



Bonneville Power Administration

Integrated Program Review

(IPR)

Asset Management Overview

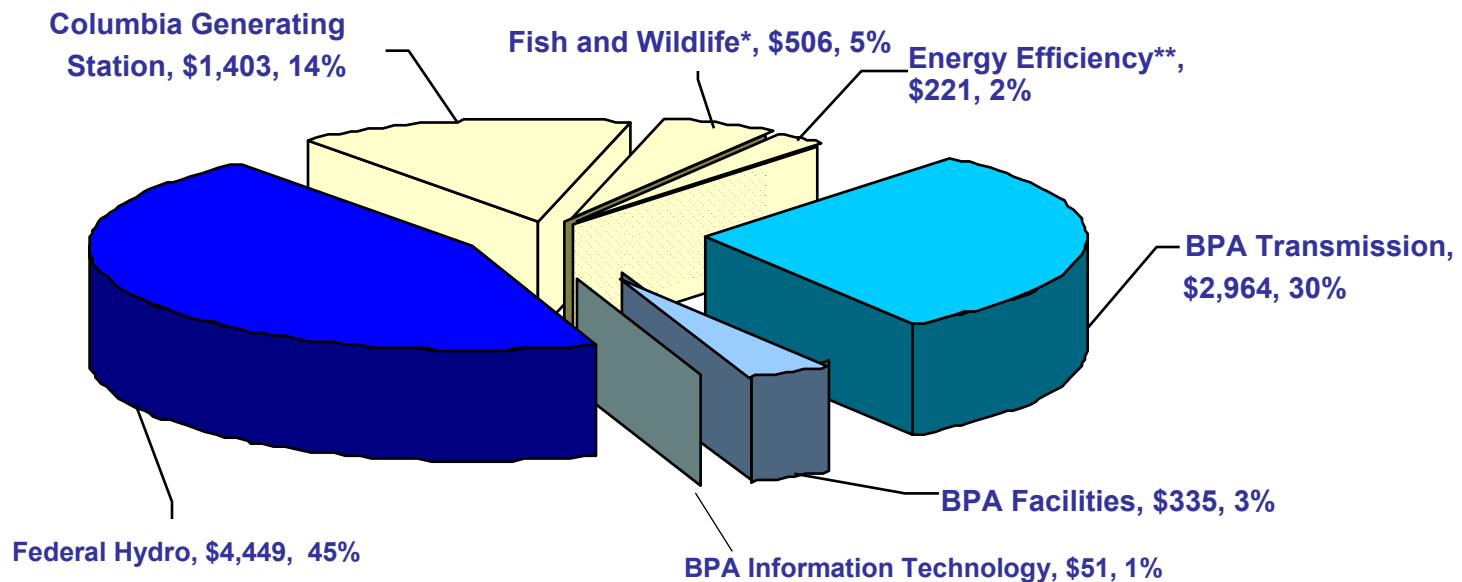
Technical Workshop

May 20, 2008



Federal Columbia River Power System

Net Plant by Asset Category
(Gross investment less accumulated depreciation)
As of September 30, 2007
(\$Millions)



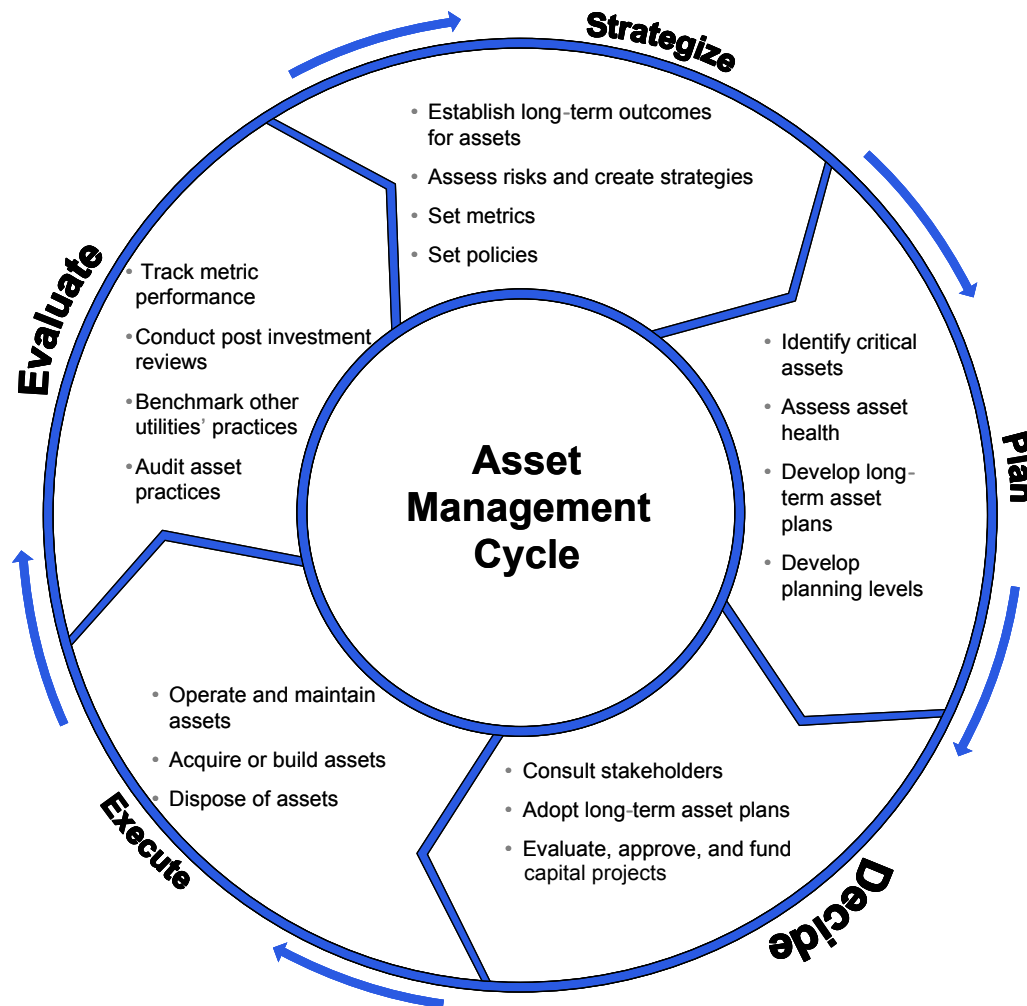
Total Net Plant: \$9,929
Cumulative Capital Investment: \$17,172

- Columbia River Fish Mitigation (CRFM) tangible assets are included in net assets for Fish and Wildlife. CRFM intangible (FAS 71) assets are not reflected in this chart.
- ** Energy Efficiency includes FAS 71 assets for capital conservation measures such as augmentation and acquisition.

This information is being released for purposes of the 2007 IPR. The information is based on Agency financial information but may not be found verbatim in an external standard financial report or other Agency financial information release. CGS information is consistent with energy Northwest's financial statements from the June 30, 2007, annual report for physical plan an accumulated depreciation.



BPA's Asset Management Process



Spans the full life of assets

- Investment (capacity upgrades, replacements, efficiency improvements)
- Maintenance
- Asset operations
- Asset disposal (decommissioning, retirement)

Objectives

- Assets meet reliability, adequacy, availability and other standards and requirements – while minimizing long-term costs
- Risks are assessed and managed
- Processes comport with “leading practices”



Strategic goal:

Maximize the long-term value of FCPRS assets

Asset strategy

- Set long-term outcomes for assets
- Assess risks to getting there
- Develop strategies

Asset plans

- Develop risk-informed asset plans
- Set metrics

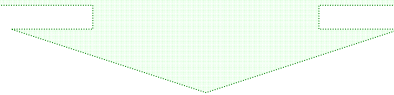
Plan execution

- Invest and maintain assets
- Improve processes
- Evaluate performance



Asset strategy

- **Set long-term outcomes for assets**
- **Assess risks to getting there**
- **Develop strategies**



- **Long-term outcomes have been set for each of the four asset categories**
- **The outcomes are directed at meeting reliability, availability, adequacy, environmental, safety/security, and other standards and requirements**
- **The outcomes are to be met at *least life cycle cost***



Asset strategy

- Set long-term outcomes for assets
- **Assess risks to getting there**
- Develop strategies

Strategic risks to meeting the long-term outcomes:

- Inadequate information on assets
- Inadequate analytical methods and asset management processes
- Shortages and volatile, escalating costs for materials, equipment and labor
- Extended disruption of critical services
- Workforce shortages and skill gaps
- Unforeseen legal decisions and evolving regulatory requirements



Asset strategy

- Set long-term outcomes for assets
- Assess risks to getting there
- **Develop strategies**

Stage 1: Foundation-building (2008-2009)

- Ensure ready access to asset information
- Develop capabilities to better optimize long-term investment
- Improve risk assessments and management
- Improve select processes
- Move toward closing skill gaps

Stage 2: Full optimization (2010–11)

- Optimize long-term strategies, plans, expenditures
- Bring CGS, fish & wildlife, and energy efficiency asset categories into the mix
- Independent evaluate agency's progress: "leading practices"



Asset plans

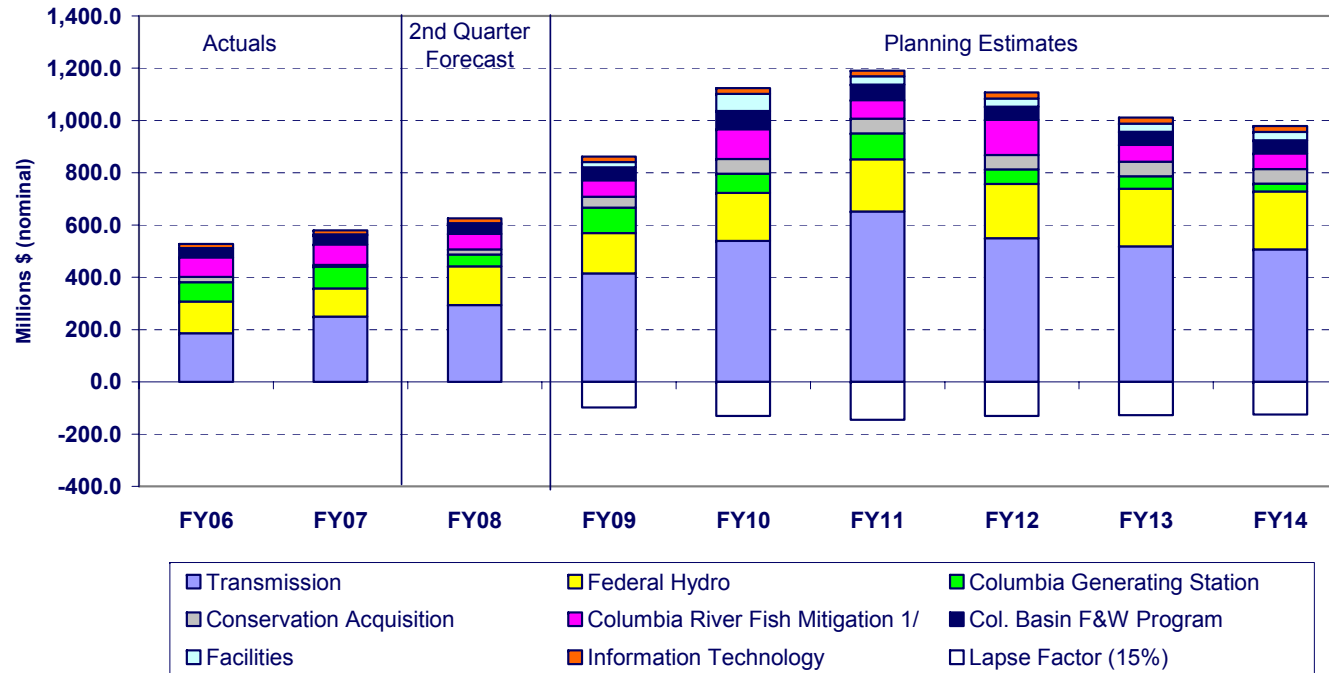
- **Develop risk-informed asset plans**
- **Set metrics**

- **Draft status now – final in September**
- **Long-term planning horizon**
- **Health and criticality of existing assets are central focus**
- **Also growing capacity needs and efficiency opportunities**
- **Result: long-term investment and maintenance needs and strategies**
- **Risk assessments and long-term optimization of expenditures will be a continuing focus**



FCRPS Capital Expenditures by Asset Category

Fully loaded capital costs, including AFUDC and Indirect Costs



Asset Category (Millions \$)

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Transmission	186.5	249.3	293.5	414.7	539.4	651.9	549.1	518.4	506.5
Federal Hydro	120.6	108.4	148.7	155.0	183.2	199.2	208.2	220.2	222.2
Columbia Generating Station	74.5	82.9	44.5	96.7	73.6	99.9	55.2	47.7	29.7
Conservation Acquisition	19.9	7.0	20.0	42.0	56.0	56.0	56.0	56.0	56.0
Columbia River Fish Mitigation 1/	75.0	77.8	60.0	63.0	114.0	71.0	135.0	65.0	60.0
Col. Basin F&W Program	35.4	35.2	36.0	50.0	70.0	60.0	50.0	50.0	50.0
Facilities	0.1	3.3	4.7	20.2	65.8	30.8	31.1	31.3	31.8
Information Technology	16.1	16.4	19.0	20.0	22.4	22.4	22.4	22.4	22.4
Lapse Factor (15%)	0.0	0.0	0.0	-98.3	-130.6	-144.9	-130.7	-127.1	-125.2
Total (before Lapse Factor)	528.1	580.3	626.4	861.6	1,124.5	1,191.2	1,107.0	1,011.0	978.7
Total (after Lapse Factor)	528.1	580.3	626.4	763.2	993.9	1,046.4	976.4	884.0	853.5

1/ Includes plant in service and capitalized study costs



Key Drivers of Investment (for Transmission, Federal Hydro, Facilities, IT)

- Loads and usage of the system continue to increase
- Deteriorating condition of assets as the system ages
- Efficiency opportunities
- Evolving regulatory requirements
- Escalating costs for materials, equipment



BPA's Financial Disclosure Information

1. All FY 2008-2013 information was provided in May 2008 and cannot be found in BPA-approved Agency Financial Information, but is provided for discussion or exploratory purposes only as projections of program activity levels, etc. This information is a derived estimate for presentation purposes and cannot be found in BPA-approved Agency Financial Information but is provided for discussion or exploratory purposes only as “projections of program activity levels, etc.”
2. All FY 2007 and earlier information was provided in May 2008 and is consistent with audited actuals that contain BPA-approved Agency Financial Information.



Ways to Participate

- All forums are open to the public and will be noticed on the IBR external Web site at: <http://www.bpa.gov/corporate/Finance/IBR/IPR/>. Staff from the Corps of Engineers, Bureau of Reclamation, and Energy Northwest will participate in presentation costs they manage.
- All Technical and Managerial workshops will be held at BPA Headquarters.
- The comment period for the IPR opens Thursday, May 15, 2008. Close of comment for FY 2009 Power costs is June 19, 2008. Close of comment for all other costs is August 15, 2008. You have several options to provide comments to BPA:
 1. Attend one or more of the scheduled workshops and give BPA your comments.
 2. Discuss your input with your Customer Account Executive, Constituent Account Executive, or Tribal Liaison.
 3. Submit written comments to Bonneville Power Administration, P.O. Box 14428, Portland OR 97293-4428.
 4. Submit comments via e-mail to: comment@bpa.gov or submitted on-line at: <http://www.bpa.gov/comment>
 5. Comments can also be sent via fax to (503) 230-3285