## Water and Power Associates, Inc.

## Newsletter

Year 43, Volume 3

July 2014

### President's Notes



Edward A. Schlotman

As I write this article my wife and I are just back

from spending a month in the hill country of Texas, about an hour north of San Antonio. Guess what? There is a drought in San Antonio and in the hill country but you wouldn't know it from a



casual glance around the countryside or the town we stay in.

The Guadalupe River runs through the town. Yes it's an actual river with water; not cement, with fish, swimming and boating. But that has not stopped the drought from occurring. Appearances can be deceiving. The restrictions are real and they are serious. Watering is only allowed two days a week if you're using sprinklers or some other kind of watering system and you may only water between six and 10 in the morning and eight and midnight in the evening. Wanna bet those times were not picked to



discourage watering by hand? How would Los Angeles and Southern California deal with such serious restrictions? What impact would they have on lifestyles or the appearance of our homes and other green spaces?

We are in a drought here as I mentioned in the last newsletter. Nothing has changed since then. The conditions are not any better. But we do not see much in the way of effect because of previous efforts and preparations to lessen those effects. (continued on page 2) EPA unveils CO2 emissions rule for existing power plants



Article submitted by Thomas J. McCarthy

On June 2, the U.S. Environmental Protection Agency (EPA) under direction of the Obama administration released a proposal that will set the first-ever national carbon pollution standards limits for America's existing power plants. The proposal follows through on the steps laid out in the administration's Climate Action Plan and the June 2013 Presidential Memorandum.

According to the EPA, the proposed guidelines will fight climate change while protecting public health and supplying Americans with reliable and affordable power. Power plants are the single largest source of carbon pollution in the United States, accounting for roughly one-third of all domestic greenhouse gas emissions.

"Climate change, fueled by carbon pollution, supercharges risks to our health, our economy, and our way of life. EPA is delivering on a vital piece of President Obama's Climate Action Plan by proposing a Clean Power Plan that will cut harmful carbon pollution from our largest source--power plants," said EPA Administrator Gina McCarthy. (continued on page 2)

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Water and Power Associates, Inc. is a non profit, independent, private organization incorporated in 1971 to inform and educate its members, public officials and the general public on critical water and energy issues affecting the citizens of Los Angeles, of Southern California and of the State of California.

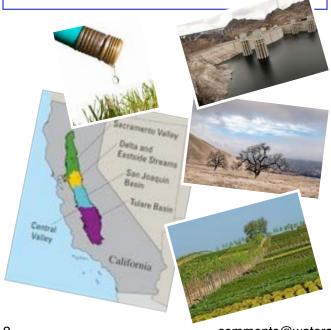
#### President's Notes (continued from page 1)



Contrast the appearance of Southern California with that of the Central Valley. Much of our agriculture is raised in the Central Valley and needs lots of water yearly to grow those crops. Pictures I have seen from time to time show pretty dry and barren countryside in the Central Valley. It is not encouraging. What if the drought continues for another year? What can we do? What will we do? Will we just wring our hands in dismay? Where is the sense of urgency?

I have recently been reading newspaper stories dealing with Gov. Brown and his reelection and some proposals and ideas for the future. I do not recall in any of that material any discussion of the California drought. Why not? When will we acquire a sense of urgency? What can we do then? There are lots of people in the State, some 37 or so million, and that number is not going down. If we go into a permanent rationing mode for people and industry what effect will that have on California's lifestyle and economy?

As always I invite your thoughts.



## EPA unveils CO<sub>2</sub> emissions rule

(continued from page 1)

EPA said the Clean Power Plan will be implemented through a state-federal partnership under which states identify a path forward using either current or new electricity production and pollution control policies to meet the goals of the proposed program. State plans are due in June 2016, with the option to use a two-step process for submitting final plans if more time is needed.

In September 2013, EPA released its proposed Clean Air Act standards for the reduction of greenhouse gas emissions from new power plants. Under those proposed guidelines, new large natural gas-fired power turbines would need to meet a limit of 1,000 pounds of carbon dioxide (CO2) per megawatt-hour (MWh). New coal-fired power units would be required to meet a limit of 1,100 pounds of CO2 per MWh, or exercise an option to average emissions at a slightly tighter limit over multiple years.

The EPA and President Obama's administration have faced heavy industry backlash over the proposed rules for new and existing power plants, with several in the power sector saying the standards are essentially an effective ban on coal-fired power.

The American Coalition for Clean Coal Electricity (ACCCE) blasted the EPA following an initial review of today's proposed rule, saying the guidelines will spur devastating economic impacts including job losses and energy costs.

"If these rules are allowed to go into effect, the administration for all intents and purposes is creating America's next energy crisis," said Mike Duncan, president and CEO of ACCCE. "As we predicted, the administration chose political expediency over practical reality as it unveiled energy standards devoid of commonsense and flexibility. These guidelines represent a complete disregard for our country's most vital fuel sources, like American coal, which provides nearly 40 percent of America's power, reliably and affordably."

EPA has remained firm in supporting the viability of the proposed guidelines and CCS technologies, acknowledging a continuing need for a role for coal generation in the U.S. energy mix.

Comment on the current proposal for existing plants will be accepted for 120 days after publication in the Federal Register with four public hearings scheduled for the week of July 28 in Denver, Atlanta, Washington, DC and Pittsburgh. Based on this input, EPA will finalize standards next June.

June 2, 2014 By Dorothy Davis Ballard Content Director



## Our Second Quarter Board Meeting Guests





Scott M. Briasco LA DWP Manager of Fleet Engineering and Electric Transportation





Gene Goodenough

NLINE ENERGY

SVP Product & Finance





Abraham Hoffman W&PA Former Board Member, History Professor Valley Community College





Matthew Swindle

NLINE ENERGY
CEO & Founder



The John Randolph Haynes and Dora
HAYNES
FOUNDATION

William J. Burke-Administrative Director The John Randolph Haynes and Dora Haynes Foundation





Víctoría Herrera.
City of Huntington Park
Community Development Dept.
Health & Education Commission





Randall Neudeck
Metropolitan Water District
Water engineer





Eric J. Tharp

LADWP

Division Manager

Fuel & Power Purchase

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# Ute Indian Tribe looks to build 1,000 MW gas-fired power station



#### THE UTE INDIAN TRIBE

#### **POWER ISSUES**

"As Seen Elsewhere" by *Thomas McCarthy* 

The Ute Indian tribe of the Uintah and Ourav Reservation, Utah, has announced its plan to undertake t h e development of a 1,000 megawatt natural gas-fired generation facility on the Uintah and Ourav Reservation. Such a facility will enable the Tribe to utilize its vast amount of land and energy resources that contain enormous potential for electricity, transmission. renewables and natural gas related projects.

Development of this project represents an exceptionally valuable opportunity for the Tribe to utilize its natural gas resources to fuel power generation on the Reservation for the benefit of Tribal Members and the surrounding community. At this time, the Tribe is examining its energy infrastructure on the Reservation to develop a comprehensive plan for moving forward with this generation facility.

The generation facility would utilize the Tribe's large reserves of natural gas. It will also create opportunities to introduce more sources of clean energy into the

rid.

"The Business Committee encourages and supports the development of the Tribe's resources in a manner that will provide long-term and sustained benefits to the Tribe so that our members can look forward to a clean energy

future," explained Ronald Wopsock, the Vice-Chairman of the Ute Tribal Business Committee and member of the steering committee established by the Tribe to oversee the project.

"Not only will this project advance energy independence for the Tribe and the United States as a whole, it will also utilize the most advanced emission controls available, making it one of the cleanest natural gas-fired power plants in the United States. As a result, the project will serve as a source of clean energy to replace outdated coal-fired power plants, such as the Bonanza Plant in the Uintah Basin, which have caused significant damage to the local environment." the Vice Chairman added.

Development of the project will provide significant benefits for the Tribe and local economy. According to Southern California Telephone and Energy (SCT&E), a development firm retained by the Tribe to assist with planning of the project, the plant is expected to generate up to 1,000 MW, which would serve to provide power for 850,000 homes annually.

Development will also create 950 jobs at the peak of construction. In addition, the project is expected to contribute hundreds of millions of dollars directly to the area's economy during the first ten years of operation and will create indirect job opportunities in the development of pipelines, and distribution and transmission infrastructure serving the project.

May 28, 2014
By PennEnergy Editorial
Staff Source: Ute Indian
Tribe

Change

Ahead

#### Taking Page From Health Care Act, Obama Climate Plan Relies On States

President Obama's new plan to fight climate change depends heavily on states' devising individual approaches to meeting goals set in the nation's capital, a strategy similar to the one he used to expand health care, often with rocky results. "I've never seen anything like this, where states get this much flexibility. It's astounding," said Dallas Burtraw, an expert on electricity markets with

Resources for the Future, a Washington research group. "The EPA is signaling maximal deference to the states."

<u>New York Times</u>, June 3 Related coverage:

<u>Hopes Modest For Carbon Rules,</u> New York Times

Reaction To Obama Administration Carbon Emissions Proposal, New York Times (Blog)

### **POWER ISSUES**

Submitted by Thomas J. MCCarthy

#### U.S. Green Groups See Need To Nudge Obama's 'Opening Bid' On Carbon Cuts

In large part, the wide-ranging reaction to President Barack Obama's signature effort to cut power plant carbon emissions could have been written months in advance. "Key Republicans and many industrial groups decried it as a job-killing war on coal that would drive up power prices; environmentalists and many Democrats hailed it as a landmark measure making good on Obama's pledge to tackle climate change," Valerie Volcovici of Reuters reports.

"Behind the bombast, however, more measured voices found a proposal that was not as severe as critics had feared nor as ambitious as proponents had hoped for. Basing the average 30 percent reduction on the year 2005 --

near a high point for such emissions, before the economic recession reduced power use and the rise of shale gas dramatically curbed coal plant output -- means much of that reduction has already occurred."

The Edison Electric Institute said it was "thoroughly reviewing" the proposed guidelines to make sure the compliance requirements and timelines were achievable across the industry. Volcovici reports that EEI President Tom Kuhn welcomed some of the flexible elements that the EPA weaved, while not fully endorsing the program, either. "While we are still assessing the overall proposal, EPA appears to have allowed for a range of compliance options to reflect the diversity of approaches that states and electric utilities have undertaken and may undertake to reduce GHG emissions," Kuhn said in a statement. *Reuters, June 3* 

Tags: EEI Related coverage:
New EPA Rules May Speed Up Changes In How
You Get Power, Washington Examiner
U.S. Unveils Sweeping Plan To Slash Power Plant
Pollution, Reuters

### Utilities Size Up Emission Cap For Power Plants

New federal limits on greenhousegas emissions would force sweeping changes in the U.S. electric system but wouldn't deliver the knockout blow to coal that mining companies and some power producers had feared, the Wall Street Journal reports. The proposed caps on carbon emissions give both states and utilities credit for reductions they already have made. Many utility

executives and spokespersons said that their companies were already on track to meet the requirements because of their part in coal fired-related retirements and an increase in other

sources of generation. Some states reported that the limits would affect them more than others, while others said they were still reviewing the draft rule.

Wall Street Journal, June 2
Tags: American Electric Power,
Duke Energy Corp., Southern Co.
Related coverage:

Obama Climate Proposal Will Shift Industry Foundations, Bloomberg How The EPA's Plan Will Impact Electricity, Coal And Natural Gas Markets, Wall Street Journal (Blog)

The Numbers: In Wake Of EPA Emissions Proposal, A Coal Plant, Wall Street Journal



### White House Throws Ailing Reactors A Potential Lifeline



The Obama administration on Monday threw a potential -- and limited -- lifeline to the country's ailing nuclear industry, highlighting the ability of existing reactors to help states curb emissions. "Policies that encourage development of renewable energy capacity and discourage premature retirement of nuclear capacity could be useful elements of CO2 reduction strategies and are consistent with current industry behavior," the **Environmental Protection** Agency said. "Costs of CO2 reductions achievable through these policies have been estimated in a range from \$10 to \$40 per metric ton."

Environment & Energy Publishing, June 2
Related Coverage:
With Carbon Rule, Illinois Power Struggle Begins, Chicago TribuneÂ

## Power ~ As Seen Elsewhere

#### U.S. States Consider Carbon Trading Schemes

A number of U.S. states are starting to consider carbon trading schemes to meet limits on greenhouse gas emissions put forward in President Obama's latest climate change initiative. "Officials in Washington



state and Pennsylvania have told the Financial Times they are examining carbon trading programs following the release last week of proposed state-by-state targets for emissions cuts," the publication reports.

Financial Times (UK), June 9

### **Buffett To Expand Energy Wager** 'As Far As The Eye Can See'

Berkshire Hathaway Inc. has plans for more investment in the utility industry, in part by betting on renewable power, Chairman Warren Buffett said Monday at the Edison Electric Institute's annual convention in Las Vegas. "We've poured billions and billions and billions of dollars in retained earnings, and several billion of additional equity," into the energy business, Buffett said. "And we're going to keep doing that as far as the eye can see." Berkshire Hathaway Energy has committed \$15 billion to renewable energy projects, including a solar farm in California that will be one of the world's largest when it is completed in



2015. On Monday, Buffett said that Berkshire could invest an additional \$15 billion on such projects, Bloomberg reports. He also said he supports the continuation of tax credits for wind and other renewable energy supplies, while acknowledging that tax

credits can be misused.

Bloomberg, June 9

Tags: American Electric Power, Berkshire Hathaway Energy, EEI Related coverage:

Buffett Ready To Double \$15 Billion Solar, Wind Bet, Bloomberg Buffett Bullish On Utilities, Warns Against Exports Of 'Finite' Gas, E&E News

Buffett: Utilities Not A Way To Get Rich But Can Help You Stay Rich, SNL

EPA's Proposed GHG Rules Front And Center At EEI Meeting, E&E News

#### **EPA: Carbon Emission Rules Could Grow Investments**

Environmental Protection Agency Administrator Gina McCarthy said Wednesday that new rules to curb carbon emissions could help grow communities' economies by investing in technologies that work for them. "What this does is send a long-term signal that renewables are important and efficiencies are important," McCarthy said. "And those investments not only must be made, but those investments are great for the local economies, they're great for job growth, they are great for continuing to allow growth in our economy in a way that will allow us to be sustainable moving forward."

Associated Press, June 4

### **Energy Infrastructure & Supply** S&P: U.S. Carbon Regulations May Spur New Nuclear Capacity In Long Term

U.S. regulations proposed earlier this week that would require existing power plants to reduce carbon emissions could favor some new nuclear plant construction in the long term, as risks from the technology fade with new plant designs, Standard & Poor's Ratings Services said in a report Thursday. "Although all options for cleaner power generation are on the table,

it's clear that nuclear power plants also offer an growth while avoiding increased carbon emission.



wrote S&P analyst Judith Waite.

Platts, June 5

Tags: Exelon Corp., Georgia Power, South Carolina Electric & Gas Co.

Related coverage:

The Surprising Winner Of The EPA's Power Plant Rules, Washington Examiner

## Los Angeles Department of Water and Power expands contract with Itron

Itron, Inc. (NASDAQ:ITRI) announced today that the Los Angeles Department of Water and Power (LADWP), the nation's largest municipal utility, has awarded the advanced time-of-use and net time-of-use electric metering contract to Itron. LADWP will utilize Itron's cellular solution to supply advanced time-of-use and net time-of-use residential, commercial and industrial electric metering to LADWP's customers. The solution will help LADWP improve customer service, expand green energy initiatives and help the municipal utility meet increasing demands from applications for solar net metered residential, commercial and industrial customers in the City of Los Angeles.

LADWP will use Itron's cellular solution to support its Feed-in Tariff (FiT) program, the largest FiT program of any municipal utility in the nation. Through the FiT program, LADWP purchases energy from eligible renewable projects from 30 kilowatts up to 3 megawatts in capacity within its service territory. The utility will also deploy this metering solution for customers participating in time-of-use rates, including, but not limited to, customers with electric vehicle charging stations, to help forecast and balance load. The data from these advanced meters will also be used for energy conservation, engineering analysis and load forecasting to increase operational efficiency.

The cellular advanced metering solution will also be used by LADWP for its customers located in areas with high outage sensitivity and critical need for real-time power quality monitoring and communication. The solution, including approximately 40,000 additional cellular advanced meters and data collection software, will be installed over three years.

"We are pleased that LADWP is expanding its commitment to a more advanced grid," said Mark de Vere White, president of Itron's electricity business line. "Itron's cellular solution is a perfect complement to the IPv6 network component of our OpenWay® smart grid platform currently being piloted by LADWP. With cellular communications, LADWP can easily deploy smart metering technology to select customers across diverse territories using an available public network."

June 13, 2014
By PennEnergy
Editorial Staff
Source: Itron, Inc.





#### Collision Course for L.A. River Water Plans

On June 5, the Los Angeles Daily News, in an article discussing the \$1 billion revitalization plan for the L.A. River, stated that the Council proclaimed Wednesday June 4 L.A. River Day, hailing the rebirth of the river and the possible return of endangered steelhead trout to the river. But, the article noted two City agencies, DWP and the Bureau of Sanitation, will be reducing the water available for the river, water being needed for the City's clean water plans, a new groundwater replenishment facility, and cleaning up pollutants in the San Fernando Valley basin. Presently, treated water flows into the river from a Van Nuys plant, which will be pumped into the ground instead to augment the groundwater basin. Officials will have to consider the competing requirements in the environmental impact report due mid-2015.

#### **Spending to Fight Drought Gets Little Support**

In an extensive article about the statewide drought, contained in the Los Angeles Times on June 6, a USC Dornsife/Los Angels Times poll found that while 89% of the public characterized the drought as a major problem or crisis, only 16% said it had personally affected them to any degree. The article noted that the state's major population centers had largely escaped severe mandatory rationing and even agriculture was able to partially compensate for reduced water deliveries by pumping more groundwater. This, according to the article, has blunted the desire for drastic remedies and big spending on water projects. The survey showed reluctance for quick fixes at the expense of the environment, but strong support for recycling, storm water capture, increasing storage in underground aquifers, voluntary conservation, and seawater desalination. A smaller percentage, though still a majority, favored building new dams and reservoirs.

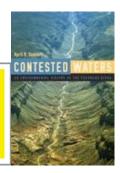
#### El Nino May Not Bring Heavy Rain

On June 6, the Los Angeles Daily News reported that California, in the third year of an oppressive drought, received good and bad news from scientists tracking the Pacific Ocean for El Nino, the phenomenon which occurs when warm ocean waters bring wet winters to California. The National Oceanic and Atmospheric Administration reported that the chances for El Nino conditions developing are up, but it looks like a moderate, rather than a strong El Nino, which only about half the time delivers wetter than normal winters.





**CONTESTED WATERS** An Environmental History of the Colorado River, by April R. Summitt. Boulder: University of Colorado Press, 2013. 286 pp. Notes, Charts, Bibliography, Index. \$34.95, hardbound. www.upcolorado.com.



By Abraham Hoffman, Ph.D.

For almost a century the Colorado River has been used and abused by seven U.S. states, two Mexican states, and a number of government agencies, including the Bureau of Reclamation and the Environmental Protection Agency. The Colorado River Compact, endorsed by six states in 1922 (Arizona held off, and Mexico was ignored until 1944), divided the river water according to prior appropriation. California received the lion's share of the allotments. Among the problems generated by the compact--the ignoring of Indian claims, Arizona's lawsuit against California in the longest such trial in U.S. history—was the gross miscalculation of just how much water flowed down to the Gulf of California. The calculation was based on a series of wet years, and the long-term average was overlooked. As urban centers—Los Angeles, Phoenix, Tucson, Las Vegas, Denver—grew in population, so did their demands for more water and electrical power.

State and federal governments did not comprehend the need for sustainability until recently. States wanted dams and irrigation canals that brought prosperity in the short term but had long-range consequences. Not until the 21st century did the users of the river wake up to the need for cooperation, not competition in dealing with the basic fact that demand exceeded supply. Any third grader could have easily summed it

up: three into two won't go. And unlike irregular fractions, pure math can't help solve the river's problems.

April Summitt provides a historical account of the river from its early exploration to the present day. The first chapter goes to 1945 and includes accounts of the Colorado River Compact; the failure of the California Development Company's headgates and the river changing its course to run into the Salton Sink; the construction of Hoover Dam and other dams, and the treaty with Mexico that allotted water to Baja California and Sonora. The remaining seven chapters explore the many issues that have made lawyers rich and exasperated state and federal governments.

Agricultural priorities dominate allotments of water, whereas urban centers scramble for sources to meet population growth.

The environmental movement tangles with Indian tribes that won "paper" water rather than "wet" water in lawsuits (yes, you have the right, but too bad you don't have the financial reserves to utilize that right). Questions of water quantity and water quality generate arguments between the United States and Mexico regarding the salinity content of water downstream from U.S. agricultural and industrial uses of water. In recent years cities such as San Diego have worked out agreements with agencies such as the Imperial

Irrigation District to buy water for urban needs. Farmers enjoy their water priorities but grow fewer crops and fallow land in order to profit by water marketing.

Summitt generally provides a useful narrative in tracing all the disputes and disagreements among Indian tribes, Mexico, the seven states, lawsuits such as Arizona v. California, the Quantitative Settlement Act/Agreement, pollution, contamination, and other environmental issues and the recent understanding that in a time of prolonged drought, sustainability requires all parties to collaborate instead of competing. She bases her research largely on published studies, government documents, numerous newspaper reports, and archival collections. However, there are a few stumbles in her work.

Summitt is either unclear or confused about Inyo County and Owens Lake and river, and Mono County and Mono Lake (pp. 212-217). The text implies that Mono Lake is in Owens Valley, as in "Mono Lake in the dry Owens Valley" (p. 217). Her survey of William Mulholland and his efforts to secure Owens River water relies too much on Marc Reisner's polemical Cadillac Desert and not enough on Catherine Mulholland's William Mulholland and the Rise of Los Angeles; and she commits major factual errors in writing about the famous water dispute between Los Angeles and the Owens Valley. (continued on page 9)

#### **Contested Waters**

(continued from page 8)

Rather surprisingly, Summitt gives scant coverage to the Metropolitan Water District even though she includes Steve Erie's Bevond Chinatown in her bibliography, and seems unaware that the MWD serves some 18 million people in southern California, not just the City of Los Angeles. Also, although she describes the creation of the Salton Sea in 1905, she fails to discuss recent issues concerning the Salton Sea and the quarrels among environmentalists, Indian tribes, and government agencies in dealing with its problems. Sonny Bono, a champion in the House of Representatives for restoration of the Salton Sea before his untimely death, goes unmentioned.

The book thus has some shortcomings, including repetitions inevitable in a work that is mainly arranged by topic, but it still provides a valuable introduction to the history of the Colorado River. While its bibliography lacks a few important works, it does offer numerous studies that may guide the reader to dig deeper into the river's history, perhaps a bit more than Summitt did.

Abraham Hoffman teaches history at Los Angeles Valley College.



#### Question #1

The above photo shows President F. D. Roosevelt giving a speech at the Dedication of Hoover Dam on September 30, 1935. Can you locate Ezra Scattergood on stage in the background?





By Jack Feldman



#### Question #2

What percentage of the L.A.'s power needs did Hoover Dam provide back in 1936?

**a**) 30% **b**) 50% **c**) 70% **d**) 90%



Question #3

What percentage of L.A.'s power needs does Hoover Dam provide today?

**a**) 6% **b**) 26% **c**) 46% **d**) 66%

#### For answers see:

http://waterandpower.org/museum/Mystery History.html



We suspect there are many, many more Los Angeles City & DWP historic photos, documents, and artifacts safely hidden away in <u>your</u> collections.

If you would like to share them with our readers, contact us at comments@waterandpower.org.

Send us a description of the items, the dates created or used, the occasion, names of persons photographed, location, uses of artifacts, etc. We can scan the items, and, at your request, return the originals to you -- we will need your name and contact numbers.

Rummage through your files & boxes. Rediscover your treasures, and allow us to display them for our audiences of historians, teachers, students, and future Los Angeles residents and employees.