

ShopTalk

Plant Operations Support Consortium

Volume 16, Number 3

Fall 2011

The Passing of the Torch

Bob MacKenzie passing torch as Consortium leader

"Working for the WSU Extension Energy Program has been a dream come true."

Eleanor Roosevelt once said, "A good leader inspires people to have confidence in their leader. A great leader inspires people to have confidence in themselves." Consortium Manager, Bob MacKenzie, has lived by this adage throughout his career.

After 15+ successful years as manager of the Plant Operations Support Consortium, he is punching out to spend time with his wife and family.

Bob's 16 years of service as an officer in the U.S. Army prepared him to be a leader. After the Army, he spent time as a consultant and then as the Director of Public Relations for the Washington State Housing Finance Commission before landing as the Manager of Facilities Operations for the Washington State General Administration, Division of Capitol Facilities. All this helped to build the foundation for what Bob calls "the most fun job I ever had" as Manager of the Plant Operations Support Consortium. With little more than a good

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Ed Valbert to lead Consortium to new horizons

"I am looking forward to meeting Consortium members and jointly expanding on existing tools."

Long-time Consortium member and supporter Edwin Valbert steps in as the new manager of the Plant Operations Support Consortium. Many may already know Ed from his previous position as Capital Asset Manager with the Washington State Department of Social and Health Services (DSHS), or from his participation as a presenter, moderator and all-around go-to-guy at past Energy/Facilities Connections conferences.

"We've searched high and low and have come across many worthy candidates," said Bob MacKenzie, current program manager until September 30, 2011, "but Ed really stands out and we're lucky to have him."

Upon graduating from the University of Washington with a degree in architecture, Ed began his career at the Washington State University Energy Extension Service (now the WSU Extension Energy Program)

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Extension Energy Program
Plant Operations Support
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Shop Talk is a quarterly electronic newsletter of the Plant Operations Support Consortium, providing information focused on facility operations. We welcome feedback from readers.

To provide feedback or to subscribe to the Consortium electronic Listserv, email us at

PlantOps@energy.wsu.edu.

Archived issues of *Shop Talk* are available at:

www.energy.wsu.edu/PublicFacilitiesSupport/PlantOperations/ShopTalk.aspx

Consortium contacts:

Ed Valbert (360) 956-2055
valberte@energy.wsu.edu

Phil Partington (360) 956-2057
phil@energy.wsu.edu

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Shop Notes

By **Bob MacKenzie**,
Consortium Manager

This is my 58th and final *Shop Notes* column to you, the steely-eyed, renowned members of the Plant Operations Support Consortium. As Gus McCray said to his best friend during the closing scenes of the lauded Lonesome Dove series, "My God, Woodrow, it's been one hell of a party."

Unlike good 'ole Gus, I will not expire...at least not for many years to come if I have anything to say about it! But we shared some fine times together, didn't we? And there's a lot to be said for doing things on your own terms, living life with conviction and upholding the faith that you are accomplishing your mission and helping people. More than 15 years of shared hard work, happiness on jobs done well; many friendships, with some borne through adversity and maintained through honesty and conviction...that's what I'm talking about! September 30th will be my last working day with the Consortium and the WSU Extension Energy Program.

I've got to tell you, your Consortium is in fine hands! Todd Currier has been a wonderful boss and the entire WSU Extension Energy Program provides a nurturing, supportive environment for Consortium staff. It's the finest setting in which I've worked during the past 37 years. Sheila Riggs, Erin Armstrong, Kelly Barton and others have been fabulous WSU support resources for your Consortium, and will continue to be in



Bob MacKenzie

the future.

Ed Valbert will take the reins of the Consortium at the end of September (*check out the full scoop on the front page of this issue*). Most of you know him, and he is intimately familiar with the Consortium. He's bright, insightful, seasoned and innovative. He's also a great listener and will craft solutions to address your challenges. DSHS will be losing an outstanding leader/steward after more than 23 years, but you will all gain a professional manager able to take the Consortium to unlimited heights. Ed and I traversed the Northwest in September, visiting you on-site to discuss ways that the Consortium can provide optimal support.

Finally, I leave Ed a staff that is absolutely awesome. Sue Brown, Phil Partington and Larry Covey are committed to serving your needs and have the collective skills to make great things happen. They are trustworthy to a fault and work together as a team to ensure seamless support. I thank them for many years of close friendship, for their counsel and for serving as a team model for others to emulate.

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Creating an Effective Custodial Operations Plan

A custodial plan must tie-in to the mission of the organization.

By Sue Brown, Consortium staff

I have never considered myself a germaphobe, but I may reconsider that after a recent vacation where I stayed at several different hotels. These were well-known chains with reputations in the hospitality industry for having high quality standards. Certain expectations accompany such hotels, and it's a disappointment when reality doesn't match expectations.

Poor indoor air quality, ineffective vacuuming and an overall lack of cleanliness were just some of my concerns. These issues are not enough to totally ruin a vacation, but having respiratory problems or picking up bacteria from a dirty glass or faucet certainly affects the quality of a vacation experience.

While guests have the choice to decide whether or not to go back to a hotel, the same can't always be said about public facilities. Occupants of many buildings – whether it's a state agency office, a daycare center, a school or a university – don't have a choice about where they are located, so it is important that those who maintain and clean public buildings perform those tasks so the building occupants can stay healthy and productive. Without the focus of cleaning buildings for the health of the occupants, custodial staff are just maintaining sick environments.

A custodial program is one of the many components of any business, and it is essential. Every building needs to be



Jeff Wolfe, Colville School District director of facilities/maintenance, guides Consortium assessment team members Larry Covey (left) and Sue Brown (middle), as they develop recommendations to improve the college's custodial operations.

cleaned. Having a successful operation does not happen without adequate planning. Management needs to see the value of planning, and there must be buy-in from everyone in the organization, from the top leader to the last custodian. Planning also involves some financial commitment, from the improved equipment and chemical purchases to an adequate level of staffing. Employees need to know they are valued, receive adequate training and maintain open lines of communication. Overall, the custodial program must tie in to the mission of the organization.

These key elements ensure that the custodial program's focus remains on target:

- Keep it simple – avoid complexity
- Keep it standard – minimal items
- Keep it repeatable – same tasks being done everywhere
- Keep it efficient – proper equipment, tools and chemicals
- Keep it effective – measure it
- Keep it involved – the people element
- Keep it safe – with a proactive safety program

See **Operations Plan** on page 6

Energy-Saving Quick Tips from the Building Operator Certification Program

Energy efficiency through improved facility operation

By Rich Prill, WSU Extension Energy Program

“Turn it down, tune it up, turn it off!” Quick Tips are low-cost or no-cost operational measures for saving energy and money, brought to you by the Building Operator Certification (BOC) program.

Tip #1: Reduce lighting where feasible – indoors and outdoors. In open common areas, temporarily turning off every third or fourth lighting fixture is rarely noticed. Make sure outside lights are not on during the day.

Tip #2: Lighting may be dimmed in response to incoming daylight, occupancy or time schedules where dimming ballasts and appropriate sensing and programming equipment have been installed. Even without dimming ballasts, some lighting may be controlled with on-off schedules, occupancy sensing or dimming on a schedule.

Tip #3: Boiler tune-ups can reduce boiler gas consumption up to 20 percent and increase steam output. Tune-ups restore a boiler to its normal efficient operating condition by detecting and correcting excess air losses, smoking, unburned fuel losses, sooting, fireside fouling and high flue gas temperatures. Puget Sound Energy offers rebates of up to 50 percent of the tune-up cost for a gas boiler – up to \$300. Call 1-800-562-1482 or check with your local gas utility.



Rich Prill performs air tests at a Washington-based educational facility as part of his efforts to improve the indoor air quality in K-12 schools.

Tip#4: Fume hood exhaust fan control can be deployed in kitchens. Through add-on devices, closing fume hood sashes reduces exhaust fan speed, which cuts power use and outside air intake.

Tip #5: Varying air handler speeds reduces power consumption significantly during the many hours of the year when

peak fan speed is not needed to meet comfort and air quality requirements. Even a slight reduction in fan speed of 15 percent can yield a noticeable drop in fan motor power demand – almost 30 percent – because of the inverse square law inherent in fan motor loading.

See **Quick Tips** on page 6

Bob

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idea and a supportive committee behind him, Bob built a self-sustaining government program to support public and non-profit organizations.

To say that the program has exceeded expectations is an understatement. The program is still thriving after 15 years, saving its members \$65 million and winning one international award, nine national awards and five regional/government awards. The program continues to flourish even in tight economic times.

Bob has not only developed this exceptional program, but he has laid the foundation for it to endure past his departure. The ability to establish excellence in a system so it can survive independently is the mark of a true leader.

With Bob's leadership, the program has engaged all challenges by following an elegantly simple code: work for the taxpayer, have a clean heart and ensure that no private benefit is being had on the taxpayer

dime. It's certain that Bob will continue to bring excellence to whatever endeavors he pursues.

"Working for the Washington State University Extension Energy Program has been a dream come true," MacKenzie said. "They have a great support system in place for the Consortium to thrive, and they genuinely care about their employees. Members will see more of these benefits as our staff continues to explore the strengths and linkages of such a powerhouse organization." ✖

Ed

Continued from page 1

educating homeowners on how to save energy and spend less on home heating and cooling costs.

He then moved on to work for an independent energy consulting firm doing commercial building energy audits and improvements. From there, he joined Seattle University and supervised a staff that educated architects, engineers and building code officials about new and ever-changing energy codes. Next, he joined the DSHS as a construction project manager, where he served for 20-plus years managing large and small construction projects at DSHS facilities statewide. He was promoted to DSHS' Capital Asset Manager before joining the Consortium in late August 2011.

His years of experience balancing the needs of DSHS facilities statewide with budgets provided by the Legislature and headquarters make him uniquely

qualified to support Consortium members as they balance facility demands and tight budgets in their organizations. Working across division lines within DSHS as well as with other agencies, cities, and counties, Ed has used the power of cooperation and resource sharing to better serve the public – experience exactly suited to Plant Operations Support.

"I am looking forward to meeting Consortium members and jointly expanding on existing tools, as well as discovering new ways that Plant Operations Support, with the strength of the WSU Extension Energy Program, can benefit existing and future members even more," Valbert said. "Since I

don't play the guitar or have the expansive joke collection of Bob (does anyone?), I am open to Consortium volunteers filling those roles in the spirit of not reinventing the wheel and sharing best practices. Thanks to everyone who has already made me feel so welcome. I look forward to assisting more members as

we all work toward servicing our organizations to the best of our abilities."

Contact Ed at 360-956-2055 or email valberte@energy.wsu.edu, with your questions or to introduce yourself. ✖



Ed Valbert

Quick Tips

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Tip #6: Periodically visit the facility during off hours to see if lights and equipment are on unnecessarily.

Tip #7: Publicize energy-saving ideas through morning announcements, school-based TV broadcasts and newsletters. Solicit ideas from your building's occupants and staff. Recognize good ideas with KUDOS announcements.

SAMPLE: Energy Conservation Message to Teachers and Administrators: Lighting

One of the many ways our school is conserving energy is to reduce unnecessary lighting of our spaces. Starting this week (DAY, DATE), the building control system will automatically turn off lights in <<THESE COMMON AREAS>>

starting at 4 p.m. instead of the normal 6 p.m. As always, the lights will blink twice (at approximately 3:50 p.m.) to remind you they will be going out in 10 minutes.

If you are working late, you can override this automatic turn-off feature by pressing the light switch in your space. This override will give you an additional 2 hours of lighting, at which time the lights will blink twice again and you can repeat the process, if required. If you will be working in your space past 6 p.m. on a regular basis, please call the Facilities Engineering Help desk (PHONE NUMBER) and we can tailor the lighting schedule for your space to correspond to your work schedule. Conversely, if you consistently stop work before 4 p.m., let us know and we will tailor the lighting schedule accordingly.

This and other energy conservation initiatives were mentioned in the first edition of our school's newsletter. If you have a good idea for energy conservation, please let our Staff Engineer and Manager of O&M know.

Quick Tips are presented by the Building Operator Certification (BOC®) program. BOC offers job skills in energy efficient building operation for engineering and maintenance staff. Author Rich Prill has taught IAQ classes for BOC since 1997. More info: www.theBOC.info/wa ✖

Rich is a nationally recognized expert in indoor air quality for residential, commercial and institutional buildings. Contact Rich, 509-477-6701, or e-mail prillr@energy.wsu.edu, with questions and comments.

Notes

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We all know when it's time to pull the plug, and I know the timing is right. I look forward to the future with bright optimism and a quest to finish tasks left untended for too long: a return to my music, reading, cooking, photography, shooting, fitness, visiting daughters, friends and family and – most importantly – hanging, hiking and traveling with my beloved Anita.

I won't wax poetic, but I want to say how proud I've been to be associated with you. You're the finest public servants, and taxpayers are blessed for your service. I will think of you fondly. I wish you calm winds and following seas, my friends. A hui hou kakou (until we meet again). ✖

Bob

Operations Plan

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- Keep it error-free – zero defects
- Keep it trained up – knowledge is power
- Keep it on the right path with continuous improvement – make changes as needed
- Keep it cutting edge – stay apprised of new technology

It takes tremendous energy to initiate changes and modifications in any work environment. If you would like to discuss how the Plant Operations Support Consortium can assist you in developing a top star custodial rating at your facility, please call Sue Brown, 360-956-2058, or email browns@energy.wsu.edu, to arrange a visit. ✖

Portfolio Manager Utilization Receives Boost Through Collaboration

By Bob MacKenzie, Consortium Manager

Use of the ENERGY STAR® Portfolio Manager application is picking up steam in many Washington state agencies and colleges, having received a significant boost from a collaborative effort among the Washington State University (WSU) Extension Energy Program and Washington state departments of General Administration (GA) and Commerce.

Portfolio Manager is an interactive energy management tool that enables users to track and assess energy and water consumption across an entire portfolio of buildings in a secure online environment. Revised Code of Washington 19.27A190 directs that all state agencies, including colleges and four-year degree-granting institutions, are to report energy consumption on all building larger than 10,000 square feet.

Larry Covey, senior project manager for the Plant Operations



Debby Aleckson

Support Consortium, has taken the lead in providing assistance to state organizations tasked with implementing Portfolio Manager. Commerce has provided funds to WSU to fund this assistance and enable the program to get off the ground.

Phil Partington, Consortium program coordinator, has assisted Covey in preparing site visits and responding to requests for assistance.

"We've made real progress working closely with Donna Albert at GA to assist colleges and state agencies," said Covey. "This is a win-win for us, as many are Consortium members as well, so we're able to provide assistance in varied venues."

GA has set up helpful web resources to assist agency points of contact in establishing their Portfolio Manager venues. ***How to Share a Facility with General Administration*** and a listing of ***Frequently Asked Questions*** are two excellent resources. Covey and Partington point to the improvements in organizational reporting since this technical assistance has been rendered. Covey said that only a handful of state agencies had provided information to GA by March 2011. But, by the June 30, 2011



Phil Partington and Larry Covey

reporting date, more than a 60 percent of state agencies had either reported their energy consumption or were in the process of finalizing their data collection. That's the sort of improvement that will pay taxpayer dividends well into the future, said Covey.

"Larry helped us get our Portfolio Manager account up and running, populated it with our information and got it up to date," said Debby Aleckson, budget manager and administrative assistant with Pierce College. "On top of that, he came out and showed me how to keep it updated. His help was very much appreciated and he continues offering support as needed."

Marty Mattes, director of facilities and operations for Bates Technical Colleges, also leveraged the assistance of the Consortium. "We were so slammed, we would not have been able to have our Portfolio Manager data fully

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Portfolio Manager

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inputted by the deadline without assistance," he said. "Larry and the team came through for us in a big way."

The energy performance of facilities can be rated on a scale of 1-100 relative to similar buildings nationwide. Buildings are not compared to the other buildings entered into Portfolio Manager to determine their ENERGY STAR rating. Instead, statistically representative models are used to compare buildings against similar buildings from a national survey conducted by the U.S. Department of Energy's Energy Information Administration. This national survey, known as the

Commercial Building Energy Consumption Survey (CBECS), is conducted every four years. It gathers data on building characteristics and energy use from thousands of buildings across the United States.

"We're impressed with the can-do attitudes of agencies and colleges," Partington said. "This spirit and technical competence enables the state to achieve its goals and, hopefully, effect real energy savings in the near future." Consortium staff will continue to assist state agencies and colleges to improve energy conservation efforts across the state.

For more information about ENERGY STAR's Portfolio Manager,

This is a win-win for us, as many are Consortium members as well, so we're able to provide assistance in varied venues.

Larry Covey

contact Larry Covey 360-956-2056, coveyl@energy.wsu.edu, or check out ENERGY STAR on the web, <https://www.energystar.gov/istar/pmpam/>. ✂

Consortium Members

K-12 Schools

Bridgeport
Camas
Centralia
Chilliwack, BC
Colville
Coquitlam, BC
Delta, BC
Enumclaw
ESD 101
ESD 114
ESD 121
Federal Way
Hoquiam
Inchelium
LaCrosse
Marysville
McCleary
Medical Lake
Mission, BC
Moses Lake
Mukilteo
Oak Harbor
Odessa
Okanagan Skaha, BC
Olympia
Orcas Island
Orondo

Port Angeles
Portland, OR
Quillayute Valley
Reardan-Edwall
Renton
Saanich, BC
San Juan Island
Selah
Selkirk
Shoreline
Snohomish
South Kitsap
Surrey, BC
Wenatchee
Wishkah Valley

Universities/Colleges

Bates Technical College

Big Bend Community College
Clark College
Columbia Basin College
Community Colleges of Spokane
Everett Community College
Grays Harbor College

Highline Community College
North Seattle Community College
Olympic College
Pierce College
Seattle Central Community College
South Puget Sound Community College
The Evergreen State College
Washington State University Extension Energy Program
Wenatchee Valley College

Municipalities

City of Centralia
City of Des Moines
City of Hoquiam
City of Kent
City of Longview
City of Olympia
City of Port Townsend
City of Tumwater

City of Vancouver
Clark County
Jefferson County
King County Department of Executive Services
Lakehaven Utility District
Lewis County
Pierce County Library System
Pierce Transit
Skamania County
Snohomish County
Tacoma-Pierce County Health Department
Thurston County
Whatcom County

States/Tribal/Misc.

State of Alaska
Squaxin Island Tribe
Hopelink
Tacoma Convention & Trade Center

Washington State Agencies

Corrections
Criminal Justice Training Commission
Ecology
Health
Housing Finance Commission
Licensing
Liquor Control Board
Military
Natural Resources
Parks & Recreation
School for the Blind
School for the Deaf
Social & Health Services
State Patrol
Transportation
Veteran's Affairs

*Our warm welcome to new members in **bold blue** type. We look forward to serving your facility and operations needs.*