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Inside The Fishbowl
Official Newsletter of NTEU 280

March 2007 **Volume 22 - Number 10**

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Important Note about PARS: We've said it before – There is no quota system for the PARS ratings scale. If any manager has told you that there is a forced distribution system, please let us know who is saying this, so we can pass the names to Luis Luna (AA OARM) and get that office straightened out!!! Thanks for your help.

*1. Message from the President, Bill Evans

What Could Management Do to Make a "Stronger" EPA?

Last month, on a Friday afternoon, (February 16, to be exact), the EPA Unions were asked to comment on a draft "Stronger EPA" Proposal put together by many high level managers. We were asked to give our responses by noon the following Tuesday (Monday was a holiday). That alone makes me believe that management has already made up their minds on this initiative. However, this president spent the best part of the weekend going over the proposal and had a lot of comments. While I can not address all comments here, I would like to highlight a few that I believe should be of some interest to us all.

The proposal called for the establishment of a permanent SES candidacy program and voluntary rotations for SES managers. My comment to this proposal was that the SES program was first

established under the Carter administration and the intent of the program was to improve government efficiency by offering higher salaries commensurate with the private sector. SESers who did not perform to standards were to be removed from their positions. I asked them how many EPA SESers have been removed from their positions since the establishment of the program? And if they are to remain as public servants, why shouldn't their success be evaluated by the staff as well as management?

In the area of strengthening EPA's recruitment and hiring process and how EPA could compete with the private sector to retain the "best and brightest", I commented on the difficulties of promoting the "best and the brightest" (best qualified) to the current pool of the GS-14 and GS-15 grade levels. By-in-large, NTEU does not believe that there are too few senior level positions, however, NTEU believes that many of these positions are not filled with the best qualified candidates. There are many highly qualified experts in their field who have earned both titles and experience and yet are robbed of promotions by their colleagues with less academic credentials and experience simply because they do exactly as management requests. A large number of senior scientists currently have not earned a PhD and have been passed over for promotions by less experienced candidates. In addition, many non-technical positions at EPA at the GS-14 and 15 levels do not even require a high school diploma. Wouldn't it be interesting to see this list? In fact, let's examine this scenario even further. How much of our management, at all levels, are staffed with managers with little or no academic credentials or experience in science and make decisions everyday on what they believe to be "sound science"? If EPA is to truly make itself stronger and able to uphold the Principles of Scientific Integrity that it bought into, perhaps they need to re-evaluate current staffing and establish a policy which will set academic and professional standards which meet the goals of the positions which it intends to fill - be they managerial or technical. One way to do this would be to offer to finance higher education and repayment of student loans. Many agencies currently do this, and as a matter of fact, Article 58 of our Collective Bargaining Agreement provides for the repayment of Student Loans. In this regard, NTEU is ready to negotiate any time.

Finally, another area which the proposal considered was the addressing of workforce suggestions for improving morale. I thought that EPA:

Should empower staff to be involved in policy decision making (both technical/scientific and administrative) as outlined in the Principles of Scientific Integrity

Allow all staff to evaluate all their levels of supervision, and actively remove or demote all supervisors which do not show a majority approval by their immediate subordinates

Should allow all employees (including management) the opportunities to work at home or other alternative work locations during and in preparation for "issues of National Significance"

To be fair, management's proposal did indicate that PARs should be improved to make it more credible and equitable. On this we couldn't agree more. We would welcome your opinions about these comments. You may send them directly to the editor of *Inside the Fishbowl* Lynne.Diane@EPA.GOV or to me at evans.bill@epa.gov.

Did You Get the Award You Deserve?

Ever wonder how decisions to distribute awards are made in your organizational unit? The process seems to lack clarity and consistency and, in most cases the information for these awards (especially the monetary awards) are guarded in secrecy. Wouldn't it be grand if all of us knew where the award money went and what we have to do to get them ourselves? There is a way that NTEU can do this. We are in the process of obtaining information through the Freedom of Information Act (FOIA). Specifically, we are requesting the following information from the FOIA office for all EPA HQ employees.

1. Employee Name

2. Type of Award (Q (Quality Assurance); QSI (Quality Step Increase); S (Superior Accomplishment); OTS (On the Spot Accomplishment); TO (Time OFF Award); T (Team Award)

3. AA ship and office Identification to branch level (eg. AA/Office/Division/Branch)

4. Grade/Series/Step

5. Position Title

6. Amount of Award

With this information you will be able to see where all the money is going in your branch or office. You can then press your supervisor to find out how you get your fair share of the awards. It has always been a mystery to me why most managers are afraid to fairly recognize employees who they award. In addition to the monetary awards, recognition is the least they can do for the employees. Employee recognition, at least at the first line supervisor level is the one action that makes this whole process transparent. We will let you know when these reports are available.

*2. NTEU Legislative Conference and Hill visits

NTEU Chapter 280 Participates in Legislative Days Conference

Members of Chapter 280 attended the National NTEU Legislative Days Conference held on February 27 through March 1. The conference kicked off with a speech from House Majority Leader, Steny Hoyer who has long been an ardent supporter of Federal employees. Teams were set up and Senators and Representatives and their staffs were visited to promote NTEUs position on important issues concerning all federal employees. See more information on this at the National NTEU website: www.nteu.org. Chapter 280 representatives visited their respective representatives with NTEUs platform and also gave out information about planned laboratory consolidations/closures. The information was well received and one congress person stated that since the last election, the climate on the hill has changed and he would be looking at our issues more closely. The closing speech was from Representative Chris Van Hollen who spoke of continuing support for Federal Employees from this last election to the next Presidential election.

EPA UNION LEADERS MEET WITH HILL STAFF AND PUBLIC INTEREST REPS

On February 26, EPA union leaders met with Grant Cope, Majority Counsel, Senate Environment and Public Works (EPW) Committee and David Mustra of Committee Member Senator Hillary Clinton's staff, along with Jeff Ruch, Executive Director of Public Employees for Environmental Responsibility (PEER), and research staff members Timothy Donaghy, Karly Kaufman and Eileen McClellan of Union of Concerned Scientists (UCS) to open discussions on how EPA unions can work together with Congressional staff and public interest allies on issues of mutual concern. Eric Olson, Senior Counsel EPW, and Greg Dotson, Majority Counsel, House

Government Reform and Oversight Committee were invited, but unable to attend and were briefed by Grant Cope on the meeting outcome.

Union representatives present were Dwight Welch, as labor co-chair of EPA's Partnership Council, Charles Orzehoskie, President of the AFGE council of EPA labor unions, Dave Christenson, President of AFGE Local 3607 (Denver) and his executive board member Maureen Kiely along with Bill Hirzy of NTEU Chapter 280's executive board. John O'Grady, President of AFGE Local 704 (Chicago) was also invited but bad weather caused him to miss the meeting. Dave and John were the leads on recent union initiatives expressing employees' concern over EPA's organophosphate risk assessments and global warming activities.

Union representatives spoke about why they wanted to work in conjunction with Congress and groups such as USC and PEER on ways to help EPA accomplish its missions while providing job satisfaction and security for Agency employees they represent. The underlying basis for the union's approach was the document the labor coalition submitted to Assistant Administrator Luna titled "Ways to Make EPA Stronger."

The unions covered, among other items, our recommendations for EPA to require managers supervising scientists to have doctorates, to require doctorates of candidates for Senior GS 14/15 positions, to adhere more closely to our Principles of Scientific Integrity, and to implement employee evaluations of supervisors.

In addition, threats implied in the Lyons Gray budget memo of June 8, 2006 to "consolidate" (for which read: "close) some EPA laboratories, and dismantle EPA's public information capabilities through library closings were high on the union list of issues. Risk assessment and control measures applied to organophosphate (OP) pesticides were discussed, as were EPA's drinking water standard review process for fluoride and the lack of interest shown by the Agency in following up on union complaints about the cover-up of the epidemiology study published by Elise Bassin showing a strong link between water fluoridation and a large increase in risk of osteosarcoma in young boys. Both these programmatic concerns were couched in terms of questionable scientific integrity in the Agency's approaches to the OP and fluoride issues.

PEER and UCS discussed plans and past efforts to survey EPA employees, particularly about perceptions of scientific integrity within the Agency.

Wynn Holds Administrator Johnson Accountable at Subcommittee EPA Budget Hearing

Following NTEU's legislative visit, which included a Chapter 280 Board member, Congressman Albert R. Wynn (MD-4), Chairman of the Environment and Hazardous Materials Subcommittee, released the following statement from the Energy and Commerce Committee hearing on the Environmental Protection Agency's Fiscal Year 2008 budget.

"**Overall, there are concerns that EPA funding is insufficient to meet its mission to protect the environment, and the public health. The number of Superfund and Brownfields clean-ups are declining. States face increasing pressure to pass costs on to consumers, drinking water infrastructure continues to deteriorate in the face of declining funding and the American public continues to face health risks from Leaking Underground Storage Tanks all as a result of chronic under-funding of EPA's core health programs. Meanwhile the EPA under this Administration is expending resources on voluntary programs with little oversight or accountability**," stated Wynn.

*3. The Whistleblower Protection Enhancement Act of 2007

On Wednesday, March 14, the House overwhelmingly passed a package of sunshine in government laws that included the Whistleblower Protections outlined below. It is very significant that *this Act extends whistle blower protections to government scientists for the first time.*

The Pesticide Action Network North America (PANNA) issued this press release following the Bill's passage:

Pesticide Action Network North America Applauds

Representative Waxman for Whistleblower Protection Law

Pesticide Action Network North America (PANNA) applauds the passing of the House of Representatives Whistleblower Protection Enhancement Act, which protects federal scientists and contractors from political interference in their scientific work.

Representative Henry Waxman, Chair of the Oversight and Government Committee told reporters, "It is important that employees who see such examples know that they are eligible for whistleblower protection, and that our science-based agencies get the clear message that retaliating against these employees is unacceptable."

Kathryn Gilje, executive director of PANNA, says "We admire the courage of the scientists at EPA, FDA, and other federal agencies who are speaking out in the face of intimidation and industry pressure. Their

dedication to our public health and environmental protections is a great service to our nation and our families."

"Those of us working on environmental health and toxics issues across the country are grateful to the federal scientists for challenging harmful decisions within the agencies," says Kristin Schafer, Campaigns Director for PANNA. "We ask Congress to listen carefully to these men and women, and to ensure that the 2008 budget retains staff scientists, protects our federal laboratories, and rejects 'outsourcing' chemical review decisions to industry experts."

For more information:

http://oversight.house.gov/story.asp?ID=1172

Expert Contacts:

- **Dr. Bill Hirzy**, Staff Scientist, EPA (on sabbatical with American University, yet very active in these issues) 202-566-2788, Hirzy.John@epa.gov

- **Jeff Ruch**, executive director for Public Employees for Environmental Responsibility,

assists government whistleblowers 202-265-7337, jruch@peer.org mailto:jruch@peer.org

- **Francesca Grifo**, Senior Scientist and Director of Scientific Integrity Program, Union of Concerned Scientists 202-223-6133, fgrifo@ucsusa.org mailto:fgrifo@ucsusa.org

- **Dr. Margaret Reeves,** Staff Scientist with Pesticide Action Network North America, on human testing and organophosphate issues, 415-981-1771, mreeves@panna.org mailto:mreeves@panna.org

H.R. 985, the Whistleblower Protection Enhancement Act of 2007, was introduced by Reps. Waxman, Platts, Van Hollen, and T. Davis on February 12, 2007. It includes the following provisions:

Protecting National Security Whistleblowers. H.R. 985 gives whistleblower protections to federal workers who specialize in national security issues. These are federal government employees who have undergone extensive background investigations, obtained security clearances, and handled classified information on a routine basis. Our own government has concluded that they can be trusted to work on the most sensitive law enforcement and intelligence projects. This bill would finally give these courageous individuals the protection they deserve.

Protecting Contractor Whistleblowers. H.R. 985 ensures that employees who work for companies with government contracts are protected when they report waste, fraud, and

abuse of U.S. taxpayer dollars. Existing legal protections for these employees are deficient, and often they fear that reporting an abuse of taxpayer dollars will cost them their jobs.

Protecting Scientific Whistleblowers. H.R. 985 includes a clarification regarding disclosure of actions that threaten the integrity of federal science. Over the last few years, the politicization of science has been rampant. It is important that employees who see such examples know that they are eligible for whistleblower protection, and that our science-based agencies get the clear message that retaliating against these employees is unacceptable.

Protecting All Whistleblowers. H.R. 985 responds to court decisions by the U.S. Court of Appeals for the Federal Circuit limiting the scope of disclosures protected under current law. H.R. 985 clarifies that "any" disclosure regarding waste, fraud, or abuse means "without restriction as to time, place, form, motive, context, or prior disclosure" and includes formal or informal communication. The bill also provides that a whistleblower can rebut the presumption that a federal official performed his or her duties in accordance with the law by providing substantial evidence to the contrary. The Federal Circuit has required a higher standard, irrefutable proof, to rebut this presumption. Furthermore, H.R. 985 allows whistleblowers access to federal district courts if the Merit Systems Protection Board (MSPB) does not take action on their claims within 180 days.

On the Union for Concerned Scientists website, Francesca Grifo, senior scientist and director of the Scientific Integrity Program at the Union for Concerned Scientists, is quoted as saying, "Today both Republicans and Democrats stood up to protect the brave scientists who expose political interference in their work. The resounding bipartisan support for this bill should embolden the Senate to pass similar legislation and send it quickly to the president's desk. Censoring scientists undermines our democracy and threatens public health. One stunning example: Vioxx: Fifty-five thousand Americans died because scientists at the Food and Drug Administration couldn't speak out. If this law had been in place at the time, those people might be alive today."

As you can see, from this excerpt of the House Committee on Science and Technology press release dated March 9, 2007, the Federal Scientist Whistleblower legislation is unfortunately, a very necessary law.

For Immediate Release

March 9, 2007

Gordon, Miller Seek Explanation on Continued Censoring

of Federal Climate Scientists

(Washington, DC) In a letter today to the Secretary of the U.S. Department of the Interior, House Committee on Science and Technology **Chairman Bart Gordon (D-TN)** and Investigations and Oversight Subcommittee **Chairman Brad Miller (D-NC)** asked for an explanation as to why federal scientists - this time at the U.S. Fish and Wildlife Service (USFWS) - are being prohibited from discussing the issue of climate change.

In an article by Felicity Barringer in the *New York Times* today, it was reported that the USFWS scientists had been instructed not to speak of global warming in relation to efforts to save Arctic species - such as polar bears - whose survival is threatened by the warming Arctic environment.

This "appears to be the latest effort by the Bush Administration to block a full and free discussion of issues relating to climate change by the scientific community, despite the President's recent acknowledgement that global warming was an issue that needed to be addressed," wrote the Chairmen in their letter to Secretary Dick Kempthorne.

4. Laboratory Closings and Reducing Science

Breaking News from the Laboratory Front:

Thursday, March 15, 2007, all BEAD Laboratory employees were called together for a teleconference meeting with Richard Kiegwin (BEAD Division Director). Rick relayed that Administrator Steven Johnson has promised that laboratories will not be closed or any jobs lost while he is Administrator of EPA. The laboratory infrastructure review will be revised to identify efficiencies or "best practices" with each other to reduce costs wherever possible. An example given was at the Region 3 Laboratory at Fort Meade, costs of heating and cooling were saved by adjusting the thermostat in the summer and winter. A committee of four senior managers will conduct the survey. Later there is a plan to hire outside consultants to assess capabilities, identify needs and build a plan for infrastructure. Need to set goals to be sure we can support agency mission in the next 10-20 years.

byline: Diane Rains, Chair, Laboratory Issues Committee

Editors Note: At the March labor/management meeting with Luis Luna, (AA for OARM), NTEU, Chapter 280 Executive Board members requested involvement in the laboratory infrastructure review as the best way to protect our bargaining unit members. Representatives of EPA management assured us that Administrator Johnson has pledged that no EPA labs would be closed as long as he is Administrator. Since all indices are pointing in this direction, the Administrator's statement could be construed in the short term as defining consolidation as something separate from closure, although it has the same effect. In the long term, by the time the lab review is completed, Administrator Johnson will be gone, although he will have begun the chain of events that will prompt lab consolidation (closure) for his successor.

Microarray Research Laboratory Continues It's Fight For Survival

The EPA Microarray Laboratory at Ft. Meade, has requested an FTE to continue the unique research of using cutting edge technology to advance the science of understanding the mechanisms of antimicrobials on a genetic level. This laboratory with only one FTE and a couple of IPAs has published 5 papers in top journals in its short three and a half year existence. Requests for a single additional FTE to aid in succession planning and continued high level of output has gone to **Marty Monell** and met with no attempts to find a solution. It is very hard to understand the position of management over a single FTE when the health of the American public and homeland security issues, an EPA priority, are at stake. Current statistics from the CDC are that **90,000 people die** in hospitals **every year** from hospital acquired infections and the cost of treating them and the **2 Million people who get sick** and survive is over **6.5 Billion dollars!** We have been told that managers know best. With over 850 OPP employees (management's count) it is very hard to understand their reluctance to back up their verbal praise for this laboratory's work with a single FTE.

EPA Looking at Labs By Mollie Churchill, OMB Watch 3/20/07

(Reprinted by Permission – Thank you, OMB Watch!)

The U.S. Environmental Protection Agency (EPA) has begun a review of its laboratory network that may result in significant closures, according to some early agency plans. In response to budget cuts, EPA intends to reduce costs at least 20 percent by 2011. According to EPA officials in a phone briefing on March 15, the review is to assess the efficacy of the lab network, eliminate duplicative programs or efforts, and increase overall efficiency. Given the FY 2007 and 2008 budget cuts to research and development, there is concern that the review and potential closures of labs are budget driven rather than reflecting a substantive management plan to create a more effective EPA.

One review plan, introduced to the House Committee on Science and Technology's Subcommittee of Energy and Environment during a hearing on March 15, proposes consolidating 39 agency laboratories. According to the Bureau of National Affairs, Dr. George Gray, the Assistant Administrator for Research and Development, pledged that no laboratories would be closed "during the tenure" of EPA administrator Stephen Johnson. However, how long Johnson, appointed by President Bush, will remain in his position remains to be seen. The review is expected to take up to three years to complete, although details are unclear, as no official plan has been finalized.

A June 8, 2006, EPA memo indicated that an early plan unquestionably included significant closings. In the memo, www.peer.org/docs/epa/06_13_9_cfo_memo.pdf , released in September 2006 by Public Employees for Environmental Responsibility, Chief Financial Officer Lyons Gray directed agency officials to cut laboratory infrastructure costs by at least 10 percent by 2009 and another 10 percent by 2011. Closing, relocating and consolidating labs were highlighted as core components of the plan. The more than 2,000 scientists employed at EPA labs would also be subject to staff buy-outs and targeted attrition. According to EPA's Gray's March 15 remarks to both the House subcommittee and to interested stakeholders in a phone briefing, laboratory consolidation does remain part of the plan.

The budget cuts and potential consolidation of labs strikes chords very similar to the EPA's recent scandal of closing regional libraries. In response to severe FY 2007 budget cuts, five (out of 27) EPA libraries were closed, documents with no other copies were destroyed, and access to EPA materials has been limited. Though Congress intervened and halted any subsequent closings pending their review of EPA's plans, the president's FY 2008 budget calls for even larger cuts at EPA, making reductions to research and information facilities increasingly likely.

Using budget purse strings to discreetly implement a political agenda may be part of the strategy at work in the EPA labs review. For instance, even though climate change is currently the most prominent environmental issue, the current administration's budget cuts appear to be undermining efforts to address this emerging threat. EPA's own Science Advisory Board

observed that the proposed FY 2008 budget will focus research programs "more on yesterday's issues and less on new and emerging environmental problems." Given the increasing scrutiny that EPA and other agencies are under for politically motivated manipulation of science, such a result from budget changes must be questioned. At a hearing on March 19, the House Committee on Government Oversight and Reform continued its investigation into whether the current administration pressured scientists to minimize the importance of climate change.

EPA's libraries and laboratories are crucial to understanding and addressing a myriad of health and environmental issues currently facing our country, including climate change. Strong science requires an arena free from political pressures, and with sufficient funding for strategic, not just reactive, research. OMB Watch will be closely following EPA actions on its management of agency libraries and laboratories to ensure that their "efficiency improvements" do not impede important scientific progress.

Press Release from the House Science Committee :: *March 14, 2007*

Subcommittee Questions EPA Budget Cuts

Members of the House Committee on Science and Technology's Energy and Environment Subcommittee today questioned the effects of projected federal budget cuts to environmental research programs at the Environmental Protection Agency (EPA).

The President's proposed budget for Fiscal Year 2008 (FY08) reduces the agency's overall budget to $7.2 billion, a 5.5 percent cut compared to FY 06.

The overall spending by EPA's research programs has been declining for several years, with a 5 percent reduction four years ago, and a 2 percent cut in FY06. Between 2004 and the proposed 2008 budget, the overall support for Research and Development at EPA has declined by 25% in inflation-adjusted terms.

During the hearing, **Energy & Environment Subcommittee Chairman Nick Lampson** (D-TX) expressed concern that these cuts will prevent the agency from adequately supporting the research and development needed to creatively solve our country's environmental problems.

"It's not about partisanship. I don't know if my kids are going to grow up to be Democrats or Republicans, but I want them grow up healthy," **Lampson** said. "Unfortunately, for the fourth consecutive year the proposed budget falls short when it comes to enabling our nation to achieve further success in environmental protection."

Subcommittee Ranking Member Bob Inglis (R-SC) spoke of the importance of R&D in developing environmental regulations, saying "Research from the Office of Science & Technology Policy and the Office of Research & Development is used to improve the regulatory framework of the EPA. I trust that the objective of that research is the use of science to achieve continual improvement in the regulatory framework. By investing in EPA's scientific research and development today, we can get better regulations for tomorrow."

Critics of the budget, including EPA's Science Advisory Board, have argued that EPA's core research programs are being eroded in ways that will limit understanding of the environment and hamper the agency's ability to formulate sound policies.

Specifically, the Administration's FY08 budget request for Science & Technology programs:

- Eliminates both the Superfund Innovative Technology Evaluation (SITE) Program and the Environmental Technology Verification (ETV) program – each of which support developing and testing innovative technologies to cleanup hazardous substances.

- Merges the Air Toxics program with the National Ambient Air Quality Standards program to form the Clean Air program which will focus on multi-pollutant effects, instead of individual pollutant sources.

- Contains a 31 percent reduction to the human health research program which focuses on risk intervention and prevention strategies that aim to reduce human risk associated with exposure to environmental hazards.

The Administration's budget plan would also cut $10 million from the Science to Achieve Results (STAR) grant program, which provides research grants and graduate student fellowships. While the bulk of the program's remaining funds have been allocated to competitive research grants in targeted mission-critical areas, a smaller amount is going toward fellowships and exploratory research on the next generation of environmental challenges.

"Cuts to the STAR grant and fellowship program not only reduce funding for research, they reduce essential funds for training the environmental scientists of the future," **Lampson** said.

Lampson and Members of the Subcommittee heard from four witnesses at this afternoon's hearing: **Dr. George Gray**, Assistant Administrator for Research and Development, Environmental Protection Agency; **Dr. M. Granger Morgan**, Chair, Environmental Protection Agency Science Advisory Board; **Dr. Jennifer Sass**, Senior Scientist, Health and Environment Program, Natural Resource Defense Council; and **Dr. Bruce C. Coull,** Carolina Distinguished Professor Emeritus and Dean Emeritus, School of Environment, University of South Carolina.

"Without investment in science and in scientists, there can be no science-based decision making," Coull said. "In real dollar terms, EPA's funding of science is nearly unchanged since at least 1990, and has been steadily declining since FY 2004."

The Administration has argued the EPA S&T funds have been focused on emerging priorities, while programs that are not as pressing or effective have been scaled back. EPA is one of two agencies that are cut in the President's FY08 request for federal spending.

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5. MANAGEMENT PLUS OR MINUS

By Dwight Welch

Management Plus

Frank Sanders, Director Antimicrobial Division, OPP and Marty Monell, Deputy Director of Office of Pesticide Programs - Problem Solvers.

The Union received a complaint from a member in AD. In order to preserve the confidentiality of the employee, I will not get into specifics. The complaint was NOT against Mr. Sanders, however, Mr. Sanders, or so we thought, had the authority to grant the relief requested. This Union has had a long productive relationship with Frank Sanders, so we attempted to resolve the complaint without filing a grievance. In less time than it would have taken to resolve a grievance, the complaint was resolved. Part of the issue involved buy in from the Office level. We all met with Marty Monell and in the spirit of problem solving (as opposed to confrontation) the issue was resolved.

Editor's note: But see this story under the closing Labs section: "Microarray Research Laboratory Continues It's Fight For Survival." Marty Monell could resolve another grievance and help the Agency meet it's Homeland Security priorities by assigning a single additional FTE to this lab, yet Ms. Monell refuses to do it. We would love to write up Marty Monell as a manager plus in this situation, but unfortunately, for the Microarray Research Lab she remains a Manager Minus.

Management Minus

Mike Hamlin, Labor Relations and Ken Venuto, Director Office of Human Resources - Union Stiffed on Information Requests; Grievance Turned Down by Two Levels

In order for the Union to resolve problems, it needs access to the information necessary to resolve these problems. This has been a long running problem with Labor Relations; they just don't want to share information. Such information is especially necessary if potential or actual disciplinary action against an employee is involved. It is a long American tradition that the accused have the right of discovery. Apparently EPA Labor Relations and OGC feel it is exempt from the U.S. Constitution and case law.

In the last issue of INSIDE THE FISHBOWL, under Management Minus I discussed the withholding of information requested under 5 USC Section 7114(b) by Labor Relations' Melissa Hatfield in accordance with the denial memo authored by OGC's Nancy Dunham. Not only is Office of Human Resource management unwilling to give the Union the requested information, they are unwilling to even try to develop some standard operating procedures to get information in the future!

For Step One of the grievance, I met with the acting Labor Relations Director Mike Hamlin. Initially, Mr. Hamlin missed the deadline for responding to the grievance and we had escalated it to Step 2. Mr. Hamlin called me and asked if he could still have a shot at resolving this issue, and the Union gave him a do over. At the face to face meeting I explained to Mike the necessity of the union's having access to the full disciplinary investigation which took place in connection with a disciplinary action against an employee, rather than the one page "cherry-picked" version we were supplied. Our discussion fell on deaf ears. Our grievance was dismissed out of hand and the written denial did not appear to be written by Mr. Hamlin, but rather appeared to be drafted by OGC, who was not present at the meeting. The analysis was apparently endorsed by labor relations as Melissa Hatfield signed the denial.

Prior to the official Step Two meeting with Mr. Ken Venuto, Director of the Office of Human Resources, Diane Lynne, Sr. VP and I met with Mr. Venuto to discuss the importance of NTEU being able to review ALL portions of ALL affidavits gathered in conjunction with the greivant's

disciplinary investigation. Ms. Lynne went even further, posing the suggestion that LR and the Union need to develop some standard procedures for handling such requests in the future.

At the Step Two grievance level, I met with Mr. Ken Venuto. Normally, Step Two grievances are handled strictly at the local level; however, Ethan Balsam, our National Field Representative, attended the meeting for the purpose of assisting me with obtaining the withheld information. We made a similar presentation; discussing the need of this information in order for the union to provide fair representation to the employee.

We also reiterated the need for some standard procedures in handling requests for information. Mr. Balsam reiterated the strong need for this information and explained that the material in question does not constitute guidance, advice, and/or counsel between management officials. In essence, Mr. Balsam insisted that Mr. Venuto disclose the requested documentation; thereby enabling the union to properly evaluate the facts and circumstances surrounding the grievance. Once again, the union's discussion fell upon deaf ears. The grievance was dismissed and the denial response was standard legalese.

The grievance is now advancing to Mr. Luis Luna, Assistant Administrator of the Office of Administration and Resource Management for Step 3. Mr. Luna prides himself in partnering and having an open dialogue with the unions. So it will be interesting to see if the Union gets the information it requests; it will be interesting to see if there are any standard procedures for obtaining information collected, or will the Assistant Administrator stubbornly march in lock-step with his minions and continue to stiff the Union.

6. Library Closings

For a comprehensive look at the EPA library situation, see http://www.fas.org/sgp/crs/secrecy/RS22533.pdf, the link to the CRS report summarized below:

[1]

71 *Federal Register* 54986.

Order Code **RS22533**

Updated January 3, 2007

Restructuring EPA's Libraries:

Background and Issues for Congress

David M. Bearden and Robert Esworthy

Resources, Science, and Industry Division

Summary

The closing of several libraries administered by the Environmental ProtectionAgency (EPA) has raised numerous issues. The President's FY2007 budget included a $2.5 million reduction for EPA's libraries, $2.0 million of which was attributed mainly to these closures. EPA reports that the closings are part of its efforts to restructure its libraries to respond to the increasing use of the Internet to access its collections. Although EPA plans to digitize certain materials, some items may be archived ordiscarded. Members of Congress, library professional associations, and public interestgroups have questioned the continued availability of EPA's collections as the agencyrestructures its libraries. The closing of EPA's libraries received increasing attentiontoward the end of the 109th Congress, including a request for the Government Accountability Office (GAO) to examine the agency's library restructuring plan. However, the funding and operation of the libraries were not mentioned in the FY2007appropriations bill that would have funded EPA (H.R. 5386). This report examinesEPA's plan to restructure its libraries and discusses relevant issues.

7. EPA's IG Office Threatened with RIFs

In a March 22, 2007 letter to Bill Roderick, EPA Acting Inspector General, Chairman of the House Committee on Energy and Commerce, John Dingell notes that "the President's FY2008 Budget request for the IG represents a $5.1 million decrease from the FY06 enacted level, which may cause a loss of approximately 30 FTEs." The letter goes on to state that "on February 5, 2007, four days after the President submitted the FY08 Budget, you notified all OIG employees that it was 'very likely we will have to close facilities and/or conduct a reduction in force to meet our '08 budget target and prepare for operating at a continually reduced level over the long term."

The letter continues to question a buyout initiative that would require staff to sever service as early as April 30, 2007. Since Congress has not approved the requested OIG budget cuts, the buyout initiative could be disruptive to operations. Chairman Dingell continues, "On its face, it appears that you are trying to make the FTE reductions proposed in the President's FY08 budget a fait accompli prior to any Congressional action or approval. We urge you not to proceed in this

manner." The letter requests a citation for buyout authority, a briefing, and an assurance that no plans will be initiated to close IG field offices without a 60 day advance notice.

Inside EPA addressed the proposed IG budget cuts in a March 6, 2007 article in which they quote an EPA source: "The source adds that the cuts would mean "less auditing, and less oversight" of EPA because it would reduce the quality and quantity of IG investigations at the regional level. The source believes that a number of regional IG offices are at risk of either significant staffing cuts or complete closure, with the leading candidates thought to be Boston, Denver, Dallas and Cincinnati."

*8. Obituary: Daljit Sawhney, Retired EPA Toxicologist and Union Executive Board member, dead at 69.

Dr. Daljit Sawhney, Toxicologist, helped establish risk assessment at U.S. EPA

By Jim Murphy, Former President NTEU Chapter 280

On February 10, 2007, a truly international group gathered in Annandale, Virginia, with his family to remember our friend and colleague, Dr. Daljit Singh Sawhney. Daljit was born on November 6, 1938, in a part of India that now belongs to Pakistan. He was graduated from Government College in Ludhiana and received a degree in veterinary medicine from the Punjab College of Veterinary Science. There he taught and practiced veterinary medicine, specializing in the diagnosis and treatment of reproductive problems in farm animals.

Political tensions led to the partition of India and the creation of Pakistan on the west and eventually Bangladesh on the east, and may have been a factor in his decision to come to the United States as an instructor of veterinary medicine at the University of Nevada, which awarded him a Master of Science degree. Dr. Sawhney moved to New York State as director of research and development for Agway in the food industry. Again he led in identifying and treating nutritional and microbial diseases in local farmers' livestock, with a particular interest in aflatoxins.

This interest led him to further graduate study at Cornell University, from which he received a Ph.D. degree for studies on mycotoxins, including aflatoxin. Dr. Sawhney was an international expert on mycotoxins, a subject of intense controversy in the debate over "yellow rain" in Asia. In the mid-1970s, after six years in Ithaca, NY, with wife Pat, daughter Larisa, son Inderjit and brother Amarjit, Daljit moved to Washington to accept a new position at the U.S. Food and Drug Administration as a toxicologist/pathologist, where he investigated the estrogen receptor as a target for toxic substances.

After four years at the FDA, Daljit joined the U.S. Environmental Protection Agency as senior toxicologist to implement the new Toxic Substances Control Act. He hired many of us at EPA for the Risk Assessment Team or kindred organizations. In 1981, Dr. Sawhney became one of the first toxicologists at EPA to be certified as a diplomate by the American Board of Toxicology. His recent work at EPA was on "high-production-volume" chemicals, with manufacture or import volumes of more than a million pounds a year. He served NTEU as an executive board member from 1988-1989.

Daljit retired from EPA in 2005. He was a scientist and a man of faith. His memorial service on February 10 was held at the Immanuel United Methodist Church, where he and Pat were members, and included both Christian and Sikh prayers and hymns, with both communities represented in large numbers. He was gentle and considerate, a fine example of a scientist and a man of faith. We miss him.

--J. Beaubier contributed to this report.

9. ADVENTURES IN ALTERNATIVE ENERGY

By Dwight Welch

Part 3: Adding Solar Energy To a Battery Backup System

This is the fun part of the series, adding solar panels to the battery powered emergency backup system. The parts you will need will be solar panels, mounting racks, a charge controller, and if you are running more than one string of panels, a collector box with circuit breakers. You will also need miscellaneous parts such as UV resistant wire (or conduit), lightning arresters, a temperature sensor, and if your power panel didn't come with one, a DC breaker for your solar panels.

First a Word About Batteries

I mentioned this in the last article. If you are interested in merely an emergency battery backup, then a battery bank of twice your anticipated outage need is all you will require. This is also true if you only have a few panels to trickle charge your batteries which you will only be discharging during power outages. In these cases a well maintained battery bank will last 10 years or more. However, if you plan to collect enough electricity to use your battery bank on a daily basis, you should calculate a battery capacity that will allow only a 10% to 20% discharge if you want the battery bank to last 10 years. I will get into this in part 4 of this series where I will outline mistakes I made, so that future solar power user can benefit from my mistakes.

While I will get into it more in the next installment, if you bought a battery backup system and now have changed your mind and want to go solar in a big way, one thing I learned is that all batteries must be of the same type, amp hours, and AGE. If you try to add new batteries to an aging system, the old ones will "drag" the new ones down. If you have one bad battery, it is wisest to replace them all! It is important to keep the batteries as equal as possible not only by type, amps, and age, but with connections and temperature.

The Solar Panels

There's a lot of crap out there so beware. However, by following a simple guideline, you can stay out of trouble and the only decision you have to make is which brand offers the most watts per dollar. The simple guideline is to stick to panels of 100 watts or more. The good panels come in three categories. Some are made by brand name Japanese electronics companies such as Kyocera, Mitsubishi, Sharp, etc. Others are sold by oil companies! That's right, oil companies like BP and Shell. The third group, the only American made non-oil company panels are made by Evergreen.

Most companies have varying advertising angles, but it is mostly hype. For instance Mitsubishi advertises that their panels contain no lead solder. Hello, none of the other name brand panels do either. You can't buy lead solder in the U.S., Japan, and other first world countries anymore; they now use tin. You may encounter lead in Chinese panels however. (See below, "Panels to Avoid.") Some panels are mono-crystalline, others poly-crystalline. Manufacturers make varying claims as to how long their panels will meet specs. As I understand it, poly-crystalline degrade somewhat while mono-crystalline will not. However, poly-crystalline perform above specs when new, and then degrade somewhat down to the specifications. All good panels can be expected to meet or exceed specs almost indefinitely. Again, stay with name brands, keep above 100 watts, and you can't go wrong; just look for the best watts per dollar price.

All good panels contain the following. Underneath is generally a plastic backing. On top of this layer, is a layer of a number of silicon dioxide disks (solar cells) soldered in a series; there will be several to many to a series. One exception is Evergreen which uses a silicon ribbon. Overlaying the solar cells should be a covering of tempered glass. Tempered glass won't yellow over time like plastic and is fairly impact resistant but not indestructible. (You can't walk on them.) These are all bordered by an aluminum frame. On the back of the panel is a junction box. The junction box should contain a number of diodes. These are necessary so that the batteries won't heat up the panels at night, and for when part of the panel is in shade and part in sun. The diodes act like a one way water, anti-backflow valve, not only keeping the electricity from flowing in a reverse direction at night, but to keep the shaded cells from being overheated by the sunny cells during the day.

One big difference, sometimes occurring even within brands, are junction boxes vs. MC connectors. The MC connectors are better than the J connectors. The junction boxes of the MC connectors are already sealed against the elements and have two wires coming out of them. The plug on the end of one is male; the other female. Simply connect male to female until you have the voltage that you need, and you're done. (E.g. 5 - 12v panels in a series will give you 60 volts.) With "J" style panels you have to carefully wire to the correct polarity within the junction box, connecting positive to negative, until you have your string. You must also seal the openings with good quality silicone sealant. "MC" panels are definitely worth paying a bit extra for.

Panels to Avoid

With panels below 100 watts you run the risk of Chinese and other junky panels which may contain lead and not have a long service life.

Avoid thin film or "roll-up" panels. These may be OK for an occasional camping trip, but won't do well in long term service. The plastic glazing will yellow and the solar cells are not well protected against breakage and becoming disconnected from each other.

There are also various warnings about "solar shingles." These are relatively new and don't have the extensive history as conventional panels and it is difficult to predict their longevity. With solar shingles on your roof, you won't be able to walk on them: they will break. Also, there should be one to, ideally, several inches underneath any solar panel to allow them to cool. As a solar panel gets hot, electricity production drops. While it may seem counter-intuitive, a cool panel under full sun produces more electricity than a hot panel under full sun. As the panel heats, electrical resistance increases and thus electric flow decreases.

The Solar Panel Rack

A good rack should be able to withstand high winds. My Two Seas racks supposedly can withstand 125 mph winds. Racks are generally aluminum with stainless steel hardware. If the racks aren't aluminum or stainless, galvanic corrosion will happen at the interface of the aluminum panel frame and, let's say, a steel rack.

Roof Mount or Ground Mount?

If space in your yard is at a premium, then a roof mount may be necessary. It may also be an aesthetic call. Some advantages of roof mounts are more exposure to the sun, more difficult to steal. There are however, many disadvantages to roof mounts overcome by ground mounts. With a roof mount you should have a least a couple of inches under the panel, many roof racks don't give an ideal cooling air space. With a roof mount, it is difficult to impossible to adjust the angle seasonally. Making seasonal adjustments of the panel angle to the sun, makes for more yearly production of electricity. The pitch of the roof may be wrong for ideal collection. For instance with a gently sloping roof, the back ends will have to be raised, reducing aesthetic appeal and making them more prone to ripping off with a strong north wind. Roof mounts attract lightning. While both roof and ground should be attached to an 8 foot grounding rod, roof mounts require a special ground fault circuit, otherwise your house is more likely to burn down in the event of a lightning strike. Another problem is snow. I've discovered that even a quarter inch will cut electricity production down to zero. However, on a sunny day following a snow, once I brush the snow off, the panels perform at top capacity. (Reflection from the whitened environment adds a bit to electricity production.) Anytime you pierce the surface of a roof, such

as with bolting down a rack, you have potential for leakage of water and rotting of the wood underneath. Such bolt down points on a roof should be checked and caulked yearly.

Tracking vs. Fixed Mounts?

There are two major brands of tracking mounts on the market: Zomeworks and Watt-Sun. Zomeworks tracks the sun using two canisters of freon, one on either side of the rack, connected by a tube. If the sun is hitting one canister and not the other, the freon is driven to the shaded canister causing the rack to tilt towards the sun, until the canisters are balanced. This causes the panels to track the sun, keeping them at ideal electricity production throughout the day. The Watt-Sun racks use photoelectric eyes and a motor connected to a battery. While the trackers claim to get 40% more electricity, and no doubt they do, if you were to invest their additional expense into additional panels, you would at least break even or better in terms of watts per dollar. The Zomeworks have been in service for decades and have a good reliability record. However, they may be blown off track in high winds and take a while to reset to the East in the morning. The Watt-Suns fare better in the wind, reset automatically, however, you must maintain an additional battery (or more) which is (are) generally charged with an extra solar panel. The Watt-Suns are more expensive. Both require a pole in a big hole (deep and wider than a post hole digger) filled with concrete. Galvanized steel water pipes can be used 2 inches for the smaller trackers 3 and 4 inch diameters for larger ones. If the pipe is insufficiently secured, it may over time, rotate in the concrete. If the pipe is not large enough, the pipe may bend over in high wind.

Tracking mounts do have some advantages over fixed mounts. If the space you have to put the solar panels is at a premium, then trackers will allow you to get more power out of less panels. Trackers also supply a more even distribution of electricity. Consider tracking mounts with less panels vs. fixed mounts with more panels, each producing the same overall amount of electricity per day. The fixed array will produce a higher spike during the mid-day hours, while the trackers will distribute the same amount of power spread out over more hours of the day. The latter situation will be easier on your battery bank, allow for direct use of the produced electricity during a longer period of the day, and in the case of very high power systems, may allow the use of less charge controllers. I've chatted on-line with some who advocate, rather than using trackers to even out the power collection over a longer period of the day, to point half the "strings" slightly eastward and the other half slightly westward.

If you are considering tracking mounts, you should make sure your environment is open enough to allow the panels to get sun throughout the day.

Fixed Mounts

There are a wide variety. The simplest and cheapest are dual track roof racks. You bolt the panels to a top and bottom track on the roof. Again, beware of the air space below the panels, and consider the slope of your roof.

The ground mounts can also be used as roof mounts and come in several basic varieties. Top of pole, side of pole, low profile, and high profile. I used low profile Two Seas racks. The pole mounts have many of the same difficulties of installation as the tracking mounts referred to above. Creatively, they have some potential to use the solar panels to shade your house in the summer. Some pole mounts allow seasonal adjustment, some side of pole mounts do not.

Most people use the conventional high and low profile ground mounts for either roof or on the ground. The panels are bolted to one set of aluminum rails and a second set, a smaller rail sliding inside a larger rail, allow you to make seasonal adjustments to the panels. The "feet" of the rails should be bolted to a concrete footing to keep the whole array from blowing away in high wind. (For roof mounts bolted to the roof.)

The Solar Charge Controller

In the first article of this series, I asked the question 12V, 24V, or 48V? I suggested 48 volts suggesting that in a large system this could save you money. In my system, in good sun, I can get 40(+) amps of 48 volts. (Varies from 48 volts to 58 volts going into the battery.) My charge controller, the Outback MX-60 is rated at 60 amps although you can tweak it up to 70 amps. If I had selected a 24 volt system, I would be at times over the limit of 70 amps max (80 a) Thus I would have needed an extra Charge Controller at $500 plus. With a 12 volt system, I would definitely need at least two additional charge controllers coming out at 160 plus amps and thus need to have spent an extra $1000 plus. With my current setup at 48v I can add at least another string of 5 solar panels without any additional equipment expense except for an extra circuit breaker.

Why a Charge Controller?

With a large enough battery bank, I've read, though I don't quite understand how to calculate it, you don't need a charge controller. Otherwise when the battery bank gets full, without a charge controller, the solar panels will overcharge your batteries and ruin them. The charge controller keeps the incoming charge within the proper voltage range to protect your batteries.

Conventional vs. MPPT

MPPT stands for "Multi Power Point Tracking." These charge controllers are significantly more expensive than the old fashioned conventional charge controllers but well worth it. You can get a decent conventional controller for a hundred or two, my Outback MX-60 was a little over $500.

In the simplest situation a 12v panel charges a 12v battery. But since a 12 v panel can produce as much as 20v (I sometimes get more than 100v from my 60v [5x12v] array), the cheaper charge controllers simply cut off the voltage at 14.5v. (Can't be used with gel batteries as these are limited to 14.1 volts.) Somewhat better and a bit more expensive of the old fashioned type can be adjusted to meet the specs of your batteries. These types of controller simply limit the voltage, the excess voltage is wasted as heat.

The MPPT controllers use this wasted energy. More than merely limiting the voltage to the set-point you select, they convert the excess voltage to increased amps. Using some hypothetical numbers, my monitor (the Outback Mate) will tell me I'm producing 100v/16amps at the panels, however, what is being put into the batteries is 50v/32amps. (The MPPT controllers continuously monitor or "track" the panel voltage and adjust the voltage going into the batteries appropriately.) With a conventional charge controller, I would be losing half of my electricity production as waste heat! The more expensive MPPT controllers pay for themselves fairly quickly.

Another advantage of the MPPT controllers such as the MX-60 is being able to use a higher voltage string of panels. Why would one want to do that? When I first planned my system, I went 48V on everything including two strings of 12v x 4, 125W panels for a hot kilowatt of power. After I unpacked everything and read all the literature, I realized that I should have gone with 60v strings, and thus I had to buy 2 more panels. (I later added another 5.) Why? At room temperature my panels are rated at 17.1v each. But when they are colder they produce more (20v plus) but when hotter, produce less. Since panels are generally black or a very dark blue, they can get considerably hotter than the ambient air. Four 12v batteries in a series, when they

measure 48v, they are 50 to 75% discharged. When they are fully charged they should be around 51v plus. In order to charge the batteries throughout their range, the incoming charge must exceed the 51 volts. (Mine are set for 57.2v max but can take 58.4v max; I left room for meter error.) However, in some situations, during a really hot, sunny day, the output of the panels could drop to 48 volts. If the batteries are already at this voltage, no charging will take place and all electricity production is wasted. By going with 60 volt strings, the voltage at the panels won't generally drop below 60v, keeping me above my 57.2v target. Thus my system always produces useful power even when the panels are hot and even at the beginning or end of the day as the sunlight, and thus, voltage drop off.

MPPT charge controllers also allow you to use odd voltage panels (e.g. 35 volts). In the ads for panels, such odd voltage panels usually have the disclaimer, "For use with grid-tie systems only." This is true for a conventional controller, you cannot use these odd voltage panels, but with an MPPT you can. So if the best deal per watt are some odd voltage panels, you can go ahead and take advantage of the savings.

The Collector Box

If you have more than one string of panels, you need a collector box. This is simply a circuit breaker box. Each string is on a separate circuit breaker. Each string feeds into one end of the breaker, while the output from each breaker goes into a central bus to be sent to the charge controller. An important note: DC breakers are different from conventional AC breakers. Do not try to scrimp by buying an AC box with AC breakers, you may end up sorry.

Lightning Arresters

Lightning arresters are inexpensive devices (around 15 bucks) but are very necessary to protect your system from lightning and electrical surges. They look like little canisters with wires coming out of them. You should have a DC lightning arrester at your collector box and a second just before the charge controller. You should also have an AC arrester on the AC input (from the grid) and on the AC output (going from the inverter to your house circuits).

The lightning arrester is basically a heavy duty surge protector. As I understand how they work, the hot wires are insulated from the ground wire by very fine particles of silicon dioxide (sand.) In the event of a lightning hit or powerful surge, the fine particles melt and go from insulating electricity to conducting electricity. The surge is then channeled to ground. Once the surge

passes, the sand goes back to powered form. Except with a very big hit, they are good again and again and again. In the event of a big hit, the canister will deform. If you see a deformed canister, you need to change the lightning arrester as it will no longer protect your equipment. Lightning arresters are not fool proof: nothing can protect from a large enough surge.

A Temperature Sensor

One optional item which, unless you have your battery bank in a temperature controlled area, is not an option at all, is a temperature sensor. They are only about twenty something dollars. The sensor is stuck to the side of one of your batteries, about mid-way up the battery. The other end attaches to the system. In the case of my system, plugging it into the inverter monitors both the inverter/charger's charging as well as the solar charge controller. Why is this necessary? The chemistry of a battery changes with temperature. A warm battery will produce more electricity, but the input charge should be lower. A cold battery will produce less electricity and the charging voltage should be higher. The temperature sensor automatically adjusts the charge you selected, based on the battery manufacturer's recommendations, to account for temperature. The charging voltage will be higher when the batteries are cold, but lower than the original setting when the batteries are warm.

Using Excess Electricity

If your system is grid-tied, feeding into the grid, your excess power, after the batteries are fully charged, can be sold to the grid. (Good luck hassling with the power company.) In a non-grid-tied system, you can use power from the grid when you don't have enough sunshine, but what do you do with the excess when your production exceeds the needs of the circuits you have connected to the system and your battery bank is fully charged? Rather than waste it as waste heat outside at the solar panels, you can set up your system to use the excess to do some useful work. In my house, I have a dedicated circuit going to a window air conditioner in the kitchen. For a few bucks, I bought a relay and a plastic electrical box. The relay is attached to my Outback system. When the voltage gets up to where the batteries are charged up, the system sends out a 12 volt current which closes the relay. This then channels the excess electricity to the window air conditioner providing me with free air conditioning. In a rural situation, the excess can be used to fill a water tank. Other uses might include powering a ventilation fan. As I write this, it's February. The temperature outside is cold, but the sun is intense; I have excess electricity. I simply plug an electric heater or high wattage lamp into the kitchen A/C outlet for free heat. If I want to use the AC or heater when there is no excess, a couple of presses at the Mate (wall mounted system controller/monitor) and the circuit is energized. If the battery bank is full, I can run the AC from that. If not, another button press and I'm using the grid instead.

Wiring

Outside wiring must be UV resistant or protected by conduit. I suggest wiring a size or two larger than a specific run calls for; this saves energy.

Coming in Part 4. Adding wind-power to make a hybrid system. The Washington DC area is not a good place for wind energy. In the mountains and on the shore, wind produced electricity is cheaper than solar. However, in the DC area, while there is little usable wind in the summer, the higher wind speeds in the winter can supplement a lower winter solar output for not a whole lot of extra investment.

Also, mistakes made, lessons learned. I will share with the reader some of the mistakes (sometimes expensive) I made and share them with you, so that if you decide to go solar, you won't waste your time or money.

10. Ask the Lawyer Column

We've corralled some of the top employment lawyers in town to participate in our new feature: *Ask the Employment Lawyer*. Send me your employment questions. Do you think you are a victim of discrimination in your office? Do you have questions about the EEO process or want information on mediation options? Have you received a reprimand? These guys charge big bucks, but will provide generic answers for free. E-mail your question to Lynne.Diane@EPA.GOV with the subject line: "Ask the Lawyer" or use the interoffice mail and direct your question to Diane Lynne UN-200-T. Your name and office will not be put in the newsletter. We may not be able to address all the questions, but we will try.

11. Congressman Wynn's Global Climate Change Symposium – April 16th , 7-9pm

SAVE THE DATE

CONGRESSMAN ALBERT WYNN

Chairman of the Environment and Hazardous Materials Subcommittee

Hosts Montgomery County

Global Climate Change Symposium

Monday, April 16th, 7-9pm.

Location: Montgomery College, Germantown Campus, Globe Hall

Featuring

Solutions to Global Climate Change

Presented by Derek Walker with The Climate Project

And a

Panel Discussion with Audience Participation

Topics Include:

- What Congress is doing and Policy Solutions
- What Maryland is Doing
- Montgomery County initiatives
- What Citizens can do to combat global climate change

For more information please contact Neesha Kulkarni at (202) 225-8699.