

Role of Public Involvement Committee

- Customer class and community representatives
- Roles:
 - Advise project team and utility
 - Represent the interest of their customer class
 - Seek areas of agreement on methodologies

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Ground Rules

1. PIC members are responsible for attending meetings or providing a knowledgeable alternate
2. Meetings will be facilitated
3. Meetings are open to the public and include a period for public comment
4. Meetings will begin with a presentation by consultant on the decisions of the Executive Team and on the issue paper topic(s) of the workshop
5. PIC members will be able to ask questions and provide comments and concerns
6. Each meeting will end with a brief summary of decisions made, consensus achieved, and a preview of next meeting, etc.

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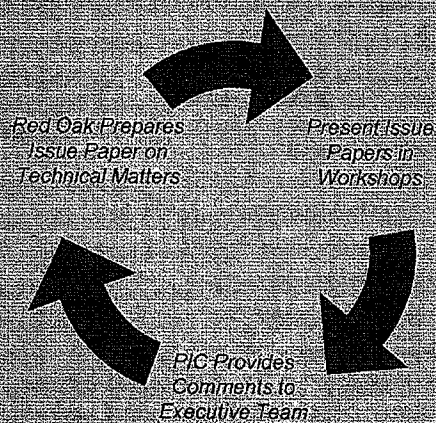
Ground Rules (Cont.)

7. A period for public comment will be provided at each meeting to allow input from non-committee members
8. PIC members, and others in attendance, are responsible for limiting comments to matters within the scope of the study; comments will be limited to 5 minutes
9. PIC members should provide formal written comments to the City for Executive Team review no later than 5 business days after the workshop
10. Comments and materials will be regularly posted to the City of Austin website
11. PIC committee members are responsible and strongly encouraged to share information with their constituents

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Planned Information Process



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Key Project Dates

- Final study report: May 31, 2008
- Presentations of final results: June 2008
- FY2008-2009 Operating Budget: August 1, 2008
- Rates effective November 1, 2008

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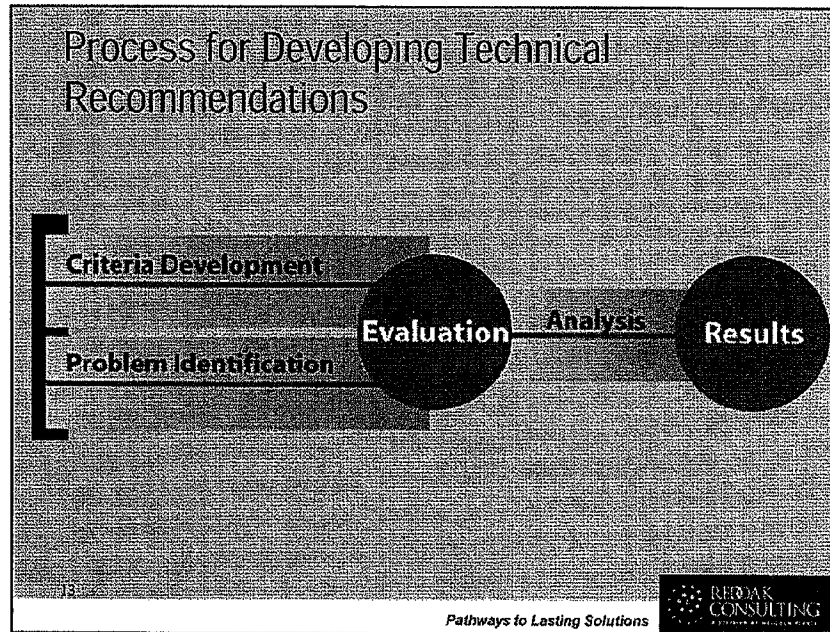


PIC Workshop Topics and Dates

- PIC Orientation (11/27)
- Revenue Requirements (12/17)
- Water/Wastewater Allocation Methodologies (1/7)
- I/I Allocations and Fire Charges (1/21)
- Composition of Industrial Class (2/4)
- Rate Design (2/18 and 3/3)

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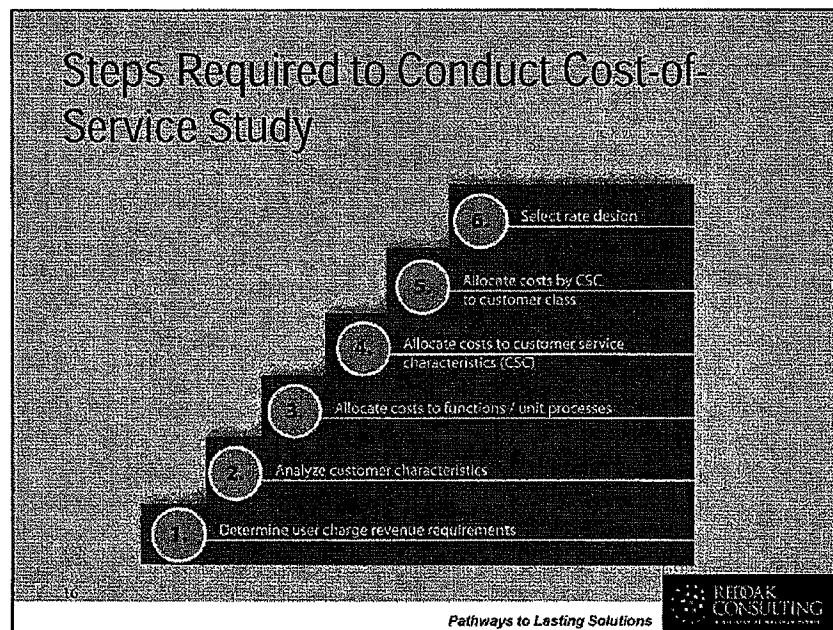
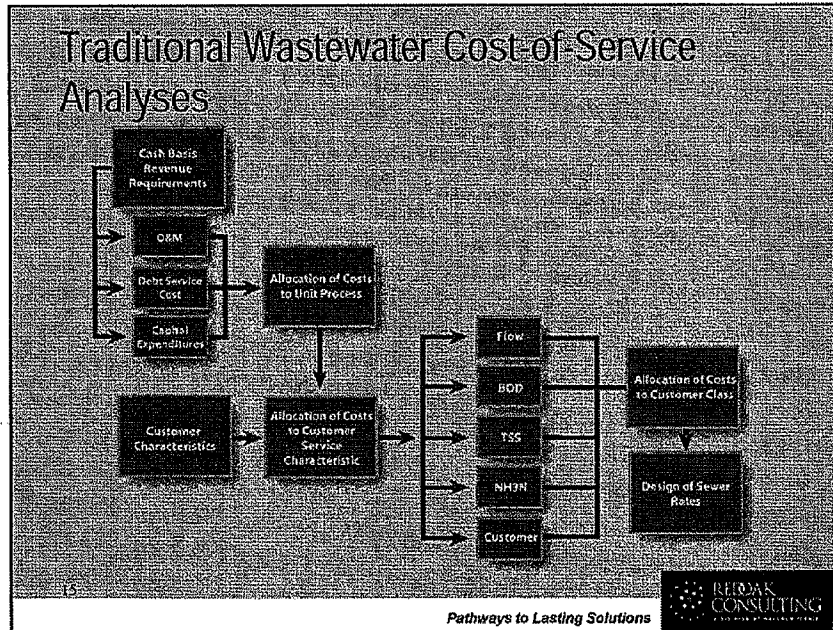


Project Goals and Objectives

- Prepare industry-standard cost-of-service analysis
 - Continue AWU's practice of transparency in cost-of-service analysis
 - Address interclass, intraclass, intergenerational equity concerns
 - Conduct transparent review of critical methodologies and options
 - Leverage industry standards to enhance decision making
 - Investigate rate design options to enhance equity and conservation
- Conduct Public Involvement Program to ensure community input and dissemination of results
- Meet requirements of project schedule

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Objective Criteria Ensures Transparency

Criteria	Option 1	Option 2
Criteria 1	😊	😊
Criteria 2	😞	😞
Criteria 3	😞	😊

The Wrong Way

Arbitrary Findings
Miscellaneous Options

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Establish Evaluation Criteria

- Initial list of criteria prepared by Red Oak
- Criteria grouped by general area
 - Implementation
 - Equity
 - Customer impacts
 - Conservation
 - Financial impacts

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Executive Team's Evaluation Criteria

Implementation	Equity	Customer	Conservation	Financial
Administrative Burden	Interclass	Affordability	Average-Day Savings	Revenue Sufficiency
Public Understanding	Intraclass	Economic Development	Peak-Season Savings	Revenue Stability
Public and Political Acceptance	Intergenerational	Rate Shock/Volatility	Peak-Day Savings	Rate Stability
Risk of Implementation	Inside/Outside City	Understandability of Bill	Sustainability	Rate Predictability
Legal Defensibility	Industry Standards			Financial Risk

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Sample Evaluation: Implementation Criteria

Implementation	Status Quo	Alt. 1	Alt. 2
Administrative Burden	+	+	-
Public Understanding	+	+	0
Public and Political Acceptance		0	0
Risk of Implementation	-	+	+
Legal Defensibility	0	-	+

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PIC Workshop Topics and Dates

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- Rate Design (2/18 and 3/3)

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PIC Member Questions, Discussion, and Comments

Public Involvement Committee Orientation Workshop
November 27, 2007

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Next Steps

- Written comments on tonight's meeting due 12/4 (to Mike Castillo)
- Revenue requirements issue paper to PIC (12/10)
- PIC Workshop (12/17)
 - Public involvement plan
 - Revenue requirements
- Written comments on revenue requirements (12/24)

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Cost of Service Rate Study 2007
Public Involvement Committee
Workshop 2: Revenue Requirements
Austin Water Utility
December 17, 2007

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Tonight's Agenda

1. Introductions
2. Ground rules for PIC Meeting
3. Decisions by Executive Team
4. PIC comments from last meeting
5. Presentation on revenue requirements
6. PIC member comments and discussion
7. Summary of decisions, agreements, and next meeting
8. Public comment period

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REHOAK CONSULTING
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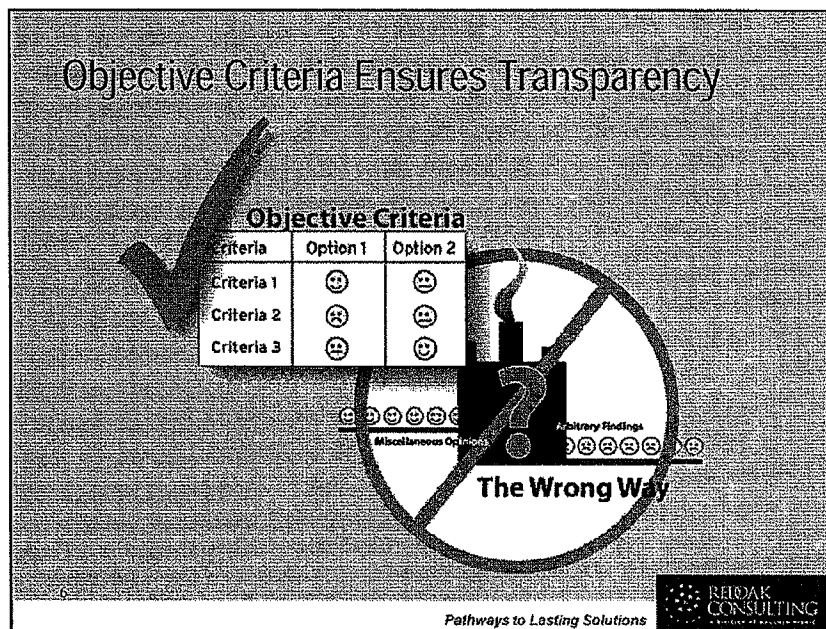
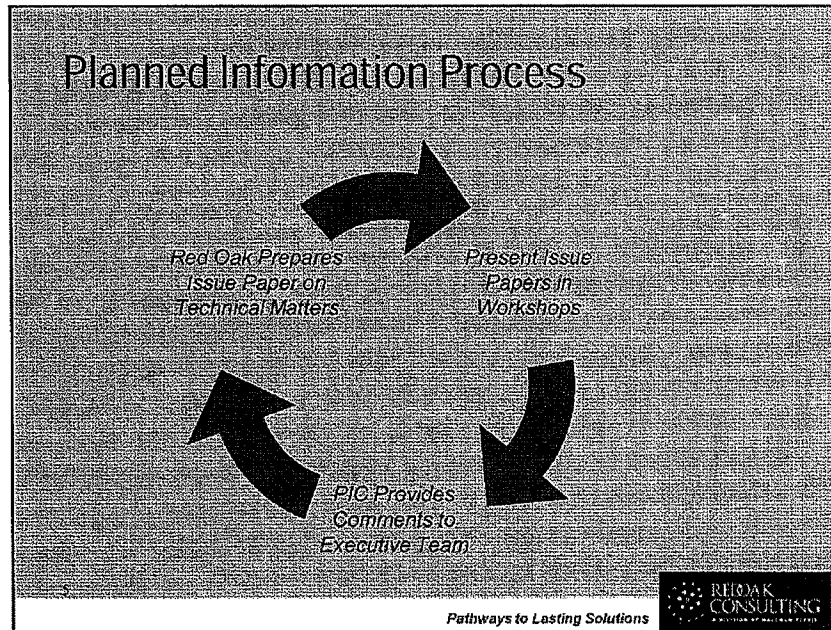


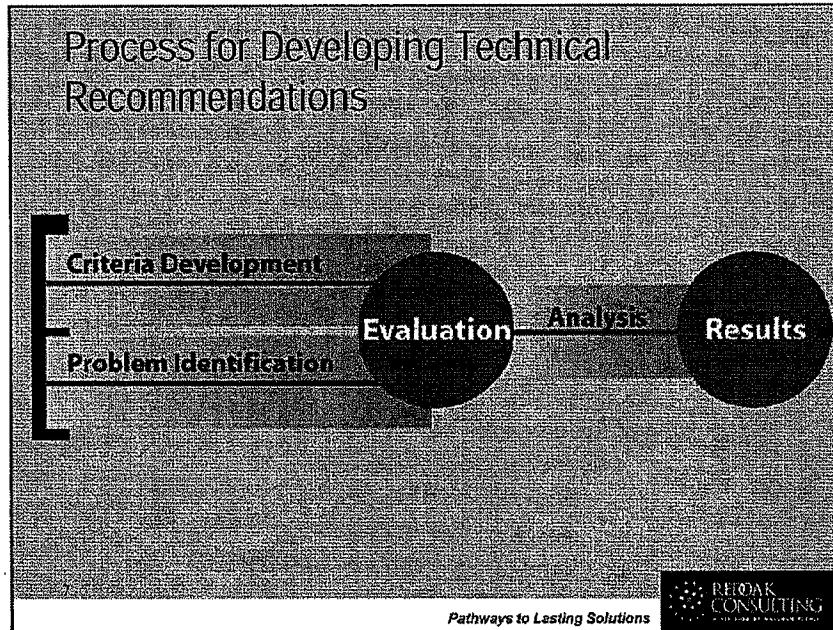
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Decisions by Executive Team

Public Involvement Committee Workshop
December 17, 2007

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Executive Team's Evaluation Criteria

Implementation	Equity	Customer	Conservation
Administrative Burden	Interclass	Affordability	Average-Day Savings
Public Understanding	Intraclass	Economic Development	Peak-Season Savings
Public and Political Acceptance	Inter-generational	Rate Shock/Volatility	Peak-Day Savings
Risk of Implementation	Inside/ Outside City	Understand Bill	Sustainability
Legal Defensibility	Industry Standards		

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PIC Comments From Last Meeting

Public Involvement Committee Workshop
December 17, 2007

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Summarized Comments from PIC Members

- Additional meetings if the topics requires
- Release of computer model
- Evaluate customer-supplied daily meter data
- Proportionality of PIC membership
- Small commercial rate advocate
- Five-day turnaround for written comments
- Utility operational overview presentation
- Conservation incentives—especially for industrial customers
- Additional issue papers
 - Peaking factors
 - Sewage strength
- Definitions for customer classification

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Determination of System Revenue Requirements

Public Involvement Committee Workshop
December 17, 2007

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Policies Reviewed

1. Which is the most appropriate overall method?
2. How should future O&M be projected?
3. How should the rate of return be determined?
4. How should the rate base be valued?
5. How should construction work in progress be treated?

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Revenue Requirements in the Broader Perspective

Cash Basis
Revenue
Requirements

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Comparison of Revenue Requirement Elements

Cash Basis	Utility Basis
O&M Costs	O&M Costs
Capital Expenditures	Deprecation and Return on Rate Base
Change in Fund Balance	Deprecation and Return on Rate Base
Debt Service	
Amortization of Debt	Depreciation Expense
Interest on Debt	Return on Rate Base
Taxes and Other Requirements	Taxes and Other Requirements

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Hypothetical Comparison of Methods

Item	Cash Basis	Utility Basis	Utility Basis with Cash Residual
O&M Expenses	\$79,127,008	\$79,127,008	\$79,127,008
Debt Service	76,636,711		
Capital Expenditures	23,525,000		
Depreciation Expense		30,242,924	30,242,924
Return on Rate Base		81,362,654	69,918,787
Less: Other Revenue	(3,747,291)	(3,747,291)	(3,747,291)
User Charge Revenue Requirements	\$175,541,428	\$186,985,295	\$175,541,428

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Debt Service Coverage and Revenue Requirements

- Measures income relative to expenses
- Indicator of financial health and debt capacity
- Not an explicit component of revenue requirements—residual based on revenue requirements

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Sample Debt Service Coverage Calculation

Line	Description	Value	Note
1	Gross Revenues	\$ 180,000,000	
	Less:		
2	O&M (Excluding Depreciation)	80,000,000	
3	Net Revenues	\$ 100,000,000	1 minus 2
4	Debt Service	\$ 77,000,000	
5	Debt Service Coverage	1.30	3 divided by 4

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Issues of Debt Service Coverage

- Bond covenants require 1.25 ratio
- City's financial policies require 1.50 ratio
- Impacts both utility and cash basis
 - Utility basis through return on rate base
 - Cash basis through capital expenditures and/or change in fund balances

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Issue 1: Revenue Requirement Options

- Cash basis
- Utility basis
- Utility basis with cash residual

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Role of Revenue Requirements in Consumer Protection

- Natural monopolies and economic regulation
- Economic regulation for municipal utilities provided by elected bodies
- For AWU, City Council provides consumer protection
- Outside-city customers often protected by long-term contracts

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Cash Basis

- Suited well for utility's subject to municipal budget requirements
- Relatively easy to administer
- Allows effective financial planning to mitigate rate shock
- Solves revenue sufficiency dilemma
- Uses readily available data
- Less able to align costs with users
 - Impact fees can mitigate
- Recommended by consulting team

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Utility Basis

- More appropriate for regulated utilities
- Provides external limitations on utility's profit
- Consumer protection provided by allowed rate of return
- In purest form may not be feasible for AWU
- Relatively more difficult to administer

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Utility Basis with Cash Residual

- Hybrid of two common approaches
- External rate of return applied to outside-city customers
- Residual rate of return calculated to meet cash basis needs—applied to inside-city customers
- Meets revenue sufficiency criteria
- Requires development of detailed asset data
- Consumer protection
 - Inside-city customers: City Council
 - Outside-city customers: limitation on rate of return

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Issue 2: Future O&M Projections

- Historical test year with adjustments for known and measurable changes
- Future budget

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Historical Test Year

- Most recent completed fiscal year
- Adjusted for known and measurable changes
- Consistent with regulated utilities
- Abnormal weather may influence costs—increases complexity to integrate known and measurable changes

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Future Budget

- Existing process—no additional work required
- Consistent with municipal utilities
- Consumer protection provided by budget process and elected officials
- Recommended by consulting team

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Issue 3: Determination of Rate of Return

- Weighted average cost of capital
- Indexed return
- Fixed return

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Background on Rate of Return

- Provides protection to utility and consumers
- Well established in industry
- Protect the value of the utility's owners—Takings clause of US Constitution

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Weighted Average Cost of Capital

- Weighted average rate of return
 - Weights based on debt/equity ratio
 - Effective interest rate and cost of equity
- Common for regulated utilities
- Complex financial analyses required to develop equity returns

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Indexed Return

- A flat equity premium added to common indices of interest rates
 - Bond Buyers Index
 - Long-term treasury bonds
- Similar to an adjustable rate mortgage
- Long-term interest rate indices less volatile than short-term

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Fixed Return

- Select return during contract negotiations
- Does not vary with market rates
- Similar to fixed rate mortgage
- Reduces volatility
- Recommended by consulting team

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Issue 4: Valuation of Rate Base

- Original cost
- Reproduction cost

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Background on Valuation

- Replacement cost of future facilities impacted by inflation
- Recent price changes are relatively more significant
- Regulated framework traditionally focused on capital recovery—not cash flow requirements

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Original Costs

- Based on accounting procedures
- Most common in the industry
- Rate base equals original cost less accumulated depreciation
- Ignores inflationary impacts
- Recommended by consulting team

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Reproduction Cost

- Requires calculation of reproduction costs
- ENR Construction Cost Index commonly used
- Rare in the industry
- Provides additional cash flow during periods of higher inflation
- Recognizes the cost of replacing facilities
- Normally has an inflation-free (i.e., real) rate of return

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Issue 5: Policy on Construction Work in Progress (CWIP)

- Capitalized interest
- Include in rate base

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Background on Construction Work in Progress

- Carrying costs of construction projects
 - Actual interest expense
 - Opportunity cost of alternative investment
- Length and complexity of projects
- Rate of return

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Capitalized Interest

- Standard accounting procedures
- *Allowance For Funds Used During Construction (AFUDC)*
- Provides more accurate allocation of capital costs over time—future users pay fair share
- More common in the industry
- Recommended by consulting team

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Include in Rate Base

- Provides greater cash flow during construction of complex projects
- Reduces volatility by slowly increasing rate base
- Misaligns costs and users over time
- Less common in the industry

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PIC Member Questions, Discussion, and Comments

Public Involvement Committee Workshop
December 17, 2007

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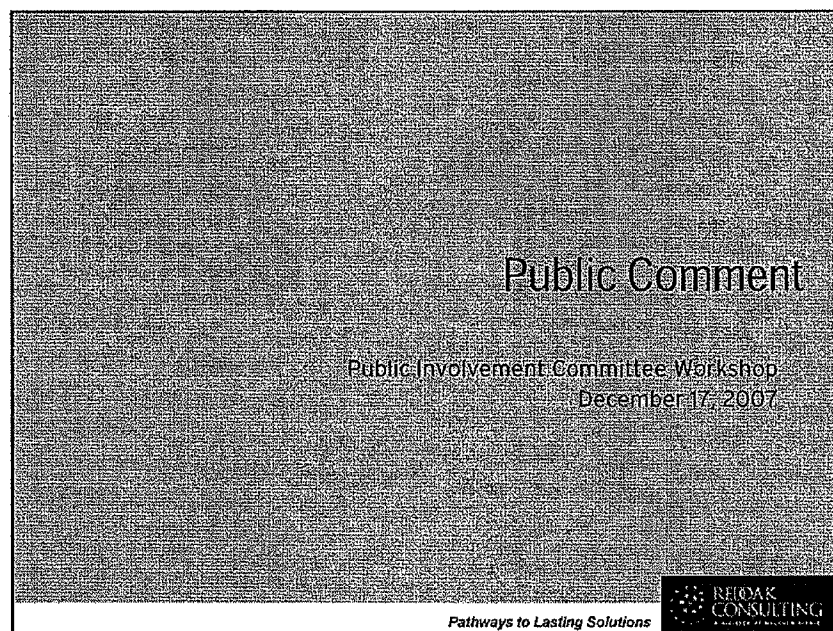
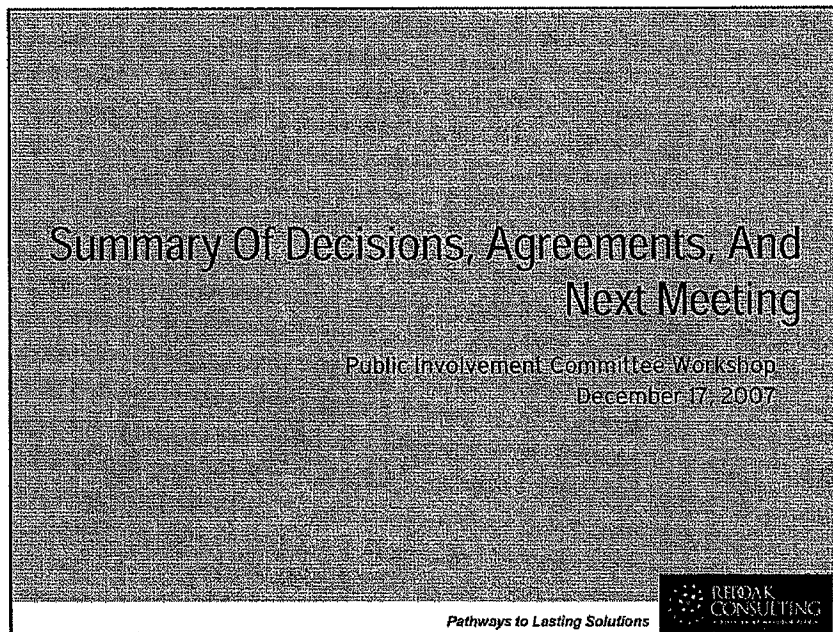
Next Steps

- Written comments on tonight's meeting due 12/26 (to Mike Castillo)
- Cost Allocation issue paper to PIC (12/31)
- Next PIC Workshop (1/7)

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Cost of Service Rate Study 2007
Public Involvement Committee
Workshop 3: Water Cost Allocations
Austin Water Utility
January 7, 2008

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Tonight's Agenda

1. Welcome
2. Review internet site
3. Overview of water system
4. Decisions by Executive Team
5. PIC comments from last meeting
6. Presentation on water cost allocations
7. PIC member comments and discussion
8. Overview of budget and financial policies
(If time allows)
9. Summary of decisions and agreements
10. Public comment period

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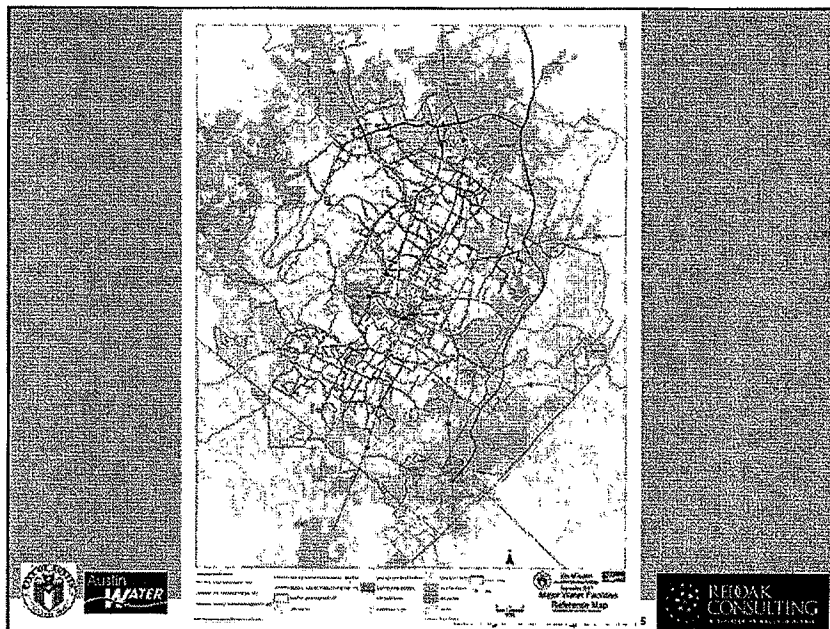
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Austin Service Area

- Estimated water served population
 - Current: ~840,000
 - 2060 Projected: ~2 million
- Approximately 200,000 current water accounts
- Current city limits land area: ~285 sq. mi.
- Utility service area boundary: ~537 sq. mi.
- Retail and wholesale, inside and outside city limits
- Wholesale service includes municipal utility districts, cities, and private companies



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Capacity of Austin's Water System

- Treatment and Production: ~285 MGD
- Historical peak day pumpage: ~247 MGD (2005)
- Distribution:
 - 9 major pressure zones
 - 16 major pump stations
 - 18 major reservoirs (storage tanks)
 - 3,500 miles of pipe

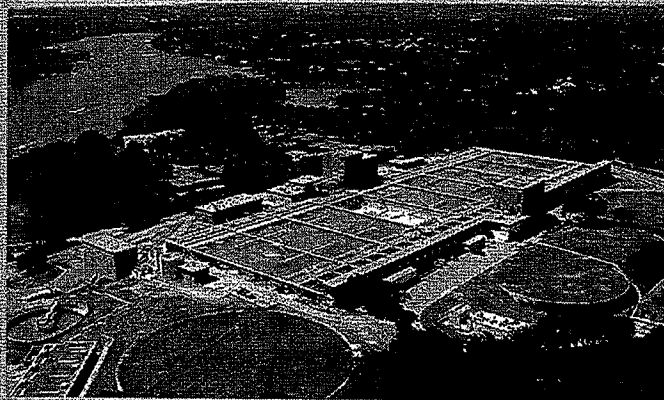


AUSTIN
WATER

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Davis Water Treatment Plant



AUSTIN
WATER

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Water Treatment Plants

Davis WTP

- Existing Capacity 118 MGD
- Currently undergoing an improvements program (completion ~2013) to improve electrical system and other components

Ulrich WTP

- In final stages of wrapping up an expansion to 167 MGD

Green WTP

- Oldest Austin WTP 1925 - soon be decommissioned
- Future New Green WTP to pump water from Town Lake (long-term)

WTP #4

- Future WTP #4 to pump from Lake Travis
- Project underway with projected completion by Year 2014



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Decisions by Executive Team

Public Involvement Committee Workshop
January 7, 2008

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Executive Team Decisions

- Provide model inputs and outputs in Adobe Acrobat PDF only
- Provide model review in meeting
- Rely on City data only
- Added evaluation criterion (policy durability)

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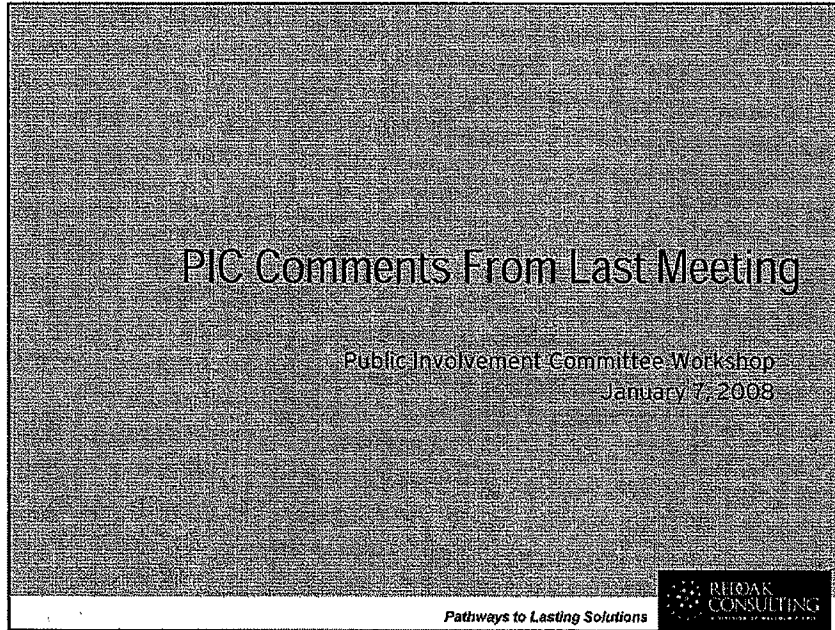


Executive Team's Evaluation Criteria

Implementation	Equity	Customer	Conservation
Administrative Burden	Interclass	Affordability	Average-Day Savings
Public Understanding	Intraclass	Economic Development	Peak-Season Savings
Public and Political Acceptance	Inter-generational	Rate Shock/ Volatility	Peak-Day Savings
Risk of Implementation	Inside/Outside City	Understand Bill	Sustainability
Legal Defensibility	Industry Standards		
Policy Durability			

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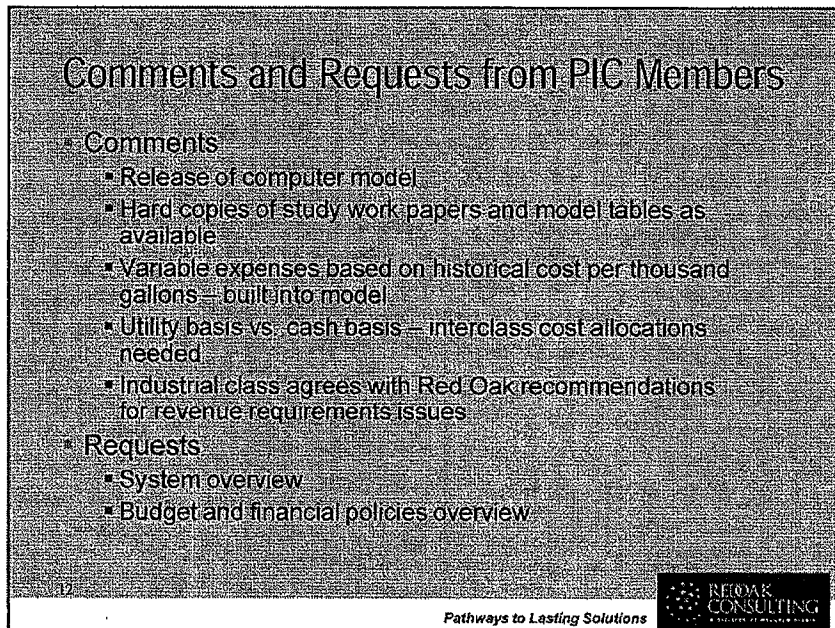




PIC Comments From Last Meeting

Public Involvement Committee Workshop
January 7, 2008

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Comments and Requests from PIC Members

- Comments
 - Release of computer model
 - Hard copies of study work papers and model tables as available
 - Variable expenses based on historical cost per thousand gallons – built into model
 - Utility basis vs. cash basis – interclass cost allocations needed
 - Industrial class agrees with Red Oak recommendations for revenue requirements issues
- Requests
 - System overview
 - Budget and financial policies overview

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Water Cost Allocations and Fire Charges

Public Involvement Committee Workshop
January 7, 2008

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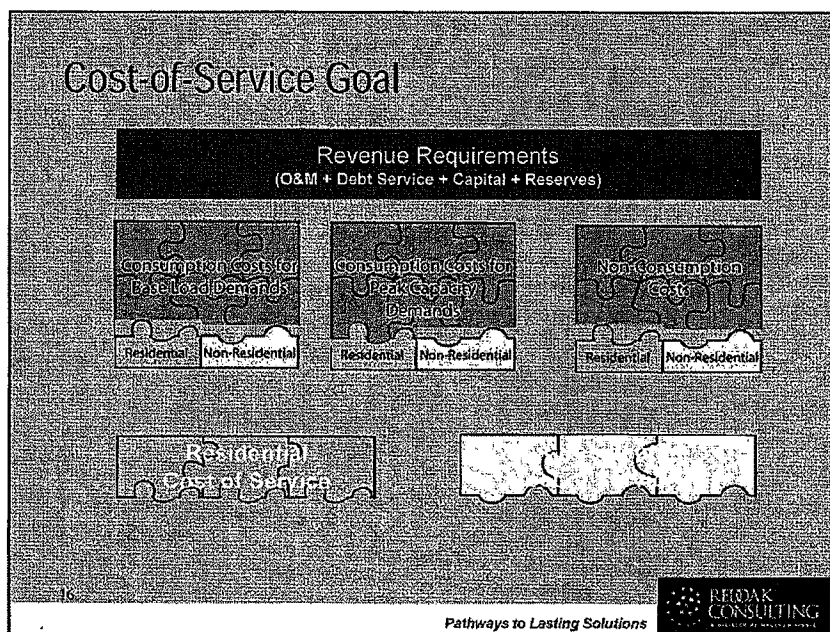
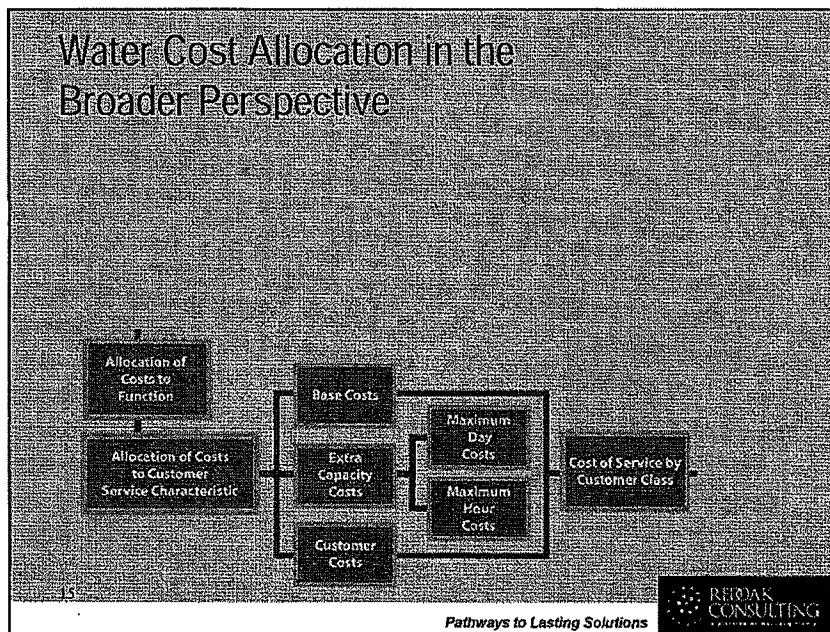


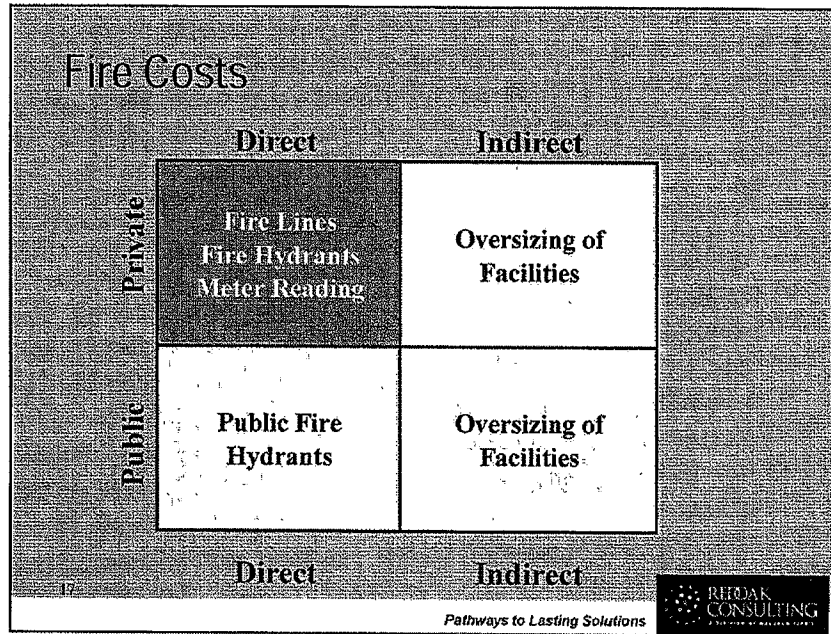
Policies Reviewed

1. Which is the most appropriate overall method?
2. What are the appropriate time steps?
3. Should private fire connections be charged for direct and indirect fire costs?
4. How should public fire cost be recovered?

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Issue 1: Water Cost Allocation Options

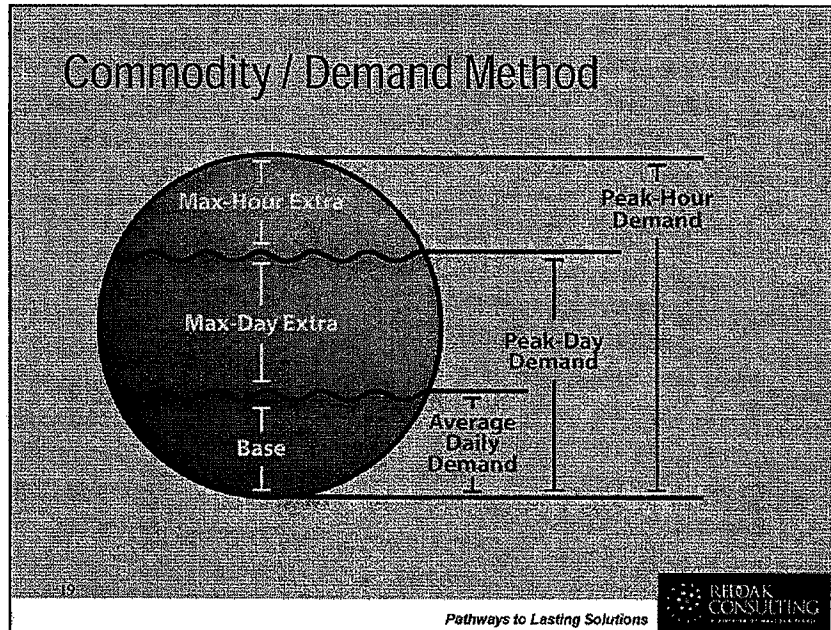
- Commodity/Demand
- Base/Extra-Capacity*

* AWU's current methodology

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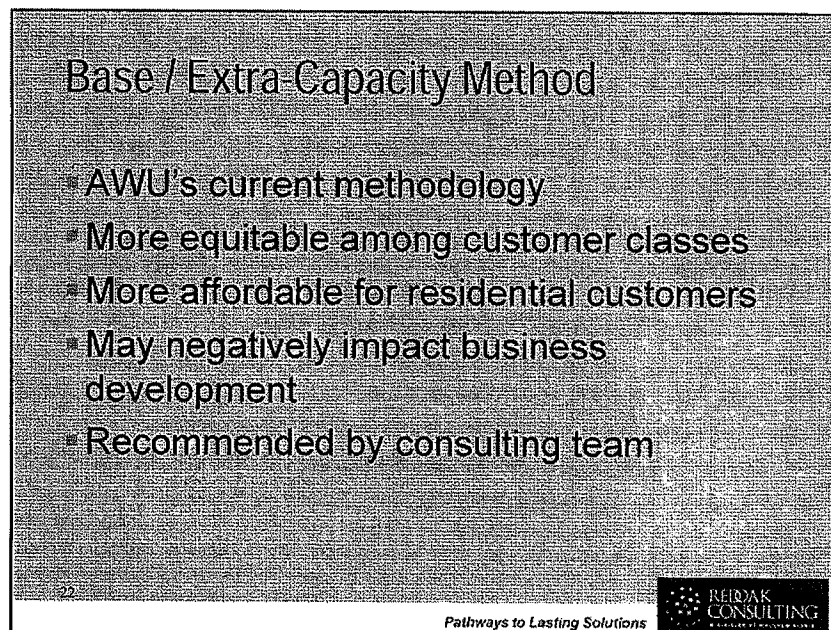
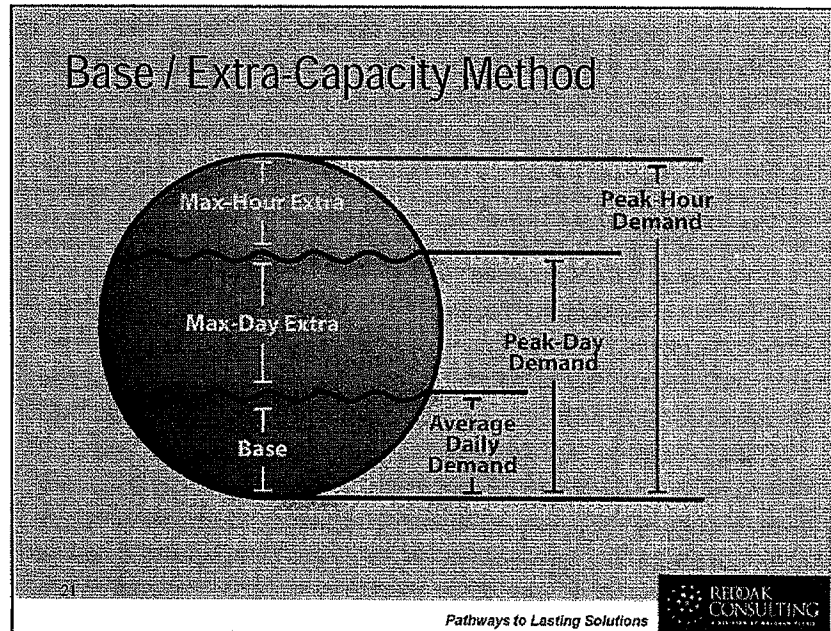
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Commodity / Demand Method

- Encourages conservation during peak season and peak day
- Less equitable among customer classes
- May reduce costs to businesses and benefit economic development
- Less affordable for residential customers

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Issue 2: Time Steps

- Peak-day and peak-hour demands*
- Peak-season, peak-day, and peak-hour demands

*AWU's current methodology

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Peak-Day and Peak-Hour Demands

- More equitable among customer classes
- More equitable between inside city and outside city customers
- Less administrative burden
- Recommended by consulting team

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Peak-Season, Peak-Day, and Peak-Hour Demands

- Additional administrative burden to add a new time step
- Reduces interclass and inside/outside city equity

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Issue 3: Private Fire Connections Costs

- No separate charge for private fire connections*
- Charge private fire connections for direct fire costs only
- Charge private fire connections for direct and indirect fire costs

*AWU's current methodology

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Direct Costs Only

- Less administrative burden
- More publicly and politically acceptable
- More equitable
- Less affordable for residential customers
- Potential increase in economic development
- Recommended by consulting team

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Direct and Indirect Costs

- Increased administrative burden
- Less equitable
- Reduced costs allocated to residential customers
- Potential negative impact on business development

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Issue 4: Public Fire Costs

- Recover indirectly*
- Fixed charge based on property value
- Fixed charge based on fire customer class
- Fixed charge based on water meter size

*AWU's current methodology

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Recover Indirectly

- Simplest to implement
- More conventional, aligned with industry standards
- Allocates more costs to residential customers
- Potential increase in economic development
- Simplest alternative for understandability of bill
- Reduced revenue stability
- Increased financial risk

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Fixed Charge Based on Property Value

- Most difficult to implement
- Less acceptable – similar to *ad valorem* property tax
- Potential legal issues
- Increased interclass and intraclass equity
- Most affordable alternative
- Low bill understandability
- Improved revenue sufficiency
- Potential impact on conservation

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Fixed Charge Based on Fire Customer Class

- Difficult to implement
- Less understandable to public
- Increased interclass and intraclass equity
- Less difficult to understand bill
- Potential impact on conservation

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Fixed Charge Based on Water Meter Size

- Readily available data for implementation
- More conventional, aligned with industry standards
- Bill is easy to understand
- Potential impact on conservation
- Recommended by consulting team

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PIC Member Questions, Discussion, and Comments

Public Involvement Committee Workshop
January 7, 2008

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Next Steps

- Written comments on tonight's meeting due 1/14 (to Mike Castillo)
- Wastewater Cost Allocation issue paper to PIC (1/15)
- Next PIC Workshop on TUESDAY (1/22)

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Summary Of Decisions and Agreements

Public Involvement Committee Workshop
January 7, 2008

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