October 26, 2011

EPCOR Water Services

2012 – 2016 Performance Based Water Rates

City Council Meeting

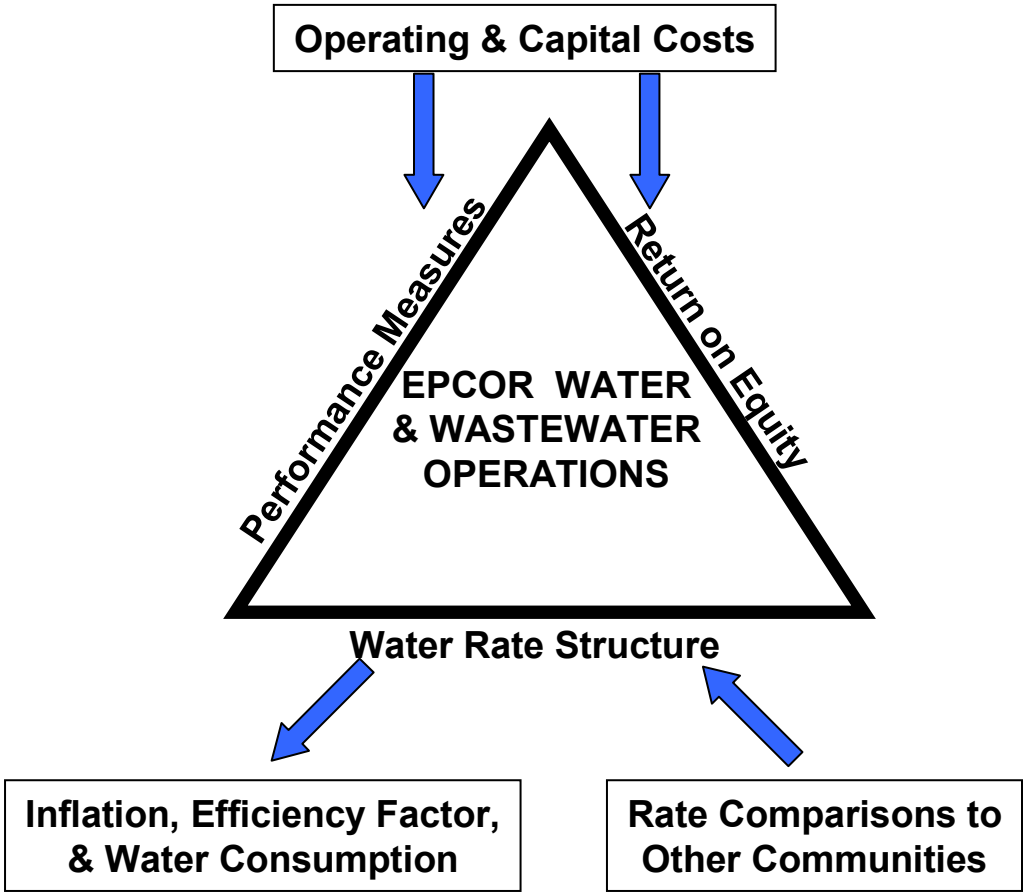
PBR Renewal Proposal Overview

- EPCOR Water is applying for a third PBR 5 year term
- The PBR approach has proven to be successful
- Key changes of the third PBR are:
  - Three tier water residential rate structure for conservation
  - Additional City driven capital
  - Gold Bar Wastewater Treatment Plant included
  - Updated allocation of costs between water customer segments
  - Updated Water and added Gold Bar performance measures

PBR Renewal Process

March – June	Public consultation process (City Council, focus groups, major customers)
June 6	PBR rate filing complete
June 16	Utility Committee overview presentation
July 20	1st reading by City Council
July 23 – August 6	Public advertisement of hearing
September 1	Utility Committee public hearing
October 26	City Council presentation

PBR Conceptual Framework



City Council Approves

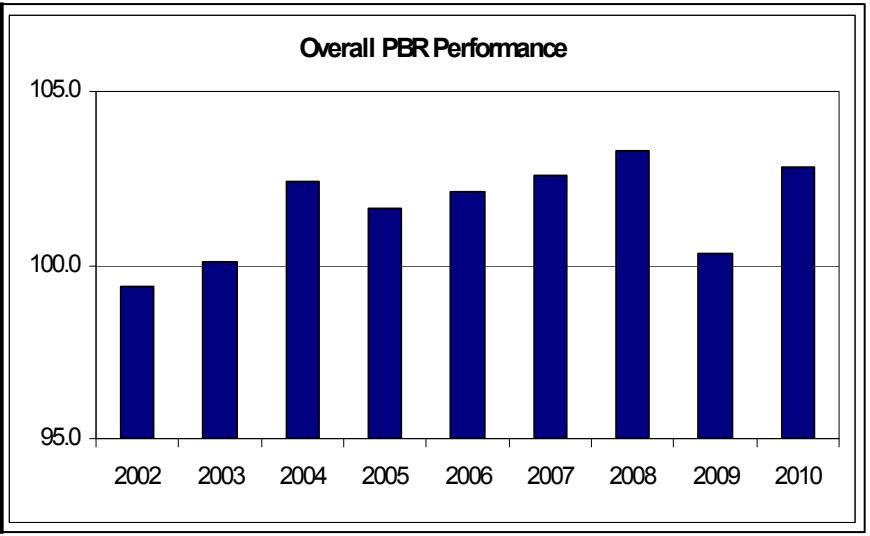
- Water Rate Structure
- Performance Measures
- Return on Equity (5 Year)

EPCOR Water

- Operates within this framework
- Takes various business risks
- Makes capital and operating cost decisions
- Capital under spend threatens performance, overspend lowers ROE

Edmonton Water PBR Results

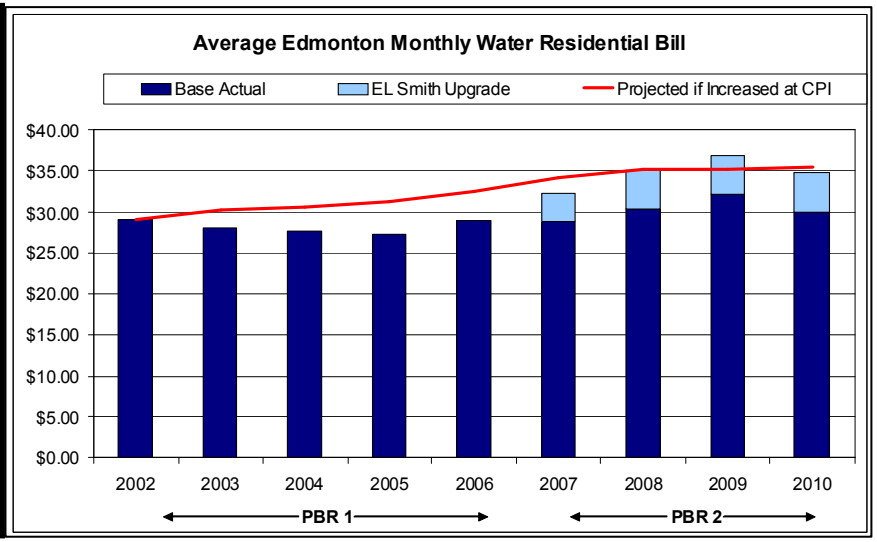
PBR Performance



Return on Equity

	Approved	Actual
PBR 1	11.50%	10.56%
PBR 2	11.25%	*11.30% (Estimated)*
PBR 3	*10.875% Proposed*	-

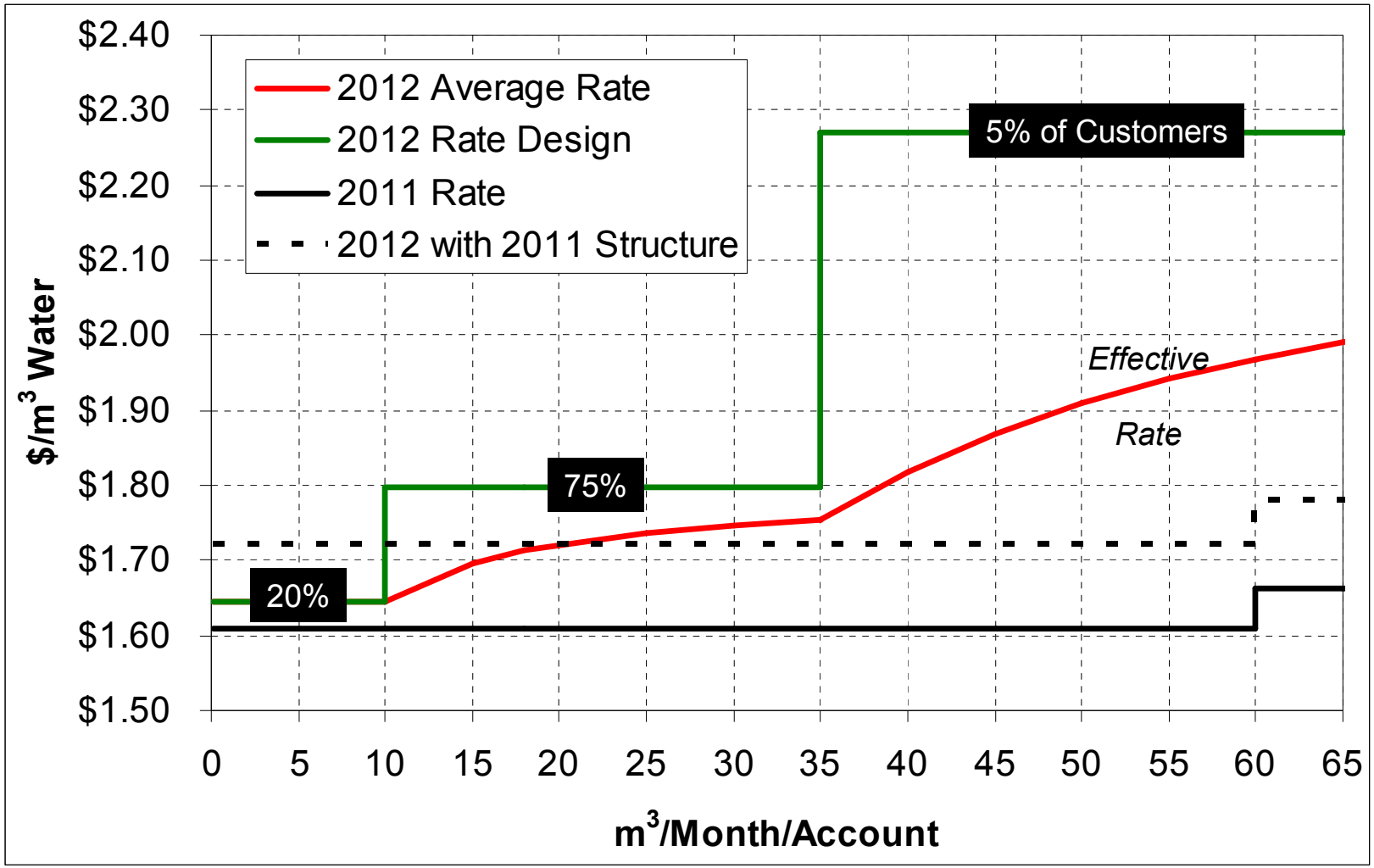
Water Bills



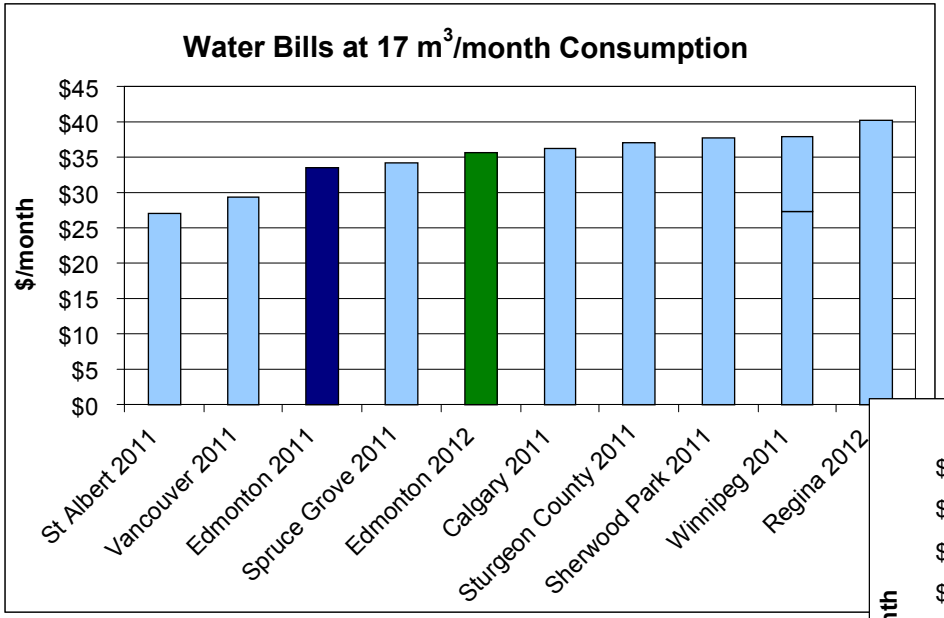
PBR 3 Customer Impact Summary

- Residential water bill estimated average increase 3.6% annually or $1.33/month for average customer (less than $1/month for low use customer)
- Residential wastewater bill estimated average increase 7.4% annually or $1.04/month for average customer (about $0.80/month for low use customer)
- Multi-residential water bill average increase at 4.3% annually
- Commercial water bill average increase at 5.2% annually

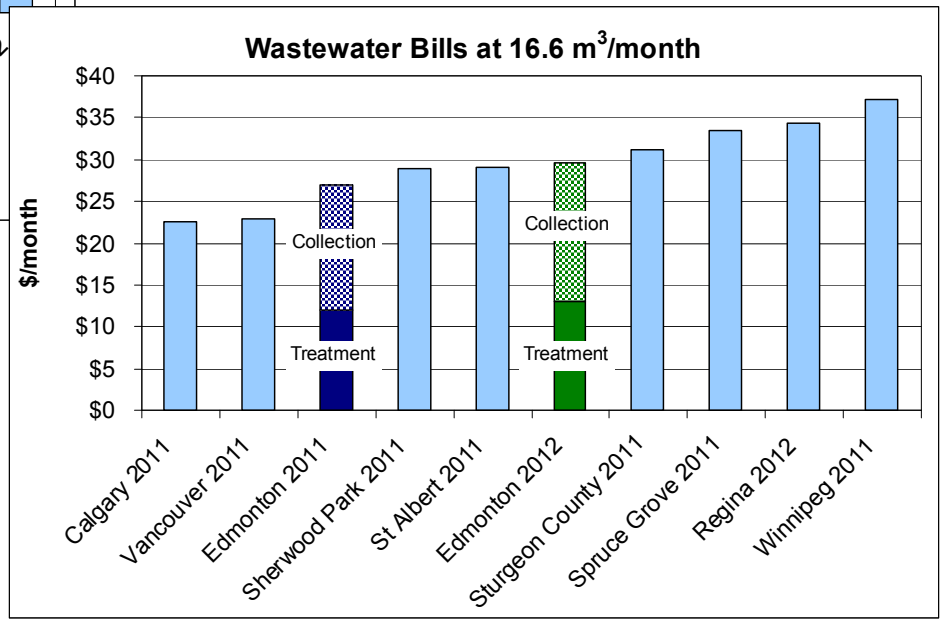
Residential Rate Design



Bill Comparisons - Residential

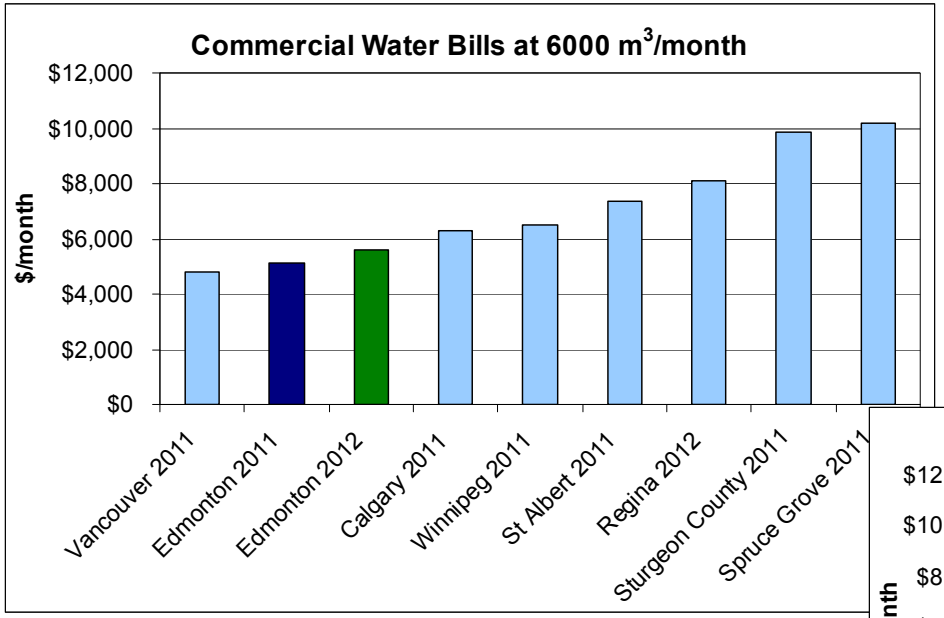


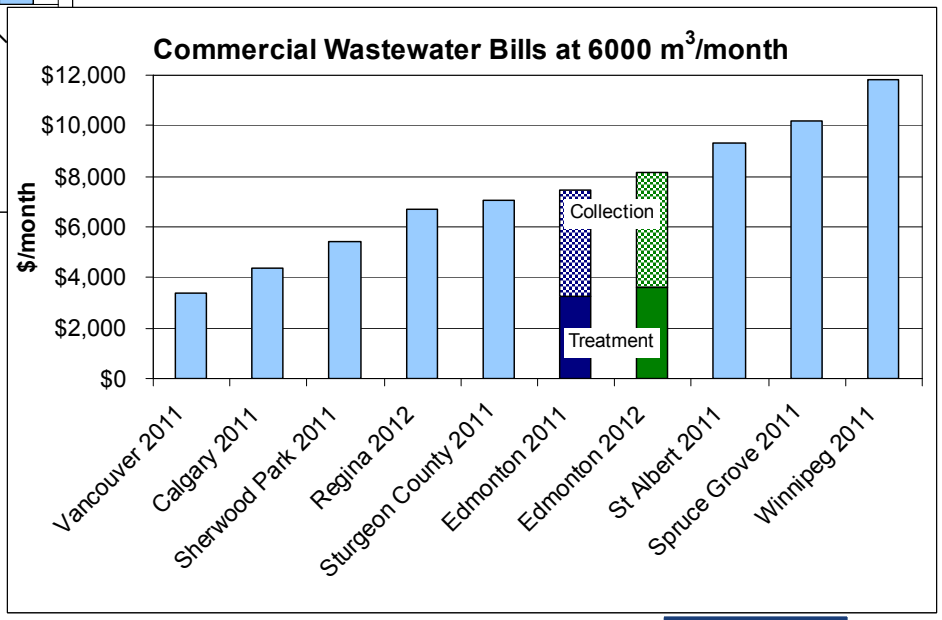
Water cost differences are driven by water quality and treatment process differences. Edmonton has relatively poor raw water quality, necessitating higher treatment and associated costs.



Wastewater cost differences are impacted by the presence of combined sewers and treatment standards. Gold Bar has a higher standard of treatment relative to other cities.

Bill Comparisons - Commercial





The wastewater comparison is combined collection and treatment – more difficult to draw conclusions. Gold Bar has a higher treatment standard and Edmonton has combined sewers.

Questions Arising from September 1 Utility Committee Meeting

Utility Committee Motion Sep-1

To Be Addressed Today

- A more complete explanation of the allocation of *corporate shared service costs*
- A more detailed rationale for the proposed *re-basing*, the proposed *return on equity* and the *inflation and efficiency factors*
- Options for *wastewater treatment performance measures for customer relations*

To Be Addressed Later

- Improvements in annual Performance Based Rates progress report

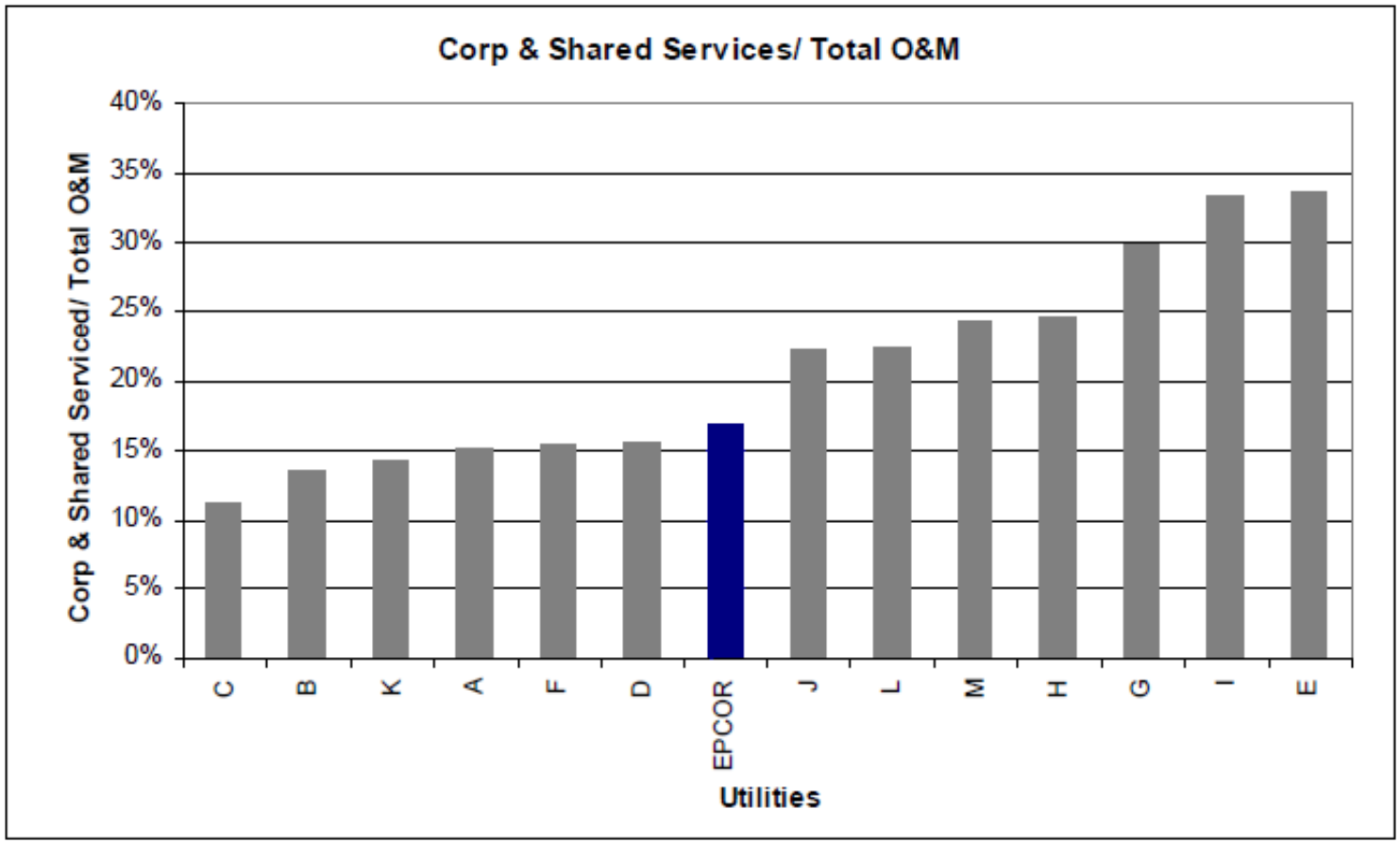
Corporate Shared Service Costs

Summary of Key Points

- EPCOR total corporate costs impacted by Capital Power split in 2009 - diseconomies of scale minimized where possible
- EPCOR total corporate costs, post Capital Power split, still reasonable relative to other benchmarked utilities
- Allocation methodology reasonable, relevant and consistent with good industry practice according to third party review
- Increases in corporate costs allocated to Edmonton Water in current PBR mostly due to Capital Power split with balance IT related and inflation
- Projected increases in corporate costs allocated to Edmonton Water next PBR at 4.5% per year including head office and inflation

Corporate Shared Service Costs

Benchmarking Results (PA Consulting Study December 2009)



Rebasing

Summary of Key Points

- "Rebasing" occurs at start of new PBR period to establish to utility costs for the next period:
  - Adjust starting point rate to reflect current costs
  - Recover prudently incurred capital spending
- Many drivers for cost increases – industrial inputs, new regulations / standards, labour, City growth above forecast
- Current PBR additional capital at $94 M ($35 M City driven, $15 M plant reliability, $24 M EL Smith, balance inflation / growth)
- If costs were lower than inflation and capital lower than plan, rebasing would lower revenue requirement (and rates) for next PBR
- Planned yearly PBR Progress Report enhancements will give City opportunity to review capital and operating spend progress

Return on Equity

Summary of Key Points

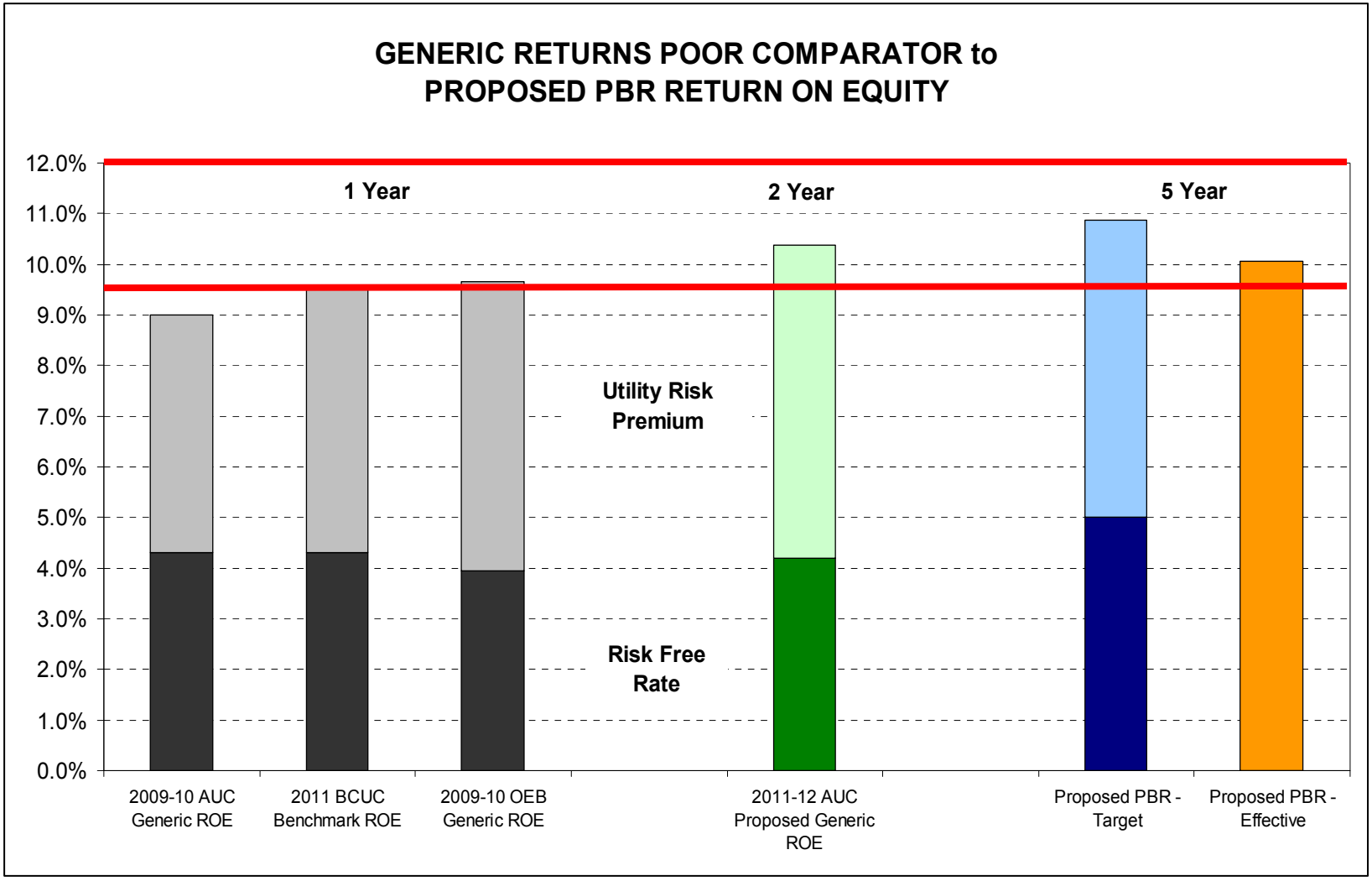
- Cost of capital expert determined Return on Equity (ROE) for EPCOR Water for PBR 3 based on several methods (tests)

- EPCOR Water's "PBR risk premium", based on data from comparable US and Canadian water, gas, electric utilities
  - Range of results are 9.6% to 12.0%
  - ROE sensitivity 0.5% ~ 35 cents/month average customer
    ~ $2 M / year water sales

Proposed ROE	Effective	Recommended	
Water	10.875%	10.875%	
Wastewater	7.79 %	10.875%	3.45% →10.875% 5 Years
Combined	10.06 %	10.875%	

- Proposed ROE not comparable to AUC Generic ROE return due to:
  - Different risk free rate assumptions (5 year versus 1 year)
  - No deferral accounts (consumption forecast risk over 5 years)

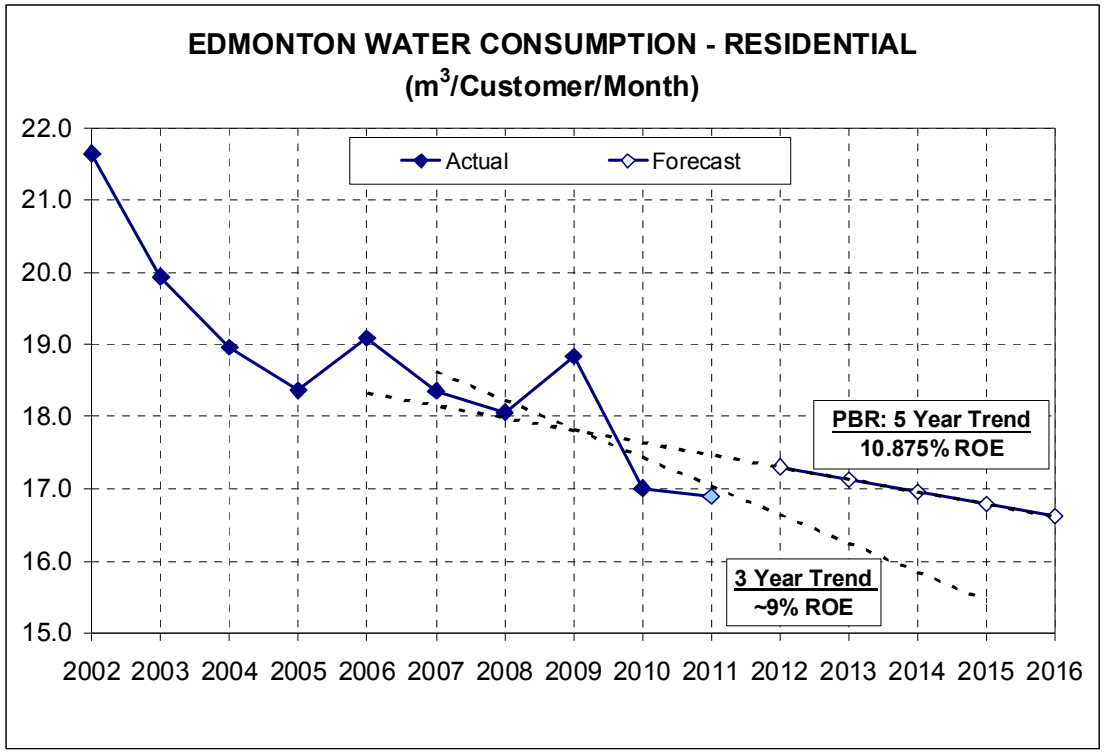
Return on Equity - Comparison



Return on Equity – Unique Risks

Summary of Key Points

- EPCOR Water has unique risks relative to other utility sectors:
  - Structural water usage declining (forecast risk)
  - Consumption risk magnified by rate structure
- Most (about 80%) of costs recovered through consumption charge
- Relatively small change in water consumption (-1 m^3/month) decreases actual ROE to 9.4%
- This rate structure supports water conservation



Return on Equity - AUC

Application of 2011 / 12 AUC Generic Cost of Capital to PBR

- AUC Generic Cost of Capital ruling December 2011 will not provide further guidance to City Council on appropriate ROE for PBR due to:

  - No formal AUC assessment of PBR premium
  - No AUC assessment of five year interest rates

- Effective combined ROE for water & wastewater in PBR application is 10.06% due to wastewater rate phasing

  Consider…..

  - Interest rate difference 1 year versus 5 years ~ +1%
  - Water consumption risk
  - General agreement Water PBR adds extra risk = higher ROE
  - Modest impact of small ROE differences to water bill (+0.5% ROE = +35 cents/month)

Inflation Factor

Summary of Key Points

- Current inflation factor is EPCOR's actual labour rates
  – Concern over lack of incentive to manage labour costs

- PBR proposal to utilize blend of external labour cost index (35%) and CPI (65%)

- Proposed labour index "Average Hourly Earnings – Industrial Aggregate (AHE)"
  - Independent source (StatsCan)
  - Readily available, verifiable
  - Reflective of multiple industries, includes public sector
  - closely tracked to EPCOR's actual labour rates
  - Reflects geographic market EPCOR primarily draws resources

- Annual adjustment mechanism in place to correct difference between forecast labour rate and actual labor as measured by AHE

Efficiency Factor

Summary of Key Points

- Expert opinion based on utility industry productivity review recommended zero efficiency factor.
  - Alberta utility worker productivity -0.2% (2006 – 2011)
  - Canada utility worker productivity (StatsCan) -2.6% (2005 – 2009)
- Current AUC applications (5 utilities) have proposed *negative* productivity factors between -0.8% to -2.0% (*added* to inflation rates)
- Challenges to input costs and worker productivity expected:
  - Water / wastewater chemical costs expected to be above inflation
  - Safety and training requirements increasing
- Proposal to maintain 0.25% efficiency factor for next PBR demonstrates EPCOR's commitment to continuous improvement

Gold Bar WWT Customer Service

Summary of Key Points

- Gold Bar WWT Plant included in PBR for first time – some proposed measures have no performance history
- Desire to strengthen original proposal for customer service measure – more significant and quantifiable
- Revised proposal is 90% of customer complaints to be responded to within 24 hours – able to track, verify and report on
- Gold Bar part of Strathcona Industrial Association – multiple plants in the area, including the Clover Bar site, complicates response
- Considered other potential measures but these either too insignificant or too unmanageable given the major change in Gold Bar operations (Enhance Primary Treatment) next five years

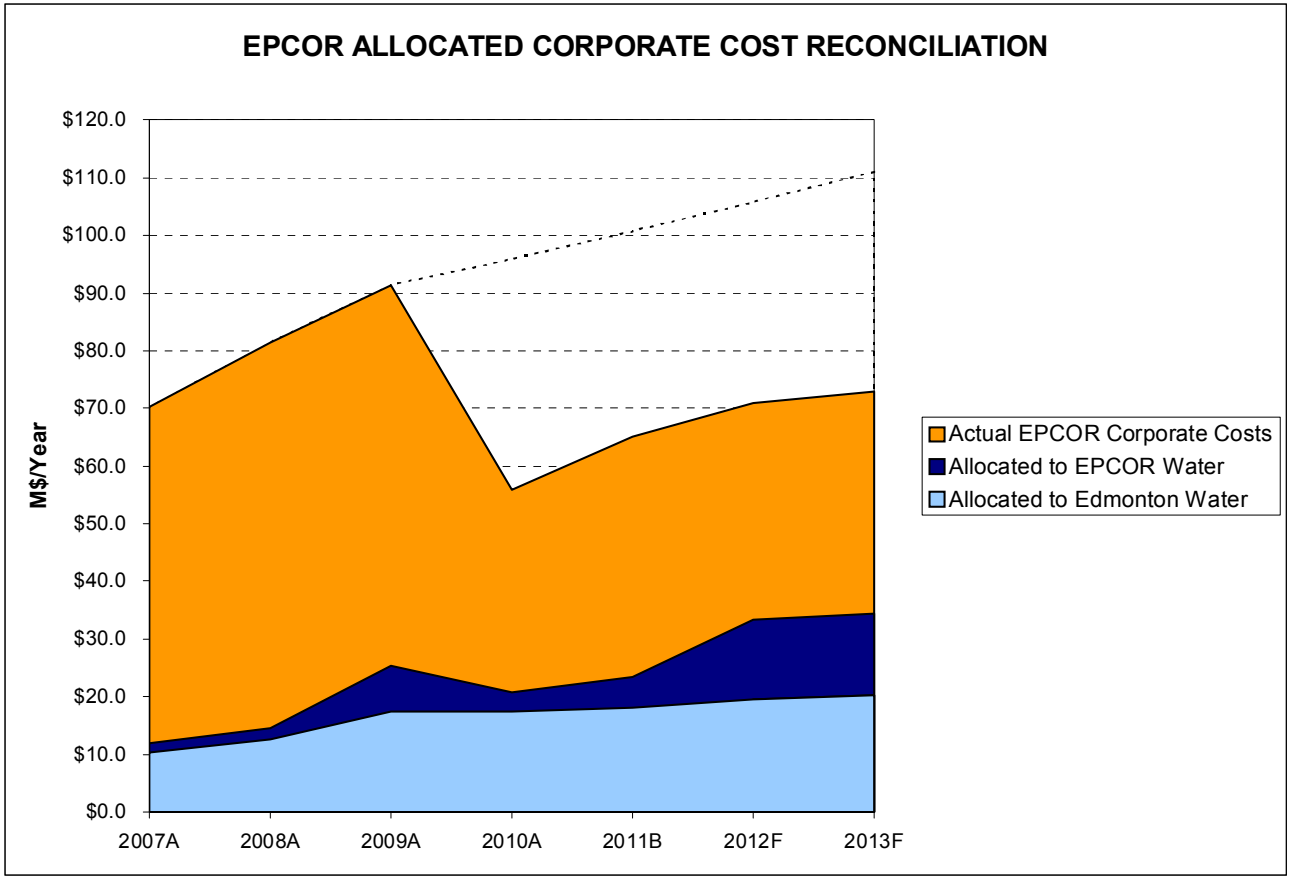
In Summary……

- PBR framework has been effective at delivering a cost effective rate structure, good water system performance and predictable water rates
- PBR renewal proposal rates reasonable, driven by prudent investment to maintain quality and reliability of the water system
- Inputs used to determine rates – EPCOR corporate costs, return on equity, inflation and efficiency factors reasonable based on expert opinion and external benchmarks
- Request that Edmonton City Council approve the proposed PBR framework for 5 years (April 1, 2012 – March 31, 2017), with one amendment for the revised Gold Bar WWT Plant customer service measure


Questions

Corporate Shared Service Costs

Changes with Capital Power Split



Rebasing – Impact of Capital

Summary of Capital – Current PBR Period

City Directed	$35 M	Accelerate renewals ($23 M) Water line relocates ($12 M)
EL Smith Upgrade	$24 M	Carry in from PBR 1
Water Treatment Plants	$15 M	Unplanned electrical upgrades and mechanical reliability
Inflation above PBR Plan	$ 8 M	Higher than planned inflation
City Growth	$ 7 M	Greater than expected in PBR 2
Standards / Other	$ 5 M	Changed road restoration standards
	$94 M	

Performance Measures

	Category	Changes
Water – Changes to Existing Performance Measures		
1	**System Reliability Index**	Planned interruption will include total construction impact Water loss factor converted to industry standard (ILI)
2	**Water Quality Index**	No design change
3	**Customer Service Index**	Response time to 25 from 22 min due to cell phone policy
4	**Environmental Index**	Reportable incident (more clarity) Watershed program participation
5	**Safety Index**	No design changes (update reflecting tighter targets only)
Wastewater – New Performance Measures		
1	**System Reliability Index**	Enhanced Primary Treatment Run Time Index
2	**Water Quality Index**	Wastewater Effluent Limit Performance
3	**Customer Service Index**	***Response to Community Issues***
4	**Environmental Index**	Same Measures as Water (ER Training, Reporting, Incident)
5	**Safety Index**	Same Measures as Water (Safety Meetings, Safe Work Plans, First Aid, Work Site Inspections, Injury Statistics)

Edmonton Water PBR Capital

2012 – 16 Capital Expenditures (Inflated thousands)

	2011F	5-Yr Total	5-Yr Average
Water Treatment Plants	$13,300	$84,200	$16,800
Reservoirs and Pump Houses	1,800	14,700	2,900
Transmission System	6,400	53,500	10,700
Distribution System	17,400	106,800	21,400
Meter Plant	2,000	18,400	3,700
IT (General/SCADA)	1,500	9,200	1,800
General Plant	2,800	25,300	5,100
Contributions in Aid of Construction	(2,400)	(11,100)	(2,200)
Subtotal	**42,700**	**300,900**	**60,200**
Accelerated Water Main Renewal	20,000	100,000	20,000
Capital Expenditures (net CIAC)	**$62,700**	**$400,900**	**$80,200**

Wastewater Treatment PBR Capital

2012 – 16 Capital Expenditures (inflated thousands)

	2011F	5-Yr Total	5-Yr Average
Wastewater Plant – Upgrades	$10,700	$75,200	$15,000
Wastewater Plant – Rehabilitation	3,500	15,700	3,100
Wastewater Plant Building	700	7,400	1,500
TT2 -Lagoon Supernatant Treatment	-	8,900	1,800
IT (General/SCADA)	800	3,700	700
General Plant	1,600	800	160
Capital Expenditures	$17,300	$111,700	$22,260