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Playing in the NO_X Credits Market: Sure Thing or a Long Shot?

Feeling depressed about your 401(k)? Wondering how to put your kids through college? Stressing out about where that next million is going to come from? Some experts would suggest crazy investment ideas like "long-term growth" and "diversification", but there is another way…

Putting your money in allowance streams in the Texas NO_X Mass Emission Cap and Trade (MECT) program in 2002 would now be worth over 30 times as much today! So why isn't Warren Buffett recommending this investment? Like many investments, the market is uncertain. Even though Texas has concrete rules about the size and behavior of the market, many factors make the market volatile and risky.

Beginning in 2002, sites with a potential to emit greater than ten tons of NO_X annually in the Houston-Galveston ozone non-attainment area were proportionally distributed a share of market "allowances" based on historical baselines. These member sites were required to maintain and retire NO_X credits in an amount equal to the number of tons NO_X emitted that year. Over time, the total number of allowances available to the participating sites was intentionally reduced; companies with excess NO_X emissions would sell to those with deficits, and air quality would improve. As the number of available allowances decreased, the law of supply and demand suggests that the price of these credits would increase. But to what level? Will the price of allowances grow another 3000 percent in the next six years?

Several unanticipated factors may affect market prices in the foreseeable future. Houston, thankfully, is experiencing continuing economic growth. It is rumored that Dubai currently has 25 percent of the world's construction cranes, but

Houston may not be too far behind. And as businesses and industry expand in Houston, so does the size of the MECT NO_X market. Each new 10-ton-plus NO_X source must "buy in" to comply with program rules and retire allowances at the end of the year. As predicted, this has created an increase in demand and higher prices; the market price of a NO_X stream, a one ton allowance in perpetuity, increased from $5,000 in 2002 to over $160,000 in 2008.

This change in the allowance price can have a significant impact on the bottom line. Companies with a 10-ton NO_X footprint interested in re-locating to or expanding in Houston might not be discouraged by investing $50,000 for environmental compliance but would probably think twice if that cost were $1.6 million.

At this price, the cost of compliance with the MECT program may influence whether a firm decides to construct in a non-attainment county or just over the county line in a neighboring attainment area. For many firms, Houston's eastern neighbor, Beaumont, is an attractive choice. Forbes' Best Cities for Business and Careers list ranks Beaumont favorably, scoring higher even than Houston in the *Cost of Doing Business*, *Cost*

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FROM THE TRENCHES

Begging Cap In Hand

A few years ago I had the opportunity to be a member of the Emissions Banking and Trading team of the Texas Commission on Environmental Quality (TCEQ). We worked primarily with the regulated community and emission credit brokers to help companies navigate state regulations (program started in 2002) that effectively created a barrier to their expansion in certain areas like Houston. For me, it was a pretty quick lesson in the "unintended consequences" of regulation and how different groups are affected in cap-and-trade markets.

Initially, market pricing for emissions credits was fairly consistent across the different TCEQ programs in which they could be used, generally hovering around 5,000 dollars per credits stream. Credits were easily transferable between programs, supply seemed to be sufficient for everyone's needs, and the market pricing was fairly stable. Subsequently, however, the credits available to swap between programs became scarce due to changes in the state's rules that stipulated that only emission reduction credits (ERCs) generated before a certain date could be converted to cap-and-trade allowances.

In response to this constraint on the use of credits, companies and brokers began to convert as many ERCs to cap-and-trade allowances as possible before the ERCs expired into the thin (and presumably, cleaner!) air. Several companies not sufficiently familiar with the TCEQ's Byzantine credit rules failed to submit proper applications to convert ERCs to allowances in time. As a consequence, many ERCs expired, and some companies suffered significant monetary impacts.

Within a few years of operation of the cap-and-trade programs, the prices of streams of allowances had skyrocketed because ERCs could no longer be swapped between programs, emissions account balances were dwindling (as a result of the cap-and-trade regulation schedule which lowered allowance caps each year) and industry was expanding in the Houston-Galveston area. And, as time passed, companies became quite reluctant to sell their credits to competitors, choosing to hold on to them in the event that they might be needed in the future. Another concern of some companies was that the public would respond unfavorably to their engaging in "pollution trading". Consequently, to maintain the image of good corporate citizenship, they rendered surplus allowances in their account as "un-tradable."

As I transitioned from my role as a state regulator to my career in consulting, some of the earliest projects I worked on involved helping companies find credits in the market and generate ERCs of their own. One such instance sent me on a search for a stream

of over one hundred tons of cap-and-trade allowances. I quickly found there is not much liquidity in the ERCs market and that the price for allowances for a proposed plant project might be a significant portion of its capital cost of the project, sometimes even equaling the cost of the process equipment.

For example, in working with a company planning to add gas turbine capacity in Houston, I found that if allowances were to be had, they would cost tens of millions of dollars to acquire, assuming that we could find a seller with a bloc of credits large enough to cover my client's needs. In the end they were hesitant to build in the Houston-Galveston area when they could site their project in an attainment area just a few counties away and build with much less hassle and expense.

Having been on both sides of the fence, I've become much more skeptical of regulatory initiatives like the Texas emissions cap and trade programs that set rigid caps. It seems problematic for regulators to attempt to limit emissions with a cap-and-trade program given the difficulty that both the regulators and the regulated community encounter in predicting future growth and emissions credit needs. With most new sources in Houston already subject to best available control technology or lowest achievable emission rate requirements as conditions of their permits, adding additional regulation in the form of a cap-and-trade to lower emissions seems well intentioned but ultimately fruitless. And the continual tightening of ambient air quality standards, especially the ozone standard, while ignoring the collateral economic, societal, and quality of life consequences, ensures the ultimate failure of any attempts to meet such standards with rigid caps, prescriptive control methods, and other existing regulatory initiatives.

Jamey Woodall
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The Reliability Factor: "Daubert" Challenges to Experts in Environmental Litigation

Environmental litigators face unique challenges in dealing with expert testimony in the litigation context. As environmental-focused lawsuits typically involve complex scientific issues, experts often present difficult and complicated technical information and must do so in a way that can be understood by judges, lawyers, and juries, who are usually not engineers and scientists. Restrictions are placed upon the testimony of these experts, however. Before an expert witness is allowed to testify, he must ensure that his work satisfies the evidentiary standards of expert testimony, first presented in the United States Supreme Court decision *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). This article provides a brief overview of recent decisions where the opinions of environmental experts have been the subject of *Daubert* challenges and how those challenges were ultimately resolved.

To guide trial courts in their evaluation of the reliability of expert testimony, the *Daubert* court identified four nonexclusive factors: (1) the "testability" of the technique, (2) whether the technique has been subjected to peer review or publication, (3) the known or potential rate of error, and (4) a "reliability assessment," which identifies and determines the "degree of acceptance" within a scientific community. Most *Daubert* challenges relate to the reliability of expert opinion. The reliability assessment is a crucial part of the trial court's "gatekeeping" function to "ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." The trial court has the duty to "first make a 'preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue,' focusing specifically on the methodology and not the conclusions." *Synergetics, Inc. v. Hurst*, 477 F.3d 949, 955 (8th Cir. 2007) (citing *Daubert*, 509 U.S. at 592–593).

The field of environmental litigation highlights some of the difficulties lawyers face in challenging and defending the reliability of expert opinions. *Daubert* challenges typically allege (1) failure to consider all relevant data or information, (2) lack of testing or sampling, and/or (3) incorrect facts or assumptions. These challenges have met with varying degrees of success.

One recent case concerning both the failure to consider relevant data and incorrect assumptions on the part of the expert is *Finestone v. Florida Power & Light Company*, No. 03-014040-CV, 2006 WL 267330 (S.D. Fla. Jan 6, 2006). In *Finestone*, the plaintiffs alleged injuries caused by exposure to sludge improperly disposed of by the defendant. Based upon sampling, one of the plaintiffs' experts testified that the sludge contained radioactive isotopes. The court rejected this testimony, finding the expert failed to consider samples taken where no isotopes were found. If included, the average concentration would have been reduced by an order of magnitude. The court concluded the expert's methodology was unreliable and questioned whether it had been "contrived to reach a particular result." The testimony was also rejected due to incorrect assumptions made by the plaintiff's experts. In calculating exposure rates, the experts computed the presence of other, more radioactive isotopes, such as cesium. The expert incorrectly assumed that cesium was present in the sludge, even though actual sampling data disproved this.

A *Daubert* challenge based upon a lack of environmental sampling occurred in *Dolomite Products Company, Inc. v. Amerada Hess Corporation*, No. 01-CV-6530T, 2004 WL 1125154 (W.D. N.Y. May 19, 2004). In *Dolomite*, the plaintiff filed a lawsuit seeking to recover remediation costs, alleging that a nearby gas station caused soil contamination. The defense challenged the plaintiff's causation expert on several grounds, including that the expert had failed to take soil and groundwater samples. The court rejected this challenge, finding that the expert's experience and methodology satisfied the evidentiary standards. The court was satisfied with the "numerous" undisputed "sources of information" the expert relied on as the basis of his opinion, including a history of spills on the defendant's property, proximity of the properties, groundwater flow patterns, and the lack of other spills near the plaintiff's property.

These recent cases can provide important lessons to experts and their sponsoring parties. Successful challenges must focus on the materiality of the information being offered to discredit the expert's evidence. Also, the expert and his sponsoring party must be fully prepared to defend the reliability of the expert's methodology. The planning for that defense must come at the beginning of the expert's involvement in the case. Litigation teams that are prepared to respond to *Daubert* challenges have the best chance of successfully having expert opinions presented to the trial court.

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News Briefs

national news

Court Reverses Vacatur of Clean Air Interstate Rule

On December 23, the U.S. Court of Appeals for the DC Circuit reversed its vacatur of EPA's Clean Air Interstate Rule. Citing major flaws in EPA's regulations, in July 2008 the Court had effectively vacated the entire program, which regulates interstate emissions of pollutants contributing to acid rain and smog. In the December 23 reversal, the court said that having a flawed rule temporarily in place was better than having no rule at all. The agency must still revise the rule, but has no deadline for doing so. For more information, contact Ed Rapier at 512.879.6649 or *erapier@zephyrenv.com*.

EPA Changes How Fugitive Emissions Are Considered in NSR Determinations

On December 10, EPA revised its New Source Review (NSR) rule to require that fugitive emissions from only the listed 28 source categories be considered when determining whether a modification is major and triggers PSD review. This revision makes the treatment of fugitive emissions for major modification determinations consistent with the treatment of fugitive emissions for major source determinations. The 2002 NSR Improve-ment rules had required that fugitive emissions for all source categories (i.e., listed and non-listed sources) be included in determining whether a modification was major. For more information, contact Roger Brower at 410.312.7907 or *rbrower@zephyrenv.com*.

EPA Takes Position that CO_2 Not a Regulated NSR Pollutant

On December 19, EPA Administrator Stephen Johnson issued a memorandum clarifying EPA's position that CO_2 is not a regulated NSR pollutant because EPA regulations only require CO_2 monitoring and recordkeeping, not actual control of CO_2 emissions. Johnson's memo was prepared in response to an earlier EPA Appeals Board decision to remand the Deseret Power Electric Cooperative Bonanza Power Plant PSD permit to EPA Region 8 for reconsideration of CO_2 BACT. The memorandum supplies a definitive interpretation of regulated NSR pollutants and provides further support in developing an adequate record for EPA's decision that CO_2 BACT is not required. For more information, contact Roger Brower at 410.312.7907 or *rbrower@zephyrenv.com*.

EPA Says Non-Certified Testers OK for Part 75 Air Emissions Testing

Effective November 4, EPA placed an indefinite stay on its requirement that certified individuals be used to perform Part 75 emissions tests and CEMS evaluations. The stay, which will allow Part 75-regulated facilities to continue using testers that are not certified in accordance with ASTM standards, is a result of a Petition for Review filed by the Utility Air Regulatory Group (UARG) asserting that the EPA can not hold utilities responsible for something the utilities can not control. For more information, contact Paul Little at 281.668.7347 or *plittle@zephyrenv.com*.

Obama Makes Environmental and Energy Chief Selections

President-elect Barack Obama has announced his energy and environment team, which will consist of Nobel physics laureate Steven Chu as energy secretary; chief of staff for New Jersey's governor, Lisa Jackson, as EPA Administrator; deputy mayor of Los Angeles, Nancy Sutley, as head of the White House Council on Environmental Quality; and former EPA Administrator Carol Browner as coordinator of his energy and environmental policies. According to Obama's *New Energy for America* plan, the team's primary objectives are to increase renewable energy use, which is intended to enhance national security by reducing America's dependency on foreign oil, and reduce carbon emissions, with the added benefit of stimulating the U.S. economy through the creation of millions of "green" jobs. For more information, contact Brett Davis at 512.879.6628 or *bdavis@zephyrenv.com*.

Department of Interior Proposes Changes to Endangered Species Regulations

The Secretary of the Interior announced on December 11 changes to its endangered species regulations which will allow federal agencies to determine if their actions will have an affect on endangered species without first seeking concurrence with the US Fish and Wildlife Service or the National Marine Fisheries Service. Previously, consultation with these agencies was mandatory for any federal action. Also, under the proposed changes, greenhouse gas production will not prevent a federal action from being authorized in circumstances where the effects of the action from green-

house gases cannot be strictly defined. For more information, contact Clay Fischer at 512.879.6629 or *cfischer@zephyrenv.com*.

EPA Issues Emissions Standards for Emergency Engines

Effective January 1, spark ignited internal combustion engines used as emergency engines are subject to EPA's Subpart JJJJ New Source Performance Standards. The regulations establish NO_X, CO, and VOC emissions limits, monitoring and testing requirements, operating requirements, recordkeeping and reporting requirements based on the engine horsepower rating, and the date of engine construction or modification. Testing and recordkeeping requirements are also established on the basis of the engines being operated in a "certified" or "non-certified" manner. The rule allows emergency engines to operate 100 hours per year for exercising and maintenance purposes. For more information, contact Doug Jordan at 281.668.7352 or *djordan@zephyrenv.com*.

EPA Revises Lead Air Quality Standard

On November 12, EPA revised the primary and secondary National Ambient Air Quality Standard for lead, lowering the allowable ambient level to 0.15 micrograms per cubic meter (as total suspended particulates). EPA also revised the averaging time for the standard to a rolling 3-month period with a maximum (not-to-be-exceeded) form, evaluated over a 3-year period. EPA revised the secondary standard to be identical in all respects to the revised primary standard. EPA also revised data handling procedures, the treatment of exceptional events, and ambient air monitoring and reporting procedures for lead. The revised rule goes into effective on January 12. For more information, contact Lou Corio at 410.312.7912 or *lcorio@zephyrenv.com*.

EPA Proposes Emissions Standards for Chemical Manufacturing Area Sources

On October 6, EPA proposed National Emissions Standards for Hazardous Air Pollutants for new and existing sources in nine chemical manufacturing sector area source categories. The standards, proposed as Subpart VVVVVV of Title 40, Part 63, include management practices for process vents, storage tanks, equipment leaks, transfer operations, and cooling tower systems. In addition, EPA is proposing treatment requirements for wastewater streams. For more information, contact Shahjabeen Hashim at 281.668.7359 or *shashim@zephyrenv.com*.

EPA Revises Emergency Planning, Release Notification, and Chemical Reporting Rules

On November 3, EPA revised its emergency release notification and hazardous chemical reporting rules, including a complete re-write in a plain language/question and answer format, clarification of how to report hazardous chemicals in mixtures, and changes to the Tier I and Tier II forms. The rule revisions, which were effective December 3, apply to facilities subject to chemical inventory reporting, those storing extremely hazardous substances in excess of threshold planning quantities, and those experiencing a release of an extremely hazardous substance or a CERCLA hazardous substance in excess of reportable quantities. For more information, contact Rebecca Luman at 281.668.7343 or *rluman@zephyrenv.com*.

EPA Amends SPCC Rules and Extends Deadlines — Again

On November 20, EPA amended its spill rules to restore the definition of "navigable waters" to that promulgated by EPA in 1973 and to include new exemptions for hot-mix asphalt containers, intra-facility gathering lines regulated by the Department of Transportation, and produced water containers having limited quantities of oil. The amendments also revise the general secondary containment requirement and exempt non-transportation-related tank trucks from sized secondary containment requirements. In addition, they provide a streamlined process for preparing spill prevention, control, and countermeasure (SPCC) plans for facilities with no individual oil storage containers having capacities greater than 5,000 gallons. The dates for compliance with the amended rules have been extended to November 20, 2009 for facilities other than a qualified farm or production facilities; November 20, 2010 for farms meeting the qualified facility criteria; and November 2013 for production facilities. For more information, contact Robin Cosgrove at 512.879.6623 or *rcosgrove@zephyrenv.com*.

EPA Proposes to Further Amend Refinery Emissions Standards

On November 10, EPA proposed a supplement to its proposed September 4, 2007 amendments to the Subpart CC hazardous pollutant emissions standards for petroleum refineries. This supplement includes a new option for storage vessels related to tank fitting control requirements and associated inspection, recordkeeping, and reporting requirements. In addition, the supplement proposes new requirements for cooling towers, and clarifies and corrects definitions, tables, and regulatory citations. The supplemental proposal is based on new information received by EPA since the initial 2007 proposal. For more information, contact Shahjabeen Hashim at 281.668.7359 or *shashim@zephyrenv.com*.

state news

Baltimore Could Become a Serious Ozone Nonattainment Area

EPA is likely to ask Maryland to voluntarily reclassify the Baltimore and Cecil County ozone non-attainment areas from "moderate" to "serious" under the Clean Air Act. Based on recent air quality monitoring data, EPA expects that it will be difficult for these areas to meet the ozone standard by 2010. If Maryland does not comply with this request, EPA intends to deny approval of Maryland's State Implementation Plan in January 2009. Reclassifying the Baltimore area and Cecil County as "serious"

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non-attainment areas will have the effect of delaying clean air compliance deadlines for another two years (to 2012). Maryland believes EPA's request to be premature and not in the interest of protecting the health of State residents. For more information, contact Lou Corio at 410.312.7912 or *lcorio@zephyrenv.com*.

Maryland Sets Rules for Disposing of Coal Combustion Byproducts

On December 1, the Maryland Department of the Environment established new requirements for the disposal of coal combustion by-products (CCBs), including fly ash, and the use of CCBs for mine reclamation. The regulations require that disposal facilities meet all the same standards required for industrial solid waste landfills. Disposal and mine reclamation sites must implement dust control measures and post-closure monitoring and maintenance procedures. Generators of CCBs are subject to new annual reporting requirements describing how the material was recently used or disposed, as well as future plans for disposal/use. For more information, contact Lou Corio at 410.312.7912 or *lcorio@zephyrenv.com*.

TCEQ Recommends 8-hour Ozone Nonattainment Designations

On December 10, the TCEQ Commissioners approved recommendations to the Governor for proposed designations of attainment status for Texas counties with respect to the 2008 eight-hour ozone air quality standard. The recommendations are based on certified air quality monitoring data for 2005 through 2007, and the TCEQ staff's review of monitoring data for 2008. The TCEQ's recommendations include nonattainment designations for all counties already designated as nonattainment for the 1997 8-hour ozone standard, plus new nonattainment designations for Travis, Hood, Bexar, Gregg, Rusk, and Smith Counties, as well as most of El Paso County. The Governor's recommendation for designations to EPA is due by March 12, 2009, and EPA will then have until March 12, 2010 to finalize the designations. For more information, contact Curtis Harder at 512.879.6643 or *charder@zephyrenv.com*.

EPA Reclassifies Houston Area as Severe Nonattainment for Ozone

On October 1, EPA granted a request from the Governor of Texas to voluntarily reclassify the Houston/Galveston/Brazoria area from a moderate to a severe 8-hour ozone nonattainment area. Under the moderate classification, the area had an attainment date of June 15, 2010, but as a severe area the new attainment date is June 15, 2019. With the reclassification, the state has until April 15, 2010 to revise its plan for meeting the standard. This date was set by the EPA to give the TCEQ time to improve the models using data from studies that only recently became available. For more information, contact Ed Fiesinger at 281.668.7353 or *efiesinger@zephyrenv.com*.

Sources to Pay Penalties for Houston Missing Ozone Nonattainment Deadlines

The Federal Clean Air Act authorizes the collection of fees by the states from major stationary sources in areas that fail to attain the ozone standard by the applicable attainment date. In its October 1, 2008 decision to "bump up" the Houston nonattainment area from moderate to severe for the 8-hour standard, EPA, in a footnote in the *Federal Register* notice, reiterated that the revised 8-hour state implementation plan to be developed by Texas "must contain fees on major sources if the area fails to attain the standard." The TCEQ has reviewed the applicable state statutes and has determined that it currently has the necessary authority to collect such fees. EPA guidance to address collection of Section 185 fees by the states is expected to be issued in early 2009. For more information, contact Ed Fiesinger at 281.668.7353 or *efiesinger@zephyrenv.com*.

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of Living, and *Income Growth*. The available development space, a growing labor pool, and developed infrastructure in the Beaumont area are great for business. And a shift in growth from Houston to the Beaumont area would reduce the demand for NO_X credits substantially.

Even though Beaumont may be a good option for businesses averse to siting a facility or expanding in the Houston area, the air quality in Beaumont often affects air quality in Houston. While no plans have been proposed to include the Beaumont/Port Arthur area in the MECT program, the possibility always exists. Compliance with the new, more stringent ozone standard may force the issue sometime in the future. One can imagine the volatility in the price of NO_X credits were the two airsheds ever combined.

Not every variable affecting the NO_X credit price is out of our control, however. Facilities subject to MECT may elect to perform financial modeling to determine the credit price at which equipment upgrades are economical. As upgrades or process changes are made that reduce a site's NO_X footprint, the newly excess credits can either be used internally for future expansions or sold on the open market to recover some capital costs. More often than not, efficiency upgrades will also improve a site's bottom line, as newer equipment requires less fuel and maintenance and has greater online availability.

Recent attention by the TCEQ to Houston area non-industrial sources of NO_X emissions, such as public schools and office build-

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FROM THE PRESIDENT

Has the Time Come for "The Smart Grid?"

Well, 2008 was quite a year — we've seen a global economic recession intensify, watched as commodity prices plunged, and tallied up the results of a national election. What does all this bode for 2009 and the future?

A term that has gained a lot of currency lately is the "Smart Grid" — defined by Wikipedia as "a vision for a digital upgrade of distribution and long distance transmission grids to both optimize current operations, as well as open up new markets for alternative energy production."

Wikipedia also notes that today's power grid began evolving in the 1890s. Consequently, many implementation decisions that still affect us today were made for the first time using the limited emerging technology available 120 years ago. In the U.S., our current electricity delivery system consists of about 9,200 generating units, 300,000 miles of power lines, and delivers approximately 1,000,000 megawatts. In the description of the Smart Grid concept at its website, the Department of Energy (DOE) notes that 10 percent of our generating capacity and 25 percent of our delivery system is needed for less than 400 hours per year, or about 5 percent of the time. The DOE further notes that even a 5-percent efficiency improvement in our national grid would be the equivalent of eliminating the fuel required, and greenhouse gas emissions resulting from, the operation of 53 million vehicles.

In addition to overall efficiency improvements, benefits of the Smart Grid are said to include the ready integration of renewable sources (e.g., wind and solar), consumer choice (e.g., the ability to use "off-peak" pricing for clothes drying, etc), the potential for large-scale energy storage, and notably, the ability to integrate Plug-in Hybrid Electric Vehicles (PHEV's), which have been described as "the killer app" for the Smart Grid.

With all of these apparent advantages, why hasn't the Smart Grid already been built? First and foremost, the high cost to implement the Smart Grid on a nationwide basis has been a substantial impediment. A related reason is that our decentralized electric power system is comprised of conservative electric utilities inherently reluctant to "mess with" established technologies for reliable power delivery. Add to that the recent collapse of global credit markets, and the implementation of the Smart Grid would at first appear unlikely.

However, according to the DOE, several factors may promote progress toward a Smart Grid sooner rather than later.

Past federal incentives – The October economic stimulus bill included provisions for utilities to accelerate the depreciation of smart electric meters and Smart Grid infrastructure.
Future federal incentives – Before the election, the Obama campaign called for matching grants of 25 percent of qualifying Smart Grid investments as well as support for advanced metering and demand response.
Regulatory favor – Elected officials increasingly see the Smart Grid as a path to better reliability and lower rates for their constituents.
Urgent upgrade needs – Many utilities have an urgent need to upgrade aging infrastructure. A recent Black & Veatch survey claimed that as much as 60 percent of the electric power infrastructure is at the end of its life.
Federal funding of infrastructure – Obama's transition team is circulating concepts for a New Deal-style stimulus bill that would provide $500 billion to $1 trillion for roads, bridges, and a Smart Grid. The Obama team has also signaled a "science-based" approach to our energy issues, naming Steven Chu the Director of Lawrence Berkeley National Laboratory, as Secretary of Energy.

Assuming that technological and other hurdles can be overcome, it's possible that significant investment in the Smart Grid could provide numerous benefits to society: creating jobs and stimulating the economy, promoting energy security and efficiency, and providing a more robust energy infrastructure that will prove to be a good investment for many years to come. It seems appropriate to end with a quote from Thomas A. Edison (1847-1931):

"If we all did the things we are capable of doing, we would literally astound ourselves!"

Joe Zupan
President

Zephyr is a professional services firm providing worldwide consulting, training and data systems to the industrial, commercial and public sectors. The firm's major areas of practice are air and water quality, waste issues, worker and community safety, and incident management.

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TCEQ Rule Enables Capping of Emissions Credits for DFW Area

On December 10, the TCEQ amended its Chapter 101 rules to grant the Executive Director authority to limit the use of discrete emissions reductions credits (DERCs) in the DFW area. This rule was promulgated in response to an EPA requirement that the TCEQ adopt an enforceable mechanism to limit the use of DERCs as a condition of final approval of the Texas plan for demonstrating attainment with the 1997 8-hour ozone standard. The TCEQ's DERC Program for the DFW area offers a market-based framework for trading emission reductions of volatile organic compounds and nitrogen oxides to allow additional flexibility for complying with the Texas Clean Air Act while creating a net reduction in total air emissions with each transaction. For more information, contact Jamey Woodall at 512.879.6625 or *jwoodall@zephyrenv.com*.

TCEQ Posts Draft Guidance on Calculating VOC Flash Emissions

On December 17, the TCEQ posted for review and comment the draft guidance document "Calculating Volatile Organic Compounds (VOC) Flash Emissions from Crude Oil and Condensate Tanks at Oil and Gas Production Site". The guidance document, intended to provide agency staff and applicants with guidance regarding flash gas emissions estimates at oil and gas sites, summarizes eight methods of flash gas emissions calculation methodologies. Rather than prescribing specific methods to be used, the draft guidance document expresses the Agency's preference for the use of direct measurement, process simulator (e.g. HYSIM, PROMAX), E&P Tanks 2.0, or Gas-Oil-Ratio from pressurized liquid sample methodologies. For more information, contact Doug Jordan at 281.668.7352 or *djordan@zephyrenv.com*.

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ings, indicates that a significant number of facilities may not have been included in the MECT program at its inception. This is a problem that really has no easy solution since these "invisible" sites were never budgeted for during the initial allocation of NO_X credits. If they, indeed, are required to meet the MECT program requirements, and, consequently, are required to hold and retire credits, the overnight change in demand could dramatically increase NO_X credit prices.

So, is the Mass Emissions Cap and Trade market a good place for investment opportunity? Like all good investment markets, it must be useful and understandable. Clearly, investments in emissions credits can be useful in meeting industry's needs for both growth and compliance with air quality regulations. However, "playing" in the MECT market isn't easy. Most of the credits are held by companies that, at least so far, have not been interested in selling; their primary goal has been to hold on to or amass additional credits to fuel future growth.

For the industries that use and understand this program, the MECT market can, in fact, be a good investment opportunity; the banking and purchasing of NO_X credits can increase the level of regulatory certainty and allow industries to make the long-range plans that will enable them to grow. And with nearby areas like Beaumont competing for industrial growth, the market may someday reach the point that Houston NO_X credits are both available and affordable.

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