MEETING ON THE DISCRIMINATION TASK GROUP DRAFT REPORT

- Frank Congel

- Director, Office of Enforcement USNRC

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Group Composition:

- Frank Congel, Director, Office of Enforcement, Group Leader
- Bill Borchardt, Associate Director for Inspection and Programs, NRR
- Barry Letts, Office of Investigations Field Office Director, Region I
- Dennis Dambly, Assistant General Counsel for Materials Litigation and Enforcement, Office of General Counsel
- Ed Baker, Agency Allegation Adviser
- Cynthia D. Pederson, Director, Division of Nuclear Materials Safety, Region III
- Brad Fewell, Regional Counsel, Region I
- Barry Westreich, Office of Enforcement

Task Group Goals

Formed in June, 2000 to:

- Promote active involvement of internal and external stakeholders.
- Evaluate the NRC's current process.
- Review/analyze stakeholder comments.
- Develop recommendations that ensure the investigation and enforcement process supports an environment where workers are free to raise safety concerns.

Task Group Schedule

- Evaluate current NRC processes.
  (Complete)   July-Sept., 2000

- Conduct Initial Stakeholder meetings.
  (Complete)   Sept.-Nov., 2000

- Review other federal agencies processes
  (Complete)   Oct., 2000-March 2001

- Develop recommendations
  (Complete)   Jan.-April, 2001

- Issue Recommendations for public comment.
  (Complete)   May, 2001

- Stakeholder Meetings   June-August, 2001

- Comment Period Ends   August 17, 2001

- Issue Final Report   October, 2001

Scheduled Public Meetings

- Chattanooga, TN   - June 25, 2001
- Chicago, IL   - July 11, 2001
- Paducah, KY   - July 12, 2001
- San Luis Obispo, CA   - August 9, 2001
- Waterford , CT   -August 14, 2001
- Washington, DC   - August 16, 2001

GENERAL COMMENTS RECEIVED

- Improve Timeliness.

- Release Information (e.g. OI Reports) prior to PEC.

- Conduct of OI Investigations.

- Establish more Criteria for Determination of Severity Level.

- Need to better explain Legal Standard used.

- Clarify DOL/NRC interface.

RANGE OF COMMENTS

INDUSTRY	PUBLIC
■ **INDUSTRY**	**PUBLIC**
-Defer to DOL	-Allegers need more protection
-No Individual Actions	-Allegers need financial assistance
-Risk Inform process	-Take stronger enforcement (especially against managers)
-No Enf Action Needed	-Current Regs sufficient
-SCWE oversight but no regulations	

NOTABLE RECOMMENDATIONS

- Maintain NRC involvement in discrimination issues.

- Eliminate deferral of cases to DOL.

- Streamline the process to improve timeliness and allow release of redacted OI reports.

- Modify the factors for determining Severity Level.
  - Severity of the adverse action.
  - Notoriety of the adverse action.
  - Benefit to the individual.
  - Did the protected activity involve participating in government processes.
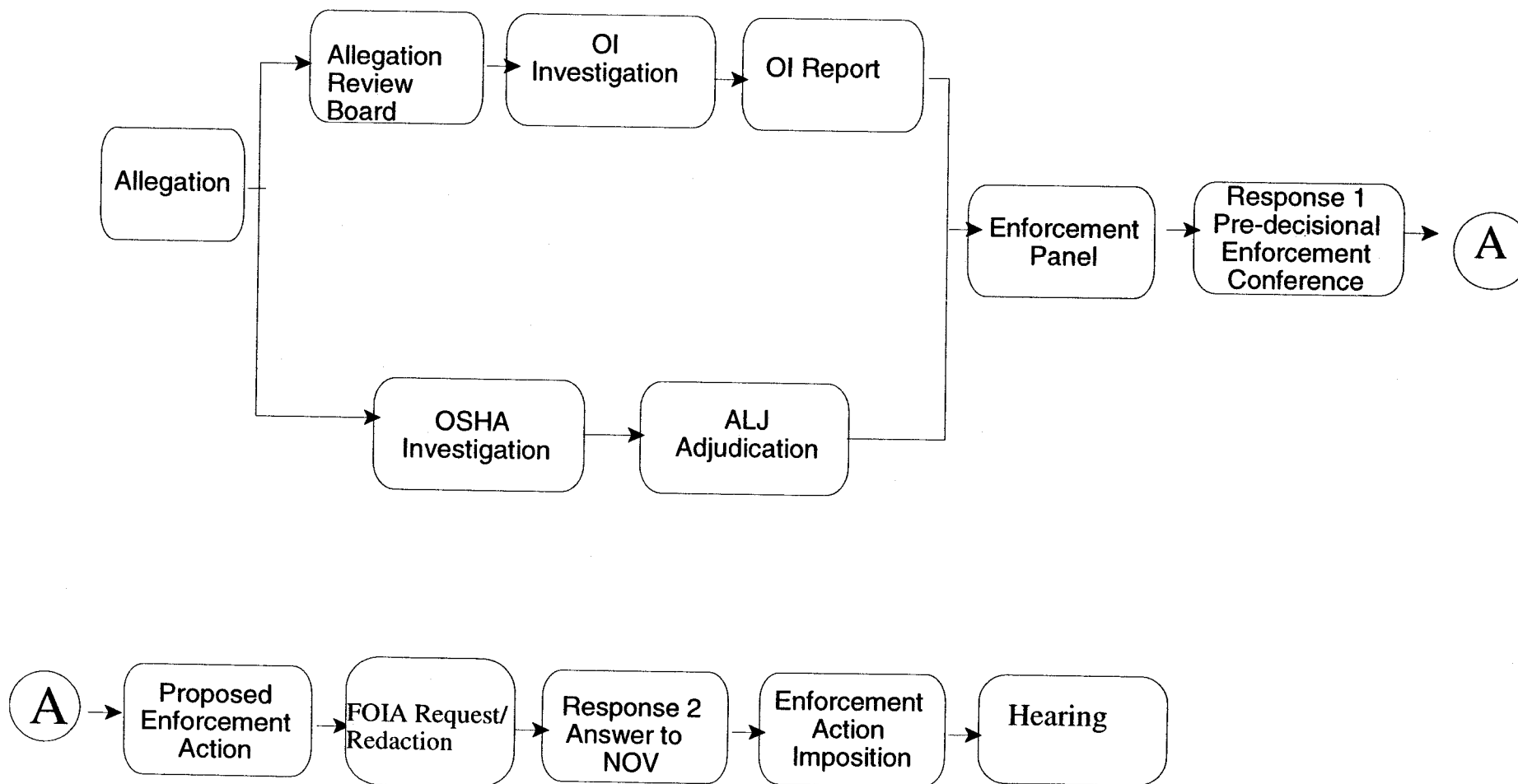
NOTABLE RECOMMENDATIONS-Cont

- Provide financial support to the allegers and one personal representative to attend PEC.

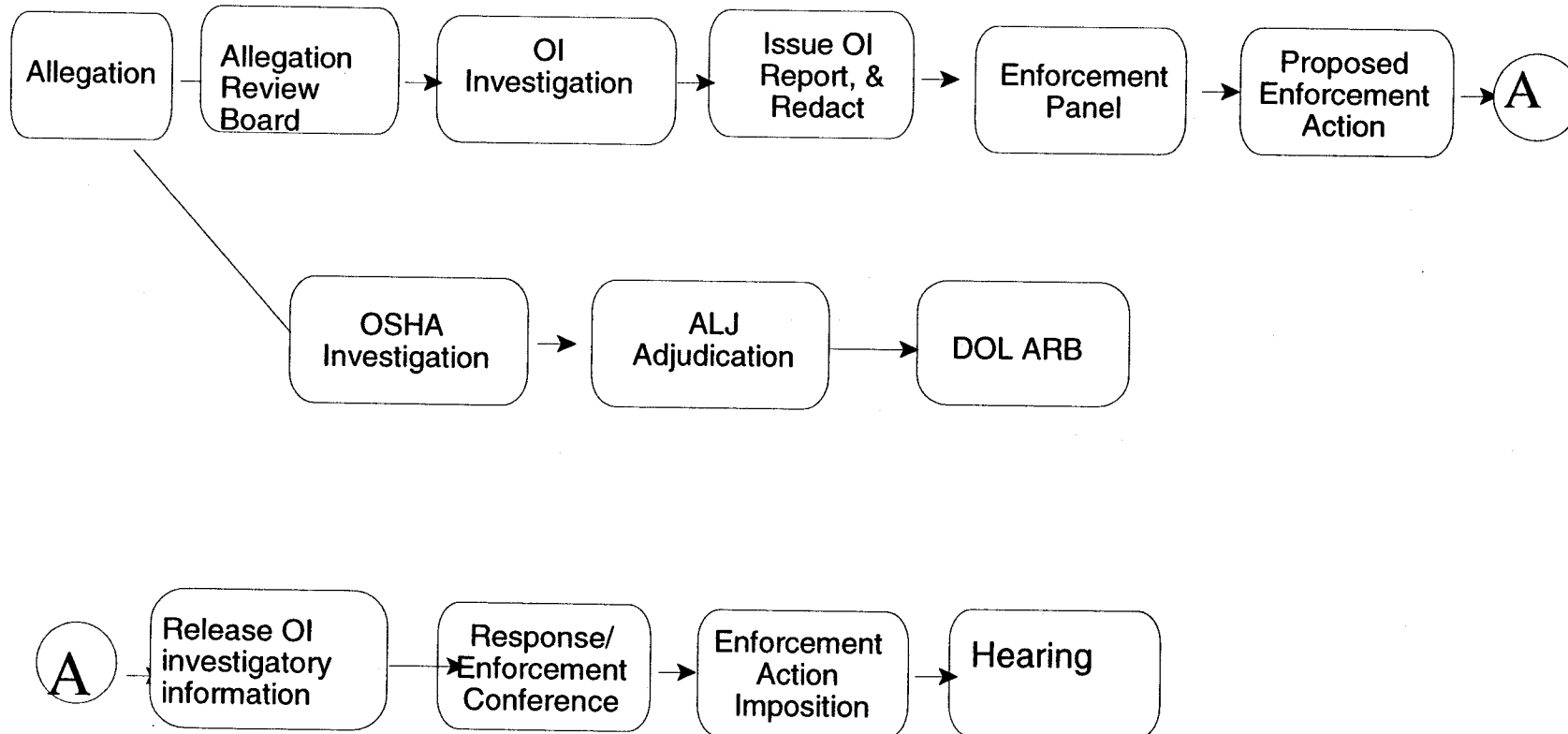- Modify regulations to allow assessing Civil Penalties to Contractors.

CURRENT PROCESS

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                    │Allegation│      │    OI    │      │          │
                ┌──▶│ Review   │─────▶│Investig- │─────▶│ OI Report│──┐
                │   │ Board    │      │ ation    │      │          │  │
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 │ A │───▶│Enforcement│────▶│Request/  │────▶│Answer to │────▶│  Action  │────▶│ Hearing  │
 ╰───╯    │  Action  │      │Redaction │      │  NOV     │      │Imposition│     │          │
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RECOMMENDED PROCESS

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│ Allegation│───│ Review    │─────▶│Investigation│─▶│ Report, & │─▶│Enforcement│─▶│Enforcement│─▶(A)
│           │   │ Board     │      │           │   │  Redact   │   │   Panel   │   │  Action   │
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      │ Release OI│   │ Response/ │   │Enforcement│   │           │
(A)──▶│investigatory│▶│Enforcement│─▶│   Action  │─▶│  Hearing  │
      │information │   │Conference │   │ Imposition│   │           │
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FUTURE ACTIVITIES

- Stakeholder Meetings and Feedback
- Comments accepted until August 17, 2001
- Issue Final Report to Commission
- Disposition recommendations
- Tasking to staff for evaluation and follow up

Sample Leadership Survey

Needs Improvement < 60%   Excellence > 80%

green = all areas > 80%   white = all areas > 60%   yellow = one area < 60%   red = two areas < 60%
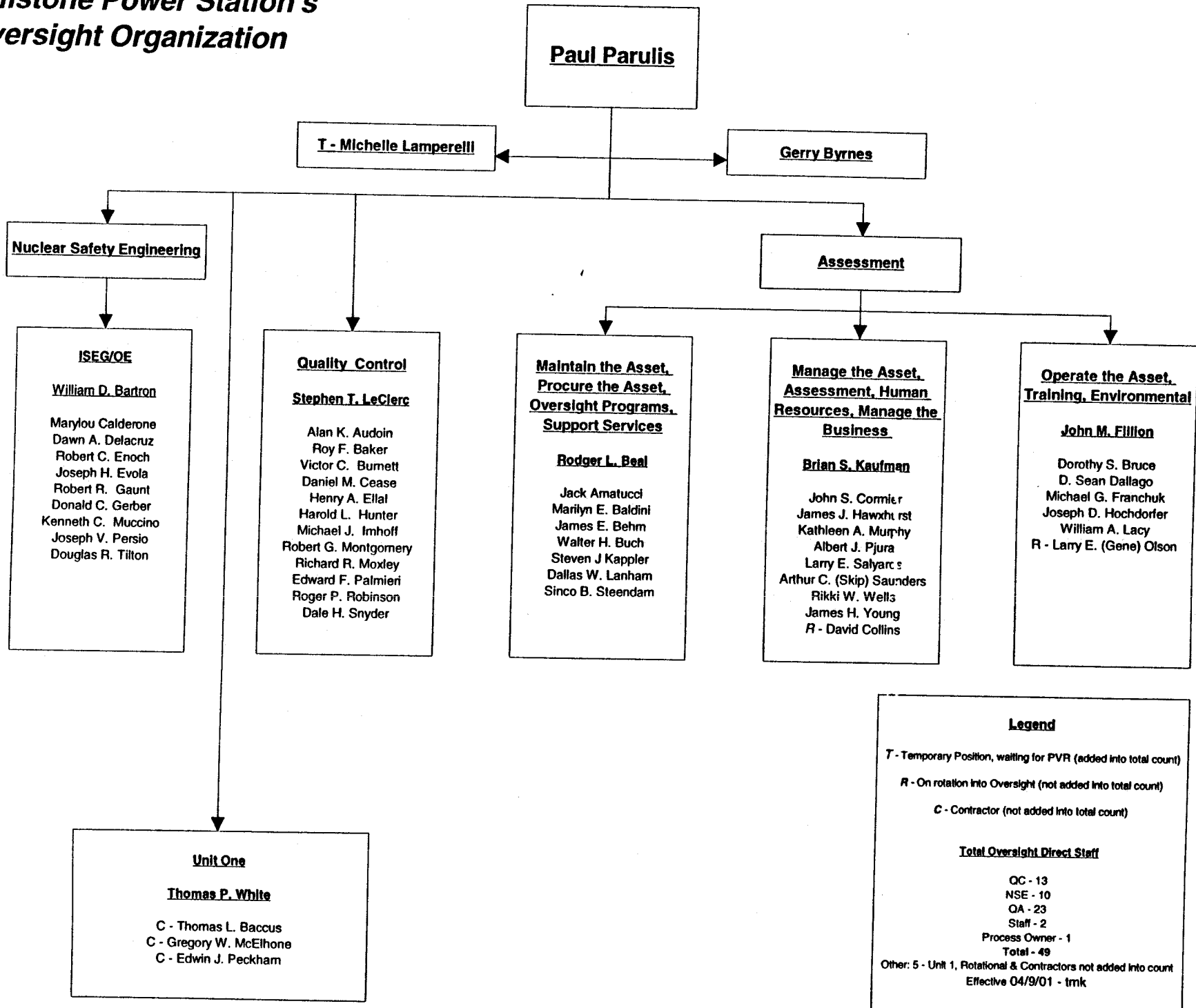
Operations
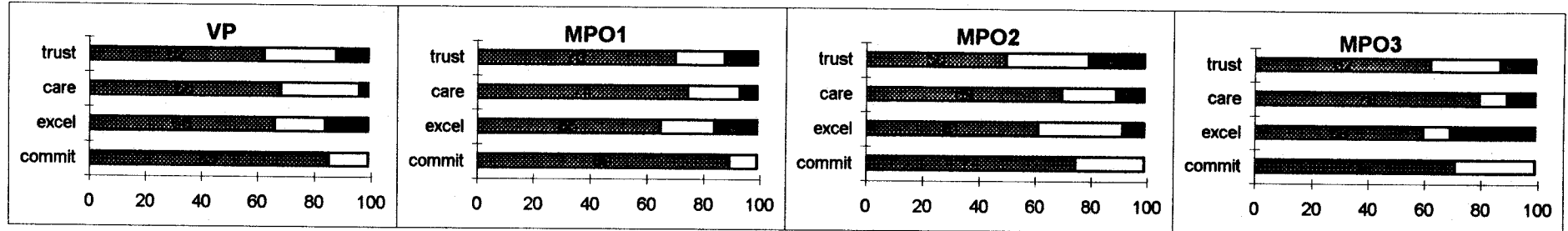
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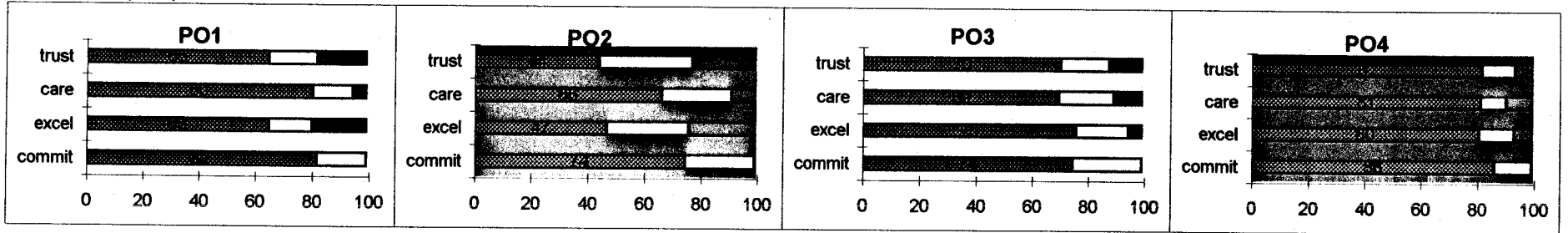
Operations (cont)

Sheet1

MPO2

trust 50
care 69
excel 61
commit 74

0   50   100

trust
care
exce
commit

Page 1

VP

trust	62
care	68
excel	66
commit	85

0 50 100

trus

car

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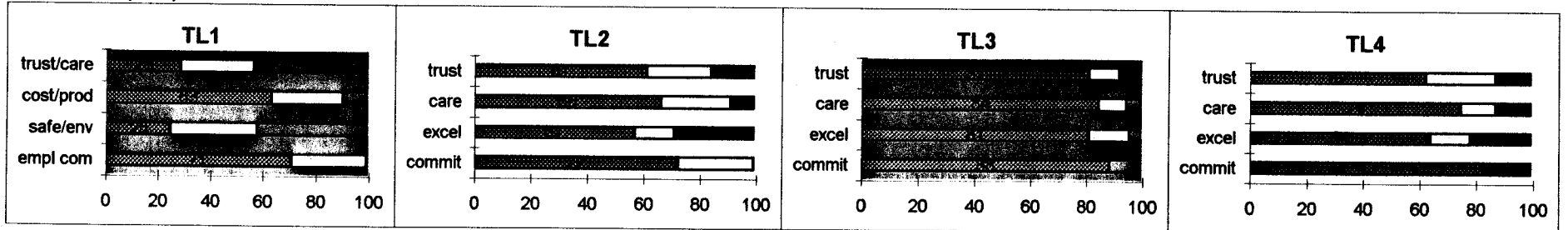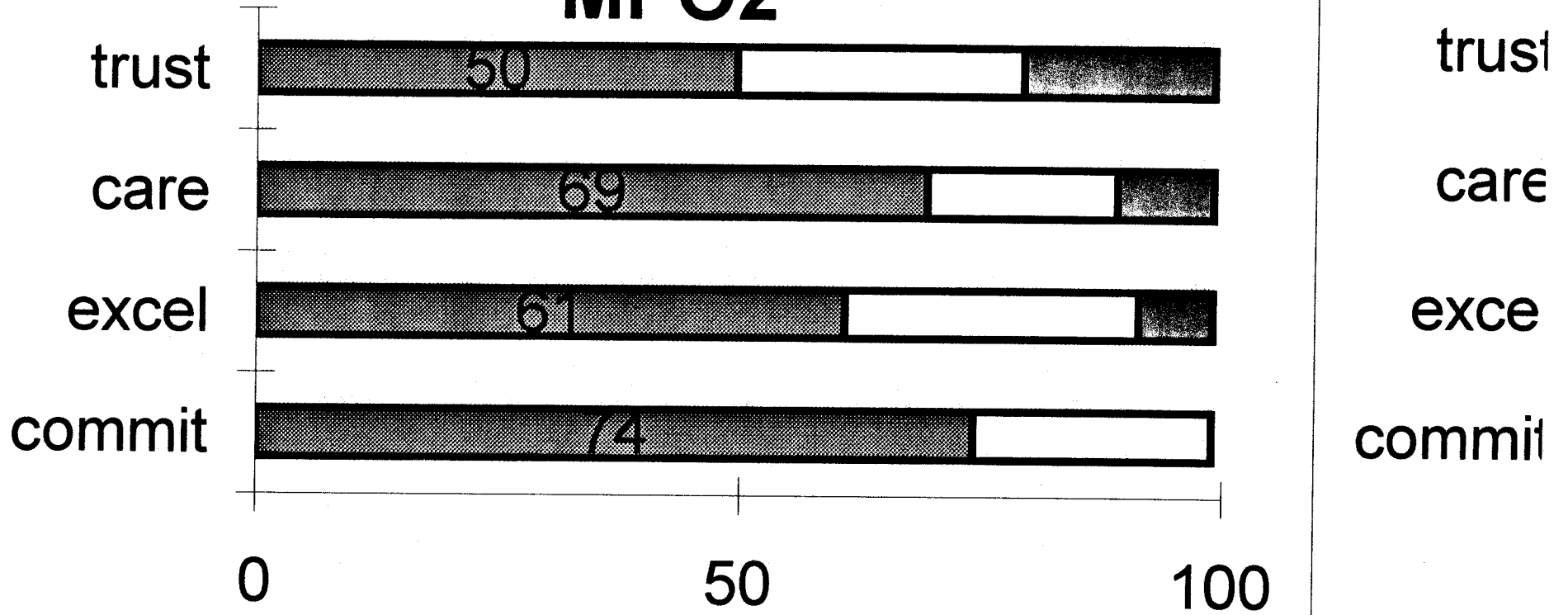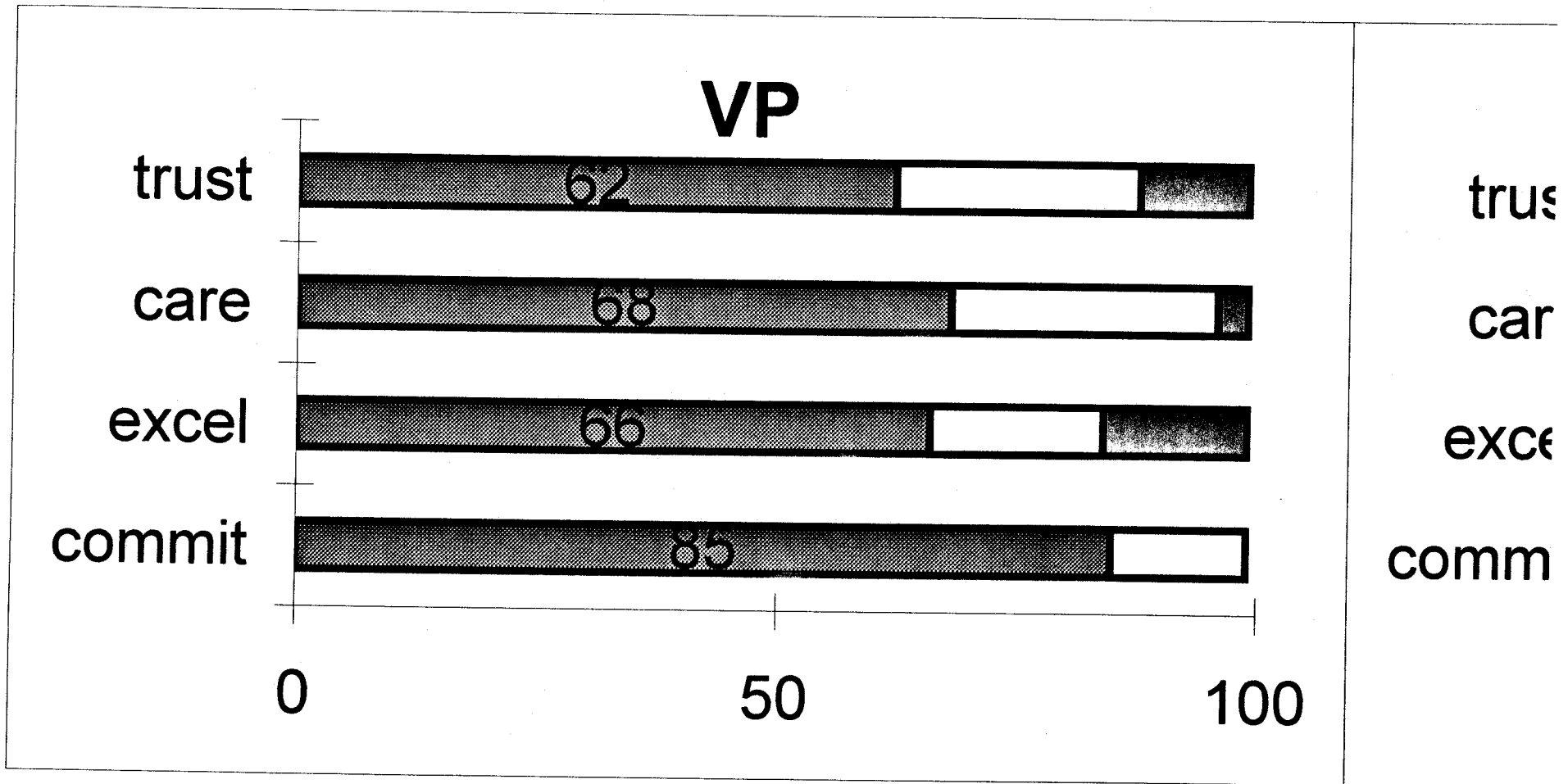
Millstone Power Station's
Oversight Organization

Paul Parulis

T - Michelle Lamperelli ← → **Gerry Byrnes**

Nuclear Safety Engineering

Assessment

ISEG/OE

William D. Bartron

Marylou Calderone
Dawn A. Delacruz
Robert C. Enoch
Joseph H. Evola
Robert R. Gaunt
Donald C. Gerber
Kenneth C. Muccino
Joseph V. Persio
Douglas R. Tilton

Quality Control

Stephen T. LeClerc

Alan K. Audoin
Roy F. Baker
Victor C. Burnett
Daniel M. Cease
Henry A. Ellal
Harold L. Hunter
Michael J. Imhoff
Robert G. Montgomery
Richard R. Moxley
Edward F. Palmieri
Roger P. Robinson
Dale H. Snyder

Maintain the Asset, Procure the Asset, Oversight Programs, Support Services

Rodger L. Beal

Jack Amatucci
Marilyn E. Baldini
James E. Behm
Walter H. Buch
Steven J Kappler
Dallas W. Lanham
Sinco B. Steendam

Manage the Asset, Assessment, Human Resources, Manage the Business

Brian S. Kaufman

John S. Cormier
James J. Hawxhurst
Kathleen A. Murphy
Albert J. Pjura
Larry E. Salyards
Arthur C. (Skip) Saunders
Rikki W. Wells
James H. Young
R - David Collins

Operate the Asset, Training, Environmental

John M. Fillion

Dorothy S. Bruce
D. Sean Dallago
Michael G. Franchuk
Joseph D. Hochdorfer
William A. Lacy
R - Larry E. (Gene) Olson

Unit One

Thomas P. White

C - Thomas L. Baccus
C - Gregory W. McElhone
C - Edwin J. Peckham

Legend

T - Temporary Position, waiting for PVR (added into total count)

R - On rotation into Oversight (not added into total count)

C - Contractor (not added into total count)

Total Oversight Direct Staff

QC - 13
NSE - 10
QA - 23
Staff - 2
Process Owner - 1
Total - 49
Other: 5 - Unit 1, Rotational & Contractors not added into count
Effective 04/9/01 - tmk

Driving Organizational Change
in the Midst of Crisis

There is no recipe for pulling an organization through a crisis. You have to think on your feet. This case study shows that even in a complex, high-pressure industry openness to learning can light the way.

John S. Carroll and Sachi Hatakenaka

After the dust had settled, the division CEO confided he had never seen a culture as broken as the one he encountered when he was hired. What it took to get his organization on its feet and moving in the right direction was an amalgam of powerful forces: an unprecedented regulatory fiat, third-party oversight and, above all, leaders at every level who were open to learning. The CEO would be the first to admit there was no solitary hero.

Observers often label an organizational crisis as financial or technological or as a failure of leadership, but the reality defies simple categories. We have studied firsthand a crisis in the ultimate pressure-cooker industry. The resolution demonstrates that organizations are more likely to weather a storm and emerge stronger if leaders avoid oversimplifying the situation and instead allow a gradual understanding to emerge and be tested in action.[1] In the case study, managers and employees at every level learned life-changing lessons — lessons that can be used in all industries to improve managers' effectiveness and companies' competitiveness in turbulent business environment.

The crisis at Millstone Nuclear Power Station in New London, Connecticut, is a tale of lost trust, external pressure, internal strife, personal transformation, cultural change and emergent leadership.[2] The resolution evolved from daily decisions, reactions to decisions and many contributors' creative solutions. Hence the lessons' broader application is best conveyed through a story reflecting that evolution and the give-and-take of the people involved.

In 1997, Hartford-based Northeast Utilities, the parent of Millstone's operating company, was facing bankruptcy. Its stock had plummeted from $26 in early 1996 to less than $8. Millstone's power-producing units were shut down. Making improvements at Millstone and buying replacement power for

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customers was costing the utility millions of dollars every day. Nevertheless, by August 2000, Millstone was again producing electricity, the stock had gone up, and Northeast Utilities was able to sell the power station for $1.3 billion. How could an organization with a seriously broken culture accomplish such a turnaround?

Setting the Stage

In 1996, Millstone had more than 2,000 employees, plus 1,000 consultants and contractors. Its three nuclear-power units were operated by Northeast Nuclear Energy Co., a wholly owned subsidiary of Northeast Utilities. During the 1970s and 1980s, Northeast Utilities had been a recognized industry leader, especially respected for its engineering organization. However, several 1980s events would lead to disruption: a tremendous outlay for building Millstone's unit three, the retirement of Millstone's pioneer CEO, and the publication of a consultant's report predicting deregulation and the need to compete on cost with other energy sources. The result was a focus on running plants without spending unnecessary funds.

By the early 1990s, there were signs that Millstone was not keeping up with an industry in which performance standards were increasing every year. Engineers and other employees were complaining, sometimes publicly, that management would not listen to concerns about design and operations. The U.S. Nuclear Regulatory Commission (NRC) was receiving approximately 50 employee allegations annually from Millstone.[3] Backlogs in maintenance, engineering work, capital projects and corrective action were growing. When management appeared unresponsive, dissatisfaction spread.

Crisis Erupts

Then the company and the NRC learned that Time magazine was preparing a story on alleged harassment and intimidation of Millstone employees who raised safety concerns. In January 1996, Millstone was placed on the Watch List, a list of plants receiving additional NRC attention. After unit one shut down for refueling and the other two units closed for unrelated equipment problems, the NRC ordered all three to demonstrate compliance with their licenses, regulations and safety analyses before restarting. In March 1996, Time put troubled Millstone on its cover.[4] In October, an NRC review group concluded that, for years, Millstone's work environment had neither tolerated dissenting views nor promoted a questioning attitude.[5] The report stated: "This poor environment has resulted in repeated instances of discrimination and ineffective handling of employee concerns [and has] contributed to Millstone being placed on the NRC's Watch List. ... Every problem identified during this review had been previously identified to Northeast Utilities management ... yet the same problems were allowed to continue." (The review also criticized the NRC's process for handling Millstone allegations.)

The NRC then directed Northeast Nuclear Energy to devise and implement a plan for handling employees' safety concerns.[6] The agency's order included an unprecedented requirement: Millstone had to demonstrate a "safety-conscious work environment" in which employees could raise concerns without fear of retaliation — and management would take appropriate action. (See "A Safety-Conscious Work Environment.") Northeast Nuclear Energy also was told to nominate for NRC approval, and then contract with, an independent third party to oversee the plan and its implementation.

Millstone experienced a human-systems and regulatory crisis, not a physical threat to the reactor core. This was a crisis of confidence both externally with regulators and the public, and inter-

A Safety-Conscious Work Environment

The U.S. Nuclear Regulatory Commission coined the phrase, "safety-conscious work environment" without providing any specifics for defining or measuring it. It is reminiscent of the concept of "safety culture" that was brought to the industry through the reports on Chernobyl by the International Atomic Energy Agency.* Millstone management and Little Harbor Consultants gradually evolved a working definition that included the following attributes:

■ safety and quality are valued above cost and schedule;

■ employees believe they can bring concerns to management and feel safe from harassment, intimidation, retaliation and discrimination;

■ employees believe that management will act appropriately on their concerns;

■ an employee-concerns program offers a legitimate alternative to bringing concerns to management; and

■ there are mechanisms to monitor and maintain those characteristics.

* International Atomic Energy Agency, "Safety Culture: A Report by the International Nuclear Safety Advisory Group," Safety Series No. 75, INSAG-4 (Vienna: IAEA, 1991).

nally with employees.[7] In addressing it, the NRC entered new terrain. Although it required Millstone to establish programs and processes to define, develop and maintain a safety-conscious work environment, it did not offer guidance on how to do that. Hence Millstone was closely watched by the industry as it moved from a focus on engineered safety features to a focus on managing a high-hazard work system.[8]

The Role of a Leader

In 1996, internal and external efforts to diagnose Millstone's underlying problems concluded that management was insensitive, intimidating, lacking interpersonal skills and preoccupied with cutting costs. Clearly, for Millstone to move forward and regain profitability, it would need new leaders.

In September 1996, Bruce Kenyon was hired to run the Northeast Utilities nuclear program, including Millstone, Connecticut Yankee (eventually decommissioned) and Seabrook stations. He insisted on full authority, so the board of trustees created the CEO for Nuclear Power position, reporting to the Northeast Utilities CEO. (See "Timeline.")

Making Change Visible to All At 8 a.m. on his first day at Millstone, Kenyon called all the employees onto the lawn and introduced himself and his values: high standards, openness and honesty, commitment to do what was right, and two-way communication. He told everyone he would do a two-week assessment and then announce his plan. Kenyon met briefly with the vice presidents and the directors one level below him and shocked them with a surprising assignment. They were to grade their peers individually from A to D, commenting on strengths and weaknesses — and return the grade sheets personally to him the following week. In the third week, Kenyon fired two of the three vice presidents and demoted the third. That sent a signal throughout the organization that things had changed.

Tackling Employee Relations Kenyon was unprepared, however, for the difficulty of creating a safety-conscious work environment or for employee suspicion of management actions. In his previous experience in the industry, managers handled employee issues in an atmosphere of trust. They didn't need confidential programs or layers of oversight. Thus when Kenyon began reshaping his top team and removed the vice president of the oversight group responsible for audits and quality control, he failed to anticipate that some employ-

ees might consider that an attack on independent oversight. He learned fast.

Kenyon has said that building trust where management-employee relations were severely damaged was "the toughest challenge I faced."[9] His strategy was to articulate his values clearly, communicate openly, move decisively to change the existing management style, and strengthen the employee-concerns program. Kenyon met regularly with small work groups and in large all-hands meetings to share information and encourage two-way communication. "It shocked them to get candid answers," he says. At his first NRC meeting, Kenyon said he found Northeast Utilities "essentially dysfunctional." An NRC employee we later interviewed remembers thinking, "Here's a fellow who at least recognizes the problem."

Giving Employees a Voice Employees needed a safe means to voice concerns. Kenyon brought in Dave Goebel, a Navy admiral, as the new vice president of oversight, and Goebel hired his former chief of staff, Ed Morgan, to strengthen and run the employee-concerns program.

Employees previously had viewed that program as a gimmick to make managers "look good and feel good," one manager told us, yet many managers considered it "a legal defense fund for bad employees." Goebel recruited employee volunteers to help draft a new employee-concerns program. The resulting task force had so many passionate advocates it immediately got mired in conflict. Two facilitators were brought in, and Kenyon and Goebel spent several hours weekly with the task force trying to build mutual respect. When the group couldn't finalize its report, Morgan and the task-force leader rewrote it over a weekend, got task-force approval and issued it in January 1997.

The plan created an employee-concerns oversight panel composed of some of the task force's members and its manager-leader. The employees argued continually with one another, but they were needed to certify Millstone's work environment prior to restart. Over time, the panel members and management evolved a workable role. The panel was able to assess the effectiveness of the action plan through surveys and interviews, to act as a communication channel for employees and to help implement management plans. As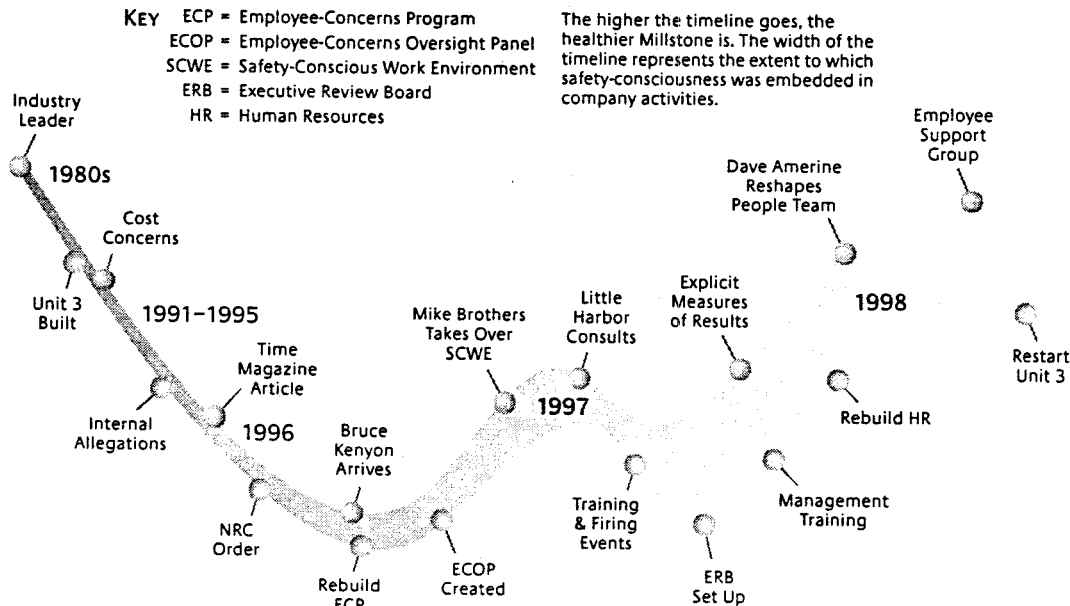 one interviewee stated, the panel's existence "sent a message to the work force that employees could act as oversight of management." Moreover, members' participation changed their own attitudes and behaviors. They developed respect for other viewpoints and

> It was apparent that management had failed to anticipate the potential effect of the discipline or to undertake timely communication to minimize the potential for a chilling effect.

KEY ECP = Employee-Concerns Program
ECOP = Employee-Concerns Oversight Panel
SCWE = Safety-Conscious Work Environment
ERB = Executive Review Board
HR = Human Resources

The higher the timeline goes, the healthier Millstone is. The width of the timeline represents the extent to which safety-consciousness was embedded in company activities.

Industry Leader

1980s

Cost Concerns

Unit 3 Built

1991–1995

Time Magazine Article

Internal Allegations

1996

Bruce Kenyon Arrives

NRC Order

Rebuild ECP

ECOP Created

Mike Brothers Takes Over SCWE

1997

Training & Firing Events

Little Harbor Consults

ERB Set Up

Explicit Measures of Results

Management Training

Rebuild HR

Dave Amerine Reshapes People Team

1998

Employee Support Group

Restart Unit 3

TIME

became more capable of learning. They saw they had to cooperate for the good of all.

As director of the employee-concerns program, Ed Morgan moved rapidly. He categorized employee concerns, lowered the threshold for what could be reported, and set high standards for doing the work. The low threshold elicited issues from contractors, whose problems often stemmed from not understanding the plant. If a supervisor lost patience and said something inappropriate such as, "This is a no-brainer," the upset contractor would accuse the supervisor of intimidation. "Millstone lost key people who left under that kind of pressure," an interviewee told us. Fortunately, Morgan had the ability to see both sides — to understand how both parties could become victims.

Bringing in a Third-Party, External Oversight Team

In January 1997, Northeast Nuclear Energy nominated Little Harbor Consultants as its independent third-party oversight team. At the urging of Dave Goebel and Bruce Kenyon, an attorney named Billie Garde was added to the team because of her experience as an employee advocate and as a facilitator for the embroiled employee-concerns task force.

Little Harbor gave the NRC, in the words of one interviewee, "a huge benefit at almost no cost." It monitored the work environment and developed the list of components of an ideal safety-conscious work environment. The list addressed senior-management policies, training for all managers on handling safety complaints, the importance of employee perception of the policy and its implementation, an employee-concerns program to handle issues separate from the line organization, and periodic independent assessments and self-assessments to monitor and improve performance.[10] Over time, Little Harbor began to work more closely with management. As an interviewee from the NRC said, "Little Harbor operated in ways we didn't imagine. ... We expected them to monitor. ... They became more proactive in assisting with thoughts [and] suggestions."

Engaging the Line Managers

In April 1997, a Safety-Conscious Work Environment initiative was established to broaden the change process. As one interviewee explained, "Ed Morgan could build an effective [employee-concerns program], but only the line organization could develop a healthy work environment."

Kenyon announced that vice president for operations Mike Brothers would head the initiative, surprising employees who foresaw a fox in the henhouse. Like most of the operations group, Brothers had come from the nuclear Navy. He described its culture in an interview as "locker room teasing. ... People are verbally brutal to each other and develop a tough shell." At Millstone, "A lot of people were scared of

me," he admitted. "I didn't realize the power of perceptions."

But Brothers' emergence as the safety-conscious work-environment leader gave the effort internal authority. He set up a group to find problem areas and formalize plans to deal with them. The group began to teach line managers what was meant by a safety-conscious work environment, how to work with employees and how to communicate better. Leadership training started in May, with help from Billie Garde and Little Harbor. The feedback from the sessions was that more training was needed. As one participant said, it "whetted our appetite."

Learning by Doing

Two defining experiences in summer 1997 challenged the commitment and resources of both the organization and the individuals involved.

Disciplining for Past Actions First, management disciplined 20 members of the training and operations departments because of inaccuracies in training documentation two years earlier. The former training director, an outspoken critic of current performance who had become nuclear-oversight director, was among those disciplined. The discipline triggered an uproar from employees who suspected retaliation for criticism of management. Although an independent investigation determined that the action was generally appropriate, it was apparent that management had failed to anticipate the potential effect of the discipline or to undertake timely communication to minimize the potential for a chilling effect.[11] People's perception is their reality.

Firing Contractors Who Raised Safety Concerns Second, contractor management fired two contractors for alleged poor performance, with the approval of several layers of Millstone management. The two contractors had raised safety concerns about the adequacy of the work the contractor group was doing on an important project. Bruce Kenyon initially supported the terminations, believing everyone had honest intent. But as director of the employee-concerns program, Ed Morgan moved immediately to get the decision overturned, and Kenyon reversed himself. The employee-concerns program's subsequent investigation revealed that the terminations were not justifiable. The employee-concerns program's response greatly enhanced that group's credibility with the work force.

Initially, Mike Brothers, the head of the safety-conscious work environment, was just "going through the motions," he admits. "I didn't believe anyone would harass someone who brought forth safety concerns." But Brothers says he changed after he heard Ed

Morgan and the employee-concerns investigator give Little Harbor their view on the terminations. "It was one of those moments your perception changes. ... [There was] clear-cut harassment. ... [It was] a watershed for me." Brothers immediately put the terminated contractors on retainer while the case was investigated, and a week later both were offered back their jobs.

> The executive review board increased employees' trust in management. It brought together multiple perspectives to create a learning environment and to help board members and managers think through their decisions.

Extensive management discussion following the contractor firings, combined with increasing intervention from Little Harbor, led to the creation of an executive board to review all disciplinary action from written reprimand to termination.[12] Eventually, reviews were extended to cover not only employees but contractors, too. Over time, the executive review board increased employees' trust in management. It brought together multiple perspectives to create a learning environment and to help both board members and managers who presented their cases think through their decisions and manage their organizations. Managers began to ask the executive review board for advice even before taking personnel actions.

Institutionalizing a Safety-Conscious Work Environment

Millstone's recovery was in high gear by fall 1997, but it was still a patchwork of efforts. For change to become embedded organizationwide, Millstone needed changes in attitudes and behaviors — and formal structures to sustain the new culture. Key people concentrating on the safety-conscious work-environment initiative were needed elsewhere. The initiative had to become an everyday practice of all line managers and draw on emergent leaders.

Building Supportive Structures In November 1997, Dave Amerine, newly hired to head the nuclear engineering and support department, volunteered to become vice president of human resources and be responsible for the safety-conscious work-environment initiative. Mike Brothers then could focus on managing the long lists of physical and paper changes needed for the restart of unit three. Amerine, according to one individual, was "an engineer par excellence [and] the least right-brain

person I know. ... A learner who took charge." Like Mike Brothers, he was changed by the job: "When you teach, you learn," an interviewee observed.

Amerine increased the participation. He renamed the daily safety-conscious work-environment meetings the People Team and included representatives from human resources, the legal department, the employee-concerns program, the employee-concerns oversight panel, the safety-conscious work-environment group, two of Bruce Kenyon's assistants, and Nilsson Associates, an organizational-development consulting group.

Amerine brought a "respect for structure," said an interviewee. His team flowcharted diagnoses of the legal aspects of problems, placing them on laminated cards that every manager could carry. For acute emergent problems, the team structured a rapid-response capacity and learned to treat a people problem the same as a plant problem: First, stop the situation; second, stabilize it; third, develop a plan to address it. For slower-growing, chronic problems, the team developed criteria to label a work group a focus area if people in that group expressed reluctance to raise issues — or if their managers were unwilling or unable to address issues raised. At one point, there were 33 focus areas, each with its own plan for addressing problems and monitoring progress. At the daily meeting, the People Team would decide who would lead the intervention for any new focus area and then request additional help.

Measurement tools. Establishing criteria and tools for measuring progress and detecting problems was vital. Early on, Little Harbor began periodic assessments, reviewing documents and conducting structured interviews with employees. In October 1997, Millstone established its own success criteria and performance indicators, cross-checked against Little Harbor's. The company conducted regular employee surveys. The employee-concerns program tracked its own indicators, and the employee-concerns oversight panel conducted focus-group interviews in hot spots and developed an effective survey methodology that averaged 95% participation. Equally important information flowed through informal channels. According to one senior manager, Billie Garde was a "magnet for people to talk to her."

Individuals and groups with differing ideas had to collaborate on creating the safety-conscious work environment. Under such ambiguity, a single measurement system could not have worked. A top-down approach would have jeopardized the fragile trust that was developing. Instead, the gradual weaving of a tapestry of understanding from many efforts to measure and communicate led to new ways of thinking and acting.

Strengthening the human resources department. Directed from Northeast Utilities headquarters, the understaffed Millstone HR department was unprepared to be a change agent. Whenever staff members tried to advocate for employees, line managers would "send them back to their corner," as one interviewee put it. Their ineffectiveness also stymied management's efforts to hire new people, restructure salaries or change overtime policy.

In January 1998, Cheryl Grise, senior vice president of administration for Northeast Utilities, received a call from Little Harbor, concerned about the lack of urgency in implementing the recommendations. The message: "If you don't get down here, this [NRC] order won't get lifted. ... We need a senior manager who understands human resources and legal." The Millstone HR department and the employee-concerns program were battling over turf; the employee-concerns program and employee-concerns oversight panel were suspicious of each other. The years of broken trust could not be countered overnight. Grise spent several months nearly full-time at Millstone. She brought sagacity and clout with headquarters. She instilled a sense of urgency in HR, taking ownership of outstanding issues and building a partnership with the line organization. With team-building activities, including weekly meetings, she persuaded people to cooperate for the common good.

People Skills Most issues facing the employee-concerns program and the People Team were personnel matters (salary, benefits and promotions) or interpersonal matters (supervisory relationships and personality conflicts). In normal organizations, line managers and the HR department handle such issues. But

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Millstone was typical of an industry in which managers are "not high on people skills — for example, few can read non-verbal signals," as one interviewee claimed. Managers had to "learn the difference between anger, hurt and a chilling effect," as another said. A manager told us that it was tough to "admit you need help." Although most figured it out, often after being put on a performance-improvement plan, about 40 managers were replaced. That got everyone's attention. Meanwhile, Nilsson Associates conducted workshops explaining the stages

of anger, denial, exploration and acceptance. Lessons were learned: A supposed chilling effect was often just a matter of people working through their anger, with employees' mistrust stemming not from fear of reprisal but from a lack of confidence that effective action would be taken.[13]

In the nuclear-industry culture, good supervisors don't have problems, and problems often are suppressed.[14] Senior management had to convince supervisors that they would be judged on their response to problems, not their lack of problems. At Kenyon's insistence, more-detailed management training was

Lessons From Millstone

FOR SENIOR MANAGERS
■ Be visibly engaged.

■ Involve people in solving common problems to build trust and commitment.

■ Communicate as often as possible to all stakeholders.

■ Model inquiry skills, and be willing to change your mind.

■ Encourage participation through multiple forums.

■ Be patient: Seeds of crisis may take years to germinate.

■ To achieve enduring change, test new behaviors.

FOR LINE MANAGERS
■ Give up old ideas of control, and don't be afraid to ask for help.

■ Try new things, make mistakes, and build new capabilities.

■ Learn about emotions and relationships; enhance your social skills.

■ Remember that others' perceptions are their realities.

■ Build trust from a combination of secure relationships and effective action.

■ Think long-term, and prepare for more changes.

FOR INFORMAL LEADERS
■ Be true to yourself.

■ Ask for what you want and be persistent.

■ Use all your resources, and remember that external forces create opportunity.

■ Give honest feedback, and forgive honest mistakes.

■ Develop new skills for the new jobs you will have in changed organizations.

developed with the help of outside attorneys. Little Harbor and NRC personnel sat in on the training and gave feedback. Senior managers participated visibly. After new, untrained supervisors mishandled some small events, the safety-conscious work-environment group's manager, drawing on past experience as a Boy Scout leader, created a "Quick Start" video for supervisors and managers who had yet to receive training. Thus leaders at all levels contributed to the change process.

Employees contributed, too. At first, when the media criticized Millstone, employees who felt embarrassed or angry nevertheless saw it as management's problem. Then Kenyon asked employees, "When are you going to say what *you* think?" In late 1997, an employee group formed and collected more than 1,500 signatures in support of management. Group members attended public meetings and wrote to newspapers, conveying the sense that Millstone was a single community.

Consolidating Successes and Facing the Future

The April 1998 Little Harbor review rated the safety-conscious work environment sufficiently improved in all categories to warrant consideration for restart. In May and June, Millstone management, the Millstone oversight group, the employee-concerns oversight panel and the nuclear committee advisory team each formally certified to th same effect. On June 29, the NRC authorized restart of unit three.

Millstone was able to shift from crisis mentality to the long-term process of stabilizing the organization, sustaining progress and ensuring the success of the company in a rapidly changing environment. Many of the safety-conscious work-environment and employee-concerns functions began to transition to HR as line managers became more effective. Little Harbor ceased being the third-party oversight organization in March 1999 but continued as consultants, periodically reviewing the work environment.

In reporting to Northeast Nuclear Energy in July 1999, the consultants said the safety-conscious work-environment initiative was still fragile: "Some areas have improved while

> It is natural to want to declare victory and move on, but management in organizations recovering from crisis must avoid treating change as a project that has been completed.

others have slipped."[15] Although "Millstone management is sincerely dedicated to maintaining a safety-conscious work environment," Little Harbor asserted, "[there was] a desire to return to normalcy a bit sooner than circumstances at the site warranted." It is natural to want to declare victory and move on, but management in organizations recovering from crisis must avoid treating change as a project that has been completed.

A crisis can cast its shadow long after the main issues resolve, and wounds can reopen. In the past two years, Millstone has responded to the competitive demands of a deregulated industry with two major waves of reorganization and downsizing. Management promised no involuntary severances but nevertheless worried lest some workers attempt to keep their jobs the old way — by lodging a complaint and claiming retaliation if laid off. Some managers we interviewed fear the company has swung the pendulum from management dominance to employee dominance. They say they are under a "reverse chilling effect." But other managers say, "Safety-conscious work environment is not anarchy. [Managers] can still discipline people involved in protected activity." It takes time for a broken culture to become healthy enough to find consistently the balance between the company's need for performance and the needs of individuals. The environment remains fragile, but the new openness allows managers to discuss issues with employees in a straightforward and caring way while holding people accountable.

In Uncharted Territory, Draw Your Own Map

In talking about how crises get resolved, many management theorists suggest that a transformational leader arises and puts forth a vision with a top-down plan for change.[16] That is not how Millstone resolved its crisis. (See "Lessons From Millstone.") Certainly, Bruce Kenyon brought personal credibility, the courage to restructure the senior team, a clear set of values and a commitment to two-way communication. His actions were consistent with principles of effective leadership.[17] But the shape of the changes and the way they unfolded were improvised by scores of leaders throughout the organization, including senior managers, line managers and emergent leaders.[18] As one manager said, Kenyon "went along with all my

recommendations. He didn't always agree."

Effecting change at Millstone was not a matter of simply creating and communicating a plan. There were continual surprises and few precedents. The nuclear-power units could be restarted only if Millstone demonstrated a safety-conscious work environment to regulators who themselves were unsure what that meant. Senior managers permitted themselves to feel doubt about how to accomplish their goals — a hallmark of leadership in rapidly changing environments. They sought help from many sources.[19] Over time, as participation grew and people learned by doing, initially vague ideas about trust and an effective employee-concerns program matured. Communicating in a caring fashion was important, as senior managers learned. But to convince both work force and regulators that Millstone could survive, mechanisms to deal with crises and conflicts were needed — as were new ways to manage work functions, take corrective action and enforce oversight.

What organization could not benefit from such lessons? Although as a wounded nuclear organization, Millstone had special needs, most of its crisis-management approaches involved familiar kinds of training — tailored to the circumstances.

Enlisting Broad Participation Because senior management had created spaces for participation, there were eyes and ears everywhere, watching the organization move forward, stumble and try again. An organization in crisis must draw on many resources, without knowing in advance which will be needed. Many individuals stepped up at key moments to offer the components from which to fashion change. Insiders and outsiders, technical experts and people experts, operators and engineers, managers and workers, learned to respect one another's contributions and build effective working relationships.

Personal Transformation Comes From Personal Experience "Foundational learning takes a while," said an interviewee. The learning "has to be tested; the learning is in the test."[20] At Millstone, those tests included turning points such as the replacement of the leader of the oversight group responsible for audits and quality control — and the subsequently reversed firing of the two contractors. They included focus-area conflicts

and the responses to individual complaints filed with the employee-concerns program. The learning was not in the policy and the structures but in the behaviors that made the structures come to life. The safety-conscious work-environment concept became part of senior managers' personal learning.

During our interviews, the theme arose repeatedly that working on change changed everyone. People became what they needed to be. They found support in a system that encouraged them to acknowledge problems and work together. The challenges changed both managers and employees. Skeptical employees watched to see how management reacted to defining moments; they weighed the differences between words and deeds, between paper promises and real change. Their evaluations would determine Millstone's success or failure. The initial tests were necessary near-failures, but management admitted its mistakes, kept the lines of communication open, sought lessons for improvement and help from more participants, and tried again. Over time, people learned to deal with chronic problems, and they learned they were capable of change and that change was welcome.

New Ways of Thinking About People Much of the learning at Millstone required a new sensitivity toward emotions, perceptions and relationships. Like many industries, nuclear power attracts and rewards people who have technical skills and get *things* done — who are objective and leave their feelings outside. Few Millstone managers understood how they had lost the trust of the work force or what would be needed to bring healing. With help from outside consultants and insiders with some of the requisite skills, managers learned that guessing what people think by pretending to be in their shoes is less effective than getting people to express themselves. When they express themselves and get a respectful reception, the result is communication and healing. Employees must have a reason to believe that management wants to listen, wants to respond appropriately, respects employees' suggestions and has the competence to succeed. The most powerful way to regain trust is to work together with a common purpose.[21]

The journey is not over. Millstone, like the rest of the nuclear-power industry, faces serious challenges. Past mistrust and feelings of anger and hurt can be stirred up by new situations. The work environment and the performance successes are fragile, and many people have given about all they can. There will be crises to be avoided and crises to be used to mobilize energy for change. Many industries face challenges of rapid change, ambiguous internal and external signals, alienation and mistrust, and dysfunctional human relationships. But people in all work settings can learn from the journey out of crisis, a journey that, like learning itself, never ends.

ADDITIONAL RESOURCES

Ed Schein's 1999 book "The Corporate Culture Survival Guide" (from Jossey-Bass in San Francisco) offers thoughtful and practical advice. Two interesting examples of senior managers reshaping their companies are seen in David Kearns and David Nadler's description of Xerox in "Prophets in the Dark" (from HarperCollins in New York, 1992) and in Noel Tichy and Stratford Sherman's story of Jack Welch at General Electric in "Control Your Destiny or Someone Else Will" (a 1993 Doubleday book).

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