

CLEAN LINE ENERGY: MOVING WIND POWER TO WHERE IT'S NEEDED

Dr. Bob Allen

Plains and Eastern Clean Line has proposed and are planning the construction of a 700 mile High Voltage Direct Current Power line stretching from the

Oklahoma Panhandle to Memphis. The 600 kilovolt line will have the capacity to move 3.5 GigaWatts of power, equivalent to the output of 5 or 6 coal fired power plants. This represents a major move to deliver excess clean, wind-generated electricity out of the midwest to markets to the east.

Similar projects are in progress to our north, the Grain Belt Express Line will be passing through Missouri on the way to St. Louis and points east and the Rock Island Clean Line which will pass through Iowa and tie into several eastern states.

These projects are not so much about the here and now, but rather the there and then. Multimillion dollar projects take long lead times between inception and completion, usually several years, so they have to be planned with the future needs in mind. The recent requirement by the EPA to reduce our nations carbon emissions only hastens our need for clean renewable electrical energy to replace

obsolescent coal fired power plants.

The lines have both supporters and detractors. Environmental groups usually favor the projects as a way to reduce carbon emissions and thus reduce the risk of the damaging effects of global warming. On the other side are land owners who see the power lines marching across their land as more big government intrusion into their lifestyles and even interfering with their livelihoods. Additional arguments against construction of the lines are possible health effects, and the fact that the entities proposing the construction are private companies.

It seems strange that an argument against private industry would be made. The United States to a very large degree operates that way, it's capitalism, right? Rights of way (ROW) must be secured for these power line projects private or otherwise, just as any project in the public interest such as water lines or a railway. Fair market price must be paid for any property taken for the ROW.

Because these are direct current lines they have a relatively small footprint, at most about 200 feet wide. The total area utilized by the Plains and Eastern Clean Line is about 8000 acres spread over the total roughly 300 miles in Arkansas. The actual land area taken out of service is much less than that as grazing land and hay fields are essentially

undisturbed even within the ROW.

Health effects of the power lines relate to several phenomena—Induced magnetic fields, possible corona discharge, and ion production. There is no convincing evidence based on years of experience with power lines that any of the aforementioned causes have health effects.

The magnetic field induced by the proposed line is about the same as the earth's magnetic field. A few meters from the edge of the right of way won't even deflect a compass. Power transmission line operators design equipment to avoid corona discharge as it wastes power. With respect to the ions generated, if you worry about power lines, stay away from beaches and waterfalls as they produce even greater numbers of ions.

Dr. Bob Allen is a member of the Arkansas Sierra Club ExComm and a retired Professor of Chemistry. He writes about energy issues and the environment on his blog at http://ozarker.org



PEOPLE'S CLIMATE MARCH IN NYC - Arkansas Sierra Club Was There!

Brian Broussard, Rel Corbin, Becky Williams

Two buses leaving Little Rock for the People's Climate March in New York City were packed full with over 100 people by the time they reached the eastern edge of Tennessee. People from all over Arkansas boarded in Little Rock, picking up fellow marchers along the journey—people of all stripes from Oklahoma, Tennessee, Missouri, Mississippi, and Alabama. There were families traveling together, students representing colleges all over the Southeast, grandparents seeking to give hope to the next generation.

The trip included a stop at the Oak Ridge National Laboratory in Tennessee to learn about research the Climate Change Science Institute is doing to advance knowledge regarding climate change. The buses arrived in NYC on Sunday, September 21, the day of the March, and still others from Arkansas arrived from other paths. Becky

from the Milwaukee NAACP whose leader was from Pine Bluff, so Arkansas was very well represented.

The turnout was truly unbelievable. One marcher who talked with NYPD said the officers commented that they have groups organize rallies all the time that say they're bringing 100,000 people and then show up with 10 or 20 thousand. The People's Climate March anticipated they'd bring 100,000 people to the streets of NYC, and as the day of the march neared this number was increased. But, I still think everyone was shocked when the March started with 310,000 people from all over the country and even other parts of the world. It was estimated that around 400,000 participated

by the end of the day! You could see nothing but a wall of people for miles in both directions, and being amongst the crowd was exhilarating—an energy we planned to bring home with us and try to share with others.

Divided into themes, the organizations involved in the March were not confined to conventional environmental clubs. There were groups representing social justice, women's issues, native rights, public health, environmental and racial justice, and probably just about anything else you could think of. This confluence of ideas and struggles revealed how compelled everyone is to fight the biggest problem of our time. Some focused on addressing challenges, some on pro-

viding solutions, but all gave tons and tons of encouragement. Becky remarked that she got goosebumps every time she thought of the marchers, each one fighting at home every day for replacing fossil fuels with renewable energy and conservation.

The trip was exhausting. We spent more time on the bus than we spent in

NYC, and the march itself had so many people that it took over 5 hours for everyone to complete the route. Some people didn't move from their starting post for hours as people waiting along side streets filled in the main path ahead

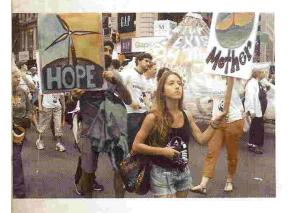


of them. Despite all the hardship, it's nothing compared to what the world's poor and those living along the coasts will experience if our fight doesn't succeed. Be sure to keep the momentum rolling by spreading the word, calling your elected representatives, and writing to the paper.

REVAMPED ARKANSAS SIERRA CLUB WEBSITE

Have you checked out our website lately? It's vastly renovated, revamped, and revitalized. Many thanks to our Chapter webmaster, Joe Wankum for his superior and tireless work in getting the site in working order.

Please refer to it often for information on Sierra Club events, news stories, action alerts, outings, and much more! Find us at arkansas.sierraclub.org. While you're at it, join our Facebook group at facebook.com/groups/sierra.club.arkansas.



(of CAG) had been volunteering at a Sierra Club Service Project in northern New York restoring wolf dens at the Wolf Conservation Center. The work ended Sunday morning, and she took the train to the City and joined in the march. We met people from Jonesboro who now live in

NYC, and a group

GROWING THE MEMBERSHIP, GROWING PARTICIPATION

Robin Rumph

On the heels of the largest climate march in history with more than 25,000 Sierra Club members marching, we should not get complacent. Songwriter Neil Young once wrote "rust never sleeps" and neither do the fossil fuel industry and big agribusiness. They have the money so we need the people. A growing environmental movement and a growing Sierra Club are critical to our success. The Arkansas Chapter is reaching out to students in college

environmental clubs across the state to affiliate with the Sierra Student Coalition (SSC). The mission of the SSC is "to train, empow-

er and organize youth to run effective campaigns that result in tangible environmental victories and develop leaders for the environmental movement." We hope these students will later turn to the Sierra Club once their school days are over to express their environmental values, leadership and activism. If you are familiar with a particular college or university and know students or faculty with interest in environmentalism please share these contacts with us and we will follow-up and help grow the Si-

erra Club and produce the next generation of environmental leaders.

Each of us has our own circle of friends. With the advent of social media that circle grows ever larger. One simple way we can all help to increase membership is to invite our friends to join. Social media make that exceptionally efficient to do. Some of us feel awkward in asking others who are not our closest friends to do something. Similarly, those who are not our closest friends may feel awkward when hearing our request. Social media reduces the awkwardness for both those who send the invitation to join and those who receive the invitation. So no worries!

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EPA'S CLEAN POWER PLAN: Good for Our Environment, Economy, & Health



Glen Hooks, AR Sierra Club Chapter Director

Last summer, my teenage sons and I took a two-week "Hooks

Man Road Trip" from Arkansas to San Francisco and back. We had a tremendous adventure and created what I hope will be lasting family memories.

One of those memories has really stuck with me: the fact that we saw wind power being generated in every single state we drove through—Texas, Arizona, New Mexico, California, Nevada, Utah, Wyoming, Colorado, Kansas and Oklahoma. Every state, that is, but Arkansas. To a lifelong Arkansan like me, that's troubling.

Unlike states in our region and across the country, our home state of Arkansas does not generate a single megawatt of electricity from wind or solar power. We in Arkansas get our electricity primarily from burning dirty coal, and the rest from gas, nuclear and a small amount from hydroelectric dams. Coal

is the single dirtiest fuel source available, and our small state is home to five coalburning power plants—three of which are more than 30 years old.

It is settled fact that burning coal to generate electricity dramatically worsens the health of Arkansans and damages our state's environment. We know that burning coal releases millions of tons of carbon into our atmosphere, plus mercury and other deadly air pollutants into our air, water and bodies. What's less well known is the tremendous negative economic impact caused by relying on coal. Each year, our Arkansas utilities send nearly \$700 million out of state to buy coal from Wyoming, which is then sent here by train and burned in our state's power plants. That's a great deal for the folks in Wyoming-but not so great for us here in Arkansas. Wyoming gets to keep our money, and we get to keep all the pollution generated by burning dirty coal.

The good news: For the first time in our nation's history, the Environmental Protection Agency has proposed to limit carbon dioxide emissions from power plants. The EPA's Clean Power Plan aims to cut carbon pollution from power plants by 30 percent nationwide—and by 44 percent in coal-heavy Arkansas. Our state regulators, environmental groups, utilities and others are currently meeting to hash out the smartest way for Arkansas to meet its Clean Power Plan goals.

The Clean Power Plan presents a tremendous opportunity for our state to jump-start the Arkansas economy. This opportunity should be embraced —if our state's leaders draft a plan that moves us away from dirty coal and toward cleaner sources of energy, all while implementing an aggressive energy efficiency program, we can meet our goals while creating thousands of good-paying jobs for Arkansans. I'm talking about jobs manufacturing solar panels and wind turbines, or installing energy-efficient water heaters, or retrofitting homes and businesses so that consumers save energy.

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CALENDAR OF EVENTS

Arkansas Sierra Club is a big supporter of our Arkansas State Parks. For this newsletter, we're including some of the programs offered at select state parks this fall along with our Sierra Club events. See Arkansas through our State Parks! Please contact individual State Parks for event/program details and possible fees.

November

- 11/16: Sierra Club hike at Cadron Settlement Park, 2 p.m. (Conway). RSVP to gary@garycawood.com
- 11/17: Panel discussion on Clean Line Energy project; 7:00 p.m., Hendrix College, Mills Room A
- 11/28: Sierra Club "Black Friday" hike at Petit Jean State Park (Morrilton, time TBA). RSVP to Gary@garycawood.com
- 11/28: Southeast Arkansas: Lake Chicot State Park (870) 265-5480 Birding Basics (11:00 a.m. - 11:30 a.m.)
- 11/29: North Central Arkansas: Bull Shoals White River State Park (870) 445-3629 Lake Cruise (1:00p.m. - 2:30 p.m.)
- 11/29: Southwest Arkansas: Cossatot River State Park (870) 385-2201

All About Antlers (10:00 a.m. - 11:00 a.m.) Awesome Autumn (2:00 p.m. - 3:00 p.m.)

11/30: Northwest Arkansas: Hobbs State Park (479) 789-5000

The Butterfly Stagecoach Line (2:00 p.m.-3:00 p.m.)

December

- NOTE: Central Arkansas Group does not meet in December
- 12/4: Central Arkansas: Pinnacle Mountain State Park (501) 868-5806
 Little Wild Ones (10:00am-11:00am)
- 12/5: South Central Arkansas: Arkansas Museum of Natural Resources (870) 725-2877

 Holiday Light Extravaganza (5:00pm-8:15pm)
- 12/13: Tinker Time (1:00pm-3:00pm)

- 12/13: Northwest Arkansas: Hobbs State Park (479) 789-5000
 - Eagle Watch Cruise (3:00pm-4:30pm)
- 12/13: Northeast Arkansas: Davidsonville Historic State Park (870) 892-4708 Holiday Bird Walk (1:00pm-3:00pm)

January

- 1/1: Southwest Arkansas: Cossatot River State Park (870) 385-2201
 - First Day Hike (1:00pm-5:00pm)
- 1/9: North Central Arkansas: Bull Shoals White River State Park (870) 445-3629Eagle Awareness (All day)
- 1/20: Sierra Club (Central Arkansas Group) monthly meeting; 6:30 p.m., Oyster Bar (Little Rock)

PAPERLESS OPTION FOR NEWSLETTER

In an effort to save trees and money, your Arkansas Sierra Club newsletter will soon be available in an electronic format. If you'd like to receive your newsletter electronically rather than via U.S. Mail, please email your address to glen.hooks@sierraclub.org, with "ELECTRONIC NEWSLETTER" in the subject line.

NOTE: You will still receive a paper newsletter at the end of each year (including this issue), so that you may receive and return your Sierra Club officer ballots. Thanks!

The Arkansas Sierra Club sends out a paper newsletter on a quarterly basis. More frequent information is available on our web site at arkansas.sierraclub.org or via e-mail updates. If you haven't received any Sierra Club messages in the last six months, we probably do not have your address. If you would like to be added to our e-mail list, please send your e-mail address to glen.hooks@sierraclub.org.

STAND UP AND BE COUNTED: DO YOU KNOW YOUR LEGISLATORS?



George Wise, Chair Sierra Club, Central Arkansas Group

As we prepare for the 2015 Arkan-

sas Legislature to convene, I wanted to ask for your help. All politics are local. Tip O'Neill coined that phrase. This concept is based on the principle that a politician's success is directly related to his ability to understand and promote the issues important to his constituents. For corporate polluters, this concept has become part of their strategy to evade responsibility for their wrongful behavior. This strategy is playing out through corporate efforts to influence local politicians. In other words, billion-dollar corporations have a strategy of imposing their agenda by working state to state to influence local politics. Obviously, we cannot compete dollar for dollar with a billion-dollar company. We can, however, work at a grassroots level to fight those who are intent upon destroying our environment. Here is what you can do.

Work at a grass roots level to support politicians who understand and support the Sierra Club's goals to protect the environment. Our friends need and appreciate our support since they are usually not supported, thankfully, by the big corporations. We all must resist the apathy that makes it easy to say, "I'm too busy" or "I'll let the Sierra Club Executive Committee take care of politics". Some of us can contribute more than others and some can contribute in more ways than others, but we need every member involved in political action in some way. There may have been a time when being a Sierra Club member was enough. Those days are gone. We need every member fully engaged in protecting our beautiful State.

Beyond supporting the Sierra Club financially through your membership, and perhaps just as important, we need every member to engage his or her legislator. Your city council member, quorum court member, representative and senator should be so well acquainted with you that they recognize your face and name. To truly help protect the environment, we need you to have the type of relationship with your legislator where they return your phone calls and respond to your texts and emails. Personal relationships are vital. We need you to begin developing those personal relationships now, well in advance of the 2015 legislative session. Showing up and meeting a legislator for the first time during the session is not as effective as building that

relationship well in advance of the session. Get acquainted with your legislator through church, school, civic clubs or other local activities. Find a common interest other than your membership in Sierra Club.

We can help you help us. If you want help setting up a meeting for the first time, or if you need talking points or strategies of how best to address our issues with your legislator, call a member of the executive committee. We need to know who you know and are happy to help you get to know your legislator. Helping us build a list of key contacts lets us know who can help with specific representatives and senators.

Finding your representative or senator is easy. Here are the links to the Arkansas house and the Arkansas Senate:

arkansashouse.org/member arkansas.gov/senate/senators.html

Remember, as we began this column, that a politician's success is directly related to his ability to understand and promote the issues important to his constituents. You are a Sierran and a constituent. Let your legislator know that supporting the environment is important to his or her success.

CLEAN POWER PLAN

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These are good jobs that can be done by an Arkansas workforce that needs it.

Predictably, some leaders from our utilities and industry are predicting catastrophe and claiming that the sky will fall if the Clean Power Plan is finalized. We should always remember that these folks have a long history of opposing each and every environmental rule — with wildly overblown claims of economic disaster that have proven to be wrong over and over again. If we'd

listened to these naysayers in the past, there would have never been a Clean Air Act, there would never have been a Clean Water Act, and we'd still have acid rain. These entities have a strong economic interest in keeping things the way they are. The rest of us have a stronger interest in a cleaner, healthier power system for our state.

The EPA is accepting public comments on the Clean Power Plan between now and Dec. 1. I hope you will join us in supporting this important step forward. To send in your comment, go to arkansas.sierraclub.org.

My sons will soon be men, and

maybe someday will have children of their own. I'm looking forward to taking another road trip then, with my children and their children, and proudly pointing out evidence that our home, Arkansas, has embraced a clean energy path forward. We can do it. It just takes the political will and the vision to do so.

This column originally appeared in the October 8th, 2014 edition of the Arkansas Times

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WOMEN AT THE CENTER: GLOBAL POPULATION AND THE ENVIRONMENT



Cami English, Chair, Ozark Headwaters Group

Drought, flooding, and extreme heat are just a few of

the factors threatening our global food and water supply as well as our ability to sustain existing communities. These issues effect us all, but as Representative Barbara Lee (D-Oakland) said, "Women will disproportionately face harmful impacts from climate change, particularly in poor and developing nations where women regularly assume increased responsibility for growing the family's food and collecting water, fuel, and other resources." With a growing global population, now is the time for us to adjust our lens to view these issues from a woman's perspective.

In early September, I was given the opportunity to attend the Sierra Club's Global Population and Environment Program in Washington, D. C. As a participant, I thoroughly studied the intersections of women, the environment, and policy. What I learned is that access to adequate health and family planning services is a vital component of creating a sustainable future in both developing and developed nations.

The United Nations Entity for Gender Equality and the Empowerment of Women recently reported that women make up the majority of small-scale farmers in developing nations, growing between 60-80% of the

food in developing countries. As Sarah Hodgdon noted in her article, Women Must Be Heard in the Climate Change Debate, these women have fewer resources available than their male counterparts to overcome crop failures or to invest in more sustainable farming methods. Because they are forced to migrate due to climate stress, women battle disease and violence at a higher rate than men, and are more often the victim of deadly natural disasters.

As a participant in the Global Population and Environment Program, I spent time on Capitol Hill, meeting with several members of Congress to discuss two women and environmentally friendly bills and to ask for an increase in appropriations for international family planning and reproductive health programs. Individually and collectively, the legislation my team presented seeks to bring women to the forefront of the discussion on climate change.

Congresswoman Barbara Lee champions the first bill, House Concurrent Resolution 36, the Women's Climate Change Resolution. This bill is designed to provide women with the resources they need to improve the health and well being of their families. The resolution highlights the critical role that women play in reducing food insecurity and poverty, as well as other negative socioeconomic effects that result from a changing climate. Specifically, the bill seeks to improve education for women, and to bring women into planning, implementing, and evaluating policies designed to address climate change.

The Global Sexual and Reproductive Health Act, House Resolution 3206, is the second bill I (with my team) presented. Introduced by Rep-

resentative Yvette Clark (D-NY), this resolution authorizes the U.S. to assist developing countries in improving the sexual and reproductive health of their citizens. Specifically, it implements sexual and reproductive health programs geared toward people of childbearing age, empowering them to choose if, when, and how many children to have. Noting the World Health Organization's findings that less than five percent of the world's poorest sexually active youth use modern contraceptives, and that unprotected sex is the second most important risk factor for disability and death among the world's poorest youth, the resolution also establishes a policy statement, "In sexual and reproductive health programs funded by the United States Government, special attention should be paid to the needs of young people."

Finally, we asked for an increase in appropriations to \$1 billion to fund international family planning and reproductive health programs. Currently, there are 222 million women in the developing world alone who have no access to family planning services. Without these services, the global population will continue to grow unmitigated, taxing the environment's resources and leading to the destruction of forests, expansion of deserts, increased pollution of air and waterways, and to the overfishing of oceans and other waterways. Please join the Sierra Club in asking our representatives to support these bills.

Thank you.

PLEASE RECYCLE
THIS NEWSLETTER!

ARKANSAS SIERRA CLUB WANT ADS

Are you looking for ways to get more involved? If so, consider serving on one of the important committees below. We'd welcome your participation and perspective—contact Chapter Director Glen Hooks at glen.hooks@sierraclub.org or (501) 301-8280.

WANTED: FUNDRAISING COMMITTEE MEMBERS

Are you an experienced fundraiser, or simply a passionate Sierra Club member who has no qualms about asking for donations? If so, we need your help! Fundraising Committee members will help in all areas of Arkansas Sierra Club fundraising: major gifts, small donor projects, and fundraising events. Creative and dedicated people are a plus!

WANTED: MEMBERSHIP COMMITTEE MEMBERS

Our strength lies in our numbers—increasing our membership numbers is key to our success! The Membership Committee will work to add a significant number of new members to our Arkansas Sierra Club rolls in the next year through tabling events, public outreach, and other creative methods. Sign up today!

WANTED: CONSERVATION COMMITTEE MEMBERS

The Chapter Conservation Committee identifies and researches Arkansas environmental issues of concern, and makes recommendations to the Chapter Executive Committee about our environmental priorities. The ideal Conservation Committee member is knowledgeable about Arkansas environmental issues, knows her way around state administrative and legislative bodies, and has a passion for finding solutions that will improve life here in The Natural State.

GROWING THE MEMBERSHIP

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Please invite your friends to become part of the Sierra Club. Include this link so friends can easily join: arkansas.sierraclub.org.

The Sierra Club has created a culture of activism that is uniquely its own. In protecting the planet the Sierra Club has never lost sight of the beauty, wonder and fun that the natural world provides in our short lives on the planet. To protect the planet we act in many ways and we act together. I am reminded of two things that activist Erica Chenoweth has said about activism: 1. People don't engage in activism alone. 2. High degrees of participation are needed to be successful. For the environmental movement and the Sierra Club to be successful we need many of us acting in many ways. You can participate by attending the general monthly meeting of your group, enjoying recreational and service outings, lobbying legislators, and acting on specific high priority campaigns like the beyond coal/clean energy campaign. Please contact me for more ways you can participate.

Robin Rumph 501-860-9194 arkenrobin@hushmail.com

TWO SIMPLE WAYS YOU CAN SUP-PORT THE ARKANSAS SIERRA CLUB

The Arkansas Sierra Club is powered by the generosity and activism of our members. Our work is steered by volunteer leaders, and it is you—the volunteers—who keep this ship afloat.

Not everyone has the time and energy to be a volunteer Sierra Club leader, but we all have a role to play in making this organization stronger. Here are two ways you can help:

- Invest in the financial strength of your Arkansas Sierra Club by making a gift at arkansas.sierraclub.org. You can make a one-time gift, or spread a larger gift out by making an automatically recurring monthly pledge. Each dollar stays right here in Arkansas to fund our work in The Natural State.
- Personally ask your friends and neighbors to join the Arkansas Sierra Club by going to arkansas.sierraclub. org. People in your network trust you—just simply going through your email, Facebook, and address book lists and sending personal invitations is a great way to build our membership.

Thank you for your support!



Sierra Club of Arkansas 1308 W. 2nd Street Little Rock AR 72201 Non-Profit Org. U.S. Postage PAID Little Rock, AR Permit No. 1377



Check out our redesigned/updated website at www.arkansas.sierraclub.org!

CHERRANS,

As I watch our green leaves turn into deep oranges, rich

reds and resonating yellows, I am once again reminded what a beautiful state we live in. We don't do massive entertainment parks or skyscrapers; we float rivers, ski in

lakes and camp amongst trees and can enjoy the natural beauty within a 20 minute drive or less. That is the beauty of Arkansas.

At the time of this writing the elections have yet to occur, but there is a strong chance that some of the candidates we wanted in office did not win. We may need to double-down on our efforts to preserve the beauty of our state, but we can't give up. We may need to

re-strategize to protect our natural resources, but we can't give up.

If you are an inactive member and searching for a group to focus your efforts on, please reconsider the Sierra Club. In the last year, we have

made great strides to create a more active club that meets our members' and state's needs. We can plug you into wherever you want to be, offer training opportunities and, without a doubt, have fun! Every action makes a difference, every inspiring word encourages and every gift matters. WE NEED YOU!

Small deeds done are better than great deeds planned.

- Peter Marshall

Thank you, Karen Sykes, Chair Sierra Club State Chapter, Arkansas

Karen Sykes is currently earning her Master's of Public Administration at U.A.L.R with a focus on policy analysis and organizational development. She also works with various non-profits throughout Central Arkansas.



Karen Sykes