

# Using Hoshin Planning to Redesign a Workforce

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## Why Hoshin Planning for NV Energy?

In the 1950s, the hoshin planning process emerged in Japan as a means to focus an organization's quality improvement efforts on strategically critical systems and processes. Since then the method has been applied successfully by leading organizations in many industries around the world. Las Vegas-based NV Energy embraced this method for strategic level improvement.

NV Energy's Vice President for Generation, Kevin Geraghty, says "In today's environment, it is more important than ever to drive for 'accomplishment,' not just 'effort'. Teams are executing at a frantic pace. With hoshin planning, they are doing that work together in a structured and reliable way." In a context of almost daily changes in the economics, politics, and technology associated with generating power, the hoshin planning disciplined process of review allows for mid-course changes, without losing the focus on the five- to 10-year objectives.

## NVE's Hoshin Planning Process

Under the leadership of Geraghty, his team's hoshin-style strategic planning process (see Figure 1) parted from standard strategic planning in four important ways:

- the selection each year of only one top priority
- the involvement of all levels and areas of the organization
- the use of planning and process improvement tools to engage a large number of people in creating and reviewing the plan
- the discipline of the review meetings.

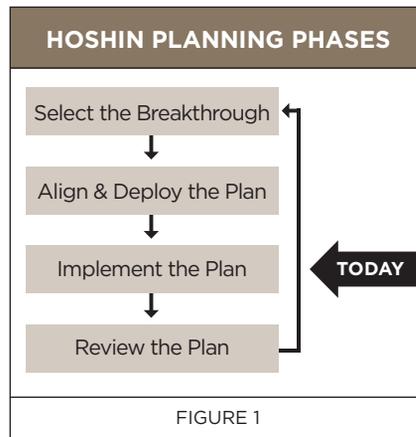


FIGURE 1

Source: 2010  
www.bclearning.com

## What's a 'HOSHIN?'

The three characteristics of a hoshin are that it involves a fundamental change in the systems of the organization; requires the involvement of the entire organization to achieve; and when accomplished, will bring the organization to its next level of performance.

## WHY Workforce REDESIGN?

In August of 2009, Geraghty and his leadership team identified the elements of a five- to 10-year vision for NVE Generation. Eleven elements

emerged as essential for success. Figure 2 shows the result of a tool the team used to determine which of those 11 elements were driving change in the system and which were more likely to be outcomes of doing the drivers well.

The leadership team does not necessarily repeat this initial planning work each year. Rather, the team will be informed by the vision they created for as long as the environment and conditions remain more or less steady. Generation selected 'Improve Daily Planning and Scheduling of Work' as its first-year hoshin. This was simplified to 'Work Management' as part of a plan for communicating with all employees. The following year, workforce redesign was chosen as the priority for Generation's hoshin planning efforts.

As can be seen in Figure 2, 'Retooling the Staff to Respond to Changes' was initially seen as more of an outcome of doing other work well, rather than as a driver. Through the implementation of 'Work Management,' this thinking evolved. The leadership team began to see the ways in which they could proactively redesign the workforce to match the work management systems they were putting in

## GENERATION VISION ELEMENTS

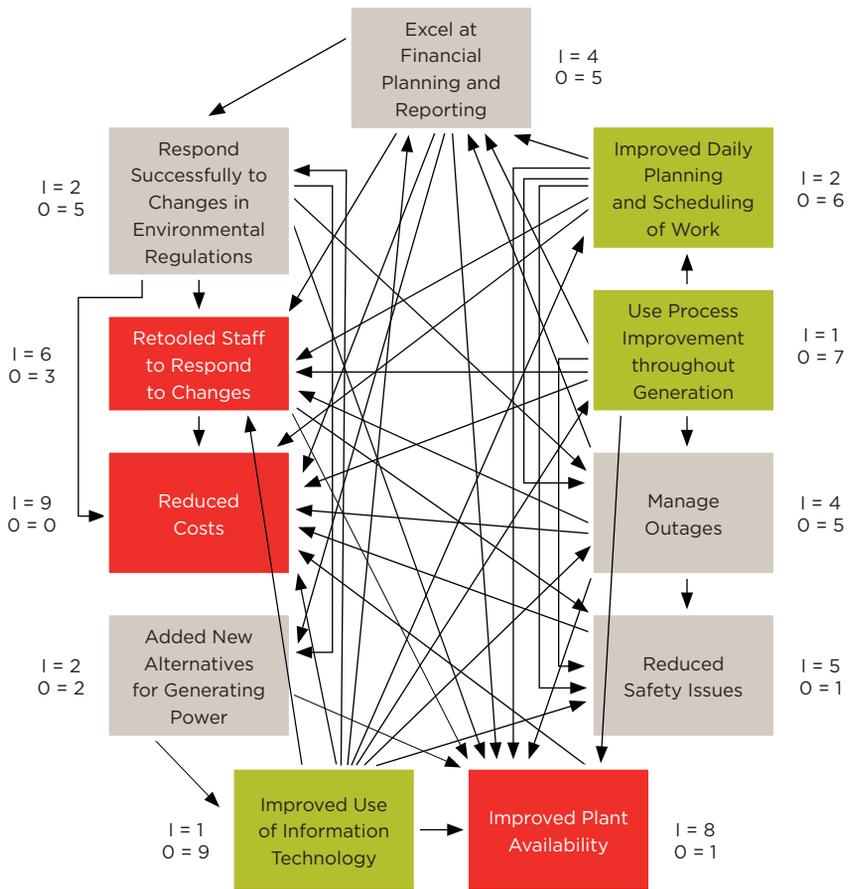


FIGURE 2

Source: 2010 | www.bclearning.com

place to meet operational needs.

As a hoshin, this priority was named "Workforce 2020."

A word about the tools from Kevin Geraghty, "How do you get 8-10 High-Potentials to come to consensus? These tools provide a vehicle for including large numbers of people and a visual map for getting consensus on what to do first."

### WORKFORCE 2020

The Hoshin Workforce 2020 project is the basis for current workforce planning within the Generation Department of NV Energy. Nearly one-quarter of the employees inside Generation have been involved with developing the design. The design has

*One of the most significant benefits to involving HR in this project has been the opportunity to share and transfer knowledge between operational and HR subject matter experts.*

-Katrina Printup,  
HR Staff Consultant,  
NV Energy

fundamentally changed how we do business and impacts how we will do business in the future. Key breakthrough innovations developed by these employees include:

- A clear definition for Core Work
- A model that can be used to optimize and diversify staffing for each Generation location
- Use of competency based assessments for employee development and retention

The mission for the Workforce 2020 project is to:

- Build well-trained, skilled, motivated and team-oriented employees
- Ensure employees will have the ability to successfully complete and lead tasks in many different capacities throughout the Generation department organization.
- Involve many employees from several different levels in creating the workforce design.

The project involved identifying nine strategies for completing the work, and forming a team around each one. To be successful, it was necessary that these teams include members from departments external to Generation. These departments include: Human Resources, Supply Chain, Corporate Communications, Labor Relations and Energy Delivery. Each strategy was assigned a leader, who led the team in creating the next level of detailed plans. The nine strategies are shown in Figure 3, the Annual Plan Table.

## ANNUAL PLAN TABLE: WORKFORCE DESIGN

### Strategies:

- 1.0 Define how Energy Supply will look in 2020 and 2030 (For example: Assets; Internal/External relationships) Outsiders = NVE, Customer, PUC, Senior Leaders, Legislators
- 2.0 Create a process for continuously reviewing and producing current and future competencies and staffing. Includes benchmarking best practices in staffing and compensation, make or buy criteria, define core versus non-core work, and produce an initial 2020 org chart and staffing plan.
- 3.0 Develop Service Level Agreements (SLA) with internal/external service providers.
- 4.0 Identify the process to create and review position requirements and duties that support the needs of the Generation fleet and result in flexible job descriptions for Workforce 2020.
- 5.0 Develop a multi-year, phased labor strategy for the 2020 workforce and align with contract negotiation schedule(s). (Strategy should include labor philosophy and recommendations for labor management training)
- 6.0 Develop a standard fleet-wide process to manage external labor.
- 7.0 Develop a skills-based training plan for the Generation 2020 workforce (technology, job specific, hard skills). (Includes certification/qualification process, training organization structure) (Include BU)
- 8.0 Create a **two-way** communication process to develop and implement the competencies. Create the “buzz”. Gather employee input needed by strategy teams. Deliver leadership’s message (BU)
- 9.0 Identify emerging technologies and align technology strategy with 2030 Workforce

FIGURE 3

Source: 2010 | www.bclearning.com

Strategy team 1.0 was assigned to define the likely asset strategy for NVE. This information became the foundation for the design. In addition, strategy team 2.0 used the asset strategy to develop a 2020 staffing design and a process for reviewing and updating that design annually.

Strategy teams met weekly in the first several months and then monthly. They applied the same tools the leadership team used to create the high level plan in creating their more detailed plans at the strategy level. A section of team 2.0’s Affinity Diagram is shown in Figure 4.

A few NV Energy departments outside Generation critically impact its performance. Strategy team 3.0 is responsible for developing service level agreements with these departments and a process for adding to and renewing these agreements.

Strategy team 4.0 is developing job descriptions and competency models for each position identified in the workforce design. Strategy team 5.0’s Labor Relations team ensures that proper labor protocols are followed as this process evolves.

Since a portion of our labor is supplemented by outside contractors and contingent workers, strategy team 6.0 is developing a process for managing external labor needs. To develop new positions with new job descriptions and competency requirements, a structured training program must be implemented, a task taken on by strategy team 7.0.

Technology is shaping how we work in our power plants. We need to know how to take advantage of this new technology and prepare our workforce to use it. Strategy team 9.0 is working to identify emerging technologies that our workers can use to optimize their performance.

Strategy team 8.0 is focused exclusively on communication. To be successful NV Energy employees need to be engaged. Regular, honest and clear communication is an important tool to make this happen.

### KEY SUCCESS FACTORS:

- Involve all departments that interface with the hoshin
- Form cross-functional teams representing all plants and corporate support groups
- Involve the bargaining unit, first-line supervision, staff positions and managers/directors
- Communicate constantly

### HOSHIN AFFINITY DIAGRAM

**What are all the things we must consider in developing the Generation Organization Chart for 2020**

**Well integrated core competencies across the fleet**

Core/non-core	Define core verses non core work
Know the future core work for NV Energy employees	What would it take to change job descriptions
Get buy-in. Work with union on core and non-core work	What competencies must we build verses buy
Can we use OPL’s to oversee non-core work?	What competencies will be easy to contract
Corporate verses plant functionality	Know the future core competencies of NV energy employees
Understand variability of core work load across seasons.	Understand capabilities of employees who will be in workforce in 2020
What core work can be performed by shared workforce	If we can buy a competency is it core?

FIGURE 4

Source: 2010 | www.bclearning.com



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ANNUAL PLAN TABLE: WORKFORCE DESIGN					
Major Work Process	NVE Generation Position		Core Work?	Employees	
	Current	Future		Current	Future
1a. Operate Plant	CCO & LCCO	Generation Tech	Y		
1b. Lead Plant Operators	Shift Supervisor	Plant Supervisor	Y	5	5
1c. Manage operations	Production Mgr.	Production Mgr	Y	3	3
1d. Direct Plant	Regional Director	Director	Y	2	1
1e. Interface with Resource Optimization	Production Mgr.	Plant Supervisor	Y		
1f. Interface with Balancing Authority	CCO & LCCO	Generation Tech	Y		
2a. Maintain Plant, Heavy Mechanical	Contractor	Contracts Supv	N		
2b. Maintain Plant, Light Mechanical	Generation Tech	Generation Tech	Y		
2c. Maintain Plant, Heavy Electrical	Contractor	Contracts Supv	N		
2d. Maintain Plant, Light Electrical	Production Tech	Generation Tech	Y		

FIGURE 5

Source: 2010 | www.bclearning.com

## Key Assumptions Behind the Workforce Design

The leadership had to agree on key assumptions that would drive the workforce design. One assumption is that Generation will concentrate on performing core work and will contract for non-core work. This led to the need to define the term “core work”.

### KEY ASSUMPTIONS FOR THE WORKFORCE DESIGN:

- Self-perform core work, contract non-core work
- Hire and retain skilled craft workers and train them to perform operator tasks
- The workforce will be flexible and mobile
- Common worker classifications between plants exist
- The design will optimize the use of emerging technology

### DEFINITION OF CORE WORK

Core work includes all the duties required for NVE Generation employees to produce electric power that cannot be obtained externally without increasing total long-term cost, reducing quality or degrading reliability.

## THE WORKFORCE DESIGN TOOL

Working with the support of process development consultant, Bob Llewellyn, the design team created a tool to organize its work. Figure 5 shows a sample of this tool. Listed down the left side are work processes. The current position performing this work is listed in the second column. To identify who should do this work in the future, the team reviewed their current and future asset strategy for each work location and then determined the classification that would most effectively perform this work in the future, listing that in the third column.

The team reviewed each work process to determine if it should be considered core work. If ‘yes (Y),’ then the position will be staffed for the future. If ‘no (N),’ the work will likely be performed by external labor resources. Other departments within NV Energy perform work for Generation. This work was identified, and service level agreements are being developed for those that do not yet exist.

Use of this tool invited the conversations that led to significantly reducing the number of job classifications for the

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business unit. This process ensured that classifications were common among all the plants. It also helped create the high-level picture of responsibilities for each classification. This allowed for easier development of position descriptions.

## TWO BARGAINING UNIT CLASSIFICATIONS

One outcome of applying this tool was the determination that by 2020 plants will likely have two primary bargaining unit classifications: Generation Tech and Asset Technician. Figure 6 shows the two classifications and their development paths. Both classifications will be hired with craft skills.

The Generation and Asset Technicians will ultimately receive similar training. However, their work emphasis will be different. The Generation Technician will prioritize operating the plant. For this employee, maintenance will be a secondary emphasis.

The Asset Technician will be trained in a similar manner, but the emphasis will be on maintenance. These technicians will receive training in additional maintenance fields and eventually will be trained to operate the balance of plant equipment.

## IMPLEMENTATION CHALLENGES AND NEXT STEPS

Geraghty says, "Don't short change the change management work. Demonstrable leadership is the most critical tool to change culture - when leaders look at things differently, so do their teams." To this end, the leadership team is revamping its means for maintaining two-way communication as the process of implementing the new workforce design continues. Division-wide surveys, focus groups, and steady messages from executives are among the specific activities being added to the hoshin communication plan.

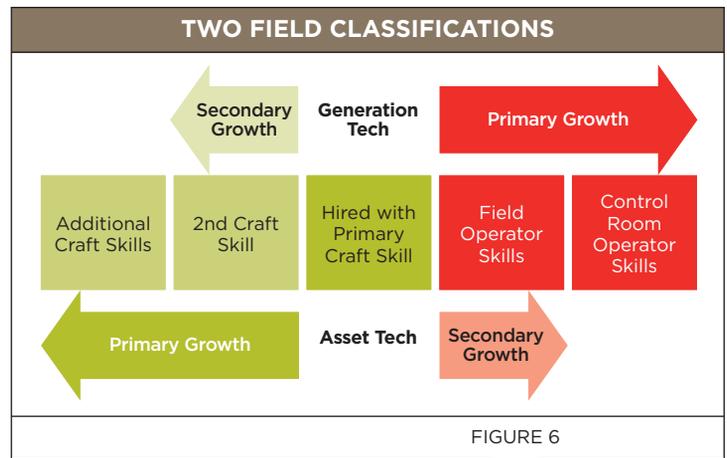


FIGURE 6

Source: 2010  
www.bclearning.com

Building time into already busy schedules has been a challenge for everyone involved in the hoshin planning process. Plant Director Alan Anderson's comments may be representative of what most are feeling, "There is always another pressing need on the plate. Still, I feel this process is what really made our Generation Leadership Team come together and function well. I'm proud of that, and consider it a great opportunity and learning experience."

An additional challenge has been the significant reduction in production from the coal facilities in the fleet, a result of low prices for natural gas. Maintaining the commitment to build a mobile and flexible workforce, while providing meaningful work for coal plant employees, has not been easy. It has pushed the Workforce Redesign team to be ready sooner, particularly related to the labor relations and training strategies.

NVE Generation has responded by freeing up one of its operational leaders from day-to-day work to lead the implementation full time. Geraghty emphasizes the need to, "assign a project lead early in the process." A central leader, with the authority to enforce the schedule, is proving critical to NVE's success at this effort.

In the fall of 2012, the Generation leadership team will revisit its original planning work of 2009 and use it to help choose the next element of the vision that will receive focused attention for the 2012-2014 period. Work on the first two annual hoshins will continue in a monitoring and review mode, until the change each was chosen to effect is complete. ■■

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