

Item 8a

Cost of Service Process

Business and Finance Committee

August 17, 2009

Office of the CFO

Near Term Actions In Cost of Service Review Process

- Conducted three agency manager workshops
 - Focused on review of the cost of service Methodology
 - Understand how changes can affect the cost of service and rates
 - Next step is to look at underlying policy principles
- Key policy questions need to be addressed
 - Current structure was based on policy concepts
 - Review policy concepts to see if any changes should affect Metropolitan's cost of service approach

Part 1: The Cost of Service Process

The Cost-of-Service process

Four steps

1. Develop Revenue Requirement
2. Assign costs to service functions
3. Classify costs based on behavioral characteristics
4. Allocate costs to rate elements

Develop the Revenue Requirement

FY2009/10 Adopted Budget (\$M)

● O&M	\$341
● SWP	\$479
● Supply Programs	\$126
● CRA Power	\$50
● Demand Management	\$60
● Debt Service	\$331
● CIP	\$412
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● Total	\$1,797

*April Board Letter, FY 2009/10 – Totals may not foot due to rounding

Adopted Budget (\$M)

• O&M	\$341
• SW	479
• Sup	126
• CRA	50
• De	50
• Debt Service	\$331
• <u>CIP</u>	<u>\$412</u>
• Total	\$1,797

- PAYGO portion of CIP is included in Revenue Requirement
- Bond financed portion of CIP is included in Debt service

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Revenue Requirement (\$M)

● O&M	\$341
● SWP	\$479
● Supply Programs	\$126
● CRA Power	\$50
● Demand Management Credits	\$60
● Debt Service	\$331
● PAYGO	\$95
● Change in Required Reserves	\$54
● <u>Revenue Offsets</u>	<u>-\$159</u>
● Net Revenue Requirement	\$1,376

- Property Tax
- Annexations
- Interest
- Hydro sales

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Assign Costs to Service Functions

What are the Service Functions?

1. Supply
2. Conveyance & Aqueduct
3. Storage
4. Treatment
5. Distribution
6. Demand Management
7. Hydroelectric
8. Administrative & General

How are Revenue Bonds and PAYGO assigned to service functions?

- Net Book Value = Asset's original cost less accumulated depreciation plus Work In Progress

Service function	NBV (\$M)	NBV %
Supply	75	1
Conveyance & Aqueduct	1,405	18
Storage	2,314	30
Treatment	2,457	32
Distribution	1,149	15
Administrative & General	272	3
Hydroelectric	112	1
Total	7,784	100

How are O&M costs assigned to service functions?

- By accounting appropriation data
 - Example: Conveyance & Distribution Unit
- Assigned
 - Example: Legal, Audit, Ethics, CFO, Board into Administrative & General
- Group manager analysis
 - Example: WSO Operations Planning into Supply
- Pro-rated
 - Human Resources, Information Technology, Office of the General Manager: by total labor
 - Security: by Net Book Value of facilities

How are SWP costs assigned to service functions?

- By line item
 - Conveyance & Aqueduct:
 - Transportation Capital
 - Transportation Min OMP&R
 - East Branch Enlargement Capital
 - Delta Conveyance
 - On-aqueduct variable power
 - Off-aqueduct power
 - Supply:
 - Delta capital
 - Delta Minimum

Revenue Requirement by Service Function* (\$M)

Source of Supply	\$217
Conveyance & Aqueduct	\$517
Storage	\$131
Treatment	\$222
Distribution	\$116
Demand Management	\$70
Admin & General	\$123
<u>Hydroelectric</u>	<u>\$(14)</u>
Total	\$1,376

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Classification of Costs Within Service Functions

Classification Based On Behavioral Characteristics

- Commodity or Base Costs
 - Costs related to average or day-to-day demand and operational conditions (Includes capital and O&M)
- Demand or Extra Capacity
 - Costs related to meeting above average or “peak” demand conditions (Largely capital)
- Standby
 - Costs related to facilities used to meet emergency conditions and capacity in excess of typical peak delivery conditions (Capital and O&M)

Storage classification

- Emergency storage
 - For use in emergency conditions: Standby
- Drought storage
 - Creates supplies for use in drought conditions: Fixed Commodity
- Regulatory storage
 - Creates capacity to move water through the distribution system: Classified same as Distribution costs

Classification factors

Function	Commodity	Demand*	Standby
Supply	100%	0%	0%
Conveyance	63%	30%	7%
Storage			
Emergency	0%	0%	100%
Drought	100%	0%	0%
Regulatory	53%	47%	0%
Treatment	45%	51%	4%
Distribution	53%	47%	0%

* Largely only capital costs

Classified Costs* (\$M)

Demand	\$128
Fixed Commodity	\$905
Variable Commodity	\$263
<u>Standby</u>	<u>\$79</u>
Total	\$1,376

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Service Functions Classified (\$M)

	Demand	Fixed Commodity	Standby	Variable Commodity	Total
Supply		241			241
Conveyance	35	287	8	225	555
Storage	6	67	71		144
Treatment	61	143		38	243
Distribution	28	87			115
Demand Mgmt		78			78
Total	128	905	79	263	1,376

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Allocate Costs to Rate Elements

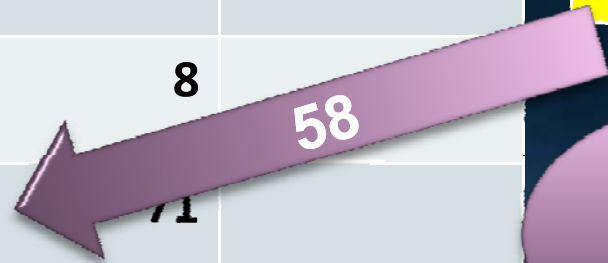
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Supply Rates

	Demand	Fixed Commodity	Standby	Variable Commodity	Supply Rates
Supply		241			299
Conveyance	35	287	8		
Storage	6	67	71		
Treatment	61	143		38	
Distribution	28	87			
Demand Mgmt		78			
Total	128	905	79	263	



Only Drought Storage

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System Access Rate

	Demand	Fixed Commodity	Standby	Variable Commodity	System Access Rate
Supply		241			382
Conveyance	35	287	8		
Storage	6	67	71		
Treatment	61	143		3	
Distribution	28	87			
Demand Mgmt		78			
Total	128	905	79	263	

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Water Stewardship Rate

	Demand	Fixed Commodity	Standby	Variable Commodity
Supply		241		
Conveyance	35	287	8	225
Storage	6	67	71	
Treatment	61	143		38
Distribution	28	87		
Demand Mgmt		78		
Total	128	905	79	263

Water Stewardship Rate
78

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System Power Rate

	Demand	Fixed Commodity	Standby	Variable Commodity
Supply		241		
Conveyance	35	287	8	225
Storage	6	67	71	
Treatment	61	143		38
Distribution	28	87		
Demand Mgmt		78		
Total	128	905	79	263

System Power Rate
225

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Treatment Surcharge

	Demand	Fixed Commodity	Standby	Variable Commodity
Supply		241		
Conveyance	35	287	8	225
Storage	6	67	71	
Treatment	61	143		38
Distribution	28	87		
Demand Mgmt		78		
Total	128	905	79	263

Treatment Surcharge
242

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Capacity Charge

	Demand	Fixed Commodity	Standby	Variable Commodity
Supply		241		
Conveyance	35	287	8	225
Storage	6	67	71	
Treatment	61	143		38
Distribution	28	87		
Demand Mgmt		78		
Total	128	905	79	263

Capacity Charge
34

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Readiness-To-Serve Charge

	Demand	Fixed Commodity	Standby	Variable Commodity
Supply		241		
Conveyance	35	287	8	225
Storage	6	67	71	
Treatment	61	143		38
Distribution	28	87		
Demand Mgmt		78		
Total	128	905	79	263

Readiness-To-Serve Charge
114

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Allocated Costs to Rate Design Elements (\$M)

Supply Rates	\$299
System Access Rate	\$382
Water Stewardship Rate	\$78
System Power Rate	\$225
Capacity Charge	\$34
RTS Charge	\$114
<u>Treatment Surcharge</u>	<u>\$243</u>
Total	\$1,376

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Rate setting is the next step

- Produces desired revenues to be collected from each Rate Design element
- Volumetric rates and charges are determined by dividing allocated revenues by appropriate billing units
 - Examples are treated and untreated water deliveries
- Want to ensure rates and charges reasonably recover allocated costs
 - Rates and charges to whole dollars
 - Previous and future expected changes
 - Bundled Agriculture and Replenishment rates

Part 2: Policy Concepts That Supported The Current Approach

Development of the Current Structure

- Process took five years
 - Strategic planning process started in July of 1998
 - Rate structure design involved Board, member agency managers, industry experts/consultants, and Metropolitan staff
 - Significant consideration of “the law of unintended consequences”
 - Important elements were changed late in the process or deferred

1999 Strategic Plan Policy Principles

- Regional provider
- Local resources development
- Imported water service
- Choice and competition
- Responsibility for water quality
- Cost allocation and rate structure
- Financial integrity

1999 Principle Regional Provider

- Metropolitan is a regional provider of wholesale water services
- Steward of regional infrastructure
- Regional planner responsible for coordinated drought management
- Collaborative development of additional reliable supplies and capacity expansion
- Equitable allocation of water supplies during droughts

1999 Principle

Local Resources Development

- Metropolitan supports local resource development in partnership with its member agencies
- Provide financial incentives to member agencies for conservation and local projects

1999 Principle

Imported Water Service

- Metropolitan is responsible for providing the region with imported water, meeting the committed demands of its member agencies

1999 Principle

Choice and Competition

- Beyond committed demands, the member agencies may choose the most cost effective additional supplies
- Additional supplies can be developed through collaborative process to strike a balance
 - Local supplies
 - Imported supplies
 - Market opportunities
 - Affordability

1999 Principle

Responsibility For Water Quality

- Metropolitan is responsible for advocating source water quality and implementing in-basin water quality for its imported water supplies
- Assure full compliance with existing and future drinking water standards
- Meet requirements for water recycling and groundwater replenishment

1999 Principle

Cost Allocation and Rate Structure

- Framework must address:
 - Allocation of costs
 - Financial commitments
 - Unbundling of services
 - Fair compensation for services including wheeling, peaking, growth, and others
- Recognized that the status quo may not address all these issues, so change could be necessary

1999 Principle Financial Integrity

- Take all necessary steps to assure the financial integrity of the agency in all aspects of its operations
- Establish a financial commitment from the member agencies that provides security for Metropolitan
 - Should not transfer undue risk to the member agencies, individually or as a whole

Additional Concepts Also Influenced The Current Structure

- Accountability:
 - Define the link among costs, charges, and benefits through a cost of service approach consistent with industry guidelines
- Equity:
 - Ensure that member agencies and other entities pay the same rates and charges for like services
 - Provide a fair allocation of costs

Additional Concepts Also Influenced The Current Structure

- Environmental Responsibility:
 - Encourage demand management by funding conservation and recycling projects/programs
 - Use pricing to encourage investments in conservation and other economical local supplies

How Does The Current Structure Deal
With These Policy Concepts?

Tiered Supply Rates

- Tier 2 Supply Rate is higher and provides financial incentive for local supply development and conservation
- No difference in supply reliability for water purchased at Tier 1 or Tier 2 rates
- Agencies with growth in imported water demand are more likely to face Tier 2 rate
- **Policy Concept:** Regional Provider, Cost Allocation, Local Resource Development, Environmental Responsibility, Imported Water Service

Purchase Order Commitments

- Most member agencies made purchase order commitments that will last through 2012
 - Commitments last for ten years and provide a minimum level of assurance that purchases will be made
 - Agencies were given higher Tier 1 purchase limits in return for making the commitments
- **Policy Concept:** Financial Integrity

Water Stewardship Rate

- Separate rate element designed to collect costs of demand management programs
- Provides funds for conservation incentives and local resource programs
- **Policy Concept:** Environmental Responsibility, Regional Provider, Local Resource Development

Fixed Charges: Capacity Charge

- Recovers compensation for peak system usage
- Provides incentive for member agencies to reduce peak capacity use of distribution facilities
- Helps reduce need for future capital expansion
- Provides a source of fixed revenue

- **Policy Concept:** Regional Provider, Equity, Financial Integrity, Cost Allocation

Fixed Charges: Readiness-To-Serve Charge

- Recovers cost for portions of system on standby for emergency service and operational flexibility
- Provides a source of fixed revenue
- Allocated to member agencies based on ten-years of historic firm water sales

- **Policy Concept:** Regional Provider, Equity, Financial Integrity, Cost Allocation

Unbundled Postage Stamp Rates

- Clearly shows the costs for specific class of service
- Member agencies pay the same rate for a class of service, regardless of where they are in the service area (Ex. power and conveyance costs)
- Reflects the inter-related nature of Metropolitan's conveyance and distribution facilities
- **Policy Concept:** Cost Allocation, Choice and Competition, Equity

Structure Allows Core Activities

- Treatment Surcharge recovers cost of water treatment responsibilities
- Member agencies pay the same rate for a class of service, regardless of where they are in the service area
- Reflects the inter-related nature of Metropolitan's conveyance and distribution facilities
- **Policy Concept:** Responsibility for Water Quality, Cost Allocation, Choice and Competition, Equity

Next Steps

- Next meeting with member agencies on Aug 31st
 - Focus will be on policy background and discussion
- Business & Finance Committee
 - Review of current policy issues
 - Feedback from agency managers on current cost of service approach