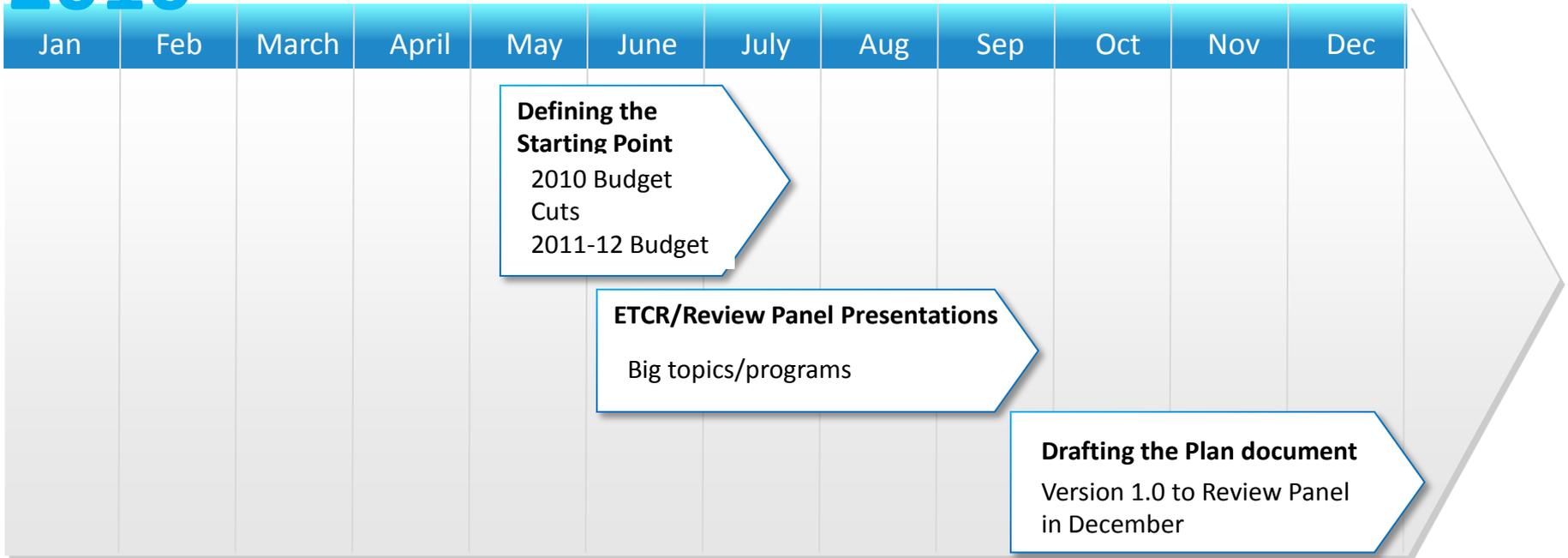


City Light Strategic Plan:
ETCR and Review Panel

June 2, 2010

TIMELINE: Developing the 2011-16 Strategic Plan

2010



Engaging City Council in the Strategic Planning Process

2010 SCL Strategic Planning

Dates

- ✓ 5/5-David Clement: Integrated Resource Plan
- ✓ 5/19-Robert Cromwell: Renewable Acquisition Strategy
- 6/2-Pam Johnson: Asset Management 1 of 2
- 6/16-Pam Johnson: Asset Management 2 of 2
- 7/7-Kelly Enright: Smart Grid 1 of 2
- 7/21-Kelly Enright: Smart Grid 2 of 2
- 8/4-Kelly Enright: Business Process Improvments
- 8/18-Gary Maehara: Human Resources
- 9/1-Eric Campbell-Recap/Review Alternatives
- 9/15-Eric Campbell-Recap/Review Alternatives

Strategic Priorities

Jan

Feb

March

April

Integrated Resource Plan

May

Renewable Acquisition

June

Asset Management –
Introdcution & Projects

July

Seattle's Smart Grid Vision &
Specific components

Aug

Business Process Improvement

Human Resources

Sep

Recap/Review Alternatives (2)

Oct

Nov

Dec

Strategic Plan: Electric Utility Infrastructure Planning

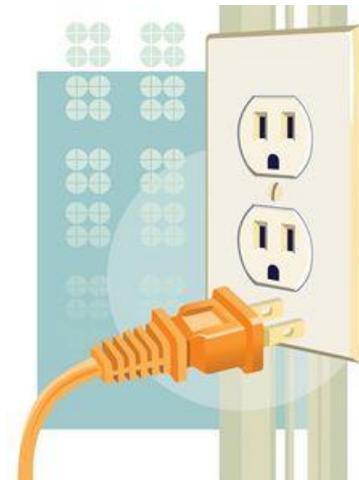
June 2, 2010

ETCR and Review Panel



Proposed Long-Term Strategic Priorities

1. Infrastructure Maintenance and Renewal
 - **Maintain Reliability**
 - **Provide Services Desired by Customers**
2. Environmentally Responsible Operations
 - **Green Portfolio Management**
 - **Environmental Stewardship**
3. High Performance Organization & Workforce

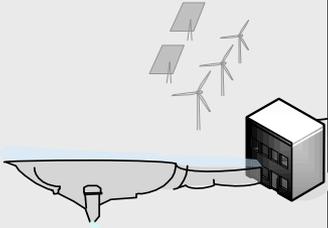
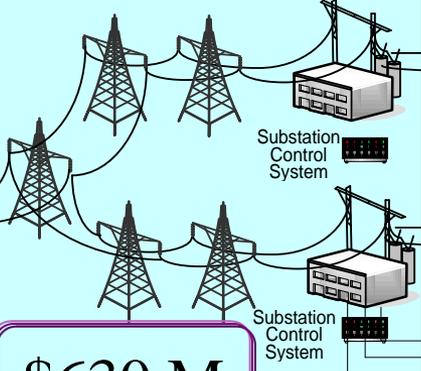
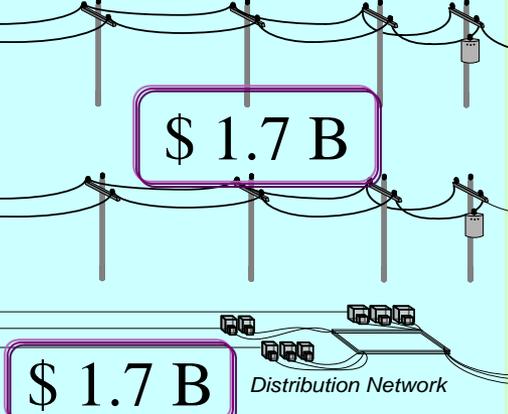
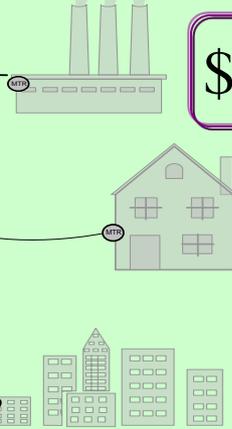


The Challenge:

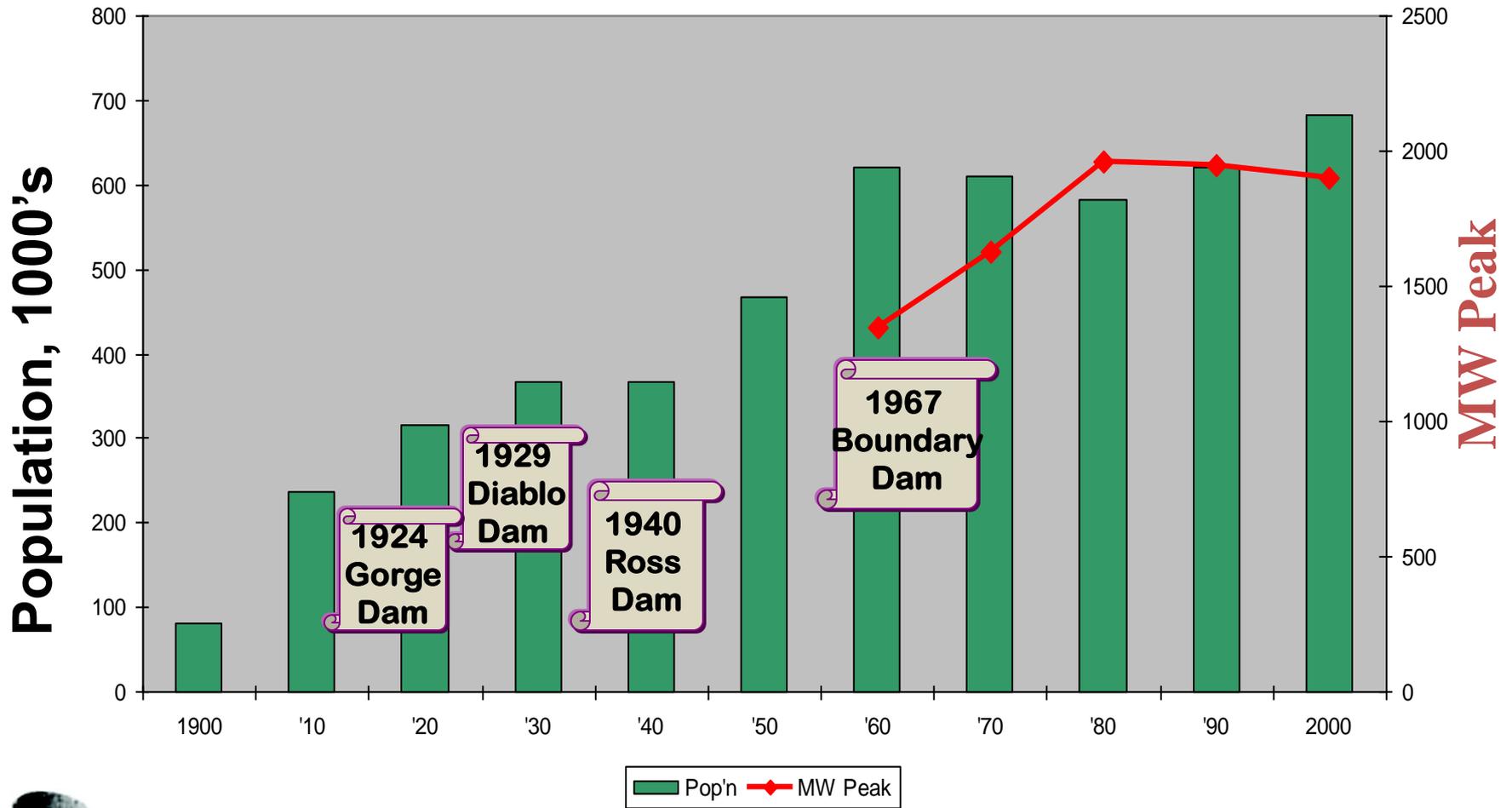
- Provide a safe and environmentally compliant environment
- Improve the customer experience
- Reduce infrastructure costs



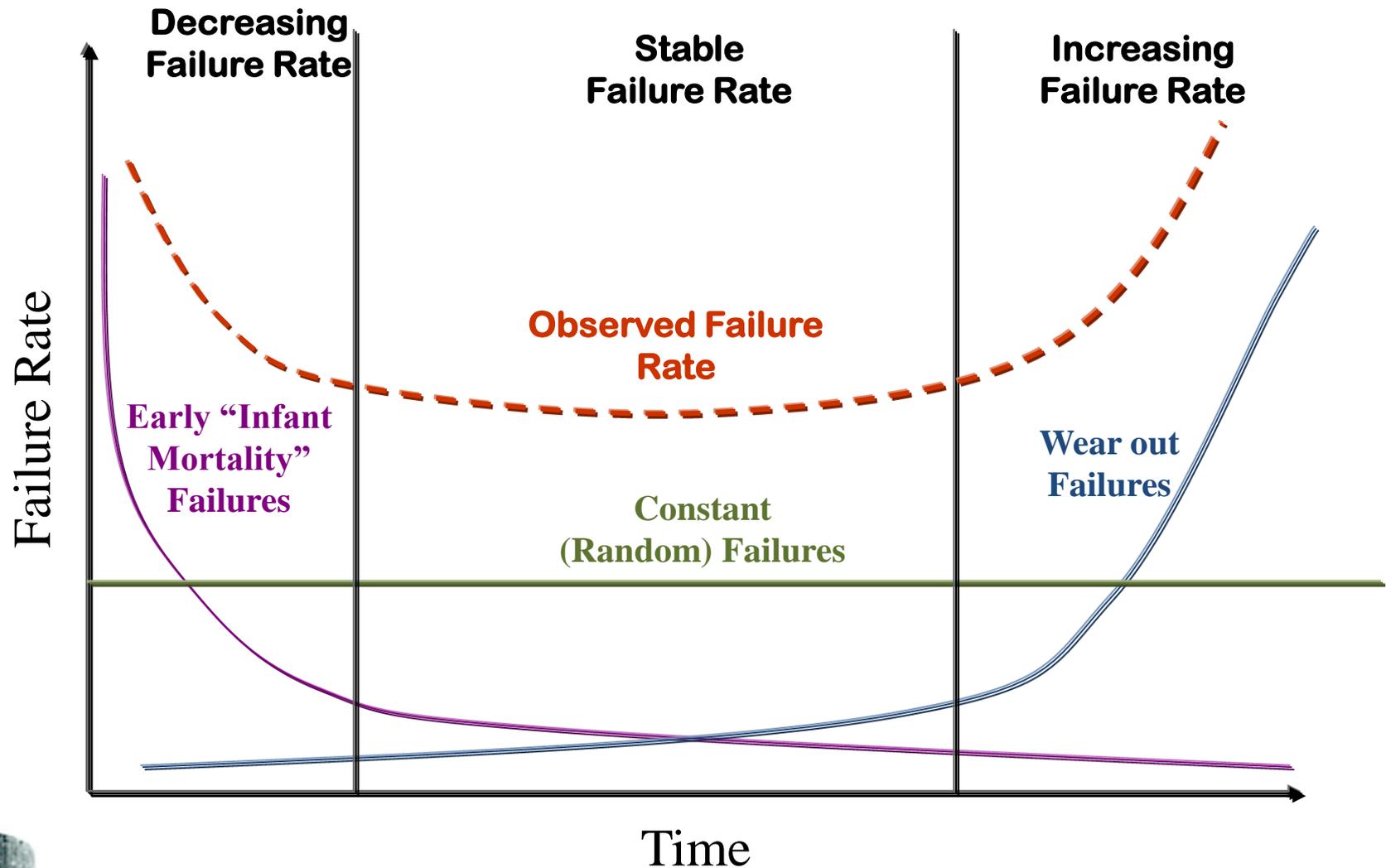
Utility Infrastructure and Assets

<p>Generation</p>  <p>Priceless</p>	<p>Transmission/Substations</p>  <p>\$630 M</p>	<p>Distribution System</p>  <p>\$ 1.7 B</p>	<p>Customer End Systems</p>  <p>\$ 60 M</p>
<p>7 dams</p> <p>7 Generation Stations</p> <p>26 powerhouse transformers</p>	<p>657 Circuit Miles of Transmission (22 miles UG)</p> <p>1200 Steel Lattice Transmission Towers</p> <p>1000 Wood Transmission Poles</p> <p>15 major substations</p>	<p>53,720 Transformers</p> <ul style="list-style-type: none"> • 1231 Network transformers • 52,422 Distribution Transformers <p>167 Electric Feeders</p> <p>108,000 Wood Poles</p> <p>84,000 Street Lights</p> <p>2427 miles of Distribution Line</p> <ul style="list-style-type: none"> • 452 mi UG • 161 mi UG Network 	<p>~ 400,000 customer meters</p> <p>71,500 in Suburban Cities (Shoreline, Lake Forest Park, Tukwila, Burien) and unincorporated King County</p>

SCL Service Territory Population and Electric Peak



Asset Failure for an Asset Class



Asset Replacement Alternatives

Option#1: Run to Failure

Status Quo – highest risk; highest cost

- Current methodology for most distribution assets
- Can lead to significant failure events and claims
Including environmental spills

Option #2: Age-Based Replacement

*Replace on Proactive Schedule –
lower risk – higher cost*

- Typically replaced shortly after economic life
or using other rule of thumb

Option #3: Asset Management

Optimizes cost and risk –

- Use asset condition to inform asset decisions
- Likely will use all three options for specific equipment types



“Run to Failure” is Costly

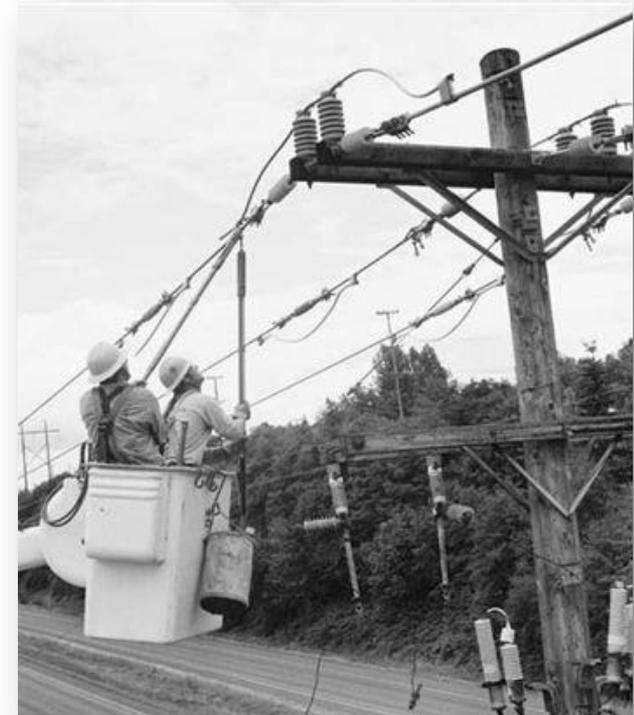
- At least 3 times more costly than Asset Management Practices

Cost of pole replacement after failure:

- 12+ hours outage – lost revenue opportunity
- Service disruption – customer dissatisfaction
- Overtime restoration
- Potential public safety issues before on-site
- Potential for environmental impact
- Crews not available for planned work

Cost of planned pole replacement

- 4 hours straight time for crew
- Pre-arranged and scheduled
- Less costly



Asset Management : Meets the Challenge

Providing a Safe Environmentally Compliant Environment :

- › Changes from “run to failure” replacement practice
- › Establishes consistent, logical preventative maintenance

Improving the Customer Experience:

- › Improved reliability and power quality
- › Planned replacement of assets at lower cost– leading to lower future rates
- › Prepares the electric system to handle smart grid capability

Reducing Infrastructure Cost:

- › Life Extension investment for assets
- › Reduces risk of catastrophic failures by forecasting probable failures from asset data, enabling pro-active action
- › Condition-based decision making



Strategic Plan: Asset Management Programs

- Complete Building Asset Management Capability
- Transmission and Distribution Infrastructure Maintenance and Replacement
- Generation Major and Regular Maintenance Strategy
- Generation Automation Strategy
- Mobile Workforce System

Next: June 16 Asset Management Presentation

- › Highlight each program's purpose & alternatives



The background consists of several overlapping, light-colored rectangular papers or cards. Each card features a large, bold, black question mark. The cards are arranged in a way that creates a sense of depth and layering, with some cards partially obscured by others. The overall color palette is monochromatic, using shades of gray and black.

Q & A