Assessing risk systematically

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Football coaches call it mapping out a game plan; businesses refer to it as mitigating risk. Like a coach shrewdly checking out the opposing team, risk managers seek out potential problems, analyze and study the implications, anticipate all potential outcomes and the likelihood of occurrence and create plans to prevent dire consequences. At Illinois Power, this is done through the "Risk Register," a comprehensive risk-assessment system developed and implemented in 1988.

The Risk Register is a formal process that identifies, quantifies and categorizes the risks facing Illinois Power, develops cost-effective methods to control them and positions the company to achieve its stated goals. The process, applicable to any business operation, continually assesses new risks, generates information for decision-making and educates employees at all levels.

The Risk Register is an effective method for forcing a conscious evaluation of risk as part of the decision-making process. It heightens understanding of risk at all levels of management, fosters a greater acceptance of informed risk and, most important, provides a solid base for future risk management actions.

The risk management staff coordinates the Risk Register and serves as a technical resource. Because of its role in the process, the risk management staff at Illinois Power has greater corporate visibility than it ever did before and is part of the loop in many departments' management decisions.

The Risk Register also laid the groundwork for Illinois Power's Corporate Disaster Recovery Plan, initiated in 1991. Through the Risk Register, the company became aware of the catastrophic risks it faces (such as earthquake and fire) and of the fact that the pre-disaster mitigation techniques in place to address them would not be sufficient to get the company back into business quickly after a catastrophic loss. Thanks to the knowledge gained through the Risk Register, Illinois Power today has a program in place to save lives, preserve property and return to a normal state of business in the shortest possible time at the least possible cost after a catastrophic loss. Through the Corporate Disaster Recovery Plan, the company obtains information on levels of damage, resource availability and the status of restoration activities; provides timely and accurate information to the media, government officials, regulatory authorities, employees and the general public; gives guidance on restoration activities; coordinates acquisition and allocation of resources and coordinates operations with city, county, state and federal emergency-service organizations.

IDENTIFYING THE RISKS

The Risk Register process consists of five phases: risk analysis, mitigation development, mitigation selection, implementation and monitoring. In the risk analysis phase, risks are identified -- both traditional liabilities and speculative or business risks, regardless of insurability. The risk management staff interviews company officers and department heads to ascertain what risks they think the business faces within their individual areas of responsibility as well as throughout the company. Historic claims experience in the risk management information system (RMIS) is also examined. The risk management staff then compiles the risks and assigns them to the departments that would have direct responsibility for them.

The departments analyze the assigned risks as well as any other risks that might be identified during the process. The analysis encompasses defining each risk, including a probable scenario; quantifying the probability and severity of its occurrence and categorizing each risk as a business, property, liability, environmental or nuclear risk. The risk management staff gives the departments guidelines for projecting loss limits and a continuum for probability (e.g., 0.0 = cannot happen; 1.0 = will occur). The departments convert loss limits to numeric codes (e.g., $1mm = 1; <= $10mm = 2), and risk <= management combines severity and probability factors to prioritize all company risks.

The probability continuum permits us, albeit subjectively, to quantify potential risks from events that have rarely or never occurred -- either in Illinois Power's experience or that of industry in general. Later phases of the process allow for more objective probability calculations. The risk analysis phase concludes with the risk management staff reviewing the departments' data and issuing reports to senior management and department heads.

CONSIDERING CONTROL TECHNIQUES

Once the risks facing the company have been identified, the departments are encouraged to use brainstorming, storyboarding or any other idea-generating methods -- disregarding momentarily the cost or appropriateness of any method -- to come up with a wide selection of mitigation techniques that might be suitable for the identified risks.

Departments are also asked to identify risks with adequate mitigation procedures in place. If the vice president responsible for the function that "owns" a particular risk agrees that the risk is adequately controlled, no further action is necessary until the monitoring phase. However, decisions about the adequacy of existing mitigation techniques are deferred until the idea-generating process is completed and potential new techniques are reviewed. Identifying "controlled risks" reduces the number of risks to be processed in the mitigation selection and implementation phases.

Risk sharers -- departments that would be affected by a risk but would not have direct responsibility for it -- are also identified. For example, loss of communication facilities (risk) by the Energy Management Department (risk owner) could preclude the Gas Supply Department (risk sharer) from monitoring its natural-gas storage fields. This phase eliminates duplicate risks and risks that are more appropriately defined as supervisory challenges (such as late reporting) and, based on new information, can downgrade risks previously classified as major. The responsible vice president is asked to state for each risk a post-loss goal: the company's or department's minimum acceptable capabilities following the occurrence of an event. The goal guides departments in developing and selecting appropriate mitigation techniques and helps ensure continuity of operations and stability of cash flows.

SELECTING RISK CONTROLS

Proposed mitigation techniques are subjected to a reasonableness test and a thorough economic evaluation. The reasonableness test requires that we answer pragmatic questions such as: Are the resources available? Will the technique work?

The economic analysis includes computing an internal rate of return and a net present value for each technique, comparing these to the unmitigated loss limits and prioritizing the techniques based on their productive value to the entire mitigation process. The analysis serves to justify budget requests, further validate technique selections and encourage greater risk-taking.

The reasonableness test and the economic evaluation also make it possible to identify unmitigable risks. The company may elect not to mitigate a risk for a variety of reasons. In some cases there may not be sufficient resources (i.e., staffing, dollars or insurance), while in others mitigation may be ruled out for practical or economic reasons (i.e., a mitigation plan that calls for terminating a required service or whose cost exceeds the loss limits would be deemed impractical). Developing a response plan is a practical alternative for dealing with many unmitigable risks. In a broad sense this can be considered mitigation in that it helps limit additional damage. Unmitigated situations force the company to assume greater risk, but after conducting the analyses in this step, we engage in informed risk-taking.

IMPLEMENTATION

The departments allocate resources, commit to an implementation timetable and develop measurement standards for evaluating the mitigation techniques being implemented. Because requests for mitigation funding compete with requests for operating funds, management's comfort level with risk-taking is revealed at this point. Resources can be committed at the corporate or departmental level, depending on the corporate culture.

Developing measurement standards requires particular attention from the risk management staff -- because managers, eager to take action after months of study and analysis, may focus more on implementing mitigation techniques than on gauging their effectiveness.

Measurement standards should evaluate the degree to which a mitigation technique reduces a risk's severity and/or probability. Evaluating mitigation for risk events that have never occurred will always present a particular challenge, because there is no experience on which to base judgments. Also, the fact that a risk event has not occurred should not be understood to mean that the mitigation technique in place to control it is effective. For example, the fact that a gas utility has not experienced a major explosion for many years should not necessarily lead the utility to infer that its mitigation plan has prevented such an explosion.

MONITORING

The final phase of the process underlines why the Risk Register is an ongoing and dynamic process. Monitoring must be continual; risks that are unmitigated and those designated as "major" are reviewed annually. For other risks, departments designate a review period, either annual or biennial. Situations designated "controlled risks" are also reviewed periodically to determine whether the mitigation methods are still effective. In some cases, changes in operations may redefine the risk, thus requiring different mitigation techniques.

The risk management staff provides the departments with risk overviews including insights gained from Illinois Power's various departments, other utilities and/or industry in general. In the overview, the staff can raise questions about emerging or changing risks, suggest possible mitigation techniques and/or recommend deleting a risk from the process. The monitoring process equips the staff to gauge mitigation effectiveness and oversee the implementation schedule. It also enables the risk management staff to help balance the competing funding needs of mitigation and operations.

Illinois Power's experience with the Risk Register so far affirms the importance of involving department heads from the outset and having the vice presidents define their risk tolerance by designating post-loss goals. The process is beneficial even for those who participate half-heartedly. Auxiliary rewards include improved communications among departments, increased disaster recovery planning, management skill development and better budget planning.

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