



THE ACADEMY OF ELECTRICAL CONTRACTING

PAPER PRESENTED BY FELLOW
TIMOTHY J. GAUTHIER ('98)

AN UNCOMMONLY HARMONIOUS RELATIONSHIP
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS
LOCAL UNION 48
AND
OREGON-COLUMBIA CHAPTER, NECA

JUNE 2013

The history of our great industry is as important as the history of our great Nation. While researching our 100 years of the NECA/IBEW relationship in Portland, Oregon, we unfolded a rich legacy of labor-management cooperation, noted by our research team led by Allen Guggenheim as an “uncommonly harmonious relationship.”

Our unique heritage includes many historical references, such as the original Northwest Electrical Power Plant built in 1888, in Astoria, Oregon (which rivaled only San Francisco on the West coast during this time).

The first hydro-electrical plant and alternating power transmission system installed in the United States at Willamette Falls, Oregon, 15 miles south of Portland bringing the mystery of electricity in 1889 to a burgeoning new community.

The first electrical contractor, Morrison Electric, established by entrepreneur Sam Jaggard in 1904, taking on the largest electrical installation the very next year, wiring the 100th Jubilee celebrating the Lewis & Clark Exposition in Portland, Oregon, demonstrating the power of electricity to over 3 million visitors during the five-month celebration. His later endeavor was to establish the Oregon Electrical Contractors Association in 1911.

The following pages are a brief summary of the 100 – page story of the Oregon-Columbia Chapter, NECA and IBEW Local 48 titled “100 Years of a Powerful Partnership”. The history is displayed by decade on rich Douglas Fir wooden panels connected with knob and tube wiring at the bottom and conduit at the top. The exhibit which opened May 13th and runs to August 4th, features artifacts, local historic photos and interactive displays. This introspective exhibit shows the unique partnership between NECA and IBEW Local 48 and how they’ve come to set industry standards across the state and

the country. Along with the NECA\IBEW milestones, the exhibit also looks at NECA\IBEW Local 48’s efforts in diversity, leadership, apprenticeship, World War II and community involvement.

I would highly recommend to all, the importance of researching and unveiling your own history whether that be your firm, your Chapter or the Local IBEW. The treasured riches you will uncover give life and breath to this great industry that will be enjoyed by all for ages and ages.



About Tim Gauthier

Tim Gauthier has served as Executive Manager of the Oregon-Columbia Chapter of the National Electrical Contractors Association (NECA) since 1982. Gauthier started his career at NECA Headquarters in 1975. He was assigned to the Midwestern Region and in 1976 to the Kansas City Chapter, NECA. Mr. Gauthier graduated from Southern Utah University in 1975 with a B.S. in Business Administration.

Gauthier is responsible for negotiating and achieving labor relations support for six separate labor agreements with IBEW Local 48. He is instrumental in government affairs and in 1990, he was appointed by the Governor of Oregon to serve on the Premium Equity Task Force for Workers' Compensation. In 2005, he was appointed by the Oregon Labor Commission to serve on the Prevailing Wage Taskforce on Private Public Development.

Gauthier has provided leadership and crafted innovative solutions that have been adopted as national models for success. He became a Fellow in the Academy of Electrical Contracting in 1998 and has served as a speaker for the International Foundation of Employee Benefit Plans.



"The Electrical Worker" January, 1893

PROMISE OF ELECTRICITY

In 1905 the Lewis & Clark Exposition in Portland demonstrated electricity was no longer a novelty. Three million attendees of the five-month show learned that electric lights, appliances, pumps and other equipment were going to replace candles and kerosene, outhouses, and horse carriages.

Leading the electric revolution were forebears of the Oregon-Columbia Chapter of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local Union No. 48.

They included electricians like future NECA contractor Samuel I. "Bud" Jaggar. He and other electricians, including members of Local 48 predecessor IBEW Local 317, which was formed in 1904, bent pipe and ran wire for lighting fixtures along the walkways of Guild's Lake. They wired the 23 major fairgrounds buildings, including the Forestry Building, brilliantly lit with 3,000 light bulbs.



The electricians (electric chandeliers) that lit Guild's Lake and outlined the Lewis and Clark Exposition demonstrated the skill and necessity of a new industry, that of the electrical contractor and his electricians.



The original 14 signers of the IBEW Local 48 charter included Andy Peachey, H. Dickman, Homer Gifford, J.D. Harkleroad, P.A. Spire, B.E. Moore, George Collins, M.A. Rhodes, H.Q. Gannon, W.J. LeDout, J.M. Ahearn, John Goodwick, H.L. Averill and W.H. Emrich.



Conductor and motorman of the Williams Avenue electric streetcar in 1904-1905.

1910 Electricity was the rage. Merchants, consumers and manufacturers demanded contractors wire their factories, homes and buildings with electric lights and labor saving appliances, motors, lifts and other machinery, washing machines and electric ranges - business was good.

1911 A handful of Portland area contractors formed NECA predecessor, the Oregon Electrical Contractors Association.

1912 Electricians needed! Streetcars with complicated electric wiring numbered 526 with 250,000 riders, commuting to work, school, shopping downtown, the park atop Council Crest or Oaks Amusement Park. New construction included Portland City Hall lighting, Ice Hippodrome, movie theatre with seating for 2,200, telephone switchboard for Northwest Steel, electrical installation inside Olson & Rowe Transfer Co., and an auto shop and garage on Broadway.

Demand for electricians increased membership of Local 317. They worked in relative harmony with contractors but disagreed how best to run the union. Dissention resulted in the formation of rival IBEW Local 480.

MAY 21, 1913 Members of Local 317 and Local 480 resolved their differences and chartered IBEW Local 48. From 14 charter-signing members, Local 48's ranks swelled to 200. Dozens of electrical contractors, encouraged by Harry Sroufe, superintendent of NePage-McKenny Co., executed agreements with Local 48:

JOURNEYMEN WAGES 22¢ per hour

WORKWEEK 40 hours

OVERTIME 33¢ per hour

HELPER'S WAGE \$1.00 per day



June 28, 1916 Oregon Association of Electrical Contractors and Dealers, taken in front of Stubbs Electric Co. SW 8th and Pine Streets, Portland OR

STRIKELESS INDUSTRY

JANUARY 26, 1920 IBEW Local 48 and the NECA predecessor, Oregon Association of Electrical Contractors and Dealers, adopted the national "no-strike" agreement established by the Council on Industrial Relations (CIR) in Washington, D.C.

Instead of costly strikes, labor and management agreed to submit disputes to the CIR panel. Six panelists from the IBEW and six from NECA would serve as the "supreme court" of the electrical construction industry. It would settle more than 8,000 disputes without a labor strike.

1920-21 Times were hard for electricians and contractors alike. Shipbuilding dried up, unemployment rose, increasing numbers of women entered the workplace, child labor was commonplace and political change made for workplace uncertainty.

OCTOBER 3, 1923 IBEW Local 48 celebrated its 10th anniversary with a gala dinner in Portland's new Labor Temple at the corner of Fourth Avenue and Jefferson, with speeches by state and national officers of the American Federation of Labor (AFL), IBEW President James P. Noonan, and former IBEW President Frank McNulty. Membership: 250



Electric demand in thousands of homes in "streetcar suburbs" on the eastside of the Willamette prompted Northwestern Electric's construction of this Albina warehouse in 1926.



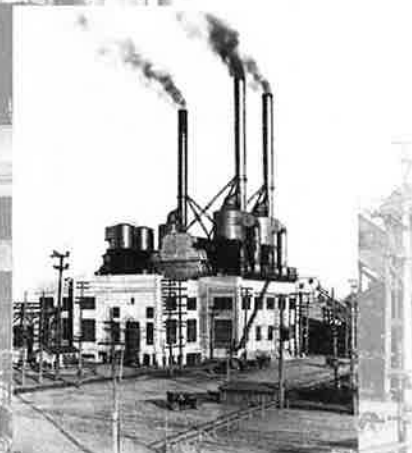
Portland General Electric's store in St. Johns in 1927 featured the latest Thor electrically-driven washing machines and Hotpoint's "Electric Maid" oven and range for the "Modern Mothers" of the Roaring 20's.

1924-1929 Boom Time. Work ignited for the Association of Electrical Contractors and Local 48 electricians with the construction of high rises, amusement parks, churches, garages and factories, and 25,000 new homes, filling in the neighborhoods such as Eastmoreland, Grant Park and Concordia, adding a dozen schools, including Cleveland, Roosevelt and Grant high schools. In 1925 alone, electrical construction was needed in almost 4,000 new buildings, including eight hotels, valued at \$21.8 million. Jantzen Knitting Mills and Pendleton Woolen Mills expanded. Apprentice electricians needed!

MARCH 8, 1923 Demand for skilled electricians prompted IBEW Local 48, Portland Public Schools, Oregon Building Congress and the Oregon Association of Contractors to start an Apprentice School funded by labor and management. It would morph in 1963 into the Metro Training Center, and in 1998 into the NECA/IBEW Electrical Training Center.

"Local No. 48 is a narrow back organization. We have about 250 members, mostly employed in building construction, some fixture men and quite a number of maintenance men. We meet in the labor temple on the first and third Wednesdays . . . Our wage scale is \$10 a day, five days a week and double time for all overtime . . . All of our boys were busy the first part of the winter and we were able to find jobs for quite a number of travelers."

B.H. Graham
IBEW Local Union 48
The Electrical Workers' Journal, February 1928



Heavy electric demand in 1928 by new buildings in downtown Portland - many wired by Oregon Electric Contractors Association members and IBEW Local 48 electricians - caused smoke to belch from Northwestern Electric's Lincoln Street steam plant.

OCTOBER 28, 1929 Wall Street crashed.

THE DEPRESSION'S IMPACT

1930 The Great Depression hit electrical contractors and Local 48 electricians particularly hard.

"While it is very true there have been a number of large jobs . . . 97 percent of this work is done under the most intolerable conditions, and all closed shop: closed to organized labor . . . They have guards stationed at the gates"

Fred C. Ream
IBEW Local 48
The Electrical Workers' Journal, May 1930

1933 Congress passed the National Recovery Act. Yet, recovery remained tepid at best.

The total value of Portland area construction was \$2 million – just 6% of the value of construction 10 years earlier. Local 48 electricians helped build new amusement parks at Jantzen Beach and Lotus Isle, and a dog track in Troutdale.

The Roosevelt Administration announced construction of Bonneville Dam to create jobs, generate cheap electricity and contribute to national security.

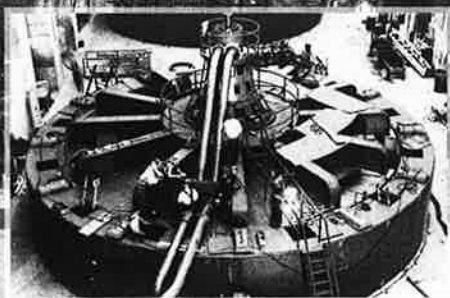
"The official count at the unemployment office at the end of September (1933) was 20,050, which is sufficient to build several dams the size of Bonneville."

Joe H. Lake
IBEW Local 48
The Electrical Workers' Journal, November 1933

1934 President Franklin Roosevelt sailed into Portland through the open bascules of Burnside Bridge on the USS Houston to kick off construction of Bonneville Dam. Thousands of contractors and electricians would find work. There would be little in the way of jobs to cheer about though, when Roosevelt returned to dedicate the dam in late summer, 1937.

1935 Fire destroyed the Oregon Capitol. Replacement created hundreds of jobs for NECA/IBEW Local 48 during a time when new work was sorely needed.

1939 George Pettingell, manager of the Oregon Electric Contractors Association, and Joe H. Lake, business manager for IBEW Local 48 implemented temporary measures to "recapture" the residential market: They cut journeyman's pay from \$1.37 to \$1.00 an hour; contractors' "mark-up" from 25% to 15%. The 1939 initiative anticipated NECA/IBEW Local 48's market recovery efforts in the 1980s.



Electricians and engineers install the first generator inside the powerhouse of Bonneville Dam, March 1938.



IBEW Local 48 apprentice electrician Eric Christenson Sr. started in the trade working on the St. Johns Bridge, shown in this 1930 photo awaiting suspender cables and the installation of its distinctive bridge deck and electric lamp posts. In 1945, Christenson would found his own firm, Christenson Electric. With its ubiquitous red trucks, NECA contractor Christenson Electric remains in operation today, in 2013, under its fifth owner.

WARTIME SHIPBUILDING

1941-1945 Portland shipyards employed 21,000 IBEW Local 48 electricians, one-third women and minorities. Three "dues windows" open 24/7 accommodated members' shift schedules. They worked 60-hour weeks, alongside 100,000 welders and riggers in the six shipyards, including the three largest built by Henry J. Kaiser on Swan Island, St. Johns and Vancouver.

They wired gun fire-controls, rigged aircraft catapults, and equipped for war 1,737 Liberty Ships, T-2 tankers, baby "flat-top" aircraft carriers, attack transports, troop ships and landing craft. At nights, apprentices learned Ohm's Law, and to unplug power before making connections. Promotion from trainee to apprentice to journeyman increased pay from \$.95 an hour to \$1.10, then \$1.20.

MAY 13, 1943 After years of inconsistent affiliation since 1911, contractors led by R.C. Kenney, president, S.I. Jaggar, W.R. Grasle, F.E. Webb and Lawrence Rogers, association manager, formed the Oregon-Columbia Chapter of NECA. Early stalwarts and the year they joined NECA would include W.R. Grasle, 1933, A.R. Johnson Electric, 1939, McCoy Electric, 1945, EC Company, 1946, Friberg Electric, 1947, Christenson Electric, 1950, Cascade Electric, 1950, Sirianni Electric, 1950, Adams Electric, 1951, and Graham Electric, 1952.

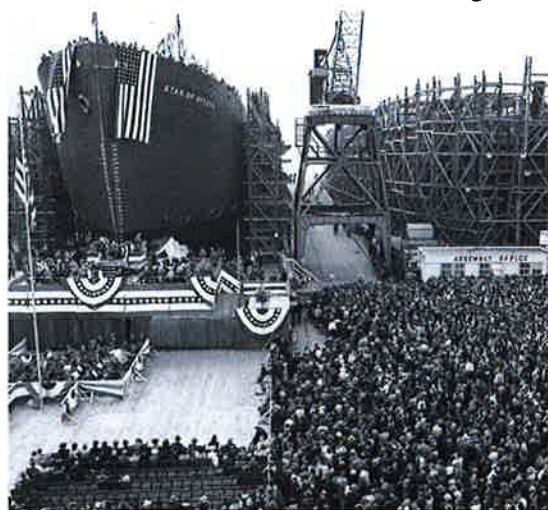
1944 NECA/IBEW Local 48 negotiated contracts involving pay, benefits, education and core values in a "harmonious" way that other IBEW locals were urged to consider in this letter published in the October 1944 issue of the IBEW's national magazine:

"With an announced theme of mutual interest, it was easy to keep on the beam, everything was 'laid on the table, in the open,' and the meetings were the most harmonious, constructive and downright enjoyable that this guy ever attended. The group hopes to eventually establish a labor-management committee . . . Try it, youse (sic) guys; it may work for you if your bosses are also human."

J.A. Erwin
Press Secretary, Local 48
The Journal of Electrical Workers and Operators



Henry J. Kaiser's three Portland-area shipyards were "assembly line" operations comprising ships in varying stages of completion from keel block to finished hull at the moment of launching.



The launching ceremony on September 27, 1941, of the 441-foot Star of Oregon Liberty Ship at Henry Kaiser's shipyard in St. Johns presaged the United States' entry into World War II two months later, and the subsequent hiring of 21,000 IBEW Local 48 marine electricians. The war would make it the largest such local in the nation.



In this 1944 photo, an electrical maintenance crew comprised of 29 members of IBEW Local 48, were still smiling even though they had just worked together without a vacation since the summer of 1942.

1946 Shipyards closed. Forest products boomed. Howard Vollum and Jack Murdock planted the seed of Oregon's Silicon Forest with their founding of Tektronix. The future beckoned.

MARCH 1948 IBEW International reorganized Local 48 and appointed H.H. "Hub" Harrison business manager and financial secretary until the next elections, at which time he won the position. He would serve Local 48 until his retirement in 1962.

1949 Total annual wage & fringe benefits \$3,930,116. **2012-** Total annual wage & fringe benefits \$362,336,383.

PORTLAND'S POSTWAR BOOM

1950 The last "owl run" of the Willamette Heights temporarily ended six decades of electric streetcar operations in Portland. Electric trolleybuses succumbed to the automobile in 1958. (In 1986, NECA/IBEW Local 48 would return electric mass transit to Portland with MAX Light Rail.)

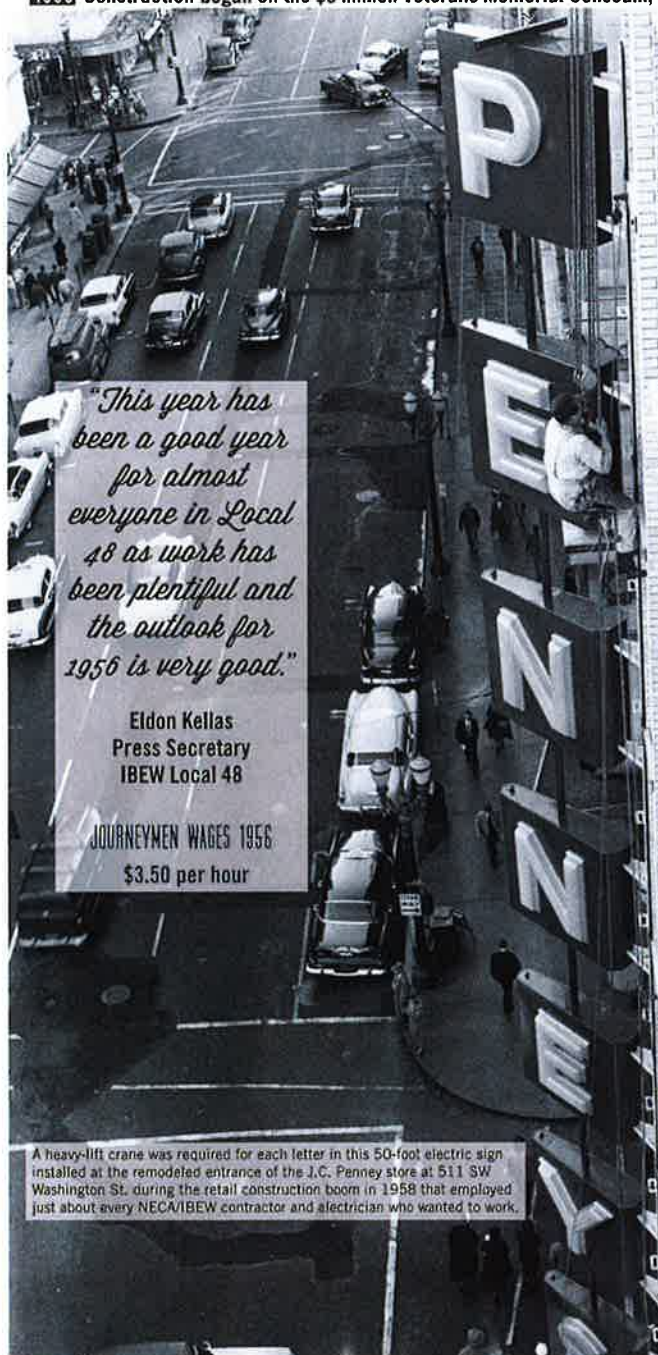
1954 The first 10 cent per hour contribution negotiated to start the Harrison Health Trust, the monthly premium was \$8.00. Today the Harrison Plan covers 5,000 families and 1800 retirees with assets of \$160,000,000 and has paid in excess of \$850,000,000 in health claims over the past 59 years.

1955 - 1959 NECA/IBEW Local 48 enjoyed a building boom in outlying Portland. Tektronix constructed its first building on a large campus in Beaverton — a seedling in what would be Oregon's Silicon Forest. Construction began on Portland International Airport, tens of thousands of homes, strip malls on 82nd Avenue and 102 Avenue, commercial buildings, The Dalles Dam, Detroit Dam, Morrison Bridge, Interstate 5 and Interstate 80 (later re-named I-84), Omark, Nabisco, and others.

1956 IBEW Local 48 membership swelled to 1,800. Benefits increased and members chartered a federal credit union.

1958 NECA contractor W.R. Grasle and Local 48 electricians began construction of Lloyd Center. Construction of Gateway Center and Eastport Plaza followed, as did urban renewal of South Portland.

1959 Construction began on the \$8 million Veterans Memorial Coliseum, adjacent to Lloyd Center.



"This year has been a good year for almost everyone in Local 48 as work has been plentiful and the outlook for 1956 is very good."

Eldon Kellas
Press Secretary
IBEW Local 48

JOURNEYMEN WAGES 1956
\$3.50 per hour

A heavy-lift crane was required for each letter in this 50-foot electric sign installed at the remodeled entrance of the J.C. Penney store at 511 SW Washington St. during the retail construction boom in 1958 that employed just about every NECA/IBEW contractor and electrician who wanted to work.

MORRISON BRIDGE

Many NECA/IBEW Local 48 members became specialists in Portland bridges, including Morrison Bridge, built in 1905, replaced in 1958, illuminated in 1987, and substantially overhauled in 2003. Four 100-horsepower AC electric motors power the steel double-leaf bascules vertical.



Wired and just about ready for electric traffic gates, the new Morrison Bridge, with its double-leaf bascule spans raised nearly vertical in this 1958 photo, contrasted sharply with the old Morrison Bridge, built in 1905, that it would replace.

In 1987, as part of the community's "Bridge Lights" campaign, volunteers from NECA/IBEW Local 48 and the Apprentice Training Center covered the \$78,000 in cost and labor to light Morrison Bridge with 35 one-thousand watt bulbs. In 2003, NECA contractor Heil Electric and Local 48 renovated Morrison and Burnside bridges under a \$1.2 million contract, enabling Multnomah County to control both from a single remote site.



Bridge tender in the old swing-span Morrison Bridge (1905) pictured here in the mid-1950s. His job would be made obsolete by construction of a new Morrison Bridge in 1958 that would be remotely controlled offsite by Multnomah County Bridge Office.

NECA/IBEW TURNS 50!

1960 NECA/IBEW Local 48's W.R. Grasle, Rose City Electric, Frahler Electric and others completed Oregon's largest construction project, Lloyd Center, in time for Governor Mark Hatfield to show Japanese Crown Prince Akihito and Princess Michiko through Meier & Frank. At the time, Lloyd Center was considered the world's largest shopping mall.

IBEW Local 48 electricians working for Ramsay Signs used four miles of wire and a half-mile of neon to construct Carling Brewing's three-story "Black Label" beer sign across the width of eight-story Sperry Flour Building at SE First and Washington.



On November 2, 1963, IBEW Local 48 President John Clothier welcomed 720 members, spouses and guests to the 50th anniversary of the union at a gala dinner and dance in the Sheraton's Grand Ballroom.



Lloyd Center would be the world's largest mall at the time of its August 1, 1960, ribbon-cutting ceremony, conducted by Gov. Mark Hatfield and Portland Mayor Terry Schrunk.



The Ice Pavilion, which boasted one of the largest covered rinks in the nation, helped make Lloyd Center a revolutionary new concept in shopping that quickly spread nationwide.

1962 Swan Island shipyard Local 48 electrician, Marie Gleason, 68, became the first woman in the nation to get an IBEW pension. Two hundred thousand people attended the AFL-CIO Industries Show, hosted in Portland for the first time by IBEW Locals 48, 125 and 49.

1963 NECA/IBEW Local 48 assumed the state's role in apprenticeship training. They launched Metro Joint Apprenticeship Training Center (JATC) with employer funding of \$0.02 per hour worked. Dan Faddis was hired to direct apprentice training, provide journeyman continuing education, stay current with new technology, and help members meet license requirements.

NOVEMBER 2, 1963 Golden Jubilee - IBEW Local 48 President John Clothier and 720 union members and wives joined 50 NECA members, including NECA President W.R. McCabe, in celebration of the 50th anniversary of Local 48's charter. Glasses went up in the Sheraton Hotel Grand Ballroom when Clothier recognized surviving charter signers, Andy Peachner and Homer Gifford.

1960 IBEW Local 48 electricians completed the decade-long construction of the \$448 million John Day Dam. In July, power flowed over a 128-mile long, 500,000-volt state-of-the-art transmission line to Keeler Substation serving greater Portland. John Day's output was equivalent to two Bonneville Dams.



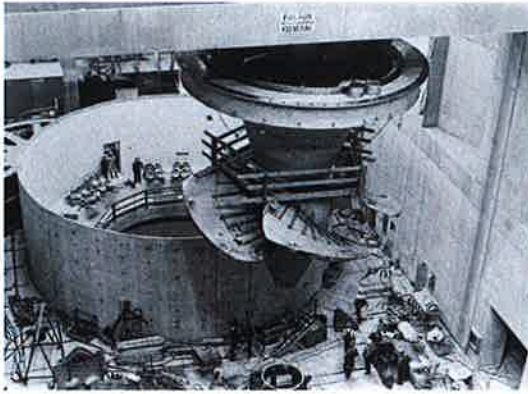
VETERANS MEMORIAL COLISEUM

At its opening, the 9,000 seat Memorial Coliseum was touted as the largest multipurpose facility of its kind in the Pacific Northwest. Construction and electrical installation of the gleaming Memorial Coliseum was completed in time for the November 3, 1960 opening featuring a performance called "Holiday on Ice."

"The gains in wages, welfare and working conditions have been reached under agreement with the National Electrical Contractors Association, Columbia Chapter, with whom we have worked in harmony as attested by the absence of a strike in the past 43 years."

John Clothier
President
IBEW Local 48

FOREST PRODUCTS TO SILICON FOREST



Bonneville Dam's second powerhouse, constructed between 1974 and 1981. The combined electrical output of the two power houses at Bonneville would now exceed 1 million kilowatts.



High rise office buildings and other structures transformed Portland's skyline to that of a major city as seen in this 1978 aerial photo.

1970 The first 30 cent contribution negotiated to start the Edison Pension Plan. Today there are now 3 local pension plans, The Ninth District Plan, the Cornell Hart 401-K and the original Edison Plan with combined assets of 1.3 billion dollars.

1971 The NECA/IBEW Local 48 partnership created the Edison Pension retirement benefit plan, paid for by employers. Edison plan income paid to retirees would supplement income from Social Security and other existing plans. That way retirees and their families could enjoy the same standard of living they had during their working years.

1972 Members of IBEW Local 517 in the coastal areas of Lincoln City to Astoria merged with Local 48.

1974 The stock market fell. Consumers and business alike roiled from 12% hyperinflation. Oregon slipped into 16 months of recession. Construction projects of NECA/IBEW Local 48 shifted away from pulp, paper and lumber to high technology equipment, semiconductor research and silicon wafer fabrication.

Bonneville Power Administration energized the central computer complex, and power system control circuits and terminals, of Dittmer Control Center in Vancouver, making it the "O'Hare Airport" of the electric grid in the Pacific Northwest.

Intel, at the urging of Tektronix, commenced two years of construction on its Fab 4 computer chip factory in Aloha, the first of seven such semiconductor research and fabrication campuses in Washington County by 2012. Thousands of NECA/IBEW Local 48 contractors and electricians would benefit from Intel's 40-year, \$20 billion investment in Oregon.



Trojan Nuclear Power Plant, completed 1975.

"Perhaps one of the . . . biggest challenges which Local 48 members undertook was the Trojan Nuclear Plant (1970-1975). Union members faced unusual first-time problems, travelled some un-tread paths, and set new precedents . . . Yet Trojan proved to be the cheapest-built nuclear power plant in the U.S., and the longest-running plant without breakdowns."

Edward L. Barnes
Business Manager (retired)
IBEW Local 48

1975 Forest products construction faltered. Industrial and marine projects slowed. Tektronix expanded. Boeing opened a plant in Gresham. Other high technology projects employed NECA contractors. IBEW Local 48 membership verged on 2,000.

1977 The Metro Joint Apprenticeship Training Center (JATC) outgrew Benson High School. Metro JATC apprenticeship increased 60%, to 300 attendees. NECA contractor Hugh D. "Buzzy" Allison convinced NECA/IBEW apprentice committee to purchase and remodel a 15,000 square foot former Safeway grocery, at Northeast 42nd and Killingsworth, for training much needed apprentice electricians.

1979 NECA ended the decade with 55 contractor members. IBEW Local 48 had 2,400 members. Journeyman earned \$17.25 per hour. Prospects for the future looked bright indeed.

The Federal Reserve Bank hiked interest rates to dampen inflation. The move depressed interest-sensitive home construction and, within two years, would shatter Oregon's economy, still dependent on timber.

ADVERSITY PROMPTS COOPERATION



Built in the 1970s, BPA's Dittmer Control Center required continual updating and maintenance to keep pace with technological advances throughout the 1980s.



Built in the midst of the recession, One Main Place, a 20 story concrete and glass tower, completed construction in 1982.

1980 In January, the nation slipped into recession. It would last six months.

1981 In July, the nation slipped back into recession, this time for 16 months.

1982 By December, 161,000 Oregonians, or 12.1% of the state's workforce, were unemployed. One-third of the members of IBEW Local 48 left Oregon for work. NECA contractors pared ranks 50-75%. Typical: McCoy Electric cut staff from 100 to 25.

1983 Labor-Management Cooperation - Tim Gauthier, NECA executive manager, and Ed Barnes, Local 48 business manager, formed an ongoing partnership on sales, marketing, public relations, and funding of apprenticeship and training center, that exists today.

Market Flexibility - IBEW Local 48 gave NECA contractors "flexibility" to compete. They reduced journeyman's wages and fringe benefits; provided flexible work-week and shift work conditions; adjusted pay for overtime, travel and subsistence; and lowered apprentice costs to contractors.

Investing In Themselves - NECA/IBEW Local 48's Edison Pension Trust Fund commenced a multi-million dollar financing of "union-built" construction projects, starting with a Tigard office building, a Hillsboro industrial park, and the largest, Loehmann's Plaza across from Washington Square. Many more such projects would follow in the years to come.

1984 As Oregon recovered, NECA contractors found work, like Sirianni Electric on the Benjamin Franklin Building and EC Company on Gresham Hospital.

IBEW Local 48 electricians completed the \$425 million modernization of Crown Zellerbach's "Roaring 20" papermaking operation in Camas, Washington, on time and at a labor cost savings of \$800,000.

"They lived up to their pledge that the job would be completed without interruptions caused by strikes or jurisdictional disputes."

William T. Creson, Chairman of the Board
Crown Zellerbach, 1984

1986 NECA/IBEW Local 48 launched a creative and unique Market Recovery program. Members paid 3.5% of their hourly wage into a fund provided to NECA contractors to recover jobs and preserve market share in Local 48's jurisdiction. After withstanding a federal legal battle the program continues today.

The mid-eighties also brought us Portland's iconic MAX light rail, a now-indispensible public transportation system.



The MAX light rail system opened on September 5, 1986. Pictured above is the NECA/IBEW Local 48 wrapped MAX cars. The future is electric!

1989 Illustrative of growing industry complexity, NECA contractor McCoy Electric installed a Super Profiler computerized milling machine that halved the time Boeing needed to produce titanium landing gear components.

DAWN OF THE DIGITAL AGE

1990 NECA/IBEW Local 48 negotiates a first ever industry wide Drug Free Workplace Program including both Labor and Management with testing, education, rehabilitation and reemployment as the core values. 100% of all NECA/IBEW contractors implement the program that now covers 7 IBEW locals and 4 NECA Chapters in the Pacific Northwest.

1991 The nation began the longest period of peacetime economic expansion in U.S. history – 10 years without a recession. Technology jobs increased 20%, topping timber, which declined 20%.

1993 The challenge of electrical contracting in 1990s was illustrated by NECA contractor McCoy Electric and Local 48 electricians' replacement of an electric power system on the top floor of 10-story Parkside Center in Portland. Using a helicopter, the NECA/IBEW Local 48 team lowered four 3000-amp electrical switchboards, each weighing 1,600 pounds, through a six-foot square hole cut into the roof. They restored power in under 30 hours.



McCoy Electric Company installs 1,600 pound units on the top level of the Parkside Center in Portland.



Foreman Chuck Schuurmans of Oregon Electric Construction at the OHSU Biomedical Center.



Ed Rasmussen and Tom Malloy of Christenson Electric install a crane light on Portland's One Oak Plaza building.



Christenson Electric's Ray Buschert installs a lighting rod atop the dome of Portland's 1000 Broadway tower.

1995-2000 Technology firms, from garage-startups to Intel, Tektronix, LSI, Fujitsu, Wacker and Mitsubishi, invested \$10 billion in plant construction and expansion.

NECA/IBEW Local 48 contractors and electricians expanded or constructed facilities for many of the 1,800 high technology firms that by the late 1990s employed 60,000 people.

NECA contractors Christenson Electric, EC Company and Oregon Electric Group each exceeded 500,000 man-hours of work, ranking them among the 30 largest electrical contractors nationally.

1998 Portland completed the five-year, \$963 million MAX light-rail extension to Hillsboro. The west side tunnel was the deepest transit station in North America.

The Internet took hold. Dotcom era boomed. Oregon's economy completed its 50-year transition from timber with 50,000 workers, to high technology, which now employed more than 70,000 workers.

The new \$6 million NECA/IBEW Local 48 Electrical Training Center opened near the Portland International Airport. NIETC was designed to meet the New Millennium's demand for apprentices and journeyman with the confidence and expertise to meet the technical challenges of the 21st Century.



NECA/IBEW Local 48 Electrical Training Center (NIETC), opened in 1998.

"We probably did close to 50% of the modern high-rises downtown. High-rise office buildings are an electrical contractor's annuity! I know it was a good year for us."

Brian Christopher
Christenson Electric

EDUCATION, DIVERSITY & TECHNOLOGY

"Our industry is so complicated today. When I came into the business, it was pretty much pipe-and-wire. Today, everything is smart. It takes a lot more education!"

Max Landon
McCoy Electric



IBEW Local 48's Chevy Volt and charging station.



Construction of Intel's DX1 fabrication facility in Hillsboro, OR.



Cherry City Electric on the job.

WIRING A GREEN TOMORROW!

Local area electrical construction tops \$1 billion. NECA/IBEW Local 48 expanded education and marketing, and redoubled market recovery programs put in place in the mid-1980s to capture its share of that market.

2006 NECA/IBEW Local 48 implements the first ever web based electronic employer monthly payroll benefit reporting system. Development through Concero Group and industry partners takes 2 years with the assistance of ex Microsoft engineers. Today this program has gone national and over 10,000 reports are filed each month online instead of on paper. Over 4.7 billion dollars in contributions, and 15 billion in wages have been reported across 192 IBEW local unions all over the United States.

2008 NECA/IBEW Local 48 members committed to Green Building, including "net-zero" construction that provides energy to occupants by energy-saving design, efficient heating, ventilation and air conditioning, and efficient lighting and appliances.

2009 The Great Recession hit Oregon hard. In 2008 unemployment peaked at 11.6%. Recovery was slow with one exception: Intel Corporation. NECA contractors and 2,000 IBEW Local 48 electricians constructed Intel's fabrication facility, D1X, at the Ronler Acres Campus in Hillsboro. Completion in 2013 capped 40 years of Intel investment in Oregon totaling \$20 billion.

2010 NECA member Hughes Electrical installed the first public, "quick-charge" station for electric vehicles in North America, in Portland for PGE. Tice Electric, E C Company, Oregon Electric Group, Cherry City Electric, West Side Electric, Heil Electric, 3D Electrical, ABC Electric, McCoy Electric, Pacific Electrical Contractors, and Stoner Electric, among others, joined NECA's electric vehicle initiative.

2012 In 2012, Kelso-Longview IBEW Local 970 merged with Local 48. Since 1924, Local 970 provided a skilled workforce that maintained, supported and upgraded the region's Columbia River ports, its pulp and paper mills, and saw mills.

JOURNEYMEN WAGES \$38.05/hr WORKWEEK 40 hours RETIREMENT \$8.34/hr HEALTH/FLEX \$9.50/hr

Through the innovative and progressive Market Recovery Program of 1986, NECA/IBEW Local 48 contractors have been awarded 18,216 projects to date. The value to the 4,500 IBEW Local 48 members is 15,136,787 hours of work. The value to 150 contractors of NECA exceeds \$1.6 billion. Twenty-seven years of cooperation on this plan alone created full time careers for 345 journeymen electricians.

"What works in the real world is cooperation. Market recovery. Industry-wide drug program. Code of Excellence. Commitment to education. Meet the demands of the marketplace. Most of all, a mutual understanding that the economic cost of conflict is unacceptable. Problem solving, through respect and trust, is the answer."

Timothy J. Gauthier
Executive Manager
Oregon-Columbia NECA

"Everything we do, the Training Center, every trust we have, by law, is joint managed. You can veto each other. It's like a marriage. We try to deal with issues with a phone call instead of a written grievance. Why not work together? Why not work to capture the dollar instead of fighting over a dime? We hold strongly to that philosophy."

Clif Davis
Business Manager
IBEW Local 48

APPRENTICE SCHOOL

The NECA/IBEW Electrical Training Center (NIETC) was no overnight success story. It took eight decades to make it the most technologically advanced facility for electrical apprenticeship training and journeyman continuing education in the nation.

NIETC has its roots in Portland's construction boom in the Roaring Twenties. In March 1929, IBEW Local 48 and the Oregon Electrical Contractors Association collaborated with Portland Public Schools to open the first Apprentice School. George Pattingell taught 18 apprentices in Stephens School on SE Seventh Street.

The school barely survived the Depression. However, enrollment soared with the wartime demand for shipyard electricians.

In 1946, IBEW Local 48 sent Apprentice School instructors to electronics courses at Marquette University in Milwaukee, WI. The school had 102 apprentices (86 vets); 23 journeymen; and 760 others in continuing education.

The school moved into Benson High School in the 1950s, but room and state funding ran out. In 1963, NECA/IBEW created Metro Joint Apprenticeship and Training Committee (JATC) and hired Dan Faddis as training director. The high tech construction demand of the 1970s prompted NECA/IBEW to acquire a 15,000 square foot former Safeway grocery in northeast Portland to serve as JATC's Metro Training Center.

During the 1980s and 1990s, the NECA/IBEW partnership recruited women and minorities with the B-Fit Program at Portland Community College. Dan Faddis's successors, Ken Fry in 1993, and Rod Belliste in 2009, continued his pursuit of diversity. By 1998, Metro JATC participants were 10.7% minorities, and 11.0% female.

The Internet Age prompted NECA/IBEW to expand the program again. In 1998, they built a \$6 million Electrical Training Center at 16021 NE Airport Way to educate apprentices and journeymen, and conduct research & development in alternative energy, net-zero and LEED certified green building, electric vehicle recharging, and advanced computer and telecommunications installation.



1912



2013



Stephens School
1929-1928



Portland Apprentice School
Beach Street 1940-1955



Benson High School
1955-1976



Metro Training Center
1976-1998



NECA/IBEW Electrical Training Center
1998-Present



1914-1937

THE GREAT LIGHT WAY

Ten blocks of Third Street pulsated with the ragtime music of Campbell's American band. Thousands of excited Portlanders lined both sides of Third – from Yamhill to Burnside – in front of Lion Store and Powers, H.T. Hudson Arms Co. and W.H. Dedman's cigar shop.

At 8 p.m., Saturday, June 6, 1914, a Northwestern Electric employee flipped on an electric switch. Suddenly, thousands of light bulbs blazed from double arches over every one of those 10 intersections. "Oooooohs!" and "Aaaaaahs!" filled the warm night air.

The incandescent burst of light made "The Permanent Order of Third Streeters" feel as they had during the 1890s that their stores were once again the "Center of Business" – Third Street was even brighter than Broadway!

Perhaps even prouder of The Great Light Way was W.A. Kraner & Co.'s team of IBEW electricians, Jim Irving, Ed Carlson, F. Moumine, F. Shrader, W. James, J. Hurst, Procher (Andy Peacher), and W.B. Holcourt.

They used a special derrick truck to erect the double arcades. Under the supervision of Local 48 Business Agent, W.H. Emrick, President H.L. Averill, Shop Steward C.R. Butterfield, and Foreman O. Osline, the electricians wired each pair of intersecting arches of latticed steel anchored at each street crossing in Doric columns of concrete. They bent pipe and ran wire to ninety-six 40-watt bulbs on each of the pairs of arches, and crowned each intersection with a blinding 750-watt nitrogen lamp.

In 1931, Portland City Ordinance No. 61325 re-christened the street Third Avenue. The Great Depression and Northwestern Electric's \$6,700 annual light bill killed off The Great Light Way in 1937. Demolition began soon after. In 1947, Northwestern Electric also disappeared, merged into Pacific Power & Light. NECA/IBEW Local 48, on the other hand, would still be working together in 2013, in relative labor-management harmony.



THE ILLUMINATED ARCHES OF THE GREAT LIGHT WAY, LOOKING NORTH UP THIRD STREET, ON A RAINY NIGHT IN 1915.



NECA/IBEW LOCAL 48 DONATED THEIR SERVICES TO LIGHT THE ONCE DARK TROUTDALE ARCH, LOCATED ON THE EAST HISTORIC COLUMBIA RIVER HIGHWAY.

1941-1945

WWII SHIPBUILDING

More than 21,000 IBEW Local 48 electricians worked 24/7 in the six Portland-area shipyards during World War II, wiring landing ships at Swan Island, Liberty Ships in St. Johns, and baby aircraft escort carriers in Vancouver. They built ships fast. Swan Island set the record: the LST, Joseph N. Teal in ten days.

In 1943, Henry J. Kaiser's Vancouver Shipyards recruited nationally:

ELECTRICIAN HELPER

Duties consist of installing cables and fittings on board the ship... according to plans and drawings. Should be good at working with small tools such as pliers, wire cutters... Considerable work is done vertically and overhead... Must have capable hands... Exactness and a flair for detail are necessary... Color blindness would be a handicap.

Fresh from her first year of college, Pat Koehler, 18, applied. "To hire on we spent a day going from one building to the next: finger prints taken here, ID photos taken there, forms and more forms to fill out. Then back downtown to Vancouver to join the International Brotherhood of Electrical Workers, Local #48. We paid our initiation fee and first month's dues before we had earned a penny."

Vancouver Shipyards bustled like a big city of indifferent strangers in too big a hurry to step aside for Koehler. Starting wage: \$.85 an hour.

"The day came, by dint of study, when we graduated to journeyman electrician at \$1.20 per hour... I was assigned to fire control. That meant guns!"

Her favorite tool: wire strippers. A year on the job, wearing steel-toed boots and a hardhat striped yellow as a sign of her craft, Koehler climbed into the round, starboard-side pillbox suspended over the water for her first solo assignment: hooking up the forty-millimeter gun directors.

"Occasionally I looked down into the swift current of the Columbia River and noticed small boats dragging for a worker who had fallen in... I connected the electricity to the five-inch gun, the largest weapon on the ship... What was a nineteen-year-old girl doing up there in such a job, anyway?"



Quotes from "Reminiscence: Pat Koehler on the Women Shipbuilders of World War II," Oregon Historical Quarterly, Vol. 91, No. 3 (Fall, 1990), pp. 285-291

NECA



IBEW

100 YEARS
OF
POWERFUL PARTNERSHIP



AFTER THE WAR, WOMEN WHO COMPRISED A THIRD OF THE ELECTRICAL WORKERS IN THE SHIPYARDS WERE GENERALLY NOT ENCOURAGED BY THE WARTIME COMPANIES TO CONTINUE. BUT THE DIE WAS CAST. THE WORKPLACE WOULD NEVER BE THE SAME.



GIANT CRANES LIFTED AND SWUNG IN PLACE A PRE-ASSEMBLED 50-TON STERN UNIT IN A PORTLAND SHIPYARD, CUTTING TWO DAYS FROM LAUNCHING THE LIBERTY SHIP FOR WAR IN THE PACIFIC IN 1943.

"I saw one accident take place inside a crane. We were eating lunch, seated on the steps of the office facing the dock, with a crane between us and the ship. A flash of light inside the cabin of the crane was followed by a scream. The crane operator came out holding up his hands. His arms were black up to the elbows. He screamed again and fainted. Rescuers had to lower him in a harness since they could not manage him on a ladder."

Patricia Cain Koehler
Journeyman
IBEW Local 48



1891 - PRESENT

DIVERSE MEMBERSHIP

The founding documents of the IBEW in 1891 and NECA in 1901 provided a blueprint for membership diversity — unrestricted by age, gender, race or ethnicity. Outlines of the blueprint were evident in the shipyards of wartime Portland of 1945. Churches and Portland City Club favorably recognized NECA/IBEW Local 48's impulse towards diversity, compared to other trades.

"It is estimated that there are between 500 and 1,000 Negroes out of the present membership . . . There are no racial discriminatory regulations . . . Within the union, everyone has equal rights."
Portland City Club Report
"The Negro in Portland July, 1945"

Journeyman Mark Smith was a wartime shipyard electrician (IBEW Card #906028). In 1952, Smith was appointed Deputy State Labor Commissioner — the highest such position ever achieved by an African-American. Another shipyard electrician, Marie Gleason, worked until she retired, in 1962, to become the first woman in the nation, among 17,000 men, to earn full benefits under IBEW's pension plan. Likewise, gender played no role when Local 48 hired Lois Burnside as manager of its Federal Credit Union in 1954.

NECA/IBEW Local 48 created an equal opportunity gateway into the electrical industry in 1963, forming a Joint Apprenticeship and Training Committee (JATC). Women and minority graduates of JATC gradually filled the ranks of the industry. In 1984, women JATC grads comprised 20% of the electricians hired by McCoy Electric to renovate the historic Paramount Theater. In 1987, EC Company selected JATC graduate Sandra Carr as its "Outstanding Electrician" from among 160 employees.

In 1993, JATC hired Nancy Mason to diversify programs. A year later, of the 714 applicants for JATC, 9.8% were women, 17.2% minorities. The trend continued in 1998 with JATC's move to a new \$6 million NECA/IBEW Electrical Training Center (NIETC).

In 2000, IBEW Local 48 elected Keith Edwards the first African American business manager of an IBEW local in the nation.

In 2009, the Daily Journal of Commerce presented its Minority Contractor Award to NECA member O'Neill Electric owners Local 48 journeyman Maurice Rahming and his wife Ali O'Neill.

Today NIETC programs have the highest percentage rate of completions for women and minorities of such programs in Oregon and southwest Washington.



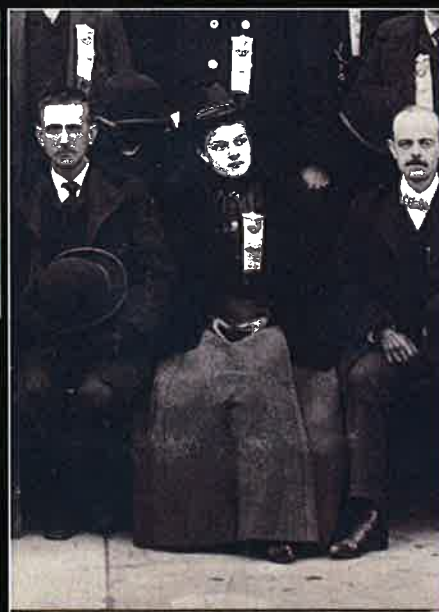
IN THIS 1944 PHOTO, AN ELECTRICAL MAINTENANCE CREW COMPRISED OF 29 MEMBERS OF IBEW LOCAL 48. ONE-THIRD OF THEM WOMEN AND MINORITIES, WERE STILL SMILING EVEN THOUGH THEY HAD JUST WORKED TOGETHER ON THE OUTFITTING DOCK OF OREGON SHIPBUILDING CORP. WITHOUT A VACATION SINCE THE SUMMER OF 1942.



KEITH EDWARDS

"Local 48 has been able to achieve great things . . . It comes from getting along and understanding (that) we are all in the boat together . . ."

Keith Edwards, Representative
Ninth District, IBEW International



THE NATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, PREDECESSOR OF THE IBEW, HIRED MARY HONZIK IN 1896, MAKING IT THE FIRST UNION TO HAVE A WOMAN ORGANIZER ON ITS STAFF.



1910-PRESENT

BRIDGETOWN USA

In addition to the "City of Roses", Portland is known as "Bridgetown" with 11 architecturally significant highway bridges within the 16-mile stretch of the lower Willamette River, including Multnomah Channel.

All require electricity, but none more so than the five large movable bridges – the Hawthorne (1910), Steel (1912), Broadway (1913), Burnside (1926), and Morrison, first built in 1887.

Multnomah County replaced the original Morrison with a second span in 1905. It wore out by mid-century, pounded by trucks and cars, and prone to gear malfunctions from swinging open for passing river traffic, 500 times a month.

Multnomah County contracted for construction of a third Morrison Bridge in the 1950s. NECA contractor Jaggar-Sroufe (cofounded by Samuel I. Jaggar who wired the Forestry Building at the 1905 Lewis & Clark Exposition) installed all the wiring and controls for the bascule span machinery, traffic gates, street lights and navigation lights, as well as the submarine cables between the east and west bascule piers. NECA contractors constructed streetlights for the bridge approaches, McCoy Electric on the east side of the Willamette, Huenegard Electric on the west.

Morrison Bridge opened May 24, 1958, with pomp by Mayor Terry Schrunk, music by Benson and Wilson high school bands, water fountains shot by fireboats, and a flyover by F-102 Delta jets.

In 1987, as part of the Willamette Light Brigade's community campaign to light Portland's bridges, volunteers from NECA/IBEW Local 48 and the Metro Training Center donated the \$78,000 in costs to install thirty-five 1,000-watt lights on the Morrison Bridge. Sutherland Electrical served as general contractor with its president, Robert Agee, project supervisor.

In 2003, NECA contractor Heil Electric and Local 48 electricians renovated Morrison and Burnside bridges under a \$1.2 million contract, enabling Multnomah County to control both from a single remote site.



MORRISON BRIDGE ILLUMINATED, DECEMBER 1987. NECA/IBEW LOCAL 48 DONATED MATERIALS AND LABOR TO THE PROJECT. L TO R: BOB AGEE, OWNER SUTHERLAND ELECTRIC; TIM GAUTHIER, NECA EXECUTIVE MANAGER; JIM HANSON, ELECTRICIAN; DWAYNE JOHNSON, ELECTRICIAN; ED BARNES, IBEW LOCAL 48 BUSINESS MANAGER.



CONSTRUCTION OF THE NEW MORRISON BRIDGE, 1950



1889-PRESENT

GO BY STREETCAR

The roots of Portland's Metropolitan Area Express, or MAX light rail system, installed and maintained by NECA/IBEW Local 48 electricians, date back to 1889. That was when the first electrified trolley rumbled across the "first" Steel Bridge (a railroad swing-span predating today's Steel Bridge). Electric streetcars were new to the Portland area, but they were no fad.

By 1912, more than a quarter-million passengers were riding Portland's 526 streetcars each day. They went to work in newly electrified factories, stores and office buildings and then commuted home, across the Willamette River, to dozens of "streetcar subdivisions" in Kenton, Beaverton and Alameda Park, Laurelhurst, and Eastmoreland, and later in the 1920s, to Council Crest, Burlingame and Willamette Heights.

Portlanders hopped streetcars and interurban rail and buses in Montevilla and Sellwood. They went shopping under the electric lights of the Meier & Frank, Lipman-Wolfe, Olds, Wortman and King department stores. They traveled in 1915 by electric "light" rail from Troutdale and Oregon City to have fun at Oaks Amusement Park or to gaze on Mount Hood from Council Crest Park.

Ridership peaked during the Depression and World War II. In 1950, Portland took a temporary hiatus. The last run of the old Willamette Heights streetcar started before sunrise on a cold Sunday morning in February 1950. Three sections of cars were needed to accommodate the crowd who wanted to experience the final run.

But it wasn't the end of an era. In 1986, Portland's MAX Light Rail made its inaugural run on a 15-mile alignment between the suburb of Gresham and downtown Portland. NECA members like Heil Electric and Tice Electric, among others, worked hand-in-glove with the electricians of Local 48 and Tri-Met to re-launch light rail and extend MAX service east and west of Portland.

Similarly, electric streetcars made a comeback with the inaugural run in 2001 — half a century after the last run of the Willamette Heights "owl car". By 2005, NECA-member Oregon Iron Works would even be manufacturing streetcars in Portland.



LAST RUN, 1950



2010



BROADWAY STREETCAR



METROPOLITAN AREA EXPRESS, 1986



METROPOLITAN AREA EXPRESS, 2013



1913-PRESENT

NECA & IBEW GIVE BACK

A cornerstone of IBEW Local 48 and NECA's presence over the last 100 years has been a commitment to giving back to the community in which their members live and work. Members volunteer time and contribute money to dozens of worthy causes – in many cases NECA-IBEW Local 48 are leading these important efforts.

A coalition of Business, Union and Labor Leaders, known as the B.U.L.L. Session, has organized a yearly charity golf tournament and auction to benefit Oregon Children's Charities. Since B.U.L.L.'s inception in 1990, NECA and IBEW have been lead sponsors, helping to raise over \$4.6 million to date.

Helping those less fortunate or in need has always been important to electrical contractors and electricians. Given their skills and expertise, Habitat for Humanity has been one of those organizations that has benefited from donations of thousands of hours and supplies.

Diseases like cancer affect all walks of life, and members of the NECA-IBEW Local 48 family have not been immune. One cause that has been the recipient of the industry's generosity has been the fight against breast cancer and the Susan G. Komen Foundation for the Cure.

NECA-IBEW recognizes that the industry's future will be passed on to younger generations, and as a result the partnership has made a commitment to support potential electricians by providing modern street and score board signage to local area schools.

In a tradition dating back to 1988, NECA/IBEW Local 48 electricians annually install and wire 500,000 lights for the annual Festival of Lights viewed during the holiday season by more than 50,000 visitors to The Grotto in the National Sanctuary of Our Sorrowful Mother, the beautiful 62-acre Catholic shrine and botanical garden in Portland.

"There's a sense of camaraderie. Because people move from company to company and through the union, there are a lot of people that I only see at the Grotto, and it's nice to reconnect."

Dave Manning
Local 48 Electrician
Rose City Electric



HABITAT FOR HUMANITY PROJECT - 2002



DYNALLECTRIC'S PINK HARDHATS FOR BREAST CANCER AWARENESS MONTH - 2010



B.U.L.L. SESSION - 2012



MULTISENSORY LEARNING ACADEMY CHARTER SCHOOL, FAIRVIEW - 2012



REYNOLDS HIGH SCHOOL SCOREBOARD - 2011



THE GROTTO LIGHTING CREW - 2008

"It's important that the wiring is done right. It is such a big event that is held outside in the rain. I take responsibility for making sure the Grotto is both a beautiful and safe experience for the visitors."

Steve Martell
Local 48 Electrician (ret.)
Heil Electric



Academy of Electrical Contracting * 3 Bethesda Metro Center * Suite 1100 * Bethesda, MD 20814
301-806-1109 * mike.thompson@necanet.org