Readiness: The Missing Link In Organizational Change?
By Jim Walters

Writers such as Thomas Friedman contend that our world will soon begin to undergo unprecedented change due to forces that move governments and organizations away from vertical top-down to horizontal bottom-up orientations. The question is can utilities adapt to a horizontal world using traditional vertical command-and-control tactics? If not, how do utilities go about instituting change from a horizontal bottom-up perspective?

Flat World and Horizontal Management
Outsourcing, supply chain management, unique collaborations (insourcing), community software development, and the ability for any of us to access the world’s knowledge are just some of the forces that are changing the playing field for all organizations. As a result, workers and consumers have unmatched power to demand change in how government and business operate. For example, cell phones enable anyone to instantly connect public and private officials with real-time pictures of a crime, workers loafing, or bad roads. Self-forming online communities provide consumers free access to software that rivals Microsoft. They also provide the means for anyone to take part in discussions of community and world issues such as how an organization is managing its affairs. Together these forces portend a change that is just beginning to emerge but will affect everyone, utilities included.

For utilities that have historically been top-down organizations, adapting to a horizontal world may be especially challenging. Due to their monopoly status and its accompanying regulation, utilities have always worked to keep consumer and employee concerns at arms length. This strategy worked while the playing field was limited to the United
States. However, the playing field is a fast emerging flat world that requires less top-down/left-brain command and control and more bottom-up/right-brain collaboration and connectiveness management.

**Instituting Change**

Research has shown that a left-brain approach to change characterized by conformity and one-way communication during crisis situations is most often successful because employees are well aware of the threat. In crisis situations the focus is to communicate what the change is in as little time as possible. However, it’s during non-crisis times that change efforts fail at a high rate because time is not taken to include employees in communication about the change. Under this approach organizational development strategies typically include hiring a consultant to help drive the change downward. Readiness of the employee to accept the change is not considered; the only choice is to “get on board” or leave. No wonder a staggering number of change initiatives fail.²

In a horizontal world, information is available to everyone at anytime; therefore, it is no longer synonymous with organizational power. Thus, using information as means to drive change downward in non-crisis times is not as effective as right-brained approaches that focus on how the change is communicated. In other words, addressing humans’ inborn need as social beings to connect with each other can no longer be ignored. For example, taking the time to engage in two-way communication where information is imparted with context and emotional impact. But again, the major inhibitor of success is individuals’ readiness to make use of this emerging infrastructure because they do not sense a crisis.

**Resistance to Change**

How then does management go about closing this readiness for change gap between themselves and non-management employees? First, it is crucial that management see resistance as a natural process that individuals go through before accepting the change. To this end, resistance to change is an inherently positive force that provides the necessary counter balance for good decision-making. Dr. Stephen Covey refers to this as giving employees “voice.” As noted in Table 1, change requires a shift from an industrial age mindset of managing people to a conceptual age mindset of leading people with respect and ultimately with empathy, taking the viewpoint of others, and embracing an ethic of caring.³

Next, management must embrace a holistic approach to change that includes intense interaction with employees in order to build increased readiness for change. Most models of change, as shown in Figure 1, detail steps in the change process from establishing a sense of urgency to anchoring the change. However, authentic communication – listening (Cont. on p. 4)
Texas is booming. With 23.5 million Texans within our borders, it takes a lot of energy to keep the lights on in our bustling state. With Texas poised to grow to over 33 million in the next 25 years, we’ll need every power tool in the energy toolbox to meet our future energy needs and to keep our economy churning.

We’re fortunate in the Lone Star State to have ample resources to meet many of our energy needs. In fact, Texas leads all other states in total production of energy. We are the number one oil refinery state and the largest producer of wind power in the nation. The Colonial pipeline out of Houston is the largest refined product pipeline in the U.S. Texas also holds the number one spot for natural-gas production in the continental U.S., producing over 33% of domestic natural gas in the U.S. in 2006. In fact, last year, Texas produced more natural gas than the state consumed, indicating there’s more than enough natural gas beneath Texas soil to meet our state’s needs today and tomorrow.

Texas is awash in good news about natural gas. Exciting new technologies have opened a wealth of opportunity in plays like the Barnett Shale where thousands of wells are tapping into the second largest natural gas field in the continental U.S. Spread over 8 million acres, the Barnett Shale natural-gas field alone produces at least 10.4% of all natural gas produced in Texas. Similarly, counties in deep South Texas contribute at least equal amounts of the fuel to our production totals. A recent study by the University of Texas at Austin says that non-conventional drilling techniques, like those used in the Barnett Shale, and the development of liquefied natural gas (LNG) facilities indicate that the United States is entering an exciting period of natural gas development. This trend translates to bolstered stability of the natural gas supply for Texas and all Americans.

In addition to helping with energy security, natural gas is good for the environment—an important consideration in our discussion of Texas energy solutions. Modern power plants that use clean burning natural gas emit significantly less greenhouse gases and are virtually free of potentially harmful particulate matter. Natural gas does not contain mercury that may contaminate the Texas water supply and our fisheries.

The responsible production of natural gas does more than help fuel our energy needs; it also powers the Texas economy. Natural gas producers fill the Texas state coffers through production taxes that support Texas schools and critical infrastructure. In 2005, production taxes in Texas reached the highest level ever at $1.6 billion.

Like any infusion of economic development, the expansion of natural gas capabilities in Texas is boosting local economies and growing jobs. A single employer operating in the Barnett Shale reports $1.7 billion in associated statewide economic activity, supporting more than 11,000 Texas jobs. By 2010, this employer projects $15 billion in total economic activity in the nine Texas counties where it operates.

Texas is indeed booming. We’ve always had a history of self-sufficiency, and we embrace solutions that are in Texas, by Texas, and for Texas. Our ability to responsibly produce clean natural gas in Texas maintains that rich tradition. At the Railroad Commission, we are proud to play our part in ensuring that Texas natural gas is produced safely and responsibly and that it will be a steadfast contributor to the energy mix that fuels Texas’ economy for many years to come.

Elizabeth Ames Jones is Chairman of the Railroad Commission of Texas. A former member of the Texas Legislature from San Antonio, she is the state’s 44th commissioner and only the 2nd woman ever elected to the regulatory agency. Established in 1891, the Railroad Commission is the regulatory body that oversees many facets of Texas’s energy industries, including all levels of the oil and gas industry, pipeline safety, gas utility rates and the permitting and reclamation of coal and uranium mines.
to employee concerns about whether their paycheck will be jeopardized, and/or whether their tasks will be changed, and/or listening to their ideas that may be different from what is being proposed – may be left out of the process. What’s more, non-management employees usually do not have the same degree of control over their work environment as management employees. Together, inauthentic communication and a feeling of helplessness regarding change foment resistive behavior because employees are not able to engage in authentic dialogue about the change.

To be sure, new management science research is emerging that contends management must foster greater connections with its employees by providing tools that encourage employees to communicate their feelings, to collaborate with management, and to learn. Yet, change is usually approached with a focus on taking action first and less on authentically connecting with employees. Indeed, just one study on readiness for change was found in the business literature and none were found in the utility sector. Given the 100-year old monopoly status of the electric power industry the lack of research was not a surprise finding.

Could a gap regarding change exist between management and non-management? If so, is the gap significant? Could assessment of readiness for change be the missing link in the change process, especially in the conceptual age? Based on the paucity of readiness research in the business sector, the author sought to answer these questions by researching the electric utility industry. The study involved 22 public sector utilities in the Midwest with a total employee base of 816 of which 247 responded.

**Readiness for Change**

Readiness for change was assessed by measuring management and non-management employee concerns for industry change using a 35 question Utility Concerns Questionnaire (UCQ). The UCQ was developed under the direction of Dr. Gene Hall at the University of Nevada – Las Vegas, to provide a means for connecting with employees regarding my utility’s adaptation to changes taking place in the electric power industry. (NOTE: It was impossible to know and test for attitudes towards each utility’s change initiative(s) if any; therefore, the questionnaire addressed industry change. Individual utilities would want to test for concerns per a specific change initiative.)

The UCQ is derived from the *Stage of Concern* questionnaire developed by Dr. Hall in 1978 while at the University of Texas. The UCQ measures resistive behavior by documenting three primary concern areas: (a) self concerns; (b) task-related concerns; and (c) impact-on-the-organization concerns. The concerns are comprised of stages as depicted in Table 2. Stages 1 and 2 reflect self issues such as one’s ability to align with the change and are impacted by organizational information and personal attitude; individuals with Stage 3 task concerns are those with anxiety about work scheduling and workload; and Stage 4, 5, or 6 individuals reflect concerns based on the impact of the change. For example, employees that measure high in Stage 4 consequence concerns are uneasy about the potential consequences to customers or themselves about the change, Stage 5 collaboration reflect concerns about having to work with others, and high
Stage 6 refocus concerns indicate unease whether the change represents the best approach. All of the stages lead directly to the day-to-day workings of an organization and are linked to employee support for the change.

As shown in Figure 2 the research results indicated both groups had moderately high levels of self and impact related concerns for industry change and low levels of concern with respect to their tasks. In addition, significant difference ($p < .05$) was found between management and non-management employees’ task- and impact-related concerns. However, no significant difference was found between the groups’ self-related concerns. (NOTE: Testing for significant difference was calculated using Mann Whitney U Test at a 95% confidence level. Thus, a difference in mean scores that had a probability value of less than 5% ($p < .05$) was considered statistically significant and the hypothesis would be accepted. Contrarily, any $p$ values equal to or above .05 ($p \geq .05$) indicated no statistical difference in the response frequency distribution and the null hypothesis was accepted.)

In addition, three questions on employee empowerment were included in the UCQ. These questions added to the breath of the research as empowerment has been shown by organizational change authors such as John Kotter, Stephen Covey, Jeanie Duck, and Noel Tichy to be important contributing factors in the change process. As shown in Figure 3, management and non-management employees registered significant difference regarding the degree of empowerment.

Together the results indicate gaps between management and non-management employees exist in three primary areas:

1. Management employees are less ready for change than non-management employees.
2. A significant difference exists between management and non-managements’ task and impact related concerns for change.
3. Management employees feel significantly more empowered than non-management employees.

These results provide evidence that employees’ concerns for change are different from management and therefore represent important areas to focus on for successful change initiatives. More important, the findings confirm that a readiness-for-change-gap exists and confirm the need for right-brain tactics as shown in Table 3. Further, the results of this study are consistent with readiness research in education that showed an approach focused on reducing concerns will lead to an increase in readiness for change. In other words, interventions that reduce self,
task, and impact-related concerns for change will likely increase employees readiness for change. Thus, targeting organizational development tactics specifically on closing the gaps in task, impact and empowerment issues, as shown in Table 3, will likely lead to less resistance and increased readiness-for-change initiatives.

In this case, if utilities managers were interested in reducing Stage 1 self concerns, it would appear from the results that both management and non-management employees are interested in learning more about industry change (high Stage 1 & 2 concerns) but are not quite as concerned in applying this knowledge to use (lower Stage 3 task concerns). The upshot for utility leaders is to understand what it will take for individuals and groups, both management and non-management, to transform their view of a horizontal reality.

While these results pertain to a specific population – the electric power industry’s public sector utilities in the Midwest – these results may serve as a wake up call for all utilities on two key issues. First, that a readiness-for-change gap exists between management and non-management employees with respect to the changing electric power industry and second, that adaptation requires right-brained techniques such as assessing workers’ readiness for change.

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Endnotes
Now that the first two federally designated electric-transmission corridors are closer to reality, legislators finally are paying attention to what this means for transmission siting in their jurisdictions. But it seems they don’t like what they see, and in fact already are fighting back.

For those not steeped in energy policy, the relatively obscure Title XII of the Energy Policy Act of 2005 (EPACT) called The Electricity Modernization Act of 2005 (now part of the Federal Power Act), which allows the feds to designate National Interest Electric Transmission Corridors (NIETCs) to ease congestion, after two years finally is getting national media attention. The immediate result is that despite a well-documented need for more electric transmission in the U.S. to increase reliability, states are crying foul and asking for repeal of that section of EPACT, before any final plans are made to construct any lines.

So how did we get to this showdown? Step back in time to the well-remembered major blackout in 2003 that started in Ohio and spread like wildfire. After much investigation and issuance of major reports on the cause and effect of the blackout by a joint U.S. and Canadian task force, which helped prompt EPACT, the first major federal energy law since 1992, perhaps we should have seen this coming.

The Department of Energy (DOE) was tasked in EPACT with presentation of an electric congestion study including an inventory of geographic areas in the Eastern and Western Interconnects (the law excluded ERCOT) with important existing or projected needs for electric transmission infrastructure. (For more on the background and requirements of NIETC designations, see Spark, May, 2006, p.3.) At that time, there were many requests for “early” designations for NIETC status in especially congested areas (see Spark, May, 2006, p.4).

But even once status as an NIETC is designated, EPACT only allows the Federal Energy Regulatory Commission (FERC) so-called “backstop” authority to issue permits for construction or modification of electric transmission facilities in an NIETC. That means FERC may issue permits after notice and hearing only if the: (1) state where siting is to occur does not have authority to approve that siting; (2) applicant is a transmitting utility that does not qualify for a permit in that state; or (3) state commission withheld approval for more than one year after the request for approval was filed or for one year after NIETC designation.

**NIETC Designations**

On April 26, 2007, the DOE proposed the first two NIETC designations—one in the Mid-Atlantic area and one the Southwestern U.S. The Mid-Atlantic Area National Corridor would encompass some or all counties in DE, OH, MD, NJ, PA, VA, WV and DC, while the Southwest Area National Corridor would encompass seven counties in Southern California, three in western Arizona and one in southern Nevada (see Maps, Fig.1 and Fig. 2, p 8-9). The draft proposals result from the DOE’s National Corridor Transmission Congestion Study released in August 2006. Public comments on the draft corridor designations are being accepted during a 60-day period following publication in the Federal Register, and three public-comment meetings on the proposed designations initially were scheduled to be held on May 15 in Arlington, VA; May 17 in San Diego, CA; and May 23 in New York, N.Y. But because of the uproar following the designation announcement, on May 9 the DOE expanded that list to add four more meetings in Pittsburgh, PA, Rochester, N.Y., Phoenix, AZ, and...

In that publication designating the proposed corridors, DOE pointed out that designation of a national corridor means that consumers are being adversely affected by transmission-capacity constraints or congestion, and that resolving the area’s electricity problems is a matter of sufficient national importance to warrant the exercise of the Energy Secretary’s discretion to designate an NIETC. It further noted the draft designation provided a potential siting venue at FERC for transmission facilities within the area bounded by the National Corridor pursuant to Federal Power Act (FPA) section 216(b). [See Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Facilities, Order No. 689, 71 Fed. Reg. 69,440 (Dec. 1, 2006), FERC Stats. & Regs. ¶ 31, 234, (2006) (Final Rule)].

But the DOE stressed that even a final NIETC designation does

![FIG. 1](draft_mid_atlantic_area_national_corridor.png)

**FIG. 1** Draft Mid-Atlantic Area National Corridor


Note: County boundaries are shown.
not pre-empt state action or authority, nor is it a determination that transmission must or should be built. It said the designation simply means transmission expansion is but one possible solution to a congestion or constraint problem, and that increased demand response, improved energy efficiency/conservation, as well as siting of added generation close to load centers are all possible solutions. It emphasized the federal government is not dictating how the states, regions, transmission providers or electric utilities should meet their energy challenges. “If a transmission project is proposed in a National Corridor, it will be the state siting authorities, and potentially FERC if certain conditions are met, that will determine the specific route of that project,” DOE noted.

DOE pointed to its Aug. 8, 2006 initial congestion study issued for comments, which gathered historical congestion data as well as modeled future congestion (71 Fed. Reg. 45,047). Based on that information, the study classified the most significant congestion areas in the nation. Two “Critical Congestion Areas,” were identified: (1) the Atlantic coastal area from metropolitan New York through northern Virginia (the Mid-Atlantic Critical Congestion Area); and (2) southern California (the southern California Critical Congestion Area). Four “Congestion Areas of Concern,” were identified, such that large-scale congestion problems exist or are emerging but more information is required to determine the magnitude of the problem: (1) New England: (2) }

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FIG. 2 DRAFT SOUTHWEST AREA NATIONAL CORRIDOR

Phoenix-Tucson area; (3) San Francisco Bay area; and (4) Seattle-Portland area. Also, a number of “Conditional Congestion Areas,” made up of areas where future congestion would result if large amounts of new generation were added without simultaneous development of transmission, were identified such as: (1) Montana-Wyoming; (2) Dakotas-Minnesota; (3) Kansas-Oklahoma; (4) Illinois; (5) Indiana and upper Appalachia; and (6) the Southeast.

DOE said it did not carve out environmentally sensitive lands from the boundaries of the two draft NIETCs, because the statute does not exclude such lands from inclusion. It said in the event of a FERC-siting proceeding, FERC would conduct a review under the National Environmental Protection Act, which would include analysis of alternative routes for that project, including realignments to avoid adverse effects on the environment, landowners and local communities. Therefore, DOE explained it tried to make the draft designations broad enough to encompass a range of alternative routes for potential transmission projects, thus leaving the determination of the best route for a specific project to the siting authorities, who are better positioned to make such a determination.

DOE said a National Corridor should remain in place for a substantial period of time, because it takes five to ten years or longer to develop proposals for new transmission facilities (or alternatives to them), obtain government approvals, obtain rights-of-way, and put such new infrastructure in place. As a general practice, the DOE is proposing to make such designations last for an initial period of 12 years, with the possibility of renewal or extension under appropriate conditions, such as while an application remains under consideration by FERC.

NIMBY?

So the showdown begins. Some state and federal representatives from the areas with the first possible NIETC designations are not happy. They stress DOE has acknowledged that under the designations, FERC would have the right to overrule state and local regulators if they refuse to issue permits for transmission corridors on designated lands. Many U.S. Congressmen, including U.S. Rep. Henry D. Waxman (D-Los Angeles) now fear this part of EPACT could trample the traditional authority of states to approve power-line siting. He argues the designations unfairly give energy companies the upper hand in dealing with state governments. However California Gov. Arnold Schwarzenegger’s administration is taking a more cautious approach and said it will review the findings and work with appropriate state agencies.

On April 25, the day before the release of the DOE’s proposed NIETC designations, the House Oversight and Government Reform Subcommittee, chaired by Rep. Dennis Kucinich (D-Ohio) held a hearing on that part of EPACT because a large number of interest groups had raised concerns over...
the authority of the federal government to overrule states on siting decisions. But some U.S. Representatives from the Northeast and Mid-Atlantic already are fighting back. On May 3, 2007, a bi-partisan legislative strategy was unveiled aimed at blocking the two NIETC designations. The strategy comes from Reps. Maurice Hinchey (D-NY), Frank Wolf (R-VA), Michael A. Arcuri (D-NY), John Hall (D-NY) and Chris Carney (D-PA). The legislators sent a letter to the Chairman of the House Appropriations Subcommittee on Energy and Water Development, Peter Visclosky (D-IN) asking that language be inserted in the base version of the panel’s spending bill to prohibit the DOE from using any money to make NIETC designations. They are joined by Rep. Raul Grijalva (D-AZ), Tom Davis (R-VA), John Murtha (D-PA), John McHugh (R-NY) and Todd Russell Platts (R-PA). “We remain quite concerned that the heavy-handed intervention of the federal government in siting such facilities will come at the expense of the rights of local citizens and to the detriment of communities working to balance electricity reliability with the protection of significant natural, historical, cultural and recreational values.”

Noticing of Job Opening

Director of Audits
Pennsylvania Public Utility Commission

This position is responsible for directing the activities of the Bureau of Audits, engaged in all phases of utility company auditing, including financial, management and operational audits; advising the Commissioners and Director of Operations on auditing matters, and advocating program policy recommendations.

This is a major, non-tenured, policy-making position located in Harrisburg, Pennsylvania. The 45-person Bureau of Audits has regional Eastern and Western Pennsylvania divisions with subordinate managers, supervisors and staff.

Minimum experience and training requirements: one year as a Public Utility Audit Manager; OR 6 years of professional auditing experience which includes 3 years of independent audit experience and 3 years of supervisory experience in public utility auditing, and a bachelor’s degree including or supplemented by a minimum of 24 credits in accounting; OR any equivalent combination of experience and training which includes 24 credits in accounting. Registration as a CPA may be substituted for one year of experience. Also, an MBA which includes 12 credits in accounting at the graduate/undergraduate level may be substituted for one year of experience.

Salary range: $77,125 - $112,157 with full health and supplemental benefits. A more detailed description of the job duties and essential functions may be accessed at the PA PUC website at Career Opportunities @ www.puc.state.pa.us. Interested candidates should submit a resume to: Susan Schoenberger, Chief of Recruitment, Public Utility Commission, Human Resource Office, 400 North Street, 3rd Floor, Keystone Building, Harrisburg PA 17120. Applications/resumes should be postmarked no later than May 25, 2007.

Clean Air Rules: A New Roadmap for the Power Sector

What do the Clean Air Interstate Rule, the Clean Air Mercury Rule, and the Clean Air Visibility Rule require of the power sector? Authors from the Environmental Protection Agency review implementation and investment progress.

Carbon Costs: The Coming Battle

The Supreme Court’s recent decision empowering the Environmental Protection Agency to regulate carbon dioxide shifted momentum toward a mandatory program to cap greenhouse gas emissions. Eventually, there will be huge implications for power generation.

Restructuring Revisited

Significant rate increases in many retail-access states have regulators and policymakers asking whether customer choice and utility restructuring have failed, and what they can do about these rate increases.

Viewpoint: In Defense of Markets

A motley assortment of naysayers and recalcitrants continue to oppose competitive electricity markets around the world. But the alternative to markets is centralized command economics—a discredited concept that deserves to be consigned to the dustbin of history.
assets,” the Congressmen wrote. According to Rep. Hinchey, the DOE and major energy companies “are trying to ram massive power line projects down the throats of the people of New York, Virginia and other parts of the country.” He added that representatives of affected communities and states will not allow the “usurpation of power and apparent violation of the Constitution” to occur. He said they already introduced several pieces of legislation to stop this and in the letter are making a direct appeal to put an end to the “misguided energy policy” by denying funding to implement it. It turns out that blocking the NIETCs via the spending bill is easier than passing a stand-alone bill, but because it would be part of an annual budget, the provision would expire after one year.

In announcing the attempt to cut off funding, Rep. Hinchey specifically singled out the proposal by the New York Regional Interconnection (NYRI), a private Transco, to use an NIETC designation to construct a nearly 200-mile, high-voltage direct current (HVDC) electric transmission line from Oneida County to Orange County in New York State. He pointed to a separate proposal by Dominion Virginia Power to use an NIETC designation to build 550-kV power lines through parts of five Virginia counties and that Hinchey said would cut through historic areas, including Antietam National battlefield, Monocacy National Battlefield and Gettysburg National Military Park.

As part of the overall strategy, in Feb. 2007, Hinchey introduced two bills and Wolf a third aimed at preventing NIETC designations from moving forward. The house members and colleagues who co-sponsored the legislation said they would step up efforts to move those three bills through Congress as a supplement to blocking funding.

The first bill (H.R. 809) would repeal section 1221 of EPACT (now part of the FPA) that authorized DOE to designate NIETCs and/or grant permits for projects in those corridors. The second bill (H.R. 810) is called the “Protecting Communities from Power Line Abuse Act,” and would strip from FERC its authority to grant federal eminent-domain authority for these transmission lines. The bill is designed to make it much more difficult and probably impossible, for power-line proposals to proceed after a state has denied a permit. Even though FERC theoretically could permit the project, the builders would be able to use federal powers to take private land from unwilling sellers.

The third bill is sponsored by Wolf (H.R. 829) and is called the “National Interest Electric Transmission Corridor Clarification Act.” It would ensure that areas recognized for scenic, natural, cultural or historic value are protected from electric corridors. It also would require transmission developers to prove that state regulators had no valid reason to go beyond one year in considering the application, and require DOE to consider all alternatives to building new transmission prior to designating a corridor.

At the state level, Pennsylvania Rep. Phyllis Mundy (D-Kingston) teamed up with Pennsylvania House majority leader Bill DeWeese (D-Fayette), in drafting a resolution urging the U.S. Congress to repeal the part of EPACT allowing NIETCs.

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(Cont’d. from p. 6)