

The Week That Was: 2012-03-10 (March 10, 2012)

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The Science and Environmental Policy Project

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March 31: Ken Haapala will be speaking at the Capital Science 2012 Conference sponsored by the Washington Academy of Sciences at 10 am. The topic is “Wind and Solar Power – the Past or the Future.” Unfortunately, registration and a fee are required.

<http://www.washacadsci.org/capscil2/body.htm>

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Quote of the Week:

As [Supreme Court Justice] Scalia observed in his dissent [to the Supreme Court Decision that carbon dioxide is a pollutant under the Clean Air Act], the statutory definition is so broad that it covers "everything from frisbees to flatulence." If you emit air into the air, it fits within the definition of pollutant as construed by the Supreme Court. Harry MacDougald, attorney for plaintiffs against the EPA finding that carbon dioxide emissions endanger human health and welfare. [H/t Charles Battig]

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Number of the Week: \$2,098,000,000

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THIS WEEK:

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

March Winds: In much of the Northern Hemisphere early March is noted for its winds, there is even a Hummel figurine titled March Winds. It appears that this March the winds may be blowing ill for the wind industry. There are two new studies from England about using wind power to replace coal plants to be shut down in order to reach carbon dioxide emission reductions mandated by the European Union, particularly the targets under negotiation for 2050. Both studies conclude that using wind power to achieve these goals is needlessly expensive.

One study, “Powerful Targets: Exploring the relative cost of meeting decarbonisation and renewables targets in the British power sector,” is by AF-Mercados Energy Markets International. It states that: “Without carbon dioxide reduction targets there would be no renewable or new nuclear.” It goes on to state: “If our only policy driver is to reduce carbon emissions, then the lowest cost way of meeting our emissions targets requires a mixture of gas and nuclear new build. Coal has no place in this least cost scenario – because of its emissions. Nor has wind, either onshore or offshore – because of its additional cost.”

The second study, a more detailed report by energy economist Gordon Hughes, now a professor of economics at University of Edinburgh, was prepared for the Global Warming Policy Foundation. The title asks: “Why Is Wind Power so Expensive?” This report estimates the cost of using wind to meet the 2020 emission standards is some £120 billion for wind turbine and back-up. While using gas-fired combined cycle gas plants alone, it would be £ 13 billion. No doubt advocates will quibble about the numbers, but even an obtuse Member of Parliament should understand there is some difference in magnitude between these numbers.

When estimating the cost of wind power, few studies take into account the enormous cost of back-up to wind, which is critical to provide reliable electricity. Professor Hughes does and therein is much of the enormous cost. Perhaps one day, affordable, reliable back-up, other than pumped hydro, will be available on a commercial scale, but it is not available today. The continuing bankruptcy of alternative energy companies in the US, with US loan guarantees, illustrates what happens when government policy is based on illusionary technology rather than one that actually exists.

It should be noted that the report by Professor Hughes does not estimate the costs of meeting the EU goals outlined in “Energy Roadmap 2050” for which negotiations collapsed on Friday. Please articles under “Questioning European Green.”

The Poles Riding to the Defense of Europe Again? On September 12, 1683, King John Sobieski of Polish-Lithuanian Commonwealth personally led a cavalry attack hitting the Ottoman forces, which were assaulting Vienna, from the flank, crushing them and ending that famous battle. On March 9, Poland was the sole holdout against the EU demand for a reduction of carbon dioxide emissions to 80 to 95% of 1990 emissions, “Energy Roadmap 2050.” Poland relies on coal for some 90% of its electricity. Its industrial leaders have made it clear that the agreement, with binding intermediate steps, would be economically destructive and may result in a mass exodus of industries to nations outside of the EU. The Polish action may not save European civilization but it may save European industrialization, at least for a while. Please see links under “Problems within the Orthodoxy.”

The Subsidy Games: President Obama is calling for ending US tax subsidies to the oil and gas industry claiming the amount to \$4 Billion. The wind industry is demanding restoration and expansion of its subsidies, ostensibly to save jobs. Into these claims the Congressional Budget Office (CBO) released a report on its estimates of tax subsidies to various energy industries. Please note that the numbers do not reflect what the CBO estimates are tax losses assuming no one would change their activities if the subsidies were removed. This assumption is common, but not truly accurate. For example, in states without mandates it is doubtful that any wind farms would be installed, thus elimination of the subsidies would result no industry in those states, thus no tax revenues would be lost. The major classifications in the report are:

Energy Efficiency improvements in homes	1.5 Billion	Expired 12/2011
Tax credits for Renewables	1.4 Billion	Expires 12/2012 for Wind, 12/2013 for other renewables
Tax credits for other	0.7 Billion	
Fossil Fuels	2.5 Billion	
Nuclear	0.9 Billion	
Various smaller programs	2.7 Billion	
Biofuels excise tax credit	6.9 Billion	Expired 12/2011
Solar & Wind grants in lieu of tax credits	3.9 Billion	Expired 12/2011

The subsidies to fossil fuels are significantly less than the President states. Some of them involve accounting techniques of expensing exploration and development costs rather than capitalizing them and expensing them later as depreciation. Given the oil and gas boom, it is probably better to do away with all energy subsidies. However, tax treatment of various classifications of expenses is always open to dispute. Please see <http://www.cbo.gov/publication/43032>. [H/t Timothy Wise]

Difficult Times: Faced with a House of Representatives determined to cut budgets and skeptics as to the threat of global warming, a number of Federal government agencies have taken new ploys to insist on the threat of carbon dioxide emissions. Of course, justifying the Federal government spending \$19.7 Billion on climate change R & D in 2012 has nothing to do with this effort. Craig Loehle offers a good overview of some of the more unsubstantiated claims being made by government agencies. Jane Lubchenco and Tom Karl of NOAA have set themselves apart from the rest. NOAA has a budget of \$3.6 Billion on climate R & D. NOAA provides important scientific information. Unfortunately, this is lost in the unsubstantiated claims. Lubchenco is noted for calling for all scientists to address environmental and social problems in exchange for public funding (TWTW Aug 14, 2010). Please see links under “Challenging the Orthodoxy” and “Communicating Better with the Public – Exaggerate.”

Ocean Acidification (neutralization): A new study claiming that the rate of ocean acidification in the 21st century will exceed that of any time in the past 300 million years has garnered much attention. Since the pH remains above 7, it remains alkaline, but such accuracy would not attract the press. As Craig Loehle points out one cannot scientifically estimate the increase in ocean acidification since the beginning of the industrial era because there is no historic record of ocean pH. The claim is the pH dropped by 0.1 since the beginning of the industrial era, yet the pH varies regionally by 0.3 and also seasonally in a particular location by 0.3. The claimed drop in pH is not particularly significant.

There is an amusing sidelight to the questionable claim that oceans are acidifying faster than any time in the past 300 million years. In *heaven+earth*, Ian Plimer states the period 260 million to 300 million years ago was the in the Permo-Carboniferous period and marked with extreme glaciations even though carbon dioxide and methane concentrations were greater than today. Apparently without recognizing it, the authors of the new report have drawn attention to the fact that nature is more important in causing climate change than human emissions of carbon dioxide. Please see links under “Acidic Waters” and Plimer’s book, particularly p. 333.

Gleick Affair: The defense of Peter Gleick has demonstrated the extent to which a number of scientists and journalists consider his actions acceptable. Journalist George Monbiot sees Gleick to be a hero and calls for all advocacy groups to identify their funding sources. No doubt the multi-billion dollar environmental industry will jump at the opportunity to identify their funding sources, whether private, corporate, foundations, or government (doubtful).

One report states that buyers of General Motors vehicles are protesting the GM Foundation for giving Heartland Institute \$30,000 over the past two years. This may be a basis for Heartland demanding damages from Gleick and all entities associated with him. But that is for attorneys to determine. For links to commentaries on the subject please see the “Gleick Affair” and www.fakegate.org.

Mann Handled: Michael Mann’s new book has received fawning praise from global warming alarmists. However, Brandon Shollenberger provides a detailed review of extensive omissions, misleading statements, and outright fabrications. Also, Steve McIntyre presents an interesting view of the justifications the Virginia Supreme Court gave in dismissing Attorney General Ken Cuccinelli’s investigation seeking Mr. Mann’s emails from the University of Virginia. It may make the University more vulnerable to the Freedom of Information Act litigation the American Tradition Institute is pursuing. Please see links under Oh Mann!

Corrections and Amplifications: Alert reader David Manuta point out two errors in identifying greenhouse gases. One was HF6 which was a typo. There is no such gas and it should have been SF6, sulfur hexafluoride. The second was misidentifying HCFC as chlorofluorocarbons. We failed to read the H. It should have been identified as **hydro**chlorofluorocarbons. We always appreciate corrections and amplifications.

Quote of the Week: As the above quote demonstrates, the 2007 Supreme Court decision declaring carbon dioxide is a pollutant under the Clean Air Act gives such a broad definition of pollutant that it renders the term scientifically meaningless.

Number of the Week – \$2,098,000,000 At the suggestion of Anthony Watts, we updated the list of the largest environmental charities from the Forbes list of the 200 largest US Charities for 2011. The list includes 12 organizations that identify that their principal purpose is environment or climate. The total revenue of these 12 is the number of the week. Donations to the organizations are tax deductible. The list is not all inclusive. For example, it does not include the Wildlife Conservation Society that lists climate

change as a pressing issue, but operates the renowned Bronx Zoo as its principal purpose. Of the 12, 8 accepted monies from government amounting to \$293,000,000.

Will these 12 charities be thrilled at George Monbiot’s proposal of complete disclosure of funding sources. Please see <http://www.forbes.com/lists/2011/14/200-largest-us-charities-11.html>

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ARTICLES:

For the numbered articles below please see this week’s TWTW at: www.sepp.org. The articles are at the end of the pdf.

1. EPA Endangers Human Health and Welfare

By S. Fred Singer, American Thinker, Mar 7, 2012

http://www.americanthinker.com/2012/03/epa_endangers_human_health_and_welfare.html

2. Industry Alters Designs in an Effort to Make Future Plants Safer

By Rebecca Smith, WSJ, Mar 8, 2012

http://online.wsj.com/article/SB10001424052970204781804577269642909854600.html?mod=WSJ_Energy_leftHeadlines

[SEPP Comment: The goal in design of nuclear plants: if something bad happens, you just walk away with no consequences except the loss of the investment.]

3. Odd Alliance Says No to Gas Exports

By Russell Gold and Keith Johnson, WSJ, Mar 8, 2012

http://online.wsj.com/article/SB10001424052970203961204577269672522415982.html?mod=WSJ_business_whatsNews

4. Windmills vs. Birds

About 70 golden eagles are killed every year by turbines at California's Altamont Pass, reports the LA Times.

By Robert Bryce, WSJ, Mar 7, 2012

http://online.wsj.com/article/SB10001424052970204781804577267114294838328.html?mod=WSJ_Opinion_LEFTTopOpinion

5. Fukushima and the Future of Nuclear Power

There's no evidence that low doses of radiation are harmful and no reason to paralyze our economy out of fear of nuclear power.

By William Tucker, WSJ, Mar 6, 2012

http://online.wsj.com/article/SB10001424052970203370604577261341008387240.html?mod=ITP_opinion_0

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NEWS YOU CAN USE:

Challenging the Orthodoxy

Climate Change Impacts In The USA are Already (NOT) Happening

By Craig Loehle, WUWT, Mar 8, 2012

<http://wattsupwiththat.com/2012/03/08/climate-change-impacts-in-the-usa-is-already-not-happening/#more-58595>

[SEPP Comment: Debunking the multitude of questionable claims from numerous US government agencies.]

Defending the Orthodoxy

Brussels pushes for full carbon accounting of all road transport fuels

By Sonja van Renssen, European Energy Review, Mar 6, 2012

<http://www.europeanenergyreview.eu/site/pagina.php?id=3566>

[SEPP Comment: Climate change – the perfect justification for massive taxation. As if taxation can stop climate change.]

Questioning the Orthodoxy

Under the radar – the NAS Report

By Willis Eschenbach, WUWT, Mar 7, 2012

<http://wattsupwiththat.com/2012/03/07/under-the-radar-the-nas-report/#more-58606>

[SEPP Comment: When you don't want to answer the question asked, change the question. Climate science by government agencies still cannot answer the basic questions because they avoid the work of understanding the natural causes of climate change.]

UN Climate Chief's 'Green Crusader' Award

By Donna Laframboise, NFC, Mar 8, 2012

<http://nofrackingconsensus.com/2012/03/08/un-climate-chiefs-green-crusader-award/>

[SEPP Comment: To some, rigorous and balanced scientific information is a matter of perception.]

Today in the Annals of Settled Science

By Walter Russell Mead, Via Meadia, Mar 3, 2012

<http://blogs.the-american-interest.com/wrm/2012/03/03/today-in-the-annals-of-settled-science/>

The high priests of global warming have lost their prestige. They're still chanting the same old mantras. But no one's listening, no one cares,

By James Delingpole, Commentator, Mar 9, 2012 [H/t Bishop Hill]

http://www.thecommentator.com/article/972/the_high_priests_of_global_warming_have_lost_their_prestige_and_the_realists_are_winning_the_debate

Questioning European Green

Powerful Targets: Exploring the relative cost of meeting decarbonisation and renewables targets in the British power sector

By AF- Mercados UK, Mar 4, 2012 [H/t Scientific Alliance]

http://www.businessgreen.com/digital_assets/4177/Powerful_Targets.pdf

Energy: low carbon, renewable, or both?

By Martin Livermore, Scientific Alliance, Mar 9, 2012

<http://www.scientific-alliance.org/scientific-alliance-newsletter/energy-low-carbon-renewable-or-both>

Why Is Wind Power So Expensive?

By Gordon Hughes, GWPF, 2012

<http://www.thegwpf.org/images/stories/gwpf-reports/hughes-windpower.pdf>

New Report: Economic Analysis Reveals Wind Power 'Worse Than a Mistake'

By Staff Writers, GWPF, Mar 6, 2012

<http://www.thegwpf.org/uk-news/5150-new-report-economic-analysis-reveals-wind-power-worse-than-a-mistake.html>

[SEPP Comment: A brief introduction to the study linked immediately above.]

£120billion gamble on wind turbines: Green energy 'ten times dearer than power stations'

By Sean Poulter, Daily Mail, UK, Mar 7, 2012

<http://www.dailymail.co.uk/news/article-2111303/Wind-turbines-Green-energy-cost-120billion-2020-say-researchers.html?ITO=1490>

Billions blown away on wind power, says British study

By David Crowe, Australian, Mar 9, 2012 [H/t GWPF]

<http://www.theaustralian.com.au/national-affairs/billions-blown-away-on-wind-power-says-british-study/story-fn59niix-1226294168155>

The winds of change

The government has finally seen through the wind-farm scam – but why did it take them so long?

By Matt Ridley, The Spectator, Mar 3, 2012 [H/t Howard Hayden]

<http://www.spectator.co.uk/essays/all/7684233/the-winds-of-change.shtml>

[SEPP Comment: The rationale for the Matt Ridley Prize for Environmental Heresy.]

EU emissions trading could escalate into 'first green trade war'

By Benny Peiser, Public Service Europe, Mar 1, 2012

<http://www.publicserviceeurope.com/article/1578/eu-emissions-trading-could-escalate-into-first-green-trade-war>

Questioning Green Elsewhere

The Global Warming Bubble

By Robert Tracinski, Real Clear Markets, Mar 6, 2012

http://www.realclearmarkets.com/articles/2012/03/06/the_global_warming_bubble_99552.html

Problems within the Orthodoxy

Poland single-handedly blocks climate talks, again

The country was the only one to object to the EU's "Energy Road map 2050"

By Alice Trudelle, Warsaw Business Journal, Mar 9, 2012 [H/t The Reference Frame]

<http://www.wbj.pl/article-58358-poland-single-handedly-blocks-climate-talks-again.html?typ=wbj>

Poland vetoes the 2050 EU carbon misplanning

By Lubos Motl, The Reference Frame, Mar 10, 2012

<http://motls.blogspot.com/2012/03/poland-vetoes-2050-eu-carbon.html#more>

The Gleick Affair

How Can I Get Some of That Anti-Global Warming Big Oil Money?

By Larry Bell, Forbes, Mar 6, 2012

<http://www.forbes.com/sites/larrybell/2012/03/06/how-can-i-get-some-of-that-anti-global-warming-big-oil-money/>

Saving the Earth, One Fraud at a Time

The latest embarrassment for global warming activists

By Steven Greenhut, Reason.com, Mar 2, 2012

<http://reason.com/archives/2012/03/02/saving-the-earth-one-fraud-at-a-time>

'Fakegate' latest climate clash

Document from skeptical think-tank turns out to have been forged

By Peter Foster, Financial Post, Mar 6, 2012

<http://opinion.financialpost.com/2012/03/06/peter-foster-fakegate-latest-climate-clash/>

17 Days Later, Peter Gleick is Back in the Saddle

By Donna Laframboise, NFC, Mar 9, 2012

<http://nofrackingconsensus.com/2012/03/09/17-days-later-peter-gleick-is-back-in-the-saddle/>

10,000 blast GM charity's gifts to group that disputes warming

By Staff Writers, Arizona Daily Star, Mar 8, 2012

http://azstarnet.com/news/science/blast-gm-charity-s-gifts-to-group-that-disputes-warming/article_ef09bc50-43be-59f1-904a-5360d926c85c.html

Anything to declare, Mr Booker? We need transparency about Heartland

You'd hope that, as Private Eye's founding editor, Christopher Booker would declare hospitality received from the Heartland Institute

By George Monbiot, Guardian, Feb 24, 2012 [H/t Jo Nova]

<http://www.guardian.co.uk/environment/georgemonbiot/2012/feb/24/christopher-booker-heartland-climate>

Anyone with democratic instincts should support the demand that the major funders of groups engaged in public advocacy should be made known to the public, whether those groups are leftwing NGOs, rightwing "thinktanks" or self-declared lobbying companies.

Monbiot — Steal things and be a “democratic” hero?

By Jo Nova, Her Blog, Mar 4, 2012

<http://joannenova.com.au/2012/03/monbiot-steal-things-and-be-a-democratic-hero/#more-20636>

[SEPP Comment: Questioning the article linked immediately above.]

Seeking a Common Ground

Should we tell the whole truth about climate change?

By Judith Curry, Climate Etc, Mar 8, 2012

<http://judithcurry.com/2012/03/08/should-we-tell-the-whole-truth-about-climate-change/#more-7534>

[SEPP Comment: Is integrity important?]

Pricing for apocalyptic externalities

We have no idea of what the actual ‘full costs’ of climate change might be

By Peter Forster, Financial Post, Mar 8, 2012

<http://opinion.financialpost.com/2012/03/08/peter-foster-pricing-for-apocalyptic-externalities/>

Communicating Better to the Public – Exaggerate

Another Physics Today Advocacy Article – This Time By Jane Lubchenco And Tom Karl

By Roger Pielke Sr, Pielke Climate Science, Mar 6, 2012

<http://pielkeclimatesci.wordpress.com/2012/03/06/another-physics-today-advocacy-article-this-time-by-jane-lubchenco-and-tom-karl/>

The article claims that they want to provide us with “environmental intelligence”. If that is their goal, they certainly have missed the target. What is needed is a more informed approach to the climate issue than presented by Lubchenco and Karl in this article. Physics Today also should explicitly list such publications as op-eds rather than permit them to masquerade as regular articles.

Comments on NOAA’s new focus on extremes

By Richard Keen, ICECAP, Mar 8, 2012

http://icecap.us/index.php/go/they-said-it/comments_on_noaas_new_focus_on_extremes/

[SEPP Comment: See link immediately above.]

Communicating Better to the Public – Make things up.

Policy questions

By Andrew Montford, Bishop Hill, Mar 9, 2012

<http://bishophill.squarespace.com/blog/2012/3/9/policy-questions.html>

[SEPP Comment: IPCC absurdity continuing to the EPA – “high confidence in some statements for which there is little evidence.”]

Earth in the Balance: 7 Crucial Tipping Points

By Jermei Hsu, Live Science, Mar 2, 2012

<http://www.livescience.com/13032-earth-7-tipping-points-climate-change.html>

Harvard physician warns of climate change health hazards

By Lisa Barbella, Medill Reports, Mar 9, 2012

<http://news.medill.northwestern.edu/chicago/news.aspx?id=203191>

Ocean levels are rising due to greenhouse gas emissions at a faster rate than we thought, said Richard Alley, a leading climate scientist, a Pennsylvania State University geologist and the keynote speaker for the public symposium.

[SEPP Comment: A misleading and / or false statement.]

Models v. Observations

Guest Post Titled “Decadal Prediction Skill In A Multi-Model Ensemble” By Geert Jan van Oldenborgh, Francisco J. Doblas-Reyes, Bert Wouters, Wilco Hazeleger

By Geert Jan van Oldenborgh, Pielke Climate Science, Mar 7, 2012

<http://pielkeclimatesci.wordpress.com/2012/03/07/guest-post-titled-decadal-prediction-skill-in-a-multi-model-ensemble-by-geert-jan-van-oldenborgh-francisco-j-doblas-reyes-bert-wouters-wilco-hazeleger/>

[SEPP Comment: A somewhat technical discussion on assessing the skill of climate models using historic data, including on a regional scale. Success with historic data does not necessarily mean the models have skill in predicting the future.]

Inappropriate Use of Climate Models

Another Example Of The Misuse Of Multi-Decadal Global Climate Model Predictions

By Roger Pielke, Sr, Pielke Climate Science, Mar 9, 2012

<http://pielkeclimatesci.wordpress.com/2012/03/09/another-example-of-the-misuse-of-multi-decadal-global-climate-model-predictions/>

[SEPP Comment: If you don’t have data, use a model to project health impacts decades from now – and fail to mention the models have no predictive capability.]

Two Further Examples Of The Overselling Of Multi-Decadal Climate Models Predictions For Regional Climate Impact Assessments

By Roger Pielke Sr, Pielke Climate Science, Mar 5, 2012

<http://pielkeclimatesci.wordpress.com/2012/03/05/two-further-examples-of-the-misuse-of-climate-models-for-multi-decadal-regional-climate-impact-assessments/>

Measurement Issues

Jet Stream Wave Patterns Further Distort the Official Global Temperatures

By Tim Ball, A Different Perspective, Mar 8, 2012

<http://drtimball.com/2012/jet-stream-wave-patterns-further-distort-the-official-global-temperatures/>

IU scientists detect seismic signals produced by tornado activity

Press Release, Indiana University, Mar 8, 2012 [H/t WUWT]

<http://newsinfo.iu.edu/news/page/normal/21533.html>

Changing Weather

Thousands flee Australian flood-hit town

By Staff Writers, Sydney (AFP) March 6, 2012

http://www.terradaily.com/reports/Thousands_flee_Australian_flood-hit_town_999.html

[SEPP Comment: Government predictions of draught are failing, sadly to an extreme.]

Changing Climate

City UHI makes spring bloom earlier

By Anthony Watts, WUWT, Mar 9, 2012

<http://wattsupwiththat.com/2012/03/09/city-uhi-makes-spring-bloom-earlier/#more-58682>

[SEPP Comment: Reporting a U. of Maryland study showing earlier springs in the urban and suburban areas of mid-Atlantic region.]

No Warming For 17 Years - Game, Set, Match

By Steve Goddard, ICECAP, Mar 5, 2012

http://icecap.us/index.php/go/political-climate/the_latest_research_belies_the_idea_that_storms_are_getting_more_extreme/

[SEPP Comment: If the 1998 and 2010 El Nino years are excluded, a more correct statement would be no warming for a decade. Contains comments on the recent outbreak of tornadoes and hail storms.]

Changing Seas

Dust linked to increased glacier melting and ocean productivity

By Staff Writers, Miami FL (SPX), Mar 09, 2012

http://www.terradaily.com/reports/Dust_linked_to_increased_glacier_melting_and_ocean_productivity_999.html

[SEPP Comment: Dust, which the EPA considers a health threatening pollutant, enhances marine life.]

Changing Sea Ice

Impact of declining Arctic sea ice on winter snowfall

By Judith Curry, Climate Etc, Mar 5, 2012

<http://judithcurry.com/2012/03/05/impact-of-declining-arctic-sea-ice-on-winter-snowfall/#more-7452>

[SEPP Comment: Further thoughts on a new paper of the same title in which she is a co-author. Links to the critique by Joe D'Aleo.]

NASA Finds Sea Ice Driving Arctic Air Pollutants

By Staff Writers, Pasadena CA (JPL), Mar 02, 2012

http://www.spacedaily.com/reports/NASA_Finds_Sea_Ice_Driving_Arctic_Air_Pollutants_999.html

[SEPP Comment: The definition of pollutant is meaningless.]

Changing Earth

Disasters cost \$380 billion in 2011, says UN

By Staff Writers, United Nations (AFP) March 5, 2012

http://www.terradaily.com/reports/Disasters_cost_380_billion_in_2011_says_UN_999.html

[SEPP Comment: The quake and tsunami in Japan were the major destroyers. The explosions at Fukushima were chemical not nuclear.]

Acidic Waters

The Geological Record of Ocean Acidification

By Hönisch, et al. Science, Mar 2, 2012

<http://www.sciencemag.org/content/335/6072/1058.abstract>

Although similarities exist, no past event perfectly parallels future projections in terms of disrupting the balance of ocean carbonate chemistry—a consequence of the unprecedented rapidity of CO2 release currently taking place.

Current rates of ocean acidification are unparalleled in Earth's history

By Staff Writers, Bristol UK (SPX), Mar 06, 2012

http://www.terradaily.com/reports/Current_rates_of_ocean_acidification_are_unparalleled_in_Earth_history_999.html

Agriculture Issues & Fear of Famine

Meeting biofuel production targets could change agricultural lands

By Staff Writers, Washington DC (SPX), Mar 05, 2012

http://www.biofueldaily.com/reports/Meeting_biofuel_production_targets_could_change_agricultural_lands_999.html

[SEPP Comment: *The biofuel mandate is unneeded, costly, and ridiculous.*]

Heavy metal pollution causes severe declines in wild bees

By Staff Writers, Washington DC (SPX), Mar 07, 2012

http://www.seeddaily.com/reports/Heavy_metal_pollution_causes_severe_declines_in_wild_bees_999.html

[SEPP Comment: *The research was conducted in Poland and the UK.*]

Litigation Issues

Salazar sued over Grand Canyon uranium decision

By Staff Writers, WNN, Feb 28, 2012

http://www.world-nuclear-news.org/ENF-Salazar_sued_over_Grand_Canyon_uranium_decision-2802127.html

[SEPP Comment: Perhaps the plaintiffs will use photos of the land in question rather the Salazar photos of the Grand Canyon.]

Cap-and-Trade and Carbon Taxes

The EU's Emissions Trading System Isn't Working

By Alexander Jung, Der Spiegel, Feb 15, 2012

<http://www.spiegel.de/international/business/0,1518,815225,00.html>

Subsidies and Mandates Forever

Bingaman Introduces Federal Clean Energy Standard Act

By Staff Writers, POWERnews, Mar 7, 2012

http://www.powermag.com/POWERnews/4460.html?hq_e=el&hq_m=2398630&hq_l=4&hq_v=5e660500d0

"The vast majority of municipal and cooperative utilities will never need to meet the minimum standard," as is noted in a [two-page summary of the bill](#).

[SEPP Comment: *Punishing the efficient.*]

Advanced Biofuels Industry Leaders Urge US Congressional Leaders to Extend Critical Tax Provisions

By Staff Writers, Washington DC (SPX), Mar 08, 2012

http://www.biofueldaily.com/reports/Advanced_Biofuels_Industry_Leaders_Urge_US_Congressional_Leaders_to_Extend_Critical_Tax_Provisions_999.html

Obama proposes bumping Chevy Volt subsidy up to \$10K

By Neil Munro, Daily Caller, March 8, 2012

<http://dailycaller.com/2012/03/07/obama-proposes-bumping-chevy-volt-subsidy-up-to-10k/>

[SEPP Comment: Consumers do not want them, the production line has shut down due to the lack of sales – the solution is to increase the subsidies to the high income groups.]

Chevy Volt dubbed Euro car of the year

By Keith Laing, The Hill, Mar 5, 2012

<http://thehill.com/blogs/transportation-report/automobiles/214155-chevy-volt-dubbed-european-car-of-the-year>

[SEPP Comment: Due to lack of sales, GM announced suspension of production of the European Car of the Year.]

EPA and other Regulators on the March

Clearing the air on the EPA

EPA grants to its advisers triggers conflict-of-interest query

By Steve Milloy, Washington Times, Mar 7, 2012

<http://www.washingtontimes.com/news/2012/mar/7/clearing-the-air-on-the-epa/?page=all>

[SEPP Comment: EPA funding of scientists who are identified as providing scientific oversight.]

A Little Pollution Saves Lives

By Roy Spencer, His Blog, Mar 7, 2012

<http://www.drroyspencer.com/2012/03/a-little-pollution-saves-lives/>

[SEPP Comment: Addressing the EPA manipulation of statistics to claim absurd health risks. The satellite estimate of fine particulate matter is most interesting.]

BPA Files Revised Plan to Manage Power Oversupply in Pacific Northwest

By Staff Writers, POWERnews, Mar 7, 2012

http://www.powermag.com/POWERnews/4463.html?hq_e=el&hq_m=2398630&hq_l=7&hq_v=5e66050d0

[SEPP Comment: Government business management. Forget what is best for the customer; what is important is what is best for the wind power supplier.]

Energy Issues – Non-US

"We need energy storage for the energy revolution"

By Staff Writers, Berlin, Germany (SPX), Mar 09, 2012

http://www.energy-daily.com/reports/We_need_energy_storage_for_the_energy_revolution_999.html

[SEPP Comment: Reliable and cost-effective electricity or energy storage on a commercial scale has been a vexing problem for over 100 years. Without it, wind and solar are not viable compared with fossil fuels. At least this group recognizes the problem, many politicians do not.]

Oil sands pollution comparable to ‘large power plant’, NASA data shows

By Yadullah Hussain, Financial Post, Mar 2, 2012

http://business.financialpost.com/2012/03/02/oil-sands-pollution-comparable-to-large-power-plant-nasa-data-shows/?_lsa=1fa2a7b0

[SEPP Comment: The satellite photos belie the claims of the opponents to oil sands, including Jim Hansen of NASA-GISS.]

As pipelines stall, railways keep oil flowing

Claudia Cattaneo, Financial Post, Mar 2, 2012

http://business.financialpost.com/2012/03/02/as-pipelines-stall-railways-keep-oil-flowing/?_lsa=f3e41a4e

Energy Issues -- US

Energy Misdirection: Revisiting Pres. Obama's U. of Miami Speech

By James H. Rust, Somewhat Reasonable, Mar 8, 2012

<http://blog.heartland.org/2012/03/energy-misdirection-revisiting-pres-obamas-u-of-miami-speech/>

Is U.S. Energy Independence Finally Within Reach?

By John Ydstie, NPR, Mar 7, 2012

<http://www.npr.org/2012/03/07/148036966/is-u-s-energy-independence-finally-within-reach>

[SEPP Comment: Energy from secure sources is the key issue, not energy independence.]

Oil and Natural Gas – the Future or the Past?

Oil giants innovate, push boundaries

By Simone Sebastian and Zain Shauk, Houston Chronicle, Mar 7, 2012

<http://fuelfix.com/blog/2012/03/07/oil-giants-innovate-push-boundaries/>

[SEPP Comment: The big producers understand the changes in oil and gas production which Washington has yet to grasp.]

Foiling OPEC

By Donn Dears, Power for USA, Mar 9, 2012

<http://dddusmma.wordpress.com/2012/03/09/foiling-opec/>

U.S. oil and gas sector created 37,000 jobs last year

Yadullah Hussain, Financial Post, Mar 8, 2012

http://business.financialpost.com/2012/03/08/u-s-oil-and-gas-sector-generated-150000-jobs-last-year/?_lsa=f3e41a4e

Fracking Indictment

By Donn Dears, Power for USA, Mar 2, 2012

<http://dddusmma.wordpress.com/2012/03/02/fracking-indictment/>

Natural Gas Prices Spur Truckmaker Interest (Market, not political, development)

By Robert Bradley Jr., Master Resource, Mar 8, 2012

<http://www.masterresource.org/2012/03/natural-gas-trucks-market-development/>

[SEPP Comment: The pick-up design indicates that the storage of the compressed natural gas will take up a large portion of the bed.]

US Administration's Control of Oil and Gas

Oil, gas industry created 9% of new U.S. jobs in 2011: WEF

By Staff Writers, Reuters, Mar 7, 2012

http://business.financialpost.com/2012/03/07/oil-gas-industry-created-9of-new-u-s-jobs-in-2011-wef/?_lsa=070af1bc

The Job Boom Obama Tried to Stop

By Marita Noon, Townhall, Mar 8, 2012

http://finance.townhall.com/columnists/maritanoon/2012/03/08/the_job_boom_obama_tried_to_stop

Return of King Coal?

Shale gas hyperbole shows our lack of institutional memory

By Frank Clemente, Energy Facts, Mar 7, 2012

<http://us1.campaign-archive2.com/?u=29bc7d5d85828d574f86c157a&id=390ed03482&e=>

[SEPP Comment: Respectfully disagree. The technology has changed, remarkably. However, modern coal plants can safely and economically generate electricity for centuries to come.]

Back To Black: Dirty Coal Celebrates Comeback In Germany

By Michael Glassman, Claus Hecking, Impulse, Mar 9, 2012

<http://thewgpf.org/international-news/5169-back-to-black-dirty-coal-celebrates-comeback-in-germany.html>

Oil Spills & Consequences

BP, plaintiffs reach \$7.8 billion settlement over Gulf oil spill

By Ben Geman, The Hill, Mar 3, 2012

<http://thehill.com/blogs/e2-wire/e2-wire/213945-bp-plaintiffs-settle-over-gulf-oil-spill>

Deepwater Oil Drilling Picks Up Again as BP Disaster Fades

By Clifford Krauss and John Broder, NYT, Mar 4, 2012

http://www.nytimes.com/2012/03/05/business/deepwater-oil-drilling-accelerates-as-bp-disaster-fades.html?_r=1&nl=todaysheadlines&emc=tha23

[SEPP Comment: No mention of the deepwater rigs that have sailed away due to government policies.]

Nuclear Energy and Fears

One Year On

The Fukushima Nuclear Accident and Its Aftermath

By Peter Kaiser, ed., IAEA, Mar 9, 2012

<http://www.iaea.org/newscenter/news/2012/fukushima1yearon.html>

[SEPP Comment: The disaster at Fukushima as summarized by IAEA and the lessons that are still being learned.]

Experts: Formal China Energy Plan Favors Grid, Nuclear Firms, Not Coal Generators

By Staff Writers, POWERnews, Mar 7, 2012

http://www.powermag.com/POWERnews/4465.html?hq_e=el&hq_m=2398630&hq_l=6&hq_v=5e66050d0

DoE agrees partnerships for SMR deployment

By Staff Writers, WNN, Mar 5, 2012

http://www.world-nuclear-news.org/NN-DoE_agrees_partnerships_for_SMR_deployment-0503125.html

[SEPP Comment: Small modular reactors may be an important part of the future energy mix.]

Alternative, Green (“Clean”) Solar and Wind

Wind farms in Pacific Northwest paid to not produce

By Dan Springer, Fox News, Mar 7, 2012 [H/t Catherine French]

<http://www.foxnews.com/politics/2012/03/07/wind-power-companies-paid-to-not-produce/?test=latestnews>

Dear Wind Industry: We Need Your Workers and Materials (and taxpayers need your cessation)

By Robert Bradley Jr., Master Resource, Mar 6, 2012

<http://www.masterresource.org/2012/03/wind-resources-needed-elsewhere/#more-19026>

Alternative, Green (“Clean”) Other

Is Seaweed the Future of Biofuel

By Staff Writers, Tel Aviv, Israel (SPX), Mar 07, 2012

http://www.biofueldaily.com/reports/Is_Seaweed_the_Future_of_Biofuel_999.html

Review of Recent Scientific Articles by NIPCC

For a full list of articles see www.NIPCCreport.org

Hot Times on the Tibetan Plateau

Reference: Liu, Y., An, Z.S., Linderholm, H.W., Chen, D.L., Song, M.H., Cai, Q.F., Sun, J.S. and Tian, H. 2009. Annual temperatures during the last 2485 years in the mid-eastern Tibetan Plateau inferred from tree rings. *Science in China Series D Earth Science* 52: 348-359.

<http://www.nipccreport.org/articles/2012/mar/6mar2012a1.html>

[SEPP Comment: Four warmer periods in the past.]

The High-Latitude Coral-Climate Correlation During the Holocene

Reference: Hamanaka, N., Kan, H., Yokoyama, Y., Okamoto, T., Nakashima, Y. and Kawana, T. 2012. Disturbances with hiatuses in high-latitude coral reef growth during the Holocene: Correlation with millennial-scale global climate change. *Global and Planetary Change* 81: 21-35.

<http://www.nipccreport.org/articles/2012/mar/6mar2012a3.html>

[SEPP Comment: Possible solar influences on coral growth. Warming enhances growth, cooling limits it.]

The Top-of-the-Atmosphere Radiation Budget: Model Simulations vs. Direct Measurements over the Tropics

Reference: Andronova, N., Penner, J.E. and Wong, T. 2009. Observed and modeled evolution of the tropical mean radiation budget at the top of the atmosphere since 1985. *Journal of Geophysical Research* 114: 10.1029/2008JD011560.

<http://www.nipccreport.org/articles/2012/mar/7mar2012a2.html>

[SEPP Comment: IPCC AR4 models are inconsistent with measurements.]

The European Heat Wave of 2003

Reference: Weisheimer, A., Doblas-Reyes, F.J., Jung, T. and Palmer, T.N. 2011. On the predictability of the extreme summer 2003 over Europe. *Geophysical Research Letters* 38: L05704
doi:10.1029/2010GL046455.

<http://www.nipccreport.org/articles/2012/mar/7mar2012a5.html>

Oh Mann!

A detailed review of Mann's book: The Hockey Stick and the Climate Wars as it relates to the Wegman report to Congress

By Brandon Shollenberger, WUWT, Mar 7, 2012

<http://wattsupwiththat.com/2012/03/07/a-detailed-review-of-manns-book-the-hockey-stick-and-the-climate-wars-as-it-relates-to-the-wegman-report-to-congress/#more-58586>

[SEPP Comment: A long analysis of statements in Mr. Mann's book. Tree ring data are not the only things Mann clips to give a misleading impression.]

Above the Law

By Steve McIntyre, Climate Audit, Mar 5, 2012

<http://climateaudit.org/2012/03/05/above-the-law/#more-15784>

[SEPP Comment: McIntyre spoke out against the Cuccinelli CID. He also filed a formal complaint with the UVA for a misconduct investigation of Mann. His views are quite interesting.]

The Union of Concerned Scientists **praised** the decision as a “victory for science”. But a decision that public agencies are immune from having to provide documents in response to investigative demands from the Attorney General for fraud against taxpayers is hardly one that meets any sense of justice or fairness.

Environmental Industry

The Greens Think You're Stupid

By Alan Caruba, Warning Signs, Mar 8, 2012

<http://factsnotfantasy.blogspot.com/2012/03/greens-think-youre-stupid.html>

Environmentalists in 'fantasy land', says Australia

By Staff Writers, Sydney (AFP), Mar 6, 2012

http://www.terradaily.com/reports/Environmentalists_in_fantasy_land_says_Australia_999.html

Saving Face by Slaying Owls

By Charles Payne, Townhall, Mar 4, 2012

http://finance.townhall.com/columnists/charlespayne/2012/03/04/saving_face_by_slaying_owls/page/full/

[SEPP Comment: Another example of environmental extremism.]

New Mapping Tool Shows How Severe Nuclear Accident Could Look in US

By Staff Writers, Washington DC (SPX), Mar 06, 2012

http://www.nuclearpowerdaily.com/reports/New_Mapping_Tool_Shows_How_Severe_Nuclear_Accident_Could_Look_in_US_999.html

[SEPP Comment: A new product from those noted for cancer scares.]

Other Scientific News

Study supports theory of extraterrestrial impact

By Staff Writers Santa Barbara CA (SPX) Mar 06, 2012

http://www.spacedaily.com/reports/Study_supports_theory_of_extraterrestrial_impact_999.html

[SEPP Comment: The sudden cooling known as the Younger Dryas (dryas is an arctic and alpine flower) in the Northern Hemisphere has been a perplexing issue. Among the hypotheses is a shut-down of the North Atlantic "conveyor" that transports ocean surface waters from the tropics to the Arctic (Gulf Stream) caused by a sudden inflow of fresh water from the massive Lake Agassiz. However, the hypothesized change in circulation in the Southern Hemisphere seems to contradict this hypothesis. No doubt the new findings described in this article will add to the controversy.]

Why Early Earth Didn't Freeze Over Still a Mystery

By Charles Choi, LiveScience, Mar 6, 2012 [H/t GWPF]

<http://news.yahoo.com/why-early-earth-didnt-freeze-over-still-mystery-201602915.html>

The Moons' influence on the atmosphere over Australia

By Jo Nova plus Ian Wilson, Her Blog, Mar 4, 2012

<http://joannenova.com.au/2012/03/the-moons-influence-on-the-australian-climate/#more-20661>

Study shows earthworms to blame for decline of ovenbirds in northern Midwest forests

By Staff Writers, Washington DC (SPX), Mar 08, 2012

http://www.terradaily.com/reports/Study_shows_earthworms_to_blame_for_decline_of_ovenbirds_in_northern_Midwest_forests_999.html

[SEPP Comment: Earthworms on the march.]

Other News that May Be of Interest

Radical theory of first Americans places Stone Age Europeans in Delmarva 20,000 years ago

By Brian Vastag, Washington Post, Feb 29, 2012

http://www.washingtonpost.com/national/health-science/radical-theory-of-first-americans-places-stone-age-europeans-in-delmarva-20000-years-ago/2012/02/28/gIQA4mriR_story.html

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BELOW THE BOTTOM LINE:

Friday Funny Bonus: Kenji gets mail

By Anthony Watts, WUWT, Mar 9, 2012

<http://wattsupwiththat.com/2012/03/09/friday-funny-bonus-kenji-gets-mail/#more-58757>

[SEPP Comment: Kenji Watts, the dog of Anthony, qualified for, and was accepted into the Union of Concerned Scientists.]

Birth control cuts greenhouse gases, activist argues

By Jason Howerton, Daily Caller, Mar 3, 2012

<http://times247.com/articles/activist-birth-control-fights-global-warming>

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ARTICLES:

1. EPA Endangers Human Health and Welfare

By S. Fred Singer, American Thinker, Mar 7, 2012

http://www.americanthinker.com/2012/03/epa_endangers_human_health_and_welfare.html

Last week, a three-judge panel of the federal District Court of Appeals for the D.C. Circuit heard two days of oral arguments in the lawsuit challenging the Environmental Protection Agency's regulation of greenhouse gas emissions using the Clean Air Act. The consolidated suit, Coalition for Responsible Regulation vs. EPA, challenges the EPA's 2009 Endangerment Finding (EF) that greenhouse gas emissions "endanger human health and welfare," the automobile tailpipe emissions rule, and the "tailoring rule" that exempts smaller stationary emissions sources from being regulated -- in contradiction of the explicit language in the 1970 Clean Air Act.

First some background: in April 2007, the U.S. Supreme Court ruled that carbon dioxide, a non-toxic, natural component of the atmosphere -- and essential for life on Earth -- could be considered an atmospheric pollutant under the Clean Air Act (CAA) of 1970 -- and could therefore be regulated by EPA. But there was an important proviso: the EPA first had to demonstrate that CO2 endangered human health and welfare. Accordingly, in 2009, the EPA issued an Endangerment Finding (EF), backed up by a Technical Support Document (TSD). A large number of petitioners then filed lawsuits against the EPA, including the states of Alabama, Texas, and Virginia, disputing the EF. (My organization, the Science and Environmental Policy Project (SEPP), is one of the petitioners; we concentrate on the scientific validity of the TSD.)

The purpose of the original lawsuit, Commonwealth of Mass. vs EPA, was to force the EPA to regulate CO2 as a pollutant from motor-vehicle tailpipe emissions. To overcome the problem of "standing," Mass. presented an affidavit written by the chief scientist of the Environmental Defense Fund, claiming that putative future warming caused by the greenhouse gas CO2 would lead to extensive flooding of New England coastal regions. There are three things wrong with this claim: one, there is no evidence that an increase in CO2 would lead to appreciable warming; two, there is no evidence that any warming, should it occur, would accelerate ongoing sea-level rise; and three, it would seem improper for the Supreme Court to accept an affidavit from an obviously biased source. Unfortunately, the Department of Justice refused our technical help and did not adequately argue the case.

As things stand now, the Appeals Court may render a decision in June 2012. There's a possibility that either party may ask the full Court to meet en banc. But if the Court turns down the request, there is bound to be an appeal to bring the case before the Supreme Court.

There are many problems with the EPA's Endangerment Finding. Some are administrative and some are legal, but there are also very basic scientific problems.

Administratively, the EPA was required to submit its EF to its Scientific Advisory Board (SAB); it failed to do that, and this may make the current EF invalid. As reported by the EPA's inspector general, the EPA also failed to carry out an independent analysis of the underlying science. Instead, the EPA relied on three external reports that were all biased in the same direction: the flawed IPCC report of 2007, reports of the U.S. Climate Change Science Program, and a later report of the National Academy of Sciences. The trouble is that these three reports are not independent evaluations of the available scientific evidence; they involved pretty much the same scientists, just wearing different hats. The EPA made no attempt to obtain any contrary analysis of the science or to carry out its own, presumably unbiased analysis.

Under the terms of the CAA, the EPA is not required to consider the cost and other negative consequences of its proposed regulations. Nevertheless, it is fairly obvious that these will drastically raise the cost of energy, including also the cost of heating and air-conditioning -- with grave impacts upon the health and welfare of low-income groups in the population.

There are also many legal problems with the EF. Once CO2 becomes a "criteria pollutant," then under the terms of the Clean Air Act, the EPA must set a National Ambient Air Quality Standard (NAAQS) -- as it did for each of the six current criteria pollutants. After all, it is the NAAQS that is relevant to human health and welfare and defines a true pollutant; limitations on emissions are simply a means to achieve a critical legal NAAQS. In the case of CO2, however, this is clearly impossible. No amount of EPA regulation of U.S. emitting sources, whether cars, power stations, etc., can achieve a targeted NAAQS without the cooperation of the rest of the world, and principally China. Nor can the EPA even define a target NAAQS for CO2.

A second legal problem has to do with the actual regulation of CO2 emitters. Under the Clean Air Act, the EPA is required to deal with every source that emits more than 100 or 250 tons of a pollutant a year. In the case of CO2, this would involve millions of sources, including apartment buildings, hospitals, etc. Realizing the impossibility of dealing with so many sources, the EPA has issued a "Tailoring Rule," which arbitrarily limits attention only to sources of more than 100,000 tons per year. But the TR is not established by law; Congress would have to amend the CAA to permit the EPA to carry out its plan.

To summarize, the core legal issues can be thought of as a series: 1) does the 2007 Supreme Court decision require an EF to regulate motor-vehicle emissions, 2) do such regulations then require also regulation of stationary sources (EPA's goal), 3) is the EPA's tailoring of the regulations to only large emitters permitted under the law, and 4) does strict application of the law lead to absurd results?

But the main objection to the EF -- and the one that we have concentrated on -- is the EPA's so-called "evidence" that a rise in CO2 will have a noticeable impact on global climate. In fact, since we filed the objection to the EF and TSD and agreed to become a co-plaintiff in the lawsuit, the scientific evidence has moved even farther in our favor. We feel more sure now that the continuing increase in CO2 has caused no appreciable warming in the crucial interval 1978-1997 -- contradicting all climate-model results. There has been no observed warming trend of Earth's atmosphere, either -- which atmospheric theory predicts should have been about double that of the surface. There has been no observed warming trend in the oceans, and most of the geological, non-thermometer ("proxy") data we have studied show no warming in recent decades.

Nevertheless, in spite of the many objections to the EF, it is still possible that the courts will defer to the EPA and permit regulation of CO2 to proceed. It would be a great economic calamity if this were to happen. It would also be a severe blow to the rational use of science in public policy-making.

2. Industry Alters Designs in an Effort to Make Future Plants Safer

By Rebecca Smith, WSJ, Mar 8, 2012

http://online.wsj.com/article/SB10001424052970204781804577269642909854600.html?mod=WSJ_Energy_leftHeadlines

[SEPP Comment: The goal in design of nuclear plants: if something bad happens, you just walk away with no consequences except the loss of the investment.]

Long before the disaster at Fukushima Daiichi, nuclear engineers were working on solutions to problems similar to those that contributed to the accident. Some of the improvements—from new high-tech materials to so-called passive safety systems—have been worked into the designs of the latest generation of reactors, regulators and safety experts say.

The latest designs for reactors "incorporate more advanced safety concepts," said Gregory Jaczko, chairman of the U.S. Nuclear Regulatory Commission.

Innovations in nuclear design are tackling problems like the ones that contributed to the Fukushima Daiichi disaster in Japan. WSJ's Rebecca Smith reports.

Some safety experts still fret that new nuclear reactors will be unable to ride out extreme natural disasters such as enormous earthquakes or tsunamis like the one that crippled the Fukushima reactors. And some lawmakers believe the new designs aren't safe enough. Rep. Edward Markey (D., Mass.) and senior member of the House Energy and Commerce Committee, said he believes the next wave of reactors will be "insufficiently prepared to respond to catastrophic events or even simple power outages."

So far, U.S. utilities are building only one kind of new reactor, the AP1000, designed by Toshiba's Westinghouse unit. It has been chosen by Southern Co. and Scana Corp. for projects in Georgia and South Carolina.

One of the AP1000's chief selling points is its use of so-called passive safety systems. Large reservoirs of water are stored above the reactor and spent-fuel pool so that gravity, not pumps, can get water to the reactor core and pool if needed.

Existing reactors, by contrast, rely more on active safety systems, like electrically driven pumps and valves, to maintain proper fluid levels and temperature settings. If reactors lose grid electricity, they begin running out of coolant in a few days, can overheat and even melt down.

"Then, if other auxiliary systems don't kick in, they're in trouble," said Ronaldo Szilard, a physicist at the Idaho National Lab who works on advanced reactor issues. "That's what happened at Fukushima."

New reactors also incorporate improved materials, such as cement that can better withstand radiation, heat and caustic chemicals, as well as steel alloys that are less susceptible to cracking and corrosion.

Another advantage of the new reactors is that they can be built in modular fashion with big sections "constructed in factories and assembled at the site," said Vaughn Gilbert, a spokesman for Westinghouse, adding that the factory approach is intended to improve quality.

Modular construction is something new for the nuclear sector. The 104 existing reactors in the U.S. were each heavily customized, which made them more expensive to build, harder to inspect and more difficult to maintain.

The modular design also improves safety because it means reactors are less idiosyncratic and therefore should be easier to staff during a crisis, experts say. An operator qualified to work in the control room of

one AP1000 should be able to step into the control room of another AP1000 and know what is going on, just as a pilot who knows how to fly a Boeing 737 can move from plane to plane.

The Idaho National Lab's Dr. Szilard said another generation of reactors is on the way that will feature even better safety features. By 2050, he said, there should be totally passive reactors that will be buried underground and so will pose no threat even if they have problems.

"If something happens, you just walk away," he said. "The reactor gradually dies down. You've lost your capital investment, but nothing happens."

3. Odd Alliance Says No to Gas Exports

By Russell Gold and Keith Johnson, WSJ, Mar 8, 2012

http://online.wsj.com/article/SB10001424052970203961204577269672522415982.html?mod=WSJ_business_whatsNews

Energy companies have found so much natural gas in U.S. shale rocks they want to begin exporting it. But the push is creating a political clash with an unusual set of opponents who think American gas should stay in America.

Gas producers are eager to find new markets after seeing the glut of U.S. gas depress prices to a 10-year low. Big gas importers, such as Japan, are lobbying through diplomatic channels to persuade the U.S. to open the export spigot.

Lining up against exports are some strange bedfellows in industry and the environmental community. The American Chemistry Council, a trade group of chemical makers, says a long-term supply of cheap natural gas would drive enormous investment and job creation in the U.S. petrochemical industry. It has warned the government against "undermining the availability of domestic natural gas."

The chemical industry is being joined by the Sierra Club, a major environmental group, which frets that giving natural-gas producers new customers overseas will lead to more hydraulic fracturing to break up the shale and release the gas, a technique dubbed fracking that has raised environmental concerns.

"We don't often have joint Christmas parties with these folks, but on this issue we have a common interest," said Michael Brune, the executive director of the Sierra Club.

The issue could come to a head this spring as the Department of Energy prepares to decide whether issuing export licenses for gas is in the national interest. The department has said it will rely in part on a report about the economic impact of exports, due within weeks.

Proponents say allowing exports could create more jobs in the natural-gas industry by encouraging new wells. Recently, some companies have shied away from drilling because domestic gas prices are so low and there is no way to sell the fuel overseas.

Exports also could help trim the U.S. trade deficit, Energy Secretary Steven Chu said last month. "Exporting natural gas means wealth comes into the United States," he said. Once a big energy importer, the U.S. has begun to turn into an export powerhouse by shipping out refined products such as gasoline.

The U.S. currently exports a small amount of gas to Japan from a 43-year-old facility in Kenai, Alaska, which chills the gas to turn it into a liquid before it can be put on supercooled tanker ships. But there aren't any large-scale terminals to create liquefied natural gas, or LNG, to ship overseas.

The possibility of exporting gas is a profound turnaround from a few years ago, when conventional wisdom said the U.S. would need to bring in LNG. In November 2005, then-Federal Reserve Chairman Alan Greenspan testified to Congress about the need to build more import terminals.

Since then, domestic energy producers expanded their drilling into shale and found trillions of cubic feet of gas. U.S. production of natural gas has risen 41% since Mr. Greenspan's testimony, according to the federal government. The price of natural gas, meanwhile, has dropped 70%.

But prices have risen elsewhere in the world. Gas in Asia fetches eight times as much as in the U.S. Gulf Coast. That is why shipping U.S. gas overseas makes economic sense.

One proposed export terminal—Cheniere Energy Inc.'s project at Sabine Pass, La.—already has won Department of Energy approval to ship to most nations. Seven other projects are seeking similar signoffs. If all are built, which is seen as unlikely, they could export about 25% of current U.S. gas production.

Creating an export trade is expected to boost prices and production of gas, a fuel used to heat about half of U.S. homes and generate a quarter of the nation's electricity. The Energy Information Administration, the statistical arm of the U.S. Energy Department, recently said gas exports could push domestic prices up over the next decade between 14% and 36%, depending on the pace of export-facility construction.

Increasing exports of gas could help both coal and renewable power, both of which are struggling to maintain market share against inexpensive gas-powered electricity generation. "Low gas prices have been hard on coal and alternative energy and to the extent that gas prices are higher, that is good for them," said Michael Giberson, an energy economist at Texas Tech University.

Cheniere, which plans to have the first new export terminal open in 2015, initially faced some internal opposition. When Chief Executive Charif Souki in 2010 proposed exports after a decade spent building an import terminal, he said the reaction from his board was, "You have got to be kidding."

Cheniere's Mr. Souki said the biggest support for exports should come from "every politician in a state that produces gas, and there 32 states that produce gas today," since exports bring in royalties and taxes.

The Sierra Club opposes creating more incentives to drill, citing long-term effects of natural-gas production, such as methane that escapes into the atmosphere from wells. It also has concerns about potential groundwater pollution from fracking and the amount of energy used to chill gas to 260 degrees below zero so it can be shipped. "It becomes a net negative in terms of climate impact, and for that reason alone we would oppose" the terminals, said the group's Mr. Brune.

Recently, U.S. diplomats have been encouraging global LNG production because they see potential strategic benefits, such as weakening Russia's power in gas markets.

"In the last five years, LNG that had been originally slated for U.S. markets has been diverted to European spot markets, forcing gas-on-gas competition as Russian suppliers had to accept lower prices for pipeline gas," said Robert Cekuta, a senior State Department official in the energy and economics bureau, speaking last month in Indonesia.

4. Windmills vs. Birds

About 70 golden eagles are killed every year by turbines at California's Altamont Pass, reports the LA Times.

By Robert Bryce, WSJ, Mar 7, 2012

http://online.wsj.com/article/SB10001424052970204781804577267114294838328.html?mod=WSJ_Opinion_LEFTTopOpinion

For years, the wind energy industry has had a license to kill golden eagles and lots of other migratory birds. It's not an official license, mind you.

But as the bird carcasses pile up—two more dead golden eagles were recently found at the Pine Tree wind project in Southern California's Kern County, bringing the number of eagle carcasses at that site to eight—the wind industry's unofficial license to kill wildlife is finally getting some serious scrutiny.

Some 77 organizations—led by the American Bird Conservancy, Cornell Laboratory of Ornithology, Endangered Species Coalition and numerous chapters of the Audubon Society—are petitioning the U.S. Fish and Wildlife Service to toughen the rules for the siting, permitting and operation of large-scale wind projects.

It's about time. Over the past two decades, the federal government has prosecuted hundreds of cases against oil and gas producers and electricity producers for violating some of America's oldest wildlife-protection laws: the Migratory Bird Treaty Act and Eagle Protection Act.

But the Obama administration—like the Bush administration before it—has never prosecuted the wind industry despite myriad examples of widespread, unpermitted bird kills by turbines. A violation of either law can result in a fine of up to \$250,000 and imprisonment for two years.

The renewed focus on bird kills is coming at a bad time for the wind industry, which is being hammered by low natural-gas prices and a Congress unwilling to extend the 2.2 cents per-kilowatt-hour production tax credit that has fueled the industry's growth in recent years.

Last June, the Los Angeles Times reported that about 70 golden eagles are being killed per year by the wind turbines at Altamont Pass, about 20 miles east of Oakland, Calif. A 2008 study funded by the Alameda County Community Development Agency estimated that about 2,400 raptors, including burrowing owls, American kestrels, and red-tailed hawks—as well as about 7,500 other birds, nearly all of which are protected under the Migratory Bird Treaty Act—are being killed every year by the turbines at Altamont.

A pernicious double standard is at work here. And it riles Eric Glitzenstein, a Washington, D.C.-based lawyer who wrote the petition to the U.S. Fish and Wildlife Service. He told me, "It's absolutely clear that there's been a mandate from the top" echelons of the federal government not to prosecute the wind industry for violating wildlife laws.

Mr. Glitzenstein comes to this issue from the left. Before forming his own law firm, he worked for Public Citizen, an organization created by Ralph Nader. When it comes to wind energy, he says, "Many environmental groups have been claiming that too few people are paying attention to the science of climate change, but some of those same groups are ignoring the science that shows wind energy's negative impacts on bird and bat populations."

That willful ignorance may be ending. The Center for Biological Diversity, the Sierra Club and Defenders of Wildlife recently filed a lawsuit against officials in Kern County, Calif., in an effort to block the construction of two proposed wind projects—North Sky River and Jawbone—due to concerns about their impact on local bird populations. The groups oppose the projects because of their proximity to the deadly Pine Tree facility, which the Fish and Wildlife Service believes is killing 1,595 birds, or about 12 birds per megawatt of installed capacity, per year.

The only time a public entity has pressured the wind industry for killing birds occurred in 2010, when California brokered a \$2.5 million settlement with NextEra Energy Resources for bird kills at Altamont. The lawyer on that case: former attorney general and current Gov. Jerry Brown, who's now pushing the state to get 33% of its electricity from renewables by 2020.

Bats are getting whacked, too. The Pennsylvania Game Commission estimates that wind turbines killed more than 10,000 bats in the state in 2010.

Despite the toll that wind turbines are taking on wildlife, the wind industry wants to keep its get-out-of-jail-free card. Last May, the Fish and Wildlife Service proposed new guidelines for wind-turbine installations. But the American Wind Energy Association quickly panned the proposed rules as "unworkable."

Given that billions of dollars are at stake, the wind industry's objections don't surprise Mr. Glitzenstein. And while the lawyer wants more thorough environmental review of proposed wind projects, what he's really hoping for is a good federal prosecution. So far, he says, the Interior Department has been telling the wind industry: "'No matter what you do, you need not worry about being prosecuted.' To me, that's appalling public policy."

Mr. Bryce is a senior fellow at the Manhattan Institute. His latest book is "Power Hungry: The Myths of 'Green' Energy and the Real Fuels of the Future" (Public Affairs, 2010).

5. Fukushima and the Future of Nuclear Power

There's no evidence that low doses of radiation are harmful and no reason to paralyze our economy out of fear of nuclear power.

By William Tucker, WSJ, Mar 6, 2012

http://online.wsj.com/article/SB10001424052970203370604577261341008387240.html?mod=ITP_opinion_0

In the early 1980s, a Taiwan steel company accidentally mixed some highly radioactive cobalt-60 into a batch of steel rebar. The radioactive rods were then used in the construction of 1,700 apartments. As a result, people living in these buildings were subject to radiation up to 30 times the normal amount received from the natural background.

When dismayed officials discovered this enormous error 15 years later, they surveyed past and present apartment dwellers expecting to find an epidemic of cancer. Normal incidence would have predicted 160 cancers among the 10,000 residents. To their astonishment, the researchers discovered only five cases of cancer—97% lower than the anticipated amount. Birth defects were also 94% below the anticipated rate. These findings were published in the Journal of American Physicians and Surgeons in 2004. As one researcher phrased it, exposure to high levels of background radiation had apparently bestowed upon residents "an effective immunity from cancer."

The incident illustrates the enormous gap that has grown between radiation science and the popular perception of the dangers of nuclear power. One year after Japan's Fukushima accident, much of the world is running away from nuclear energy on the grounds that its risks are too great for a modern society to bear.

Germany has reinstated plans to close down all its reactors by 2022, even if it means importing huge quantities of natural gas from Russia and nuclear-generated electricity from France and the Czech Republic. Japan has taken all of its 54 reactors out of service with the possibility that they may never run

again. The result has been a complete reversal of Japan's trade balance from 20 years of surpluses to a record \$18 billion deficit. Oil and liquid natural gas imports have increased dramatically while factories have slowed because of power shortages.

In the United States, the reaction so far has been less severe. The Nuclear Regulatory Commission has increased its vigilance and is under tremendous pressure to close down aging reactors such as Vermont Yankee in southeastern Vermont and Indian Point north of New York City. But the NRC did issue its first new license in 30 years for two Westinghouse AP1000 reactors at the Vogtle plant in eastern Georgia. Construction is expected to begin soon. Still, it's a far cry from the 30 to 100 new reactors that were being touted a year ago as part of America's "nuclear renaissance."

Meanwhile, 100 coal plants have been shut down in the U.S. over concerns about mercury and carbon emissions while the "renewables," solar and wind, that are supposed to take their place are proving to be much more intractable and land-consuming than previously imagined. With so much economic damage in the wake of Fukushima, it might behoove the world to ponder what the dangers of nuclear energy really are.

All 54 of Japan's reactors absorbed an earthquake of 9.0 on the Richter scale—the biggest in Japan's recorded history. Though the shock exceeded design specifications, the steel reactor vessels and concrete containment structures remained intact. The problem occurred when the subsequent 50-foot tsunami wiped out the backup generators at Fukushima, crippling the cooling system and causing the four operating reactors to overheat.

The core of three reactors melted down, but that in itself is not a public catastrophe as long as the reactor vessel and containment structure hold. All the radiation releases have come from contaminated cooling water and steam vented or escaping into the environment. Other releases came from the spent fuel pools, which also lost some of their coolant and proved to be a greater danger.

Nuclear engineers have long recognized these vulnerabilities. The AP1000 being built in Georgia is specifically designed with a "passive" cooling system that relies on natural convection currents rather than electric pumps so the reactors can cool themselves for several days while waiting for power to be restored. Spent fuel rods at existing reactors will be moved inside the containment structure wherever possible or into dry casks where they do not require cooling. All this takes time and expense but will be a necessary step toward improving nuclear safety.

The real problem, however, may be in the public's overestimation of the danger posed by small exposures to radiation. In order to avoid any possible charge of negligence, regulatory bodies around the world have adopted what is called a "linear-no-threshold" or "no safe dose" standard for radiation safety.

This says, quite simply, that because huge doses of radiation—the kind you might get from standing in the same room with a spent fuel rod—can cause illness or cancer, we must assume that even the smallest doses will have the same effect on a smaller scale. It's exactly the same as saying that because jumping off a 10-story building will break every bone in your body, stepping off a one-foot curb will also cause some minor damage.

So far there have been zero fatalities or adverse health effects from radiation exposure at Fukushima. All the damage has been from depression, despair and even suicide among the 100,000 people who have been evacuated from their homes within a 12-mile radius.

Some of these people are even being shunned in their new locales under the bizarre supposition that they constitute a radioactive danger. Yet as Ted Rockwell, one of the most notable veterans of the Manhattan

Project, points out, people around the world live with radiation levels much higher than is present in the evacuation zone without showing any ill effects. The residents of the Taiwan apartments experienced 10 times the level of radiation as is prevalent in the evacuation zone.

The etiology of radiation-related disease is well-known. Radiation can cause DNA damage but the body has repair mechanisms to deal with it. Last December scientists at Berkeley made microscopic videotapes of these cellular repair sites in action. "Our data show that at lower doses of ionizing radiation, DNA repair mechanisms work much better than at higher doses," wrote Mina Bissell, a world-renowned breast cancer researcher who co-authored the report. "This non-linear DNA damage response casts doubt on the general assumption that any amount of ionizing radiation is harmful and additive."

Other researchers speculate that low radiation doses may immunize the body against cancer and birth defects by stimulating these repair mechanisms into greater responsiveness, just as vaccines stimulate the immune system. That would explain the low cancer rates in Taiwan.

As long as government agencies around the world continue to operate under the premise that even the smallest exposures to ionizing radiation can be harmful, Germany and Japan will go on dismembering their economies while countries such as the U.S. attempt to straddle the widening gap between outlawed coal and a renewables future whose promise now appears greatly exaggerated.

Taking a clear-eyed look at the actual dangers of nuclear energy seems like a much more sensible course.

Mr. Tucker is author of "Terrestrial Energy: How Nuclear Power Will Lead the Green Revolution and End America's Energy Odyssey" (Bartleby Press, 2010).

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