

Maximizing Benefits for Customers: Regulatory and Governance Opportunities

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Preview

- Wired Group benefit research projects
- \$ benefits per customer, per year by capability
 - Reference Case
 - Best Practices
- Top 4 drivers of variance in benefit levels
- Regulatory/Governance opportunities
- How today's distribution investments differ
- How tomorrow's distribution business will differ

Wired Group Benefit Research



SmartGridCity™
Deployment Evaluation



Duke Energy Ohio
Deployment Evaluation



Best Practices

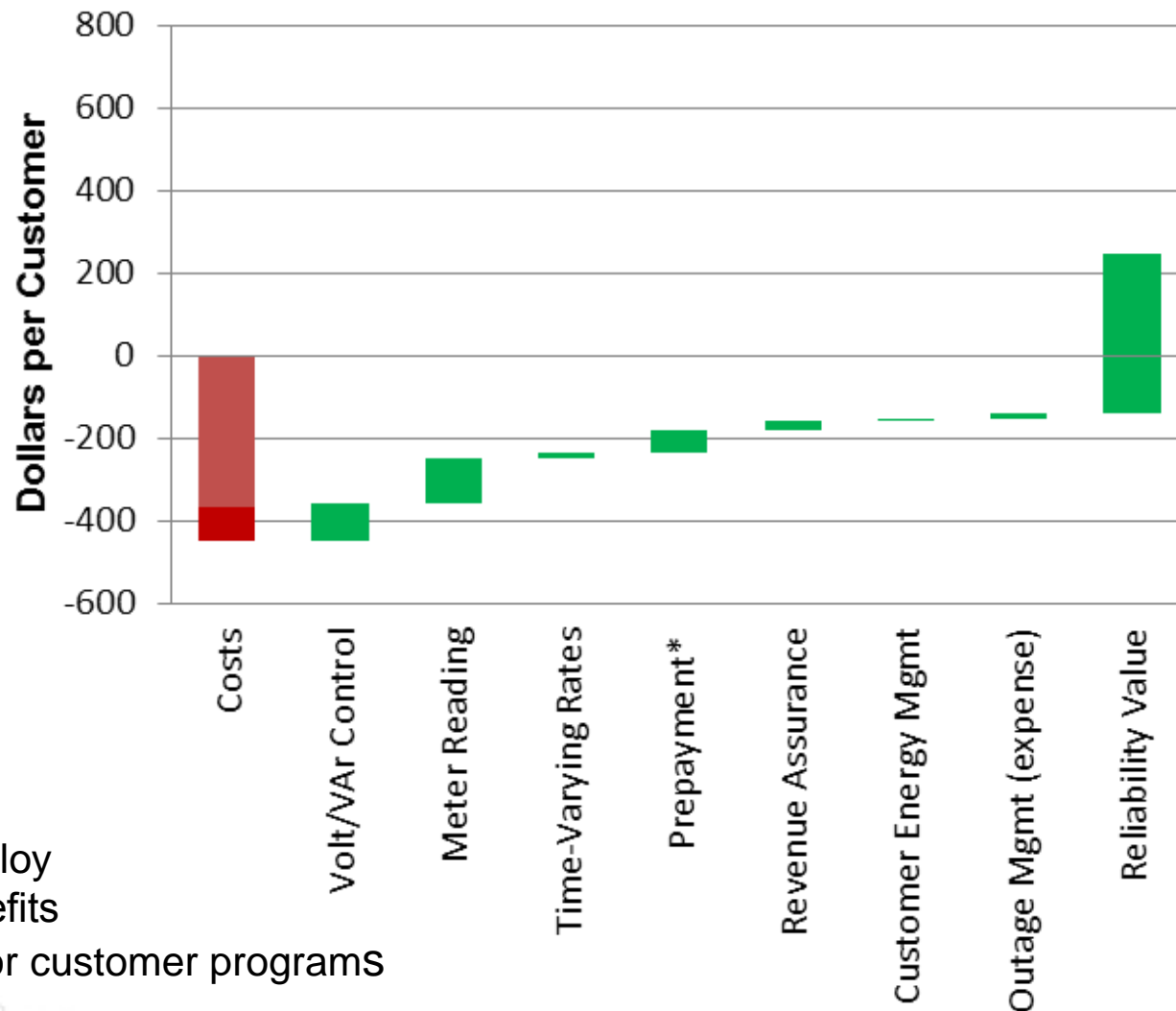


Documenting Value Creation
(Current, Future)



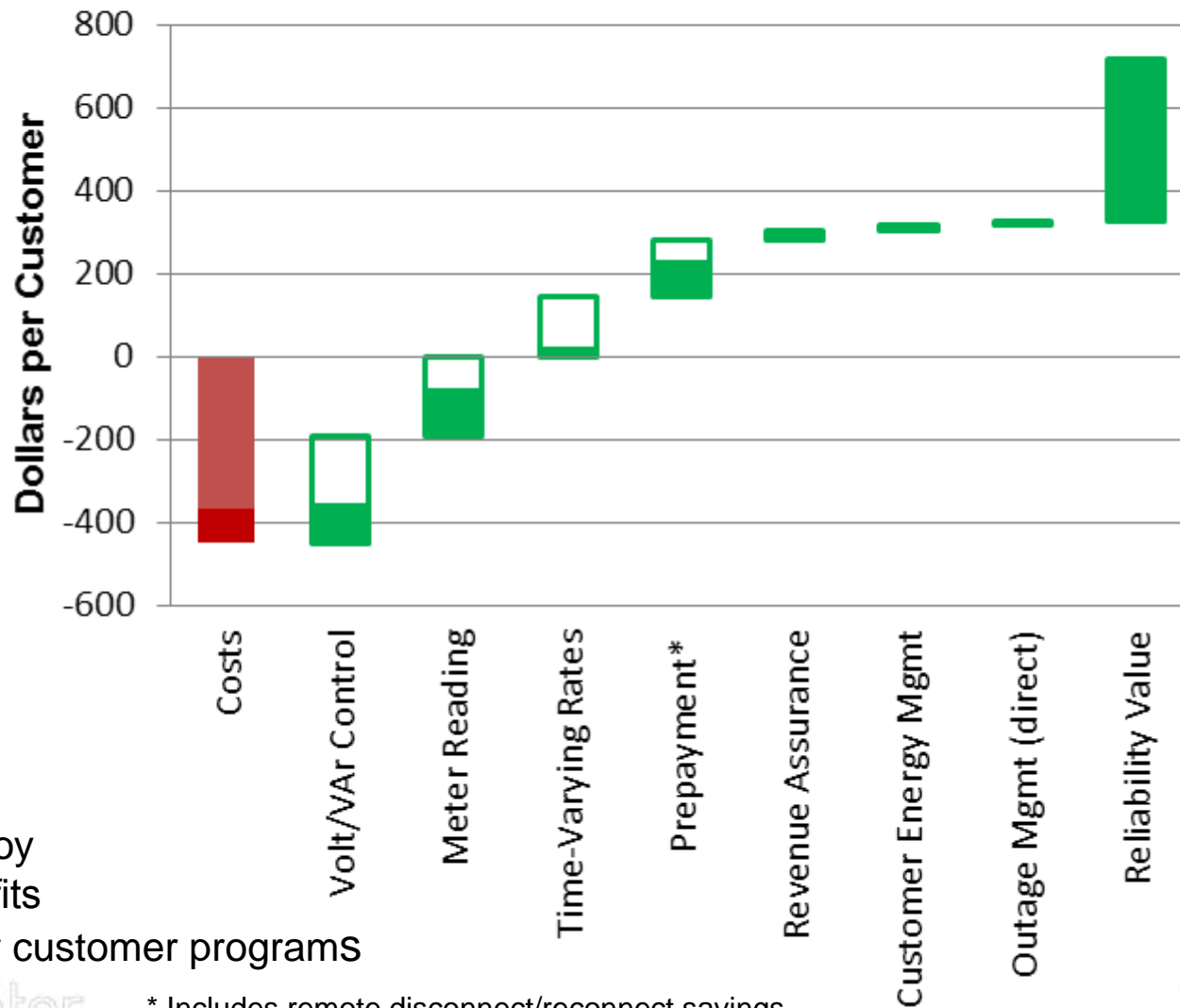
Cost/Benefit Research Review
& Synthesis

Smart Grid Costs and Benefits by Capability -- Reference Case



- 13-year NPV
- 3 years to deploy
- 10 years' benefits
- 3 year ramp for customer programs

Smart Grid Costs and Benefits by Capability -- Ideal Case



- 13-year NPV
- 3 years to deploy
- 10 years' benefits
- 3 year ramp for customer programs

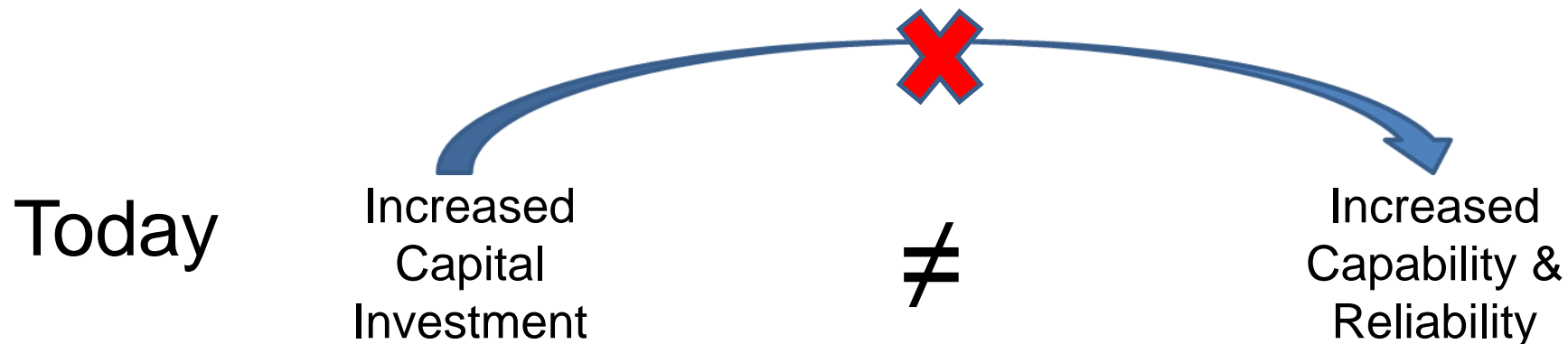
Top 4 Drivers of Benefit Variance

- Utility operating characteristics pre and post
 - PRE: Meter Reading (Manual vs. Automated)
 - POST: IVVC (Peak Period vs. Continuous)
- Customer participation
 - Time-Of-Use; Prepayment; Customer Energy Mgmt.
- Speed at which savings are executed, recognized
 - Execution of cost reductions
 - Recognition of cost reductions in a rate case
- Market value of energy and capacity

Regulatory/Governance Opportunities

- Traditional Ratemaking
 - Conservation harms utility ability to recover costs
 - Rate case timing impacts customer benefit recognition from operational savings
- Payment/collection issue policies/restrictions
 - Prepayment programs
 - Remote disconnect/reconnect

Today's Distribution Investments Differ



Tomorrow's Distribution Business Will Differ

- What do we want from our distribution utility?
 - Accommodate increased customer generation
 - Increase reliability
 - Reduce operations and maintenance costs
 - Increase distribution grid & customer efficiency
 - Prepare for electric vehicle charging
- How much are we willing to pay?
- How should we compensate distribution utilities?
- How should we measure utility performance?

Thank You!

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Watch for *“Smart Grid Hype and Reality: A Systems Approach for Maximizing Customer Return on Utility Investment”* from Wiley and Sons September, 2014