

# **ENVIRONMENTAL ENGINEERING**

## **NEWSLETTER**

### **10 NOV. 2014**

*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. TCEQ APPROVES FINES TOTALING \$775,800**

*Penalty of \$400,000 assessed against Shell Chemical LP, Harris County*

FOR IMMEDIATE RELEASE

Wednesday, Oct. 22, 2014

Media Contact: Lisa Wheeler Phone: 512-239-5003 / Pager: 512-606-3681

The Texas Commission on Environmental Quality today approved penalties totaling \$775,800 against 31 regulated entities for violations of state environmental regulations.

Agreed orders were issued for the following enforcement categories: two agricultural, seven air quality, one Edwards Aquifer, one industrial or hazardous waste, one multimedia, four municipal solid waste, three municipal waste discharge, two petroleum storage tank, six public water system, and one water quality.

Default orders were issued in the following categories: one multimedia, and one petroleum storage tank.

There was one petroleum storage tank enforcement default and shutdown order.

Included in the total is a fine of \$400,000 against Shell Chemical LP, in Harris County, for air quality violations stemming from emission events that began on Jan. 10 and ending 12, 2013. Of that amount, \$200,000 will be used by the Houston Regional Monitoring Corporation, for its air monitoring project.

Roger Zygmunt

#### **B. KEYSTONE XL OIL PIPELINE OWNER WINS CLIMATE LEADERSHIP AWARD**

WASHINGTON -- The company that wants to build the Keystone XL pipeline was recognized this week for leadership on climate change -- to the shock of environmental activists.

Alberta-based TransCanada, which has been seeking permission to build the 1,660-mile pipeline from Canada's oil sands to refineries in Texas, was included as a corporate climate leader on the Carbon Disclosure Project's [Climate Performance Leadership Index 2014](#). The Carbon Disclosure Project, or CDP, is a United Kingdom-based nonprofit that works with companies to tally and report their greenhouse gas emissions. TransCanada was one of five energy sector companies included on the "A List" in this year's report.

The report notes that the company has set targets for emission reductions, and includes a quote from TransCanada: "Our business strategy is informed by the risks and opportunities from climate change regulations, physical climate parameters and other climate-related developments such as uncertainty in social drivers ... we anticipate that most of our facilities will be subject to future regulations to manage industrial [greenhouse gas] emissions."

[http://www.huffingtonpost.com/2014/10/17/keystone-xl-climate-transcanada\\_n\\_6005898.html](http://www.huffingtonpost.com/2014/10/17/keystone-xl-climate-transcanada_n_6005898.html)

## **COMMENTS:**

### **A. THE WEEK THAT WAS: 2014-11-1 (NOV. 1 2014)\*\***

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

**IPCC Synthesis Report:** On November 2, the UN Intergovernmental Panel on Climate Change (IPCC) is scheduled to release its report synthesizing three separate assessment reports (ARs) into a coherent whole. The three reports are Climate Change: The Physical Science (2013); Impacts, Adaption, and Vulnerability (2014); and Mitigation of Climate Change (2014). It is easier speculating what the synthesis report will not contain, rather than speculating what it will contain. Above all, the synthesis report will not be an accurate representation of the science, but a defense of the political positions of the respective countries –bureaucratic science, at best. The synthesis report will not discuss the failure of the IPCC and the climate establishment to advance understanding of the sensitivity of the earth to a doubling of carbon dioxide (CO<sub>2</sub>), which is called climate sensitivity. The 2013 estimate was 1.5 –4.5°C. This is the same estimate as given in a 1979 report to the US National Academy of Science by a special group under MIT meteorologist Jule Charney. As discussed in the October 18 TWTW, the inability to narrow this estimate demonstrates a lack of progress in the climate science embodied by the IPCC and its adherents such as the US National Climate Assessment produced by the US Global Change Research Program.

There will be little or no systematic discussion of the failure of the climate models, relied on by the IPCC, to predict the lack of 21st century warming. There will be little or no systematic discussion of the 40 some latter-day explanations of the lack of warming. Some of these explanations are inconsistent with other explanations, and many embody natural causes, which according to the IPCC Summary for Policymakers, should have been considered in the original reports.

In the synthesis report, there will be little or no systematic discussion of the possibility that the low-end of the estimated range of climate sensitivity is far too high. More importantly, there will be little or no systematic discussion of the possibility that the high-end of the estimated range of climate sensitivity is far, far too high. Without the high-end estimates, there is no logical justification for extensive studies on impacts, adaption, vulnerability; and mitigation of climate change. Such studies include emotional issues such as species extinction and dramatic sea level rise, upon which a large part of the climate establishment justifies its existence.

What we can expect is a muddling through –the IPCC ignoring the mounting evidence that its proclamations about certainty are wrong, and that the earth is simply not very sensitive to increasing greenhouse gas emissions. The effort will keep the bureaucrats and their political supporters satisfied, as the general populace becomes increasingly aware that there is something seriously wrong with climate science and with the entities that support it. See links under Challenging the Orthodoxy, Defending the Orthodoxy, and Questioning the Orthodoxy.

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**EU Agreement to 2030:** With a few notable exceptions, there seems to be no limit to the number of Western politicians who are willing to lead their countries into energy poverty, provided other politicians are willing to do the same.

Last week, the politicians of the European Union reached an agreement on carbon dioxide emissions to the year 2030, with some uncertainty. The major components of this agreement include: 1) cutting carbon emissions by at least 40% by 2030 compared with 1990 levels, which will be legally binding on every member state; 2) that the share of renewables such as wind and solar in the EU's energy mix will be raised to 27% compared with 1990 levels, and 3) a 27% improvement in energy efficiency.

It is not clear how some of these provisions will be enforced and if the provisions survive if the UN IPCC does not pass a major resolution acceptable by all parties at the December 2015 climate summit in Paris. Germany and the Nordic countries demanded stringent enforcement provisions. Poland, holding the presidency of the European Council, and other central European countries resisted. These countries received promises of financial assistance to meet various targets of energy efficiency. It remains to be seen how the details will work out. See Article # 1 and links under Questioning the Orthodoxy and Problems in the Orthodoxy.

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**UK Anniversary:** This year marks the sixth anniversary the UK Parliament passed the Climate Change Act, with only 5 members of Parliament voting against. It is increasing evident that the Act is becoming a burden on the citizens of the UK, as the science of global warming/climate change is imploding. As stated by Nick Butler, those who voted for the Act embraced several beliefs which are not true:

- \* Fossil fuel prices would rise inexorably as global demand exceeded supply;
- \* Europe could gain a material competitive advantage by being the first major region in the world to develop a low-carbon economy based on renewables;
- \* A gradually rising carbon price would increase the cost of externalities including air pollution and climate change, until renewables became fully competitive;
- \* The negative effects of higher energy costs on competitiveness would be mitigated by a global deal with all the world's major economies making progress towards the common goal of reducing emissions.

The Act followed a White Paper issued in 2003 by the government entitled: *Our energy future – creating a low carbon economy*. John Brignell of Number Watch states 5 basic principles of sound energy policy, which have been ignored by the government.

1. Energy should be obtained from a variety of sources, lest one should fail.
2. There should be a reliable and continuous source to service the base load.
3. There should be further instantly available sources to accommodate demand surges.

5. Policy should not be decided by trends, fashions or religious convictions.

Obviously, wind and solar, strongly supported by the EU, fail these basic principles. See Power mad! <http://www.numberwatch.co.uk/2003%20February.htm#Power> and links under Questioning European Green.

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**Failing Wind:** The Scientific Alliance and the Adam Smith Institute published an empirical study by Capell Aris entitled: Wind Power Reassessed: A review of the UK wind resources for electricity generation. The study uses nine years of wind data from airfield weather-observations to calculate the likely performance of a wind fleet across the UK, and then expands the scope to include Ireland and the low countries of the northern European plain covering Belgium, Holland, Denmark and Germany. The purpose of the expanded scope is to see if highly promoted interconnections can improve performance.

Based on these measurements, the researchers built a theoretical wind fleet with 10GW of nameplate capacity. They found that power output exceeds 90% of theoretical power 17 hours per annum; power output exceeds 80% of theoretical power 163 hours per annum, theoretical power is below 20% for 3,448 hours (20 weeks) per annum, and theoretical power is below 10% for 1,519 hours (9 weeks) per annum. Further, when the fleet is 20% of maximum, 77% of the failure to generate more than 20% occurs in events that continue for 12 hours per more.

Further, the study found that expanding to Ireland improved the performance somewhat; but expanding it to the northern European plain reduced the performance. The European interconnections have little impact on the mitigation of wind fleet intermittency and variability. Those familiar with the deficiencies of wind power may not be surprised by the results. But such studies are needed to explain to politicians, and others with the EU, that the hope of free wind power remains a myth. See links under Alternative, Green ("Clean") Solar and Wind.

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**Defense of the Grid:** Under increasing criticism, the UK National Grid produced a winter outlook report showing that things are not as bleak for the UK as many claim, which may be true. However, there are two components to the outlook that must be considered. One is current status and the second is trend. The current status may be fine, but if the trend is downward, it needs to be addressed. With the EU embracing a 27% increase of renewables and a 40% reduction in carbon dioxide emissions, the outlook is not promising. See links under Defending the Orthodoxy.

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**How Low Can Oil Go?** Speculation continues on the extent to which world oil prices can fall until there is a curtailment in US oil production from dense shale. The large, diverse set of variables include cost of leases, cost of transport, knowledge of the shale formation, technological improvements, and many other factors that require local as well as world-wide knowledge. For an overview of some of the factors, see Articles # 3 and # 4.

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**US Elections:** The Administration appears to be preparing for the US mid-term elections on November 4 with apparent disdain for the results. In the *Federal Register*, government agencies are filing notice of impending regulations to take effect sometime after the election.

If this is the pattern for the next two years, then the nation can expect continued economic stagnation with a growth rate of less than 3 percent. The exception is oil and natural gas

extraction on state and privately controlled land, which the Administration has not been able to control, at least as of now.

The Federal courts have made it clear that they will not protect the public from impending regulations. The regulations must be final. See links under Litigation Issues and EPA and other Regulators on the March.

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**Number of the Week:** More than \$15 Billion in FY 2013. The Wall Street Journal had an article announcing that the government of India is abandoning its regulation of diesel fuel. The government has been subsidizing the fuel at below market rates at an estimated cost of about \$10 billion per year. According to the report, total fuel subsidies amounted to more than \$15 Billion in FY 2013. The article is consistent with prior reports in TWTW, which stated that developing countries and petro-states are the primary governments subsidizing fossil fuels. Thus, arguments by the wind industry that it needs subsidies in Western countries because fossil fuels are subsidized are illogical.

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<http://www.sepp.org/twtwfiles/2014/TWTW%2011-01-14.pdf>

## **B. FRIDAY FUNNY – YOU’RE A CLIMATE DENIER IF:**

By Mark Heyer – You’re a climate denier if: – You believe that the atmosphere has continued to warm for the last 17+ years despite rapid growth of CO<sub>2</sub>. 97% of real climate scientists acknowledge that it hasn’t. They call it the “pause” or “hiatus” although there is no scientific evidence that warming will pick...

<http://wattsupwiththat.com/2014/10/24/friday-funny-youre-a-climate-denier-if/>

## **C. NEW STUDY PREDICTS A SLIGHT COOLING OF NORTH ATLANTIC SEA SURFACE TEMPERATURES OVER THE NEXT DECADE**

Guest Post by Bob Tisdale and Pierre Gosselin at NoTrickZone provided an introduction to a recently published paper in his post IPCC Scientist Mojib Latif Sees North Atlantic Cooling Over Next Decade...Confirms Oceans Play Crucial Role. The paper is Klöwer et al. (2014) Atlantic meridional overturning circulation and the prediction of North Atlantic sea surface temperature....

<http://wattsupwiththat.com/2014/10/24/new-study-predicts-a-slight-cooling-of-north-atlantic-sea-surface-temperatures-over-the-next-decade/>

## **D. OUR INITIAL COMMENTS ON THE ABRAHAM ET AL. CRITIQUE OF THE SPENCER & BRASWELL 1D MODEL**

October 23rd, 2014

Our 1D forcing-feedback-mixing model [published](#) in January 2014 (and *not* paywalled, but also [here](#)) addressed the global average ocean temperature changes observed from the surface to 700 m depth, with the model extending to 2,000 m depth.

We used the 1D model to obtain a consensus-supporting climate sensitivity when traditional forcings were used (mostly anthropogenic GHGs, aerosols, and volcanoes), but a much smaller 1.3 deg. C climate sensitivity if the observed history of ENSO was included, which was shown

from CERES satellite measurements to modulate the Earth's radiative budget naturally (what we called "internal radiative forcing" of the climate system).

Abraham et al. recently published an [open source paper](#) addressing the various assumptions in our model. While we have only had a couple days to look at it, in response to multiple requests for comment I am now posting some initial reactions.

Abraham et al. take great pains to fault the validity of a simple 1D climate model to examine climate sensitivity. But as we state in our paper (and as James Hansen has even [written](#)), in the global average all that really matters for the rate of rise of temperature is (1) forcing, (2) feedback, and (3) ocean mixing. These three basic processes can be addressed in a 1D model. *Advective processes (horizontal transports) vanish in the global ocean average.*

They further ignore the evidence we present (our Fig. 1 in [Spencer & Braswell, 2014](#)) that a 1D model might actually be preferable from the standpoint of energy conservation, since the 3D models do not appear to conserve energy – a basic requirement in virtually any physical modelling enterprise. Some of the CMIP3 models' deep ocean temperature changes in apparent contradiction to whether the climate system is being radiative forced from above. Since the 3D models do not include a changing geothermal heat flux, this suggests a violation of the 1st Law of Thermodynamics. (Three of the 13 models we examined cooled most of deep ocean since 1955, despite increasing energy input from above. How does that happen?)

On this point, how is it that Abraham et al. nitpick a 1D model that CAN explain the observations, but the authors do not fault the IPCC 3D models which [CANNOT explain the observations](#), and possibly don't even conserve energy in the deep ocean?

Regarding their specific summary points (in bold):

**1. The model treats the entire Earth as ocean-covered.**

Not true, and a red herring anyway. We model the observed change in ocean heat content since 1955, and it doesn't matter if the ocean covers 20% of the globe or 100%. They incorrectly state that ignoring the 30% land mass of the Earth will bias the sensitivity estimates. This is wrong. All energy fluxes are per sq. meter, and the calculations are independent of the area covered by the ocean. We are surprised the authors (and the reviewers) did not grasp this basic point.

**2. The model assigns an ocean process (El Nino cycle) which covers a limited geographic region in the Pacific Ocean as a global phenomenon...**

This is irrelevant. We modeled the OBSERVED change in global average ocean heat content, including the observed GLOBAL average expression of ENSO in the upper 200 m of the GLOBAL average ocean temperature.

**3. The model incorrectly simulates the upper layer of the ocean in the numerical calculation.**

There are indeed different assumptions which can be made regarding how the surface temperature relates to the average temperature of the first layer, which is assumed to be 50 m thick. How these various assumptions change the final conclusion will require additional work on our part.

**4. The model incorrectly insulates the ocean bottom at 2000 meters depth.**

This approximation should not substantially matter for the purpose the model is being used. We stopped at 2,000 m depth because the results did not substantially depend upon it going any deeper.

**5. The model leads to diffusivity values that are significantly larger than those used in the literature.**

We are very surprised this is even an issue, since we took great pains to point out in our paper that the *\*effective\* diffusivity values we used in the model are meant to represent \*all\* modes of vertical mixing*, not just diffusivity *per se*. If the authors read our paper, they should know this. And why did the reviewers not catch this basic oversight? Did the reviewers even read our paper to see whether Abraham et al. were misrepresenting what it claimed? Again, the *\*effective\* diffusivity is meant to represent all modes of vertical heat transport (this is also related to point #8, below). *All the model requires is a way to distribute heat vertically, and a diffusion-type operator is one convenient method for doing that.**

**6. The model incorrectly uses an asymmetric diffusivity to calculate heat transfer between adjacent layers, and**

**7. The model contains incorrect determination of element interface diffusivity.**

The authors discuss ways in which the implementation of the diffusion operator can be more accurately expressed. This might well be the case (we need to study it more). But it should not impact the final conclusions because we adjust the assumed effective diffusivities to best match the observations of how the ocean warms and cools at various depths. If there was a bias in the numerical implementation of the diffusion operator (even off by a factor of 10), then the effective diffusivity values will simply adjust until the model matches the observations. The important thing is that, as the surface warms, the extra heat is mixed downward in a fashion which matches the observations. Arguing over the numerical implementation obscures this basic fact. Finally, a better implementation of diffusivity calculation still must then be run with a variety of effective diffusivities (and climate sensitivities) until a match with the observations has been obtained, which as far as we can tell the authors did not do. The same would apply to a 3D model simulation...when one major change is implemented, other model changes are often necessary to get realistic results.

**8. The model neglects advection (water flow) on heat transfer.**

Again, there is no advection in the global average ocean. The authors should know this, and so should the reviewers of their paper. Our *\*effective\* diffusivity*, as we state in the paper, is meant to represent all processes that cause vertical mixing of heat in the ocean, including formation of cold deep water at high latitudes. Why did neither the authors nor the reviewers of the paper not catch this basic oversight? Again, we wonder how closely anyone read our paper.

**9. The model neglects latent heat transfer between the atmosphere and the ocean surface.**

Not true. As we said in our paper, processes like surface evaporation, convective heat transfer, latent heat release, while not *explicitly* included, are *implicitly* included because the atmosphere is assumed to be in convective equilibrium with the surface. Our use of 3.2 W/m<sup>2</sup> change in OLR with a surface temperature change of 1 deg. C is the generally assumed global-average value for the effective radiating temperature of the *surface-atmosphere system*. This is the way in which a surface temperature change is realistically translated into a change in top-of-atmosphere OLR, without having to explicitly include latent heat transfer, atmospheric convection, temperature lapse rate, etc.

### **Final Comments**

If our model is so far from reality, maybe Abraham et al. can tell us why the model works when we run it in the non-ENSO mode (mainly greenhouse gas, aerosol, and volcanic forcing), yielding a climate sensitivity similar to many of the CMIP models (2.2 deg. C). If the model deficiencies are that great, shouldn't the model lead to a biased result for this simple case? Again, they cannot obtain a "corrected" model run by changing only one thing (e.g. the

numerical diffusion scheme) without sweeping the other model parameters (e.g. the effective diffusivities) to get a best match to the observations.

These are our initial reactions after only a quick look at the paper. It will take a while to examine a couple of the criticisms in more detail. For now, the only one we can see which might change our conclusions in a significant way is our assumption that surface temperature changes have the same magnitude as the average temperature change in the top (50 m) layer of the model. In reality, surface changes should be a little larger, which will change the feedback strength. It will take time to address such issues, and we are now under a new DOE contract to do climate model validation.

Roy Spencer

**This paper demonstrates simple models can be better than complicated models.  
GHH**

## **E. ROOT CAUSE ANALYSIS OF THE MODERN WARMING**

Posted on [October 23, 2014](#) | [233 comments](#)

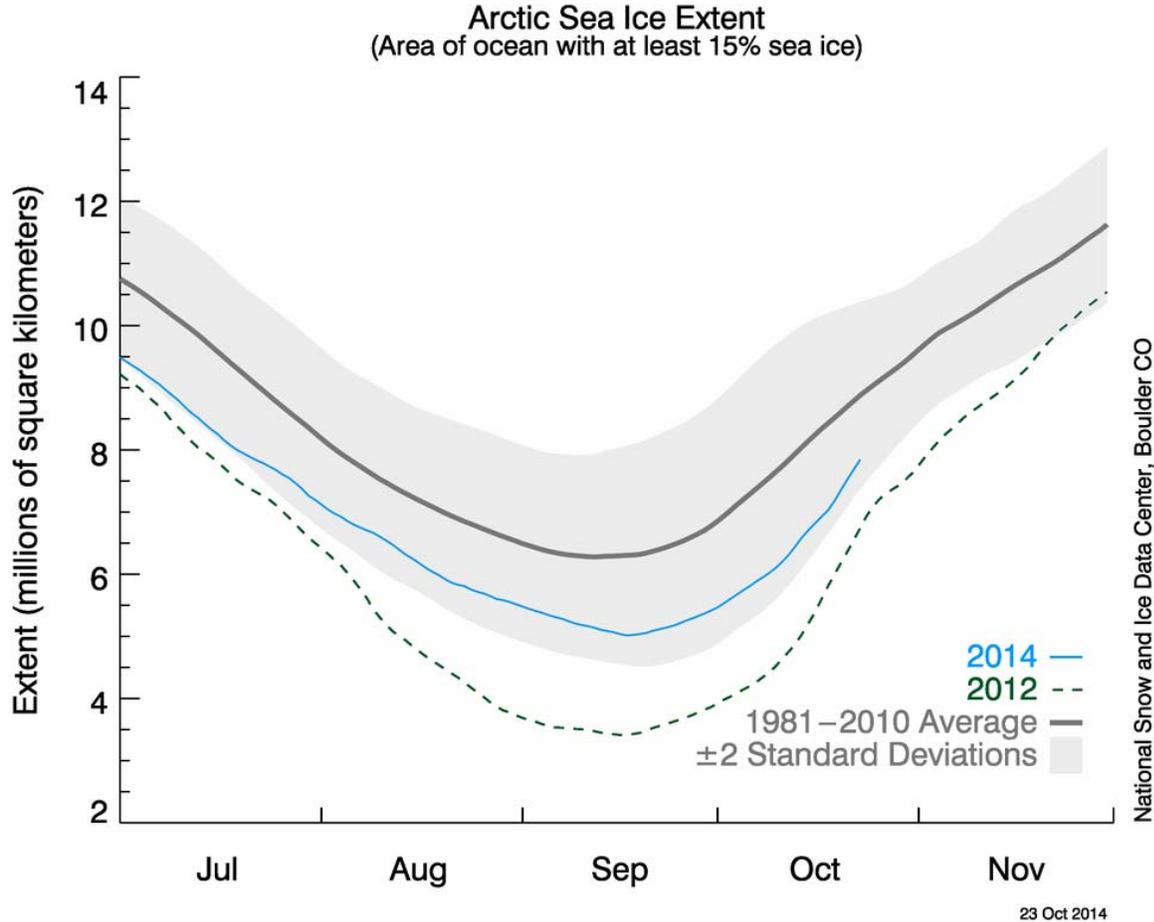
by Matt Skaggs

For years, climate scientists have followed reasoning that goes from climate model simulations to expert opinion, declaring that to be sufficient. But that is not how attribution works.

<http://judithcurry.com/2014/10/23/root-cause-analysis-of-the-modern-warming/#more-17097>

**Did EPA or IPCC ever use “Root Cause Analysis of the Modern Warming” determinations or analysis? GHH**

## **F. ARCTIC SEA ICE EXTENT**



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<http://wattsupwiththat.com/2014/10/19/poland-to-veto-eus-40-co2-reduction-proposal/>  
 Don Shaw

## **G. INDUSTRY-BACKED REPORT SAYS EPA CLIMATE RULE TO COST \$366B**

By [Timothy Cama](#) - 10/16/14 12:57 PM EDT

A study commissioned by the coal industry and other business groups found that the Environmental Protection Agency's (EPA) carbon rule for power plants could cost at least \$366 billion.

The analysis, written by Nera Economic Consulting, said that people in 43 states would see double-digit percentage increases in their electricity bills, with at least 20 percent increases in 14 other states.

Meanwhile, the carbon dioxide reductions would only limit global warming by 0.02 degrees and sea level rises by 0.01 inch, researchers said.

"This analysis is further confirmation that it would be irresponsible for any state to implement EPA's costly power plan," Hal Quinn, president of the National Mining Association, said in a statement. "Asking Americans to pay more in return for less energy and fewer jobs is not a plan that provides them the economic security they deserve."

Mike Duncan, president of the American Coalition for Clean Coal Electricity, said the analysis shows major problems with the proposed rule.

<http://thehill.com/policy/energy-environment/220967-industry-backed-report-says-epa-climate-rule-to-cost-366b>

Roger Zygmunt

## **H. DOE LAUNCHES NEW CARBON CAPTURE DEMONSTRATION PROJECT**

The U.S. Department of Energy (DOE) and Skyonic Corporation have launched a new carbon capture demonstration project at a San Antonio cement plant. The \$40 million project will capture 75,000 tons of carbon dioxide (CO<sub>2</sub>) and convert the gas into other commercial products, include sodium carbonate, sodium bicarbonate, hydrochloric acid (? , **GHH**) and bleach(? , **GHH**). . In addition to CO<sub>2</sub>, the facility will also remove sulfur oxides, nitrogen dioxide, mercury, and other heavy metals from flue gas streams.

Funded in part by the 2009 American Recovery and Reinvestment Act, the project includes \$28 million in support from DOE. The project was paired with over five years of research and laboratory testing from Skyonic, as well as other private investment.

The project has successfully completed its phase 2 implementation plan, which included a testing and process optimization effort to collect technical and cost data for the process and an update to the overall process techno-economic analysis and CO<sub>2</sub> life cycle study.

Founded in 2005, Skyonic developed the first carbon capture technology designed to capture CO<sub>2</sub> emissions via a mineralization process. Developed by inventor and CEO Joe Jones, Skyonic's patented technology is a first-in-kind process.

For additional information on the Skyonic Skymine project, visit:

<http://www.netl.doe.gov/research/proj?k=FE0002586>

ASME Capitol Update - October 24, 2014

## **I. 100 YEAR SNOW RECORDS BROKEN ACROSS THE SOUTH EASTERN US ON OCTOBER 31ST AND NOVEMBER 01ST**

It was the earliest and heaviest snow in several places since records have been kept dating as far back as 1880. 100 Year Snow Records broken across the South Eastern US on October 31st and November 01st. It was the earliest and heaviest snow in several places since records have been kept dating as far...

<http://wattsupwiththat.com/2014/11/03/100-year-snow-records-broken-across-the-south-eastern-us-on-october-31st-and-november-01st/>

## **J. IPCC PREDICTION OF SEVERE WEATHER INCREASE BASED ON FUNDAMENTAL ERROR**

[extreme weather](#) / [IPCC](#)

Guest Opinion by Dr. Tim Ball Claims that weather forecasts are reasonably accurate up to 48 hours are based on measured results for fair weather. Results for severe weather, which are really what is important for people, are very poor. The Intergovernmental Panel on Climate Change (IPCC) has a worse record for both. Every prediction/projection...

<http://wattsupwiththat.com/2014/11/02/ipcc-prediction-of-severe-weather-increase-based-on-fundamental-error/>

## **K. ICSC: IPCC FOCUS ON STOPPING GLOBAL WARMING AND EXTREME WEATHER IS UNSCIENTIFIC AND IMMORAL**

[Climate News](#)

### **ICSC: IPCC focus on stopping global warming and extreme weather is unscientific and immoral**

Ottawa, Canada, November 2, 2014: “IPCC Chairman Dr. Rajendra Pachauri was right to advocate “a global agreement to finally reverse course on climate change” when he spoke to delegates tasked with approving the IPCC Synthesis Report, released on Sunday,” said Tom Harris, executive director of the Ottawa, Canada-based International Climate Science Coalition (ICSC). “The new...

<http://wattsupwiththat.com/2014/11/02/icsc-ipcc-focus-on-stopping-global-warming-and-extreme-weather-is-unscientific-and-immoral/>

## **L. HOW URGENT IS ‘URGENT’?**

Posted on [November 2, 2014](#) | [249 comments](#)

by Judith Curry

*I think we have a very brief window of opportunity to deal with climate change . . . no longer than a decade at most. – [James Hansen 2006](#)*

*We have only four more years to act on climate change. – [James Hansen 2009](#)*

<http://judithcurry.com/2014/11/02/how-urgent-is-urgent/#more-17184>

## **M. WHAT WOULD A +2°C WARMER WORLD LOOK LIKE?**

An argument regularly advanced by alarmists is – can we afford to take the chance? This argument is often associated with a claim that a rise in global temperature greater than 2°C would be catastrophic – a theory backed by authoritative sounding computer simulations which suggest dangerous ocean acidification, deadly heat, and extreme weather. It...

<http://wattsupwiththat.com/2014/11/04/what-would-a-2c-warmer-world-look-like/>

## **N. JOHN COLEMAN FIRES BACK ON THE IPCC SYNTHESIS REPORT WHEN YOU READ A NEWS STORY**

A RESPONSE FROM CLIMATE SKEPTIC JOHN COLEMAN FOUNDER OF THE WEATHER CHANNEL about the United Nations Panel on Climate Change issuing new climate warnings and making a plea for immediate action to counter the impending climate crisis, do you ever wonder what a climate change skeptic thinks when he...

<http://wattsupwiththat.com/2014/11/04/john-coleman-fires-back-on-the-ipcc-synthesis-report/>

## **O. JIM STEELE’S CLIMATE CHANGE PRESENTATION TO THE IEEE LIFE MEMBERS**

Climate Sensitivity and Droughts: Landscape Changes and Ocean Oscillations vs CO2 On October 15, 2014 in Berkeley CA, I was invited to speak to the Life Members of the

International Electrical and Electronic Engineers and speak about my insights to climate change as presented in my book Landscapes and Cycles: An Environmentalist's Journey to Climate...

<http://wattsupwiththat.com/2014/11/03/jim-steeles-climate-change-presentation-to-the-ieee-life-members/>

## **P. PUBLIC TRUST IN PENNSYLVANIA REGULATORS ERODES FURTHER OVER FLAWED FRACKING STUDY**

Raw data showing high concentrations of certain pollutants at gas operations and health risks of 25 chemicals were left out of the state's studies.

By Lisa Song, InsideClimate News

Oct 23, 2014

<http://insideclimatenews.org/news/20141023/public-trust-pennsylvania-regulators-erodes-further-over-flawed-fracking-study>

David Sassoon

## **Q. INSIDECLIMATE NEWS WINS EPPY AWARD FOR FRACKING INVESTIGATION 'BIG OIL + BAD AIR'**

'Big Oil + Bad Air' reveals the dangers of releasing toxic chemicals into the air from oil and gas drilling.

<http://insideclimatenews.org/carbon-copy/20141030/insideclimate-news-wins-eppy-award-fracking-investigation-big-oil-bad-air>

David Sassoon

## **R. IN KEY MIDTERM RACES, DEMOCRATS SOUND LIKE REPUBLICANS ON CLIMATE ISSUE**

Democrats are justifiably worried about holding onto control of the United States Senate in the midterm elections Nov. 4. Most forecasts have Republicans winning seven seats for a 52-48 advantage, which would almost certainly spell doom for any action on climate change.

<http://insideclimatenews.org/news/20141021/key-midterm-races-democrats-sound-republicans-climate-issue>

David Sassoon

## **S. HADCRUT4 Adjustments – Discovering Missing Data or Reinterpreting Existing Data? (Now Includes September Data)**

Guest Post by Werner Brozek and Just The Facts: To begin, we would like to sincerely thank Tim Osborn of the University of East Anglia (UEA), Climatic Research Unit (CRU) for his responses (1, 2) to this recent WUWT article. Unfortunately, by the time the dialogue got going, many readers had already moved on. Tim's responses did...

<http://wattsupwiththat.com/2014/11/05/hadcrut4-adjustments-discovering-missing-data-or-reinterpreting-existing-data-now-includes-september-data/>

## **T. Sorry to Disappoint: Cooling in the North Pacific? Not So Much**

Guest Post by Bob Tisdale The sea surface temperature anomaly maps from Unisys had many people thinking there had been a drastic cooling of the surface of the extra tropical North Pacific. But as discussed in this weekend's post [On The Recent Unisys Sea Surface Temperature Anomaly Maps and Cooling of Northern Hemisphere Ocean Surfaces](http://wattsupwiththat.com/2014/11/04/sorry-to-disappoint-cooling-in-the-north-pacific-not-so-much/), there were...  
<http://wattsupwiththat.com/2014/11/04/sorry-to-disappoint-cooling-in-the-north-pacific-not-so-much/>

## **U. MORE RENEWABLES? WATCH OUT FOR THE DUCK CURVE**

Posted on [November 5, 2014](#) | [9 comments](#)

By Planning Engineer

It can be very misleading to compare the energy costs for wind and solar to the energy costs for more conventional generation technology and assume the difference is the cost of providing for "clean" energy.

<http://judithcurry.com/2014/11/05/more-renewables-watch-out-for-the-duck-curve/#more-17149>

## **V. JC'S BOOK SHELF**

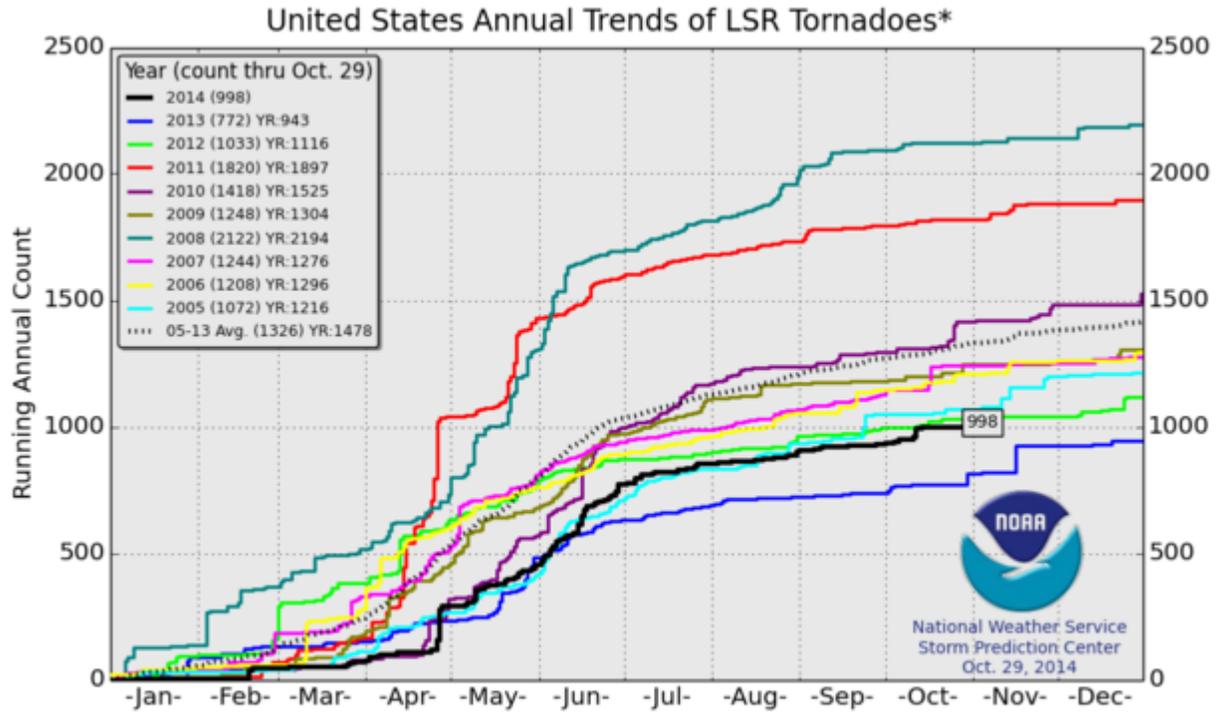
Posted on [November 4, 2014](#) | [172 comments](#)

by Judith Curry

Some new books that I've been reading, by Roger Pielke Jr., Rud Istvan, George Marshall and James Gleick.

<http://judithcurry.com/2014/11/04/jcs-book-shelf/#more-17178>

## **W. VIOLENT TORNADOES ARE ON THE DECLINE IN THE U.S.**



\*Preliminary sightings/events from NWS Local Storm Reports (LSRs)  
 Annual average is based on preliminary LSRs 2005-2013

Don Shaw

**X. HOW I GOT MY LIFE BACK – MY HEARING HAS BEEN RESTORED TO NEAR-NORMAL- THIS HAS NOTHING TO DO WITH CLIMATE CHANGE**

[Anthony Watts / 26 mins ago November 5, 2014](#)

This is an extremely personal note, and I have been waiting a week to write to see if in fact the results were real and lasting. I'm happy to report that they are and I am a changed person as a result of this transformation. Let me tell you a story about my struggle and how I suffered with for years now my family and my friends in my career and everything suffered along with it and what I did to solve it.

<http://wattsupwiththat.com/2014/11/05/how-i-got-my-life-back-my-hearing-has-been-restored-to-near-normal/>

Regards  
 George