

# **Federal Hydropower Strategic Planning Workshop**

Federal Hydropower Strategic Planning Workshop

20 - 22 July 2004

Denver, Colorado

# Workshop Objectives

- **Gain a collective understanding of the value of the Federal hydropower program.**
  - In advance of workshop, share Watershed Management Information Papers (understand the multi-purpose benefits we aim to achieve and the constraints we operate under in each watershed).
  - In advance of workshop, share Project Specific Information Papers (understand how each project contributes to the regional power system).
  - In advance of workshop, query regional stakeholders on what they believe the Federal hydropower program should value and place focus on.
- **Begin the journey toward a nationally aligned strategy supported by strategic objectives and performance metrics.**
  - Determine the top tier of national agency objectives and metrics to begin the development of regional objectives and metrics.
  - In advance of workshop, dialog by conference call to gain a common understanding of the short term workshop goal and the long term program direction.
  - In advance of workshop, inform stakeholders how the HQUSACE Strategic Plan and hydropower objectives and measures were developed.
- **Visualize where this can lead us.**
  - Share strategic planning at the U.S. Bureau of Reclamation.

# Workshop Flow

- **Welcome and Introduction – Mr. Mike White**
- **Plenary Panel Perspectives**
  - Tom Graves, Executive Director, National Preference Customer Committee and Mid-West Electric Consumers Association.
  - Ted Coombes, Executive Director Southwestern Power Resources Association.
  - George Taylor, Executive Director Southeastern Power Resources Committee.
  - Messrs. Bob Porter, Jack Dodd, and Jon Worthington of DOE/PMA Liaison Office.
  - Ms. Claudia Thornblom, DASA(CW).
- **Large Group: Development of National Hydropower Program Goals**
- **Small Groups:**
  - Development of National Objectives and Measures Aligned With Goals
  - Identification of National Strategic Initiatives Toward Objectives
- **Glimpse at the Future**
  - Bureau of Reclamation Strategic Planning Process
  - Bonneville Power Administration Strategic Planning Process
- **Project Visit – (Depends on Workshop Location)**
  - If Las Vegas, NV or Portland, OR include discussion of the Comprehensive Power Operations Review Program at Hoover Dam or Bonneville Dam.

# These Are The Generic Steps



# Another Way to Look At Our Framework

## What Tiers Are Defined?



# What Tiers Are Defined? It Depends.

Mission: Corps or Civil Works or Hydropower?

Our Strategy: Focus on

- People
- Process
- Communications

Our Values – No debate here.

Our Vision – Corps or CW or Hydropower?

Where do our items from Allatoona fit in this framework?

Strategic Objectives

Civil Works or Hydropower Specific?

Performance Metrics

•OMB/CW

•Budget EC

•Hydropower CoP

Initiatives (National, Regional or Plant Specific)

Specific Initiatives to Improve Our Metrics Which Monitor Our Progress Toward Achievement of Our Strategic Objectives.



# A Proposal for Discussion

Our Strategy: A focus on

- People
- Process
- Communications

Strategic Objectives

TBD in Denver  
(Large Group)

Mission & Vision: From CW  
Strategic Plan.

Our Values – LDRSHIP

Where do our items from  
Allatoona fit in this  
framework?

Performance Metrics

Examine All in Denver  
(Small Groups)

Initiatives (National, Regional or Plant Specific)

Specific Initiatives to Improve Our Metrics  
Which Monitor Our Progress Toward  
Achievement of Our Strategic Objectives.



# Allatoona Meeting Objectives & Outputs

- Talk strategically about the future.
  - Importance of alternate funding strategy.
  - 2012, Civil Works Strategic Plan and President's Management Agenda.
- Develop a framework and approach to develop a strategic workshop for the hydropower community.
  - Strategic Workshop design.
- Identify key components to a strategic vision that aligns with the future direction of the Corps.
  - Key elements for a hydropower strategic plan.
  - Vision for the future (after the workshop).
  - Strategic compass “.... the goal is not to develop a perfect strategy but one that will take us in the right direction with the ability to adjust.”
    - Predict multiple future scenarios. (PLAN)
    - Identify key success factors and basic trends. (PLAN)
    - Develop a strategic vision. (PLAN)
    - Generate strategic goals and options. (PLAN)
    - Implement effectively and monitor in real time. (DO & CHECK – Performance Metrics)
    - “.... **with the ability to adjust.**”

# Allatoona Meeting Issue Identification

- Our customers need to better inform Congress.
- We need direct funding legislation and a budget scoring fix.
- Explore customer funding of large capital improvements.
- We need to show performance benefits.
- We should consider revising major rehab standards.
- We should study maximizing capacity of existing infrastructure.
- We need more hydropower R&D funding.
- We need a hydropower R&D steering committee.
- Small groups should discuss what's missing, what's in conflict?
- Small groups should identify issues and recommend solutions for:
  - Performance and measuring performance/goals.
  - Guiding principles for the program.
  - Functioning as a CoP; interdependent team.
  - Human capital strategy; being a world-class hydropower organization.
  - Research and development; new technologies.
  - Investment strategies for the future.
  - Communications strategy and knowledge management.

# Our Next Step: Putting Allatoona Into a Strategic Context

- We collectively have in our minds some intuitive rationale for pursuing each of the items raised at Allatoona.
- We need to put on paper and agree on the rationale associated with all these good thoughts. Our rationale should be aligned to achieve a Strategic Objective.
- This will help us visualize where our initiatives and problem solving efforts fit in and allow us to make sure they are aligned with our Mission, Values, Vision, Strategy and Strategic Objectives.
- We should have performance measures that allow us to monitor our progress toward our strategic objectives.
- We need to be able to answer why we are electing to put our efforts into certain initiatives “.... if we can’t tell our stakeholders why we do things, we don’t know what we’re doing.”

# Putting the Puzzle Together – Going Through The Allatoona List

- Our customers need to better inform Congress ..... Where does this fit?
  1. Assume that we had collectively decided that our National strategic objectives were to “Provide a Reliable Power Supply” and “Maximize Operational Life”.
  2. We intuitively understand that our system reliability and equipment life is a function of our asset condition, maintenance; and investment decisions.
  3. We then decide it is important for us to measure asset condition to help guide us to ensure a reliable power supply and maximum equipment life.
  4. We know our asset condition is poor because appropriated funding is inadequate.
  5. We know direct funding and customer funding is a way to avoid national competition for scarce funds so we agree it is important to seek regional funding solutions.
  6. Our customers lobbied for customer funding. We need their support for direct funding.

Therefore: We need our customers to better inform Congress on the necessity for direct funding to ensure a reliable power system and maximize operational life of our infrastructure.

# Putting the Puzzle Together – Going Through The Allatoona List

We need our customers to better inform Congress on the necessity for direct funding to ensure a reliable power system and maximize operational life of our infrastructure.

We can debate this, but I would call it an initiative. This example also shows where measures and direct funding fit in.

STRATEGY OBJECTIVES: Provide Reliable Power Supply and Maximum Operational Life (Aligned with our overall Mission, Values and Vision).

MEASURE: Asset condition (HydroAMP, REMR, de-ratings, etc.)

GOAL: Declining number of de-rated units and/or average unit age, etc.

STRATEGIC INITIATIVE: Legislation for direct funding to help us make investments to achieve our goal and strategic objectives.

– Sub-Initiative: Get customers to better inform Congress.

# Putting the Puzzle Together – Going Through The Allatoona List (One More Example)

- Human capital strategy; world class org ..... Where does this fit?
    1. Assume that we had collectively decided that our National strategic objectives were to “Provide a Reliable Power Supply” , “Lowest Sustainable Cost Power” and “Maximize Operational Life”.
    2. We then decide it is important for us to measure violations of reliability standards, asset condition, cost of power, and environmental violations to help guide us to ensure a reliable power supply, lowest sustainable cost power and maximum operational life.
    3. We intuitively understand that we need skilled and knowledgeable people to achieve system reliability, cost effectiveness, long equipment life and environmental sustainability.
    4. We decide we need a Workforce Capability Initiative.
    5. We assign a task force to develop a strategy for ensuring workforce capability.
- Therefore: We need a human capital strategy to ensure our ability to provide a reliable power system, lowest sustainable cost power and maximize operational life of our infrastructure.

# Putting the Puzzle Together – Going Through The Allatoona List (One More Example)

We need a human capital strategy to ensure our ability to provide a reliable power system, lowest sustainable cost power and maximize operational life of our infrastructure.

We can debate this again, but I would call it an initiative.

**STRATEGY OBJECTIVES:** Provide Reliable Power Supply, Lowest Sustainable Cost Power and Maximum Operational Life

**MEASURES:** Violations of reliability standards, cost of power against industry benchmarks, asset condition (HydroAMP, REMR, de-ratings, etc.), notice of environmental violations, etc.

**GOAL:** Declining number of violations, cost or de-rated units and/or average unit age, etc.

**STRATEGIC INITIATIVE:** Explore and implement a strategy to ensure workforce capability.

# National Federal Hydropower Program Balanced Scorecard

**Example Only**

**Maximize Benefit to the Nation**

Power System Reliability	Lowest Sustainable Cost Power	Maximum Operational Life
<ul style="list-style-type: none"> <li>Provide a reliable power supply.</li> <li>Support a reliable transmission system.</li> </ul>	<ul style="list-style-type: none"> <li>Provide cost-effective power services and supply.</li> </ul>	<ul style="list-style-type: none"> <li>Stewardship of the Nation's resources for sustainment of multiple benefits.</li> </ul>

*National Agency Perspective*

Supply	Asset Condition	Operations	Partnership
<ul style="list-style-type: none"> <li>Be prepared to take advantage of new demand opportunities</li> <li>Secure cost effective efficiency improvements</li> <li>Secure cost effective capacity improvements</li> </ul>	<ul style="list-style-type: none"> <li>Use maintenance best practices</li> <li>Manage asset condition to reduce risk</li> </ul>	<ul style="list-style-type: none"> <li>Use the right amount of water at the right places to meet multiple purposes</li> <li>Operate each plant's generation efficiently</li> </ul>	<ul style="list-style-type: none"> <li>Operate as an integrated regional partnership</li> <li>Effective use of asset management processes</li> </ul>

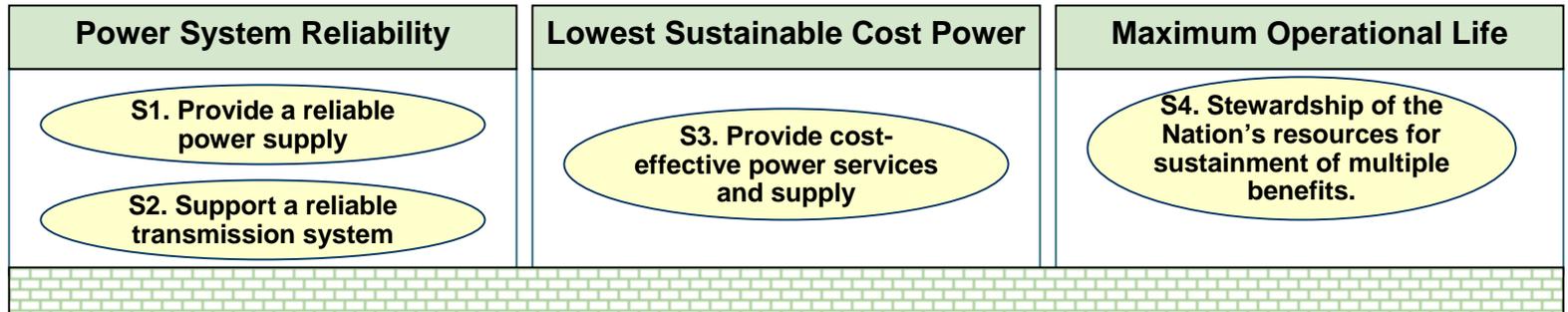
*Regional Perspective*

Safety	Capable Workforce	Culture
<ul style="list-style-type: none"> <li>Perform work safely.</li> </ul>	<ul style="list-style-type: none"> <li>The right people in the right jobs, with the right skills, at the right time, in the right numbers.</li> </ul>	<ul style="list-style-type: none"> <li>An environment of partnering, teamwork, performance and results.</li> </ul>

*Project Perspective*

**Example Only**

**Maximize Benefit to the Nation**



**National Perspective**

Outcome	Measure	Long-term Target	Short-term Target	Initiative
S1. Provide a reliable power supply	Percent of hydro demand met incorporating market and water conditions	100 percent	90 percent	Implement computer water use optimization program.
S2. Support a reliable transmission system	Percent of time plants operate within reliability standards applicable to generators	100 percent	100 percent	Inspection and testing of protective systems.
S3. Provide cost-effective power services and supply	Expected cost/kWh	All plants are managed consistent with their life-cycle asset mgt plan	Constant cost per generation capacity (normalized for average water year)	Cost benchmarking
S4. Stewardship of the Nation's resources for sustainment of multiple benefits	Condition index Notice of Violations Reportable Oil Spills	Declining average unit age. Zero NOVs and Reportable Spills.	Declining number of de-rated units. Declining number of NOVs or Reportable Spills	Budget priority on restoring de-rated capacity and extending unit life. Spill containment.