Over a century ago, our drive for energy from petroleum and electricity spawned the most powerful and dominant corporate monopolies in history. John D. Rockefeller’s Standard Oil Trust established the model of the modern corporate behemoth. J. P. Morgan’s General Electric sought to dominate the electrical business. Eventually, the public rose and broke up Standard Oil and settled for regulated electrical monopolies.

But now the giant energy corporations are back. The old Standard Oil Trust can be seen in the recombined ExxonMobil, and corporate monsters such as Enron have been set loose on the land by electricity deregulation.

Michael Klare points out that in recent years, national governments have taken over the oil industry in much of the world. In the United States the oil industry has taken over the national government. They use campaign contributions, lobbyists and the revolving door to completely manipulate US policy and are creating chaos in the world, from skyrocketing prices to war and climate destruction.

The Global Environment and Energy Correspondent for the Economist identifies the concentration of power in the energy industry as a major cause of these problems and the lack of anti-trust enforcement as a key policy failure.

So far in the 2008 election cycle, energy industry contributors have spent $38.5 million on Congressional and Presidential candidates. Forty corporate contributors gave 50% of that total. But the biggest money is going into lobbying. Between 2000 and 2006, lobbying expenditures increased 52%, from $153 million in 2000 to $232 million in 2007. Forty energy corporations spent over one million dollars on lobbying in 2007, which equaled 57% of the industry total. The top ten companies spent $77 million on lobbying (see page 3).

People connected with corporate energy are also playing a major role in the presidential campaign. Public Campaign, identified 33 staffers and fundraisers for John McCain connected to gas and oil corporations including lobbyists for Chevron, ExxonMobil, Shell and BP.

In the fight between clean energy and dirty fossil fuels, John McCain is pushing a nuclear solution, despite heavy evidence that nuclear power does not make sense (see page 13). Barack Obama, on the other hand, with connections to corporate biofuel manufacturers, has championed the next generation of biofuels as a solution to high gas prices.

Real solutions to peak oil and climate change have to be found and they are not being promoted by the corporate lobbyists or their funded candidates. Al Gore says we have to move to 100% renewable energy sources for electricity in ten years. The International Energy Agency predicts that “investments of at least $45 trillion might be needed over the next half-century to prevent energy shortages and greenhouse gas emissions from slowing economic growth.”

To create a secure energy future, though, it is going to take more than money. It will require a reinforcement of our anti-trust laws to once again break up the oil monopolies and reclaim our country. It will also take a fortification of political will for the public to takeover the electric industry in the form of public utility districts, electrical co-ops and Community Choice Aggregations. As Cleveland Mayor Tom Johnson once pointed out, “I believe in municipal ownership of these monopolies, because if you do not own them, they will in time own you.”
Swarming the Climate Catastrophe

by Ted Nace

One of the most underreported stories of the past year has been the incredible success of a swarm of grassroots groups fighting Big Coal. Employing both traditional organizing tools and Web 2.0 linkups, the anti-coal movement has succeeded in blocking so many coal plant proposals—67 since the beginning of 2007—that industry analyst Robert Linden of Pace Global told the Christian Science Monitor that the coal industry had entered a state of “de facto moratorium.”

This wave of potent activism comes on the heels of alarming reports and calls for action by climate scientists such as NASA’s James Hansen. Basically, if carbon dioxide emissions are not quickly phased out, the resulting rise in global warming gases could cause enough global warming to induce vast releases of natural global warming gases locked up in Arctic tundra, thereby creating an uncontrolable runaway effect.

To prevent such an outcome, Hansen recommends focusing especially on coal, which is more carbon intense and has much higher reserves than oil and coal. In fact, Hansen says that halting emissions from coal is “80% of the solution to the climate crisis.”

Greenpeace and others have exposed “clean coal” as a “false hope”: too risky, expensive, and far-off. The technology of democracy, spurred by grassroots organizing, is needed. Nothing else has the power to push out coal interests and summon environmentally friendly solutions.

All around the country, direct action and grassroots agitation has created a “death-of-a-thousand-cuts” dynamic, upping the risks of coal projects and thereby scaring off financiers. Energy analyst Robert Linden commented, “You turn off the money spigot, you’ve turned off those plants.”

• In Oregon and Delaware, citizens forged innovative new regulations requiring side-by-side comparisons between coal and cleaner power technologies, then used those comparisons to replace coal with wind, solar, and conservation alternatives.
• In Alaska, Maine, Michigan, Montana, and New York, organizers successfully worked through city councils, borough assemblies, and planning commissions to block needed permits.
• In Florida and Kansas, grassroots agitation created political space for mainstream political and business figures to push back against coal interests.

CoalSwarm (http://coalswarm.org), is networking groups and mobilizing new activists. It is an online information source where anyone can find or post information about the coal movement. For example, CoalSwarm contains up-to-date information on over 200 anti-coal groups, over 200 proposed coal projects, over 100 journalists writing about coal, and much more.

The aim of CoalSwarm is to support the many strands of the existing grassroots movement. Those strands include: militant groups in Appalachia opposing mountaintop removal mining; grassroots groups in Alaska, Arizona, Colorado, Delaware, Florida, Indiana, Minnesota, Missouri, Montana, Nevada, New York, North Dakota, Ohio, and Texas; regional groups such as the Western Organization of Resource Councils; grassroots-oriented national groups such as the Sierra Club; student groups such as the Energy Action Coalition with 48 participating groups; direct action networks such as Rainforest Action Network, Rising Tide, and Earth First; and urban climate activists, such as New York Loves Mountains and Architecture 2030.

Too often, the “takeaway message” about global warming is one of personal failure. Unless each of us acts individually to cut our consumption, the planet will be toast. While that message embodies some degree of truth, taken by itself it is disempowering and alienating. What is more important for people to embrace is the power of decisive collective action. Just as society used mass movements and governmental structures to overcome the Depression or create the National Parks system, the same tools can be used to shut down today’s coal plants and replace them with benign alternative sources of power. This is entirely possible, we just have to keep organizing and make it a reality.

Ted Nace is the director of CoalSwarm and author of Gangs of America: the Rise of Corporate Power and the Disabling of Democracy. He can be reached at info@cmNOW.org.
Much has been said and written about America’s addiction to oil, and how our dependence on it is harmful to our economy and national security. But our dependence is rooted in something more fundamental and harmful—centralized energy production controlled by a handful of corporations. These oil, coal and nuclear power companies enjoy a monopoly over the dirty and dangerous energy we use, entitling them to record breaking profits at a time when American households are struggling to get by. These corporations exploit political leadership to ensure that government policies restrict household’s access to renewables—the kind of consumer-controlled energy systems that combat global warming and free families from economic dependence on utility corporations and gas stations.

In 2008, three-quarters of federal subsidies benefit the oil, coal and nuclear power industries. This leaves too few resources for helping families wanting to install on-site solar, or make energy efficient improvements to their homes or acquire super fuel-efficient hybrid transportation. Why are the subsidies directed to mature, profitable, and dangerous energy sources like oil, coal and nuclear? Because those industries have spent more than $200 million making campaign contributions to federal politicians since 2001, with 72 percent of that total going to Republicans.

Oil companies will receive more than $9 billion in U.S. taxpayer subsidies this year, and that number will only grow as thousands of lucrative oil leases on federal land are coming on-line. Big oil companies like ExxonMobil are set to avoid paying $60 billion in royalty payments over the life of the leases for extracting valuable oil and natural gas from land owned by the American people.

And it keeps getting worse. Last month, the U.S. Department of Energy announced it was awarding $30.5 billion in new loan guarantees to finance energy projects—and nuclear power would receive two-thirds of that total. That will leave renewables to fight it out with transmission line upgrades and efficiency for the remaining one-third. Loan guarantees for nuclear power are particularly egregious because of the enormous costs and risks associated with building and operating nuclear reactors.

In all of these cases, the nuclear power and oil industries receive the largest share of subsidies because of their political power and the army of lobbyists they employ. Over the last decade, the oil and nuclear lobbies have spent $1.6 billion on federal lobbying expenses, which purchases them hundreds of lobbyists to blanket Washington, DC pushing for expanded subsidies and fighting against incentives that would encourage development and implementation of alternatives.

So what is the Public Citizen Energy Program’s alternative vision?
- End subsidies to the oil, coal and nuclear industries in order to finance household’s access to clean, alternative energy.
- Promote on-site solar, clean transportation and energy efficiency to provide families with alternatives to high prices and reduce greenhouse gas emissions, thereby combating climate change.
- Provide money to families instead of corporations to generate/save energy instead of corporations yields huge benefits for working people.

In New Jersey, for example, nearly 3,200 households received an average of $70,000 to install solar systems to generate most or all of their energy needs. As a result, New Jersey ranks as the second largest solar market in the United States.

Rather than providing $18.5 billion in loan guarantees to two companies to build new nuclear power plants, that same amount could provide loan guarantees to nearly 1 million households to allow them to install solar panels that would generate at least half of their monthly power needs.

An alternative vision of energy exists. But we must have the political will to break the oil, coal and nuclear power companies’ monopoly over our energy production, and instead finance the renewable energy revolution that will make families energy self-sufficient.

Tyson Slocum is the Director of Public Citizen’s Energy Program. See www.citizen.org He appears regularly in radio, print, and television media.
King CONG Dominates Energy Policy

Interview with Harvey Wasserman excerpted from Corporations and Democracy, July 4, 2008. A long-time researcher and writer on corporate energy issues, he is a Senior Editor at FreePress.org and author of SOLARTOPIA: Our Green-Powered Earth, A.D. 2030

The Bush/McCain gas price escalation is an Enron rerun. From 1999 to 2001, Enron ripped off California for $100 billion. There was no energy shortage. Their employees were playing with supply, pulling power plants offline to raise the price of electricity. In San Diego it went up 700%.

Corporations control the national energy policy by owning or renting the Congress and the President, Cheney, in his secret meetings obviously cut a deal with the big energy suppliers to: 1) continue the tradition of Enron gouging the American public; 2) sit on renewables; and 3) go to war in Iraq. That was the Bush energy policy—to go to war with Iraq and conquer their energy supply. And they did it not to supply it to the United States, but to ensure that it did not come in too great a quantity so that they could keep the price high.

Now we have this massive rise in gas prices and the Saudis say there is lots of supply and that it is the bankers and speculators that are driving up the prices.

Meanwhile, the Bush Administration is using the high prices as an excuse to drill for oil and build nuclear plants. Essentially, they are wrecking the earth in order to solve their oil shortage problem. McCain has the same gas and oil advisors as Bush. But nothing they are proposing is going to solve the problem.

The corporate death grip on supplying and refining fossil fuels, the electric grid and the automobile system does not allow us to solve the problem. If we got rid of King CONG, which is corporate Coal, Oil Nuclear and Gas, and replaced it with available technology, wind, solar, tidal, geothermal, increased efficiency, mass transit and conservation, we could get all of the energy the earth needs.

It is not a problem of technology. It is a problem of corporate domination. In 1920, GM did not see their competition as Ford and Chrysler. They saw mass transit as their competition. General Motors, Standard Oil and the glass and rubber companies consciously destroyed mass transit because they wanted to sell cars and gas. It made way for the biggest ecological disaster in history. We can’t even buy fuel-efficient automobiles because Detroit won’t make them.

Now, the gas and oil companies are absolutely terrified of the solar, wind, tidal and geothermal companies. That is why they are diverting everybody’s energy into nuclear power, which is a complete failure both economically and ecologically. Nuclear does not threaten the interests of King CONG because they are all invested in it. But they cannot control renewable energy because it uses free energy for its fuel.

In the long term we have this perfect storm of running out of both fossil fuels and the capacity of the earth to sustain the burning of fossil fuels. King CONG has too much money invested to let renewables happen. Polluting industries make more money out of destroying the planet than preserving it.

What is amazing about all these King CONG guys is that they all praise the free market, but then turn around and support massive subsidies for nuclear power. Nuclear power cannot be built without massive government subsidies. They cannot get private financing. They cannot get private insurance. No body would think of building a nuclear plant in a true market economy.

That is the first thing we have to do. If we removed all energy subsidies, renewable energies would win out.
Ending The Tyranny of Oil

by Antonia Juhasz

Big Oil maintains an almost impenetrable cloak of secrecy around its business dealings, leaving consumers, policy makers, and industry experts alike with shockingly limited access to meaningful information about both the companies’ inner workings and their relationship to the American and global political system. At its heart, Big Oil’s power is derived through money—lots and lots of money. The top seven oil companies alone operating in the US took in $133 billion in profit last year, money that buys an unparalleled influence in state governments, Congress, the White House, and in the international arena.

In my forthcoming book, *The Tyranny of Oil: the World’s Most Powerful Industry—and What We Must Do To Stop It*, I take on big oil—the individual oil companies themselves. I expose the underlying reason for the skyrocketing price of oil, particularly since 2000—rampant industry financial speculation and manipulation of the market. I reveal how as much as half of the price of a barrel of oil is largely determined by the actions of energy futures traders, including those working for and on behalf of Big Oil. I also reveal that the real culprit behind the rapid pace of rising gasoline prices is over-concentration in the US oil industry. Since the 1990s, more than 2600 mergers have taken place in the US oil industry. I trace the transformation from use to disuse of antitrust law in the US, concluding that many, particularly the largest of these mergers, should never have been permitted. ExxonMobil, Chevron, ConocoPhillips, BP, Shell, and Valero control almost 60% of the US refining market—roughly twice as much as the largest companies controlled 12 years ago—and more than 60% of US gas stations. Thousands of independent oil refineries and gas stations have been bought up or pushed out, leaving a market dominated by a few oil giants.

Despite Big Oil’s very expensive hype, it has no intention of becoming “Big Energy.” The industry’s investments in green, sustainable, alternative energy are all show. The oil companies fully expect to remain oil companies well into the future, thanks to their massive profits which are being used to scour the globe for every last drop of oil—from the tar sands of Canada to the shale regions of the Midwestern US, off America’s coasts and in deep waters around the world. For, if one cares little for the environmental, economic, social, or political costs associated with drilling for and capturing the world’s remaining oil—particularly unconventional oil—there will be plenty of oil for decades to come.

Governments—not oil companies—should capture the increased price of oil and use that money for massive investments in tools to make the transition away from oil a low cost undertaking for everyday people. First, we must reduce oil consumption, transitioning away from oil as rapidly as possible, and help others around the world do the same. Second, we must call for the Separation of Oil and State. Based on the successful campaigns in the 1990s against the tobacco industry, Oil Change International is spearheading a campaign to call on anyone who seeks or holds elected office to renounce oil industry money in all its forms as a clear demonstration that campaign promises will become policy reality when the campaigning is over. Third, we should break-up Big Oil. Our nation's antitrust laws were written to attack the economic power that the nations largest companies—led by Standard Oil—exercised over our government. We face a similar, if not a worse situation today. In order to reclaim our democracy, we must rein in the economic influence of the oil industry so that decisions about the most pressing issues of our day—worker safety, public health, war, and our planet’s very survival—can be addressed through democratic decision-making.

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**Justice Rising** is a publication of The Alliance for Democracy, whose mission is to end the domination of our politics, our economics, the environment, and our culture by large corporations. The Alliance seeks to establish true economic and political democracy and to create a just society with a sustainable, equitable economy.

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Letters to the Editor and Future Issues

Justice Rising received several letters to the editor about the last issue on Migrants: World Citizens or Corporate Slave. We are making a section on our website for letters and a place for readers to respond or discuss Justice Rising along with a Justice Rising blog.

The next issue of Justice Rising will be on Food: Corporate Control or Grassroots Food Sovereignty. Contributions are welcome. The deadline is September 15. Nancy Price and Ruth Caplan will guest edit the issue after that looking at the Security and Prosperity Partnership of North America.

Water, Nature and the Alliance for Democracy

by Nancy Price

Corporate capitalism is destroying fresh, regional water systems in the quest to get oil out of tar sands. Now Bush wants to exploit the oil shales of Western states that will similarly impact local and regional water sources. Enabled by complicit governments, corporations commodify, privatize and profit from almost every aspect of nature. AfD’s “Tapestry of the Commons” project brings a new focus to the concept of “the Commons”—what to consider part of “the Commons” and what principles might apply to the use and sharing of “the Commons.”

With AfD’s focus on the water commons, we propose a definition of “the Commons” that includes:

• the rights of nature—in this case water—and the obligation of communities to protect these rights for the ecosystem for seven generations;

• the community’s right to use water to promote the common welfare;

• denial of the rights of corporations to take water from the community to sell for profit; and

• more broadly denying corporations the ability to use Constitutional law to deny the rights of people and nature.

See www.tapestryofthecommons.org and email Nancy Price—nancytprice@juno.com for a presentation. For AfD’s Defending Water for Life in Maine and the new Defending Water for Life in Oregon project websites see our Defending Water for Life Campaign at www.thealliancefordemocracy.org

The sun and wind are part of the Commons. It only makes sense that the public use them to generate electricity. But corporations have an iron grip on electrical production for their own ends. Since the late 1800s, Wall Street financiers and utility suppliers have understood that selling electricity is a road to riches. Their wealth is dependent upon keeping centralized generation of electricity under their control and charging prices that allow them to pay off their huge capital investments. Decentralized wind and solar electrical production would free us of their death grip.

Politicians like Franklin Roosevelt realized that corporate ownership and commodification of electricity leads to high energy prices. The public outcry pushed for public ownership of production and distribution of electricity.

Corporate power used massive public relations campaigns and political manipulation to defeat this early public-power movement. In place of public utilities, they created an oxymoron—regulated corporate monopolies. Then they successfully controlled the regulators and set the prices.

Now, the destruction of the environment and skyrocketing fuel prices have ignited a new round of public-power advocacy, which is promoting decentralized wind and solar-energy production. Corporate utilities are fighting these innovations because they threaten corporate profits by decentralizing power generation, rendering their old, polluting, centralized generators obsolete. Public entities, on the other hand, concerned about the public good, understand the external costs of energy production—most especially global warming—and appreciate the value of decentralized wind and solar power generation.

Groups like Citizens for Local Power (see page 15) are sprouting up across the country to take advantage of this movement. The establishment of Community Choice Aggregation allows local municipalities to get into the power utility business without buying the wires and poles. Public utilities can generate sustainable electricity. But corporate utilities, Wall Street financiers and large-scale electric generation manufacturers oppose these efforts. As one energy consultant advises, without strong political will, public ownership will never happen.

Political will has made public ownership of electricity happen in the rest of the world. It is time to make it happen here. Citizens must take the energy away from the corporate behemoths and claim it as grassroots power, forever.
Oil and Water

by Nancy Price

Oil and water don’t mix. But water is part of the “mix” in energy extraction and production, from separating bitumen oil from tar sands to cooling nuclear plants. In the face of climate change, water scarcity and drought, it is time to learn more about water use in energy production. What rights do corporations have to waste and pollute water?

Northern Alberta Province holds much of the world’s tar sands reserves. Tar sands is the common term for a dense and viscous form of oil. Recently, the method of producing oil from these sands has met with severe criticism.

Tar sands typically need two to four barrels of water transformed into steam to produce a barrel of oil. As Chris Nelder puts it: this water consumption is enough to sustain a city of two million people. At the current rate, water levels in the Athabasca River are going down, yet the target is to quadruple the rate by 2020. This would not leave enough water to sustain the Athabasca River and Delta. The water supply of 300,000 aboriginal people and Canada’s largest watershed, the Mackenzie River Basin, would be threatened. After use, the water is toxic with contaminants, so it cannot be released into the environment. Vast quantities are pumped into enormous settlement ponds that contain high levels of heavy metals and other health-threatening elements that gradually pollute the groundwater aquifer.

Critics also point out that vast quantities of natural gas are used to heat the water into steam. Over the next ten years, this usage of natural gas adds to the demand that experts agree will exceed available amounts of natural gas in North America. Since natural gas is a major fuel for electricity generation, its depletion is leading to talk of building nuclear plants. (see page 13).

Another problem has been pointed out by Maude Barlow, who emphasizes that Alberta is destroying its water heritage to produce oil profits for American-owned companies. This trade is no doubt one of the impetuses for the Canamex Highway—one of the six north/south super-corridor transportation routes—complete with oil and gas pipelines—of the Security and Prosperity Partnership of North America. Barlow warns that the governments of Alberta and Canada could be forced to shell out hundreds of millions of dollars in compensation to foreign-owned oil sands companies under the North American Free Trade Agreement (NAFTA) if a drought—or perhaps the degradation of the Athabasca River—forces the province to ration water.

In a vote that can be seen as a move against sepa-

rating oil out of tar sands, the US Conference of Mayors in June adopted a resolution to specifically avoid high-carbon fuels such as tar sands that emit approximately three times more carbon dioxide pollution per barrel extracted as conventional oil production. One clause states: “The health of the planet, including its oceans, wild lands, rivers, air, and climate, faces increasing threats from our continued dependence on fossil fuels.”

Finally, this resolution encourages the use of life cycle analyses to evaluate greenhouse gas emissions from the production—extraction, refining, and transportation—of fuels, including unconventional and synthetic fuels. It supports creation of clear Federal and State guidelines for tracking the origin of various types of fuel in order to facilitate life cycle analysis and encourages mayors to track and reduce the life cycle carbon dioxide emissions from their municipal vehicles by preventing or discontinuing the purchase of higher-carbon, unconventional or synthetic fuels for these vehicles.

Nancy Price is the Co-Chair of the Alliance for Democracy and Western Coordinator of the AfD Defending Water for Life Campaign.

Questions and Sources:

In holding energy extraction corporations accountable for waste and pollution of fresh water we might ask: What right do corporations have to fresh water sources? What do extraction/mining and energy corporations pay for the water? Isn’t the cost subsidized by all the life dependent on that water? What pollutants contaminate the water? How is the polluted water treated—on site with little accountability or at taxpayer expense through a municipal system? What conservation and recycling measures could be adopted to protect water resources and public health or should we join the Mayors and publicize and support their resolution?

For more information, see:
• Security and Prosperity Partnership of North American at www.thealliancefordemocracy.org/spp
• Is the tar sands’ water supply protected by NAFTA? by Meera Karunananthan April 16, 2008 www.canadians.org/integratethis/water2008/Apr-16.htm
• Chris Nelder on Canada’s Tar Sands, http://canada.theoildrum.com/node/2931
• Go to Council of Canadians, do a search on tar sands or go to www.canadians.org/cgi-bin/htsearch
FERC Gives Corporations the Ocean

by Frank Hartzell

From rivers in Alaska to California breakers to the open ocean off Maine and Florida, the Federal Energy Regulatory Commission (FERC) has taken water energy (hydrokinetic) development rights from the public and granted them to corporations. President George W. Bush’s belief in empowering corporations to supplant the public process with “market-based” solutions is reflected in the five Commissioners he has appointed to FERC.

FERC legislation gives it authority over dams and interstate power lines. It has no power from Congress to regulate hydrokinetics. FERC, known for its cowboy self-image, stepped into a Pacific-sized void when a Canadian company proposed a wave farm on behalf of the Makah Bay Indian Nation in Washington State’s Olympic National Marine Sanctuary. With no process in place, FERC issued its first hydrokinetics license to this project in December 2007, without getting any legislative authorization. Blaming FERC entirely for the confused process would be a little like blaming a single outlaw for the problems of the Old West. The President has taken no leadership on ocean issues, save for his 11th hour push for oil drilling. Democrats have no intelligible ocean platform. Congress is responsible for the void that FERC filled.

As hundreds of new limited-liability corporate applications for hydrokinetic permits began pouring in, FERC issued several “policies” purporting to establish procedures for hydrokinetics. Unknown to public agencies outside FERC, private companies had been working on a larger approach, which would openly benefit private companies while leaving the public process ill-defined. Bush appointees are proud to have insured that corporations have more power and regulators less authority. FERC has resisted nearly universal calls from federal, state and local agencies to engage in the usual public process. Instead, FERC adopted a neo-conservative notion that regulations are simply red tape. FERC wants to license corporations to put devices in the water, and then wait for the permits to clear before allowing generation to occur.

This idea was greeted by an unprecedented blast of condemnation not only by environmentalists but by a plethora of state and federal agencies such as the Department of Interior and National Oceanic Atmospheric Administration, who said FERC does not have basic understanding of the environmental consequences of the technology, much less the legal requirements of the other governmental jurisdictions involved.

In late 2007 and early 2008, private companies asked FERC for preliminary permits to launch tens of thousands of hydrokinetic devices. The largest number were not in the ocean, but in the Mississippi River. During June and July, much of the Missouri River has been claimed, along with a proposal to claim ocean currents off Maine.

By May 9, FERC had granted 106 permits for ocean, wave, and tidal projects and another 102 were pending many seeking to use thousands of devices. Thousands of square miles all over the nation have been quietly claimed, gaining corporations exclusive rights that can last for decades.

The entire business of dividing up the nation’s waters for hydrokinetic energy testing and study has occurred almost entirely under the public radar. The Bush Administration has never announced its hydrokinetics strategy, nor have Democrats in Congress. FERC doesn’t release the number of permits when asked, and doesn’t notify any of the involved areas directly. Local governments have been stunned to find out their waters have been claimed by private parties.

A Houston company claimed waters off both the Indian village of Eagle, and the City of Eagle, Alaska on a stretch of the Yukon River reachable by road only part of the year. This stunned the Eagle Village Chief and the city mayor, who had never heard of the successful applicant. Both communities were counting on a power project by the local power company. Because FERC’s process non-competitively awards the first applicant in line exclusive study rights, the local company in Eagle, Alaska lost out.

On the other hand, Lincoln County, Oregon and Sonoma County, California both asked for formal applicant status so they could lead the development of wave energy in their communities. In this case, FERC rejected their applications despite their rule of granting the license to the first applicant in line.

Local governments, surprised that their waters are being claimed under FERC permits for wave energy projects, have pleaded with the agency to slow down and communicate. FERC refused several appli-
nation's energy portfolio, very little is known about their effects on fish and wildlife resources and the natural and human environment,” the DOI filing states.

But DOI has also been accused of taking advantage of the lack of intelligible ocean planning to push Bush's pet idea of fish farms. Interior's Minerals Management Service in July proposed regulations that would cover renewable energy and fish farms and could allow oil rig owners to do both. Old oil rigs could be turned into fish farms or wave energy generators and result in millions in savings for oil companies, even though little or no science supports fish farms.

The deregulatory ethos of free trade has created globally what corporations call opportunities for profit in the ocean beyond the scope of any regulation, many being new ideas for reducing carbon. For environmentalists, fishing groups and those concerned about planetary issues, this bit of laissez-faire represents more of a threat than a salvation to the planet.

California's top environmental regulator, Mike Crissman, secretary of the California Resources Agency has asked the federal agencies to go back to the drawing board on wave energy, get more organized, slow down and eliminate conflicts.

Frank Hartzell, former managing editor of the Napa Valley Register, has been a journalist since 1984 and has written for more than 200 publications. Recently, Frank has written about ocean issues in the Christian Science Monitor, E Magazine and RenewablesWorld, an online publication.
Public utilities, electrical co-ops and community choice aggregations (CCAs) are three of the main ways for consumers to take control of both their energy supply and consumption. The American Public Power Association is the service organization for the nation’s more than 2,000 community-owned electric utilities that serve more than 45 million Americans. The National Rural Electric Cooperative Association is dedicated to representing the national interests of 900 cooperative electric utilities and their 40 million consumers. They track public policy and political action around the electric industry, climate change and the environment. The Community Choice website follows the situation in California and talks about the background and benefits of community choice aggregation, which is available in five states.

Many groups have blossomed to work on the transition away from the fossil fuel/nuclear economy. Oil Change International views the oil industry as a source of global warming, human rights abuses, war, national security concerns, corporate globalization, poverty, and addiction. They see oil interests behind every major political barrier to a clean energy transition. They have an activist tool kit and campaigns that include Separate Oil and State and Follow the Money that spotlights oil industry political contributions. CoalSwarm is an ever-expanding wiki resource on the coal industry that connects over 180 groups working on phasing out coal. Use it to find local and state groups working on coal issues. The Nuclear Information and Resource Center is the national information and networking center for citizens and environmental activists concerned about nuclear power, radioactive waste, radiation and sustainable energy issues. Their campaigns include No New Nukes and Nuclear economics.

The various renewable energy technologies that will allow for a non-polluting, locally-controlled energy economy have many websites promoting the virtues of renewables. The American Solar Energy Society has been around since 1954 and has chapters across the country. They see their effort as the catalyst for starting a sustainable energy economy. They also have a solar calculator that lets you know how much it will cost to install solar PVs at your home. The American Wind Energy Association has information on legislation and policy around wind energy and maps and calculations for setting up small wind systems all connected into the Renewable Resource Data Center at the National Renewable Energy Laboratory. Wave energy is such a new technology that it does not have any such national association, but Lincoln County Oregon has been on the forefront of a local government movement to put the ownership of wave energy into local hands rather than control by corporate utilities. See www.co.lincoln.or.us/counsel/lcwepp.html
The Prize: The Epic Quest for Oil, Money and Power by Daniel Yergin is the Bible of the Oil Age. It looks like a Bible, weighing a couple of pounds in any printed form, and it delivers. The saga of how Pennsylvania rock (petro) oil (leum) went from a patent medicine ingredient skimmed from swamps, to the creator of John D. Rockefeller, the American Century and Hydrocarbon Wo/Man, aka you and me, is both scholarly and riveting. As with any good creation story, incredible, voracious characters and instructive tales abound. You do not understand our world well enough until you have read The Prize.

Many people hope that the Age of Oil will be followed by the Age of the Sun—in the form of a distributed, ‘democratic,’ non-polluting solar power grid—will find nourishment in Who Owns the Sun: People, Politics, and the Struggle for a Solar Economy, by Daniel M. Berman and John T. O’Connor. Who Owns the Sun is packed with tales clustered around the themes of solar power development (limited) and the (more interesting) public-private battles over energy that have periodically shaken this country, but consistently get downplayed in popular histories. Chief among these is the public-power movement, which swept the country and the West in the 1900s and 1910s with the intent to put the means of energy production, or at least energy retailing in the people’s hands. On the heels of the breakup of Standard Oil, dozens of private power companies were seized and converted into public utilities. A century later, most of those have been seized right back and, in California, gathered under PG&E, though remnants of the Public Power surge remain. In any case, a good set of case studies in the domestic politics of energy can be found here.

The international geopolitics of energy is Michael Klare’s focus in Rising Powers, Shrinking Planet: The New Geopolitics of Energy. Klare’s useful though admittedly oversimplified view is that ideology, politics, cultural history, even—gasp—capitalism itself—will take a back seat in the coming decades to the simple and possibly brutal pursuit of energy resources. Among the crucial facts Klare relates, over the past 20 years there has been a complete reversal, from mostly corporate to national control—81 percent and growing—of global oil reserves. Since countries do not behave like companies, Klare suggests, the global marketplace is becoming increasingly irrelevant when it comes to oil. Simple possession, and the granting or denial or access, is all that counts. Klare divides the world into oil surplus and oil deficit nations, the two largest of the latter being China and the US He aptly traces the irony—or is it absurdity?—of building a vast military-industrial empire which can now be defeated simply by restricting the flow and/or raising the price of rock oil.

The Last Hours of Ancient Sunlight: The Fate of the World and What We Can Do Before It’s Too Late by Thom Hartmann is a kind of self-help book for what the author frankly assumes is the end of an age. Hartmann is perceptive about the deep cultural, even spiritual implications of a radical change, and likely radical reduction in energy consumption. He searches cultures from around the world, many indigenous, and marks a basic distinction between young cultures (the West, USA, etc.) and elder cultures, those who have lived on the land for thousands of years and continue to do so. Hartmann’s argument is, simply, that the future for us involves growing up.

Jonathan Schell’s The Seventh Decade: The New Shape of Nuclear Danger is about energy in its purest destructive form. This has got to be one of the best short histories of the Nuclear Age; Schell has always been one of its top chroniclers. He is just as diligent and illuminating about today’s chaotic world of nuclear arms development and “control.” Schell’s solution is disarmingly simple and what it has always been for: the main nuclear powers to lead the way to complete disarmament.

Though disarmament in the current climate seems impossible, Schell’s calm clarity drives home the point that to strive for anything short of it could well make it certain that the Greatest Generation was followed by the Generation that Failed.

Richard Rudolph and Scott Ridley’s classic book, Power Struggle: The Hundred Year War Over Electricity, clearly lays out the long fight over who should rightfully own electric power. It traces the roles of Edison, who first identified the potential to sell electricity as a commodity and JP Morgan who put together the behemoth General Electric. It also follows the long waves of public power championed by Gifford Pinchot and others who established the first municipal power systems and Franklin Roosevelt who made the Federal government a large scale electricity producer. The authors’ critical analysis of the growth of the regulatory system as a corporate cover for their takeover of most of the electrical grid is an important observation.

Now it is time for Americans to take their power back and the booklet, Common Sense, by the Mendocino County Energy Working Group gives us a model of how communities can take hold of their electrical future. Put together mainly by Brian Corzilius, it calculates how much and what kind of energy a community uses for which purposes. It looks at the contribution of this energy consumption to the accumulation of greenhouse gases in the atmosphere. It proposes specific wording changes to the general plan in order to appropriately deal with peak oil and climate change over the next twenty years. It also talks about how a community can gain ownership of its electricity through CCAs or municipal utility districts. Although written for the specifics of Mendocino County California its approach and techniques can be used anywhere. It is available online at www.greentransitions.org/Papers/EWG2007_FReport.pdf. Brian Corzilius is available for consultation at bcorzilius@corzilius.org
Hydrogen
Facilitating Renewable Energy
by Monterey Gardiner and Jamie Holladay

As a nation we can no longer afford to be dependent on foreign sources of energy and future generations should not be asked to deal with the consequences of the “status quo” use of fossil fuels. Renewable energy must be a key part of the energy solution. However, most renewable energy is intermittent by nature. Hydrogen can be used to store intermittent renewable energy to balance or replace electric power we normally use. Hydrogen can be used to directly heat our homes, cook our food, and power our vehicles. All of this can be done with little to no carbon footprint or emissions other than water at the point of use.

Hydrogen can be made from any primary energy source. Electricity can be used to generate hydrogen at the point of use by splitting water into hydrogen and oxygen via water electrolysis at a cost of $5.20/kg. Natural gas can be processed to form hydrogen at a cost of $2.50/kg. Hydrogen can also be produced from many sources we consider waste: biomass at $2/kg, or gas from landfills and waste water treatment plants. More advanced options involve the use of concentrated sunlight in solar-driven thermochemical cycles, costing $4-5.50/kg. Hydrogen can be used to store inexpensive energy such as from rice straw or off-peak electricity. The US Department of Energy (DOE) has a goal of $1/kg to pay for the delivery of hydrogen with centralized production.

For transportation, the cost of hydrogen could be well within range of what we pay for gasoline today. One gallon of gasoline has about as much energy as 1 kg of hydrogen and a fuel cell vehicle is about twice as efficient as a conventional combustion engine.

The average US household used approximately 565,000 BTUs per day in 2005. This is equivalent to approximately 5 kg of hydrogen. Depending on how the hydrogen is converted to electricity, one would need as much as 10 kg/day to operate the average household.

Institutional barriers form the biggest obstacle in bringing about the mainstream use of hydrogen. Codes and standards have to change and some level of infrastructure will have to develop (even for purely distributed generation systems). The high cost of fossil fuels, awareness of climate change, environmental consequences, and the opportunity for a broad shift in political will all point to the potential for hydrogen and alternative energies to play a far larger role in our energy future.

Our energy needs will not be dealt with by a simple transplant of fossils fuels with renewable energy. At the community level a holistic approach is needed involving smart growth initiatives, urban policies which promote mass transit/walkable communities, and sustainable agriculture. Germany is a good example of intelligent public policy that has been conducive to renewable energy growth. As of 2007, 14% of Germany’s energy needs were provided by renewable energy. In order for a large growth of renewable energy to happen, several policies should be implemented including:

- national renewable energy goals,
- power generation promotion policies,
- feed in law/tariffs,
- capital subsidies, grants or rebates,
- sales, excise and energy tax reductions.

What do we do in the meantime? Using hydrogen in the near term will be expensive until economies of scale occur and large-scale manufacturing brings costs down. We need to encourage a national discussion to achieve consensus on a long-term energy plan, and then make sure politicians follow through on that plan. Hydrogen will be part of this solution. We need to encourage local fire marshals or “authorities having jurisdiction” to become educated about hydrogen to facilitate infrastructure development, and to encourage widespread hydrogen use in the US. Our energy needs can be intelligently reduced, and a transition to clean energy is not only possible, but inevitable. The actions and efforts put forth today will determine how fast and orderly that transition is.

Article references available on request.

Monterey Gardiner grew up off-the-grid in Northern California. Since graduate school at UC Davis’ Institute of Transportation Studies (MS’02, PhD’04), he has worked for private and public institutions to make hydrogen mainstream.

Jamie Hollady is a research chemical engineer with a decade of experience in batteries, fuel cells, and hydrogen.

Feed in Tariffs
Germany has become a leader in small, distributed, renewable energy because they are using feed in tariffs (FITS). These mandate that utilities have to buy power from any producer and pay a specified rate depending on the source of the power. The rates are established to pay back the upfront costs of the solar panel, wind generator, or other generating device.

In Germany, and now most of the EU, feed-in-tariffs are generating more investment in renewables and a larger percentage of all energy coming from renewables. Washington and Wisconsin have established FITs and several other states are in the process of implementing them. We should make sure that all states make these rates available to energy producers.

We need to encourage a national discussion to achieve consensus on a long-term energy plan, and then make sure politicians follow through on that plan.
No More Nuclear Power

by Dorothy Boberg

The public has spoken in many forums for years: NO MORE NUCLEAR POWER PLANTS!

They are too expensive, too dangerous, too polluting, too damaging to our health, too challenging to terrorists, too prone to encourage worldwide nuclear proliferation and will not answer the global warming problem. California law prohibits new plants until the highly radioactive wastes can be permanently disposed of in a government-approved repository. The nuclear industry, however, is now trying to create a renaissance for the failed nuclear plants by rebuilding them in stages, such as replacing the radioactive steam generators within the containment structures of San Onofre II and III. The industry is proposing new plants in other states that may allow them, and the Bush administration has enthusiastically embraced industry’s propaganda as its own policy.

But we have to look at how much fossil fuel energy it takes to build and operate one 1000 megawatt nuclear reactor; to mine and mill the uranium, neutralize the tailings, convert uranium to U hexafluoride, enrich uranium from natural U238 to U235, fabricate the fuel elements, produce the products to construct the reactor, build the reactor infrastructure, decommission and dismantle the reactor, clean up the site, dispose of the radioactive waste, build the needed vehicles, transport the high and medium level waste to long term storage and guard the waste for 240,000 years.

It may be impossible for most laymen to understand the several hundreds of petrojoules of fossil fuels needed for the nuclear fuel cycle, but it is not impossible to accept the obvious concept that it takes more fossil fuel expenditures for one reactor than the reactor can produce in power in its lifetime.

Dr. Helen Caldicott reports that it takes 162 tons of natural uranium each year for one nuclear plant. If the uranium is from granite ore, 40 million tons must be mined or 80 million tons after providing for chemical treatment of the ore. “The extraction of uranium from this granite rock would consume over 30 times the energy generated from the uranium.”

Uranium is in short supply. If all electricity worldwide were to be generated from nuclear power, all the known reserves of uranium would last nine years. In the same case, uranium from high grade ores would last three years. Any reprocessed uranium becomes a security problem because it can be used for nuclear bomb proliferation.

In addition to the truth of negative energy from nuclear power after using fossil fuels to produce it, the monetary costs have not been honestly reported. What is the cost to the public of the $13 billion in subsidies in the 2005 Energy Bill? What is the cost of the stranded investments paid by customers of nuclear energy when a plant lasts only 28 of the promised 40 years life, and then they pay again to rebuild such plants as San Onofre II and III? What does the federal government funded Price-Anderson insurance cost the taxpayers to protect nuclear companies from loss? How much will taxpayers pay for Homeland Security, which has, to date, done little or nothing to secure the existing 103 nuclear plants? What are the medical costs for the hundreds of individuals who have contracted cancer, leukemia and injured DNA from the operation and accidents at nuclear plants? This includes Three Mile Island, the partial meltdown of the sodium cooled reactor in 1959 at the Santa Susanna Field Laboratory in the west San Fernando Valley, California, and Idaho Lab SL-1.

Scientists are telling us that to cope with global warming, reduce nuclear injuries, reduce our energy costs, and to meet our future energy needs, we must forego building nuclear plants and go directly and at once to conservation and alternative, distributive, renewable energies such as co-generation, wind, solar, small hydro, geothermal, biofuels and tidal wave power.

It may be too late to make the necessary transitions if we continue on the nuclear path!

Dorothy Boberg is a former member of the AfD National Council and a scholar of evolution. She is a college lecturer and author of the book Evolution and Reason—Beyond Darwin.

California Coastal Commission Request

California law prevents building new nuclear plants in California. However, the California Coastal Commission, on May 8, 2008, voted unanimously to allow replacement of two radioactive steam generators now enclosed in the domes of San Onofre II and III. At this hearing, five members of Creed (Coalition for Responsible and Ethical Environmental Decisions) testified against this proposal as no information was available about when or where the removed radioactive generators will be moved from the San Onofre beach. Creed asked the Coastal Commission to take the lead in requesting state governmental officials to regain the responsibility to protect the health and safety of California citizens by returning the authority of the federal Nuclear Regulatory Commission for Radiation Safety to the California Department of Health - Radiological Health Section. Creed has good evidence that the NRC has not been responsive to the health and safety needs of the public, but rather supports whatever corporate utilities request in order to rebuild San Onofre II and III by piecemeal replacement of plant parts starting with the opening of the containment domes and removal of the radioactive steam generators.
For the human species, energy originally meant food and warmth. The invention of clothing allowed body heat generated from food to be conserved in cold climates. Fire and shelter did the same. Tools allowed more efficient use of human energy. The domestication of animals multiplied the energy available for human use. Early civilizations learned to use wind power for sailing and water power for milling grain.

The use of coal and petroleum to motivate machines ushered in a new era of plentiful energy and human population growth. For a detailed view of this era of unlocking the fossil carbon see Thom Hartmann's *The Last Hours of Ancient Sunlight*.

Coal businesses, starting in England and then spreading to other industrializing nations, grew increasingly powerful starting in the 18th century. In the 19th century most large coal businesses became corporations. This business model was already in place when petroleum began to be substituted for whale and vegetable oils starting in the 1860s. By 1900 the United States alone produced 63 million barrels of oil valued at $75.7 million.

John D. Rockefeller's Standard Oil Company quickly consolidated most of the oil production in the United States, using violence as well as a variety of economic and legal tactics. In 1882 the Standard Oil Trust was created to control a set of oil corporations. In 1890 the Sherman Antitrust Act became federal law. The State of New Jersey changed its laws to allow corporations to own other corporations in any state, (in effect allowing a corporation to be a Trust) so the entity was reborn as the Standard Oil Company of New Jersey.

When the nuclear power industry came into existence in the 1950s, it was expected to follow the same path laid out by other energy corporations. However, in the 1960s, opposition to the building of nuclear plants grew, and was organized and able to influence plant building decisions through the legislative and regulatory processes. Nuclear plants were not able to produce energy at a price competitive with coal. Management of the design and building processes was inept. Then a series of "accidents" happened that showed safety concerns were well-founded. In the 1980s nuclear power plants stopped being built in the United States.

We now appear to be at the beginning of an era of large renewable energy corporations. While renewable energy may be an improvement from an environmental standpoint, we can expect these new corporations to be a corrupting influence upon our political process. The recent ethanol debacle, fueled by taxpayer subsidies and the quaint role of the state of Iowa in selecting presidential nominees, illustrates the danger.

William P. Meyers is the author of *The Santa Clara Blues: Corporate Personhood Versus Democracy*. He serves on the board of the California Center for Community Democracy.
It’s Our Power
by Crispin Hollinshead

Washington State has a history of public ownership of power, beginning in 1930, when the initiative process was put into law. Half of Washington State is served by public power; Jefferson County is the only portion of the Olympic peninsula that is not.

Last year, Puget Sound Energy (PSE), our current electricity provider, announced that it was being sold to an Australian investment fund, and applied for a large rate increase. This prompted a citizen’s group to investigate taking over the system by expanding the authorization for our existing water Public Utility District (PUD). With a favorable vote of the county citizens, this PUD will have condemnation rights and can bargain to purchase the distribution system from PSE, despite their unwillingness to sell.

We have gathered enough signatures to put the authorization on the November ballot. A registered political action committee, Citizens For Local Power, is working to raise funds for the campaign and get the information out to the voting public.

Jefferson County, the City of Port Townsend, the Port District, and the County PUD have joined together to fund a feasibility study for purchase of the PSE system. The pros and cons of the deal will be evaluated, and the final study will be done by mid-August, giving plenty of time to inform the population. A study done for the City of Port Townsend in 2000 indicated several local advantages to public ownership.

PSE, as a corporation, has to put profits before people as a matter of law. As a result, we pay higher rates than any PUD in the state, and receive less service. All labor is non-union, based out of county on the other side of a floating bridge. In addition, much of the infrastructure is old, contributing to service failure rates.

A PUD-owned system would add 35 to 50 family wage jobs to our community. As a PUD we would have access to low-cost hydroelectric power from the Bonneville Power Administration (BPA), which operates a series of dams on the Columbia River constructed with federal money. BPA gives public power systems preferential treatment.

The challenges are: funding the purchase of the system; creating the management organization; and applying to the BPA to buy power at lower prices. Despite start-up costs, lower rates will be an outcome, and rate stability will be achieved quickly. Local jobs and local control are social benefits independent of fiscal calculation. In addition, a PUD can invest in local alternative energy production, furthering local employment.

The next hurdle is a successful vote in November. Remember, It’s Our Power!

Model and furniture maker Crispin Hollinshead also built seismometers for Scripps Institute in San Diego. He calls himself an optimistic catastrophist and is treasurer of Citizens for Local Power in Port Townsend, Washington. See citizensforlocalpower.org for more information.
Nature’s Rights

"Nature...has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution." — From Ecuador's proposed Constitution

As President Bush calls for offshore oil drilling, and the oil industry wreaks environmental havoc squeezing the last ounces of oil out of the planet, Ecuador makes a bold move to protect the Amazon rainforest from complete devastation by the oil corporations. Three times as much oil has been spilled in the Ecuadorian Amazon since production began in the 1970s than the Exxon Valdez spread across Prince Williams Sound. Volatile pools of oily detritus leach into the jungle ecology spreading cancer and disease amongst the inhabitants. Originally, production was limited by the single pipeline that carried the oil over the Andes to ports on the Pacific Ocean. Now a second pipeline has been opened up and new oil extraction threatens to spread into totally pristine areas of the Amazon jungle.

On July 7, 2008, the Ecuador Constitutional Assembly—composed of 130 delegates elected countrywide to rewrite the country's Constitution—voted to approve articles for the new constitution recognizing rights for nature and ecosystems. The new constitution will be put to a popular vote and, if passed, Ecuador will become the first country in the world to shift to Rights-Based Environmental Protection. Under these provisions, if a project or development threatens the ability of ecosystems to exist and flourish, it would violate the rights of nature.

Ecuador faces enormous pressure to develop its oil and other resources. As South America's fifth largest oil producer, Ecuador is dependent on its petroleum resources, which account for more than half of the country's export earnings and one-fourth of public sector revenues.

The people and government of Ecuador have been engaged for years in finding ways to protect their environment. The rise of a powerful indigenous movement closely connected with nature has been an important part of this phenomenon. They have even sought to have the international community pay the country to keep the oil in the ground to protect the fragile rainforest ecosystem from the rampages of the drilling industry. The idea of establishing ecosystem rights resonated with the Constitutional Assembly Delegates, including Assembly President Alberto Acosta, former Energy Minister for Ecuador.

They invited the Pennsylvania-based Community Environmental Legal Defense Fund (CELF) to brief the Constitutional Assembly on CELDF's work assisting local communities to draft and adopt laws recognizing legally enforceable “rights of nature”. CELDF associates presented their work to delegates one-on-one and at their committee meetings. The delegates then asked CELDF to draft provisions for the new constitution based on the local ordinances developed for municipalities in the United States.

“We received many questions from delegates about how to protect an area in the Ecuadorian Amazon, which is part of the Yasuni National Park. There are significant oil resources there in the Ishpingo-Tiputini-Tambococha oil fields, known as the ITT,” explained Mari Margil, Associate Director of CELDF. “The ITT and the rights of nature are integrally linked. Drilling in the ITT will decimate ecosystems there. If rights of nature are approved in the final constitution, citizens will be able to go to court to uphold the rights of the rainforest against the efforts to drill the ITT.”

The Ecuadorian people are deeply connected with the land, and understand that protecting their environment makes long-term sense ecologically and economically. “As Ecuador is writing a new constitution, there is a strong interest in moving beyond the environmental laws that they have in place now that do little to actually protect ecosystems in the Amazon or elsewhere in the country,” said Margil.

“Ecuador is now leading the way for countries around the world to make this necessary and fundamental change in how we protect nature.”

Find out more about Rights for Nature and Ecuador’s Constitution at www.celdf.org

Jan Edwards is the creator of the “Tapestry of the Commons” which is online at www.thealliancefordemocracy.org. She is a member of the Redwood Coast Chapter of the AfD.