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Talent

Nuclear Revolution

How to ease the coming upheaval in the nuclear power industry.

BY PAUL W. BENSON AND FRED ADAIR



The U.S. nuclear power industry is caught in a vise. On the one hand, the industry stands on the brink of a great resurgence. The need to reduce carbon emissions has made clean nuclear energy an attractive option; the Energy Policy Act of 2005 included a number of incentives for the industry; and approximately 30 applications for reactor units are expected to be filed with the Nuclear Regulatory Commission by the end of 2009.

On the other hand, just as the industry prepares to expand dramatically over the next decade, it faces a yawning talent gap. A 2005 study by the Nuclear Energy Institute found that half of the industry's employees are over 47 years

old, and more than a quarter of nuclear workers already are eligible to stop working. Meanwhile, as the baby boomers retire, there will be far fewer available replacements with nuclear knowledge.

Given these demographics and the resurgence of nuclear power, executives will pursue a number of different strategies to bridge the coming talent gap. Some of those strategies entail seeking leaders from largely unfamiliar sources both inside and outside the industry — leaders who bring with them different leadership styles. In any organization, a new leadership model has profound implications for the company culture. Call it “revolution from the top.”

Companies that fail to recognize

this revolution's potential to disrupt the organization, as well as the opportunities that such culture change offers, risk impeding their progress precisely at a time of enormous expansion. But by understanding the threats and advantages associated with each potential source of new leadership, companies can begin preparing now to absorb the inevitable culture shockwave and make the most of their leaders' promise. More specifically, they can adopt some proven approaches to acquiring and assimilating new leaders. These best practices significantly can reduce the risks involved with taping unfamiliar sources of talent, help the new leader achieve a soft landing, and minimize destructive cultural disruptions while enabling needed culture change.

New Leadership Sources

There are four strategies — with accompanying cultural implications — that nuclear power companies are likely to pursue to compensate for the coming dearth of talent. These strategies are: looking internationally; buying talent through mergers and acquisitions; promoting talented young insiders; and bringing talent from outside the industry.

U.S. utilities might go abroad to find seasoned leadership in countries that have extensive experience with nuclear power. The European Union has a total of 147 reactors in operation. Among the EU countries, 59 of those reactors are in France, which relies on nuclear power for 80 percent of its energy. Twenty-three reactors are in

operation in the United Kingdom, and 18 in Germany. Outside the European Union, significant experience is found in Japan with 55 units, Russia with 31, South Korea with 20, Canada with 18, and India with 16.

Bringing in international leadership can cause culture shock several times over. First and most obvious, varied working styles rooted in general cultural differences between non-U.S. leaders and their new U.S. colleagues can be significant. Second, the culture of the national industry from which the new leader comes can differ from the very specific culture found in the U.S. industry. Third, differences from country to country in such areas as reactor design, regulatory environment, and public and political attitudes toward nuclear energy also shape leaders and their company cultures.

Another strategy will be to acquire talent as a result of M&A transactions. According to the most recent PricewaterhouseCoopers utilities global survey, which included 119 senior power utility executives from 114 companies in 44 countries, the shortage of skills and knowledge has become an increasingly important driver of M&A activity in the utilities industry as a whole (see *Energy Efficiency: The Changing Power Climate*, PricewaterhouseCoopers, 2007). In 2007, acquisition of skills was named as a deal driver by half of survey respondents, up from only a third in 2006. In the Americas the figure is 54 percent in 2007, up from 26 percent the previous year.

As anyone who does M&A deals knows, putting together two different company cultures, even in the same industry, is often difficult. Often, many of the most talented people in the acquired company leave because they feel slighted in the new order of things. Sometimes the acquirer, lacking the time and requisite expertise in talent assessment, fails to make the best use of newly acquired talent. Further, turf wars between top

leaders of the two merged companies can erode the anticipated gains of the M&A strategy.

Promoting from within can avoid many of these pitfalls. Companies might find they have young talent with great technical knowledge and strong interpersonal skills whom they are willing to take a chance on in the top job. Although veteran nuclear executives might regard the leapfrogging of the generations this way as unrealistic, it offers some advantages. The young superstars likely will understand the current management culture and yet not be fully indoctrinated in it, enabling them to manage adroitly the transition to a new culture. Further, given that new nuclear plants are estimated to require 10 to 15 years from planning through authorization, young talent can provide

Young talent can provide continuity during extended years or reactor construction and operation.

a high degree of continuity through this crucial phase of the nuclear resurgence. Similarly, the emergence of new reactor designs and new construction techniques argue for continuity of leadership over the extended years of planning, construction, and operation. Finally, many young high-potential leaders tend to view the sector from a highly commercial perspective, which makes them an invaluable asset in marketing power externally.

Nevertheless, this “young superstars” approach to talent can have significant cultural repercussions. People who feel they have been passed over may leave prematurely, exacerbating the talent shortage. People who remain may chafe at the idea of suddenly finding themselves managed by someone whom

they previously outranked. Further, other top young talent who resent their former peer’s elevation might behave in ways that undermine the new leader.

Another alternative is to bring the strong leadership from outside the industry. Although the origins of the industry’s current leadership suggest that today’s industry prefers leaders who come from within the nuclear arena of a major utility, some companies may look for experienced leaders from process industries such as other types of electric power generation, chemicals and the like. Such an option may be unavoidable as the shortage worsens. But there are also some positive reasons for looking farther afield. For example, companies that feel confident in their technical expertise may wish to bring in an outsider with a highly developed commercial sense. Moreover, by working under such leaders, executives whose backgrounds are exclusively in the nuclear industry will have an opportunity to broaden their commercial skills — and their career prospects.

However, because the industry roots in the U.S. Navy’s nuclear program, there could be considerable cultural resistance to an outsider who has not been trained in a similar fashion. Such outsiders are likely to face a tough time if they are unable to win hearts and minds and quickly demonstrate that their experience is relevant to their experience is relevant and valuable.

Smoothing the Way

To mitigate the risk of tapping an of these unfamiliar sources of talent, it’s helpful to think of the process of acquiring a new leader as occurring in three stages: the preparatory stage of determining the position specifications; the exploratory stage of assessing the candidates; and the implementation stage, in which new leaders join the company and take charge. At each of these stages, proven principles can be applied and concrete steps taken to address the risks

posed by new sources of talent.

First, before the search, determining company-specific requirements for the position will help define the skills, talents and experiences needed. Every company is different, and capturing one company's uniqueness within the specifications for a position common to many companies requires insight and creativity. As the indispensable foundation for any search, the specifications should include the competencies expected of any leader and, more important, the specific competencies, relevant experiences, and personal characteristics required in the role in order to fulfill the company's strategic vision.

For example, over the next several decades new nuclear plants will almost certainly be built in the United States. For many companies, leadership will be critical. That doesn't mean that the new leader must have built a nuclear plant — especially given that no nuclear plant has been built in the United States in more than 30 years — but it does mean that the job specifications for those companies will include that competency, and potential leaders will be expected to have at least analogous experience or otherwise relevant abilities.

In a sense, competencies tied specifically to strategic needs address cultural issues by transcending them. But company-specific cultural issues also can be addressed more directly in the job specifications. They should establish the fundamental leadership requirements and the unique leadership challenges related to the role. Also, the specifications should take into account the existing culture, degree of cultural change required, barriers to success, and specific competencies needed to overcome them.

In the assessment stage, presenting candidates with real-world challenges can distinguish the top talent from the rest of the field. All candidates should of course be thoroughly referenced, vetted through interviews with associates, and evaluated for competencies established

in the job specifications. But because the company is seeking talent from unusual sources, it's imperative to engage candidates in intensive conversations about specific challenges the company faces, not simply about abstract issues or hypothetical cases.

For example, the company might be planning to apply for two new operating licenses while upgrading three existing plants and trying to site two newly approved plants against heavy community opposition — all in the context of specific market objectives, a unique company culture, and an environment of price volatility for raw materials in all energy sectors. How would candidates apply their experiences against these specific challenges and strategic objectives? Do they bring a valuable perspective that the company might have missed? How do they see the company's culture affecting their approach to these challenges? Do they genuinely engage the issues and suggest creative, practical answers, or do they retreat into business platitudes to avoid giving what might be perceived as the wrong answer? Do they feign expertise they don't have, or do they forthrightly identify areas where they will need help and say how they will require it?

Because the requirements of nuclear operation are so demanding, the scale so enormous, and the regulatory burden, capital investment, and attendant risks so great, this assessment must be as company- and culture-specific as the position specifications are.

Finally, in the implementation stage, the new leader's credibility is established. This on-boarding and taking-charge period — the first 90 to 180 days of the new leader's tenure — can be critical in determining whether the leader and the culture collide or cooperate. From the beginning, the new leader should have a mentor — someone wise in the ways of the company, attuned to the future strategy, and savvy about the location of the cultural landmines. The

mentor should be a widely respected executive with a track record of achievement, a strong commitment to the mentoring role, and the ability to establish a candid, trusting relationship to help the leader navigate the intricacies of the organization. The new leader may also want to seek a sounding board outside the company and industry of comparable complexity, scale, and culture.

This process will be most successful if it occurs within a broader context of the alignment of strategy, organization, and leadership. The new leader develops a game plan with the leadership team for addressing the company's strategic and organizational priorities, for clarifying strategy, and aligning in the organization to deliver it. In addition to solid analysis and creative thinking, this alignment requires extensive constituency-building. That means engaging people at every level of the organization — encouraging them to help create and validate priorities, demonstrating to them that the organization is confidently led, and communicating with them not only through the iron logic of strategy, but in emotionally compelling ways that get them excited about the direction of the company.

With top nuclear executives scarce and their cultural fit far from assured when they are drawn from unfamiliar sources, it's more important than ever to clearly define the required competencies, assess candidates for their ability to address company-specific challenges, and do everything possible to help a new leader succeed. The result: A company that can move to fulfill its strategic vision with maximum speed and minimum risk — despite the changing face of leadership in the industry.

Paul W. Benson leads the global power, utilities and infrastructure practice of Heidrick & Struggles. He can be reached at pbenson@heidrick.com Fred Adair is a partner in the leadership consulting practice of Heidrick & Struggles. He can be reached at fadair@heidrick.com.