

Distribution Reliability

Presentation for
Revenue Requirement Workshop
January 15th, 2004

Distribution Reliability

- Reliability Performance and Benchmarking
- Trends and Plan Targets
- Outage Causes and Key Contributing Factors
- Investment Plan
- Cost Performance and Benchmarking
- Plan Deliverables

Reliability Performance and Benchmarking

Measure	BC Hydro F2004 YE Forecast	Canadian Utilities Average (CEA)	North American Utilities Average (PA Consulting)
ASAI	99.951%	99.953%	99.967%
CAIDI	3.00 hrs	1.74 hrs	2.12 hrs
Customer Hours Lost	7,102,144	6,755,662 *	4,743,337 *

* Based on BC Hydro's average of 1.64 million customers in F2004.

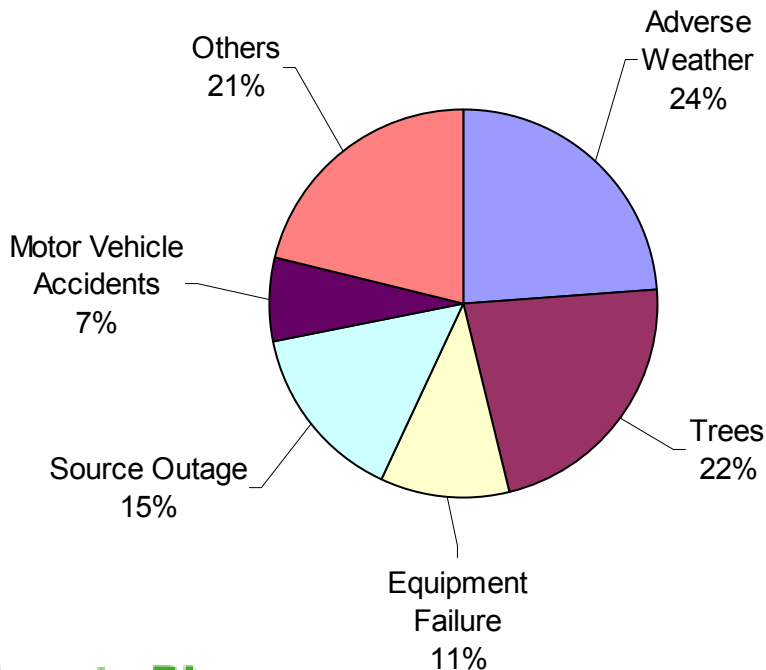
Trends and Plan Targets

Measure	5-Year Average *	F2003 Actual	F2004 YE Forecast	F2005 Target	F2006 Target
ASAI	99.967%	99.957%	99.951%	99.970%	99.970%
CAIDI	2.23 hrs	2.60 hrs	3.00 hrs	2.15 hrs	2.15 hrs

* F1998 – F2002

Outage Causes and Key Contributing Factors

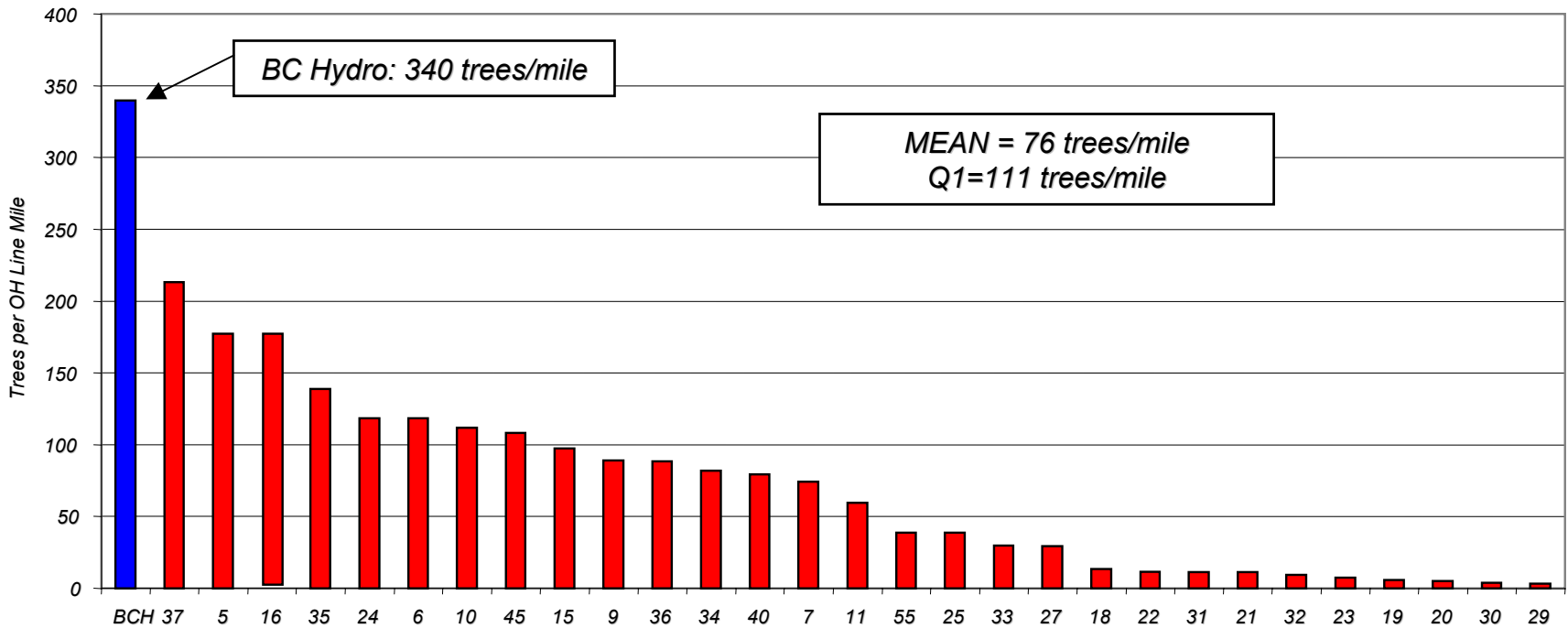
F2003 Customer Hours Lost



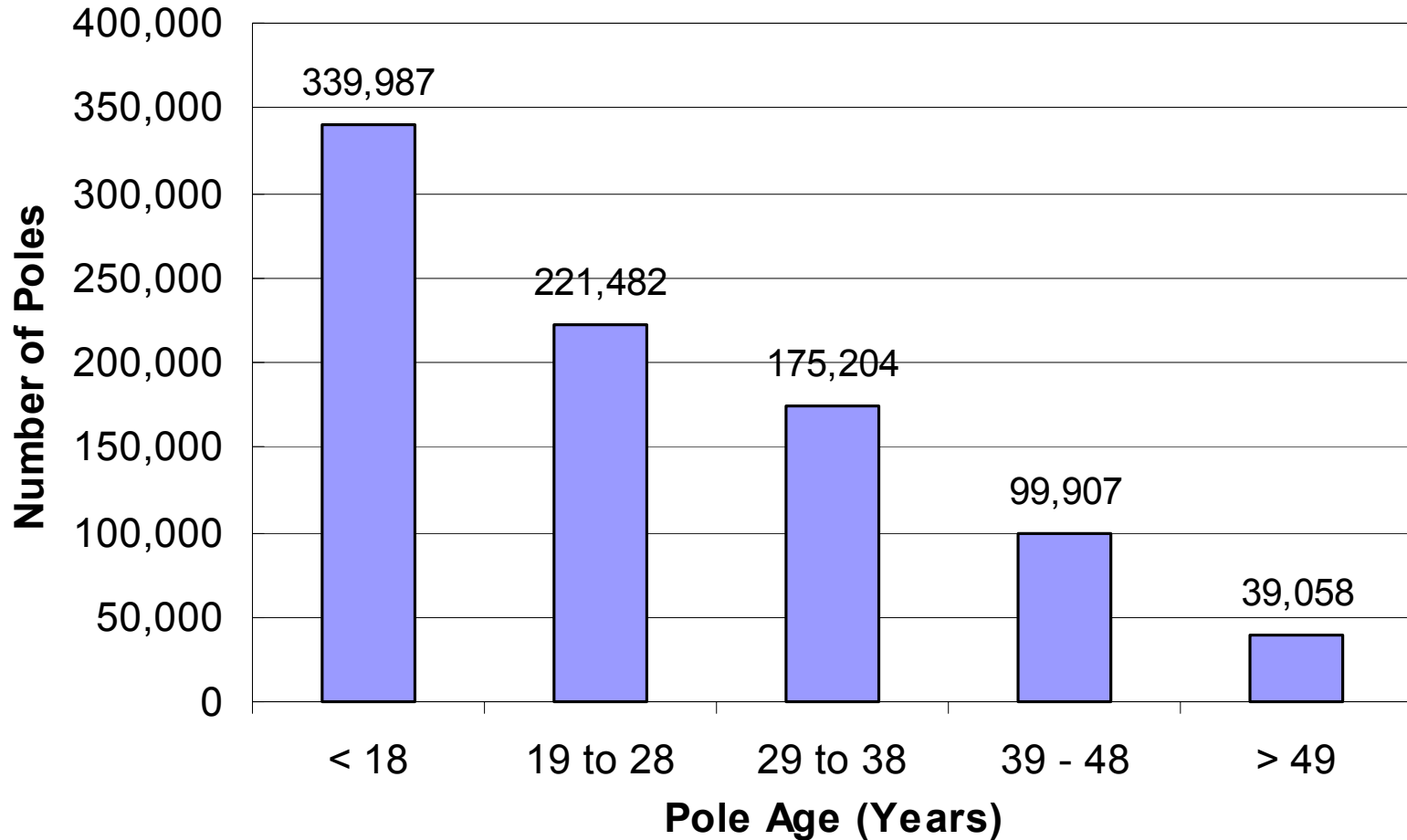
Key Contributing Factors

- Weather & Trees
- Source Outages
- Asset Health / Aging Infrastructure

Number of Trees Managed per Overhead Pole Mile



Distribution Pole Age Profile



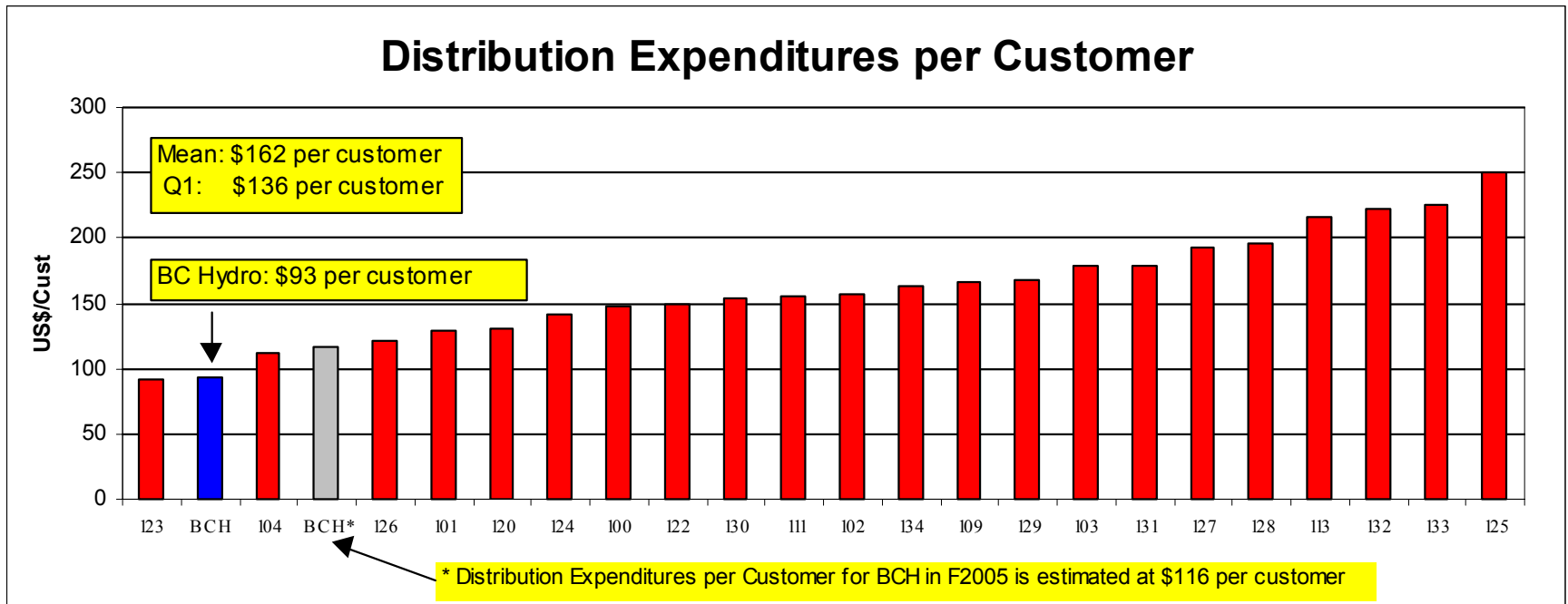
Investment Plan

- Operations - make additional crews available to reduce outage response time
- Maintenance - eliminate backlogs and maintain facilities to standard
- Vegetation - optimize pruning cycles and support community regreening
- Replacements - increase capital investments to keep pace with aging assets
- System Improvements - align investment spending with reliability needs of customers

Expenditures Required to Address Distribution Reliability Issues

Direct Cost of Work \$ Million (Gross)	F04 YEF	F05	F06	F04-F06 Increase/(Decrease)
Operations	31.8	29.3	29.5	(2.3)
▪ Maintenance	20.7	27.6	27.7	7.0
▪ Vegetation	18.0	20.5	20.3	2.3
▪ Replacements	32.3	27.4	28.2	(4.1)
▪ Improvements	30.6	36.3	38.8	8.2
Asset Management & Maintenance Total	101.6	111.8	115.0	13.4
TOTAL	133.4	141.1	144.5	11.1

Cost Performance and Benchmarking



Plan Deliverables: F05 & F06

- Meet Reliability target of 99.970
- Prudent additional spending
- Maintain system capability