants to be found anywhere.”

The history of power in our rural islands is steeped in the stories of the local people who dedicated their lives’ work to creating the electric cooperative, to building the system across twenty islands, and to continually maintaining and improving the power grid and friendly offices that serve us today. You’ll meet some of these people and hear their stories in these pages. We invite you to join us in celebrating these stories of hard-won success, and to participate in the activities and events honoring the co-op family, which includes each and every member-owner who has invested time, money, and trust in the Co-op over the last 75 years.

**Please join us in celebrating our co-op story at the following 75th Anniversary events:**

75th Annual Meeting on the Ferry — Saturday, May 5

## **OPALCO 75th Anniversary Open Houses**

These open houses will include refreshments, commemorative gifts for all attendees, and special recognition for the co-op family members (longest-standing members, past and present OPALCO Board and staff members) on each island. OPALCO “elders” are invited to speak.

**June 4:** OPALCO Offices in Friday Harbor, 1:00 – 3:00 p.m.

**June 20:** Community Meeting Hall on Shaw, 1:00 – 3:00 p.m.

**June 29:** OPALCO Offices in Eastsound, 1:00 – 3:00 p.m.

**July 18:** OPALCO Offices on Lopez, 1:00 – 3:00 p.m.

*opposite: “Then and Now,” by Frank Loudin*

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## Orcas Power & Light Cooperative

The mission of the Orcas Power & Light Cooperative is to serve our Members with safe, reliable, cost-effective and environmentally sensitive electric utility services.

**Orcas Power & Light Cooperative**  
**183 Mt. Baker Road, Eastsound, WA 98245**  
**[www.opalco.com](http://www.opalco.com)**

### BOARD OF DIRECTORS

Chris Thomerson - President (Orcas), James Lett - Vice-President (Lopez), John Bogert - Treasurer/Secretary (Shaw), Winnie Adams (Orcas), Vince Dauciunas (San Juan), George Mulligan (San Juan), Bob Myhr (Lopez)

### MANAGEMENT

Randy J. Cornelius, General Manager  
 Foster Hildreth, Assistant General Manager

### ANNUAL REPORT CONTRIBUTORS

Suzanne Olson - Writer and Creative Director, JoAnn Roe, Susannah Beck, Beverly & Barry Madan, Buyral & Ellen Madan, Orcas Island Historical Museum, Bonneville Power Administration and Steve Horn Photography

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# Message from the President of the Board

*Chris Thomerson*

At this 75th Anniversary of our local member owned, nonprofit cooperative, we are happy to celebrate continued success in meeting our prime directive: to serve our members with safe, reliable, low-cost and environmentally sensitive electric utility services.

While the local economy continues to be depressed, OPALCO remains healthy and stable and intends to remain so by economizing, adjusting and enhancing operations to best build on opportunities for our community, including:

**Collaborating with compatible local projects to reduce costs and provide employment**

**Taking advantage of historically low interest rates to complete necessary maintenance and expansion projects at low cost and ahead of schedule**

**Installing proven technologies to enhance efficiency and reliability**

**Implementing innovative solutions and developing creative relationships for mutual benefit, working together with significant partners wherever we may find them**

Remember: we deliver hydro electricity - low cost, clean, and there when you need it. No other source of renewable electricity can say that.

OPALCO continues to develop a robust communications and data transfer infrastructure to run our electric system safely, reliably and efficiently.

We are making an extensive and thorough examination of providing communications and data services for the benefit of our members countywide. As we expand our data infrastructure we are working hard to develop multi-use facilities to provide: emergency responder communications; reliable, low cost, high speed internet services; and a platform for cellular providers - countywide.

We are studying this complex undertaking very carefully. We are taking great pains to do this right and we will continue working hard to provide high value to our members at low cost. In some ways the move toward providing networked communications services for our members countywide echoes the community spirit that first created this Cooperative of ours 75 years ago.



*Chris Thomerson, Board President*

# Message from the General Manager

*Randy J. Cornelius*

I want to thank the members, the Board of Directors, and our employees for helping OPALCO fulfill its commitment to deliver reliable electrical service at the cost of service. Residential rates have been stable since 2008, and incremental increases to commercial and other tariffs have been implemented to make sure each member is paying a fair share. However, we are now forecasting a long-term upward trend in our energy costs. After October 1, 2011, all of our load growth (increased demand) will have to be purchased at market rates (Tier II rates), which are higher rates reflecting the Bonneville Power Administration's (BPA's) full cost of acquiring additional power.

BPA has moved from a five-year to a two-year rate period. As a result, we can expect our wholesale power costs to be adjusted every two years to reflect the growing cost of power. Fortunately, you have the ability to help us control our energy costs. OPALCO and its members can work together to manage increasing electric bills through energy efficiency and conservation. You have control over what you do in your home, and OPALCO can help you learn what practices will have the most impact to help lower your energy use. Working together, we can keep your electric bills under control and manage our load as a co-op. Energy efficiency, conservation, and our

local renewable energy programs will play an increasingly important role in controlling load and rate growth.

On an operational note, much of 2011 was focused on activities that will prepare us to serve you better in the coming years. Many system improvements were made: four miles of overhead lines were converted to underground, and 5.4 miles of old direct buried cable were replaced. There were 127 new accounts added to our system. Our automatic meter reading (AMR) system was completed; approximately 14,500 new meters were installed over a four-year period. With this project complete, crews will not have to travel as far to read meters or locate faults, which will keep them safer, reduce our carbon footprint, save time, and help us save you money.

The OPALCO staff will gradually phase in an automatic metering infrastructure (AMI), which provides two-way communications with our meters. AMI will modernize our electric grid and will provide "smart grid" features to support our energy-efficiency and conservation efforts. Implementing AMI would require some expansion of our fiber-optic network

*Randy J. Cornelius, General Manager*







*Bonneville Dam 1940, photo courtesy BPA*

and could assist in building a “hybrid” fiber/wireless network, which could also provide high-speed Internet access to most of San Juan County. You can read more about this in on page 34 and on our website at [www.opalco.com](http://www.opalco.com).

OPALCO’s 2011 financial year began with an approved budget of \$19 million. We ended the year with total expenditures of \$18.3 million. The Board approved the payout of \$1,052,184 in the form of capital credits. Our budgeting and financial planning objectives include maintaining a stable financial position to help manage our risks, implementing a construction work plan to address system reliability, and funding new technology to better serve our members and reduce future operating expenses.

Finally, I want to acknowledge the outstanding performance of our employees and directors. Their efforts reflect a high level of dedication to our members. As member-owners, you can take pride in knowing that you are served by a progressive staff and officers committed to meeting your needs.

## In Memoriam

**George Goff** *July 5, 1934 – April 3, 2011*

George was the Line Superintendent of the San Juan District for 34 years and was instrumental in building our reliable electric system.

**Roger Crosby** *November 3, 1919 – June 27, 2011*

Roger served on the OPALCO Board of Directors for 22 years. His legal expertise and sharp vision served OPALCO through a period of major growth and development.

**Jim Cahail** *January 4, 1934 – December 23, 2011*

Jim joined OPALCO in 1969 as an Engineer and retired 30 years later as the Assistant General Manager. Jim played a major role in designing our current system and laying submarine cables.

# Power By and For The People

*by Jo Ann Roe*

A group of twelve islanders formed a cooperative in 1937 to take advantage of President Roosevelt's Rural Electrification Administration (REA) initiative to electrify rural America. However, power to the people—electrical power, that is—did not fully arrive in the San Juan Islands until mid-century, 1951, when the Bonneville Power Administration began to lay a submarine cable to the San Juan Islands.

It took technological advances and imagination to achieve the goal, but—above all—it took daring men and women. Laying the cable five miles from Fidalgo to the Lopez substation was not for the faint-hearted. Since the cable had to be one unbroken piece, just getting it to Anacortes was a daunting matter of placing a series of huge, 10-foot diameter reels holding the 38,000-foot cable in a figure-eight manner on a series of rail gondolas chained together. Crews then transferred the cable to a special barge with two wells for the reels. Because the operation was so unusual and was claimed to be the first laying of submarine cable in the United States, tourist boats came out to watch the process.

The work was ponderous but basically simple. As cable was unwound from the reels, workmen on two barges guided it and

kept it taut as it sank to the bottom of Puget Sound. The crew gradually moved along to Decatur, went overland to the western shore, then took the cable back underwater to the Lopez substation. The newly streamlined OPALCO organization was to take it from there, as finances permitted.

No underwater cameras or submersibles existed to monitor the bottom of the sea. The cable simply followed the sea-floor contours as best it could. It lay atop pinnacles one moment and plunged 300–500 feet deep the next. Inevitably, the great tidal changes natural in Puget Sound waters caused the cable to move to and fro, fraying it and causing outages.

Then OPALCO's crews went to work. When OPALCO took over the construction of the power service in 1951, says Lineman Jack Cadden, "We didn't have any specialized equipment. All we had was a 1937 half-ton truck and hand tools!" Without scientific transits to determine the direction between Lopez and San Juan, for instance, Engineer Jim Cahail (later Assistant General Manager) used field glasses to focus on an old snag on San Juan to create the line of passage. The company rented barges, tugs, scows—most of which had been large fishing boats—from Jensen Shipyards of Friday Harbor, the Foss Tug Company, and others.



The crew sank cable of about three inches in diameter (the Bonneville cable was about six inches) over to the present substation near Friday Harbor, cut trees, installed poles, and attached the overhead lines. “The submarine cables were real heavy as they came off the reels,” Cahail said. “We learned to put more slack in the cable to allow for it swirling back and forth in the tides. It would wear holes through the insulation and blow fuses.”

Jack Cadden told the author that, of course, breaks in the cable usually occurred in the dead of winter after big swells and high tides. The OPALCO crews had to go out and splice the cable, and “it was colder than h--- out there, not to mention dangerous.” One break occurred between Lopez and Shaw right where the cable came out of the water. The crew struggled fruitlessly to pull the cable in to attach it to the land pole, so Jack, holding a rope attached to the cable, just jumped into the water and dragged it in. “The water temperature was 42 degrees,” he said.

Technical personnel such as Chief Operator Eber Bruns confidently planned such key details as the path of the grid, and others negotiated grants of easements by island landowners. By the late 1960s, electricity was available to most residents from a grid strung throughout the island in a basically circular pattern, under the sea and overland. The cost of power was as low as one cent per kilowatt-hour!

Breakages from tidal currents challenged both Bonneville and OPALCO. Imagine trying to find the two separated ends of the cable lying under restless water, especially in Rosario Strait. Officials

today laugh at the absurd situation that occurred one stormy day, when the crew hauled both ends of a broken cable on board the rocking boat. The splice went smoothly, but when the crew was about to drop the cable into the water, they discovered the cable was threaded through the boat’s rigging!

The last really big outage in OPALCO’s history lasted three weeks, from November 20 to December 11, 1964. The Bonneville crews tried to locate the break, estimated to be 1.6 miles from land at the bottom of Rosario Strait in 175 feet of water. Once it was found, they planned to anchor a barge at each end of the break. An estimated 6,000 residents were without power at Thanksgiving time and had no heat, unless they still had old wood stoves or active fireplaces. OPALCO members were very tolerant until the emergency ended.

Water was not the only adversary: trees falling into the lines during snowstorms or windy periods caused many outages. Jim Cahail recalled a time when he and a fellow employee rode around on awful forest roads to shoot down accumulating snow on trees near the lines. As noted earlier, it takes daring and resourceful men and women to keep providing power to the people.

*Part-time Blakely Island resident JoAnn Roe researched the history of OPALCO’s legacy for her book, *San Juan Islands: Into the 21st Century* (Caxton Press, 2011). She condensed parts of her book for this article.*



May 11, 1935: President Franklin D. Roosevelt created the Rural Electrification Administration (REA) for the purpose of making long-term, low-interest loans to electric utilities for construction of power facilities in rural areas. Ninety percent of America's rural areas were still without electric power.

December 1937: OPALCO signed a contract for \$36,940 with the Fairbanks Morse Co. for the construction of the generating plant. "It is understood that [OPALCO is] making a successful campaign to raise by individual pledges an amount sufficient to sustain the project for the first year. The REA is satisfied once the people

## 1935 — 1936 — 1937

May 21, 1936: President Roosevelt signed the Rural Electrification Act of 1936 into law, providing official status to the REA as a lending agency for electric cooperatives and authorizing \$410 million for a 10-year program to "light up the countryside."

March 1937: Orcas Island residents F.H. Boddington, William E. Boyer, Amos B. Coffelt, Rev. F. Eastman, Charles S. Gerard, Dr. A.B. Harrison, J.E. Harrison, Chester R. Martin, Mrs. Opperman, Carl Templin, Harry P. Walrath, and Edward J. Young formed the Orcas Electric Association.

May 1937: Members of the original Board of Trustees were Charles S. Gerard (Project Supervisor), John E. Harrison, Edward J. Young, Chester R. Martin, Harry P. Walrath, Amos B. Coffelt, and William E. Boyer. At its first meeting, the Board approved by-laws and passed a resolution to apply for an REA loan of \$87,000 at 2.77% interest. The loan was requested to build a generating facility and 50 miles of distribution line on Orcas Island.



have the service they will never be without it. In other words, the REA is willing to assume the risk for 20 years if the people are willing to trust themselves for one year.” Friday Harbor Journal, December 9, 1937

Mr. E.W. Johnson was hired as first General Manager of Orcas Power & Light Cooperative.

*E.W. Johnson*



1938: The Bonneville Power Administration (BPA) finished construction of the Bonneville Dam on the Columbia River and installed many miles of transmission lines throughout the Northwest.

# 1938

January 1938: The firm of NePage McKenny began construction on 53 miles of overhead power lines on Orcas Island. Four crews with a total of 85 men, many of them local, were contracted to complete the work in 60 days. They installed 84 miles of line.

July 1938: The Orcas Island generation plant was completed at a total cost of \$150,000. The original plant consisted of two Worthington General Electric diesel engines. Engine No. 1 was 50 kW and Engine No. 2 was 100 kW; both were 2400 volts. “The extremely rugged terrain of the island made transportation of machinery and materials difficult, and winding roads impeded construction.”



September 10, 1938: The Cooperative held its first Annual Meeting in the gymnasium of the Eastsound school house. At that time there were 196 active accounts and 211 members. Cash on hand was \$77.95.

November 28, 1938: Moran State Park membership was approved and power was strung to the CCC camp near Cascade Lake. The fee was waived.

May 1939: Manager E.W. Johnson resigned due to pressing "business affairs in Alaska." J. E. Harrison resigned from the Board and was hired as a permanent, part-time Manager on June 12, 1939, with a salary of \$75.00. The position became full time in January of 1940 with a salary of \$125.00.



*J.E. Harrison*

# 1938

# 1939

May 1939: Mr. Eber Bruns was hired as Chief Engineer of the power plant for a salary of \$100. He, his wife Atlanta, and their two children moved into the small main office next to the generating plant. He added five more rooms and a bath to the building within a year.



*The first generating plant was completed for a total cost of \$150,000*

*Eber Bruns at the power plant*







August 26, 1939: Mrs. Ruby Cross Langell filled the vacancy created by the resignation of J. E. Harrison, becoming the first woman to occupy an Orcas Power & Light Board of Trustees position.

Power was turned off at 10:00 pm each night. For special occasions, the power would remain on until midnight.



*Eber Bruns, Plant Operator*

## 1940

September 1939: At OPALCO's second annual meeting, member Al O'Neal won a prize for supplying the best last line to the new jingle "OPAL," as OPALCO used to be known. It read...

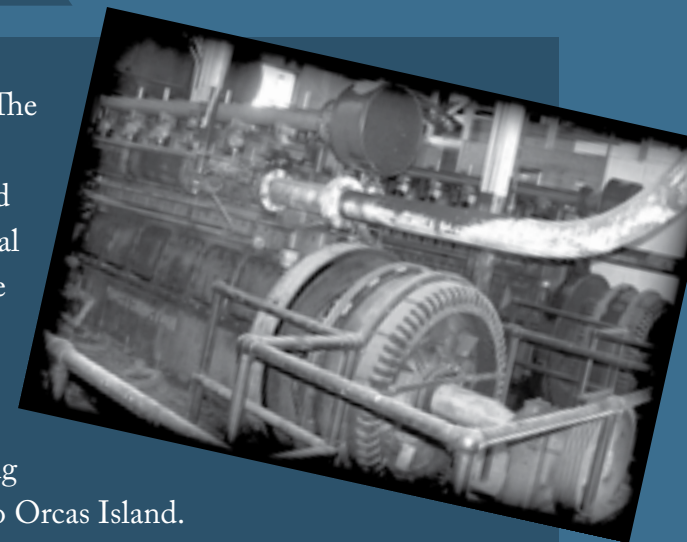
**She never eats, she never sleeps.**

**She works all day and night.**

**She's here, she's there, she's everywhere,**

**She's our own power and light."**

August 8, 1940: The Orcas generating plant was enlarged to twice its original size and two more Worthington 100kW generators were installed, providing 24-hour service to Orcas Island.



April 1941:  
OPALCO had 260 members. There were approximately 350 families living on Orcas Island and approximately 3,300 people living in the San Juan Archipelago.

OPALCO acquired five acres on Lopez from Mrs. Riviere and built a new diesel power plant.

July 27, 1946: The generating plant at Orcas had a record load of 225kW and the fuses at the transformer bank blew, causing an island-wide blackout. Outages due to overload were a common occurrence, and plans were made to again increase the size and capacity of the Orcas generating plant.

**“Generator for Island on Order in East. May Take a Month for It to Get Here. Juice Must Be Saved.”**

Orcas Islander  
June 5, 1947

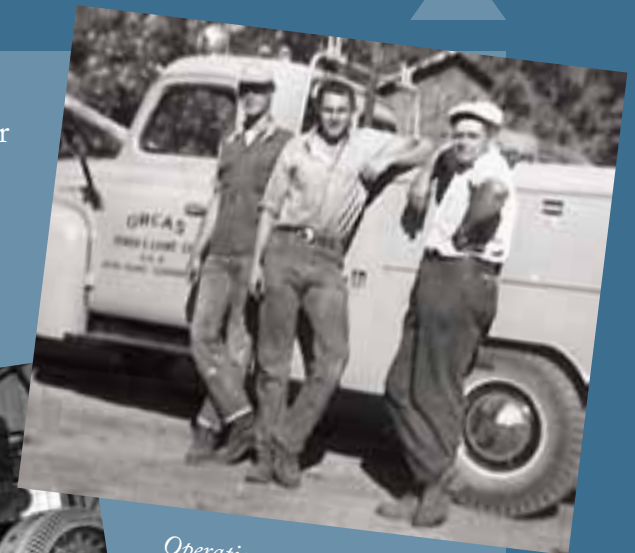
# — 1941 — 1942 — 1946 — 1947 —

September 1941:  
OPALCO purchased L. T. Mulvaney's Friday Harbor Light and Power Company.

Electric cooperative leaders organized the National Rural Electric Cooperative Association (NRECA) in Washington DC.



April 1947: Two Superior diesel generators were installed at the Orcas generating plant.



*Operations crew Jerry Cadden, Jack Cadden and Eber Bruns*





The 1947 article stated that the Board was bringing in a portable generator to handle the summer peak load, as generating capacity was taxed almost to the limit. "Do your ironing after breakfast or in the afternoon, but never during mealtimes," the article warned. "The main switch at the generating plant will be pulled whenever the load reaches a dangerous point. We plan to leave the service off for two or three minutes when an attempt will be made to restore services. If the load is still too high, the switch will again be pulled and the process repeated. Operator Eber Bruns says that after the third time he will go to bed."

A contest was held among students of the island high schools for an OPALCO logo. Osborne Van Moorham and Buddy Russell of Nellie S. Milton School tied and shared the \$15 prize money. The Board decided to use the best features of both drawings to create the logo.



## 1949

At 11 years old, OPALCO had 1191 consumers using an average of 171 kilowatt-hours (kWh) per month. A total usage of 2,444,671 kWh generated \$128,661.00 in energy sales. The average cost per kWh in the 1940s was 5.3 cents. OPALCO operations resulted in a deficit of \$24,489.25, and at the end of 1949 OPALCO was delinquent in loan and interest payments to the REA in the amount of \$49,560.20.

## 1951

1950: OPALCO had a little more than 200 miles of overhead distribution line installed: 70 on Orcas Island, 45 on Lopez, 75 on San Juan, and 12 on Shaw (not yet energized). L. J. Parker was Manager of OPALCO.

NRECA's Willie Wiredhand made his debut as the official electric cooperative mascot.



April 17, 1951: Anacortes' "Queen's Court" christened the cable to cross Rosario Strait and connect the San Juan Islands with power from BPA. See this historic event on video at

[www.opalco.com/history/videos/](http://www.opalco.com/history/videos/)



July 1951: The lines on Shaw Island were energized.

July 22, 1951: More than 700 people thronged Odlin Park on Lopez Island to help OPALCO and BPA celebrate the delivery of power from Anacortes to Lopez Island. The celebration was also attended by Senator Harry P. Cain, Congressman Henry Jackson, and BPA Administrator Dr. Paul A. Raver.

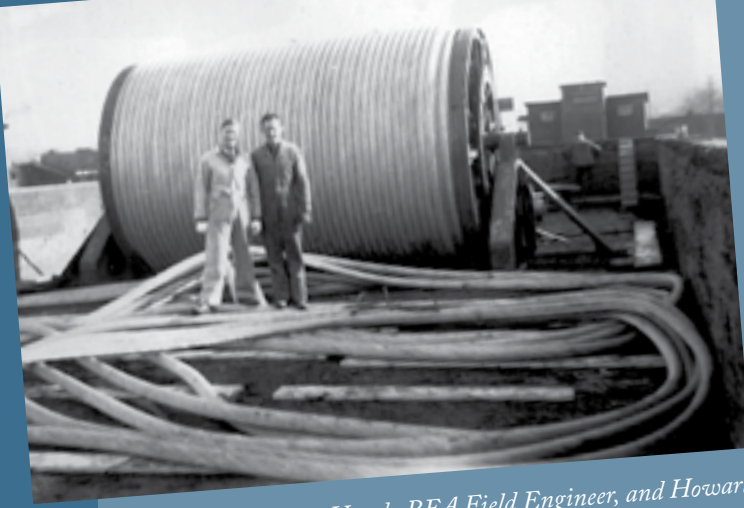
# 1951

July 18, 1951, 12:51 p.m.: After 14 years of effort to get low-cost Columbia River power from the mainland to the islands, BPA energized its newly installed cable from Anacortes to Decatur Island and from Decatur to Lopez Island. OPALCO began purchasing power from BPA.



*Congressman Henry Jackson makes a speech*





*W.J. Hauck, REA Field Engineer, and Howard Zenier, Consulting Engineer*

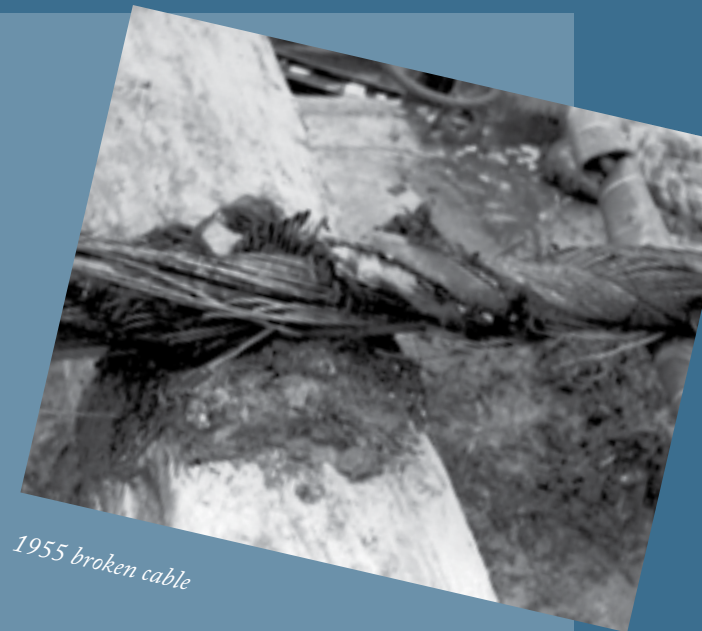
February 5, 1952:  
More than 12,000 feet of Okonite submarine cable was installed between San Juan and Lopez islands.

April 1954: Annual Meeting drew the largest crowd in the history of the San Juans: 910 members in attendance. There was a vote to decide where OPALCO's headquarters should be located; Orcas Island won the battle over San Juan Island by a margin of 148 votes.

# — 1952 — 1953 — 1954 — 1955 —

May 1953: George E. Letellier was the Manager of OPALCO and Robert F. Buck was President of the Board.

April 13, 1955: The four-year-old Lopez-to-San Juan Okonite submarine cable failed due to the tremendous tidal current. Repairs were not finished until May 9 and cost \$32,294.27. In addition, the excess costs of interim generating on island amounted to approximately \$3,951, for a total cost of \$36,245.27.



*1955 broken cable*

General Manager George Letellier resigned; K. A. MacMillan was hired. National “Live Better Electrically” and the “Medallion Homes” campaigns were launched.

*To earn a gold medallion—considered the apex of modern living—a home had to have an electric clothes washer and dryer, waste disposal, refrigerator and all-electric heating. Medallion courtesy of Buyral & Ellen Madan*



June 23: The submarine cable between Lopez and San Juan failed again. Diesel generators in Friday Harbor supplied power until the early morning of July 17, when the repaired cable again permitted the flow of energy from the mainland.

## 1956 - 1957 - 1958 - 1959

More than 350 people attended the Annual Meeting. State Senator Fred J. Martin spoke on the recent legislative session and developments regarding the proposed inter-island bridges. The 4-H club served coffee and doughnuts.



*Maud Margaret Adams*

OPALCO's Friday Harbor offices closed for reasons of economy. They reopened in September 1960.





April 8, 1961: The Annual Meeting was held at the IOOF Hall in Eastsound. The by-laws were amended to elect directors by four geographic districts. The Articles of Incorporation were amended to provide for capital credits.

April 18, 1961: “Bonneville Power Administration engineers yesterday completed laying the world’s longest submarine power cable, a line 7 ½ miles long linking Greens Point near Anacortes and the San Juan Islands in Puget Sound. Some 500 persons lined the shores, motor boats paused and even a ferry boat left its course so passengers could watch as engineers laid the final five miles of high-voltage cable along the bottom of Rosario Strait to Decatur Island.” AP News.

## — 1959 — 1961 —

August 31, 1959: REA approved a loan for \$281,725: \$78,500 to build new substations on Shaw and San Juan islands; \$21,500 to construct 4.4 miles of distribution line to serve 67 new customers; \$70,725 for new transmission facilities; \$16,000 to increase capacity of existing distribution lines; \$5,000 to increase capacity of existing substations; \$66,000 for new transformers, meters, and service wires; \$14,000 for additional regulation equipment; and \$10,000 for additional working equipment.

K.A. McMillan was OPALCO’s Manager, E.H. Nash was the

Superintendent on San Juan Island, and Eber Bruns was the Orcas Superintendent. Otis Perkins of Lopez was President of the Board. In 1959, there were 1,663 members, an increase of 39% over ten years. The consumption per member per month was 714 kWh, four times as much as in 1949. The total energy usage was 13,939,150 kWh, generating \$285,000 in energy sales. The average cost per kWh used in the 1950s was two cents. Interest and premium payments due REA were paid in full and a margin of \$11,149.28 was recorded.



July 1961: OPALCO laid four new cables between Lopez and San Juan.



*OPALCO Board members visit the job site, 1961.*



## 1961 — 1962



1962  
*Annual*  
MEMBERSHIP  
MEETING

April 14, 1962: The 25th Annual Meeting was held aboard the Evergreen State at Lopez. Otis Perkins, President of the Board, chaired. The remaining surviving members of the original Board — John Harrison, Charles Gerard, and E.J. Young—were present. Novelty light switch plates were given out to members.



October 12–13, 1962: “The Big Blow,” a severe wind storm, caused a major power outage. “The Thursday night storm proved only a teaser, for Friday night, a storm arose and winds

November: OPALCO members experienced an extended outage due to a submarine cable break caused by the vibration of the cable (Aeolian action) induced by marine tidal current action. "Walter Buffum milks his cows by hand for the first time in 30 years. Twelve-year-old Jennifer Elf misses her favorite rock-n-roll show on television. Auxiliary diesel generators provide enough electricity for OPALCO members to have a couple hours of power each day while temperatures drop near freezing."  
- Seattle Post-Intelligencer, November 22, 1964

December 10, 1964: Nourdine Jensen was appointed to the Board to replace John G. Jones.

*Nordine Jensen waits to speak at the 1978 annual meeting*



## 1964

increased to hurricane velocities. At the Friday Harbor Airport, a wind gauge measuring to 90 miles an hour was hitting the top limiting pin during the most severe gusts. Damage from the storm was much in evidence

Saturday morning. Trees had fallen into houses. Several chimneys had blown over. Windows had blown in. Roofs had been lifted from barns and cabins . . ."  
- OPALCO Beacon, October 1962

## 1970-1979

1978 Annual Meeting on the ferry.







*Bill Ward*



*Pete Stoothoff*



*Mac McElheare*



*Donald White, Engineering Aide, Orcas; Buyral Madan, Superintendent of Orcas area; George Goff, Superintendent of San Juan area; Neil McLachlan, Manager of Office Operations; Max Weidel, Purchasing Agent; James Cabail, Engineering Aide, San Juan; Allen Thompson, Manager of Power Use Operations; Robert Fralic, Superintendent of Lopez area*



OPALCO was swept up in the Washington Public Power Supply System (WPPSS) debacle, the biggest and most notorious municipal bond default in U.S. history. OPALCO was one of 88 Northwest utilities pressured into sponsoring the construction of two nuclear plants that were never finished, and then got stuck with some of the \$2.25 billion bill. OPALCO's share of the debt was estimated at \$45 million over thirty years, which would have meant a 60% rate increase for members—who would get nothing in return! OPALCO Board Member Leon Fennesbeck convened a summit of regional co-op leaders to brainstorm a way forward. In a bold move at the end of 1982, OPALCO became the first utility to file for Chapter 11 bankruptcy protection to ensure the Co-op's survival. Within six months, the Washington State Supreme Court released all 88 utilities from any debt repayment to WPPSS, and OPALCO withdrew its bankruptcy filing.



*Board Member Leon Fennesbeck. Steve Horn Photography*

# 1980 — 1986

October 14, 1980: One of OPALCO's own, Bruce "Ole" Pederson, Journeyman Lineman of Lopez Island, was killed while working on a 7,200-volt regulator bank on Lopez.

Boarding the ferry for the 1986 member meeting as captured by National Geographic



*Giant ferry Elwha nudges the landing as Hal B. Maynard of the San Juan Islands' electric cooperative clicks off the on-boarding members with a tally counter. In a tradition of down-home democracy, insular and isolat-*

*ed co-op members annually board a Washington State ferry to debate, vote, and socialize with electricity users from other islands. The ferry cruises among rocky, fir-clad islands as members carry on their*

By Ann G. Year © 1986 National Geographic Society



*Doug Bechtel,  
Steve Horn Photography*

November 1988: Doug Bechtel was named General Manager. Bechtel played a key role in the development of the Co-op during his 14-year tenure and was responsible for moving the utility toward greater system reliability through undergrounding projects (via the storm abatement surcharge) and for working with the Board to select a new communications system, which laid the groundwork for our current fiber-optic infrastructure. Bechtel started OPALCO's Green Power Program, which gave members a way to support local renewable energy, and authored 333 "OPALCOGrams" to keep members informed.

**For more photos, stories, history and videos, visit [www.opalco.com/history](http://www.opalco.com/history)**

# 1987

# 1988 — 1989

OPALCO celebrated 50 years of service.



OPALCO employees voted to unionize under an International Brotherhood of Electrical Workers (IBEW) contract.



Jan 31, 1989: The first of three "100-year storms" to hit San Juan County in a two-year period struck. Acres of trees were mowed down by the storm, and power was out for up to four weeks for some members.

1990: Armitage Island was energized, the 20th island to be served by OPALCO.

February 1991: The Project PAL “Round-up” Program began. Members began to round their bills up to help their co-op neighbors in need during the heating season.

March 1991: The Board instituted a five-year storm abatement program to bury power lines in areas that were damaged by the storms of 1989 and 1990. The program included a surcharge of 0.25 cent per kWh on all bills. Doug Bechtel wrote, “These storms have changed the way OPALCO does business. We are going to fix this system so that it does not happen again.”

## — 1990 — 1991 — 1992 —

December 18, 1990: The third 100-year storm in two years caused power outages two-to-four weeks. Staff member Beth Anderson recalled, “Hurricane-force winds whipped trees in all directions. Trees and power poles were littering the ground throughout the islands; people had to literally cut their way out of driveways and along roadways.” Doug Bechtel wrote, “Dozens of members showed up at OPALCO offices with chain saws ready to help, retired employees came back to help, and volunteers pitched in to keep the linemen fed—including a special turkey dinner on Christmas Day. The off-island crews who came to help said that they had never been to a place where people were nicer or appreciated their efforts more.”

January 1992: OPALCO purchased its first two electric vehicles with a grant from the U.S. Department of Energy: a General Motors G-Van and a Solectria Force, a retrofit based on the Geo Metro.



Consecutively, OPALCO installed the first electric car recharging stations on San Juan Island.





*Cherry Thurman, Robin Morgan, Michelle St. Claire, Karin Becker, Rita Davis, Cele Westlake, Judi Resch, Carol Merrill*



*OPALCO crew lays 69kV cable between Lopez and San Juan Islands. Steve Horn Photography*

October 1, 2001: BPA's wholesale power rates increased by 50%. OPALCO avoided this increase by signing a pre-subscription contract, saving over \$8 million in power costs over the next five years.

# 1993 — 1993 — 2001

The Green Power Program began. Members who opted in paid a 4 cent-per-kWh premium on their bills. Of this amount, 2.5 cents paid for BPA's Environmentally Preferred Power and 1.5 cents went toward incentives for local renewable power producers feeding in to OPALCO's grid.

The Board approved a new communication system for OPALCO using fiber optics. BPA laid a new cable between Anacortes and Lopez Island and signed a 30-year agreement with OPALCO to lease 12 fibers to the Co-op for a one-time fee equal to the cost of manufacturing those fibers. By the end of the year, aerial fiber was installed on Lopez and San Juan Islands in Phase I of the project. Phase II construction began in July 2002 with aerial fiber installed on Shaw, Orcas, and more of Lopez.

OPALCO spent half a million dollars to clean up chemical contaminants in the ground at the old generator plant. Geo Engineers of Redmond, WA was hired to bring the site into compliance

July 2002: Orcas Island residents Richard and Becky Greaves installed a 30kW photovoltaic (PV) system, the largest privately owned system in the Northwest and the largest local producer in OPALCO's Green Power generation program to be connected to the OPALCO grid. The project provided more than

30,000 kWh of green power each year for OPALCO members, enough to provide power for three average households for year! In addition, there were 13 grid-connected green power generation systems in the islands, producing a total of more than 57,863 kWh of electricity from PV, wind, and micro-hydro power.



*Greaves solar array, Orcas Island*

## 2002

with Washington State Department of Ecology standards. Up until the 1970s, PCBs, solvents, and other chemicals were routinely used to help insulate transformers and to do cleaning and maintenance work.



August 2002: Randy J. Cornelius was hired as General Manager. Cornelius came up through the ranks from journeyman lineman, later earning his degree in electrical engineering from Oregon State University. Before coming to OPALCO, he was the Electric Utility Director for the city of Sitka, Alaska. Randy J. Cornelius brought the Co-op into the 21st century with unparalleled system reliability, further developed OPALCO's fiber communication system to connect the island community to the larger world, and negotiated a twenty-year contract with BPA to buffer the Co-op from escalating power costs into the future.

July 2003: The Board approved the Island Network Friday Harbor Intranet Pilot. A microwave link was installed connecting Friday Harbor to Lopez. In 2004, a grant from the San Juan County Economic Development Council helped fund the design and buildout of the Friday Harbor fiber-optic distribution system. In March

2004, The Computer Place became the first Island Network subscriber, followed by the San Juan Island School District, the San Juan Island Library, and Rock Island, Inc. By the end of 2004, OPALCO had laid new submarine fiber-optic cables between Lopez and Shaw, Shaw and Orcas, Decatur and Blakely, and Blakely and Orcas Islands.



The fiber infrastructure expanded into Eastsound and Lopez Village areas for greater business access to Island Network services.

# 2003 — 2005 — 2006 — 2010

The fiber connection to OPALCO's Eastsound office was completed, and OPALCO began transporting all data traffic over its own fiber-optic system. Installations at the ferry terminals, including Anacortes, were completed. San Juan County signed a contract with Island Network for five locations.

OPALCO began providing Island Network Internet services and advanced Ethernet services to a limited number of public organizations and targeted businesses. San Juan County subscribed to the first gigabit link between the County Courthouse and the Carlson Building. Island Network provided services to Northwest Open Access Network (NoaNet); school districts on Orcas, Lopez, and Shaw; the University of Washington Labs; and public libraries on Orcas and Lopez Islands.

March 2011: OPALCO purchased a Nissan LEAF, a 100% battery-powered, zero-emission electric vehicle for OPALCO business. Electric Vehicle charging stations on San Juan, Lopez and Orcas Island were updated to accommodate 240/120V charging.



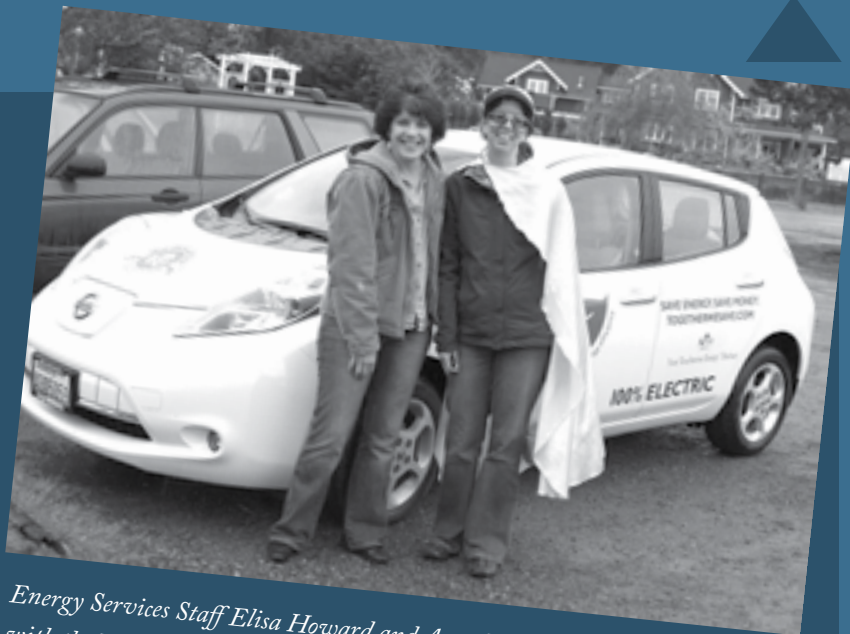


*OPALCO Operations crew and staff, 2010*

May 2011: A group of OPALCO members form a committee to build a new Green Power Program and M.O.R.E. (Member Owned Renewable Energy) is launched to provide incentives for local renewable power producers. Members fund the incentives through voluntary donations.



# 2011



*Energy Services Staff Elisa Howard and Anne Bertino with the Nissan LEAF*

October 2011: OPALCO signed a record 20-year contract with BPA for power, locking into a tiered rate structure that guaranteed the Co-op its full share of clean hydro-power at the region's relatively low rates (Tier I) and introducing the promise of market rates (Tier II) for load growth in the future.

OPALCO began to study expanding its fiber infrastructure to provide broadband (high-speed Internet) services to its members.

# 75 Longest-Standing Members

*We got our power from you!*

OPALCO salutes its 75 longest-standing members. These founding Co-op Family members have maintained an active membership since the earliest days for their families or organizations and have played an important role in the development of the cooperative. On behalf of the entire membership, OPALCO honors these founding members for their foresight and fortitude, and for their long-term capital investment in our local electric system.

The first name listed is the original member, current active member in parens.

**Amos Coffelt (Vern Coffelt)**

**Axel Jensen  
(Virginia Jensen)**

**Culver Willis (John Willis)**

**Mt. Constitution Lodge  
(Oddfellows)**

**Camp Orkila**

**Deer Harbor Community  
Club**

**Albert Jensen & Sons Inc.  
(Jeri Ahrenius)**

**A. G. Lawson**

**William & Edith McLachlan  
(Cal McLachlan)**

**Sherman & Lucille  
Thompson (Betty Hall)**

**Catherine Murray**

**Roger S. Loring**

**Hackett-Larsen Post #163**

**Masonic Hall**

**San Juan Island Grange**

**Christian Science Society**

**Kenneth F. Dougherty**

**Town of Friday Harbor**

**Al Sundstrom**

**Irene Vandersluys**

**Mildred Sandwith**

**Eber Bruns (Ellen Madan)**

**San Juan County**

**Lopez Island Grange**

**Corinne Carter**

**Orcas Island Foundation  
(Indralaya)**

**Sea Ranch Association**

**Vernon Blake**

**Patricia J. Fairweather**

**James A. Scribner Jr.**

**Lloyd Lillie**

**Jane Barfoot-Hodde**

**Richard Lea III**

**Hayes Rehm**

**Marty Percich**

**Fred D. Nichol**

**Buyral Madan**

**Mary Shoen**

**Galen & Joyce Burghardt**

**Laurence J. Parker**

**Charles Settles Sr.**

**John McCutcheon**

**John P. Cadden**

**Wayne B. Fowler**

**Agnes M. Murray**

**Gwen Yansen**

**Kathryn (Katie) Jensen**

**Dan S. Miller MD**

**San Juan School  
District #149**

**L. Wayne "Corky" North**

**Mary Kalbach**

**Miriam "Molly" Madden**

**Lopez School District #144**

**Edmund C. Bold  
(Skip Bold)**

**George Reid (Emily Reid)**

**Victor J. Capron**

**James R. Corrie**

**Jane S. McIlroy**

**Emelia L. Bave**

**Wesley Ray**

**Martin L. Schuehle**

**Robert E. Ploghoft**

**Bernice Steinmetzer**

**Thorsten (Torry) Johnson**

**Edith V. Dickinson**

**St. Davids Mission**

**St. Francis Church**

**Elaine Strong Hughes**

**Olga Water Users Inc.**

**Grant E. Riley**

**E.W. Chevalier (Frances  
Chevalier)**

**Stanley P. Reitan**

**Thomas Rodrique**

**James C. Johnson**

**Miles McCoy**



*1993 Cable Lay Project, Steve Horn Photography*

OPALCO is collecting the stories of its longest-standing members and will publish them at [www.opalco.com](http://www.opalco.com).

OPALCO realizes that this list may be incomplete and/or have inaccuracies. Please contact Suzanne Olson at 376-3537 if you have information or stories to share.

This list will continue to grow on OPALCO's website through 2012 and beyond.



# Coffelt Family

## *First Recorded Membership*

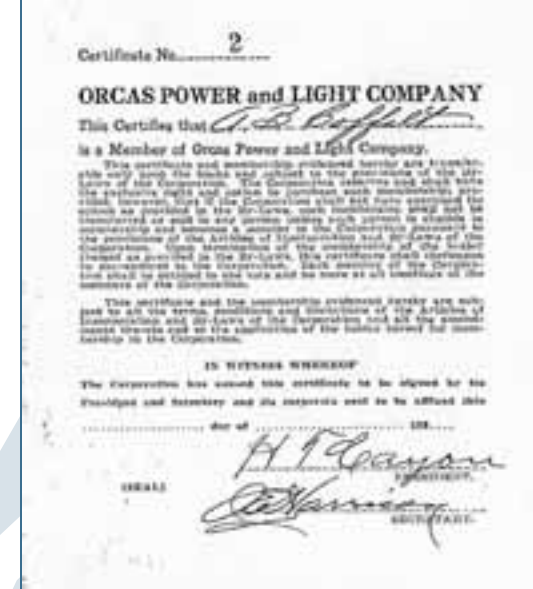
Vern Coffelt comes from a long line of OPALCO founders and supporters. His grandfather, John Gus “JG” Smedberg, a pioneer Orcas farmer known for his prize-winning apples and pears, was instrumental in connecting the Orcas Power and Light boosters with the federal Rural Electric Administration in the ‘30s. Vern’s father, Amos Coffelt, was one of the original twelve signers of OPALCO’s documents of formation, and was on the first OPALCO Board. In the ‘50s, Vern’s cousin Clarence Coffelt worked in the OPALCO office. And in 1960, Vern himself joined OPALCO as a lineman. He retired as Superintendent 35 years later.

Vern was born in 1930 and grew up in a farmhouse on the south slope of Orcas’s Turtleback Mountain. Unlike many of their neighbors, the Coffelts had power years before OPALCO ran a line out to West Sound. Amos had always been interested in electricity and had rigged a Pelton water wheel on the stream that ran down the hill

to the road. There was quite a good drop there, and with pipe scavenged from a logging camp up the mountain, they were able to run a DC generator strong enough for a couple of lights for the house and the chicken coop. When they didn’t need the lights, Vern or his brother would hike down the hill to shut off the water flow to save water, which seemed like a pretty long trek at the time.

Before electrification, many people on Orcas were making their own power. Most systems were battery-based with either wind chargers, or Delco or Kohler home-use generators. After electrification, most of those systems fell into disrepair, except among the power enthusiasts. In fact, over the years Amos Coffelt’s Pelton wheel made its way around the island to George Keyes’ place (now Glenwood Springs), then Ernie Manley’s, before finally ending up back at Vern’s, where it remains in the barn.

Back when OPALCO was still trying to get the street, Vern remembers Amos going around to the neighbors, trying to get folks to sign up in advance for power if it came as a show of financial support. “Some folks wouldn’t sign on; they couldn’t see what use they would have for electricity. But, of course, eventually everybody did come around.”



*First OPALCO membership certificate on record.*



*Amos Coffelt (standing),  
seated man unidentified*

His first work for OPALCO was helping run the overhead line around Crane Island. “What I liked best about working for OPALCO was the diversity of things I got to do, everything from cutting brush and right-of-way clearing to lineman work to laying or fixing submarine cable. In the early days, we didn’t have a lot of resources, so we made the best of things with what we had, and had to be creative.” One of his favorite memories is just spending time with his agreeable boss, Eber Bruns, hiking through the woods on Blakely Island, deciding where the power lines would cross the island.

Asked what it was like to be a lineman’s wife back in the day, Vern’s wife Sidney remembers the phone ringing off the hook at all hours during outages. “We were about fourth on the list of who to call if there was an outage—it was printed right there in the phone book, who to call. If the first number was busy, you called the next one. And of course, all your friends skip the list and just call you. People

*Amos Coffelt and boys, circa 1930.  
Vern is the infant*



would say, ‘Where’s my power! Why don’t you get it on?’ Well, I didn’t know any better than anyone else what was going on. But at least back in those days, people really understood how hard the lineman worked and respected them and their dedication. They had to go out in absolutely the worst weather, really dangerous conditions. Today people don’t seem to think about that as much.”

For their contributions of brain power, muscle and grit to the OPALCO cause, we gratefully acknowledge the hard work and ingenuity of three generations of Coffelts.

## Mildred Sandwith

*Member Family Since 1943*

Mildred was born and raised in Friday Harbor, where her grandfather was a doctor and owned the local pharmacy. As the youngest of four, Mildred did not have many chores to attend to, but she remembers her brothers cutting wood for the family’s wood-fired cook stove, and the kerosene lamps that provided light. Mildred’s father traded some of the family land to the L.T. Mulvaney’s Friday Harbor Light and Power Company in exchange for free power, but the agreement evidently wasn’t transferred when OPALCO purchased the company in 1941.

Mildred went to Spokane for her secondary education. When she returned, she married and moved out to the country on San Juan Island, to a house with OPALCO power. Soon after Bonneville



*Three generations: Gunnar, Roger and Finn Sandwith with Mildred Sandwith on the occasion of her 90th birthday at the 74th Annual Meeting*



*Mildred, recalling her letter to then Senator Jackson: 'not one cent!' 2012*

Power laid its first submarine cable to the island, Mildred remembers Senator Henry Jackson making a speech and, perhaps jokingly, telling islanders that they each owed him \$10 for his role in getting the Bonneville Power out to the islands. Mildred took exception to this and wrote a scathing letter to the editor of the Friday Harbor Journal, saying “We don’t owe you one cent!”

During the big snowstorm after the Christmas of 1968,

Mildred and her husband had no power for two weeks and had to pack water from town to water their cows. Finally the power came on, but for just two hours out of each 24 until the cable was repaired.

Mildred has five children and 14 grandchildren. She is especially proud of her grandson Roger Sandwith, who is a Journeyman Lineman for OPALCO on the Orcas Island crew. Roger, also a San Juan Island native, came up through OPALCO’s Apprentice Program.

Looking back, Mildred appreciates running water and the microwave oven as great advances brought by electricity—but nothing as much as watching tennis on television. An avid tennis player herself in her younger days, she doesn’t like to miss a match.

## Jane Barfoot-Hodde

*Member Family Since 1937*

Jane is a long-standing member of OPALCO herself, having joined the Co-op with her late husband Jack in 1947. She is also a member of the Willis family, who first came to Orcas Island in 1887 and joined the Co-op as soon as they could, in 1937. Jane was born in 1913 in the family home on the Willis homestead on the east side of Orcas Island; she spent her childhood there, going to school in the one-room schoolhouse.



*Jane at home in 2012*

Heat in the Willis home was provided by a wood stove, hot water was heated via the wood cook stove in the kitchen, and a cooler—no refrigerator—kept perishables cool with air circulation. Jane remembers, “When we got the OPALCO power on at our house, it was so wonderful to have bright light.” The family ordered a Crosley radio with “three big dials” for entertainment and news.



Jane loved attending the OPALCO Annual Meeting on the ferry. “That was my meeting,” she recalled. “You needed to go, simply because it was my OPALCO.” She remembers that there was always a nice lunch, in addition to the business meeting and interesting speakers. It was a great way to see folks from all around the islands at a time when Eastsound was hours away by horse and buggy.

Jane remembers the last time the big diesel generator plant was fired up by Buyral Madan, in 1982. “They could generate enough power to run the Island Market,” she recalled, “and were experimenting to see if they could keep the schools open and what else they could cover in case of a big outage.”

Jane has been a dedicated volunteer for the Orcas Island Museum for years. She played a key role in the Oral History project, documenting the life stories of island elders. OPALCO is honored to recognize Jane and her family for their special role as long-time member-owners.

### **DO YOU HAVE A STORY TO SHARE?**

**We are collecting OPALCO stories and will continue to publish them on our website at [www.opalco.com](http://www.opalco.com). Please contact Suzanne Olson at 376-3537 if you would like to share a story, photos or memorabilia from OPALCO’s history. It’s not too late!**

**OPALCO honors our longest-standing current staff members, all of whom have given at least 20 years of service:**

**Rex Guard, Journeyman Lineman (33 years)**

**Todd Shaner, Manager of Operations (31 years)**

**Steve Dengler, Journeyman Lineman (27 years)**

**Beth Anderson, Manager of Technical and Energy Service, Island Network (24 years)**

**Karin Becker, Purchasing Agent (23 years)**

**Terry Turner, Engineer (22 years)**

**Kerry Anderson, General Foreman (21 years)**

**Mark Tilstra, Manager of Engineering (21 years)**

**Rich Lartz, General Foreman (20 years)**

**Kevin Zoerb, Journeyman Lineman (20 years)**



*Rex Guard, Steve Dengler, Kerry Anderson, Beth Anderson*

# OPALCO Broadband Initiative

## *Bringing high speed connectivity to the islands*

OPALCO has joined with a coalition of county stakeholders to investigate the feasibility of providing expanded broadband (high-speed Internet) services to San Juan County. OPALCO launched a member survey and commissioned an engineering feasibility study in late 2011. The study was conducted by a telecommunications consulting firm, and the results are encouraging. Islanders need faster, more reliable Internet connections, and the study suggests it can be done here—despite the islands’ challenging topography. The OPALCO Board has not made a decision to go forward but has approved more targeted studies to further explore the project.

The 2011 study proposes a solution that would extend OPALCO’s high-speed network to the general public by building out the fiber-optic lines to a set of wireless end points, which would then provide high-speed data communications to homes and businesses. This expanded network would help OPALCO modernize its monitoring and control of the islands’ electric grid, provide “smart grid” features in support of energy conservation efforts—and the same “hybrid” fiber/wireless network could provide high-speed Internet access to most of San Juan County. The project cost is estimated at approximately \$18 million, which OPALCO would finance using low-cost loans from the U.S. Dept. of Agriculture’s Rural Utilities Service.

These wireless facilities could also meet other critical needs for our community through joint-use agreements with other organizations. OPALCO is working with the Emergency Medical Services, Sheriff, and fire departments to design a system that will help fill gaps in the two-way radio coverage of these first responders. Cellular phone coverage in the islands could be improved as well, as OPALCO would offer access (power, fiber optics, and space on the pole) to wireless carriers.

The results of a survey conducted last fall showed that our members strongly support making OPALCO’s fiber network more widely available. With this membership support, and the positive results of the feasibility study, OPALCO is hopeful that it can move forward, but there are issues still to be resolved. We are currently working on these next steps:

**Due diligence. The feasibility study involved a high-level analysis. More detailed reviews of both the technical and business plans are now under way.**

**Licensing of radio frequency. The wireless component of the broadband implementation will require that OPALCO acquire an FCC license for appropriate radio frequencies. Several possibilities are being explored.**

**Coordination with San Juan County. This is a large and expensive project, so OPALCO needs to be in sync with the County regarding land use, access, and permitting. We are working with the County to ensure that this system can be built within the County's regulatory framework.**

The goal of OPALCO's Broadband Expansion Project is to create a joint-use network that will deliver all of these benefits for the good of the community: better emergency services communication, improved electrical system reliability, high-speed Internet service, and the potential for improved cell phone coverage. We will continue to work hard with our partners throughout the County to build an efficient and effective system that would meet our needs and deliver the greatest possible benefits at the cost of service: it's the cooperative way. For the most up-to-date information, check in with us at [www.opalco.com](http://www.opalco.com).



*Foster Hildreth,  
Assistant General Manager*



*Journeyman lineman Roger  
Sandwith installs a fiber  
microwave repeater at the  
OPALCO headquarters*



# Energy Services

*Save energy, save money*

The Energy Services Department has a big message to deliver and needs every member's ear and assistance. The message is familiar. It was the same last year and it will be the same far into the future...

**"Everything that we do to conserve energy, use energy more wisely, or create our own energy contributes to the sustainability and well-being of the Co-op community."**

This past year, the Energy Services Department employed a multitude of tools and many creative approaches to reach our Co-op members. Energy Services staff dressed up in energy superhero

costumes and engaged the public on street corners and in ferry lines, provided presentations around the county at senior centers and service clubs, and gave away an iPad to encourage members to subscribe to OPALCO's "Sharing the Load" blog during the launch of the enhanced Energy Services website.

In 2011, OPALCO members reported approximately 805,274 kWh in energy savings. This number reflects those individuals and business owners who installed energy-saving measures, such as installing more-efficient lighting, adding insulation, or upgrading appliances. This number does not reflect some of the most effective energy-efficiency practices that members are adopting to make a difference in their energy bills—simple things like turning down the thermostat and wearing a sweater to conserve energy.

Here's some exciting news for those who are able to take simple steps to save energy, as well as those who can afford to take bigger steps: In late 2012, OPALCO will be rolling out a new online tool that will allow members to track their energy usage on a daily basis. With this tool, members can interactively see the energy saved after turning down the thermostat or lowering the water heater temperature. When new insulation or lighting is installed, members will be able to track the savings. Stay tuned for more information on this exciting development.

Please help us in continuing to spread the Energy Efficiency message. If you have benefitted by an appliance rebate or had a Home Energy Snapshot, share your experience with your friends and neighbors. Together we save energy and money!

*Middle-school girls build a solar-powered Lego lawnmower in Science Class funded by the OPALCO Energy Efficiency & Conservation Education Grant*





## Member Owned Renewable Energy (M.O.R.E) Program

*Earthball wind generator installed on  
Orcas Island*

OPALCO's M.O.R.E. Program puts member investments in green power to work with local renewable energy producers who are interconnected to the cooperative electric grid. The result is a local portfolio of renewable energy that amounted to 180 megawatt-hours (MWh) of clean power in 2011—enough to supply about 225 island households for a month. An independent committee of OPALCO members oversees the M.O.R.E. Program and distributes financial incentives to local producers.

There are two ways members can participate in the program: as investors or as producers.

Investors opt in for recurring monthly or one-time contributions to support the M.O.R.E fund. OPALCO currently has 458 member-investors contributing at least \$4.00 toward green power each month. In addition, 45 members are currently “All Green,” contributing \$0.04 per kWh consumed, in addition to their regular

monthly charge. One hundred percent of contributions goes toward supporting local green power! Contact Member Services at 376-3500, or check the “green power” box on your paper bill and become an investor—it’s that easy!

Producers are members who install solar, wind, or micro-hydro systems (generators) interconnected to OPALCO’s cooperative power grid. Producers receive incentive payments based on energy production. The incentive rates range from \$0.20 to \$0.30 per kWh produced based on the year the system is connected, with maximum limits of 4,000 kWh for residential members and 10,000 kWh for commercial members. All incentive payments come from M.O.R.E contributions received from member-investors. Incentives paid in 2011 totaled \$5,493 for ten systems producing nearly 24 MWh. Together with all of OPALCO’s more than 60 interconnected renewable generators (most installed and incentivized before M.O.R.E. was established), our members produced 180 MWh of clean and renewable energy in 2011. To find out more about having your home or business become a producer, go to “Renewable Generation” on OPALCO’s website at [www.opalco.com](http://www.opalco.com), or contact Energy Services at 376-3586. In addition to the M.O.R.E. utility incentive, there are also federal and state incentives available!

Working together through energy efficiency, we can make a difference in managing our load and keeping rates lower. It’s the co-op way—members supporting members and investing in local green power!

**For more photos, stories, history and videos,  
visit [www.opalco.com/history](http://www.opalco.com/history)**

# Nourdine Jensen Cooperative Youth Scholarship Program

*For a brighter tomorrow*

The first annual Nourdine Jensen Cooperative Youth Scholarship Program (NJCYSP) awards were presented in May of 2011. The three student winners were Susanne Mietzner of Orcas High School; Samantha Swanson of Lopez Island, who attends the Spring Street International School; and Connor Smith of Friday Harbor High School. The OPALCO Board of Directors established the scholarship program in honor of Nourdine Jensen, a long-time board member and advocate for the Cooperative.

Each student received a \$500 award and an all-expense-paid trip to the Co-op Youth Rally, a week-long



leadership camp held at the College of Idaho. Each also took home top honors and additional scholarship dollars from the Idaho Consumer-Owned Utility Association.

“This was a valuable experience for our students,” said NJCYSP Coordinator and Youth Rally chaperone Suzanne Olson. “The students not only learned a lot about the electrical utility world, but got hands on and took leadership roles in building a grass-roots action group, forming their own co-op, and testing it against realistic scenarios. They balanced the work with a lot of fun networking with about 70 peers from rural electric co-ops representing Alaska, Oregon, Wyoming, Utah and



Idaho.” Olson added, “OPALCO’s students were stellar citizens and ambassadors for the Co-op; we were the only co-op to take home a scholarship award for each student who participated. In addition, Connor Smith was elected by his peers to come back in 2012 to plan and direct the Rally as a Youth Director.”

“The Youth Rally was a fantastic experience!” says Susanne Mietzner, 2011 Scholarship winner. “I learned a lot about how the political process and co-ops work. I made some great friends that I’m still in touch with, and we had a ton of fun together. I’m pretty shy but I was welcomed with open arms and made to feel I was a part of something amazing.”

The Nourdine Jensen Cooperative Youth Scholarship Program is open to sophomores and juniors of OPALCO member households. The Rally, established in 1986, is hosted by the Idaho Consumer Utilities Association, which also sponsors additional scholarship awards and leadership opportunities for participating students who demonstrate exceptional leadership qualities during the Rally. The 2012 NJCYSP winners will be announced at the June 21st OPALCO Board meeting in Eastsound.



*right: 2011 OPALCO Scholarship Award Winners: Susanne Mietzner, Connor Smith and Samantha Swanson*

*below left: 2011 Youth Rally students on steps of Idaho State Capitol*

*below right: Students at the State Capitol*





# OPALCO's 74th Annual Meeting

*May 14, 2011*

The Washington State Ferry Elwha was crowded with more than 325 people who attended the 74th Annual Meeting. Voter turnout was robust, with a total of 1300 ballots cast for two board positions in District 1 (San Juan, Brown, Henry, Pearl and Spieden Islands); 1165 absentee ballots were submitted in advance. The two successful candidates were George Mulligan and Vince Dauciuas, both of San Juan Island. Board officers elected were Chris Thomerson as President, Jim Lett as Vice President, and John Bogert as Secretary/Treasurer. OPALCO members were treated to a hearty gourmet brunch by The Bay Café. The names of six members who sent in their absentee ballots were drawn for \$50 credits on their next OPALCO bills. The lucky winners were Richard Hobbs, Gertrude Ahbel-Dallas, Ross Brown, Paul Chiles, Betty Bostrom and the Hull Family LLC.









# OPALCO At Work

## *Roche Harbor Project*

The Roche Harbor Transmission Rebuild Project on San Juan Island began in 2010 with the clearing of the right-of-way, access acquisition, and the replacement of 26 transmission poles due to infestation and rot. The distribution line was then slated for reconductoring, primarily to eliminate line loss on the eight-mile stretch along Roche Harbor Road. This stretch of line, built in the 1970s, connects the Friday Harbor distribution circuit with the Roche Harbor distribution circuit, which serves 2,749 members on San Juan Island.

Reconductoring is the process of replacing the existing conductors (wire) with new, larger and higher-capacity conductors. OPALCO's line crews worked on hot (live) lines on this year-long project, ensuring constant power for members along the route. Trained linemen use fiberglass hotsticks to work on energized lines safely—a big challenge in itself. The hotstick is insulated and has a variety of attachments, allowing the lineman to work at a safe distance from the live fixtures he is installing or removing—for example, loosening a nut-and-bolt assembly on a crossarm while another lineman holds the live conductor with another hotstick, keeping the conductor from grounding or arcing. One lineman described this process as “tying your shoes with chopsticks.”

The top circuit of these large poles has a three-phase transmission voltage of 69,000 volts; the lower circuit is OPALCO's three-phase

distribution circuit, operating at 15,000 volts. The transmission circuit routes power to the Roche Harbor substation, which provides distribution power to serve our membership throughout the Roche Harbor area and outlying areas of Friday Harbor proper. This tremendous effort will now permit adequate power to be rerouted in case of outages or maintenance necessities at the Roche Harbor substation.

In addition to the electrical work, a fiber-optic cable was installed to the Roche Harbor substation, giving OPALCO the ability to complete the Automated Meter Reading (AMR) rollout on San Juan Island.

“This has been a real team effort,” said Line Foreman Bob Belcher. “Just about every lineman in the Co-op from all three islands has put time in on this job.” The work was completed in December of 2011.



*OPALCO crew at work on the Roche project: Sean Parsons, Luke Furber, Bob Belcher, Kai Burlison, Tim Savage and Brian Swanson*

# Member Services

*Here to serve our Co-op  
Member/Owners*

The primary goal of the Member Services team is to provide friendly support and helpful information to our members. This past year brought positive changes on the technology front to greatly improve the tools we use to serve members. These include:

## **Final deployment of Automated Meter Reading (AMR)**

**meters...** All members now have the new AMR meters, which provide accurate routine and on-demand meter readings right from our desks. As a result, OPALCO staff members now have daily meter readings at their fingertips to analyze historical consumption when resolving bill inquiries from members.

**Payment Gateway...** An internal payment processing system upgrade now provides state-of-the-art security to an already secure environment for member financial information. Members

can continue to enjoy the convenience of paying via Autopay, online at [www.opalco.com](http://www.opalco.com) or by phone, with confidence that their financial information is secure.

*Ginny Reagles,  
Member Service Representative*

In the coming year, there are additional improvements and technology upgrades planned to benefit members as they manage their accounts:

**Improved telephone and email services for notifying members about outages, service events, and other important and timely announcements**

**After-hours telephone access to account information and bill paying**

Rest assured - while we continue to take advantage of industry best practices, our friendly staff is still available to talk with you in person. We believe improving access to information while maintaining the personal service we value as a cooperative is the key to member satisfaction. Call one of our Member Services Representatives Monday through Friday, 8 a.m.– 4:30 p.m., for account inquiries, a complimentary billing and consumption analysis, or an update on our ever-evolving energy programs.

*Amy Saxe,  
Member Services Supervisor*



*Marilyn Goff and Jeanne Fodor,  
Member Services Representatives*



# COMBINED BALANCE SHEETS

For years ending December 31, 2011 & 2010

	2011	2010		2011	2010
	unaudited	audited		unaudited	audited
<b>ASSETS</b>			<b>EQUITIES &amp; MARGINS</b>		
Utility Plant	81,629,317	77,019,821	Memberships	\$60,510	\$58,475
Less accumulated depreciation & amortization	32,376,495	30,501,824	Other equities	2,948,477	2,458,133
			Patronage capital	38,045,861	36,046,269
<hr/>			<hr/>		
Net utility plant	49,252,822	46,517,997	Equity & Margins	41,054,848	38,562,877
<b>OTHER PROPERTY AND INVESTMENTS</b>			<b>LONG-TERM DEBT</b> (LESS CURRENT MATURITIES)		
Non-utility property (net)	194,402	233,754	RUS mortgage notes	11,512,470	9,157,377
Investments in associated organizations	908,190	883,687	CFC mortgage notes	2,812,122	2,939,231
			<hr/>		
	1,102,592	1,117,441	Long Term Debt	14,324,592	12,096,608
<b>CURRENT ASSETS</b>			<b>CURRENT LIABILITIES</b>		
Cash and cash equivalents	4,054,395	2,478,786	Accounts payable	1,548,452	1,347,428
Accounts receivable	2,690,548	2,065,759	Customer deposits	67,922	60,866
Materials and supplies	1,333,658	1,217,892	Accrued liabilities	937,926	909,094
Other current & accrued assets	110,144	88,498	Current maturities of long-term debt	485,380	485,380
			<hr/>		
Total current assets	8,188,745	5,850,935	Total Current Liabilities	3,039,680	2,802,768
<b>TOTAL ASSETS</b>	<b>\$58,544,159</b>	<b>\$53,486,373</b>	<b>DEFERRED CREDITS</b>	125,039	24,120
			<hr/>		
			<b>EQUITIES, MARGINS AND LIABILITIES</b>	<b>\$58,544,159</b>	<b>\$53,486,373</b>

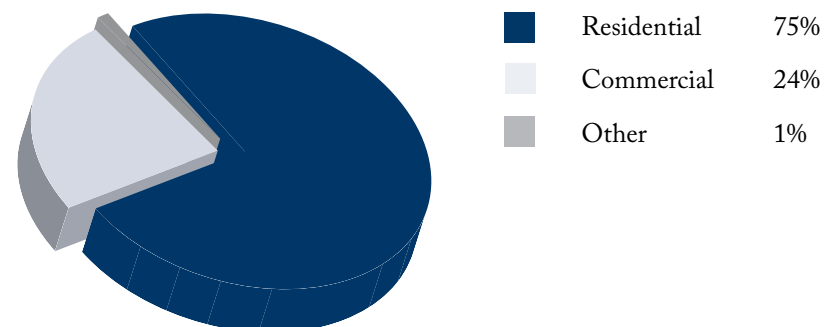


# STATEMENTS OF OPERATIONS

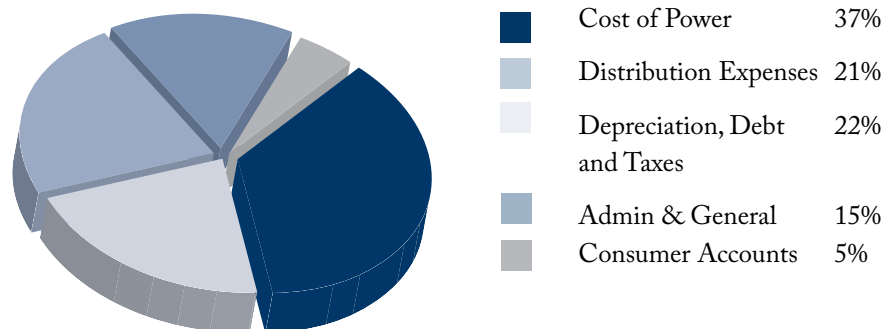
For years ending December 31, 2011 & 2010

	2011	2010
	unaudited	audited
<b>OPERATING REVENUES</b>	\$21,169,199	\$18,667,312
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<b>OPERATING EXPENSES</b>		
Cost of purchased power	6,680,856	6,458,080
Distribution expense	3,817,710	3,603,887
Consumer accounts	835,247	936,561
Administrative and general	2,605,413	2,459,678
Depreciation and amortization	2,507,468	2,313,197
Taxes	869,518	813,110
Interest expense - other	227,223	293
Interest on long-term debt	733,675	684,822
<hr/>		
Total Operating Expenses	18,277,110	17,269,628
<hr/>		
Operating margins	2,892,089	1,397,684
Non-operating margins	200,004	82,881
Patronage capital credits	42,563	31,419
<hr/>		
<b>NET MARGINS</b>	<b>\$3,134,656</b>	<b>\$1,511,984</b>

2011 REVENUE



2011 EXPENSE



# Project PAL

## *Round Up Your Bill*

The PAL program was developed to help low-income OPALCO members pay their winter heating bills. Project PAL is funded through voluntary member contributions. Members contribute by rounding up their electric bill payment amounts to the next whole dollar and by direct donations. An independent volunteer council made up of OPALCO members meets to evaluate each application for PAL funds and awards grants by unanimous vote. Half of PAL funds is designated for seniors and disabled persons of low income; the remainder is made available to any member who meets the guidelines ([www.opalco.com](http://www.opalco.com)) and whose application is approved by the volunteer council. Thanks for all your support! During the 2010–2011 heating season an average of 2980 members rounded up their payments each month for a total of \$12,384.13.

An additional \$7,144.35 was received from members in monthly and one-time gifts. 234 members received PAL grants for a total of \$34,736.38 PAL funds disbursed (includes additional funds rolled over from 2090–2010). Of the 234 members who received PAL grants, 120 members were senior or disabled.



### **WELCOME NEW OPALCO EMPLOYEES IN 2011**

Susan Evans, Member Services Representative and Project PAL Coordinator & Katie Maxwell, Engineering & Operations Administration Specialist.

# *Thank You!*

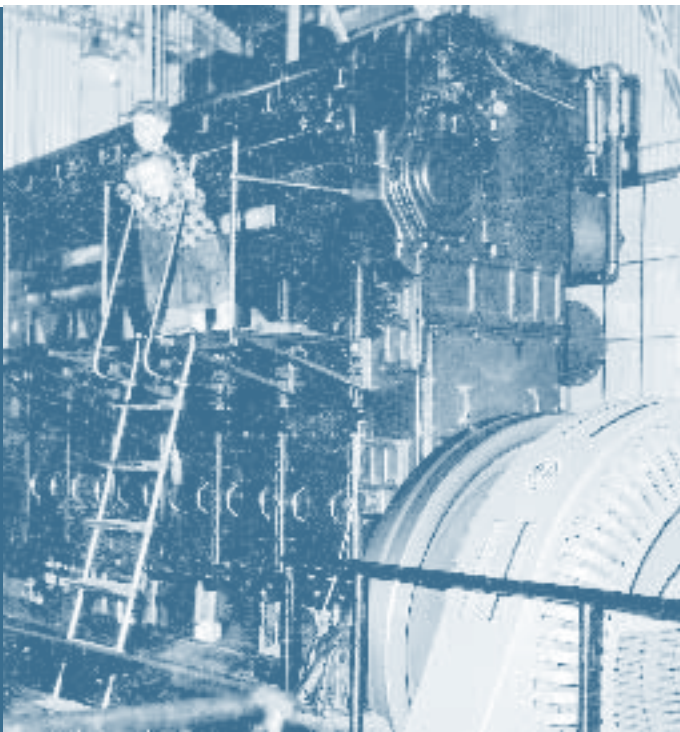
OPALCO is grateful to Buyral & Ellen Madan for their generosity in sharing materials from the Bruns and Madan family archives. The Co-op's institutional memory is indebted to Ellen's careful stewardship of her family albums and collections.

# An OPALCO Legacy Story

## *The Eber Bruns - Madan Family*

Eber and Atlanta Bruns, along with their children Ellen and Don, moved to the generation plant on Mt Baker Road on May 1, 1939. Eber, a diesel mechanic on tugboats, was hired to run the two diesel generators that supplied power to Orcas Island. His beginning salary was \$100 per

*Madan children Rich and Sandy inspect the new Superior generator*



month and included living quarters that he built himself at the plant. He also received all the electricity he could use for free.

In 1940, General Manager J.E. Harrison wrote about Eber in a letter to the REA: "He has taken excellent care of the plant and I am sure you can appreciate that it takes an unusual disposition to be able to maintain service 24 hours per day, day in and day out, with only one day off per week, and keep agreeable enough to be fit for company."

Ultimately Eber would end up as Chief Engineer for Orcas and Lopez islands, serving also as a lineman in charge of Force Account (power system) construction and all maintenance of both lines and generating plants. He installed the generating plant at Lopez and much of the switchboard improvements and additions in the main plant at Eastsound. In the early years, power was turned off between



*Eber and Atlanta Bruns*

10:00 pm and 6:00 am. Eber would blink the lights at 9:55 pm to give the poker players a warning that the lights were going off! During WWII, he maintained an armed guard at the plant. Eber retired May 1, 1967.





*Rich, Buyral and Barry Madan at the plant.*

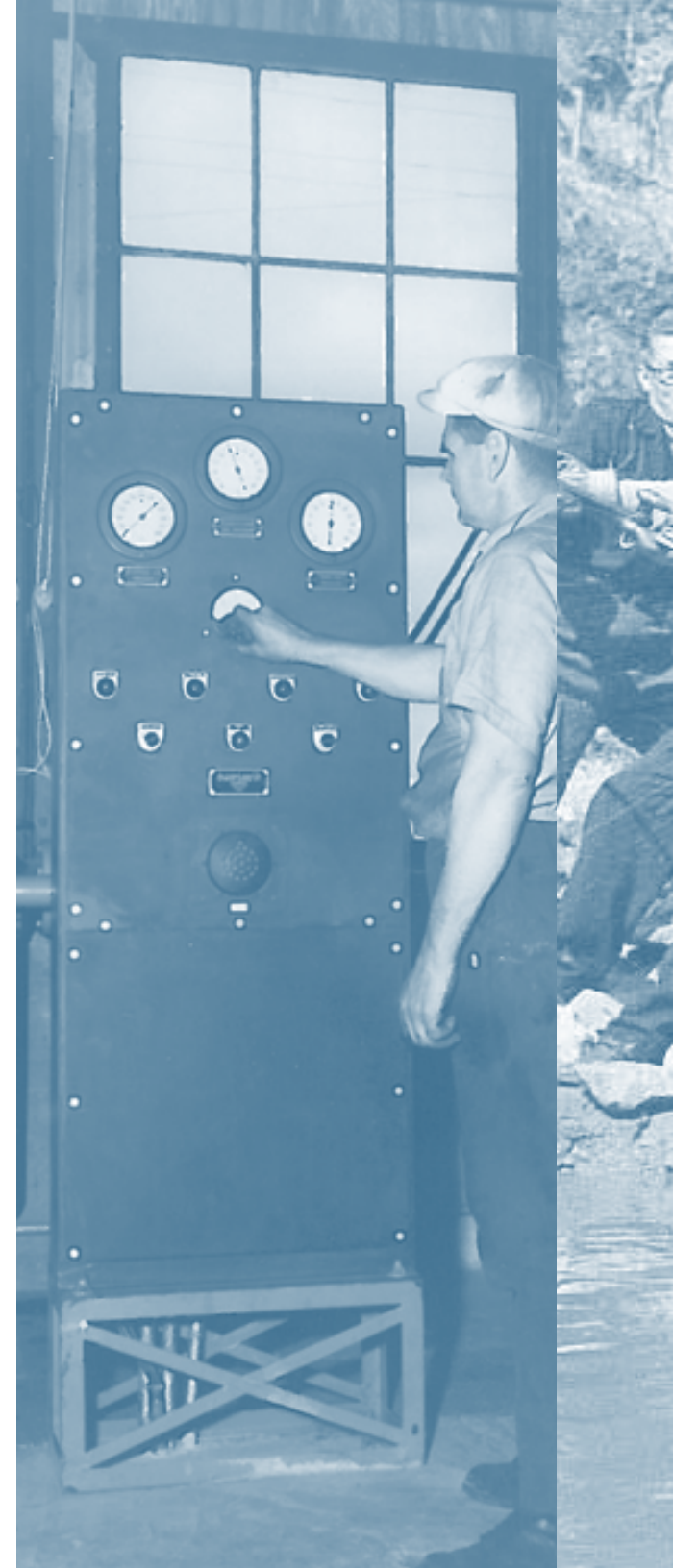
Meanwhile, Eber's daughter Ellen married Buyral Madan, who began full-time work for OPALCO on February 1, 1958. Buyral's first part-time job was nailing the numbers to the poles on Shaw. The whole family would tag along as he nailed in the numbers, getting a whopping 10 cents per pole. He worked as a lineman, spliced the submarine cables, and eventually became



the operations/plant manager. Buyral, too, ran the diesel generators, working closely with Eber. One time a small submarine cable from Orcas to Blakely went bad. It was so small that Eber and Buyral pulled it up by hand from a rowboat—they laid it across the boat and repaired the bad spot, then tossed it back in the water. Even Ellen got in on the act, answering the phones when the power went out and dispatching her husband and other linemen to search for and fix any outages. Buyral's rise to the position of Superintendent was especially impressive as he was (and is) completely deaf. Buyral retired on June 28, 1990.

Beverly Madan, Buyral and Ellen's daughter-in-law (married to Barry), began work at OPALCO in 2008, long after her father-in-law retired. Bev is the Executive Assistant to Randy J. Cornelius, General Manager, taking minutes at the Board meetings, providing office support to Randy and the Board of Directors, and helping plan the annual meetings.

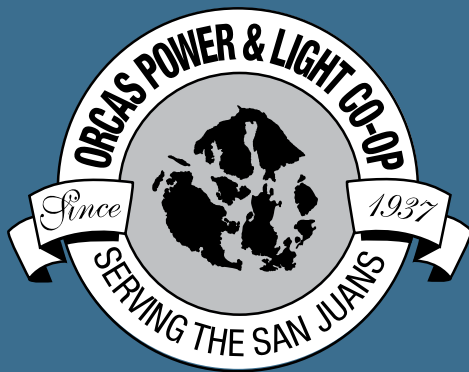
*left: Barry, Ellen and Buyral Madan at the 2010 Annual Meeting. right: Eber Bruns at the controls*











For more photos,  
stories, history  
and videos, visit  
[www.opalco.com/history](http://www.opalco.com/history)

