This week's edition includes:
If you need older URLs contact George at ghh@att.net.
Please Note: This newsletter contains articles that offer differing points of view regarding climate change, energy and other environmental issues. Any opinions expressed in this publication are the responses of the editor alone and do not represent the positions of the Environmental Engineering Division or the ASME.

George Holliday
This week's edition includes:

ENVIRONMENT:  A. CONFUSED ABOUT ICE SHELF DECAY AND SEA ICE INCREASE?
EXPLAINING ANTARCTIC ICE TYPES AND THEIR DIFFERENT RESPONSES TO CLIMATE CHANGES
http://glaciology.weebly.com/articles.html
Judith Curry

B. INTERESTING ARTICLE OF ARCTIC WARMING
This report was from November 2, 1922, as reported by the AP and published in The Washington Post - 93 years ago.
The Washington Post
The Arctic Ocean is warming up, icebergs are growing scarcer and in some places the seals are finding the water too hot, according to a report to the Commerce Department yesterday from Consulaft, at Bergen, Norway.
Reports from fishermen, seal hunters and explorers all point to a radical change in climate conditions and hitherto unheard-of temperatures in the Arctic zone. Exploration expeditions report that scarcely any ice has been met as far north as 81 degrees 29 minutes.
Soundings to a depth of 3,100 meters showed the gulf stream still very warm. Great masses of ice have been replaced by moraines of earth and stones, the report continued, while at many points well known glaciers have entirely disappeared.
Very few seals and no white fish are found in the eastern Arctic, while vast shoals of herring and smelts which have never before ventured so far north, are being encountered in the old seal fishing grounds. Within a few years it is predicted that due to the ice melt the sea will rise and make most coastal cities uninhabitable.
Nan Earle

C. EPA PROPOSED "CLEAN" POWER PLAN: 30% REDUCTION IN HARMLESS CO2 EMISSIONS
Guest opinion by Steve Goreham
Originally published in Communities Digital News.
"Last June, the Environmental Protection Agency (EPA) proposed its Clean Power Plan as a nationwide regulation to reduce carbon dioxide (CO2) emissions from electrical power plants. Comments to the EPA have now been submitted, and it’s not a surprise that a majority of state governments oppose the plan. In the best interests of US citizens, states should refuse to comply with the proposed EPA Clean Power Plan. The Clean Power Plan (CPP), more formally named the §111(d) rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources, calls for a 30 percent reduction in power plant emissions by the year 2030. The CPP sets specific CO2 reduction targets for each state, based on four building blocks: 1) improved efficiency of coal-fired power plants, 2) increased use of combined cycle natural gas power plants, 3) increased use of renewable and nuclear energy, and 4) increased energy efficiency by consumers and businesses. But the main thrust of the proposal is the shut-down and replacement of coal-fired power plants, which now provide about 40 percent of US electricity. There are three major strikes against the Clean Power Plan. First, the authority assumed by the CPP is not granted to the EPA by the laws of the United States. Second, efforts to try to implement the CPP will degrade the finest electrical system in the world, hurting consumers and businesses. Third, if implemented, the CPP will not have a measurable effect on global warming. The Clean Air Act of 1970 authorized the establishment of state and federal regulations to control air pollution, and established the EPA to implement requirements of the act. The Clean Air Act and its amendments of 1977 and 1990 authorize the EPA to establish national ambient pollution standards and to control pollution levels from individual facilities, but not to regulate state electricity markets. A September 2014 letter from 15 state governors stated that the EPA’s Clean Power Plan proposal, “not only exceeds the scope of federal law, but also, in some cases, directly conflicts with established state law.” State electrical public service commissioners are tasked with providing reliable, low-cost electricity for the citizens of their state, while meeting environmental standards. Commissioners trade off the costs and benefits of hydrocarbon, nuclear, and renewable power sources, and they plan new power plants, electrical transmission lines, natural gas pipelines, and other facilities. CPP restrictions threaten to inflate the price and seriously degrade the reliability of US electricity for negligible environmental benefits. The State of Indiana requested that EPA withdraw the CPP proposal, predicting an electricity price increase of more than 60 percent due to EPA regulations. The State of Arizona commented that the CPP is “not technically feasible” and will “seriously undermine the reliability of electric service.” The Public Utility Commission of Texas also urged the EPA to withdraw the rule, estimating compliance costs at over $20 billion and that Texas electricity prices would rise by more than 20 percent by 2020. NERA Economic Consulting estimated a consumer cost of up to $479 billion by 2031, or about $1,500 for each man, woman, and child in the US. Some states have shown support for the Clean Power Plan, led by California and New York. Both states appear to be in a race to achieve the highest residential electricity rates in the lower 48 states. In 2013, California citizens paid 16.19 cents per kilowatt-hour, but New York was number one at a whopping 18.79 cents per kW-hr, well over the US average of 12.12 cents per kW-hr. Paradoxically, New York recently banned hydraulic fracturing of natural gas, a fuel that the CPP heavily promotes.
However, the Clean Power Plan, if implemented, will provide negligible environmental benefits. Evidence is growing that natural cycles of Earth, such as ocean currents driven by the sun, dominate global temperatures and that human influences are small. Today’s storms, droughts, floods, and surface temperatures are neither extreme nor abnormal by historical standards. EPA Administrator Gina McCarthy has admitted in Congressional testimony that the effects of the CPP and other EPA regulations will not be visible in the more than 25 indicators of climate change on the EPA website. Yet the EPA continues to push regulations based on the ideology of human-caused global warming. Hundreds of billions in consumer cost and degraded electrical reliability appear to be only a small price to pay for an immeasurable change in global temperatures. In the best interest of citizens, states should defy the EPA’s proposed Clean Power Plan.”

Steve Goreham is Executive Director of the Climate Science Coalition of America and author of the book *The Mad, Mad, Mad World of Climatism: Mankind and Climate Change Mania*

Don Shaw
http://wattsupwiththat.com/2015/03/19/states-should-defy-unlawful-epa-carbon-dioxide-rules/

D. THE ALFRED E. NOBLE PRIZE – CALL FOR PAPERS

This Prize was established in 1929 by the American Society of Civil Engineers in Honor of Alfred E. Noble, Past President of ASCE and of the Western Society of Engineers, for the purpose of perpetuating his name and achievements. The award is made to a member of any grade of ASCE, AIME, IEEE, ASME and WSE for a technical paper of exceptional merit accepted for publication by any society provided the author has not passed his 35th Birthday at the time the paper was submitted.

Please review the links below for the award information:
Award Web page:
https://www.asme.org/about-asme/get-involved/honors-awards/award-information/joint-awards
http://www.asce.org/leadership-and-management/awards/
Nomination forms:
http://www.asce.org/leadership-and-management/awards/download-center/
Please forward the nomination to:
Bjong Yeigh
SUNY Institute of Technology
100 Seymour Road
Yeigh@UW.edu
wolf.veis@gmail.com

Arnold Feldman

**HEALTH: A. AVIAN INFLUENZA (68): USA (MINNESOTA, SOUTH DAKOTA) HPAI H5N2, TURKEYS**

Deadly bird flu confirmed at turkey farm in South Dakota, 5th poultry farm in Minnesota

A bird flu strain that’s deadly to poultry has spread to a 2nd turkey farm in one of the top turkey-producing counties of Minnesota, state and federal officials said Thursday [2 Apr 2015]. The U.S. Department of Agriculture confirmed the H5N2 strain in a flock of 71 000 turkeys in Stearns County, the Minnesota Board of Animal Health said. That brings the number of Minnesota turkey farms where the strain has been detected to 5, officials said.

Health150420

**B. YELLOW FEVER - AMERICAS (04): ARGENTINA, REQUEST FOR INFORMATION**

A ProMED-mail post
<http://www.promedmail.org>
ProMED-mail is a program of the International Society for Infectious Diseases <http://www.isid.org>

Date: Week 11 (ending Sat 21 Mar 2015)

Reported are 20 suspected yellow fever cases under study and 2 probable cases in Entre Rios province although one has a history of recent yellow faver vaccination. The cases under study are reported from the following provinces: Buenos Aires 5 cases, the Federal Capital 2 cases, Chibut 1 case, Cordoba 1 case, Jujuy 3 cases, San Juan 1 case, Santa Fe 7 cases.

No ill or dead monkeys were reported.

Communicated by
ProMED-mail from HealthMap Alerts
Yellow fever cases in Argentina have been reported rarely, but there have been previous reports of cases in northern Argentina, especially Misiones province. The widely scattered cases reported from 7 provinces would be unusual, if they are confirmed. If these suspected and probable cases are confirmed as yellow fever (YF) virus infections, it would be of interest to know more details such as the specific dates of their infections, the ecological setting in which the YF virus infections were acquired (presumably forest habitats), the sex and age of the individuals and the outcome of the infections. It would also be of interest to know why the recently vaccinated individual became infected; assuming that this probable case becomes laboratory confirmed and is not discarded. A HealthMap/ProMED-mail map of Argentina showing these provinces mentioned can be accessed at http://healthmap.org/promed/p/4. - Mod.TY

SAFETY. A. WASHINGTON - The shrinking space on airplanes is surely uncomfortable, but it might also be dangerous for passengers' health and safety. Planes are filled with more passengers than ever before. Fliers are older and heavier. Flight attendants warn about an increase in air rage, and experts question if having rows of seats packed closer together might make it harder for passengers to evacuate after a crash. A consumer advisory group set up by the Department of Transportation dove into all those issues Tuesday at a public hearing as part of its role to make nonbinding suggestions to government regulators. Charlie Leocha, the consumer representative on the committee, said the government sets standards for the conditions for dogs flying as cargo but doesn't dictate minimum space standards for passengers. "In a world where animals have more rights to space and food than humans," Leocha said, "it is time that the DOT and FAA take a stand for humane treatment of passengers."

Less personal space
Fliers last summer squeezed into the least amount of personal space in the history of flying. In July, U.S. airlines sold a record 87.8 percent of seats on domestic flights, according to the Bureau of Transportation Statics. And that figure does not include all the seats occupied by passengers who redeemed frequent flier miles or airline employees flying for free. Following the implementation of checked-bag fees in 2008, more and more passengers are carrying on bags, fighting for overhead bin space, said Julie Frederick, a representative for the American Airlines flight attendants union. That anger carries over through the flight as passengers bump elbows on armrests and bang their knees against tray tables. She said there are more cases of air rage, many of which go unreported. Questions were also raised if the increased density of seats means passengers won't be able to evacuate fast enough after a crash. The Federal Aviation Administration runs various tests including how fast passengers can evacuate a plane and how fast they can put on a life preserver. But Cynthia Corbertt, a human factors researcher with the FAA, testified that it conducts those tests using planes with 31 inches between each row of seats. Many passenger jets today have less legroom. For instance, United Airlines has 30 inches of room, known as pitch, on some jets; Spirit Airlines offers 28 inches.

Evacuation test
Before any new jet is allowed to fly, the manufacturer must prove that everybody can evacuate in 90 seconds with half of the exits blocked.

Pennsylvania Attorney General Kathleen Kane, who chairs the DOT committee, noted concern that the FAA does not factor in panic, especially parents who might take extra time to ensure their children are safe before evacuating.

"So they aren't the average traveler, quite honestly," Kane said.

On long flights, there is another risk for fliers: deep vein thrombosis, where a blood clot forms, typically in a leg vein. If that clot gets lose and travels into the lungs, it can cause a blockage.

Nimia Reyes, a medical officer with the Centers for Disease Control and Prevention, said that seat size isn't necessarily a factor in people developing the clots or not. The real issue, she said, was how able passengers are to get up, walk around and stretch. Those in window seats have twice the risk of getting deep vein thrombosis than those on the aisle seats.

**More room for sale**

Producing more legroom isn't that simple.

After years of major losses and a wave of bankruptcies, airlines are finally profitable again after adding baggage fees and increasing the number of seats on jets. Last year, U.S. carriers earned more than a combined $11 billion.

Airlines do offer coach passengers more legroom, if they are willing to pay for it - often $50 extra each way. Many travelers aren't.

Keith Hansen, director of government affairs for budget carrier Allegiant Air, said the No. 1 thing vacationers care about is price.

David Berg, a member of the DOT committee and general counsel for the industry's trade and lobbying group, Airlines for America, asked how airlines would respond if the government created a new rule requiring a minimum amount of legroom.

"If airlines are forced to reduce the number of seats," Hansen replied, "inevitably there would be an increase and it would price out part of the traveling public."


**MESSAGE FROM THE CHAIRMAN. A. ASME Engineering Sciences Segment (ESS)**

As the month of March draws to close, this email is sent with an attachment of introduction. Please feel free to forward it to those within your discipline. I write as the Lead of the Engineering Sciences Segment (ESS) Leadership Team, a small group of volunteers who have been positioned to work with the ASME staff in helping create and support the growth of conferences, events and programs that promotes the engineering sciences within the new Technical Events and Content Sector (TEC). Given your leadership role within ASME, I look forward to working with you, and perhaps talking with many of you at the upcoming May 2nd TEC training session being hosted by ASME in Denver.

This first year of the sector reorganization has been quite busy as processes by ASME have been (and are still being) formed. The ESS Team thanks you for continuing to help in the planning of conferences, authoring and reviewing content, and attending ASME events. Please feel free to send us your ideas on workshops, webinars, and or other technical content exchanges to ensure that we exceed expectations in providing value to our members.
Thank you for your continued support!

Rick Cowan
Engineering Sciences Segment Lead
ENV150420
Arnie Feldman

COMMENTS

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Climate and Health: By using the Freedom of Information Act, Chris Horner, of the Competitive Enterprise Institute, obtained an email addressed to “Richard Winsor” the imaginary employee of EPA used by Lisa Jackson as a disguise for receiving and sending email. The particular email in question, dated March 18, 2009, discussed strategic communications and suggested EPA shift its tactics from emphasizing the weakening science of global warming to the fear of pollution, especially air quality, with emphasis on the EPA’s Children’s Health Office. As discussed in the February 7 and February 14 TWTWs, the EPA has done this, making many highly questionable claims about respiratory diseases, such as asthma, even though the causes are not known and the disease may be greatly over-diagnosed, not only in the US but in England as well. TWTW cited research that made the claims dubious, at best.

This week, the Administration announced a major marketing campaign involving the Surgeon General of the US and many government agencies claiming that climate change is a threat to Public Health. One of the featured diseases is asthma, particularly childhood asthma. The effort is led by the US Global Change Research Program (USGCRP), with an enacted budget for fiscal year 2014 of $2.489 billion from various agencies plus an additional $14 million from the State Department and USAID.

The President added a now common personal touch by claiming that his daughter suffers from asthma caused by climate change. Now, instead of claiming the coal-fired power plants cause asthma, the Administration is claiming climate change causes asthma.

The executive summary of the report declares that: “Changes in climate, specifically rising temperatures, increasing precipitation, and increasing atmospheric carbon dioxide, are expected to contribute to increasing levels of some airborne allergens and associated increases in asthma episodes and other allergic illnesses compared to a future without climate change.” The report asserts a high confidence in this finding. [Please note that each page of the report states: “Draft for Public Comment. Do Not Cite or Quote.”]

Humanity evolved beginning about 6 million years, with homo-sapiens appearing about two hundred thousand years ago. For about 2.5 million years the earth has had extreme climate change of ice ages with long periods of glaciation and brief periods of warmth. According to the Administration, humanity, which evolved in the tropics during extreme climate change, is now threatened by climate change and warmth?

According to the announcement by USGCRP, public comments must be submitted by 12:00pm Eastern time, June 8, 2015. To adequately prepare SEPP’s comments, over the next several weeks, TWTW will present certain parts of this document, with comments, for review by its
readership. The goal will not be to prepare an exhaustive rebuttal, but to prepare a 5 to 10 page document refuting of the most salient points. The adequacy or inadequacy of hypothesis testing will be emphasized. See links under Defending the Orthodoxy, Communicating Better to the Public –Use PSYOPs, http://www.globalchange.gov/about/budget, and https://wattsupwiththat.files.wordpress.com/2015/01/march-09-epa-strategy-memo-to-lpj.pdf

**************

**PSYOPs:** Students of Psychological Warfare may recognize the Administration’s tactics as typical psychological operations –PSYOPs. The Department of Defense defines PSYOPs as “planned operations to convey selected information and indicators to foreign audiences to influence the emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals.”

Though practiced for countless generations, PSYOPs came into full flower during World War I, with the belligerents using it both against the enemy and on their own people. In general, when using PSYOPs, propaganda, on their own populations, the Germans ridiculed the allies as incompetent, the allies de-humanized the Germans. In preparing for World War II, Hitler, and others, recognized the allied effort was more effective than the German effort. During World War II, all sides depicted their own populations as heroic and the enemy as sub-human.

During World War I, Edward Bernays was one of the foremost practitioners of PSYOPs for the United States. He wrote the influential *Propaganda*, published in 1928. At the time, propaganda did not have the negative connotations it developed during World War II and afterwards.

Bernays made a fortune advertising for cigarette companies. Later, when the strong evidence became known that cigarette smoking is harmful to health, Bernays dropped these accounts.

There is a legal issue if the US Information and Educational Exchange Act of 1948 (Smith–Mundt Act), which restricts the use of PSYOPs and propaganda on the US population, applies to all agencies of the US, or just the Department of State. Nevertheless, it is important to identify government use of these tactics on the public.

One could argue that propaganda has been common in the global warming/climate change issues. The UN Intergovernmental Panel on Climate Change (IPCC), and the USGCRP, which follows it, have become ever more strident with certainty in their science that humans are the primary cause of global warming/climate change. This certainty is being increasingly questioned as nature refuses to follow the forecasts of an ever-warming globe. Increasingly, natural variation is coming to the fore.

The hockey-stick, which minimized natural variation, and emphasized late 20th century warming is but one example of the stridency, which could be viewed as propaganda or PSYOPs. The personal investigations by members of Congress on the private funding of researchers who express doubt about the official science are another example of PSYOPs, propaganda. So are the unsubstantiated claims that independent scientists questioning the IPCC received funding from tobacco companies, etc. These claims are particularly disturbing when those making such claims are honored by once distinguished scientific institutions. In some small measure, we should be thankful that the Administration has become so blatant in its efforts, allowing PSYOPs and propaganda to be openly discussed in its proper context. See links under Communicating Better to the Public –Use PSYOPs

**************

**Another View of US Health Effects from Climate Change:** In 2012 the Cato Institute released a point-by-point rebuttal to the 2009 report of the USGCRP. Unlike the 2009 USGCRP, the Cato
report contained a chapter on human health. As Patrick Michaels and Chip Knappenberger discuss the key points in that chapter are:

- “The health effects of climate change on the United States are negligible today, and likely to remain so in the future, unless the United States goes into precipitous economic and technological decline.”
- “Death certificate data indicate that 46 percent of all deaths from extreme weather events in the United States from 1993–2006 were from excessive cold, 28 percent were from excessive heat, 10 percent were from hurricanes, 7 percent were from floods, and 4 percent were from tornadoes.”
- “Over the long term, deaths from extreme weather events have declined in the United States.”
- “Deaths in the United States peak in the colder months and are at a minimum in the warmer months.”
- “In U.S. cities, heat-related mortality declines as heat waves become stronger and/or more frequent.”
- “Census data indicate that the migration of Americans from the cold northern areas to the warmer southwest saves about 4,600 lives per year and is responsible for three to seven percent of the gains in life expectancy from 1970-2000.”
- “While the U.S. Global Change Research Program states that “Some diseases transmitted by food, water, and insects are likely to increase,” incidence of these diseases have been reduced by orders of magnitude in the United States over the past century, and show no sign of resurgence.”

To this, SEPP can add that according to the two largest re-insurance companies in the world, monetary losses from extreme weather events are declining, but losses from cold weather in the US are increasing. The Administration needs to be informed that its PSYOPs campaign has already been decimated. Only an update for its new claims is needed. See links under Challenging the Orthodoxy

**************

Convincing a Skeptic: Ron Bailey of Reason Magazine asked: “What Evidence Would Persuade You That Man-Made Climate Change Is Real?” The short answer to that is: if you are referring to carbon-dioxide caused global warming, now called climate change, show a global climate model that has been verified and validated. In spite of the U.S spending over $35 billion on climate science, there are none. Failing that, show a global climate model with significant predictive skill –it forecasts temperatures well. Judith Curry observed that: “there is one climate model that falls within the range of the observational estimates: INMCM4 (Russian).” As Curry notes, others observed that the Russian CMIP-5 model is performing the best with HADCRUT 4 and Berkeley Earth surface temperature data and it “has high inertia from ocean heat capacities, low forcing from CO2 and less water for feedback.”

In different posts Roy Spencer and Christopher Monckton answer Bailey’s question in greater detail. Spencer’s comments are particularly succinct:

“The first problem I have is with his premise: those skeptics believe humans have no role in climate change. I don’t know of any serious skeptics who hold such a view. Now, maybe he is addressing people who deny any human involvement in global warming. His article is vague, and maybe he can clarify his intent for us.

“The second problem I have is with Ron’s list of a variety of evidences of global-average warming, which (again) no skeptic worth their salt disputes. The science dispute is over how much of the warming is manmade versus natural. Like too many others, Ron conflates climate change with human-caused climate change, which is not the same thing.
“Regarding his list, he seems to believe they are independent evidences of manmade warming. Wrong. To the extent warming occurs, even if it is entirely natural, warming would occur in the atmosphere and deep ocean; it would cause an increase in atmospheric water vapor, as well as precipitation; the warming would be stronger in the upper troposphere than the lower troposphere; and stronger over land than over the ocean. 

“These things would all occur together anyway, no matter the cause of the warming, Ron. And causation is, indeed, the question which science so far cannot answer. 

“Since climate models cannot even hindcast what has happened (let alone forecast), they clearly have no handle on multi-decadal temperature changes brought about by natural effects. There does not even need to be any forcing —e.g. the sun, volcanoes, etc. — in order for climate to change because the ocean-atmosphere system is nonlinear and dynamical — in a word, chaotic. It can change all by itself. For example, [in] this plot we see that global warming (and cooling) has been the rule, not the exception, for the last 2,000 years.” [Plot given in post.] 

“Significantly, that warming occurred during the period when climate modelers developed their models, and since they assumed all warming was manmade, they had to increase the models’ sensitivity. Now, they are between a rock and a hard place, continuing to publish overly-sensitive models they know are wrong (based upon both surface AND deep ocean warming rates).”

Spencer’s point that a list of the consequences of global warming is not evidence of cause is particularly salient. Repeatedly, there are studies of the projections from climate models being given as evidence. Yet, projections from climate models, which have not been validated, are little more than sophisticated speculation and are categorized in TWTW under the heading Un-Science or Non-Science?

Spencer’s point of the models being developed during a time of warming, which was assumed to be man-made, and now overestimate warming is crucial. The failure of government to fund natural causes of recent warming and cooling is becoming apparent and its interpretation of climate science is biased.


***************

Acidic Waters? There were several recent articles on the mass extinction that occurred about 252 million years ago. Most discussions attributed the extinction to enormous volcanic activity, particularly the region of north-central Russia called the Siberian Traps. For example, Ian Plimer’s heaven+earth states the eruption may have released sufficient sulfur dioxide to cause intensely acidic rain and perhaps cause the ocean surfaces to become acidic for a brief time. A recent paper published in Science attributes the lowering of pH to carbon dioxide(CO2). However, the abstract does not explain how the technique used to measure pH can separate if the cause of the lowering is due to carbon dioxide (carbolic acid) or due to sulfuric acid. Those claiming that carbon dioxide emissions will cause acidic waters will support the CO2 explanation, even though sulfuric acid is far stronger than carbolic acid.

TWTW reader Clyde Spencer writes: “I question whether a highly-buffered alkaline solution (sea water) can dissolve enough CO2 to truly become acidic. From reading in my college oceanography text, it appears that even in hydrogen sulfide-rich waters in ‘dead’ zones, sea water rarely even gets as low as pH 7 [neutral]. Club Soda, which is un-buffered and saturated with CO2, has a pH of about 5. That is probably the lowest fresh water can get with only carbonic acid present.”
Decaying vegetation can cause freshwater bodies to reach significant acid levels, far below 7 (neutral). For example, Okefenokee is a southern black water swamp (or bog) stretching from southern Georgia to northern Florida. It has a measured pH between 3.5 and 3.9. Yet it supports plant and animal communities including insects, fishes, birds, turtles and alligators. None are unique to the swamp. It also supports smaller creatures such as crustaceans. Before jumping to conclusions about the acidic effects of carbon dioxide, the research must be explored further. See links under Changing Earth --Acidic Water sand

Lowering Standards: The American Physical Society(APS) is revisiting its policy statement on global warming. The draft statement reads:

On Climate Change:
Earth’s changing climate is a critical issue that poses the risk of significant disruption around the globe. While natural sources of climate variability are significant, multiple lines of evidence indicate that human influences have had an increasingly dominant effect on the climate warming observed since the mid-twentieth century. Although the magnitudes of future effects are uncertain, human influences on the climate are growing. The potential consequences of climate change are great and the policies of the next few decades will determine human influences on the climate for centuries.

On Climate Science:
As summarized in the 2013 report of the Intergovernmental Panel on Climate Change (IPCC), there continues to be significant progress in climate science. In particular, the connection between rising concentrations of atmospheric greenhouse gases and the increased warming of the global climate system is more certain than ever. Nevertheless, as recognized by Working Group 1 of the IPCC, scientific challenges remain to our abilities to observe, interpret, and project climate changes. To better inform societal choices, the APS urges sustained research in climate science.

On Climate Action:
The APS reiterates its 2007 call to support actions that will reduce the emissions, and ultimately the concentration, of greenhouse gases, as well as increase the resilience of society to a changing climate. Because physics and its techniques are fundamental elements of climate science, the APS further urges physicists to collaborate with colleagues across disciplines in climate research and to contribute to the public dialogue.

Some had hoped that the APS would consider recent research suggesting natural influences play an important role in climate change, but the bureaucracy is too entrenched. What it defines as “significant progress in climate science” is anyone’s guess. Steve Koonin’s participation in an APS workshop gives rise, for some hope beyond the bureaucratic science. But to no avail. Writing in Climate Etc., Koonin points out the human (anthropogenic) influence is very small compared with the natural influences on climate, which are many times larger. See links under Challenging the Orthodoxy.

Number of the Week: 13. There are 13 federal government entities identified as taking part in the US Global Change Research Program and the president’s new PSYOPs offensive. The government entities are: Departments of Agriculture; Commerce; Defense; Energy; Health and Human Services; Interior; State; Transportation; plus EPA, NASA, NSF, Smithsonian Institution and USAID. http://www.globalchange.gov/agencies
http://www.sepp.org/the-week-that-was.cfm

B. IDIOTIC CLAIM FROM WH SCIENCE ADVISOR JOHN HOLDREN: ‘FINALLY, LESS ENERGY CAN MEAN MORE EMPLOYMENT.’

The Magical Power of the Kilowatt-Hour Guest essay by Tom Scott

The typical follower of this blog is likely more knowledgeable in math and the sciences than the average reader, so many of you will find the following quite obvious on an intellectual level, but the facts below may still stimulate a new awareness of…

http://wattsupwiththat.com/2015/04/04/the-magical-power-of-the-kilowatt-hour/

C. AND HERE WE HAVE BEEN TOLD IT’S ‘CLIMATE DISRUPTION’ CAUSING LOCAL WEATHER CHANGES, WHEN IT’S ACTUALLY DEFORESTATION

From the University of Maryland the department of Al Gore’s Kilimanjaro claims: Deforestation is messing with our weather — and our food

New study, the first of its kind, investigates cooling and warming effects of forests at both a global scale and a high spatial resolution

Annapolis, Md — New research published today in Nature…

http://wattsupwiththat.com/2015/04/03/and-here-we-have-been-told-its-climate-disruption-causing-local-weather-changes-when-its-actually-deforestation/

D. MARCH 2015 ENSO UPDATE – WILL THE 2014/15 EL NIÑO BECOME THE 2014/15/16 EL NIÑO?

Guest Post by Bob Tisdale

This post provides an update of many of the ENSO-related variables we presented as part of the 2014-15 El Niño Series. The reference years for comparison graphs in this post are 2009 and 2014, which are the development years of the last two El Niños. I have not included animations…


E. EARTH INSTITUTE: “JAPAN SHOULD USE NUCLEAR POWER”

Guest essay by Eric Worrall

Jeffrey Sachs, director of The Earth Institute at Columbia University, has stated in an interview with Ryuichi Otsuka, a news researcher for the prominent Japanese news provider Yomiuri Shimbun, that Nuclear Power is an essential part of the solution to climate change. According to Sachs; Q: Nuclear power has various…

http://wattsupwiththat.com/2015/04/06/earth-institute-japan-should-use-nuclear-power/

F. AGREEING TO DISAGREE

Guest Post by Willis Eschenbach

Over at “Digging in the Clay” Verity Jones has an excellent graphic summarizing the different levels of disagreement. The graphic deserves wider
circulation. The types of disagreement range in a spectrum from the strongest, refuting the author’s central point, all the way down to the weakest, name-calling. Here’s the graphic:

http://wattsupwiththat.com/2015/04/05/agreeing-to-disagree/

G. PERVERSE CLIMATE “MORALITY”
Current climate policies mean energy deprivation, poverty, disease and death for billions Guest essay by Paul Driessen You’ve got to admit, liberal are masters at describing every initiative they launch as “the moral thing to do.” Their campaign for draconian energy regulations and a new global warming treaty is no exception. Protecting people, wildlife and…

http://wattsupwiththat.com/2015/04/05/perverse-climate-morality/

H. A REPLY TO BORN: HOW TO REPRESENT TEMPERATURE FEEDBACKS IN A SIMPLE MODEL
By Christopher Monckton of Brenchley, David Legates, Willie Soon and Matt Briggs Mr. Born has had another go at our paper, Why models run hot, published in January 2015 (PDF here) in the Science Bulletin of the Chinese Academy of Sciences. Go to scibull.com, click on “most read articles”. And ours is the all-time no.…

http://wattsupwiththat.com/2015/04/05/a-reply-to-born-how-to-represent-temperature-feedbacks-in-a-simple-model/

I. DO BIOFUEL POLICIES SEEK TO CUT EMISSIONS BY CUTTING FOOD?
Date: March 27, 2015
Source: Princeton University
Summary: A new study found that government biofuel policies rely on reductions in food consumption to generate greenhouse gas savings.

http://www.sciencedaily.com/releases/2015/03/150327201710.htm
Judith Curry

J. HAS RENEWABLE ENERGY FINALLY ENDED THE GREAT CLEAN ENERGY STAGNATION?GUEST OPINION:
Fossil fuels have generated roughly two-thirds of the world’s electricity for the past three and a half decades. Despite the expansion of nuclear power in the 1980s and recent year-after-year of “historic” growth in renewable energy, increasing supplies of low-carbon electricity have barely kept pace with the growth in global demand for electricity. As a result, the share of the global electricity mix provided by coal, gas, and oil has been remarkably constant over that time. Fossil fuels provided about 70 percent of global electricity in 1980, 62 percent in 1990, 64 percent in 2000 and 65 percent in 2010.

http://theenergycollective.com/jessejenkins/2213301/has-renewable-energy-finally-ended-great-clean-energy-stagnation

K. CLIMATE SENSITIVITY: RINGBERG EDITION
Posted on April 5, 2015 | 185 comments
L. TOTAL COULD BUILD $1.7B PORT ARTHUR PLANT

By Eric Besson

Updated 10:23 am, Monday, April 6, 2015

Total Petrochemicals is exploring construction of a $1.7 billion standalone petrochemical plant at its Port Arthur facility, which produces a base ingredient in plastics from natural gas, a company official confirmed.

If Total were to move forward with plans to build a new ethane cracker, it would mean 3,500 construction jobs and 45 full-time jobs at Total's Port Arthur complex, according to Total's state permit applications.

Jefferson County officials and company executives are negotiating potential tax breaks for the investment, a county official said.

Total spokeswoman Tricia Fuller stopped short of a public commitment to the project. She said the state permit filings are part of the company's process of evaluating the potential for expansion and that nothing has been finalized.

"It is something that's under consideration," Fuller said. "Given the length of the time of the permitting process, we elected to file some applications and begin some work toward Port Arthur as a potential (location) for an ethane cracker."

Total's proposal would generate about 1 million metric tons of ethylene per year through the ethane cracker, a large unit that separates the chemical from the natural gas liquid ethane. The ethylene, a building block for plastics used in goods like athletic shoes or automotive belts, is sent to buyers through pipelines.

In permit filings with the Texas Commission on Environmental Quality, the cracker is classified as a new chemical plant, but it aligns with long-running production at the complex, which is jointly owned by Total Petrochemical and BASF Corporation. Total is the chief sponsor of the new project.

Total converted an existing cracker at the petrochemical plant to feed on natural gas in 2013 and expanded it one year later. Previously, the $1.5 billion unit processed naphtha, a by-product of liquid petroleum. Now, it can process oil or gas.

Like many Southeast Texas industrial projects, demand for a new ethane cracker is driven by rising supply of shale gas unlocked by a drilling technique called fracking. Long before fracking drove down the price of crude oil, it cheapened natural gas, giving a boost to petrochemical plants that use gas as a feedstock, with many expanding their systems to take in more.

Gas-fed ethane crackers have been in vogue nationwide, though slumping oil prices have reduced the price margin between the two feedstocks and have delayed projects.

Total's considered project could nearly double the current 1 million ton per year capacity.

The petrochemical plant, which says it employs 250 workers on a $44 million payroll, first filed for permits last summer and had its property tax break pushed forward by Jefferson County Commissioners Court March 23.

Total and BASF are still hammering out the details of a tax abatement plan with county officials, said Fred Jackson, assistant to County Judge Jeff Branick. Once the two sides reach an agreement, with the amount of tax breaks offered largely based on overall investment and full-time job creation, county commissioners will hold a public hearing and vote, Jackson said.
Company officials have told county administrators that Total would invest about $1.6 billion in the project and that BASF would contribute an additional $130 million to their portion of the project, Jackson said.
The project would slot in at the existing chemical plant, which is next door to Total's 174,000-barrel-per-day crude oil refinery. Total in 2011 completed a conversion project to allow the refinery to handle heavier crude oil, a move that many Gulf Coast refineries made as the crude type runs south from Canada and northern U.S. shale plays by rail and pipeline.
Roger Zygmunt

M. LATEST GLOBAL TEMP. ANOMALY (MAR. '15: +0.26°C)
ANSWERING RON BAILEY’S QUESTION: “WHAT EVIDENCE WOULD PERSUADE YOU THAT MAN-MADE CLIMATE CHANGE IS REAL?”
April 6th, 2015
I just found out that Ron Bailey at Reason.com published an article a few days ago entitled, “What Evidence Would Persuade You That Man-Made Climate Change Is Real?”

N. THE SUN EXPERIENCES SEASONAL CHANGES, NEW RESEARCH FINDS
Quasi-an Anthony Watts / 4 hours ago April 7, 2015
Quasi-annual variations may hold clues to space weather From the National Center for Atmospheric Research/University Corporation for Atmospheric Research BOULDER -The Sun undergoes a type of seasonal variability with its activity waxing and waning over the course of nearly two years, according to a new study by a team of researchers led by the National... http://wattsupwiththat.com/2015/04/07/the-sun-experiences-seasonal-changes-new-research-finds/

O. CLAIM: WESTERN CANADA TO LOSE 70 PERCENT OF GLACIERS BY 2100
From the University of British Columbia Seventy per cent of glacier ice in British Columbia and Alberta could disappear by the end of the 21st century, creating major problems for local ecosystems, power supplies, and water quality, according to a new study by University of British Columbia researchers. The study found that while warming temperatures… http://wattsupwiththat.com/2015/04/07/claim-western-canada-to-lose-70-percent-of-glaciers-by-2100/

P. WHITE HOUSE: CLIMATE CHANGE CAUSES MORE ASTHMA
Guest essay by Eric Worrall
President Obama has announced a new initiative to tackle climate change, in the name of helping people with asthma. According to AP; Warning of the perils to the planet has gotten the president only so far; polls consistently show the public is skeptical that the steps Obama has taken to…

http://wattsupwiththat.com/2015/04/07/white-house-climate-change-causes-more-asthma/
Don Shaw

**Q. UAH GLOBAL TEMPERATURE REPORT: MARCH 2015 – DOWN SLIGHTLY**
The Version 5.6 global average lower tropospheric temperature (LT) anomaly for March, 2015 is +0.26 deg. C, down a little from the February, 2015 value of +0.30 deg. C (click for full size version): The global, hemispheric, and tropical LT anomalies from the 30-year (1981-2010) average for the last 15 months are: YR MON GLOBAL…


**R. DRAFT APS STATEMENT ON CLIMATE CHANGE**
Posted on April 7, 2015 | 118 comments
by Judith Curry
The American Physical Society has released its draft Statement on Climate Change to the APS membership.
http://judithcurry.com/2015/04/07/draft-aps-statement-on-climate-change/#more-18323

**S. CLIMATE SENSITIVITY: RINGBERG EDITION**
Posted on April 5, 2015 | 253 comments
by Judith Curry
Presentations are now available from the WCRP Workshop on Earth’s Climate Sensitivity.
http://judithcurry.com/2015/04/05/climate-sensitivity-ringberg-edition/#more-18305

**T. SHELL FILES LAWSUIT AGAINST ARCTIC DRILLING PROTESTERS**
WASHINGTON — Shell filed a lawsuit in federal court Tuesday seeking to kick six Greenpeace activists off one of its chosen Arctic drilling rigs and block the advocacy group from boarding more of its vessels.
The complaint, lodged in a federal district court in Alaska, comes one day after the activists grappled their way onto Shell’s contracted Polar Pioneer drillship while it traveled across the Pacific Ocean toward the United States.
Read more: Arctic activists scale Shell-contracted rig
Armed with food, hammocks, sleeping bags and other supplies, the protesters could remain camped out on the rig for days — using tweets, videos and pictures from the exercise to bolster a campaign against Shell’s plans to drill new wells in the Chukchi Sea north of Alaska this summer.
“The message is getting out there,” Greenpeace activists said on a website documenting the protest. “Shell’s oil rig should not be allowed anywhere near Arctic waters; it’s the wrong
choice in the face of climate change, and an oil spill disaster waiting to happen. And we won’t let Shell silently slip into the Arctic.”
Greenpeace has said that the six protesters will not interfere with the navigation or operation of the rig and the heavy-lift vessel Blue Marlin that is carrying it across the Pacific Ocean.
But Shell spokeswoman Kelly op de Weegh insisted that “these acts are far from peaceful demonstrations.”
“Boarding a moving vessel on the high seas is extremely dangerous and jeopardizes the safety of all concerned, including both the people working aboard and the protesters themselves,” op de Weegh said. “While we recognize the right to voice an objection to our planned Alaska exploration program, we can’t condone Greenpeace’s unlawful and unsafe tactics.”
Greenpeace USA’s executive director, Annie Leonard, called the lawsuit “Shell’s latest attempt to keep people from standing up for the Arctic.”
“We know Shell can’t be trusted to drill in the Arctic; three years ago, the company nearly caused a major accident in Alaska, and this year it wants to go back and try again,” Leonard said. “Shell knows that if the government won’t stop it, then people around the world will raise their voices in protest. That’s why it’s hired an expensive army of lawyers and a PR team to keep what its doing secret.”
Greenpeace’s ship, Esperanza, has been trailing the Polar Pioneer for more than 20 days, after the rig left Malaysia in early March. The Polar Pioneer and Shell’s other contracted Arctic drillship, the Noble Discoverer, are both destined for ports in Washington, where they will make final preparations for the company’s planned drilling campaign this summer.
Shell won a similar court order in 2012 to keep protesters from encroaching on its rigs and support vessels, months after activists spent four days atop the derrick of the Noble Discoverer.
Read more: Shell wins court order against Greenpeace
Shell later asked the court to voluntarily dismiss the 2012 litigation after its Kulluk drilling unit ran aground on an Alaskan island and it became clear it would be awhile before the company resumed Arctic drilling operations.
The new lawsuit asks for an immediate injunction to protect Shell’s maritime vessels and other assets associated with its Arctic drilling campaign from “unlawful and unsafe interference by Greenpeace” while they are in transit to the Pacific Northwest, in port, traveling to the company’s oil and gas leases in the Chukchi Sea and conducting drilling operations north of Alaska.
In the petition, Shell says the six Greenpeace activists — including one from the United States — “willfully, recklessly and illegally … boarded the Blue Marlin on the high seas approximately 750 miles northwest of Hawaii and thereafter scaled and now illegally occupy the Polar Pioneer.” The actions showed “a callous disregard for the rights and safety of themselves and of others,” Shell says.
Shell notes that two Greenpeace members were injured when the Spanish Navy intercepted them last year near the Repsol oil ship Rowan Renaissance in a separate action.
Shell also describes the history of some of the activists now on board the Polar Pioneer, who hail from six different countries. The U.S. volunteer has reportedly been arrested at least twice in prior Greenpeace actions, Shell notes. And Shell says, John Smith, a 31-year-old from New Zealand, is a “self-identified contract climber and undercover ninja.”
The company tells the court that if Greenpeace’s activities are left unsanctioned, they will cause “irreparable harm” and monetary damages by delaying or preventing Shell from transporting its
vessels, supplies and personnel to the Chukchi Sea for planned oil drilling during a few ice-free
months this summer.
“Greenpeace is well aware that even short delays in the Arctic can stop exploration for the
season,” Shell says in its lawsuit, “and has used that tactic successfully against other companies.”
Houston Chronicle

U. KICK THE ETHANOL HABIT
Imagine a government energy program that is such a disaster that the Environmental Working
Group and the American Petroleum Institute both oppose it. The anti-poverty group ActionAid
USA wants to get rid of it, as does the pro-business Competitive Enterprise Institute. Sen. Dianne
Feinstein, D-Calif., wants to end it. So does Sen. Pat Toomey, R-Pa. They're both sponsors of the
Corn-Ethanol Mandate Elimination Act of 2015.
Feinstein pans the ethanol mandate as "both unwise and unworkable." Quoth Toomey: "It drives
up gas prices, increases food costs, damages car engines and is harmful to the environment."
Scott Faber of the Environmental Working Group told me the Environmental Protection Agency
"shows corn ethanol is worse for the environment than gasoline." The free-market Manhattan
Institute's Robert Bryce believes the Renewable Fuel Standard costs American families $10
billion annually in higher fuel prices. But will Congress vote to kill the program? And if so, will
President Obama, a longtime ethanol booster, sign the bill?
The Renewable Fuel Standard started off with the best of intentions: to reduce greenhouse gas
emissions and promote American energy independence. It morphed into a victim of its own
success. Some 40 percent of the U.S. corn crop now goes into American gas tanks, which has
driven up the cost of feed for livestock, as well as food prices for American families. In 2013,
PricewaterhouseCoopers figured the standard pushed up food prices at chain restaurants by $3.1
billion per year. Because the standard requires refiners to purchase increasing volumes of
ethanol, production increased from 3.9 billion gallons in 2005 to 13.9 billion gallons in 2011,
according to the Manhattan Institute. At the same time, gasoline consumption is down 12 percent
from 2015 projections. The industry is up against the "blend wall." When blends contain more
than 10 percent of ethanol, some automotive engines break down.
Looks like a slam dunk, but ...
Add up the many groups that oppose the ethanol mandate and you would think the Feinstein-
Toomey bill is a slam dunk. But there may be one state more powerful than ranchers, consumers,
environmentalists and capitalists: Iowa. As the host of the first-in-the-nation presidential caucus,
Iowa has a supersize presence in U.S. politics. Iowa's GOP Gov. Terry Branstad has a pithy
warning for self-styled, free-market GOP hopefuls: "Don't mess with the RFS."
Good for farmers, refiners
For his part, environmentalist Faber believes Capitol Hill can kick its ethanol habit this year.
Even the ethanol lobby is looking to Washington to reform renewable-fuel standards. The
Houston Chronicle's Jennifer A. Dlouhy has reported on the Advanced Biofuels Association's
decision to back an overhaul of the renewal-fuel standard that would accommodate the
production of more advanced biofuels. "Their industry will go the way of the butter churn unless Congress changes the RFS," Faber crowed.

While Iowa will tempt hopefuls to support a bad policy, New Hampshire follows Iowa, South Carolina follows New Hampshire and Nevada follows South Carolina. These states include meat and poultry producers that have had to pay higher feed prices, and consumers who have seen grocery bills rise.

Bryce's paper "The Hidden Corn Ethanol Tax" is more cynical. He has reported on how the mandate has lowered fuel efficiency, damaged small engines, promoted harmful land use and driven up food prices. It's good for corn farmers and ethanol refiners, but bad for most everyone else. "Do I think the corn ethanol scam, the mandate, will be repealed?" Bryce mused. "I doubt it. "I wish it were so, but after a decade of watching this, I can't get any more cynical about it," Bryce continued. "Where are the free-market Republicans?" They seem to melt into the Iowa corn fields.

Senators hear from ethanol boosters, but they don't hear as much from the ordinary people who pay the freight for this destructive mandate. They should.

Houston Chronicle

V. FIFTH CIRCUIT HOLDS EPA RESPONSE TO CWA PETITION REVIEWABLE UNDER HIGH DEGREE OF DEFERENCE - WATER QUALITY ISSUES

On April 7, 2015, the Court of Appeals for the Fifth Circuit held in *Gulf Restoration Network et al. v. McCarthy* that EPA’s denial of a petition requesting the adoption of water quality standards under the Clean Water Act ("CWA") was reviewable agency action. However, EPA may decline to make the determination of whether the water quality standards are “necessary” “if it provides an adequate explanation, grounded in the statute, for why it has elected not to do so.” EPA’s decision is subject to a “highly deferential standard of review.”

A group of environmental organizations petitioned EPA to use its powers under the CWA to adopt standards to address nitrogen and phosphorous pollution in the Mississippi River Basin.

First, the Fifth Circuit found that declining to adopt the water quality standards was akin to a denial of a rulemaking petition rather than a nonenforcement decision, because EPA did not have to find that the states had done anything wrong in delegated programs in order to determine that federal standards are “necessary to meet the requirements of [the CWA].” 33 U.S.C. § 1313(c)(4)(B). EPA could refuse, however, to make the necessity determination. Drawing on the U.S. Supreme Court’s decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Fifth Circuit held that there must be a “close and specific linkage between the decision not to make a threshold determination and the statutory provisions.” Alternative policy grounds that do not have clear textual support are insufficient.

Finally, the Fifth Circuit remanded the case to the district court to determine if EPA’s denial of the petition meets this test by providing “some reasonable explanation” grounded in the statute.
The district court must apply the arbitrary and capricious standard of review under the Administrative Procedure Act, and, as with the denial of a rulemaking petition, the review should be “extremely limited” and “highly deferential.”
A copy of the opinion in *Gulf Restoration Network et al. v. McCarthy*, No. 13-31214 (5th Circuit, April 7, 2015) is attached.
Roger Zygmunt
ENV150420-2

**W. HOW TO CONVINCE A CLIMATE SKEPTIC HE’S WRONG**
By Christopher Monckton of Brenchley “What Evidence,” asks Ronald Bailey’s headline (www.reason.com, April 3, 2015), “Would Convince You That Man-Made Climate Change Is Real?” The answer: a rational, scientific case rooted in established theory and data would convince me that manmade climate change is a problem. That it is real is not in doubt, for…

**X. THE DIRTY SECRET OF OBAMA’S CARBON PLAN**
Taking one-third of U.S. coal-fired power plants off the grid by 2020 simply isn’t workable. Here’s why.
By
Warner Baxter
April 12, 2015 5:50 p.m. ET
Americans don’t give much thought to whether their electricity will be there when they need it. You flip a switch, the lights go on. Your phone charges up. The medical equipment in the emergency room does its job. Yet electric reliability, long a bedrock of this country’s prosperity and high standard of living, does not come as easily as its steady presence might suggest.
The Environmental Protection Agency’s Clean Power Plan, a proposed regulation limiting carbon emissions from existing coal-fired plants, threatens to jeopardize the reliability that Americans and businesses have come to depend upon. The EPA proposal calls for states to cut emissions by 30% from 2005 levels by 2030. It also imposes aggressive interim targets starting in 2020 that will test states’ ability to meet these standards without disrupting service. For example, 39 states must achieve more than 50% of their final target by 2020.
Reliable power requires decades of careful planning. The appropriate amount and type of round-the-clock generation capacity, transmission and distribution lines must be finely balanced in advance to ensure the lights go on when a switch is flipped anywhere in the U.S. The EPA plan will significantly impair that planning process.
The EPA’s proposal is causing concern among those who provide electricity for a living. The Federal Energy Regulatory Commission held an event in St. Louis on March 31, the last in a series of conferences on the implications of the plan. The North American Electric Reliability Corp., a nonprofit oversight group, has said the EPA plan could constitute “a significant reliability challenge, given the constrained time period for implementation.”
These concerns are driven in large part by the planned retirement, mostly thanks to the EPA’s carbon plan, of about one-third of America’s coal-fired power plants by 2020. This represents enough generating capacity to supply the residential electricity of about 57 million Americans. That’s a lot of power being taken off the grid in a very short period.

It takes years to site, permit and construct replacement power plants, and EPA’s compliance timeline does not account for this reality. For example, if a new gas-fired power plant must be built to meet the EPA’s 2020 interim target, all permitting and development would need to be completed by 2017. But that is impossible because state compliance plans might not even be submitted to the EPA until 2017 or 2018, and the agency has said it may take up to a year to approve them.

Beyond that, opening new natural-gas plants, as well as operating existing plants at higher levels, will require new pipeline infrastructure, and building natural-gas pipelines often takes five years or longer. More transmission lines will likely be needed to connect the new capacity to the grid. These projects can take 5-15 years. The point is that the 2020 interim targets are simply not achievable.

Like many utilities, my company, Ameren, has spent years developing a plan that achieves substantial carbon reductions without straining the grid or needlessly raising rates. With millions of people in Missouri and Illinois relying on us for safe, reliable and reasonably priced energy, we have to find responsible, practical ways to transition to a cleaner and more diverse portfolio. Our 20-year plan involves adopting a mix of coal, nuclear, natural gas and renewables, while improving energy efficiency, and reaches the EPA goal only five years later than the current plan—and at a staggering cost savings of $4 billion for our Missouri customers, according to company estimates.

A few solutions would significantly reduce the reliability and cost risks of the EPA’s proposed plan. A critical first step is that the EPA must replace its aggressive interim targets with a process that allows states to set their own paths toward the final goals. Each state should be allowed to tailor its compliance plan to local circumstances, balancing unique factors such as cost, fuel diversity and environmental benefits. In exchange for this flexibility, enhanced interim reporting requirements would help the EPA monitor the progress while providing a more accurate idea of the work under way—and challenges involved—in achieving the targets.

Beyond that, two safeguards should be added to the plan. First, it should include a mechanism to deal with reliability issues before a state’s plan is implemented. Such a mechanism would require the Federal Energy Regulatory Commission to examine the effects of state-submitted plans on regional reliability. If issues are identified, the state should be allowed to resubmit a revised plan and potentially adjust its targets to maintain reliability.

Second, the EPA should incorporate a reliability safety valve that would operate throughout the compliance period if unforeseen events—such as tornadoes destroying a wind farm or extreme cold weather—require coal plants to operate at unanticipated levels. Owners of these coal plants need assurance that they will never be penalized for keeping the lights on.
Neither fallback measure is a substitute for addressing the EPA’s interim targets. While the EPA’s desire to reduce carbon emissions is understandable, doing so should not jeopardize reliability or unnecessarily threaten the affordability of the national electricity supply. There are better ways to achieve much the same end, and the agency should pursue a more reasonable course on carbon policy.

*Mr. Baxter is chairman, president and CEO of St. Louis-based Ameren Corp.*

Regards
George

**Note:** There will be no Newsletter next week I am attending the AAEES meeting.