THE LEAGUE OF WOMEN VOTERS®
OF THE FAIRFAX AREA

Fairfax VOTER

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Is Electricity in the Capital Area Adequate and Reliable?

The League of Women Voters of the National Capital Area (*LWV-NCA*), an inter-league organization made up of eleven local leagues from Washington, DC, Virginia, and Maryland, has produced a masterful survey of the sources, adequacy, and reliability of electricity in the metro area. Come to a unit and learn more about what you need to know about energy production locally—or come to the at-large unit and briefing on February 5 at the Mason District Government Center. One of the authors of the study has agreed to come to the briefing, so we will have genuine expertise on hand.

Calendar

February 2011 (Black History Month)

1 March Fairfax *Voter* deadline
2 League at G.A. / WRT (approximate G.A. crossover date)
4 NCA Board Meeting
5 Briefing-Regional Electricity, NCA Study Mason District Gov't Center, 10 a.m.
9 WRT Richmond
8-14 Unit meetings – Regional Electricity
14 League founded in 1920 (91th anniversary)
16 WRT (last one this session)
16 Board meeting – Packard Center
21 President's Day/schools closed

Inside This Issue

The President's Message

HAPPY NEW YEAR! May 2011 be full of family, good friends and successful events. Every year we look at last year, learn what didn't work and what did, and plan for the future – hopefully taking our lessons learned the hard way to heart.

One of my "wishes" for this year is the toning down of partisanship and the toning up of compromise and listening to all. These are hard times, and we all need to work together to make 2011 – and future years – ones on which we can build a solid foundation of good and transparent government that responds to all, not just a select few. Democracy is messy, chaotic and slow. It takes patience, determination and endurance from everyone – it is not an instant gratification experience. And it takes participation from everyone. Participation for some people is just paying attention to what is going on in your community. No, you can't pay attention to all, but you can pay attention to one interest. Start following bills in the Virginia Assembly as well as national bills, local organizations, county committees and boards. If you can't attend meetings, look up the minutes on the web sites. And you don't have to do this alone. Take a neighbor or family member with you. It can possibly be a family project. Be a part of making democracy work – because it can't work without you.

Janey

Support the Work of the League

Make a Tax-free Donation to LWVFA Education Fund Today

Letters to the Editor

League Members,

After much work and advocacy for a Bipartisan Redistricting Commission Gov. McDonnell has appointed such a body by executive order. It is not legislation or an amendment but it is a small step forward to possibly a better system. The panel seems to be of quality members and tasked to follow the Constitution but nowhere does it protect incumbents at least in the text of the attached document. No funding is provided either. Like all things the devil is in the details, but I am encouraged that this is a step forward but there is still much work to be done. This is further than we have gone in the past. The Press Release has a list of those named to the commission.

Thanks to all who have worked to this end, our work is not yet done.

Olga Hernandez
President
League of Women Voters of Virginia

The Editor:

I just received a report showing the current membership numbers for the local Leagues in Virginia and noticed something that I find quite amazing: Although the Fairfax League still has the largest (though decreasing) membership, the Charlottesville/Albemarle, Arlington, Loudoun, Falls Church and Williamsburg Leagues all have more household memberships than Fairfax. Maybe more of us should ask our spouses or other family members to join. We do have the largest number of lifetime members.

Therese Martin,
Treasurer

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or call 703-658-9150

Recap of December Unit Discussions . . .

Good Government, Position Revision, New Metro Study Among Suggestions for State and Area League Programs for 2011-2013

By Lois Page, LWVFA Program Director

December's program planning meetings regarding proposals for 2011-2013 for both League of Women Voters of Virginia and League of Women Voters of the National Capital Area led to members generally supporting proposals put forth by the boards of both organizations.

For LWV-VA, members seemed to be agreeing that the state organization should focus its energies in the upcoming two years on good government issues"—with some limitations. Springfield felt this should be the primary focus but not the only one. Reston Evening felt we should be ready to react on other issues if a current event comes to the forefront, such as offshore drilling. Good government issues were defined as sunshine laws, elections laws, and redistricting.

Units also seemed to be agreeing that revising the current positions should be a program planning recommendation, if not the only one. At least, most units thought it was a good idea, even though they might have other program suggestions. Among the suggestions for changing or updating: the education position is too specific and outdated and should not list specific programs for funding; revise all positions for clarity and uniform writing; drop the position regarding the surviving spouse inheriting all property; look closely at oldest positions, such as land use; all reviewed for their relationship to current laws and policies; Women's Rights should become Human Rights; and Land Use should appear under Government. It wasn't clear from some of the reports if a "review" of a position might have been part of the revision of all positions. Springfield asked for a review of fiscal policy and air quality positions.

Other program suggestions of interest: a study of the powers of the Virginia governor, lieutenant governor, and attorney general in relation to those of other states, proposed by three units. McLean thought LWV-VA should look at Virginia's laws regarding charter schools and Chantilly Centreville thought we should look at bullying in the schools. Mount Vernon Day and Springfield proposed a study of Virginia and immigration laws, and Mt. Vernon Evening wants the state to look at the Medicaid funding that is lost to Virginia due to lack to matching funds. Reston Day also would like to look at off shore drilling proposals and alternatives such a wind farms, coal, and other drilling in the state.

In addition to wanting increased action on good government issues, (to include Dillon Rule), units pushed for increased action on felon's rights, transportation, and water supply and distribution.

LWVNCA suggestions were easier to discern. A new study of Metro, one of several proposed by the Program Development Committee, was a clear favorite among the membership. Among suggestions for inclusion in the study: feeder buses and feeder issues, safety, management and organizational structure, how Metro works, government, and issue of dedicated funding.

Updating the LWVNCA water position to concentrate on clean water was rated either 1 or 2 by five units and should concentrate on clean water and the management and distribution of water. Additional ideas put forth by the membership included Beltway safety especially in regard to distracted drivers, but also in regard to construction issues and changing traffic patterns; updating the controlled substance position, and whether or not our regional government body—COG —is effective/alive. What does it do?

One unit felt that LWVNCA positions on controlled substances, comprehensive health planning, D.C. financing, and land use/housing do not belong in a regional document, and one unit felt we should drop the support for medicinal use of marijuana and heroin.

LWVFA's Board will be formulating our response to LWV-VA and LWVNCA at the January Board meeting.

LWVFA Testifies Before General Assembly Delegation

On January 8, 2011, President Janey George testified before the Fairfax Delegation to the Virginia General Assembly reminding them the League's number one legislative priority is that Virginia adopt a nonpartisan redistricting plan for its General Assembly and Congressional seats. Her remarks included:

"League leaders have testified at public hearings on redistricting across Virginia that we believe the voters should choose their representatives and not the other way around. The future of incumbents should be decided at the ballot box and not through the redistricting process.

While one of the effects of partisan gerrymandering is a decrease in voter turnout, another is its contribution to the increasing polarization in legislative bodies, including the Virginia General Assembly. As noted in the League's redistricting study, "with little reason to fear voters, representatives increasingly cater to party insiders and donors rather than to the political center…; bipartisan compromise around moderate policies takes a backseat to party loyalty, resulting in historic levels of polarization." The gerrymandered districts established in 2001 increased the election of candidates who have been unwilling to compromise on legislation, the budget and--especially important for our region-- transportation issues and funding.

In its 2011 session, we hope the General Assembly will approve legislation that facilitates voting and increases governmental transparency, including the following proposed legislation:

- HB1401 and 1402, which would allow no-excuse absentee voting;
- HJ497 and SJ 284 – Constitutional Amendment which restores voting rights to felons once they have completed all requirements of their sentence, probation or parole; and
- HB778, proposed last session by Delegates Keam and LeMunyon, which provided for electronically available recorded subcommittee, committee and floor votes on all legislation for members of the General Assembly.

"We strongly encourage the General Assembly to establish a dedicated, stable and reliable funding source for the balanced transportation needs in the Commonwealth. This is going to take money; we realize it and are willing to pay. An improved transportation network would attract businesses to our area, provide jobs and make us more competitive in the future.

"The League believes in efficient and effective government that is adequately financed. We support many elements of the Fairfax County Legislative program— especially:

- Funding of core services – schools, transportation, and rebalancing state and local funding resources and responsibilities; and local authority for taxation and land use. The League has long supported the diversification of revenue sources allowed to counties and other local jurisdictions so that property taxes do not make up such a large portion of local revenues.
- Funding of public safety, court system and employees, jails, and juvenile justice. We also support increased funding for indigent defense.

"Finally, the League is alarmed about possible further funding cuts for sexual and domestic violence services. Over the past year, there has been a 22% increase in the number of adults and children receiving services and a 22% increase in the number of nights of emergency shelter needed. We must continue to assure that sufficient services are available for the victims of sexual and domestic violence."

LWVFA to Hold Membership Recruitment Initiative Training

LWVUS has selected Virginia for the next round of Membership Recruitment Initiative (MRI) and Leadership Training, starting in 2011. State Coaches will be trained to mentor and advise local Leagues and MAL Units on how to ensure membership growth and develop leaders. Initial State Coach training will occur at a regional conference in the northeast in late March, 2011 (at LWVUS expense); subsequent coaches will be trained by webinar. The first in-state training for local Leagues will occur in early summer 2011; eventually all local Leagues and MAL Units in Virginia will be involved in the program.

Free Hotel Rooms During 2011 General Assembly Session

:The Board approved a plan for offering two free hotel rooms at the Hilton Garden Inn in Richmond to four League members on Tuesday night (two persons per room) to attend the Women's Legislative Roundtable (WRT) on Wednesdays during the Session, starting Tuesday night January 18 thru February 15. Rooms would be filled on first-come, first-served basis; Action Director Sue Lewis will coordinate. swlcvlle@embarqmail.com

Electricity Fact Sheet . . .

Is Electricity in the Capital Area Adequate and Reliable?

Fact sheet prepared by: Melpi Jeffries, Chair; Ann A. Jackson, Barbara Hankins, Dorothy Marschak, Jack Mathison, Jane Hilder, Naomi Glass and Natalie Howard.

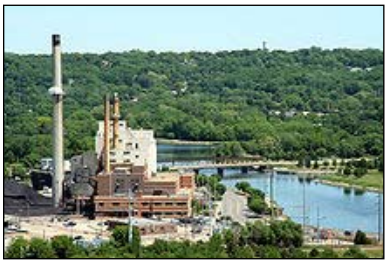
INTRODUCTION

At the 2009 Convention, LWVNCA adopted a study of "the Adequacy and Reliability of Electricity in the National Capital Area." Benjamin Franklin's spark has evolved into the major source of energy for lighting, heating, cooling, refrigeration, computers, banking, communications, industrial machinery and transportation. Huge amounts are necessary to serve both industrial and residential needs and demand. A study of electricity involves looking at the three elements necessary to produce and deliver electricity: Generation, Transmission and Distribution. The committee will survey the various technologies and sources–including fossil fuel, wind power, solar power and nuclear power–which generate electrical energy. Electricity transmission lines provide the transport highways to move electricity from the generation sources to concentrated areas of customers. Proposed transmission lines as well as the 'Smart Grid' will be discussed. Distributors, usually investor-owned utilities, deliver electricity from the transmission lines to the end user or customer.

GENERATION

Electricity is the movement of electrons and occurs naturally. Electricity is created from the conversion of a fuel or other source of energy into moving electrons. All of the fuels and most energy sources are used to convert water into steam which moves power turbines that generate electricity. Centralized power generation became possible when it was recognized that alternating current power lines can transport electricity at a very low cost across great distances by taking advantage of the ability to raise and lower voltage using power transformers. Electricity has been generated at central stations since 1881, initially relying upon coal or water power. Distributed generation is any electricity generating technology that is connected at the customer side of the meter, such as photovoltaic solar energy serving an office, and that is used to displace electricity from the grid during times of peak demand.

Fossil Fuels



In the National Capital Area (NCA) the type of fuel used to generate electricity is as follows: coal – 55%, nuclear – 34%, natural gas – 8%, petroleum – 1%, hydroelectric – 2% and other, including renewable generators, 1%. Coal is the primary source of electricity in the NCA area. Coal is very abundant, easy to store and transport. Coal power plants offer unique load-carrying flexibility useful to meet peak demand and provide a dependable base-load. Mining coal, especially mountaintop clearing, can be very destructive of the environment and hazardous to miners. Coal powered electrical generation plants emit Nitrogen oxides (NO2), Sulfur dioxide (SO2), Mercury and greenhouse gases such as Carbon dioxide (CO2) and Methane. Coal powered plants produce the highest emissions of CO2. Nitrogen dioxide forms ozone (smog) in the presence of heat and sunlight. Coal powered plants also produce great quantities of fly ash and scrubber sludge. Power plants are significant users of water and the operations of plants located near the Chesapeake Bay affects aquatic ecosystems as well as the availability of water for other users. Finally, coal is an inefficient producer of electricity.

Natural gas emits only half as much CO2 as coal and is regarded as a transitional fuel toward renewable energy. Over the past decade expertise in the complex technology needed to extract gas from shale has been developed. The Marcellus Shale basin starts in New York State and runs thru Pennsylvania, passes through Garret County, Maryland, into West Virginia, thus providing a source of energy closer to the NCA area. However, the hydraulic fractioning extraction method poses some environmental concerns about ground water contamination. Nevertheless, the increasing supply of natural gas may lead to natural gas being the near-term fuel of choice for cleaner electricity production and transportation.

Major oil companies such as Exxon Mobile are acquiring smaller natural gas companies and their shale assets.

Nuclear Energy

The 1979 partial meltdown of the Three Mile Island nuclear plant in Pennsylvania effectively stopped the nuclear power industry in the United States. It has been thirteen years since the last new nuclear power plant opened in the United States. The pressure to reduce the production of climate-warning gases has renewed interest in low emissions nuclear power overriding the dangers of radioactive waste disposal and nuclear proliferation. Newer reactor designs such as Generation 3+ reactors use standardized designs, include passive safety features and consume more nuclear fuel which lowers costs and reduces wastes. The Energy Policy Act of 2005 provides thirteen billion dollars in tax credits for new nuclear facilities (enough for 2 or 3 plants) and further tax credits have been proposed in the current session of Congress. An application, submitted by Constellation Energy, to build a new nuclear plant at Calvert Cliffs is being reviewed by the Nuclear Regulatory Commission. Virginia has two nuclear facilities, at Lake Anna and at Surry. However the costs of building nuclear power plants are prohibitive and construction may take as long as ten years. Nuclear energy has low efficiency balanced by low operating costs. Another negative impact is the water needs of nuclear energy facilities. The Calvert Cliffs nuclear plants withdraw, daily, more than thirteen times more than the daily municipal supply for the City of Baltimore.

Geothermal Energy

Temperatures in the interior of the planet Earth are incredibly high due to heat from the Earth's molten core, the breakdown of radioactive materials in the crust and the friction of the crust's plates rubbing each other. This heat is brought to the surface as hot water and gases usually in volcanic areas where it used to warm buildings and to generate electricity. All commercial geothermal plants rely upon hydrothermal reservoirs which lie close to the surface. Three geothermal power plant technologies are being used to convert hydrothermal fluids to electricity. These are dry steam, flash steam and binary cycle. Dry stream power plants use steam as it comes from the wells and route it directly through turbine/generator units to produce electricity. Steam technology was first used in Lardello, northern Italy, in 1913. Steam technology is also used at The Geysers, California, the world's largest single source of geothermal power. Flash steam plants, the most common type, use water at temperatures greater than 360 degrees Fahrenheit that is pumped under high pressure to the generation equipment at the surface. Binary cycle geothermal power is a closed loop system so that virtually nothing is emitted to the atmosphere. Making electricity with geothermal power is approximately as cheap as using fossil fuels. The Earth's magma and hot dry rock will provide cheap, clean and almost unlimited energy as soon as the technology to use them is developed with the support of the Department of Energy.

Renewable Energy

Renewable resources are those that are continually replenished and are not used faster than they can be replaced. Renewable/alternative energy resources include sunlight, wind, tides and geothermal heat.

Solar energy is clean, abundant and highly efficient. Two technologies are used to produce electricity from solar power. The first, traditional solar panels use photovoltaic cells to convert the sun's rays directly into electricity without emitting any greenhouse gases. Solar modules can be installed on roofs, in a field or in a patch of desert. In the Washington area, coops have been formed to facilitate the use of photovoltaic modules for individual residences and more than 1,000 solar panels will be installed on four Catholic University buildings. However, according to the International Energy Agency, power from solar cells

costs $200 – 600 a megawatt-hour (MWh) as opposed to $50 – 70 per MWh for offshore wind power in the United States. The second technology, concentrated solar power or CSP, deploys huge banks of mirrors to focus solar radiation; the resulting intense heat drives steam turbines, producing electricity in a process similar to the one used in coal or oil fired plants, but without the greenhouse gas emissions. Efficient solar-thermal plants can be built in principle on the same sort of scale as gas-fired power stations. President Obama has distributed economic stimulus funds to Abengoa Solar, a leader in CSP technology, to build one of the world's largest solar plants in Arizona.

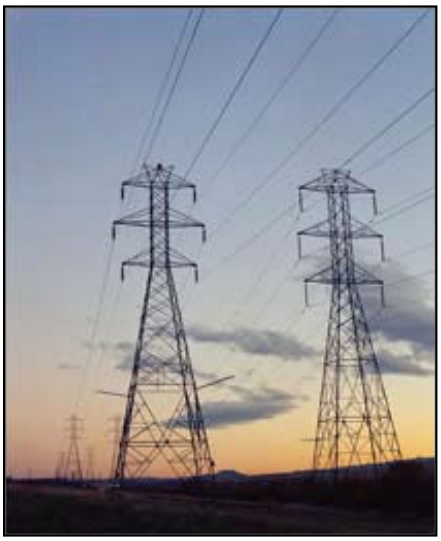
Wind power is one of the fastest-growing alternative energy sources in the world. Wind power is a low carbon, renewable source of electricity that can deliver millions of watts of relatively low cost power. Wind turbines have high capital costs and close to zero operating costs. Construction of wind turbines involves transporting and assembling very large components. Modern wind turbines weigh more than 300 tons and stand some 300 feet tall. A floating wind turbine can have a turbine tower 213 feet above the waterline and is attached to a buoy which extends about 330 feet below the waterline. However, like solar energy, wind power is intermittent, driving the growing use and development of batteries and other storage devices. A more serious obstacle is the lack of adequate transmission lines. Wind energy has bumped into the power grid's limits.

In the November 2009 issue of *Scientific American,* Mark Z. Jacobson and Mark A. Delucchi propose how 100 percent of the world's energy , for all purposes, could be supplied by wind, water and solar resources by 2030.The authors call for 3.8 million large wind turbines, 90,000 solar plants and numerous geothermal, tidal and rooftop photovoltaic installations worldwide. They assume that most fossil fuel heating, ovens and stoves can be replaced by electric systems and that most fossil fuel transportation can be replaced by battery and fuel cell vehicles.

TRANSMISSION

Electricity transmission lines move electricity from generation sources to concentrated areas of customers where the distribution system moves electricity to the end user. Electricity when transmitted, flows over all available paths, following the path of least resistance, and cannot be easily directed. The buying and selling of electricity requires direct coordination and proactive monitoring of the electrical systems. Three independent electrical systems, known as power grids, transmit electrical power in the United States. They are the Eastern Interconnect, covering the eastern two-thirds of the United States and Canada, the Texas Interconnect and the Western Interconnect, encompassing most of the rest of the two countries. Each system operates in a coordinated and unified manner within its power grid but the three grids are not linked so that power can flow between them.

The Energy Policy Act of 1992 empowered the Federal Energy Regulatory Commission (FERC) to restructure electric markets. FERC issued Order No. 888 and No. 889 in 1996. These landmark actions directed the owners of the nation's transmission lines to open their lines to third-party customers at non-discriminatory rates. "Deregulation" rapidly followed leading to separate ownership of generation plants and distributors/ electric companies. In 1999, FERC issued Order 200 which established Regional Transmission Organizations (RTOs) who will operate the transmission portion of the electrical system. RTOs are expected to reduce discriminatory transmission practices, improve power grid reliability and increase investments in transmission infrastructure. The PJM Interconnection (PJM) coordinates the flow of electricity from power plants to distribution companies over a network of transmission lines owned by its members in all or parts of Delaware, Maryland, New Jersey, Pennsylvania, Virginia, and the District of Columbia. As authorized by the energy act of 2005, the Mid-Atlantic region from Northern Virginia to New York has been designated as an NIETC. This designation means that additional transmission capacity is so critical that FERC, under limited conditions, may overrule state utility commissions and issue permits for regional transmission line projects that are deemed to be in the nation's interest.



Two additional transmission lines, the Mid-Atlantic Power Pathway (MAPP) and the Potomac Appalachian Transmission Highline (PATH) have been proposed. PATH, like most of the transmission lines that serve the National Capital Area, would transmit power generated in the Mid-West by traditional power plants dependent upon

coal. MAPP will run from Dominion Virginia Power's coal powered Possum Point substation to the Calvert Cliffs nuclear plant, go under Chesapeake Bay to Maryland's Eastern shore and through the Delmarva Peninsula. The major objection to both proposed lines is that since PMJ must transmit the cheapest power, electricity generated by dirty coal will have an advantage. MAPP, however, could transmit nuclear power from Calvert Cliffs and could be useful for transmitting wind energy from the Delaware shore to the Mid-Atlantic Region. The power grid is balkanized with about 200,000 miles of power lines divided among 500 owners. Big transmission upgrades involve multiple companies, many state governments, numerous permits and fights with property owners. The end result is that electrical generation is growing four times faster than transmission according to federal figures.

DISTRIBUTION

Distribution is the process whereby electrical power is physically delivered to end-users. Because of deregulation in the District of Columbia and Maryland, determining exactly who is providing what to whom isn't as simple as it used to be. Generally, there is a major provider for each area. The various Public Service Commissions have approved a number of other providers who sell electric services as well – some only to residential, some only to commercial users and some to both. The state of Virginia has not deregulated electricity, so that some distributors also generate electricity.

District of Columbia

Potomac Electric Power Company (Pepco) Energy is the major provider of electricity to the District of Columbia. The DC Public Service Commission has approved 37 additional providers, of which 17 are currently providing service in the District. All seventeen sell to commercial customers while only two service residential customers. According to a DC Public Service Commission report, 97.3% of DC residents get their power from Pepco and only 2.7% from other providers. 75.9% of commercial customers get their power from Pepco and 24.1% from other providers. Overall, Pepco provides service to 95% of total customers and the other providers 5%.

Maryland

Baltimore Gas and Electric (BGE) is the major provider in Anne Arundel and Howard Counties. Allegheny Power serves Frederick County and Pepco is the major provider in Montgomery and Prince George's Counties. The Maryland Public Service Commission (MPSC) approves additional providers by service area of the major providers. One additional provider has been approved for the Allegheny service area, 11 for the BGE service area, and 5 for the Pepco service area. The additional major provider is Delmarva which serves mostly the Eastern Shore. None of Maryland's providers own generational facilites.

Alternative providers service 4.1% of residential customers and 28.8% of commercial customers are serviced by alternate providers. The larger the commercial enterprise, the more likely it is to use an alternate provider. Not included in any of the above figures are cooperatives, municipally owned electric companies, etc. In other words, only investor owned companies are regulated and, apparently, tracked by the Maryland PSC.

Virginia

NCA communities in Northern Virginia are served by Dominion Virginia Power (DVP) and Northern Virginia Electric Cooperative (NOVEC). On average, 80% of power used in Virginia is generated in Virginia and 20% comes from out-of-state. Virginia is projected to increase power demands 28% over the next decade, the fastest of any of the 13 states in the PJM area. Dominion Virginia Power's electricity in 2009 came 42% from coal, 40% nuclear, 11% natural gas, 6% renewables and 1% oil. Dominion owns four nuclear facilities, at Lake Anna and Surry, Va, numerous coal-fired and gas-fired facilities and a biomass facility in Hurt, VA that burns waste from logging, saw mills and paper mills. Dominion also owns a pumped-storage hydro facility in Warm Springs, Va, that uses excess energy generated during low demand periods to pump water into large storage basins from which water is released during high demand periods to generate electricity. This Bath County facility is actually a net consumer of

electricity, but it benefits Virginia's electrical system by converting electric power from low demand periods to electric power for high demand periods. Dominion has two wind projects planned.

NOVEC is a member-owned distribution cooperative headquartered in Manassas that serves parts of Clark, Fairfax, Fauquier, Loudon, Prince William and Stafford Counties and the cities of Manassas, Manassas Park and Clifton. NOVEC receives power supply primarily from Old Dominion Electric Cooperative (ODEC) which purchases power through the PJM marketplace. Old Dominion co-owns base load generating facilities with Dominion Virginia Power including a share of the Lake Anna nuclear plant and three gas- fired facilities to meet peak load demand.

RELIABILITY

Reliability is the ability of a power company to deliver electricity to its customers in an adequate amount at the reasonable prices. While local power outages are the responsibility of the distribution companies, PJM is responsible for delivering reliable power to the distributors. The Federal Energy Policy Act authorized the North American Reliability Corporation (NERC), an independent organization, to establish mandatory and enforceable reliability standards for the interstate transmission system. Eight regional reliability councils are charged with assessing compliance with these standards. Reliability First Corporation (RFC) covers Maryland and most of the PJM service area. 83 mandatory reliability standards have been approved by FERC thus far.

The absolute amount of electricity produced by power plants is one factor that affects overall reliability of the system. The other is transmission congestion, a situation occurring when lower cost power cannot reach its intended market because the transmission system is unable to carry the electricity. This can result from a variety of reasons which result in an overloading of the grid. According to the "Electricity in Maryland Fact Book," generators selling to zones with high congestion can receive higher prices than those who sell in zones with lower congestion.

Maryland legislation required the Maryland Public Utility Commission (PUC) to "assess the amount of electricity generated in Maryland as well as the amount of energy imported from other states in order to determine whether a sufficient supply of electricity is available to customers in the State." The 2007 Report was the last of a series. Its conclusion is that the reliability of Maryland's supply is "uncertain."[1] It found that the mid Atlantic area is deficient in generating capacity and thus is one of the largest power importing areas in the country. Maryland imported 25% of its power in 2006. Little in-state generating capacity is expected to come on line in the next 5 years and certain fossil fueled generating plants may be retired to comply with state and federal air pollution. The state's utilities and PJM forecast that demand will continue to rise at a pace of 1 – 2% per year. As a result, Maryland is expected have little margin for error in ensuring electric reliability. Because Maryland imports so much of its power and as do neighboring states, its ability to import power during peak periods is limited because the transmission system is working at peak capacity. In addition to the possibility of shortages, the difference in "locational marginal prices" (LMPs) between Maryland and points west has risen significantly in the past several years. The PUC recommendations include adding in state generation, siting and improvement of new transmission facilities, energy conservation and demand management programs that will reduce the need for new electric supplies and more efficient use of both existing and planned electric infrastructure.

In a report issued in April, 2009, NERC points out that integrating increasing amounts of "variable resources" such as wind, solar, ocean, and some forms of hydro, will require significant changes in traditional methods of planning and operation because availability of these sources cannot be adjusted to meet varying demands by consumers as opposed to traditional power plants which control the amount of power they produce. The report says that significant transmission additions and reinforcements will be needed to move these alternative forms of power from their sources to demand centers since much of the power produced by alternative sources is located in low population areas and may be produced during times of low demand. Most of the comments of the Maryland PSC apply as well to the District of Columbia and Northern Virginia since they are all part of the same PJM system.

Preliminary data from PJM apparently indicates that at least some additional transmission lines may not be needed as soon as originally thought. PJM is in the process of preparing its 2010 Regional Transmission Expansion Plan based on recent data.

An indication of what we might see come from an Associated Press report from Sept, 2009 stating that demand for electricity across the United States fell 1.6% in 2008 and was expected to fall another 2.7% in 2009. Wholesale prices for coal, natural gas and oil in the PJM market area were down 40% in 2009.

THE SMART GRID

The Smart Grid concept embodies the idea of bringing the electric grid into the computer age. Smart Grid proponents believe that the electric infrastructure will evolve over the next few decades into a highly automated and interconnected network similar to the Internet. The smart grid involves a network of "smart" devices (microprocessor or computer technology) that enable real-time balancing of generation and electrical delivery via information flow through intelligent systems. Currently grid operations are based on the balance of supply and demand between generators and utility customers. The current grid monitors demand and adjusts supply. The Smart Grid will be self sustaining to ensure reliability. The smart grid refers to an array of switches, sensors and computer chips that will be installed at various stages in the energy-delivery process in power stations, in electricity meters (smart meters) in clothes dryers and air-conditioning systems. The smart grid will provide consumers with timely information and control options to help them to reduce their electricity bill.

The American Recovery and Investment Act of 2009 earmarked eleven billion dollars for smart grid technologies to modernize and enhance the nation's electric transmission infrastructure. On July 13, 2009 the Baltimore Gas and Electric Company (BGE) announced it filed with the Maryland Public Service Commission (PSC) a comprehensive and advance "Smart Grid" initiative, including the planned installation of 2 million residential and commercial smart meters, that could save BGE electric and gas customers in excess of $2.6 billion over the life of the project. A pilot program proved that customers can reduce peak electricity usage by about a third and enjoy significant savings with the aid of smart meters and a new pricing plan. Early in 2010, Pepco announced the installation of smart meters in the District of Columbia.

REGULATION OF ELECTRICITY

Deregulation has succeeded in restructuring the electrical industry by separating the generation of electricity from the transmission and distribution of electricity. Nevertheless, the generation, transmission and distribution of electricity remains heavily regulated at the federal, state and local level.

The Federal Power Commission (FPC) was created in 1920 to coordinate hydroelectric power. Its authority was expanded by the Public Utility Regulatory Policies act of 1935 to include regulation of all interstate electricity transmission. The Department of Energy Organization Act of 1977 created the Department of Energy. At the same time the FPC was renamed the Federal Energy Regulatory Commission (FERC), remaining a separate independent regulatory body, the FPC was renamed the Federal Energy Regulatory Commission (FERC). FERC regulates the interstate transmission of electricity, natural gas and oil. The Energy Act of 2005 gave FERC jurisdiction over interstate transmission and wholesale sales of electricity, hydroelectric licensing, some siting applications for electric transmission projects and mandatory reliability standards for high voltage interstate transmission lines.

The Nuclear Regulatory Commission (NRC), created in 1974, focuses its regulatory activities on reactor safety oversight and reactor license renewal of existing plants, materials safety oversight and materials licensing for a variety of purposes, and waste management of both high-level waste and low-level waste.. In addition, the NRC evaluates new applications for nuclear plants.

The Environmental Protection Agency has jurisdiction over air quality, and other environmental effects caused by the generation, transmission and distribution of electricity.

The Public Service Commission of the District of Columbia regulates electrical rates of the Potomac Electric Power Company, and licenses alternative electricity generator and transmission suppliers. The Maryland Public Service Commission regulates electrical rates, modifications in scope of service, maintains records and reports of electrical service and has jurisdiction over new generating plants and high-voltage transmission lines. The Virginia State Corporation Commission sets rates for electricity for retail customers, regulates new generation facilities and new transmission lines. Virginia approached deregulation gradually and in 2007 the Virginia General Assembly acted to re-regulate electricity except for users with very large energy demands. Virginia has set a voluntary goal of 12% renewable generation by 2022. Both the District of Columbia and the Maryland have a very active Office of the People's Council to represent consumer interests.

The adequacy and reliability of electricity in the National Capital Area is but one aspect of the generation, transmission and distribution of electricity to the area. A study of the complexities of pricing both on a wholesale and retail level would complete the picture.

(References and sources are available upon request.)

League of Woman Voters of the US
Position on Energy

(Ed Note: In order to assist with discussions on this topic, the League's national position is printed for your information.) The League supports:

- energy goals and policies that acknowledge the United States as a responsible member of the world community
- reduction of energy growth rates;
- use of a variety of energy sources, with emphasis on conserving energy and using energy-efficient technologies;
- the environmentally sound use of energy resources, with consideration of the entire cycle of energy production;
- predominant reliance on renewable resources;
- policies that limit reliance on nuclear fission;
- action by appropriate levels of government to encourage the use of renewable resources and energy conservation through funding for research and development, financial incentives, rate-setting policies and mandatory standards;
- mandatory energy-conservation measures, including thermal standards for building efficiency, new appliance standards and standards for new automobiles with no relaxation of auto emission control requirements;
- policies to reduce energy demand and minimize the need for new generating capacity through techniques such as marginal cost or peak-load pricing or demand-management programs;
- maintaining deregulation of oil and natural gas prices;
- assistance for low-income individuals when energy policies bear unduly on the poor.

February is Black History Month . . .

Black History Month Honoree Was a Designing Woman

By: Bernice Colvard, League Historian


Picture courtesy of Library of Virginia

Long before women were accepted in the field of architecture, **Ethel Bailey Furman** (1893-1976) designed houses in Richmond and central Virginia. She studied privately in New York City and then returned with her family to Richmond to work in partnership with her father, a building contractor. One way of dealing with the discrimination she encountered as a black woman was to submit building plans through the male contractors with whom she worked. Whatever the situation, Furman persisted.

In the late 1920s, Furman was the only woman to attend the Hampton Institute's annual builders' conference. In the 1940s, she continued training with coursework in architectural drafting at the Chicago Technical College. Furman designed an estimated 200 residences and churches in central Virginia as well as two churches in Liberia. Her 1962 design for the education wing of Richmond's Fourth Baptist Church was recognized on the National Register of Historic Places as part of the Church Hill North Historic District extension in 2000.

Furman was one of eight outstanding women selected by the Library of Virginia for inclusion in its *Virginia Women in History 2010* project.

December 7 BOS Highlights . . .

BOS Requests Funding Help for BRAC; Kanter Appointed to Reapportionment Committee

By Janet Al-Hussaini, Co-Chair Action Committee

- County's Federal Principles and Funding Requests primarily focus on transportation infrastructure, including federal funding to mitigate impact from Base Realignment and Closing (BRAC) action at Fort Belvoir.
- Supervisor McKay confirms appointments to 2011 Advisory Citizen Re-apportionment Committee including Anne Kanter as League of Women Voters' representative
- Authorization given to advertise public hearing for County's sale of two million gallons per day (MGD) of County's unused capacity at Upper Occoquan Sewage Authority's (UOSA) Treatment Plant to meet Prince William County's additional treatment need.
- Board adopts 2011 Legislative Program for Virginia General Assembly.
- Authorization given to advertise a public hearing before Board on January 25, 2011, at 4:00 p.m. regarding the County's purchase of one million gallons per day (MGD) of capacity at Loudoun Water's Broad Run Water reclamation (BRWR) Facility.
- Board adopts the Pohick Creek & Sugarland Run/ Horsepen Creek Watershed Management Plans.
- Chairman Bulova moved that Board endorse Chief Administrative Officer (CAO) Task Force recommendations regarding preliminary fiscal year (FY) 2012 Virginia Railway Express (VRE) Budget.
- Board requests authorization to award five-year contract to Firstlab in amount of $279,106 annually ($234,106 for Fairfax County Public Schools and $45,000 for County Government) for alcohol/drug testing and MRO management services.
- Supervisor Smyth moved that Board authorize County Attorney to take legal action to preserve County rights to refund from City of Falls Church regarding overcharged amounts for water service during calendar years 2007 to the present.
- Chairman Bulova announced County government will take the *Orange Cones No Phones* Employer Safety Pledge to discourage distracted driving in construction zones. Chairman Bulova urged County agencies to visit www.OrangeConesNoPhones.com sign up, and download the e-Toolkit.
- Chairman Bulova reported hearing from Virginia Department of Transportation (VDOT) Commissioner Whirley regarding potential transportation funding through use of toll credits. Credits can be used as State match for some Federal projects in Commonwealth.
- Fairfax Water indicates desire to revisit 1993 agreement with Board to modify types of projects requiring public review and other minor changes. Modifications intended to keep pace with Comprehensive Plan, not to facilitate development opportunities.

School Board Gives Superintendant Authority to Determine Length of School Day

By Ginger Shea, Schools Chair

Although the *Washington Post* did not use the letter from the LWVFA Schools Committee that was printed in our January VOTER, a similar letter (below) was printed in many editions of the *Connection* newspaper on January 6.

> The Fairfax County school board is considering a proposal to delegate authority to the superintendent to establish the length of the school day. The League of Women Voters of the Fairfax Area spoke against this policy change at the December 2 school board meeting. This is such a major change that it should have been discussed widely and received more public attention. The League supports well defined channels for community input and review for FCPS policies. Setting the amount of time that students will be in school is a fundamental responsibility of local school boards: this decision should not be delegated to the superintendent or any other employee.

Nevertheless, that same evening the school board voted in favor of delegating authority to the superintendent to establish the length of the school day. Sandy Evans (Mason District) and Tina Hone (at-large) voted against this change.

County Budget Input Exercise Leads to Limited Response

By Lois Page, LWVFA Program Director

December's program planning meeting included an option to look at some facts about the proposed Fairfax county budget and respond to some questions about what can done to balance the budget in hard times. Few units had time to spend on an in-depth look but some suggestions were made as to how to improve the process in future years.

First of all, about half of the units had not received the December Voter by mail, so the "FY 2012 Do-It Yourself Budget Toolkit" was not able to be read before the meetings. Secondly, coupling this activity with program planning proved too time consuming for some units. One unit responded: "…this is a very worthwhile exercise -- however, we need the material put into a more user friendly format and not so many details. It would have been helpful to review changes from past budgets and summarized information instead of the tables of information. This was a good first attempt and we would like to do this again next year; however, we need a whole meeting for it."

One unit, Springfield, decided this was too important to skip and scheduled a January meeting to discuss the budget further. Input from that meeting was not available at press time.

As for what people did respond: the most acceptable decisions made in the past included doing away with the auto decal and reducing the library funding (one unit). The least acceptable decisions also included library cuts (one unit said, "We love libraries."), this time by four units, plus cuts to parks, public health nurses, full day kindergarten, and cuts leading to deinstitutionalizing mental health patients.

Members didn't have many suggestions as to things that could be cut to balance the budget but did have suggestions for priorities: preserve as many jobs as possible, and protect funding for schools, mental health, social services, and child care. LWVFA will have a chance to speak to the county budget committee before the budget is adopted in April.

Recollections of Suffragist's Daughter Recalls Stories of Her Mother

By Bernice Colvard, League Historian

Sibyl Vanneman of Fairfax League's McLean unit shared these stories about her suffragist mother, **Augusta Street (1889-1976)**, with us.

Elated at passage of the 19th or suffrage Amendment in 1920, Augusta tried to cast a ballot two weeks before the birth of Sibyl and her twin sister Sarah. This was at a time when a respectable lady in an advanced stage of pregnancy did not appear in public. Sibyl doesn't really know but suspects that Augusta was refused at the polls. She said: "Mother was always dramatic and would exaggerate a bit."

Augusta joined the League of Women Voters at its inception in 1920. After the Streets moved to Washington, D.C., in 1928, she went on the National Board as Finance Chair. She continued in that portfolio until 1934. She remained a loyal League member for the rest of her life.

In Washington, D.C., in 1931, it was permissible but not mandatory for women to serve on juries. Augusta was selected to serve on a sequestered jury for the D.C. Supreme Court. Herbert Glassman and 10 others had violated Prohibition regulations, but those charges didn't hold up and they'd been charged with conspiracy against the government; nine of the defendants would be convicted. Sequestration was, of course, to prevent jury tampering. Sibyl was 10 that year and clearly remembers her mother's absence from home and the stories she told about that jury duty.

Augusta Street with children, circa 1928. Photo was published in The Washington Star. Sibyl Street Vanneman is the daughter on right side of picture

Several women had been excused from jury duty in this case because they admitted to being members of the Anti-Saloon League or a similar group. The very last name on the list of potential jurors, Augusta was tired, hungry, and a bit irate by her turn. When asked if

(Con't. See **Recollections,** Page 8, Col. 1)

(From Page 7, **Recollections**)

she were a member of the Women's Christian Temperance Union, she vehemently replied "No!" and was accepted by the defense. She spent the next ten days in close proximity to eleven men, who were initially strangers. Sibyl stated: "Mother liked men and got along well with them." Because Augusta offered to sew on buttons or do other mending, advised the food provider to add fresh produce and decrease fried foods from their meals, even taught bridge, and did not complain about their cigar smoking, the group came to accept her. She grew to admire their competency in dealing with the trial materials and achieving a verdict. Obviously, Augusta agreed with the National League of Women Voters advocacy of jury service for women.

In the early 1950s, Sibyl helped establish the local league in the city of Falls Church and remained a member there until she moved to Fairfax County in 2002. We thank her for reminiscing with us.

Bits and Pieces . . .

League News From Around the State

LWV-VA to Apply for a Grant From LWVUS for Redistricting Projects.

The Open Society Institute (OSI) has offered LWVUS an average of $5,000 per grant for nine states (California, Florida, Georgia, Missouri, North Carolina, Ohio, Pennsylvania, Texas and Virginia) to use to monitor the redistricting process in those states. The LWV-VA Board agreed to apply for one of the grants.

Training Session on Vote411.org to be offered at 2011 Convention

LWVUS has been evaluating the interactive voters service website known as Vote411.org that was promoted in the November 2010 elections. An update on the status of Vote411.org going forward will be provided after the LWVUS Board meets in late January, 2011 to review the recommendations. If continued, the LWV-VA Board would like to offer a training session on the Vote411 process at a Convention 2011 Workshop

Election Laws Consensus Questions Available in March

Election Laws Study, Part 2 Consensus Questions will be available for March discussion: Seven draft consensus questions for Part 2 of the Elections Laws Study, were reviewed with final approval at the February 1, 2011 board meeting. The questions and supporting material will be distributed to local Leagues in February with feedback to LWV-VA by the end of March.

Improving Metro Governance Forum

When: February 12 – 11 A.M.

Where: Martin Luther King Library, 901 G Street, NW, Washington

Panel: David Alpert, Vice Chair, Riders' Advisory Council
James Dyke, Chair, Greater Washington Board Of Trade
Jim Graham, Former Chair, Metro Board

Sponsor: League Of Women Voters of The National Capital Area

2011 State Convention Will Be Held in Blacksburg

Convention will be held April 30 to May 1, 2011 in Blacksburg (hosted by the Montgomery County LWV) at the Hilton Garden Inn near the VA Tech campus. Room rates are $89 per night for two beds per room. First Plenary will start on Saturday morning (April 30) to allow for a workshop for all attendees on "Vote411.org" in the afternoon. Banquet will be Saturday evening and Second Plenary will convene Sunday morning with adjournment by noon. There will be a continental breakfast both Saturday and Sunday mornings; and a campus tour mid-day Saturday that will include lunch at one of the dining halls on campus (no lunch facilities at hotel).

This Month's Unit Meeting Locations

Topic: Is Electricity in the NCA Adequate and Reliable?

Members and visitors are encouraged to attend any meeting convenient for them, including the "At Large Meeting" and briefing on Saturdays when a briefing is listed. As of January 12, 2011, the locations were correct; please use phone numbers to verify sites and advise of your intent to attend. Some meetings at restaurants may need reservations.

Saturday, February 5

10:00 a.m. At-Large Unit and Briefing
Mason District Gov. Center
6507 Columbia Pike
Annandale 22003
Contact: Lois, 703-690-0908

Wednesday, February 9

9:30 a.m. Mt. Vernon Day (MVD)
Mt. Vernon District Gov. Center
2511 Parkers Lane
Alexandria 22306
Contact: Gail, 703-360-6561

10:00 a.m. McLean (MCL)
Star Nut Gourmet
1445 Laughlin Ave.
McLean 22101
Contact: Gail, 703-356-2851

10:00 a.m. Fairfax Station (FXS)
Burke Centre Library
5935 Freds Oak Rd.
Burke Centre 22015
Contact: Lois, 703-690-0908

12 noon Chantilly/Centreville (CC)
Sully District Gov. Center
4900 Stonecroft Blvd.
Centreville 20151
Contact: Susan, 703-391-066

6:15 p.m. Dinner Unit (DU)
Yen Cheng Restaurant
Main Street Center
9992 Main Street, Fairfax 22030
Contact: Tin, 703-207-4669

7:30 p.m. Reston Evening (RE)
Reston Art Gallery at Heron House
Lake Anne Village Center,
Reston 20190
Contact: Lucy, 703-757-5893

Thursday, February 10

9:00 a.m. Reston Day (RD)
Contact: Margo, 703-620-9054

12 noon Fairfax City Day (FXD)
Oakton Regional Library
10304 Lynnhaven Pl., Oakton 22124
Contact: Bobby, 703-938-1436

12 noon, Vienna Evening (VE)
Oakton Regional Library
10304 Lynnhaven Pl.
Oakton 22124
Contact: Anne, 703-938-7304

9:30 a.m. Springfield (SPF)
Packard Center (Lg. Conf. Rm)
4026 Hummer Rd
Annandale 22003
Contact: Nancy, 703-256-6570
or Peg, 703-256-9420

7:45 p.m. Mt. Vernon Evening (MVE)
Paul Spring Retirement Community
Mt Vernon Room
7116 Fort Hunt Road
Alexandria 22307
Contact:Kay, 703-765-7104

Monday, February 14

1:30 p.m. Greenspring (GSP)
Hunters Crossing Classroom
Spring Village Drive
Springfield 22150
Contact: Kay, 703-644-2670

March Meetings:

Election Laws - Part 2

The League of Women Voters of the Fairfax Area (LWVFA)
4026 Hummer Road, Suite #214 Annandale, VA 22003-2403
703-658-9150. Web address: www.lwv-fairfax.org

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February, 2011

Jane E. George, President
Ron Page, Editor
Liz Brooke, Coordinator

The League of Women Voters is a nonpartisan political organization that encourages the public to play an informed and active role in government. At the local, state, regional and national levels, the League works to influence public policy through education and advocacy. Any citizen of voting age, male or female, may become a member.

LWVFA MEMBERSHIP APPLICATION

(Dues year is July 1 through June 30. Current dues year ends June 30, 2011.)

Membership Category: Individual $65 ____ ; Household (2 persons–1 *VOTER*) $90 __; Donation $ _____
Student $32.50 ____; (Coll. Attending _____)

Membership is: New ____; Renewal ____ ; Reinstate ____; Subsidy Requested ____
We value membership. A subsidy fund is available, check block above and include whatever you can afford.

<u>Dues are not tax deductible</u>. Tax-deductible donations must be written on a separate check payable to LWVFA Ed. Fund.

Please Print Clearly!

Name _____ **Unit** _____

Address_____

City _____ **State** _____ **Zip + 4** _____

Phone (H) _____ **(W)** _____ **E-Mail** _____

Thank you for checking off your interests:

___ **County Govt**	___ **Voting Procedures**	___ **Health Care**	___ **Schools**
___ **Fiscal**	___ **Environmental Quality**	___ **Human Services**	___ **Other (Specify)**
___ **Public Libraries**	___ **Land Use Planning**	___ **Judicial Systems**	
___ **Transportation**	___ **Water**	___ **Juvenile Problems**	

Mail to: LWVFA, 4026 Hummer Road, Suite 214, Annandale, VA 22003