



THE POLITICS OF CHANGE



Energy Politics: Comparing the Candidates

Sorting out the presidential candidates' stands on energy involves several leaps of faith.

To take either seriously, one must begin by assuming that if gasoline prices had not topped \$4 dollars per gallon, each would be talking about our energy future. Despite 35 years of rhetoric (by both parties) surprisingly little has been done to reduce U.S. dependence on foreign oil. Instead, the percentage that comes from overseas sources nearly doubled. It is therefore not a stretch to imagine that, if oil prices dropped back to \$60 a barrel (roughly where it was during the 2006 election, during which it wasn't even mentioned), both campaigns would not mention the issue.

But let's make that leap of faith and assume that both candidates sincerely want to do something about energy. How do they compare? In general, they both agree that the U.S. must become less dependent on foreign oil and fight global warming. That's where the agreement pretty much ends. Obama looks more toward alternatives to oil – not just renewables, but also nuclear and 'clean' coal – with an eye toward integrating his plans with global warming concerns. Government-regulated programs play a big role. McCain essentially calls for more of everything, including more U.S. oil wells, with fewer specifics and a much greater dependence on private sector initiatives, which he calls "market-based

energy reform." In essence, it's the traditional republican–democratic difference.

Each has supported some form of cap on greenhouse gas emissions, and both support energy efficiency. McCain states that "government must set achievable goals, but the markets should be free to produce the means." Obama strongly supports government-sponsored programs to both develop such technologies and implement them as a way to prime the pump for job creation and new business development.

The candidates differ on renewable portfolio standards (Obama for, McCain against), existing regulations (McCain wants less, Obama wants to maintain or expand much of it), and tax breaks and subsidies (Obama wants more for new technology and less for existing oil and nuclear companies; McCain wants to cut taxes in general, but supports some 'public-private partnerships', e.g., coal gasification and nuclear power).

None of the senators running as presidential or vice-presidential candidates has ever been on a Congressional committee related to energy. However, Sen. Joe Biden, Obama's VP pick, does have a lengthy history of supporting legislation regarding climate change and energy efficiency. Alaska Gov. Palin's energy back-

ground is limited to cutting taxes on oil companies and subsidizing a gas pipeline that may never be built, depending on which party wins the election.

At present, recent surveys indicate that voters claim energy will impact how they vote for a candidate. While claims and campaigns may change on the way to November 4, it will be interesting to see if the winners actually do anything significant during their administration, "The politics of change" could result in a significantly different energy future for America, no matter which candidate wins.

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Our Sustainable Future

Energy prices are a significant part of an operating budget. As a result, corporations want to use energy more efficiently and reduce their carbon footprint. It was important that Luthin Associates be able to provide "world class" sustainability advice.

For that reason, Great Forest and Luthin Associates have formed a joint venture to provide energy management and sustainability services to the business community.

The partnership of our two companies provides a unique combination of energy management with sustainability services that will be unmatched in the industry. Great Forest is an innovative leader and exceptionally capable in the services it provides to its customers.

This partnership will enable each of us to introduce new services, and, most importantly, develop new products for clients. This will all be accomplished while we help preserve the environment.

Specifying Your Energy Consulting Contract

One way to compare energy consultants when evaluating their fees is through the scope of work to be covered by that fee. In addition to seeking the lowest overall cost for power your consultant should also provide the following services:

- Assembling and organizing your historic account data (account numbers, service addresses, rates etc.).
- Checking the suitability of existing delivery tariffs to find options for cutting those costs.
- Benchmarking annual usage and demand to check for major anomalies.
- Examining load profile(s) for options to cut the capacity portion of the commodity price.
- Reviewing the consistency of account usage to set realistic allowable variances.
- Understanding the energy impact of planned capital projects.
- Assisting with credit issues or financial standing (e.g., to avoid paying deposits).
- Identifying qualified suppliers.
- Explaining pricing structures and risks to help the client choose appropriately.

- Forecasting utility and bidder pricing to manage customer expectations.
- Watching market metrics for pricing opportunities as they arise.
- Critiquing bidder contracts prior to pricing and negotiating favorable terms and conditions.
- Managing the entire bid process.
- Developing unit costs of different offers to create an apples to apples analysis.
- Ensuring all contracts are approved prior to the bidding so there are no problems at the last minute.

Once the deal is done, the consultant's services should continue throughout the contract length. These services should include:

1. Verifying the accuracy of the supplier bills and utility bills.
2. Reviewing utility tariffs for opportunities to achieve savings.
3. Looking for opportunities to renegotiate a deal if market conditions change.
4. Ensuring taxes are applied correctly to the supplier's bills.

5. Tracking budgeted energy costs to actual expenditures.

When comparing potential procurement consultants, it's also a good idea to examine credentials (e.g., AEE Certified Energy Procurement Professional, also called CEP) and speak to prior customers for references. Credit checks are recommended.

And don't be overly influenced by claims of potential cost savings. Such numbers may be relative to an "expected price" developed by the consultant that has been inflated by assumptions to make the winning price look good. To promote their services, a procurement practitioner may try to maximize the apparent "savings" from their process, especially if the fee is high. To approximate the going market rate for power at a given time, check their claimed cost savings against other sources (e.g., free newsletters from some of the major suppliers) or an indicative bid for your portfolio from your incumbent energy supplier.

A Code of Ethics for Energy Procurement Consultants

Retail energy procurement is still a relatively young industry (~20 years old) and efforts to regulate it vary widely across the U.S. In some states, a license to broker (as versus sell) power is required. In New York State the New York State Public Service Commission (PSC) and energy marketers developed (in 2006) a set of voluntary guidelines embodied in a "Statement of Principles for Energy Service Companies Marketing Retail Energy to Residential and Small Business Customers. Those guidelines cover only the bare minimum behavioral standards (e.g., use of plain language, no misrepresentation) and do not address the types of issues that can arise for a large customer with energy budgets in the hundreds of thousands of dollars or more.

At present, the only existing independent board that oversees standards for energy procurement professionals serving large end user clients is the Certification Board for Energy Procurement Professionals of the Association of Energy Engineers (AEE). Set up to create and oversee the certification training and testing for those supporting energy purchasing by retail customers and utilities, the CEP board is a logical agency to also set standards for behavior in that industry.

To respond to the need for standards appropriate to such customers, a Consultant Code of Ethics is being developed to serve as a benchmark for acceptable behavior for energy professionals. As a leader in the energy procurement practice, Luthin Associates is lending the effort to maintain and improve the standing of energy procurement professionals. Doing so could avoid the need for the development of extensive consumer regulations and the cumbersome licensing that might result. In October, Luthin Associates will present a plan for a Consultant Code of Ethics to the AEE CEP Board at the World Energy Engineering Congress in Washington, DC.

Publicizing the names of signatories, and enforcement of the Code, will be among the issues for discussion. In other industries, signers of such a Code are publicly listed (e.g., on a web site), and a process exists for de-listing those knowingly violating the Code. Promotion of the Code could be done during energy procurement courses and presentations at energy-related trade conferences, as well as the usual press releases and trade magazines.

As the Code and its management develop, Luthin Associates will report further on this effort. By this time next year, it is hoped that consumers who purchase energy in competitive mar-

kets will have a new tool to add confidence when choosing energy professionals.

Did You Know?

- ◆ According to a British energy trade magazine, in 2007, wind overtook hydroelectricity as the UK's primary renewable source of power.

ref. BERR Energy Trends cited at http://pro.energycentral.com/professional/news/power/news_article.cfm?id=10718125

- ◆ Over the next three years, 200 Honda FCX Clarities, a hydrogen fuel cell vehicle, will be driving through Southern California looking for "gas" stations. Luckily, Shell's Santa Monica Boulevard station will be available to keep these units running. A recent article in the New York Times of September 23, 2008, points out the many infrastructure issues that a Hydrogen economy will face when competing with electric technologies. The cost of developing a hydrogen infrastructure is estimated at \$2 to 400 billion, a figure that seemed extraordinary just over a month ago.

Tips For Energy Buyers To Avoid Potential Conflicts of Interest

Since sales of retail power and gas were deregulated years ago, energy customers have been hearing from many calling themselves ‘energy consultants’ that seek to guide them on buying energy. As some customers have learned, however, all such ‘consultants’ are not created equal, in either their background or their ethics. Luthin Associates, and many other consultants, however, take pride in pursuing legitimate efforts to find customers the lowest cost for energy.

In the early days of the industry, some pyramid schemes involved people with no background or knowledge buying ‘licenses’ to sell power. While such scams died a quick death, we continue to see others claiming ability to provide procurement services based on peripheral or unrelated experience, such as working for a utility, an energy commodities brokerage, or a manufacturer of generating equipment.

Smart customers choose an energy consultant by deciding what services they want, and examining credentials, experience, and knowledge to find who may best serve them. In so doing, they often find that some self-proclaimed ‘experts’ don’t even know the lingo. Those understanding supply side issues may, for example, be woefully

ignorant of demand side options, and vice versa. The only way to be sure is to request examples of experience in both areas, and check the references for each. You may also want to do a background check and a credit check. Treat the consultant as you would a prospective employee.

One issue that should be raised by the customer in the evaluation process is ‘supplier neutrality.’ The customer should seek to ensure that the consultant is not receiving a fee based on the volume of business that they steer to a particular supplier. A “side deal” to direct business to a particular ESCO could end up costing the customer more than if the consultant is ‘supplier neutral’.

Before signing with a consultant, a smart customer should determine how diverse the consultant is in the number of suppliers who have won their deals. Ask for three references from customers who have received services from three different suppliers. Also ask if the consultant is being paid in any way by the supplier. If the consultant is indeed ‘supplier neutral’, they will have no reason to recommend one over another, beyond price and services, and they should be able to document any claims of

superior services.

The same questions should be asked with regard to the use of online auctioneers that may help a consultant find the lowest available price. How much is the auctioneer to receive, and will that extra cost be built into the final price? And does the consultant get a cut of that fee? If so, how much?

In our experience, the auctioneer’s price is relatively low compared to the consulting fees, not higher. A high auctioneers price may be indicative of a “sole source” referral arrangement that may not be beneficial to you, the customer. Accordingly, customers, should raise the same “conflict of interest” questions with their prospective suppliers when a supply auction may be involved.

Customers and consultants need to realize that customer complaints to government agencies are often the source of investigations and interventions that may lead to over-regulation – or worse. Therefore, we believe it makes more sense for the industry to police themselves. We encourage others

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Put a Pro In Your Pro Forma

It is not uncommon for energy engineers to develop impressive, elaborate, creative and sound proposals for replacing or installing major energy systems and then take a very simplistic approach to quantifying the economic impact of the project. Design and construction risk in the energy business is relatively simple compared to financial risk so it is crucial that a project pro forma be reviewed closely and that alternative scenarios are developed to judge the level and range of risk in a project.

The test of a successful project is based on an estimate of future energy prices. Predicting these future prices are difficult and an educated guess at best. However, there are several methods that can be used to make these guesses more educated. For example, rather than using last year’s average cost of power to evaluate a chiller project, the pro forma should be based on the future load profile of the facility after the project is implemented. This will incorporate the economic benefit of reduced demand charges, especially if the project involves gas or steam. Ask the proposer to request a two year indicative price from an ESCO. This will enable you to at least know the exact level of your

short term savings. From that point informed escalation levels can be used. The commodity portion of your electric bill can be matched to CPI future expectations and the delivery portion can be based on known rate increases. Using last years’ usage and prices guarantees that your economic decision will be based and flawed data.

At this point, it is crucial that you also develop several “what if” scenarios. A review of historical gas prices over the last five years can provide good insight to the levels of change that might be expected in a future electric project as these two commodities tend to track closely. You may want to look at a range equal to 95% of the highest and lowest historical prices and recalculate the pro forma. Try it again at 75% and then 55% and so forth. A well developed spreadsheet will make this task relatively simple. At this point, you can get a good idea of the level of risk based on various assumptions.

For complicated projects such as cogeneration where you are dealing with both gas and electric prices, many large projects will incorporate

a Monte Carlo simulation. This exercise develops millions of scenarios based on the distribution curves of energy prices, system efficiency and run time. At the end of the process, you will be able to determine with a 95% certainty, a range of financial performance.

The main point is to understand that the level of effort in calculating the financial impacts should be as rigorous as the effort that goes into the engineering.

Quotable Quote:

“Change is inevitable. In a progressive country change is constant.”

Benjamin Disraeli
British Politician

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Web Resources

NYSERDA has a great source of cooling and heating degree days. The URL is:
http://www.nyscrda.org/energy_information/nyepch.asp
The data goes back to 2002, is listed by County and is provided in an easy cut and paste format.

BizEE Degree Days has Daily Degree Days for N.Y.C. and can be accessed at:
<http://www.degreeedays.net/>
It provides downloadable files for most weather centers with daily, weekly and monthly degree day data.

Luthin Associates, Inc. is an energy management consulting firm serving Tri-State and national clientele with a variety of energy procurement services since its founding in 1994. Our core business is fossil fuel contract development; fuel, steam and electric negotiation and alternate rate opportunities; energy purchase management and customer education for deregulated markets; benchmarking and other sustainability services. Our client experience includes strategic energy initiatives for major universities, state and local governments, numerous major healthcare facilities and real estate concerns. In our former positions, and as Luthin Associates, we have 85 years' collective experience in energy and financial management.



CPA Members Meeting Schedule 2008-2009

November 2008	December 2008	January 2009
Tuesday November 18 8:30 am	Tuesday December 16 8:30 am	Tuesday January 20 8:30 am

**Tips For Energy Buyers To Avoid
Potential Conflicts of Interest**

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to join us in adopting a code of ethics.

Just as customers may now choose energy suppliers through competitive bids, they may also choose energy consultants through the same process. Careful specification of fee structures, tasks, and deliverables should be part of the RFP for energy services, just as it is for energy contracts.

Congress Bails Out Sustainability Too

Among the components of the financial bailout package were several items that will have a major impact on sustainable energy. The legislation extends the investment tax credit (ITC) for residential and commercial solar, small wind and ground source heat pumps for a period of between four and eight years. It also removed the \$2,000 cap on residential solar systems thereby cutting the payback period for an installation by almost 50%. These changes will provide a major impetus to the solar panel industry. The commercial building ITCs were extended through 2013.

Other significant components of the legislation include electric plug-in cars which will receive tax credits of up to \$7,500. Tax credits for fuel cells were increased from \$500 to \$1,500 per kW and geothermal heat pumps and cogeneration will get 10% ITCs. \$800 million in Clean Renewable Energy Bonds (CREBs) will be available to finance generation from wind, biomass, geothermal, irrigation, hydropower, landfill gas, marine and trash. Additional provisions affect clean coal, carbon sequestration, and alternative fuels. For a comprehensive look at the legislation go to:

<http://www.dailykos.com/story/2008/10/3/13571/2894>

On a Personal Note...

The main theme of Politics of Change, our latest newsletter, involves the "spin" we are currently seeing in the energy business. For the first time in the various careers of the Luthin team, some of which span more than 30 years, energy is in the forefront of the political and economic landscape. I was going to say it is second only to national defense and then the economy meltdown occurred. Right now, energy is the third most important issue to Americans and it has made its way up the political issues ladder to reach the status of being called an issue of "national security."

Of course, the main reason for all this attention is the \$4 gallon of gas. Once energy reached a certain level, we knew everyone was going to pay attention to it.

So, now that we are in the spotlight, how do we act? Like the financial services world? Un-

fortunately, as we see in some of our articles, at present, within our industry, there are a significant number of financial operatives looking for another industry to "derivatize." There are a number of financial professionals who have taken a course on energy procurement, or have some limited background, and are now bringing their "unique" i.e. uninformed, style to help you reduce your energy budget. Frequently, these consultants couple their expertise with outrageous claims regarding their ability to save you money on energy. All I can say is if something sounds too good to be true, it probably is.

Noting the influx of a new wave of "consultants" we have dedicated much of this newsletter to helping you understand what should be required from someone who claims to be a procurement expert. It is much easier to look at an engineer's credentials and determine if they can design a new CHP plant. However, understanding who can develop a realistic pro-

forma for such a project is just as important and much more difficult.

So those of us who have spent our career building a new industry, energy consulting, we now find we are in a game that is attractive to a lot more people. In the past we were responsible for helping our clients manage a relatively small percentage of their operational costs. Higher prices have significantly increased the cost of energy and are causing many of our customers to cut back on their business activities to pay the electric bill. This is the worst time for "so called" experts who have no stake but self interest, to get involved in helping organizations manage their energy budgets.

Make sure the consultants you elect to manage your portfolio will live up to their campaign speeches.

Catherine Luthin