

Generating Power 10 at Diablo

Tom Dalzell: 'We will be 2 fully prepared'
Sierra Pacific declares 2 impasse
Your Letters 3
Sandoval scholarship 4 and Trade Grant
Retirees remember Owen 6
Cowart's contribution 6
Tree Trimmers7in bargaining
Outside Line8construction
PG&E Missed Meals 19
Union Shopper:20All New!
News briefs

A Free

Trade Agreement between the US and South Korea was protested by more than 50,000 union members and farmers in November in Seoul, South Korea, Labor Notes reported. The agreement was negotiated in June 2007 and has to be ratified by both countries.

74 percent of people in the United States are willing to support a tax on fossil fuels if the money is used to promote efficiency or new fuel



sources, according to a new University of Maryland poll.

Presidential

candidate Mike Huckabee said he supported striking Hollywood writers "unequivocally, absolutely." Then he crossed their picketline. See page 19.

Employers have the right to prohibit workers from using the company's email system to send out union-related messages, the National Labor Relations Board ruled 3-2 on Dec. 21.



Local 1245 members loe Lopez, left, and Leroy Marx assist with clean-up in the wake of the Fernley levee breach.

Orville

Owen

June 28, 1927

CCID **** Volume 57 No.1 • Jan/Feb 2008 For up-to-the-minute news, see our website: www.ibew1245.com

Levee break at Fernley

Storms hit, members respond

BEW members kicked into high gear across California and Nevada following a major storm that swept in from the Pacific with hurricane-force winds and drenching rains the first week of the New Year.

With as many as 2.1 million customers without power at the storm's peak, Pacific Gas & Electric mobilized more than 600 of its own crews, about two dozen

Keep the faith

rville Owen, a passionate believer in unions, died New Year's Day at his home in Santa Clara, Ca. He was 80.

Owen compiled a 40-year record of union activism from the time he was initiated into IBEW Local 1245 in 1952 until his retirement in 1992-and he was only getting started. After retirement, Owen took up the cause of senior citizens and played an active role in the San Jose Chapter of the Local 1245 Retirees Club. He proposed that the Utility Reporter devote a page to retiree issues each month, and for years he penned a regular column for it.

Each column ended with his signature phrase-"Keep the Faith"-that reflected his belief that

continued on page 5

"mutual aid" crews from other California utilities, and about 100 contract crews from as far away as Kansas.

In Fernley, Nev., the effects of the storm were compounded by the rupture of an earthen levee on an irrigation canal. City workers represented by IBEW Local 1245 were among the first responders.

"Our crews have been working up to 20 hours per day since the levee broke at 4 o'clock on Saturday morning (Jan. 5)," said Local 1245 Business Representative Pat Waite, two days after the breach. "They have cleaned out all the ditches that accumulated debris from the flood, and they are now pumping water out of the flooded areas into the ditches."

Three Local 1245 members had damage to their homes.

The Sacramento Municipal Utility District mobilized nine service crews, 14 line crews, 25 tree crews and 14 additional crews from contractors and other utilities. At the storm's peak, 150,000 SMUD customers were without power. The utility said it received 700 reports of trees taking down power lines.

More than 1,000 Roseville Electric customers, including the Roseville Square shopping center, lost power during the

continued on page 19

Members say 'No' to offer from Sacramento RT

Yes to mediation, strike authorization

ocal 1245 members at Sacramento Regional Transit rejected a "last, best, final" offer from the Sacramento Regional Transit District.

The vote, counted Dec. 10, was 1 in favor and 202 against the offer. In a sep-

arate vote, only 7 members approved arbitration, while 195 voted in favor of mediation and strike authorization

The offer from RT called for an increase in employee medical premiumsharing from 8% to 10%.

Mediated talks are scheduled for Jan. 14, reported Business Rep. Darryl Norris.

Following the vote, Local 1245 requested strike sanctions from the Sacramento Central Labor Council, which granted it just before the Christmas holiday.

RT members serving on the ballot committee for the Dec.10 vote were Ray Adams, Matt Mibach, Arthur Montano and Paul Williams.



"Everybody complains about the weather, but nobody ever does anything about it."

Mark Twain





Global warming is cooking our planet. Carbon emissions must be drastically reduced. Is nuclear power part of the solution? In this third installment in our series on Global Warming, the Utility Reporter looks at nuclear's prospects.





Tom Dalzell **BUSINESS MANAGER**

Fully prepared

s I write, the first in a series of heavy winter storms are pounding California and Nevada. Thousands of our members are working around the clock throughout our 360,000 square-mile jurisdiction in cold, windy, wet, and stormy conditions to restore service to millions of Californians and Nevadans who are out of power. These situations leave no doubt as to who makes a utility work. As important as those with engineering, financial, and management jobs are, it is our members who are the engine room of any utility.

The coming year is full of challenges for Local 1245. Contracts covering more than 14,000 of our members will expire in 2008, and we enter the year still in difficult negotiations with Sacramento Regional Transit, Turlock Irrigation District, South San Joaquin Irrigation District, and all of our line clearance tree trimming contractors.

As we prepare for these negotiations, we are facing change on a level that we have rarely experienced. At Sierra Pacific, new management is pushing our sister local in Las Vegas towards elimination of their defined benefit pension plan in favor of a cash balance account system. At SMUD, longtime General Manager Jan Schori, with whom Local 1245 has worked well for years, has announced her plans to retire in early 2008. The Board at Sacramento Regional Transit is conducting a national search for a new General Manager, and just a few days ago the Board at the Lassen Municipal Utility District voted to terminate General Manager Frank Cady.

Change is the order of the day at PG&E, both in management and in work processes. Virtually every PG&E operating officer has been hired within the last three years, coming from a variety of backgrounds inside and outside the utility industry, inside and outside the United States. We will begin negotiations early this summer dealing with an operating management team that has nobody - literally nobody - who has been through negotiations with Local 1245.

At the same time, PG&E's management is struggling to move through and

BARGAINING Pact ratified at **Foster Wheeler**

y an 80% to 20% margin, Local 1245 members ratified improvements to their collective bargain-

ing agreement during general negotiations with Foster Wheeler Martinez.

The vote followed additional bargaining necessitated by the membership rejecting Hunter Stern



the initial contract proposal, Local 1245 Business Rep. Hunter Stern reported.

The bargaining produced a significant first-year wage increase averaging 7% for all members based on what the parties agreed are market rates and equity improvements. The wage increase is retroactive to Oct. 16, 2007.

Employees will receive base wage increases of 3.5% on Oct. 16 of each subsequent year during the four-year term of the agreement. In addition, significant improvements were made to vacation allotment, the 401(k) retirement plan and the establishment of a new, highly paid classification in Operations Department.

Further improvements were gained in sick leave accrual, severance pay-

2

ment, shift differential and in-lieu meal payments.

Following recent trends, monthly cost to the employee for health and welfare premiums will increase over the term of the agreement. The employee cost will increase one percent annually from the current 15% beginning Jan. 1, 2009.

Representing the Union during negotiations, in addition to Stern, was Tony Williams

Sierra declares impasse

embers of Local 1245 have again rejected a cross-crafting proposal by Sierra Pacific Power that would affect working across classifications at Tracy Power Plant.

In separate voting by maintenance and operations personnel, the tally was 4-9 in maintenance and 6-18 in operations.

The company and union met again Jan. 8 and 9. The company did not show any movement in its position during these talks, and on Jan. 9 the company declared an impasse, reported Business Rep. Randy Osborn.

Serving on the Local 1245 Bargaining Committee were Gary Bailey, Randy Bradshaw and Richard Puff. Serving on the Local 1245 Ballot Committee were Scott Hilderbrand and Jerry McAlister.



CONFERENCES AND CONVENTIONS **Electrical Workers Minority Caucus**

Dorothy Fortier

past Business Transformation. I don't choose to make an extended critique of Business Transformation here and now, but it is safe to say that most of the problems facing the new management at PG&E are problems that either did not exist at all or did not exist at current levels before Tom King launched Business Transformation in 2004. Bill Morrow's hands-on approach involving bargaining unit employees is a refreshing contrast to the top-down Accenture days, but the problems are daunting.

Both of these factors will impact our negotiations. The challenge of getting to know and assessing the new management team is one that I relish. We know in broad terms what we hope to accomplish in negotiations, and in the coming months our members will be submitting specific proposals for negotiations. In the past, we could anticipate with some degree of accuracy what the company was likely to propose because we knew who we were dealing with. I am determined that by the time we exchange proposals with PG&E we will have as full an understanding as possible of who we are dealing with; only with a true understanding of your adversary can you negotiate from strength. We will be strong.

As for the lingering effects of Business Transformation, PG&E's failure to met its financial targets cannot help but add pressure to the coming negotiations. It would be foolish to telegraph our bargaining strategy and I don't intend to, but our members can be sure that we will enter negotiations fully prepared for counter pressure from the company. Financial problems caused by Business Transformation will not be solved at our expense.

As always, my greatest wish for the new year is that our members work safely. Our work is full of hazards, and vigilance every minute of every day is our best hope for coming home safe and sound.



- Jan 19: Rich Cowart Retirement Party, Vacaville, CA
- Jan 27-28: Advisory Council, Vacaville, CA
- Feb 5: Retirees Club, Santa Rosa, CA
- Feb 5: Retirees Club, Merced, CA
- Feb 7: Retirees Club, San Jose. CA
- Feb 13: Retirees Club, Vacaville, CA
- Feb 14: Retirees Club, Dublin, CA
- Mar 4: Retirees Club, Santa Rosa, CA
- Mar 4: Retirees Club, Merced, CA
- Mar 6: Retirees Club, San Jose, CA
- Mar 12: Retirees Club, Vacaville, CA
- Mar 13: Retirees Club, Dublin, CA

Retirement Planning Seminars

Feb. 1- March 1. See Page 6 for complete schedule.



& Managing Editor Eric Wolfe President Mike Davis **Executive Board** Art Freitas Chris Habecker Mike Jacobson Anna Bayless-Martinez Tom Cornell Mike Cottrell

Executive Editor

Tom Dalzell

Treasurer Cecelia De La Torre

Published bi-monthly at 30 **Business Manager &** Orange Tree Circle, Vacaville, CA 95687. Official publication of Local Union **Communications Director** . 1245. International Brotherhood of Electrical

> 2547, Vacaville, CA 95696. Periodical postage paid at Vacaville and at additional mailing offices. USPS No. 654640, ISSN No. 0190-4965

> > POSTMASTER: Please send Form 3579, Change of Address, and all correspondence to Utility Reporter, P.O. Box 2547, Vacaville, CA 95696.

UtilityReporter

January/February 2008

Volume 57 No. 1

Circulation: 22,200 Single copies \$1. Subscription by arrangement. Have you moved recently? Please

send complete new address and your Social Security Number (by U.S. Mail) to: "Address Change IBEW Local 1245 P.O. Box 2547 Vacaville, CA 95696.

Our Web Site can be viewed at www.IBEW1245.com

Our phone number is (707) 452-2700.



Got something to share with your fellow union members? Send signed letters to: Utility Reporter Letters, IBEW 1245, POB 2547, Vacaville, CA 95696. Please note that we cannot print personal attacks or letters dealing with union politics. Opinions expressed in "Letters" are those of the individual authors and do not necessarily reflect the views of IBEW Local 1245.

"Monday" has new meaning

Editor's note: Long-time Local 1245 activist and equipment mechanic Dale Huntsman sent the following e-mail to co-workers at Sierra Pacific Power on the day of his retirement, Jan. 4. It is reprinted here in slightly edited form with Dale's permission.

As I type this email, I have now been RETIRED for 5 hours and 7 minutes!

After a 36-year career as an Equipment Mechanic, I have decided to pull the plug and retire from the power company.

My work as a Mechanic began in 1971, about the time that I met Linda, the Love of my Life. We have been married for 36 wonderful years and she deserves this retirement as much as I do.

I leave regular employment voluntarily and with much anticipation. I am also retiring early, at the young age of 55. This represents a challenge to make our money last as long as we live, but it should be great fun, no matter what happens. Our health is good and our minds are reasonably sound.

I anticipate substantially difficult financial times for all Americans in the short-to-mid-term future due to economic pressures from within and outside our great nation. Unfortunately, we middle-class working folks will soon be paying the price for the stupid decisions of our so-called "leaders". Hold on tight ...

However, I will not let fear of the future prevent me from beginning this next chapter in our lives.

Greatly looking forward to doing what I want, when I want, and finally beginning to work on projects OF MY OWN! I have projects that I began in the early 1980s that I hope to "move to the front burner."

Linda is also looking forward to us having more time together and we hope to someday in the not-too-distant future to be able to travel to the far corners of the planet to visit our dear friends in Australia and Europe.

In the meantime, you can find me here at HOME with my sweetheart, snuggling up together enduring this huge snow storm that has just dropped about a foot of fresh snow already and is Utility Reporter

expected to continue through the night. At least I don't have to worry about going to work on Monday!

Big Dale Huntsman; Reno, NV

Stiefer sends holiday greetings

Editor's note: Just before Christmas Local 1245 received the following e-mail from Howard Stiefer, long-time Local 1245 President and Assistant Business Manager, who now lives in Missouri. He included this photo from the recent ice storm there.



The ice storm was not as serious as anticipated. Thought you all would enjoy a picture of our Winter Wonderland. We also have our first tree in ten years so we are quite the merry bunch.

We wanted to thank everyone who visited, called, sent cards, and generally just wished us well this past year. It meant a lot to us.

Thank you so much and you all have a Merry Christmas and we hope the New Year brings everyone joy and wellness. Howard and Patricia Stiefer

Owen warmly remembered

Editor's note: The following e-mail from former Advisory Council member Bill Wallace is reprinted here with his permission.

You wrote an excellent article on Orv. He was many things to many people, but always a friend and a hard worker for the rank and file union members. He will always be warmly remembered. Thank you.

Bill Wallace; San Jose, CA

Gratitude owed to Weakley

Please accept my commendations on the fine article that you researched and wrote for the Nov/Dec. 2007 Utility Reporter.

The article on Ron Weakley was certainly informative and interesting. I am insisting that my crew members read it as I pass my copy around to them. It is incumbent upon those of us, who have been around here for quite a long time, to ensure that the younger members of the Union know how the Union originated here at PG&E and how the benefits that we enjoy today came from the foresight of dedicated members like Ron Weakley. We certainly owe this man and his peers a debt of gratitude for their sacrifices in ensuring the progress that we have today. You certainly gave credit, where credit is due, in your excellent write-up on Mr. Weakley. Good work. Eric!

As labor history is a long and laborious road that many men of stature paved for us today, it is incumbent upon us to pass this message on to those in our charge. The Homestead, Pennsylvania steel strike/lockout of 1892, Matewan coal mine strikes, the auto industry strikes, West Coast longshoreman's strike. Pinkerton atrocities are all an educational chapter that we should never forget and be ready to talk to our fellow union members about. As we honor members past by speaking about these historical events, noteworthy articles such as yours are pivotal in getting the message out. I will keep this one in my reference library for future use.

Fine job!

Gene McCandless; San Francisco, CA

Learned a lot listening to Weakley

I was saddened to read about Ron Weakley's death but really enjoyed the information about his union activities.

I represented the Gas Department during the first systemwide negotiations in 1953. I must admit I was the weakest link on the committee, but I learned a lot just listening to Ron Weakley, L.L. Mitchell, Mert Walters, Elmer Bushy, Howard Sevey and others.

I served on the San Joaquin Division Grievance Committee for several years so I worked with Scott Wadsworth, Mark Cook, etc. That's why the pictures brought back memories.

I just made out a check and noticed

my employee discount was \$30. I've been retired since 1983 and my pension and health insurance have really helped a lot. Even though I worked in the Gas Department, I carried an "A" card and now I get a pension check from the IBEW each month for \$55.48 which I enjoy spending at the local Indian casino.

Please excuse my printing because my longhand is a little shaky, as well as my spelling!

Keep up the good work!

Joseph A. McCauley; Fresno, CA



Sevev

Scott Wadsworth

Weakley diligent

I was saddened by the recent passing of Ron Weakley. The remembrance of Ron in November/December issue of the Utility Reporter was excellent and reminded me of my association with Ron Weakley over the years.

I first met Ron at a shop stewards conference in 1963, and I was struck by his knowledge of the utility industry and what was happening within PG&E. As an active Shop Steward in the Line Department of PG&E, I was appointed to serve on an interim job protection committee. I was a lineman at the time and the issue involved two-man crews and installation of new underground residential distribution systems. Weakley was concerned that PG&E would try to find a way to use cheaper classification to do the work. We were successful in keeping the work within the electric line classifications.

Ron was very smart about the issues and problems with all of the employers Local 1245 represented. He was very diligent about protecting the members working conditions and benefits with a goal to improve wages and working conditions.

As pointed out in the remembrance article, it was through his leadership that the Advisory Council was established within Local 1245, made up of elected representatives from all segments and geographical areas of our jurisdiction to better the communications and representation for the membership.

Ron established principles and goals for improvement to the welfare of the local union and its members. Under his leadership our members at Pacific Gas and Electric Co. and Sierra Pacific Power Co. were among the first in the industry to participate in a stock savings fund plan with contributions made by the employer in addition to a separate defined benefit pension plan. Weakley negotiated the first dental plan and Long Term Disability plan in the utility industry. Ron Weakley's vision, his ability, and his integrity made him a leader. He set the pattern for other utility local unions in the U.S.

Today unions, including Local 1245, are in a continuous struggle to protect and make improvements for the membership. To pause and look back, wages, benefits and working conditions are pretty good compared to where we came from.

I was very impressed with Ron's leadership and the Loca11245 organization and wanted to be a part of it. I was serving on the Advisory Council representing the San Joaquin Division of PG&E in 1968 when Ron hired me to serve as a Business Representative. His tutelage prepared me to go on to serve for 21 years as Business Manager, which now appears some don't want to remember or acknowledge.

Ron Weakley has left his mark and it will be a lasting mark.

Jack McNally, Business Manager 1980-2001, Sacramento, CA

L.L. Mitchell



Mark Cook



AL SANDOVAL MEMORIAL COMPETITIVE SCHOLARSHIP CONTEST

The purpose of this contest is to provide a grant in aid for scholarships to colleges and junior colleges, thereby making financial assistance toward the attainment of a higher education.

- 1. The grant will be as follows: Five hundred dollars (\$500.00) per year, up to four (4) years, as long as a C (2.0) average is maintained and the parent maintains their membership in good standing in Local Union 1245.
- 2. In order to be a candidate in this contest, you must be a son or daughter, natural, legally adopted or a legal ward of a member of Local Union 1245. You must also be a high school student who has graduated or is graduating in (the year of the contest). A copy of your diploma or a letter from your high school stating that you will graduate in 2008 must be attached to your scholarship application.
- 3. The Scholarship Grant will be made only to that candidate who intends to enroll full-time in any college certified by their State Department of Education and accredited by the Local Accrediting Association.
- 4. Applications may be secured by addressing the Recording Secretary of Local Union 1245, by calling the Union Office, by using the form printed in the Utility Reporter, or by downloading a form from the Local 1245 website.
- 5. Checks will be paid directly to the college upon presentation of tuition bills to the Local Union.

- 6. All applications shall be accompanied with a written essay, not to exceed five hundred (500) words, on the subject designated by the Executive Board.
- Essays should be submitted on 8 1/2" x 11" paper, on one side, preferably typed and doubled spaced with applicant's written signature at the conclusion of the essay.
- 8. Applications and essays must be mailed to I.B.E.W., Local Union 1245, P.O. Box 2547, Vacaville, California 95696, by registered certified mail only, and be *postmarked no later than the first Monday in March of each year (March 3, 2008).*
- 9. Each year the scholarship shall be presented at the Advisory Council meeting in May; the Judge and a guest and the recipient and parents shall be invited, at Local Union expense, to present and receive the Scholarship Award.

A suitable trophy or plaque shall be purchased by the Local Union to be presented to the scholarship recipient.

NOTE: The topic for the 2008 Al Sandoval Memorial Competitive Scholarship essay is:

Executive compensation has increased dramatically in recent years compared to compensation for the average American worker. Discuss ways in which this development reflects and/or conflicts with basic American values like "liberty and justice for all."

APPLICATION FOR THE AL SANDOVAL MEMORIAL COMPETITIVE SCHOLARSHIP
Sponsored by
LOCAL UNION 1245
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, AFLCIO
P.O. Box 2547 • Vacaville, CA 95696 • Telephone: (707) 452-2700

I hereby make application to enter the Competitive Scholarship Contest sponsored by Local Union 1245, I.B.E.W., AFLCIO:

Name					_ Date of Birth		
	(Last)		(First)				
Address					_Telephone (_)	
	(Street)	(City)	(State)	(Zip)			
Name of	Parent						
Compan	У						
Work Loo	cation						
I graduat	ted or will gradua	te from				High	School
Which is	located at						
I expect	to attend					College or	School
Location	·						
Candida	te's Signature				_Date		
	certify that the a				5		
	chool Name)	and has o	r will be gr	aduating i	n(Month a	and year)	, 2007.
Official's	signature and po						
	o certify that I an						
Candida ending	te, whose name	0			ny and gradua , 2008.	0	

(Parent's Signature and Card No.)

LOCAL 1245 TRADE AND VOCATIONAL SCHOOL GRANT

The purpose of these grants is to provide aid to the children of members to attain a trade or technical education.

- 1. The grants will be as follows: Five hundred dollars (\$500.00) per year, for up to two years for two candidates, as long as a passing grade is maintained, and a parent maintains membership in good standing in Local Union 1245.
- In order to be a candidate in this 2. contest, you must be a daughter or son, natural, legally adopted or a legal ward of a member of Local Union 1245. You must be a high school student who has graduated or is graduating in the year of the contest. A copy of your diploma or a letter from your high school stating that you will graduate in the year of the contest must be attached to your application. Additionally, a letter of recommendation from your vocational teacher, department head, or school principal must accompany the application.
- 3. Applications may be secured by addressing the Recording Secretary of Local Union 1245, by calling the Union Office, by using the form printed in the Utility Reporter, or downloading the form from the Local 1245 website.
- 4. The grant will be made only to a candidate who intends to enroll in

any industrial, technical or trade school, other than correspondence schools, which are accredited by the Accrediting Commission for Career Schools and Colleges of Technology (ACCSCT).

- 5. Applications must be mailed to IBEW, Local Union 1245, P. O. Box 2547, Vacaville, California 95696, by registered mail or certified mail only, *and be postmarked no later than first Monday of April of each year (April 7, 2008).*
- 6. Two names will be drawn by the Judge of the Competitive Scholarship Contest from those submitting applications. These two will be recipients of the grants.
- 7. Checks will be paid directly to the school upon presentation of tuition bills to the Local Union.
- 8. Presentation of awards will be made to recipients at the unit meeting nearest his residence following the drawing.



APPLICATION FOR THE LOCAL 1245
TRADE & VOCATIONAL SCHOOL GRANT FOR MEMBERS' CHILDREN
ENROLLING IN TECHNICAL, INDUSTRIAL, OR TRADE SCHOOLS
Sponsored by Local Union 1245 International Brotherhood of Electrical Workers, AFLCIO
PO Box 2547 • Vacaville CA 95696

CANDIDATE INFORMATION

Candidate's Name	Birth Date
Street	City
StateZip	Phone ()
High School	Graduation Date
Address of High School	
What school do you expect to attend?	
Where is it located?	
What Trade or Craft will you be studying?	
Why this particular Skill?	
Candidate's Signature	Date
STATEMENT OF	MEMBER/PARENT
Name of Member/Parent	
Employer	Location
	g of I.B.E.W. Local Union 1245, that Candidate is my h school during the term ending
Signature of Member/Parent Union Card No.	
This is to certify that the above named candida and has or will be	ate is currently enrolled as a student at, 2008. e graduating in, 2008. (Month and year)
(School Name)	(Month and year)
Official's signature and position	

Orville Owen, from page 1

working people and retired working people could better their lives through collective action.

Owen served Local 1245 as an Assistant Business Manager from 1980 to 1992, leading negotiations with Sierra Pacific Power and tree trimming contractors, among other assignments. A former baseball player and well over six feet tall, Owen was an imposing figure at the bargaining table. Although gentle and soft-spoken in everyday conversation, he came to the bargaining table with steel in his eye. When he struck the table for emphasis, area earthquake monitors probably registered it on the Richter scale.



Orv with Lois, his wife of 57 years.

"I will never forget his early union leadership talents and his almost reverent loyalty to his union and its members," said Ron Weakley at the time of Owen's retirement in 1992.

Weakley, the union founder who died last October, was a major figure in Owen's life. They met in 1952 when Weakley came up to Reno for a union meeting. Owen, a 25-year-old gas serviceman, was completely won over.

"And I thought right then, 'I want to meet this man and get with his program,'" Owen recalled in an interview last fall.

Owen became a shop steward and won appointments to the Grievance Committee and then the Bargaining Committee. In the early 1960s, Sierra Pacific offered Owen a job in management. Owen asked Weakley for a job on the union staff, but the union didn't have enough funds to hire him.

Orv in his mid-30s after joining the Local 1245 staff as an organizer: a winning smile and a towering physical presence.

Weakley had a theory on why the company wanted to promote Owen to management.

"Sierra Pacific found him to be an articulate, shrewd, and sometimes testy member of our union's negotiating committee and grievance committee," he recalled in 1992. "Orv was a massive presence at the bargaining table, and I suspect that Sierra Pacific felt it better to have him on their side, rather than listening to him telling them why and where they were wrong."

In 1963 Weakley offered to hire Owen as an organizer with temporary funds from the International. Weakley explained that the funds might not last, but Owen took the job and never looked back.

His first assignment was organizing at the Nevada Irrigation District. There was also a serious campaign underway organizing tree trimmers. In early 1964, the union assigned Owen to Pacific Gas & Electric in San Jose, where he helped shore up union support in the gas department.

Weakley's top assistant during this period was L.L. Mitchell, who was a principal co-founder of the union. Owen felt it an honor to be working for these two men and was never shy about saying so.

"I have yet to see anybody that would match Ron Weakley and L.L. Mitchell at the bargaining table," Owen recalled in 1991. "Ron was a philosopher. He was ten years ahead of most people. Mitch was a mechanic and he knew how to negotiate a collective bargaining agreement."

In 1962, Owen and his wife Lois named their new son Ronald Mitchell Owen in honor of the union leaders.

"He just adored Ron and Mitch. He learned so much from them," said Lois. The two union leaders "were like fathers" to Owen, whose natural father deserted the family when he was young.

Lois called Owen "a great husband and a great father" during their 57 years of marriage, despite the long and unpredictable hours that sometimes come with union staff jobs.

"I appreciated the fact that he cared so much about what he believed in. I Below: Orv with two business managers he worked for: Ron Weakley, left, and Jack McNally.



Right: Orv could be an intimidating figure at the bargaining table, chewing on the end of his ever-present pipe. "He almost bit it off when he got too fired up at the table," Ron Weakley once observed.

was happy that he was serving people and drawing up the contracts and helping them to get better wages and fringes. That meant a lot to me," Lois said.

Trying to help working people, she said, "just rang a bell with him and he pursued it ever since and fell in love with the labor movement and everything it represented."

In 1971 Mitchell succeeded Weakley as business manager. Owen had a few tough years after Mitchell failed to win re-election in 1977, but was quickly promoted to assistant business manager after Jack McNally was elected business manager in 1980.

Owen had overall responsibility for tree trimmer negotiations when Asplundh Tree decided in 1992 to impose \$2/hour wage cuts and then locked out the workers. The union responded with a two-week strike that completely overwhelmed the company's ability to perform work and led PG&E to cancel Asplundh's contract. The strikers subsequently landed jobs with the company chosen by PG&E to replace Asplundh in that area.

It was one of the most dramatic victories in Local 1245 history. At a picnic to celebrate the occasion, Owen grabbed a picket sign and led tree trimmers, supporters and union staff members in an impromptu victory parade.

Later that year, Owen retired, and promptly took up the cause of retirees. He remained a driving force at the San Jose Chapter of the Local 1245 Retirees



Sure, you can come in. As long as you have a union card. Any questions?

Club throughout his retirement. In 2001, Orville and Lois Owen became charter members of the AFL-CIO's Alliance for Retired Americans. Owen was also active in the Congress of California Seniors.

Owen believed that many of the problems faced by working people had political origins. "He couldn't stand Bush," said Lois, a fact already appreciated by anyone who had ever listened to Owen express outrage over attempts by the Bush administration to privatize Social Security and Medicare.

"If Social Security goes kaput, we're all in deep fat," Owen said in 2002.

Owen's sense of mission never seemed to abandon him. In fact, he seemed to draw strength and a certain joy from engaging in the battle.

"It's always a struggle. The struggle goes on, it will always be there," he once said. "The workers are going to have a struggle all their lives."

And there's absolutely no doubt what advice Orv Owen, our union brother, would give to those engaged in the uphill battle for workers' rights in the coming years:

Keep the faith!



Orv leads a celebratory picketline at a picnic for Tree Trimmers following the successful strike against Asplundh in 1992.





Retirees remember Owen, look ahead to bargaining

retirees at the January meeting of the San Jose Chapter of the Local 1245 Retirees Club on Jan. 3.

Owen, the former Local 1245 Assistant Business Manager, long-time Retirees Club member, and active participant in the San Jose chapter, died on New Year's Day.

"At our meeting we discussed some of our experiences with Orv," reported Chapter President Jack Hill, who explained that he himself had been persuaded by Owen to join the union back in 1966 when Owen was the union business rep in San Jose.

"And without him, we would not have had a Retiree Club," said Hill. "When things got rough he kept us going. We all will sure miss him."

Retirees at all five chapters are

Retiree Club Meeting Schedule

East Bay Chapter: 2nd Thursday each month, 10 a.m., IBEW Local 595, 6250 Village Parkway, Dublin, CA

San Jose Chapter: 1st Thursday each month, 10 a.m., at IBEW Local 332, 2125 Canoas Garden, San Jose, CA.

Vacaville/Sacramento Chapter: 2nd Wednesday each month, 10 a.m., at IBEW Local 1245, 30 Orange Tree Circle, Vacaville, CA.

Santa Rosa Chapter: 1st Tuesday each month, 10 a.m., at Coco's Restaurant, 1501 Farmers Lane, Santa Rosa.

Merced Chapter: 1st Tuesday each month, 10 a.m., Merced Senior Community, 755 W. 15th Street, Merced.

rville Owen was on the minds of preparing to send representatives to a joint meeting at Weakley Hall in Vacaville on Jan. 18 to discuss strategy for upcoming general bargaining between Local 1245 and PG&E. Also scheduled to be present at the union hall that day is IBEW International President Ed Hill.

> Retirees in Santa Rosa in December took note of the fact that Local 1245 unit meetings will start entertaining proposals for negotiations-an opportunity to put forward proposals addressing retiree concerns. Although retirees themselves cannot make motions, there are many members-especially those nearing retirement themselves-who share retirees' concerns over pension and medical benefits.

> The Santa Rosa retirees also discussed the upcoming political elections in 2008 and the possibility that candidates may ask to attend meetings to meet retirees (also known as "the demographic group most likely to vote in elections.")

> At a time when medical costs keep going up for everyone, the Santa Rosa group also discussed the pluses and negatives of a national health plan, said Recording Secretary Ken Rawles.

> At the Merced Chapter meeting in December, retirees discussed possible contact between Retiree Club chapter officers and Local 1245 Executive Board members to discuss "retirees' benefits and needs," reported Chapter President Mike Bonds. Among the issues of greatest concern to the Merced chapter are voting rights for retirees at local unit meetings, a cost-of-living adjustment (COLA) for pension benefits, and an increase in PG&E contributions toward retiree medical benefits.

Congratulations newly-retired members

The Local 1245 Retirees Club congratulates these recently-retired members of the union. We invite you to participate in a Retiree Club chapter in Dublin, San Jose, Vacaville, Santa Rosa, or Merced. If you don't have a chapter nearby, call the union at 707-452-2718 and find out how you can help start one!

Frank Knowlton

Santa Rosa, CA

Richard Pearson

Cottonwood, CA

21 years

13 years

Ken Eckler

Sacramento, CA

Harry Guilford

Redding, CA

13 years

32 years

Nancy Alders 13 years Stockton, CA Philip Begley 32 years Anderson, CA **Robert Branche** 14 years Oakland, CA **Robert Burchfield** 25 years Shingletown, CA Leopold Casa 28 years King City, CA

Weakley Remembers Tales from the Early Days of IBEW Local 1245

Leaving Las Vegas

Editor's note: Local 1245 founder Ron Weaklev loved to tell stories-from the early tumultuous days when the union was being organized, to the sometimes bizarre situations he found himself in during 20 vears as the union's business manager. He asked that these stories not be published until after his death.

nome years ago a man named Grant Sawyer became governor of Nevada. We were very strong supporters of his candidacy. In fact, our local union gave him

night before the election. He got on the radio with that money. We think that helped him over the top and he became governor.

asked me if he could be of any assistance to anything we needed or wanted. I told him we didn't want anything for having

He served for two terms in Nevada. He

Ron Weakley \$1500 to use the

David Jenkins Michael Pernitzke 25 years 23 years Pleasant Hill, CA Los Gatos, CA **Thomas** Pope Gary Iones 16 years 33 years Hemet, CA Challenge, CA Albert Jordan Gary Uber 27 years 16 years Colusa, CA Verden, OK

Gary Van Horne 36 years Newark, CA Kenneth Williams 46 years Santa Rosa, CA



supported him.

He said, "I have a vacancy on the Nevada Gaming Commission. Do you know anyone you might suggest, I'm looking over candidates."

I said, "Yes, there is. There's a man I know in San Francisco who's the retiring chief agent for the FBI. He's retiring, and I'll ask him if he's interested and he'll let me know and I'll let you know."

So the (ex-FBI) guy said he was interested. So I said, "You'll have to move to Nevada, you have to be a Nevada resident." The guy said, "OK." He did move, and he did get on the commission.

Well, you can imagine an FBI guy getting on the Nevada Gaming Commission-the reaction among the gamblers and the gangsters and the rest of them! So I got associated with that happening and I became somewhat unpopular in certain circles

I was sitting in the Riviera Hotel having a beer and a young man came up. He looked like a college student, with short cropped hair, probably in his early 20s. He asked if he could sit down. I said, "Sure." He simply told me if I wanted to remain alive it would be a good idea to get on a plane and get out of Las Vegas. So I thanked him and I left Las Vegas.

Unit Meetings

Unit 1211, Salinas, will meet April 1 (not April 8). From now on, Salinas unit meetings will be on the first Tuesday of the month rather than the Tuesday of the first full week of the month. Bill Brill, Business Rep.

Unit 1219, Hollister, will meet April 2 (not April 9). From now on, Hollister unit meetings will be on the first Wednesday of the month rather than the Wednesday of the first full week of the month.

Bill Brill, Business Rep.

Unit 3514, Chilcoot, now meets on the third Tuesday of the month. Next meetings are Jan. 15, Mar. 18 and May 20.

Randy Osborn, Business Rep.

Cowart retires t's true. Richard Cowart served on

so many union committees-at one point he was on 11 at the same time—he doesn't remember them all

But Cowart himself is likely to be remembered

Richard Cowart

for a long time to come for his commitment to union principles and his wide-ranging contribution to Local 1245.

When he retired at the beginning of 2008, Cowart's 35 years with IBEW included 28 years as steward, seven years on the Advisory Council, and six years as business representative.

And then there were all those committees, where Cowart's job experience and labor principles got put to good use for the union: Rubber Glove, All-Hands, New Business Pilot, Combo Crew, Policy 22, and FACTS, to name a few.

Unionism came naturally to Cowart. He remembers going with his father-a merchant marine-to the MEBA hall in San Francisco. After Cowart hired on at PG&E in 1972, he was quickly recruited

as a steward, serving with then-Business Rep. Veodis Stamps.

Frank Saxsenmeier, a long-time business rep who retired as assistant business manager in 2005, was a major influence.

"He'd push me to prove that I had a grievance and make me do my homework. That's probably why you saw me at the union hall so much," Cowart says.

Another major influence was the late, much-missed Business Rep. Joe Valentino. "I loved that man," Cowart says, and lets it go at that.

When Business Manager Perry Zimcontinued on page 7

Line Clearance Tree Trimmers

Tree trimmer bargaining update

The union negotiating committee for line clearance tree trimmers and vege-

tation control has proposed improvements in wages, benefits and working conditions in bargaining with the four biggest tree trimming contrac-



tors: Davey Tree Ray Thomas

Surgery, Asplundh Tree Expert, Utility Tree Service and Trees Inc.

The companies are unilaterally seeking major employee contributions towards future monthly health and welfare premiums. The union is aware that health and welfare costs continue to skyrocket. However, in viewing medical costs in the perspective of employee "total compensation," the union believes that the companies are receiving a very good deal on labor costs within IBEW 1245's jurisdiction.

The union committee has met with these contractors as a group on five separate occasions: Nov. 20 in San Francisco, and Nov. 30, Dec. 4, 5, and 6 at Weakley Hall in Vacaville. A sixth meeting scheduled for Dec. 20 was cancelled by the contractors, who said they were working on responses to the union's economic proposals.

The next scheduled negotiating dates are Jan. 9 and 10 at Weakley Hall.

The union will keep members informed of the results of ongoing negotiations at the regular unit meetings of the union. The unit meeting schedule can be found on-line at www.ibew1245. com/unitmeetings.html.

In other news, a surprising number

of union tree trimmers are not enrolled in the health insurance plan obtained through past bargaining. Members are urged to look at their pay stubs and make sure the deduction for insurance is being taken.

Últimas noticias sobre las negociaciones de los podadores de árboles

El comité negociador del sindicato para los podadores de árboles y trabajadores de control de la vegetación ha propuesto mejoras en salarios, beneficios y condiciones de trabajo con los cuatro contratistas más grandes de poda de árboles: Davey Tree Surgery, Asplundh Tree Expert, Utility Tree Service and Trees, Inc.

Las compañías están buscando unilateralmente importante contribuciones de los trabajadores hacia futuras contribuciones para los costos de seguros médicos y beneficios de bienestar. Sin embargo, analizando los costos médicos en la perspectiva de la "compensación total" del empleado, el sindicato cree que las compañías están recibiendo una propuesta muy buena en el área de los costos laborales dentro de la jurisdicción de la IBEW 1245.

El comité del sindicato se ha reunido con estos contratistas como un grupo en cinco ocasiones separadas: Nov. 20 en San Francisco y Nov. 30, Dic. 4, 5 y 6 en Weakly Hall en Vacaville. Una sexta reunión planeada para el 20 de Diciembre fue cancelada por los contratistas, que dijeron que estaban trabajando en sus respuestas a las propuestas económicas del sindicato.



A Davey Tree crew performs line clearance tree trimming just east of Dry Creek on Highway 299 in California. In the lift is Working Foreman Gil Suarez, a 12-year member of IBEW Local 1245. Also working on the job, but not pictured, is Climber Travis Payton, initiated in 2004. Photo by Ray Thomas Utility Reporter

Las siguientes fechas para las negociaciones son enero 9 y 10 en Weakley Hall.

El sindicato mantendrá a sus miembros informados acerca de las reuniones regulares del sindicato. El programa de reuniones del Sindicato se puede ver en www.ibew1245.com/unit meetings.html.

En otras noticias, un sorprendente número de podadores de árboles del sindicato no está participando en el plan de seguros de salud obtenido a través de pasadas negociaciones. Se exhorta a los miembros a que se fijen en sus cheques de pago para asegurar que la deducción de sus primas de seguro ha sido descontada.



Dani Sandoval, CLA, and Jorge Cisneros, Foreman, at work last year for Davey Tree Surgery in the Sacramento area.

Photo by Eric Wolfe



Front row, from left: Juan Amezcua, Trees, Inc.; Robert "Casey" Burtch, Utility Tree Service, Inc.; Pete Ely, Davey Tree Surgery; Roy Hayes, Davey Tree Surgery; Ray Thomas, Local 1245 Senior Business Rep.; Sergio Munoz, Asplundh Tree Expert Co. and Local 1245 Advisory Council representative; Junior Ornelas, Local 1245 Business Representative. Back row, from left: Octavio Perez, Trees, Inc.; Carl Lamers, Local 1245 Business Representative; Jose Torres, Davey Tree Surgery; Dale Evenson, Asplundh Tree Expert Co.

In Memoriam: Manuel Angel Lucas

Davey Tree Surgery Co. employee Manuel Angel Lucas died while working outside of Ben Lomond, CA on Jan. 3.

Manuel Angel Lucas was working on the ground when he was struck by a tree or a portion of a tree, according to the Sheriff's office. Fire crews and medics were sent to the scene, but Lucas was pronounced dead at the scene.

The Davey crew was trimming trees on a large parcel in a remote spot off Empire Grade near Alba Road, according to a report in the Santa Cruz Sentinel. Services were scheduled for Jan. 11 in Salinas.

Local 1245 extends its condolences to the friends, family and co-workers of Manuel Angel Lucas.

Cowart Retires, from page 6

merman hired him as a business rep in 2001, Cowart knew PG&E inside out. But the public sector—Cowart was given responsibility for the City of Ukiah Electric Department, the City of Willits, Shelter Cove and NCPA—was new terrain.

"It's very much more complicated," Cowart readily admits.

When asked what advice he'd give to a new union representative coming on the job today, he doesn't skip a beat: "I'd give the same advice that Frank gave me, to answer their phone calls."

In fact, he's still getting calls. "Today I answered a phone call for a fellow that left a message at the hall. They need to hear from you."

Now that's dedication. It's what you'd expect from someone whose heart is in the labor movement.

"I love every moment I spent working with IBEW," says Cowart. "From the time I was a steward until the time I left, working with IBEW is what made my life worthwhile. I'm going to miss them all."

The feeling's mutual, Rich.



By Ron Cochran

he vote taken at the Dec. 12 Outside Line unit meeting was unanimous in adding the 25¢ an hour

increase that was allocated for a projected increase in the Lineco premiums. This increase was not needed and per the contract was to be applied to wages or Ron Cochran NEAP. The 2008



Lineco Employer contribution increases 25¢ from \$5.00 to \$5.25. Section 4.11 of the current contract states that if the increase is not needed the difference will be applied to the NEAP or to the members' wages.

Calls for the month of December are as follows:

Journeyman. Linemen: 17 Apprentice Linemen: 2 Cable Splicer: 0 Equipment Specialist: 5 Groundman: 10 Total calls: 34

Injured Workers Fund

The trust account has been set up and all Injured Workers Fund Authorization cards for members working on referrals prior to the membership approval have been collected and forwarded to NECA to start the collection process. All new referrals after the Sept. 13 vote have the fund authorization language included. The Outside Line Unit made a motion at the Oct. 10 unit meeting to donate the unit's 2007 social fund of \$100 to the Injured Workers Fund account as the first deposit into the account We should start to see account balances on this trust next month.

Joint Safety Committee Meeting

The Joint Safety Committee is schedule to meet here at 1245 Vacaville office on Tuesday, Dec. 11, for their next regularly scheduled meeting. The last meeting was held on Sept. 19 at the JATC facility. On Oct. 31 a Joint Sub-Commit-

Get the latest news at www.ibew1245.com

tee convened in Escondido Ca, to discuss proposed rule revisions to the outside line construction Safety Rule Book (Red Book). Committee was put together to discuss FR Clothing and equi-potential grounding. Notes from that meeting are available on-line at the IBEW Local 1245 website at www.ibew 1245.com/news-items/OL_Report_ Revised_12-20-07.htm. After approximately Feb. 1 the notes will be located at www.ibew1245.com/newsarchive/OL_ Report_Revised_12-20-07.htm

Cal-Nev JATC Report

We currently have 327 outside line apprentices registered in our JATC program. We have 7 apprentices traveling out of our jurisdiction for work; 75 apprentices are working out of Local 1245; 229 are working out of Local 47; 13 are working out of Local 396; 17 are off of work. We graduated 47 apprentices in 2007 to journeyman lineman. We have indentured 53 apprentices into the program.

We have 31 traffic signal maintenance apprentices registered: 6 are working for Republic Electric in Local 1245's jurisdiction; 24 are working for Republic Electric in Local 47's jurisdiction.

Other News

• The COMET training scheduled for Jan. 5 was bumped off track by the



winter storm that hit the same weekend, keeping many members busy with stormrelated repairs.

- Outside Line members and staff attended a First Aid/Cardiopulmonary Resuscitation training session hosted by the California-Nevada JATC. The eight-hour class, held at Weakley Hall, had 17 people in attendance.
- First contracts have been negotiated with Cam Constructors (Outside Line agreement) and PMC (Pole Test and Treat Agreement. Others are in process.
- Pole test and treat contracts have been renegotiated-and approved by the International Office-with Davey



Tree, Utility Pole Test, Republic ITS, and Osmose.

First Aid & CPR is the second Saturday of every month at our Riverside and Sacramento facility.

> Ron Cochran is Assistant Business Manager, Local 1245

Sacramento Municipal Utility District

Apprentice Jason Ray, Sacramento Municipal Utility District, working a half-inch sling that was attached to a pull line used to install new conductor for a 69kv circuit.



Apprentices reconductoring 12 kv and installing a 69kv line on top for the Sacramento Municipal Utility District along Bruceville Road in Elk Grove are, from left, Neil Hylton, Kerry Tarvin and Ben Fisher.



Topping a double redtag pole for Sacramento **Municipal Utility** District on Bruceville Road in Elk Grove are, from left, Rick Carr, apprentice; Kyle Martin, lineman; and Douglas Jones, apprentice.



Seminars will be available to I.B.E.W. / P.G.&E. employees age 40 and older and those on LTD. Your spouse or significant other is also welcome to attend. These seminars are provided to you free of charge. Please call Merrill Lynch in Walnut Creek, CA at **800-234-3858** and ask for Yi Seeman if you have any questions.



I.B.E.W. Local 1245 and Merrill Lynch Present: Retirement Planning Seminars

Bakersfield

Friday, February 1st 6:30 PM to 8:00 PM Presenter: Dave Brantley Doubletree Hotel 3100 Camino Del Rio Ct. Bakersfield, CA

Oakland

Tuesady, February 5th 6:30 PM to 8:00 PM Presenter: Dave Brantley Hilton Oakland Airport One Hegenberger Rd. Oakland, CA

Foster City

Tuesday, February 12th 6:30 PM to 8:00 PM Presenter: Dave Brantley Crowne Plaza 1221 Chess Drive Foster City, CA

Chico

Saturday, February 23rd 1:00 PM to 2:30 PM Presenter: Bob Gallo Holiday Inn 685 Manzanita Ct. Chico, CA

Ukiah

Friday, February 29th 7:00 PM to 8:30 PM Presenter: Bob Gallo Holiday Inn - Ukiah 1720 N. State Street Ukiah, CA

Fresno

Saturday, February 2nd 9:00 AM to 10:30 AM Presenter: Dave Brantley Piccadilly Inn 2305 W. Shaw Ave. Fresno, CA

San Jose

Saturday, February 9th 9:00 AM to 10:30 AM Presenter: Dave Brantley Hilton San Jose 300 Almaden Blvd. San Jose, CA

Monterey

Thursday, February 21st 6:30 PM to 8:00 PM Presenter: Dave Brantley Hyatt Regency One Golf Course Dr. Monterey, CA

San Luis Obispo

Saturday, February 23rd 9:00 AM to 10:30 AM Presenter: Dave Brantley Madonna Inn 100 Madonna Road San Luis Obispo, CA

Santa Rosa

Saturday, March 1st 9:30 AM to 1 1:00 AM Presenter: Bob Gallo Hilton - Santa Rosa 3555 Round Barn Blvd. Santa Rosa, CA

Concord

Saturday, February 2nd 9:30 AM to 11:00 AM Presenter: Bob Gallo Concord Hilton 1970 Diamond Blvd. Concord, CA

Sacramento

Saturday, February 9th 9:30 AM to 11:00 AM Presenter: Bob Gallo Holiday Inn 300 J. Street Sacramento, CA

Redding

Saturday, February 23rd 9:00 AM to 10:30 AM Presenter: Bob Gallo Best Western 2300 Hilltop Dr. Redding, CA

Stockton

Tuesday, February 26th 7:00 PM to 8:30 PM Presenter: Bob Gallo Stockton Grand Hotel 2323 Grand Canal Blvd. Stockton, CA

Eureka

Saturday, March 1st 9:00 AM to 10:30 AM Presenter: Vave Brantley Red Lion Inn 1919 Fourth Street Eureka, CA



Access Authorization

ccess authorization is no small matter at a nuclear plant. New employees who need regular access to the plant must apply for a key card through the access authorization department, where Routine Plant Clerks help administer the plant's security apparatus.

"We have to do a background of the individual. We process fingerprints through the FBI," explains Rou-

tine Plant Clerk Mary Reneau.

Clerks administer the MMPI, a standard test in use for decades, to get a basic personality profile of job applicants. And once an employee qualifies for the key card, who do you suppose takes the photo? That would also be a Routine Plant Clerk.

Smile!



Routine Plant Clerks, from left, Dianne McFadden, Janet Fillmore, Terrie Gramespacher, Jennifer Beck, Cynthia Wilson, Virginia Hopkins, Dolores Johnson, and Mary Reneau (inset).

Monitoring Exposure

By necessity, nuclear plants are designed to limit the amount of radiation that reaches people working there.

"The Translucent Dosimeter measures the radiation that a person receives in a Radiological Controlled Area," explains Dosimetry Clerk Carolyn Kuhl. If workers go into the containment area "they have to have additional badges."

Permanent employees and visitors are monitored. So are temporary workers who work the outages. "We keep all the records. We make sure the outage workers don't have too much exposure before they start working so they don't exceed their annual or their lifetime



limit," says Kuhl. Besides external exposure, "whole body" counts are also taken to monitor radiation that may have been ingested. "We have to keep

those records forever," says Kuhl.

Carolyn Kuhl, Dosimetry Clerk

Records Management

It's hard to keep track of what you've done, or what needs to be done, without proper records. In Records Management, Routine Plant Clerks handle almost all documents that come through the plant, says Sue Kin-

near, such as schematics that are ready to be processed and distributed. Routine Plant Clerks in Records Management also do a lot of document scanning, a process that has replaced microfiche as the preferred method of storage.



Sue Kinnear, Routine Plant Clerk



Kathleen Taylor, Dosimetry Clerk



Jessie Lemus, First Plant Clerk



The Unit 2 turbine, on the 140' level of the "Turbine Deck."

Testing and Training

Testing and training are labor intensive activities. Just ask Routine Plant Clerk Gayle Barry.

"It can get really crazy here," says Barry, who keeps a bottle of Mylanta at the ready. "Right now we're in the middle of indexing everything in the back

room," where all the training materials for the technical programs are kept.

The clerks proctor the computer-based testing lab, print materials for testing, and perform various training tasks in advance of outages.

"Teamwork is essential to this area," says Barry.



Gayle Barry, Routine Plant Clerk



January/February 2008





Power Generation



Standing in front of the moisture separators are Operators, from left, Frank Eric Lowe, John Clipperton and Jack Kiser.

The reactor control room. Actually, it's a nearly-exact replica of the control room, which can be used for training purposes. Access to the real control room is much more tightly controlled since 2001.

The turbines are what Diablo Canyon is ultimately about, utilizing steam heated by a nuclear reaction to generate electricity. Business Rep. Dan Lockwood stands in the cavernous room where the action is. Ben Kirschbaum, Instrument and Control Tech, takes data from turbine vibration monitor that is being replaced.



Senior Control Operator Mike Jacobson.





Routine Plant Clerk Joanna Markum provides support to "the welders and the tool crib guys."



Diablo Canyon takes security very seriously, as you can see from the rolls of barbed wire behind Janitor Rodney Spears.



Diablo Canyon

continued from previous page

On Task



Rigger John Stone returns to work after donating blood, as shown by the armband. "We're trying to be good community neighbors," says Stone.



Control Technician Charles Wood after finishing pressure transmitter calibration.



Tool Clerk Dan Ferrini takes a break from a tork calibration machine to take a phone call.



Mel Silva, First Plant Clerk

Payroll

Senior Plant Clerk Cathi Mazzacavallo, below, handles payroll. "SAP is challenging," she says, referring to the software. But rather than falling victim to frustration, she keeps an anti-stress kit nearby, and here demonstrates how to use it.



Routine Plant Clerk Renelle Hayes, left, shares a few moments outdoors with Lynn Moon, chair of the local unit meeting for Local 1245, and Business Rep. Dan Lockwood.









"This is the test facility for relief valves. We test them here, rebuild them, retest them and send them back to the plant," says Tom Stewart, Foreman. From left: Todd Ettestad, Machinist; Ryan Borba, Wendy Kadota, Albert Castro, and Tyrell Cargill, Apprentice Mechanic Riggers; and Stewart.

Testing Relief Valves



Machinist Todd Ettestad.





Steve Heckman, Willy Garris, Paul Sims and Dennis Romero are among the electricians responsible for insuring the safety and reliability of plant equipment.



Maintenance Subforeman Jim Dykstra and Mechanic Rigger Shane Goldman.

Emergency diesel generators provide back-up power for the emergency cooling pumps. Working on a switch calibration are Nic Evangelo, Apprentice Instrument Repairman; Jim Bennett, Shift Control Technician; and Mike Symens, Apprentice Instrument Repairman.

Power Plant



Machinists Larry Wise and Utility Worker Juan Anaya prepare some new fittings.

Building Mechanics

Diablo Canyon houses some of world's most complex technology for producing electricity, but someone has to keep the house itself in order. That job belongs to the building mechanics, who provide maintenance services to the plant's many ancillary buildings.

Need some carpentry or electrical? Call a building mechanic. Need some cubicles installed or furniture repaired? How about flooring or carpeting? There are a thousand "honey do's" that come with the job, says Crew Leader Gregg Larson, including the occasional major renovation such as remodeling the 6th floor and converting the west end of it into managers' offices.

Building mechanics, despite their title, aren't necessarily con-

fined to buildings. They also perform landscape m a i n t e n a n c e, street sweeping, culvert, clearing, and maintenance on sewage pump stations, among other duties.



Building Mechanics at Diablo Canyon available for a photo were Crew Leader Gregg Larson, Paul Marting, Temporary Supervisor Ron Layugan, Larry Kelley, Ken Gray, Clerk Susan Massey, Raul Robles, Mark McDermott and Ric Muscio.

Machinists



Machinist Kris Evangelo marks studs with heat trace number and material number.



Machinist Dan Ward machines all-thread size length for relief valves.



Machinist Subforeman Don Rotta dials in a fixture that's used to hold a valve bonnet to be machined.



Dan Rhodes, Jr., GC Painter "A", sandblasts some parts.



Mechanic-Riggers Robert Turney, left, and Al Etchison prepare to move a channel head for a heat exchanger on a diesel generator.



Mechanic-Utility Worker Alvino Lafuente works on a Safety Culture project.



Electrician and union steward John Molette, right, discusses a grievance with Business Rep. Dan Lockwood.



Tool Clerk John Mancebo is performing record-keeping required by the NRC.



"Everybody complains about the weather, but nobody ever does anything about it."

GLOBAL WARMING,

ELECTRIC POWER,

AND IBEW 1245

Nuclear Revisited Global warming is cooking our planet. Carbon emissions must

be drastically reduced. Is nuclear power part of the solution?

THIRD IN A SERIES

by Eric Wolfe

wo reactors nestled in the hills along the central California coast show what is right with America's nuclear power program.

Operated by members of IBEW Local 1245, the Diablo Canyon power plants



The twin nuclear reactors at Diablo Canyon, located on the central coast of California, provide about 20% of PG&E's electric power. *Diablo Canyon Independent Safety Committee*

have run at 80% of capacity during their lifetime compared to an average of 70% for the rest of the US nuclear fleet. More recently, DCPP has operated at over 90% of capacity, and has achieved the top rating of the Institute of Nuclear Power Operations for overall performance.

Together, Diablo's two 1100-megawatt units provide about 20% of the power supplied by Pacific Gas & Electric to its customers in California.

There's a muscular ingenuity to the way that nuclear plants convert tiny quantities of fuel into large quantities of electric energy. It's a heavyweight technology that has inspired people to think big. In 1954, the head of the Atomic Energy Commission, Lewis Strauss, famously spoke of a nuclear future where electricity would be "too cheap to meter." President Richard Nixon in 1974 envisioned a nuclear age in which the US would have 1,000 reactors operating by the year 2000.

These goals proved unrealistic. In the first decade of the 21st century there are just 104 nuclear plants operating in the US.

But the new century has brought urgent concerns about catastrophic climate change, and nuclear power is once again inspiring big hopes. In a widely-noted study published in 2003, a team of scientists at MIT laid out a scenario for battling carbon emissions by tripling US nuclear capacity by 2050. Some nuclear advocates have even suggested that America should try to match

Mark Twain

France, where nuclear accounts for 77% of national power generation.

Todd Christine Whitman, the former head of the Environmental Protection Agency who now consults for the Nuclear Energy Institute made the case for a nuclear renaissance in Business Week last fall. "With nuclear power," she wrote, "we get the chance to preserve the Earth's climate while at the same time meeting our fu-

ture energy needs." But a nuclear renaissance will still have to deal with several unresolved issues from the earlier era—reactor safety, waste storage, arms proliferation, and cost—along with this fundamental question: Can nuclear power be deployed quickly enough to make a meaningful difference in the battle against global warming?

A Nuclear Renaissance

The industry appears ready to give it a try. On Sept. 25, 2007 NRG Energy, Inc. and the South Texas Nuclear Operating Co. filed for a license to build and operate two new nuclear plants in Texas the first such application submitted in nearly 30 years. In the closing months of 2007, power companies filed applications or partial applications for a total of six new nuclear plants in Texas, Virginia and Alabama. The Nuclear Regulatory Commission is expecting applications for 28 new reactors over the next two years.

It took some prodding to get the industry moving again. Investors still remember nuclear projects that saddled some utilities with ruinous costs.

The Shoreham nuclear project in New

York, originally projected to cost \$65-75 million, ended up costing \$6 billion. It was closed without ever producing a single kilowatt of power, and led to the partial public takeover of the Long Island Lighting Co. In New Hampshire, the Seabrook nuclear project went \$4.5 billion over its original price tag of \$1 billion and sent its major backer, Public Service of New Hampshire, into Chapter 11 bankruptcy.

To lure investors back to the nuclear industry, the Energy Policy Act of 2005 offered financial incentives that include \$3 billion in research subsidies, \$3 billion in construction subsidies, and about \$6 billion in operating tax credits. In December of 2007, Congress sweetened this package with another \$20 billion in loan guarantees for nuclear projects.

These federal subsidies could help reinvigorate the nuclear industry. But there are skeptics.

Peter Bradford, a former member of the Nuclear Regulatory Commission and now vice chairman of the Union of Concerned Scientists, says the subsidies "will prove only that the government can compel the taxpayers to build nuclear plants." Whether new nuclear plants can be competitive with other alternatives in the absence of massive federal subsidies will be known only after new plants have come on line and established an economic and safety track record—something that is at least 10 years away, and possibly much longer.

Harder and Faster

The existing fleet of reactors reinforces nuclear's image as a powerful technology and a logical successor to coal.

Although the number of reactors has

remained steady at just over 100 for many years, these reactors have increased their output from 673 billion kilowatt hours (kWh) in 1995 to 782 billion kWh in 2005. The industry has achieved these gains by running reactors at an average 90% of design capacity, compared to an 80% average in 1998. This improved performance owes much to the IBEW members who have helped perform refueling outages with ever-increasing efficiency, keeping plants on-line and producing power to the greatest extent possible.

In a further demonstration of strength, some reactors are now being pushed beyond their design capacity, a process known as "uprating." More than 4,900 MW of power uprates since 1977 have added the equivalent of four to five nuclear reactors to the grid.

In addition to running its plants harder, the nuclear industry is running them longer. Since 2000, the Nuclear Regulatory Commission (NRC) has approved 47 applications to extend the operation of nuclear plants beyond their original 40-year lifespans.

Running plants into their "golden years" offers the prospect of financial benefits for investors as well as consumers. Although costly to build, nuclear plants are relatively cheap to operate. Power from PG&E's Diablo Canyon, for example, currently costs about 3.8 cents per megawatt hour. A plant that runs 60 years is a far more attractive economic proposal than one that runs only 40.

Nuclear power currently provides about 20% of the nation's electric output, virtually carbon-free. US coal plants produce 50% of the nation's electric output, but they also produce 82% of carbon emissions from US power plants. It will be a cause for rejoicing if nuclear power



Nuclear plants have been operating at close to full capacity in recent years. Nuclear Energy Institute



Electric generation by fuel source, 2004. US Energy Information Administration, 2006





At the leading edge of a national trend, the Diablo Canyon workforce has conducted refueling outages with ever-increasing efficiency. The Unit 1 refueling outage at Diablo Canyon in the spring of 2007 was completed in just 29.8 days, the best time ever for Unit 1. As shown in this graph, the industry average in 2006 was 39 days, a big improvement over the past 15 years. *Nuclear Energy Institute*

can eliminate the dire threat posed by climate change. But the obstacles are many and long-standing, and cannot be brushed aside. Our choices have consequences, and in the battle against global warming we may not have a second chance to get it right.

Reactor Safety

Nuclear proponents say reactors are safe. Opponents say reactors are capable of catastrophic accidents.

Both sides are right. Nuclear plants in the US have extraordinary safety features designed to protect the public against radiation exposure. Reactors operate safely virtually 100% of the time.

But so much attention is given to safety precisely because reactors have enormous destructive power. In a landmark study for the Atomic Energy Commission, the Brookhaven National Laboratory estimated that a "worst case" accident at a 1,000-megawatt reactor could kill as many as 45,000 people, cause property damage of nearly \$300 billion, and radioactively contaminate an area the size of the state of Pennsylvania.

The accident at Three Mile Island near Harrisburg, Pennsylvania in 1979 produced a partial melt down of the plant's nuclear core. The reactor containment building prevented a catastrophic release of radiation, but the accident undermined public confidence in the industry.

There have been other, more recent near-misses.

In 2002 officials investigating First-Energy's Davis-Besse plant in Ohio discovered that boric acid from leaky water nozzles had burned through the reactor's six-and-a-half inch thick carbonsteel head, leaving only the quarter-inch thick stainless-steel lining—which was starting to crack and bulge.

Scientists at Oak Ridge National Laboratory later determined that if the plant had continued operating, this liner would have burst. David Lochbaum, a nuclear engineer with 17 years experience working in nuclear power plants, told Fortune magazine what this meant:

"They came very close to an accident that would have been much worse than Three Mile Island and not as bad as Chernobyl. You don't ever want to be in a place where those are your bookends."

The public is supposed to be protected by the Nuclear Regulatory Commission, which is responsible for enforcing nuclear safety. But the NRC failed to act on early warning signs of trouble at Davis-Besse. In late 2001, several months before the severity of the problem came to light, the NRC became concerned about steel nozzles in the reactor lid at Davis-Besse. The NRC legal team approved a rare shutdown order. But Sam Collins, the NRC's nuclear reactor regulation director at the time, refused to execute the order—right after meeting with Robert Saunders, who was then chief nuclear officer for FirstEnergy.

In a trial last fall, another NRC official testified that Saunders "assured us he would not operate it unless he was convinced it would be safe."

Andrew Siemaszko, an engineer at the plant, had photos of the rust-streaked reactor head from refueling outages in 1998 and 2000. During the 2000 refueling he says he wanted a complete cleaning of the head, but the utility simply re-started the plant instead. The damning photo from the 2000 refueling was turned over to an NRC inspector. The inspector took no action.

The utility later paid a record \$33.5 million in fines for lying to the government about Davis-Besse's operating status in the fall of 2001, but no executives from FirstEnergy were held accountable. No one at the NRC was held accountable for the agency's negligence—at least not publicly.

Blame for this serious safety breach



A close-up of the 6-by-5-inch hole in the Davis-Besse reactor head. The hole, caused by a boric acid leak, left only a thin strip of stainless steel lining protecting the reactor from rupturing. *Wired.com*



Red rusty boric acid deposits on the Davis-Besse vessel flange. *NIRS.org*

worked its way down the ladder to Siemaszko, the engineer. Although Siemaszko objected to re-starting the plant in 2000, he ultimately approved the restart, saying he feared losing his job if he refused. That proved to be a big mistake. Siemaszko was indicted by a federal grand jury in 2006 for "willfully causing material facts to be concealed from the NRC." His trial is scheduled to start May 18 of this year.

An investigation of the Davis-Besse near-miss by the federal General Accounting Office in 2004 found nuclear regulators failed to make plant owners cultivate a "safety culture" among reactor workers and managers. This is the sort of criticism that rankles nuclear workers, who know how much time and effort go into safety in their industry. But a renewed public debate over reactor safety is inevitable if there is an effort to double or triple the number of US nuclear plants. The Davis-Besse incident and other near-misses will stiffen the resolve of local citizens trying to prevent new nuclear construction near their community.

Storing the Wastes

The problem of waste disposal has bedeviled the nuclear industry from the beginning. Much of the waste is extremely radioactive, some of it for tens of thousands of years.

Strontium-90 and cesium-137, two of the most dangerous products of nuclear fission, have half-lives of about 30 years, meaning that their radioactivity declines by half after 30 years. Ten years after removal from a reactor, a typical spent fuel assembly has a dose rate in excess of 10,000 rem/hour, 20 times the fatal dose rate for humans.

In the absence of a permanent solution, waste has been accumulating at fuel storage pools at US reactor sites. By 2015, nearly all of these pools will



The Nuclear Regulatory Commission says virtually all of America's nuclear reactors will have run out of capacity in their spent fuel storage pools by 2015. *Nuclear Regulatory Commission at www.nrc.gov/waste/spent-fuel-storage/nuc-fuel-pool.html*

be filled to capacity. Knowing that the waste has to go *somewhere*, about half of the country's reactor operators are now turning to "dry cask" storage to supplement their fuel storage pools.

These temporary solutions carry known risks.

If water accidentally drains from a fuel storage pool, irradiated fuel could spontaneously combust. The resulting nuclear inferno could release catastrophic amounts of radioactivity, killing an estimated 25,000 people or more as far as 500 miles downwind, according to the NRC. Another study for the NRC estimated such a fire could cause 2,000-7,000 square miles of land to be condemned, with economic losses due to evacuation ranging up to \$566 billion.

Understandably, the US government and the nuclear industry are keen to get these dangerous wastes under the ground. Federal legislation in the 1980s directed the Department of Energy (DOE) to locate, build and operate a nuclear waste repository, and essentially narrowed the potential locations to one: Yucca Mountain in Nevada.

Nevada politicians, hearing the protests of their constituents, have resisted the federal plan. When it comes to nuclear waste, almost everyone is a NIMBY (Not In My Back Yard). And the federal government's choice of Yucca Mountain has given the NIMBYs plenty of ammunition.

A nuclear waste depository has to be impervious to environmental disturbance for a very long time. But Yucca Mountain is in a seismically active area. Between 1976 and the late 1990s, 600 earthquakes registering 2.5 or greater on the Richter scale struck within 50 miles of the site. In 1992, a 5.6 quake with epicenter just 10 miles from the site did extensive damage to the DOE field office there.

Water samples collected at the DOE's own Exploratory Studies Facility later indicated that rainwater has deeply penetrated the site during the past 50 years, violating DOE's site suitability guidelines. Rather than disqualifying the site, DOE changed the guidelines.

Transportation of Waste

Besides problems with the site itself, many Nevada officials are concerned about the potential for an accident during transportation of radioactive wastes. These concerns were delivered forcefully at a public hearing conducted by the DOE in December.

Roger Halstead, transportation adviser for the Nevada Nuclear Projects Agency, testified that each truck cask of spent nuclear fuel would contain 350,000 curies of radioactive cesium and strontium, about 20 to 30 times the amount of fission products released by the Hiroshima bomb.

Moving the accumulated tonnage of high-level radioactive waste to Yucca will require approximately 108,500 truck shipments, or more than 36,000 combined rail and truck shipments, according to a federal Environmental Impact Statement. To put this in perspective, a truck shipment of high-level radioactive waste would be required every 4 hours, around-the-clock, 365 days a year, for 38 years.

Accidents are inevitable, according to experts. The DOE itself estimates there would be 66 truck or 10 rail accidents during the transportation of this enormous quantity of waste. Based on the actual record of past spent fuel shipments, other experts estimate there would be 130 truck accidents or 440 rail accidents over 40 years.

These statistics are not lost on those who are nearest the proposed reposi-

Tripling global nuclear power capacity by 2050 would make it necessary to construct and license a new Yucca Mountain-size facility somewhere in the world every 3 to 4 years for the next half century. tory at Yucca Mountain. Las Vegas Mayor Oscar Goodman called the plans for transporting waste "a disaster waiting to happen."

Even if no accidents occur, the waste repository is a costly proposition. The DOE currently estimates the total cost—construction, transport of waste, storage—at \$58.5 billion. The project's publicity director predicts this figure will rise.

A project in the works for more than 20 years, still not built, costs rising, opposition unabated: this is far from a success story. A nuclear renaissance would make these problems worse by far.

Tripling global nuclear power capacity by 2050 would make it necessary to construct and license a new Yucca Mountain-size facility somewhere in the world every 3 to 4 years for the next half century. And yet, as the MIT study points out, "No country has yet successfully implemented a system for disposing of this waste."

Reprocessing and Weapons Proliferation

Many have suggested that we should "recycle" some of the waste from nuclear plants rather than bury it.

The Bush Administration requested \$405 million for Fiscal Year 2008 for its Global Nuclear Energy Partnership. GNEP aims to separate plutonium and uranium from spent nuclear fuel, a practice traditionally referred to as "reprocessing." The separated plutonium, rather than being a waste product requiring burial, can be used as fuel for reactors.

Unfortunately, it can also be used to make nuclear bombs. That's why President Gerald Ford banned reprocessing in 1976. India had just exploded its first nuclear weapon—a bomb constructed from plutonium that had been extracted from nuclear plant waste through a reprocessing program India had conducted in secret.

The US stand against reprocessing helped curb the spread of this dangerous technology. No non-nuclear weapon state has begun reprocessing since Japan in 1977. Programs have been shut down in Argentina, Belgium, Brazil, Germany, Italy, Taiwan and South Korea.

President Bush announced in 2004 that he wanted to limit new nuclear reprocessing and uranium enrichment plants to countries that already operate them. But his announcement appears to have produced the opposite of its intended effect. The three years following his announcement brought "the greatest explosion of interest in uranium enrichment in the nuclear age," according to Congressional testimony by Matthew Bunn, a researcher at Harvard's Kennedy School of Government. States such as South Africa, Argentina, Australia, Canada, Ukraine and Belarus are all showing renewed interest in the technology.

If states perceive that a new line is being drawn between technology "haves" and "have nots," Bunn told Congress, "they will rush to try to ensure that they are on the 'have' side of the line."

Expanding the world's supply of plutonium through an aggressive program of reprocessing increases the possibility of diversion to terrorists, "rogue" states, or others in the future who might wish us harm. Roughly 240 metric tons of separated plutonium are in storage around the world today. Reprocessing the current store of US spent fuel would triple this amount.

The bigger the world's stockpile of potential bomb material gets, the harder the task of keeping track of it in a timely manner—"making it feasible that the theft of enough plutonium to build several bombs could go undetected for years," says the Union of Concerned Scientists.

If reprocessing plutonium truly solved the waste storage problem, some might consider it worth the risks. But reprocessing itself produces several different types of radioactive waste, with a total volume substantially greater than the original waste.

As noted by the Keystone Center—a federal, industry, academic, and nonprofit collaborative process—a "fuel cycle with reprocessing and any type of separation will still require a geologic repository for long-term management of nuclear waste."

Cost is also a concern. Existing reactors in the US create some 2,000 tons of spent fuel annually. A commercial scale reprocessing facility capable of handling that much material would cost an estimated \$7.5 to \$30 billion to build, excluding operating costs. In November 2007, eight US Senators—Democrat and Republican—cautioned that DOE's plans for reprocessing could end up costing taxpayers \$200 billion or more.

The MIT researchers, who favor the current "once through" fuel cycle, reject reprocessing categorically, saying it is not realistic to expect that problems of cost, proliferation risk and fuel cycle safety can be overcome by new reactor and fuel cycle technologies.

Enter Global Warming

The current nuclear fleet is helping the US avoid carbon emissions. If today's nuclear output of 100,000 megawatts had been achieved using coal instead, an additional 600 million tons of carbon dioxide would be entering the atmosphere each year. The logic is straightforward: building new nuclear plants could allow us to avoid building new coal plants, or to retire old coal plants.

But the overall contribution that nuclear plants can make in the battle against climate change will be limited by two major factors: How many can we build and how quickly can they be deployed?

Speed is of the essence. Warmer tem-

Recent estimates of \$1.5 billion to \$2.1 billion per reactor are already giving way to much higher figures. Florida Power and Light, which plans a two-reactor project in South Florida, recently revised its estimate to a jaw-dropping \$6 billion to \$9 billion—per reactor.

peratures have already begun melting frozen tundra in the northern latitudes. Without rapid action to reduce emissions, warming tundra will release vast quantities of methane—a greenhouse gas 20 times more potent than carbon dioxide. Such a release could simply overwhelm human efforts to reduce carbon emissions.

Unfortunately, speed is not one of the virtues of nuclear construction. NRG Energy, first out of the box to apply for a combined construction and operating license, hopes its two proposed plants will come on line in 2014 and 2015. Are those target dates realistic? The industry's track record is not good. Many reactors in the existing fleet were completed years behind schedule.

Hoping to do better, several energy companies are looking at new reactor technology by AREVA, a company headquartered in France. But AREVA has encountered significant problems with the nuclear plant it is now building in Finland. The project, begun in 2003, is already at least two years behind schedule due to flawed welds in the reactor's steel liner, unusable water-coolant pipes, and faulty concrete in the foundation.

AREVA is catching these problems and trying to deal with them. But the delays only serve to confirm perceptions that nuclear projects—with their extraordinary safety requirements—cannot stay on schedule.

Cost is the other major barrier to largescale deployment of new nuclear plants. Recent estimates of \$1.5 billion to \$2.1 billion per reactor are already giving way to much higher figures. Florida Power and Light, which plans a two-reactor project in South Florida, recently revised its estimate to a jaw-dropping \$6 billion to \$9 billion—*per reactor*.

The federal tax incentives enacted by Congress in 2005 and 2007 are designed to give a boost to the first few reactors by having taxpayers shoulder a large share of the costs. In addition, several state utility commissions have indicated they might ease the burden by letting utilities start charging ratepayers for the power before the plants start operating.

These subsidies—coupled with streamlined licensing procedures could be enough to jump-start construction of the first few plants. As builders gain experience, the cost of subsequent plants might come down.

But maybe not. Costs for many power plant commodities—from steel and concrete to copper and nickel—are soaring. So is the cost of finishing them into components. The domestic nuclear industry is down to a single supplier for many components. The nuclear workforce is aging and skilled labor is in short supply. Construction delays could increase the cost of borrowing money.

In 2005, the CEO of Dominion Resources, Thomas Capps, made this prediction about what would happen to his company's credit rating if he were to announce plans to build a \$2.6 billion nuclear plant: "Moody's would go bananas." Congress has tried to remedy those credit concerns by enacting the new subsidies. But those subsidies will not last very long nor go very far, especially if reactors are going to carry price tags of \$6 billion or \$9 billion. Financing could become very hard to find.

Getting the Job Done

Nuclear plants are large, like most coal plants. It seems logical that we could simply substitute one technology for the other—and solve our carbon emissions problem at the same time.

But the math isn't encouraging. The MIT study found that a nuclear renaissance—300 plants in the US and 1,000 worldwide by mid-century—would not be enough to even freeze carbon emissions at their present level. In fact, it would offset only 12 to 25% of the expected growth in carbon emissions. That may be better than nothing, but it would be a very expensive investment for a very limited return.

As IBEW members, of course, we will take the work and be glad for it. But at some point taxpayers and ratepayers are going to start asking if there's a cheaper, more effective way to fight global warming.

It appears there is. But the alternative is going to look different than what we're used to. The solution almost certainly will not consist of a heroic contribution by a single big technology, but the combined contributions of many technologies.

Individually, other available technologies seem scrawny compared to nuclear power. But collectively they carry far more potential to reduce carbon emissions.

• In the US, energy efficiency alone has the potential to deliver two to three times more energy than nuclear power currently provides, according to the Electric Power Research Institute (EPRI).

• Wind on readily available rural land could be harnessed with current technology to produce twice as much electricity as the nation now generates from *all* sources.

• Small hydro, biomass, geothermal, ocean waves, currents, solar thermal, and photovoltaic systems have "a practical economic potential many times total US electricity consumption," according to Amory Lovins of the Rocky Mountain Institute, writing in Nuclear Engineering International. Like nuclear power, some of these alternatives face technological and financial barriers to deployment. But unlike nuclear power, they generally do not require 10 to 20 years to start making a difference.

Energy efficiency is already having a profound effect on US energy consumption, although its contribution is often poorly-tracked and thus hard to measure. But there is evidence that thousands of efficiency measures undertaken by individuals, industry, business and government have been contributing to a steady decline in the amount of electricity consumed per dollar of US Gross Domestic Product—a measure known as "electric intensity."

The 2% drop in US electric intensity in 2003 amounts to a savings of 13.8 GW of electricity—the energy equivalent of a dozen nuclear plants. The 2.3% drop in US electric intensity in 2004 amounts to an even greater savings—more than 16 GW of electricity.

California has been a pioneer in the promotion of energy efficiency. Between 1982 and 1985, solicitations by California's three investor-owned utilities resulted in 23 GW of contracted-for electric end-use efficiency to be installed over the following decade. Unfortunately, utility deregulation sidetracked this effort before it could be fully implemented. Even so, by the early 1990s the utilities' programs had saved about 10 GW of electricity, roughly equivalent to the output of nine nuclear plants.

Global warming has put efficiency back in the spotlight. But how much potential is left in the "efficiency resource"? At what point will we stop finding new ways to use energy more efficiently? Apparently no time soon. The discovery of new potential for enduse efficiency is actually outpacing the rate at which such improvements are being deployed. In other words, the "ef*continued on next page*

Electricity generation, in kilowatt-hours (kWh) per 10-cent investment.



IBEW Local 1245 graphic, adapted from Rocky Mountain Institute

ficiency resource" is growing, not diminishing—a viewpoint shared by Lovins at the Rocky Mountain Institute and Clark Gellings, Vice President of Innovation at the Electric Power Research Institute.

There are obstacles to achieving these savings. Here's one: state utility regulators (California being a notable exception) penalize rather than reward utilities for investments in efficiency. Here's another: new buildings often fail to incorporate existing design and construction practices that could save much of the energy that is currently wasted. But the good news is that harnessing power from improved efficiency does not require major technological breakthroughs. It only requires that we recognize the opportunities, and adjust local and national policies to capture them.

Can We Do It All?

It is fashionable these days in the utility industry to say that we need to pursue "all options" in the effort to curtail carbon emissions.

But does pursuing all options amount to the most effective strategy in battling global warming? Maybe so, if we could afford to do everything. But we cannot. The amount of money that can be squeezed from capital markets, taxpayer pockets, and electric consumers is finite. The very real threat of runaway global warming requires us to concentrate on the options that can quickly yield the greatest carbon reduction per dollar invested.

The chart on page 17, utilizing calculations by Lovins, shows the comparative value of investments in various technologies in terms of electricity produced. For ten cents we get:

- 1.0 kilowatt-hour (kWh) of nuclear electricity
- 1.2-1.7 kWh of dispatchable windpower
- 0.9-1.7 kWh of gas-fired

industrial cogeneration • 2.2-6.5 kWh of building-scale

cogeneration

• 2.4-8.9 kWh of waste-heat cogeneration

• Up to 10 kWh or more of enduse efficiency

A large-scale ramping up of nuclear construction, to have even a marginal impact on carbon emissions, could cost a trillion dollars in plant construction alone—perhaps significantly more. Would this come at the expense of capital, expertise, and political initiative paid to faster, cheaper alternatives? The answer is almost certainly yes.

The IBEW has always been a strong supporter of nuclear power, the source of some of the best-paying jobs in the utility industry. Highly-skilled IBEW members have played an important role in bringing nuclear reactors closer to their full potential. Whatever the ultimate verdict on nuclear's possible

18

value in fighting global warming, IBEW members are going to take nuclear work wherever it exists, and perform it with the diligence the public expects. As the nation retools its energy sector to reduce carbon emissions, the current fleet of reactors will be a significant plank in the bridge to our energy future.

At the same time, IBEW will increasingly represent the people who deliver energy efficiency, as well as those who deliver renewable power. If the battle against catastrophic climate change is to be won, these are the areas where the quickest and most affordable solutions are going to be found. Later this year, in our continuing series on global warming, the Utility Reporter will look at Local 1245 members already involved in harnessing these energy sources of the future.

(Part III in a continuing series)

You can read the first two installments in this series on-line:

Part 1: "Doing Something About the Weather" closely examines the threat from global warming.

http://www.ibew1245.com/newsarchivedocs/Global_Warming1_6-11-07.pdf

Part 2: "Are We Cooked? Not Yet!" examines how energy efficiency offers new hope in the battle against global warming.

http://www.ibew1245.com/newsarchivedocs/Energy_Efficiency_9-10-07.pdf

Sources

(Web addresses for cited material, where available, are listed on the IBEW 1245 website at www.ibew1245.com/ newsarchive-docs/GW3-Sources.pdf)

Nuclear Option (Introduction) www.pge.com/education_training/about_

energy/diablo_canyon

- "California Energy Commission Nuclear Issues Workshop," Jack Kennan, Sr. Vice President and Chief Nuclear Officer, Pacific Gas & Electric, June 28, 2007
- Interview, Pete Resler, Director of Nuclear Communications, Pacific Gas & Electric, October 2007
- Speech to the National Association of Science Writers, Lewis Strauss, New York City, Sept. 16, 1954
- *"Going Nuclear,"* David Whitford, Fortune
- magazine, July 31, 2007 *"US Nuclear Reactors,"* US Energy
- Information Administration, Oct. 31, 2005 "The Future of Nuclear Power: An Interdisciplinary MIT Study," Professor
- Stephen Ansolabehere et al., 2003, page 3 "Nuclear Now: How Clean Green Atomic
- Energy Can Stop Global Warming," Peter Schwartz and Spencer Reiss, Wired, February 2005
- "France Gets 'X' Percent of Its Energy from Nuclear Power," Denis Du Bois, The Energy Blog, May 3, 2007
- *"The Case for Nuclear Power,"* Christine Todd Whitman, Business Week, Sept. 17, 2007

A Nuclear Renaissance

- "Companies File the First Nuclear Plant Application in 29 Years," US Dept. of Energy, EERE Network News, Sept. 26, 2007 "Bids for Nuclear Power Soar," Greg Edwards,
- Times-Dispatch (Richmond, VA), Dec. 10, 2008 "Nuclear Industry Stirs with Plans for New
- *Plants,*" Associated Press, Sept. 19, "Lights Out at Shoreham", by Dan Fagin, undated
- *"Business Notes/Bankruptcy,"* Time, Feb. 8, 1988

- 'New Nuclear Power 'Wave'—or Just a Ripple? How millions for lobbying, campaigns helped fuel US industry's big plans," Mike Stuckey, MSNBC, Jan. 23, 2007
- 'Congress' Spending Bill Would Offer Nuclear Plant Loan Guarantees," Washington Platts, Dec. 17, 2007
- *"Nuclear Deficits,"* Peter Bradford and Kurt Gottfried, TomPaine.com, Sept. 15, 2006

Harder and Faster

- Power Partners Resource Guide/Nuclear Energy
- Nuclear Energy Institute, 2006 "California Energy Commission Nuclear Issues Workshop," Jack Kennan, Sr. Vice
- President and Chief Nuclear Officer, Pacific Gas & Electric, June 28, 2007 'US Nuclear Industry Capacity Factors, 1971-
- 2006" Nuclear Energy Institute 'The Future of Coal: An Interdisciplinary MIT
- *Study,*" Professor Stephen Ansolabehere et al., Massachusetts Institute of Technology, 2007, Executive Summary, page ix
- "Emissions of Greenhouse Gases in the United States," US Energy Information Administration, November 2007

Reactor Safety

- "Spin Doctor Strangelove, or How We Learned to Love the Bomb," John C. Stauber and Sheldon Rampton, Center for Media and Democracy, Fourth Quarter 1995
- *Court Told of Failed Bid to Shut Davis-Besse,*" Tom Henry, Toledo Blade, Oct. 3,
- 2007 2007
- "Going Nuclear," David Whitford, Fortune magazine, July 31, 2007
- "First of Two Trials in Davis-Besse Case Set to Begin Today in Toledo," Tom Henry, Toledo Blade, Oct. 1, 2007
- "Davis-Besse Workers Called Liars as Trial Begins," Tom Henry, Toledo Blade, Oct. 2, 2007
- *"FirstEnergy Drops Insurance Claim,"* Tom Henry, Toledo Blade, Dec.8, 2007 Nuclear Regulatory Commission,
- Memorandum and Order, May 3, 2006 "GAO: NRC Misjudged Ohio Nuke Plant Risk," Associated Press, May 18, 2004

Storing the Wastes

- *"Backgrounder on Radioactive Waste,"* US Nuclear Regulatory Commission, April 2007
- *"Nuclear Fuel Capacity,"* Nuclear Regulatory Commission, Feb. 13, 2007
- "Current and Potential Independent Spent Fuel Storage Installations," Nuclear
- Regulatory Commission, December 2005 "Technical Study of Spent Fuel Pool Accident
- Risk at Decommissioning Nuclear Power Plant," NRC, NUREG-1738, February 2001, Appendix 4, Table A4-7, p. A4-9; "NRC study warns of 500-mile radiation
- spread," Roger Witherspoon, Journal News (New York State), Nov. 10, 2002.
- Robert Alvarez, et al, "Reducing the *hazards* from stored spent power-reactor fuel in the United States," Science & Global Security, Vol. 11, No. 1, 2003, pg 10
- "Radioactive Wreck: The Unfolding Disasters of US Irradiated Nuclear Fuel Policies," Nuclear Monitor, March 17, 2006, page 9 "Petition For Disqualification Of Yucca Mountain From Consideration As A
- Nuclear Waste Repository," Amended Dec. 12, 1998 "Yucca Mountain: DOE denies appeal on
- "Yucca Mountain: DOE denies appeal on site rules," Steve Tetrault, Las Vegas Review-Journal, Dec. 15, 2001, cited at "Radioactive Wreck: The Unfolding Disasters of US Irradiated Nuclear Fuel Policies," Nuclear Monitor, March 17, 2006, page 14, footnote 52

Transportation of Waste

- "Moving Radioactive Waste to Yucca: The Dangers of Waste Transport," Antonella Romano, M.S., Physicians for Social Responsibility, undated
- "Nuclear Waste Storage Project: Yucca Plans Draw Public's Ire," Keith Rogers, Las Vegas Review-Journal, Dec. 4, 2007
- Review-Journal, Dec. 4, 2007 *"Going Nuclear,"* David Whitford, Fortune magazine, July 31, 2007
- "The Future of Nuclear Power: An Interdisciplinary MIT Study," Professor Stephen Ansolabehere et al., 2003; pages 3 and 10

'Nuclear power: economics and climateprotection potential," Amory Lovins, Jan. 6, 2006, page 13

Reprocessing and Weapons Proliferation

- *"The Need for Nuclear Power,"* Richard Rhodes and Denis Beller, Foreign Affairs, January/February 2000, page 41
- "Nuclear Reprocessing: Dangerous, Dirty, and Expensive," Union of Concerned Scientists, January 2006 at: www.ucsusa. org/global_security/nuclear_terrorism/ extracting-plutonium-from-nuclearreactor-spent-fuel.html
- "Radioactive Wreck: The Unfolding Disasters of US Irradiated Nuclear Fuel Policies," Nuclear Monitor, March 17, 2006, page 7
- "Risk of GNEP's Focus on Near-Tern Reprocessing," Testimony by Matthew Bunn, Senior Research Associate, Project on Managing the Atom, Harvard University, to the Committee on Energy and Natural Resources, Nov. 14, 2007
- "Bush Proposes Limiting Nuclear Reprocessing Facilities," US Department of
- State, May 11, 2004 "Major Findings Reached in the Keystone Center Nuclear Power Joint Fact-Finding,"
- News Release, June 14, 2007 "Eight Senators Call For Reduced Nuclear
- *Reprocessing Funding,*" News conference, Nov. 21, 2007 *The Future of Nuclear Power: An*
- *Interdisciplinary MIT Study,*" Professor Stephen Ansolabehere et al., 2003, page 5

Enter Global Warming

- *"The Future of Coal: An Interdisciplinary MIT Study,"* Professor Stephen Ansolabehere et al., 2007, page ix
- "U.S. Nuclear Plants Play Vital Role in Beating Sweltering Heat Wave," News release, Nuclear Energy Institute, Aug. 27, 2007
- "Doing Something About the Weather," Utility Reporter, June 2007, page 12 "NRG Energy Files First Full License
- Application for New Reactors," Nuclear Energy Institute, October 2007
- "Nuclear Industry Stirs with Plans for New Plants," Associated Press, Sept. 19, 2007 "Cost Surge for Building Power Plants," Matthew Wald, New York Times, July 10, 2007
- "Nuclear Power Costs Surge in Rush to Build," Asjylyn Loder, St. Petersburg Times, Dec. 12, 2007
- "New Energy in Nuclear Power Supply," Joshua Boak, Chicago Tribune, Jan. 6, 2008 at www.chicagotribune.com/ business/chi-sun_nukejan06,0,6203019. story

Getting the Job Done

- "The Future of Nuclear Power: An Interdisciplinary MIT Study," Professor Stephen Ansolabehere et al., 2003, page 3
- 'Efficient Electricity Use: Estimates of Maximum Energy Savings, SPRI, 1990, summarized in "Efficient Use of Electricity," by A.P. Fickett, C.W. Gellings and A.E. Lovins in Scientific American, September 1990
- *"Mighty Mice,"* Amory Lovins, in Nuclear Engineering International, December 2005

"Nuclear power: economics and climate-

Interview, Ralph Cavanagh, Natural

and Summary, Page 35

Can We Do It All?

Times, Dec. 12, 2007

page 3

2007

page ii

protection potential," Amory Lovins, Rocky Mountain Institute, Jan. 6, 2006,

Resources Defense Council, August 2007

Tackling Climate Change," American Solar Energy Society, January 2007, Overview

"Nuclear-Power Dilemma: It's Carbon-Free

"Nuclear power: economics and climate-

Nuclear Power Costs Surge in Rush to

Build," Asjylyn Loder, St. Petersburg

January/February 2008

protection potential," Amory Lovins, Rocky Mountain Institute, Jan. 6, 2006,

But Comes with Big Questions," Sarah Jane

Tribble, San Jose Mercury News, June 10,

'An extended brotherhood'

Editor's note: This e-mail was received from former PG&E Troubleman Bruce Hayden and is published with his permission.

onight I sit in the dark again. The laptop battery will soon run out. For much of this last week we have been out of power and when it has been restored we are still not certain that it will not go out again.

PG&E crews have been restoring the power incrementally over the past week. Each time they restore a section for power it has to be tested and if there is still a problem the line tests bad (NG), they have to "sectionalize" to test again to determine just where the problem may be. This can be aggravating for those of us who have just got used to being back on power after a few days, but even worse for the crew members who are trying to repair all the damage this storm has brought.

Tonight though it is different. Late this afternoon a lineman was fatally injured while working to restore our power. Some of you may know that I worked over 40 years as lineman, troubleshooter and line construction foreman in this area. When the power went out I assumed that it was again the testing of the line in the process of restoration. I found out the line went out because of an electrical contact which was fatal for a lineman working restoring out power.

I had gone to put gas in our car just as the power went out and Cindy called me on my cell phone saying a

and economic analysis has been

retained by Pacific Gas & Electric

to help establish a methodology for ana-

lyzing and computing missed meal

periods for thousands of Local 1245

sion to seek outside help in trying to

resolve the missed meal issue. Specifi-

cally, the firm will provide guidance in

determining payments to employees in

what has become known as "Group

made in accordance with Letter Agree-

ment 07-37, which was negotiated by

PG&E and Local 1245 last year to insure

compliance with California state labor

law in light of recent court decisions.

The letter agreement identified two

Payments for missed meals are being

Local 1245 has affirmed PG&E's deci-

Consultant to help analyze

and compute missed meals

friend from the local fire department called to tell her that a lineman had been killed knowing that he may have been someone I worked with. For those of us who are or have been in the trade this hits us hard. In many ways we are like many other emergency workers, an extended brotherhood. We have shared those long hours in difficult conditions. We are always aware of the dangers inherent in our jobs. None of us have not been touched by fellow workers who have suffered serious, or worse, fatal injuries. It is a the nature of the trade. Even so we accept this as a reality and continue on with a pride that comes with doing something that others shy away from.

Our humor could be harsh and outrageous as the conditions that we worked under. Respect was earned, not gratuitously given. We were and are as much different from each other as could be, much more so than other occupations. But we shared something that others do not, a camaraderie of trust in when things got tough you are there. You are a team of diverse ornery, outspoken, testosterone poisoned individuals. You could bicker and fight among each other but put it all aside when the s**t hits the fan.

When one falls, as happened this evening, we have lost a brother. I felt this even though I am no longer a part of the team. This unknown young man—I do not yet know his name—is very much in my thoughts, a loss in for the family that I was a part of for over 40 years. I think of this as I sit here in the dark.

Bruce Hayden; Garden Valley, CA

Felipe Chavez, 1976-2008

PG&E Lineman Felipe Chavez was killed while working to restore power in the Auburn area on Jan. 11. Brother Chavez, 31, was working on a power pole along Highway 193 near Cool, east of Auburn at the time of his death. Fellow crew members pulled Chavez off the pole, but medics were unable to revive him.

Local 1245 offers its condolences to the friends, family and co-workers of Brother Felipe Chavez.

Fernley, from page 1

storm. Local 1245 members at the City of Roseville worked to get power restored on Friday and over the weekend.

Local 1245 members also responded to outages in other service territories, including Sierra Pacific Power and Truckee Meadow Water Authority in Nevada.

But the largest problems with outages were experienced at PG&E. Although most customers were restored within a couple of days, some in the more remote locations of the North Valley and the Sierras were without power for the better part of a week.



Local 1245 members working in the wake of the Fernley levee breach are Kirk (Hoot) Huhtala, Shop Steward Jay Freeman, and Travis Hall.

PG&E Special Rates and Premiums for 2008

Shift Premiums

Second Shift\$1.54	
Гhird Shift\$3.07	
Sunday Premium\$3.07	
Sunday-Second Shift\$4.61	
Sunday-Third Shift\$6.14	
Relief Premium\$29.56	

Nuclear Operator License Premiums

Reactor Operator	.\$4.91
Certified Fuel Handler	.\$2.46
Sr. Reactor Operator	.\$6.14
Sr. Reactor Operator – DCPP .	.\$7.98

Remote Reporting For 2008

Less than 15 miles	 	 .\$20.25
15 miles or more	 	 .\$28.50

Huckabee 'Supports' strikers, crosses picketline

ike Huckabee crossed a picketline by Hollywood writers to appear on Jay Leno's "Tonight Show" Jan. 2-but says he supports the writers.

It could be that the former Arkansas governor and presidential candidate is unclear on the concept: You show support for strikers by not crossing their picketline.

"My understanding is that there was a special arrangement made for the late-night shows, and the writers have made this agreement to let the late night shows to come back on, so I don't anticipate that it's crossing a picket line," Huckabee told reporters traveling with him prior to the show.

Told he was mistaken and that writers had cleared only Letterman's show, not Leno's, Huckabee protested: "But my understanding is there's a sort of dispensation given to the late-night shows, is that right?"

Told again that he was wrong, Huckabee murmured, "Hmmm," and, "Oh."

His professed concern about doing the right thing apparently went out the window when showtime arrived. He walked past a striker carrying a sign that read, "Huckabee is a scab."

But Huckabee may be unclear on the concept of "scab" as well. He apparently thinks it means you're on the same side as the strikers. Despite his action, Huckabee insisted he stands with the writers.

"I support the writers, by the way. Unequivocally, absolutely," he said.

Huckabee should try using those words in a complete sentence, just to see how they sound. For example: "To show my 'unequivocal' and 'absolute' support for the striking writers, I am crossing their picketline."

To be fair, Huckabee may be trying to blaze a new trail in the meaning of words. If so, it's probably a good bet that he will enjoy the "unequivocal" and "absolute" support of union members at the voting booth.



firm specializing in statistical June 1, 2004.

A joint committee established by the letter agreement further clarified the classifications that belong in those two groups. (A copy of Letter Agreement 07-37 can be viewed on the IBEW 1245 website by clicking on the PG&E Letter Agreements tab on the right side of the home page.)

PG&E and Local 1245 have not been able to come up with a methodology for determining the extent to which employees with unpaid off-duty meal are entitled to missed meal payments, the so-called "Group Three."

The firm retained by PG&E to help resolve issues with respect to Group Three specializes in statistical and economic analysis of liability and damages related to employment litigation matters. The firm's expertise includes surveys, observation studies, and statistical and damages analyses.

members.

Three."





"Historical Lineman" T-Shirt Item # 42 6.25 oz., 100% cotton Shirt color: White S, M, L, XL: \$11.50 2X: \$13, 3X: \$14 4X: \$15, 5X: \$16



Solid Color Beanie Choose logo: IBEW Lightning Bolt or IBEW Gas or IBEW Traditional Logo Item #24 (acrylic) Color: Red or Hunter Green \$7



Denim Sweatshirt Jacket Choose logo: IBEW Lightning Bolt or IBEW Gas or IBEW Traditional Logo

Item #88 100% cotton laundered denim with quilt lining, grey fleece insert drawstring hood, full zip/snap front, raglan sleeve, accent stripe trim. Colors: Light Blue Denim or Charcoal Denim S, M, L, XL: \$91 2X:\$ 94, 3X: \$97 S, M, L, XL: \$91 2X:\$ 94, 3X: \$97



IBEW 1245 UNION SHOPPER

UNION MADE

IBEW

"Let There Be Light"

Long-Sleeve T-Shirt

100% cotton. 5.4 oz

2X: \$19, 3X: 20; 4X \$21, 5X: \$22

Shirt color: Black

S, M, L, XL: \$17

Item #47

1245

ata

Portland Fleece Jacket Choose logo: IBEW Lightning Bolt or IBEW Gas or IBEW Traditional Logo Item #85 Poplin outer shell, arctic fleece lining, zipper front. Color: Navy with Gray S, M, L, XL: \$84 2X: \$92, 3X: \$96, 4X: \$99, 5X: \$104 Champ Jacket "Retro" Logo: "Strength Through Unity" Item #84 Sanded cotton 10 oz duck shell with quilt lining, Full zip front with contrasting distressed shading sleeves. Color: Black S, M, L, XL: \$72 2X: \$75; 3X: \$78; 4X: \$81; 5X: \$84

Corona Polo Shirt Choose logo: IBEW Lightning Bolt or IBEW Gas or IBEW Traditional Logo Item #55 Corona Polo Pique Sport Shirt with Striped Trim, Blend 60/40 double pique, no poelot

no pocket. Shirt colors: Navy or White S, M, L, XL: \$33 2X: \$35; 3X: \$37

Mail order form to: ImagePointe, 1224 LaPorte Rd., Waterloo, IA 50702 Or fax order: 1-319-234-0174



IBEW 1245 Hat Choose logo: IBEW Lightning Bolt or IBEW Gas or IBEW Traditional Logo Item #9 6. paged brushed cotton Low profile

Women's Johnny-Y Sport Shirt

Shirt colors: Navy, White, Sage or

Choose logo: IBEW Lightning

Bolt or IBEW Gas or IBEW

Traditional Logo

100% combed cotton

6.8 oz soft interlock

S, M, L, XL: \$29

2X: \$32; 3X: \$33

Item #115

Periwinkle

Item #9 6-panel brushed cotton. Low profile, unstructured front, fabric strap. Color: Navy \$12.00

Embroidered logos



LOCAL 1245 IBEW Traditional logo (blue, red, white & gold)



IBEW Lightning bolt (white, blue and gold)



IBEW Gas logo (white, blue, silver & yellow)



Strength Through Unity "Retro" logo (black, red, blue & gold)

Order on-line at www.ibew1245.com



Click on Union Shopper

Or fill out this form to submit order by fax or US mail.