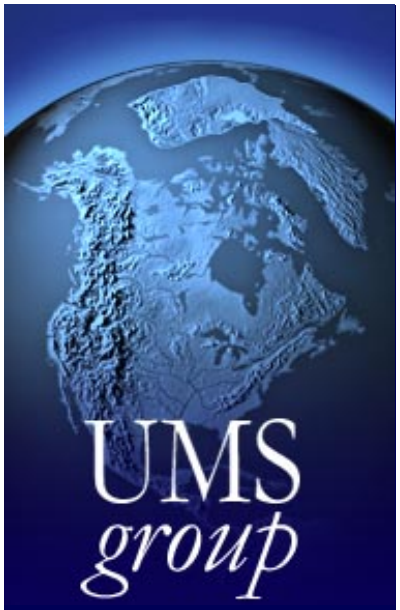


Americas
Asia Pacific
Europe
Middle East

Chugach Electric Association Macro Benchmarking Analysis

August 13, 2007

Findings For The Blue Ribbon Panel

UMS Group | Performance Optimization

About UMS Group

UMS Group is an international Management Consulting firm specializing in performance management solutions in the global electric utility industry.

UMS Strengths

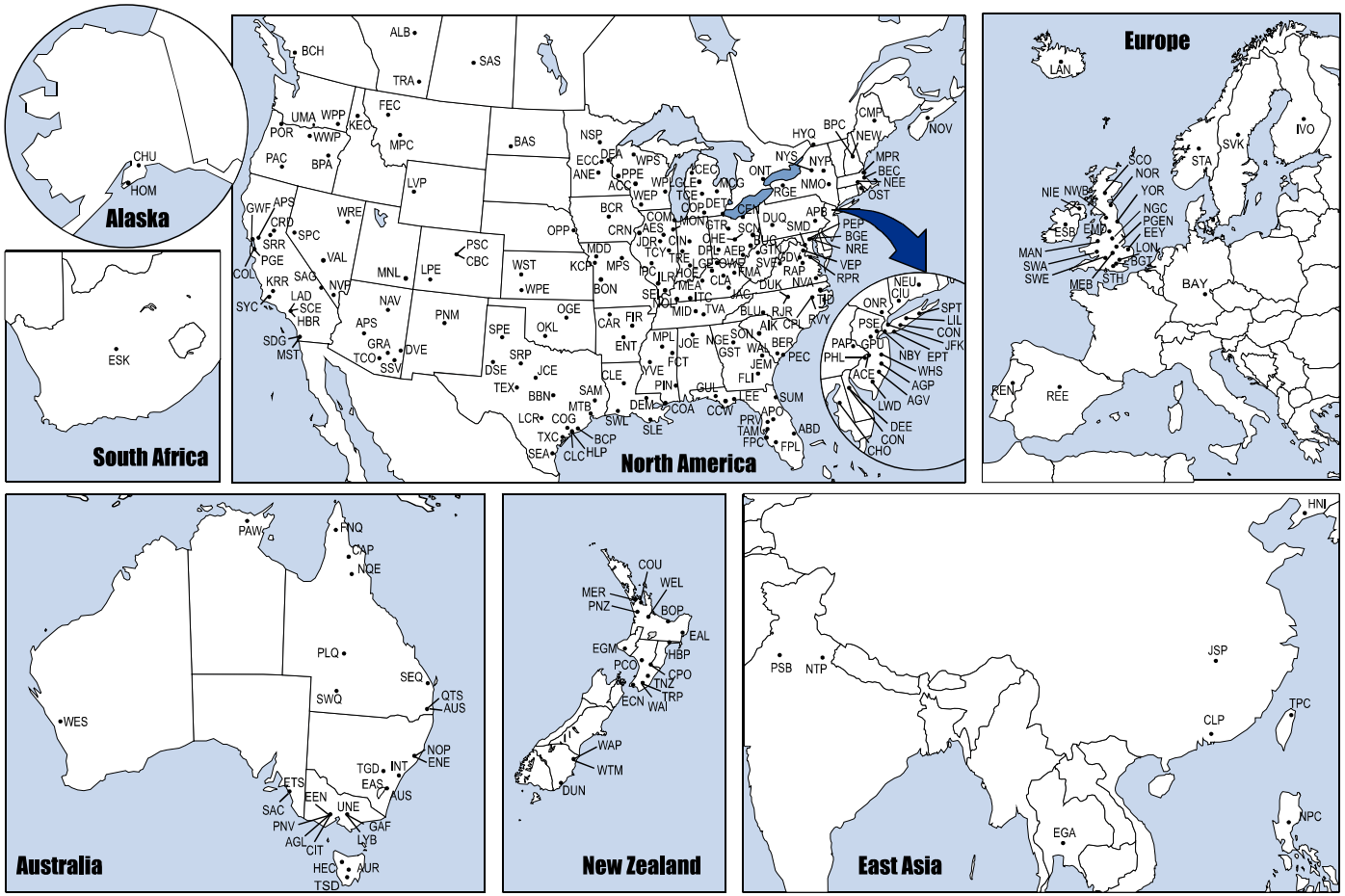
- Recognized leader in operational benchmarking and best practices discovery
- Strong base of experience in utility performance improvement
- Major involvement with utilities undergoing energy reform and privatization
- Experience working with the majority of leading utilities worldwide

Our unique knowledge of world class asset and performance management practices, advanced library of diagnostic methodologies and benchmarking data, and our global base of operational expertise have driven the turnaround of numerous utilities across North America and abroad. Our services extend from board level strategy development to corporate transformation and merger integration.

UMS Group Mission Statement

"Creating Competitive Advantage With Breakthrough Performance Solutions"

Our Global Utility Client Portfolio Is A Key Asset In Helping Utilities Drive Performance Improvement



Our Client Base Is Representative Of All Electric Utility Sectors As Well As Other International Energy Companies

North American Utilities And Associations

Alberta Power (Canada)
Alabama Power
American Electric Power
Arizona Public Service
Atlantic Electric
Baltimore Gas & Electric
Basin Electric
BC Hydro (Canada)
Bonneville Power Administration
Boston Edison
Carolina Power & Light
Centerior
Central Louisiana Electric Co.
Central Maine Power
Chugach Electric Association
Commonwealth Edison
Consolidated Edison
Consumers Power
Dayton Power & Light
Delmarva Power
Detroit Edison
Duke Power Company
Duquesne Light
Electrical Power Research Institute (EPRI)
Empire District
Entergy
Florida Power & Light
Florida Power Corporation
Georgia Power
GPU Energy
Gulf State Utilities
Idaho Power
IES Industries
Illinois Power Company
Intermountain Power
Jersey Central Power & Light
Kansas City Power & Light
Kentucky Power
Long Island Lighting
Los Angeles DWP
Louisville Gas & Electric
Lower Colorado River Authority
Metropolitan Edison/Penelec
Michigan Consolidated Gas
Mississippi Power
Missouri Public Service
Montana Power
New England Electric System
New York Power Authority
Niagara Mohawk Power Corp.
Northeast Utilities
Northern Indiana Public Service
Northern States Power
Nova Scotia Power (Canada)
Nuclear Energy Institute (NEI)
National Rural Electric Coop Association (NRECA)
Ohio Edison
Oklahoma Gas & Electric
Omaha Public Power District
Ontario Hydro (Canada)
Pacific Gas & Electric
Pacific Power & Light
Pennsylvania Power & Light
Philadelphia Electric
Portland General Electric
Potomac Electric
PSI Energy
PS Company of Colorado
Public Service Electric & Gas
Public Service New Mexico
Public Service of Indiana
Salt River Project
San Diego Gas & Electric
Sask Power (Canada)
Savannah Electric
Sierra Pacific Power
Southern California Edison
Southern Company Services
Southern Nuclear
Tampa Electric Co.
Tennessee Valley Authority
Virginia Power
Washington Public Power
Washington Water Power
West Plains Energy
Wisconsin Electric Power
Wisconsin Power & Light
Wisconsin Public Service

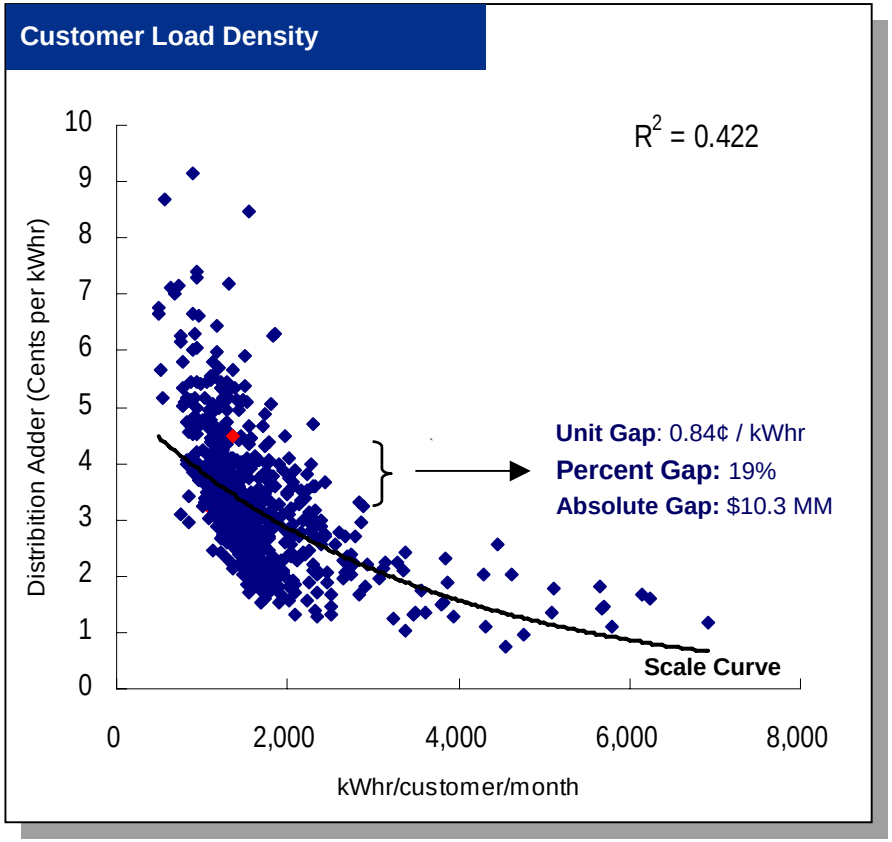
Non-Utility Energy Related Companies

Black & Veatch
Bayou Cogeneration Plant
Doswell Limited Partnership
Asplundh Tree Expert Co.
Electric Power Research Institute (EPRI)
GE Answer Center
GWF Systems
Central Power & Lime
Chevron
Cogenron (Enron)
Amgen
Air Products & Chemicals, Inc. (Cambria)
Newark Bay Cogeneration
A. E. Staley
RJ Reynolds
Caterpillar
Westinghouse
Mission Energy

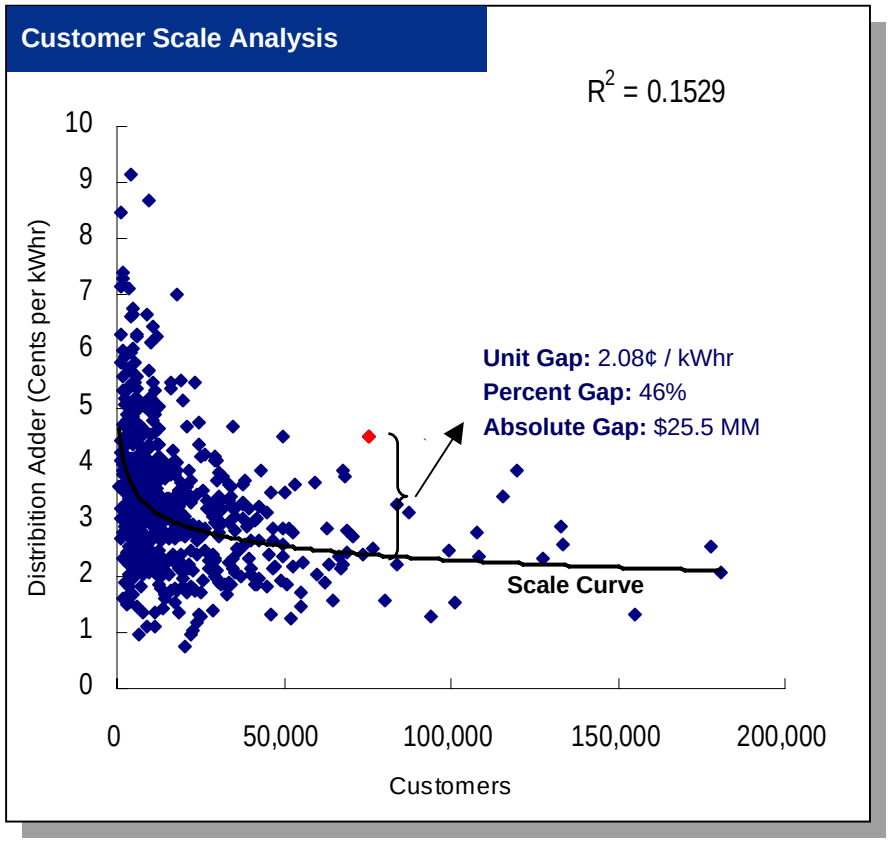
International Utilities

Austa Electric (Aus)
Capricornia Electricity (Aus)
Central Power (N. Z.)
China Light & Power (Hong Kong)
Citipower (Aus)
Delta Electricty (Aus)
Eastern Electricity (U.K.)
Eastern Energy (Aus)
EGAT (Thailand)
Electricity Corporation of New Zealand (N.Z.)
Electricity Transmission Authority (Aus)
Elia (Belgium)
Enel (Italy)
EoN (Germany)
ESB (Ireland)
ESKOM (South Africa)
Far North Electricity (Aus)
Gas & Fuel Corporation (Aus)
HIPD Corp. (China)
Illawarra Electricity (Aus)
Ivo Voimansiirto Oy (Finland)
JiangSu Prov. Elect. Bd. (China)
Landsvirkjun (Iceland)
London Electricity (U. K.)
Loy Yang B (Aus)
Manweb (U. K.)
Mercury Energy (N. Z.)
National Grid (U. K.)
National Power Corporation (Philippines)
National Thermal Power Corporation (India)
Northern Electricity (U.K.)
Orion Energy (Aus)
PowerGrid Singapore (Singapore)
Power & Water Authority (Aus)
PowerLink Queensland (Aus)
Prospect Electricity (Aus)
Punjab State Elect. Board (India)
QTSC (Aus)
Red Electrica (Spain)
Ree Electrica (Portugal)
Scottish Power (Scotland)
Solaris Power (Aus)
South East Queensland Electricity Board (Aus)
South West Power (Aus)
Southwestern Electricity Board (U. K.)
SPI Power Net Victoria (Aus)
Statnett SF (Norway)
Svenska Kraftnät (Sweden)
Sydney Electricity (Aus)
Taiwan Power Corporation (Taiwan)
Tennet (Netherlands)
Transco (Abu Dhabi)
Transelectrica (Romania)
TNB (Malaysia)
Transend (Tazmania)
TransGrid NSW (Aus)
TransPower (N. Z.)
WAPDA (Pakistan)
Wel Energy (N. Z.)
Western Power (Aus)

Chugach Electric's Distribution Adder is about average among peer companies, but when relative size and customer load intensity are considered, their costs are well above expected levels…

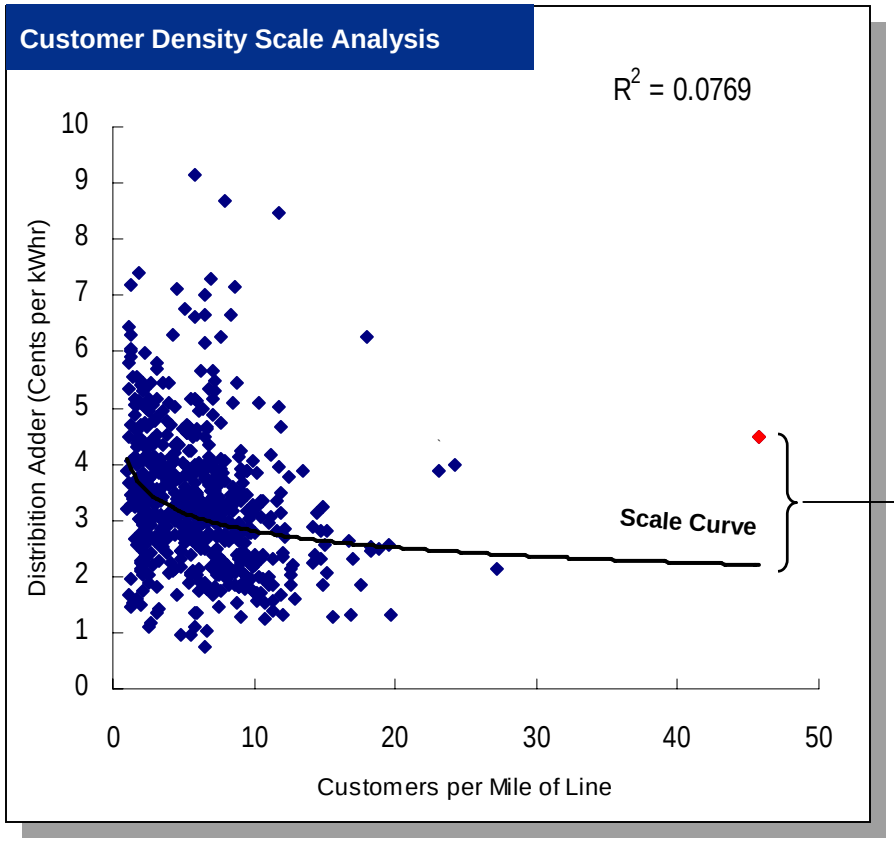


Distribution Adder = DUOS [Distribution Use of System] in international benchmarking.



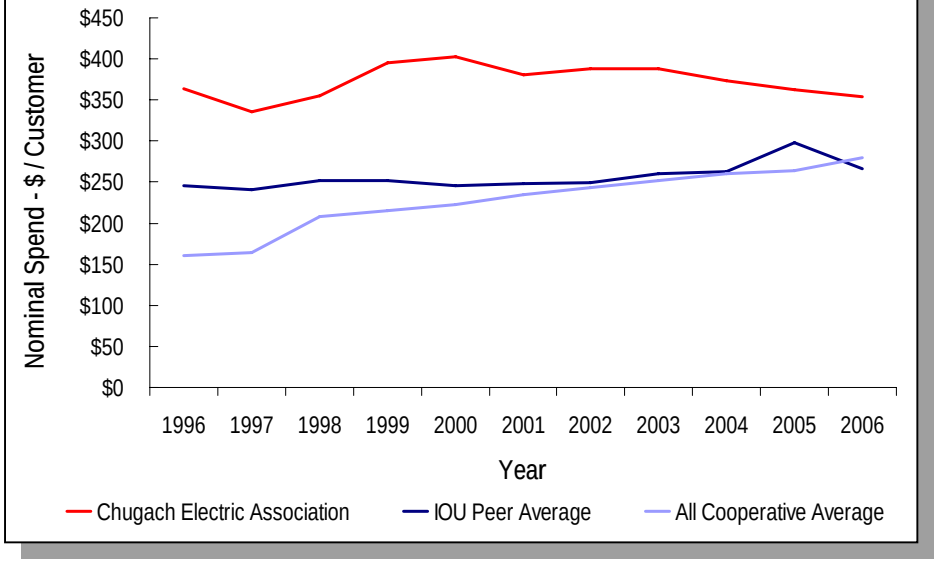
Based on USDA-RUS Loan Data (supplied by the Blue Ribbon Panel)

Relative Customer Density also suggests that CEA should have significantly lower costs…



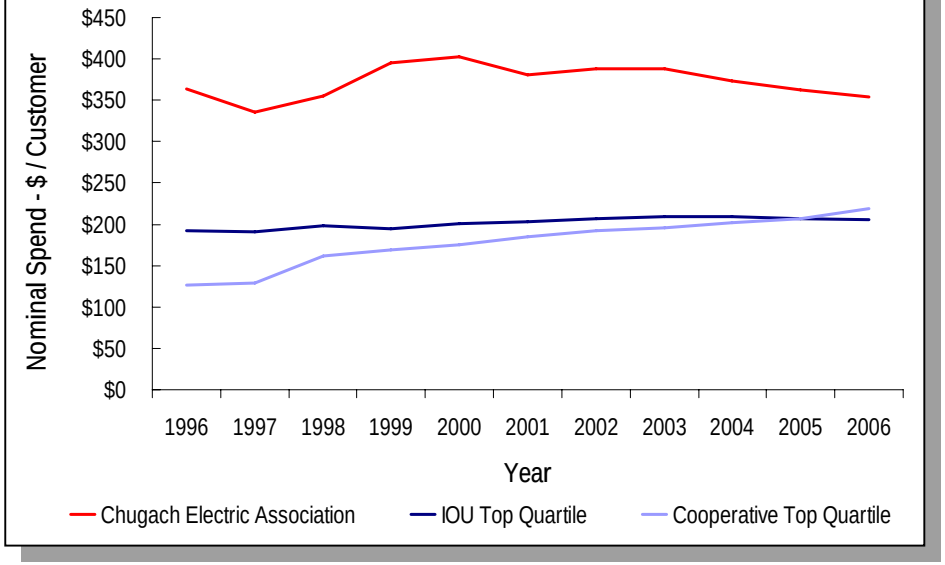
Compared to Two Peer Groups – Smaller IOU's (<165,000 Customers) and All Electric Distribution Cooperatives, CEA's O&M Spending Per Customer Has Improved, But Is Still Higher than Average.

Spending vs. Peer Group Average



* 2006 Co-op data projected

Spending vs. Peer Group Top Quartile

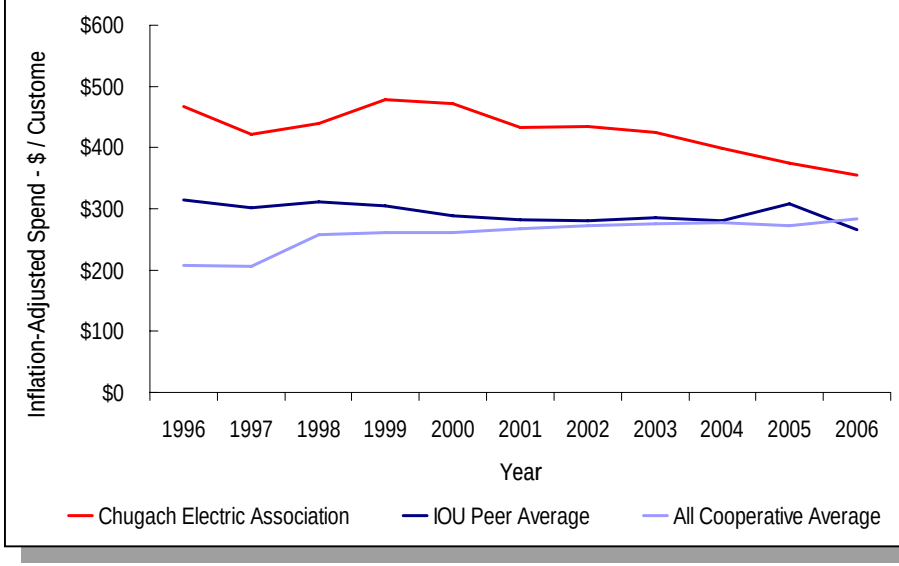


* 2006 Co-op data projected

Nominal O&M Spend ($ / Customer)

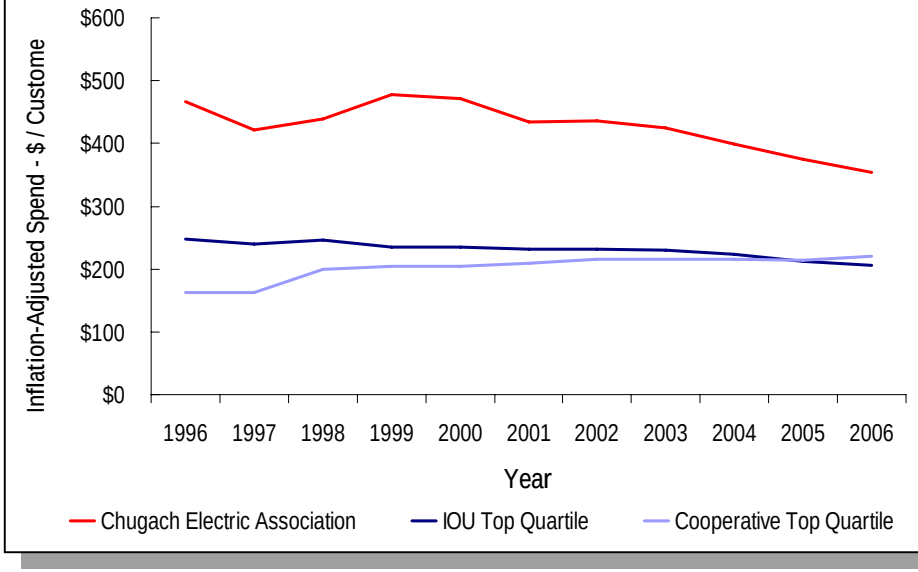
Adjusting the Results For Inflation Doesn't Change These Conclusions, But Does Somewhat Moderate The Apparent Efficiency Gap …

Spending vs. Peer Group Average



* 2006 Co-op data projected

Spending vs. Peer Group Top Quartile

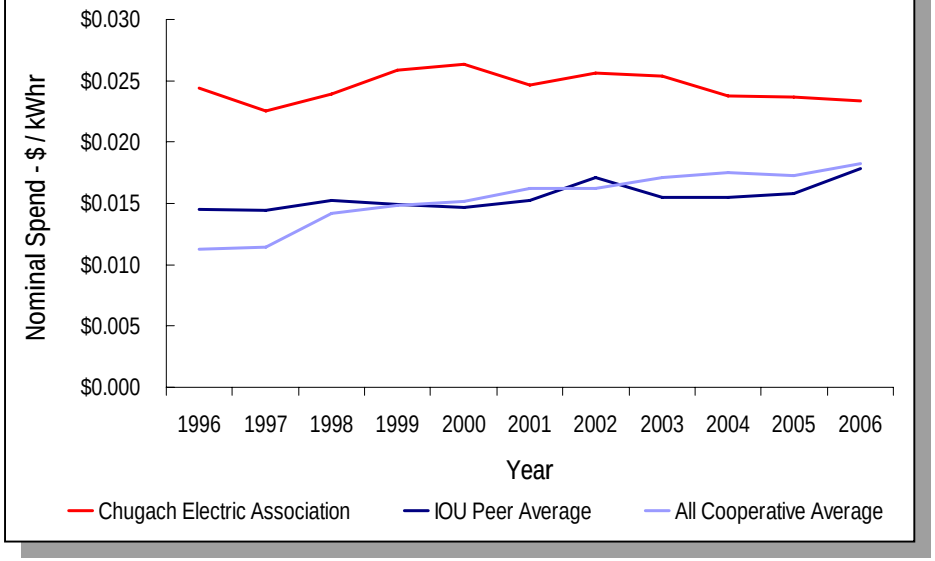


* 2006 Co-op data projected

Inflation-Adjusted O&M Spend ($ / Customer)

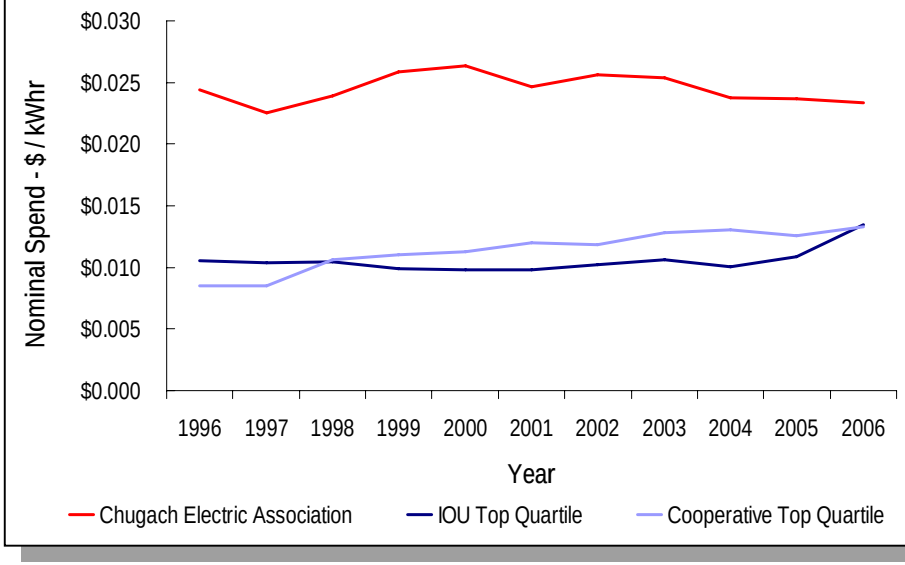
CEA's O&M Spending Per KWhr Is Higher Than Average Compared to Peers, And Is Almost Double the Top Quartile For Each Peer Group.

Spending vs. Peer Group Average



* 2006 Co-op data projected

Spending vs. Peer Group Top Quartile

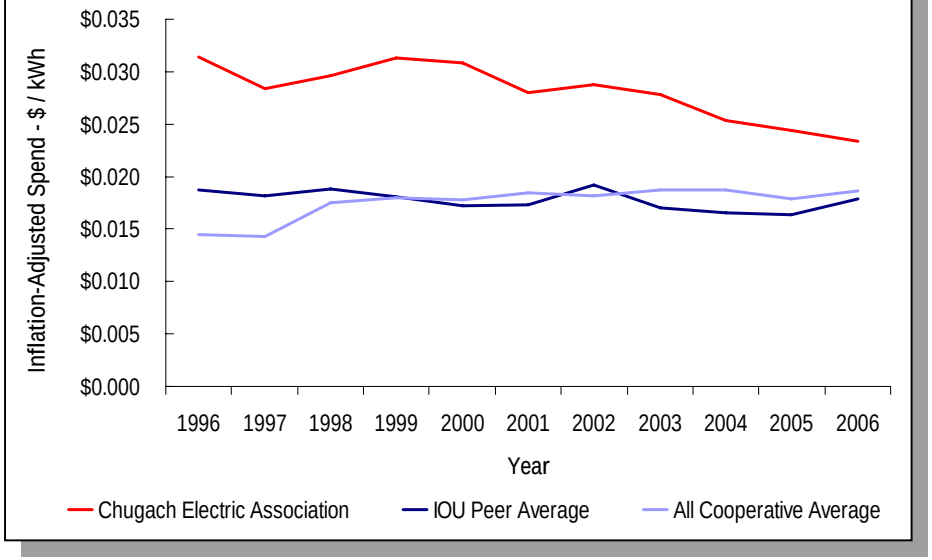


Nominal O&M Spend ($ / KWhr)

* 2006 Co-op data projected

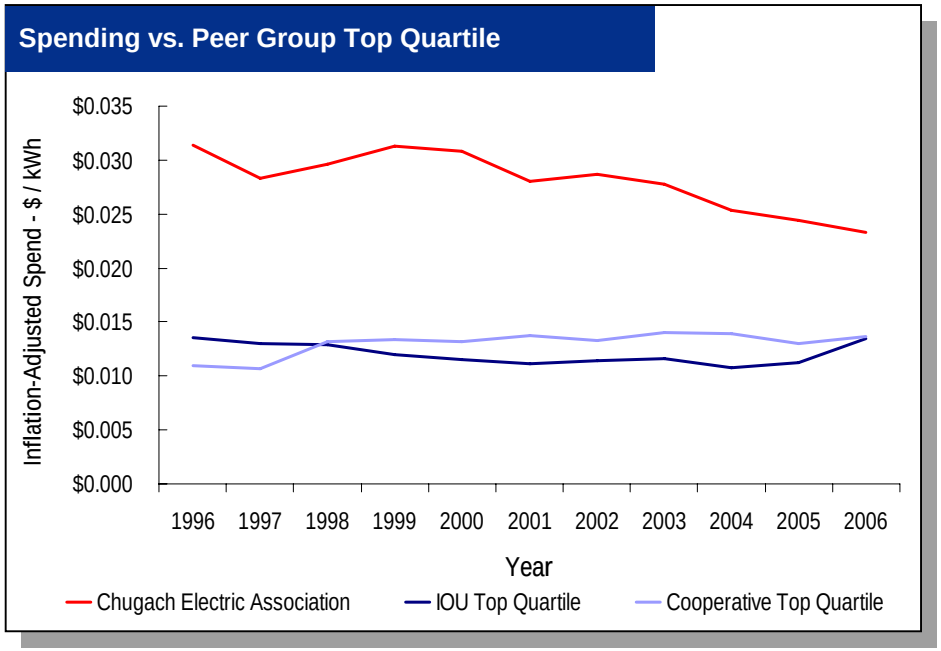
Again, Adjusting the Results For Inflation Doesn't Change These Conclusions, But Does Somewhat Moderate The Apparent Efficiency Gap

Spending vs. Peer Group Average



* 2006 Co-op data projected

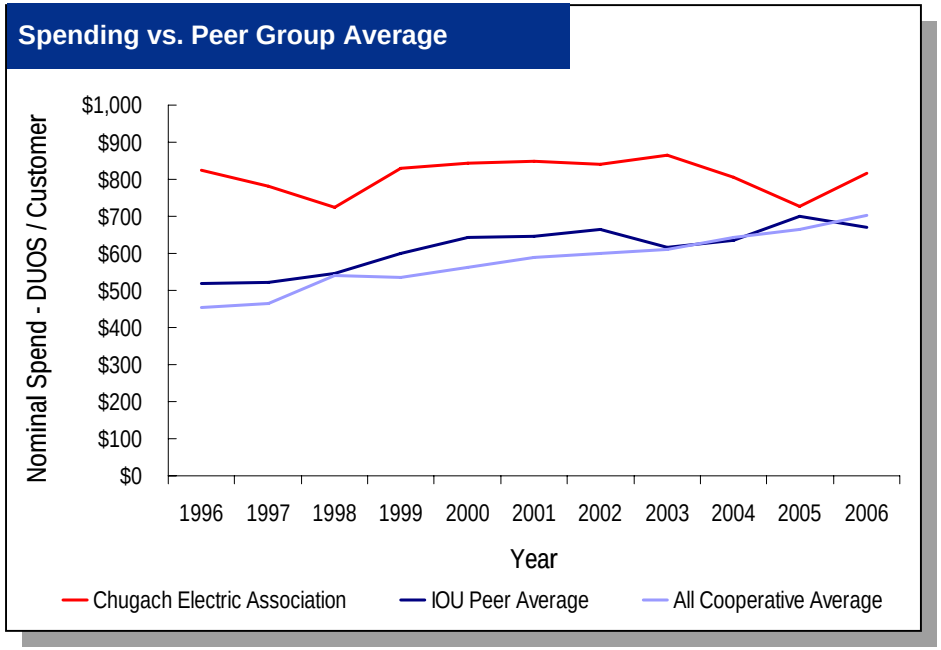
Spending vs. Peer Group Top Quartile



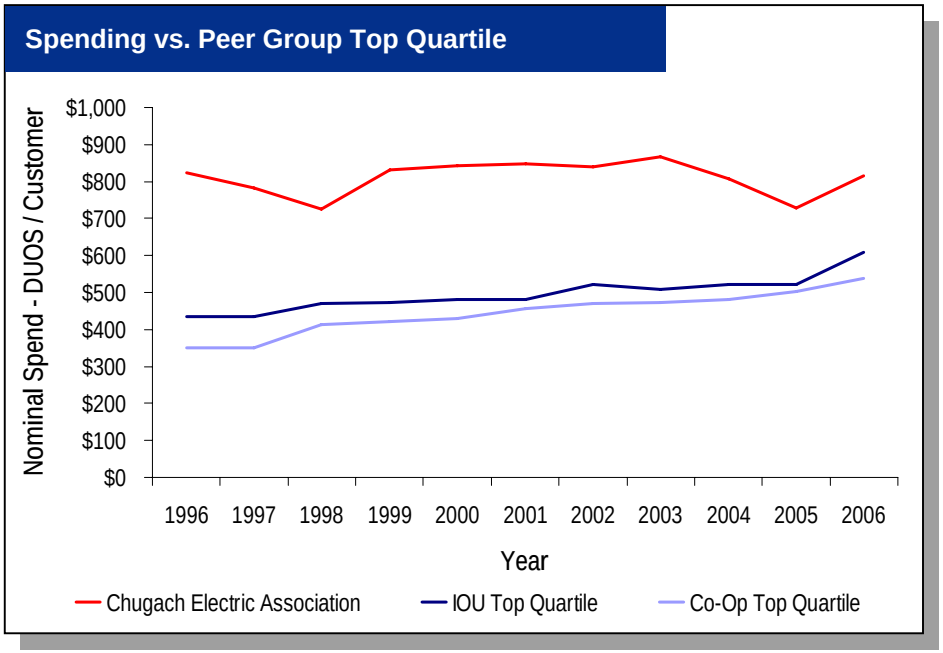
* 2006 Co-op data projected

Inflation-Adjusted O&M Spend ($ / kWhr)

CEA's Distribution Adder (DUOS) Per Customer Is a Bit Higher Than Average, And 25 to 30% Above the Top Quartile For Each Peer Group.



* 2006 Co-op data projected

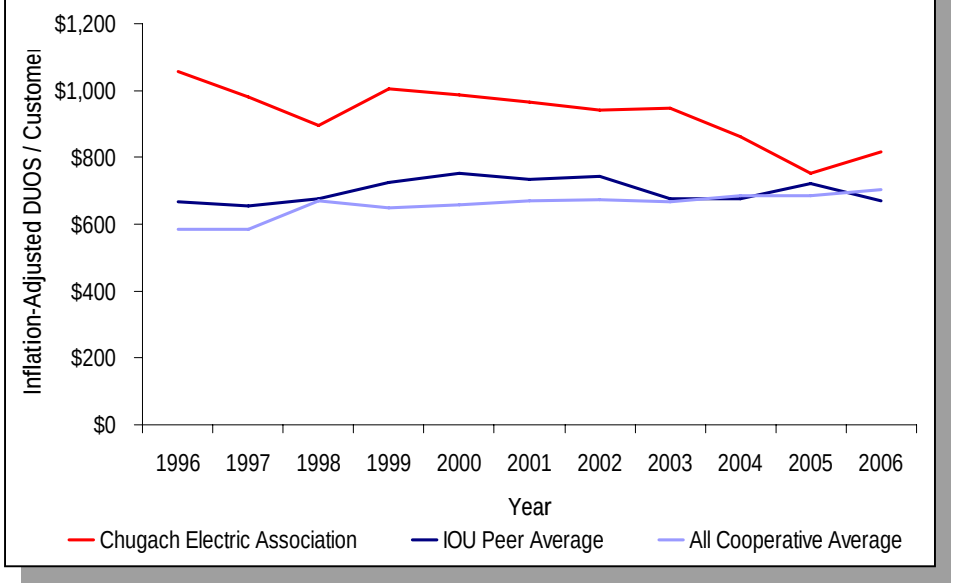


* 2006 Co-op data projected

Nominal Spend (DUOS / Customer)

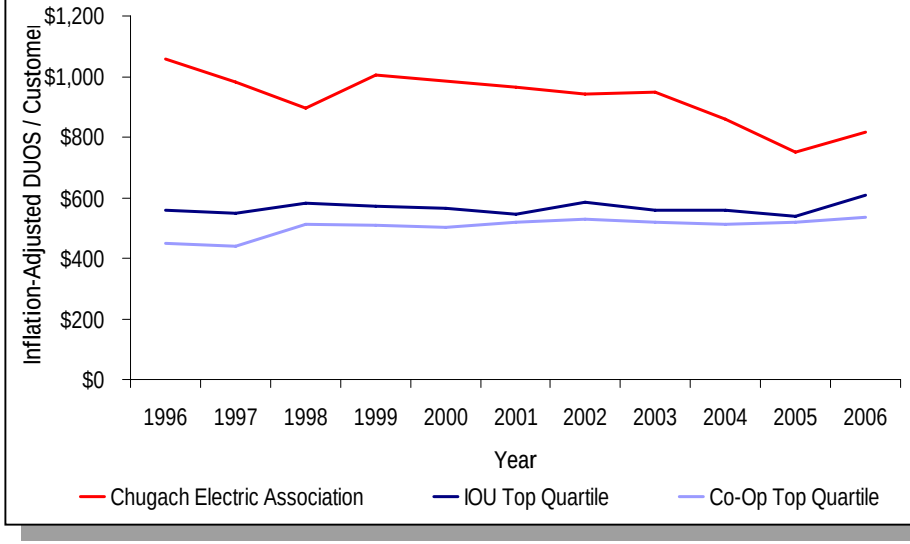
Once Again, Adjusting the Results For Inflation Doesn't Change These Conclusions, But Does Somewhat Moderate The Apparent Efficiency Gap.

Spending vs. Peer Group Average



* 2006 Co-op data projected

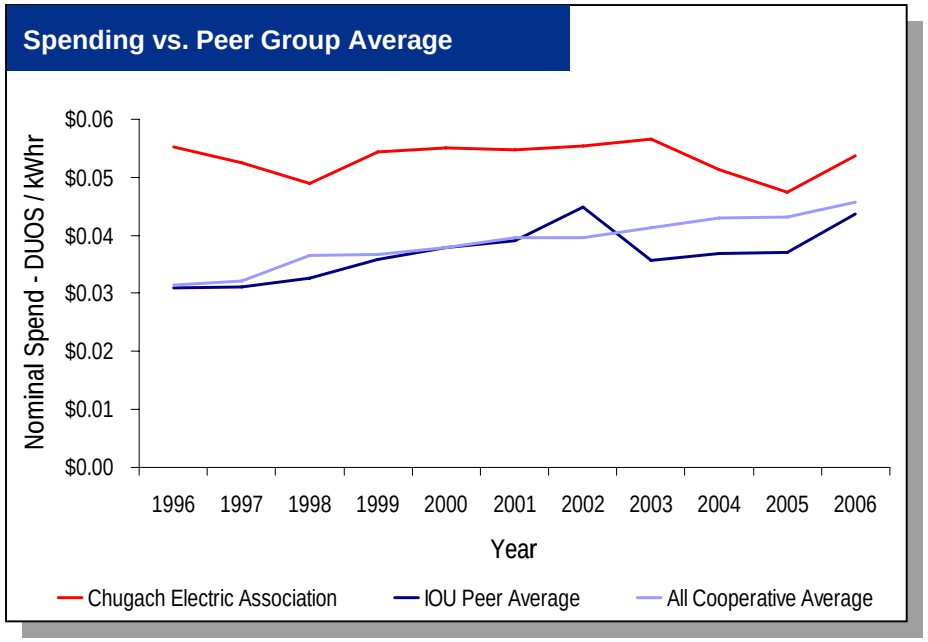
Spending vs. Peer Group Top Quartile



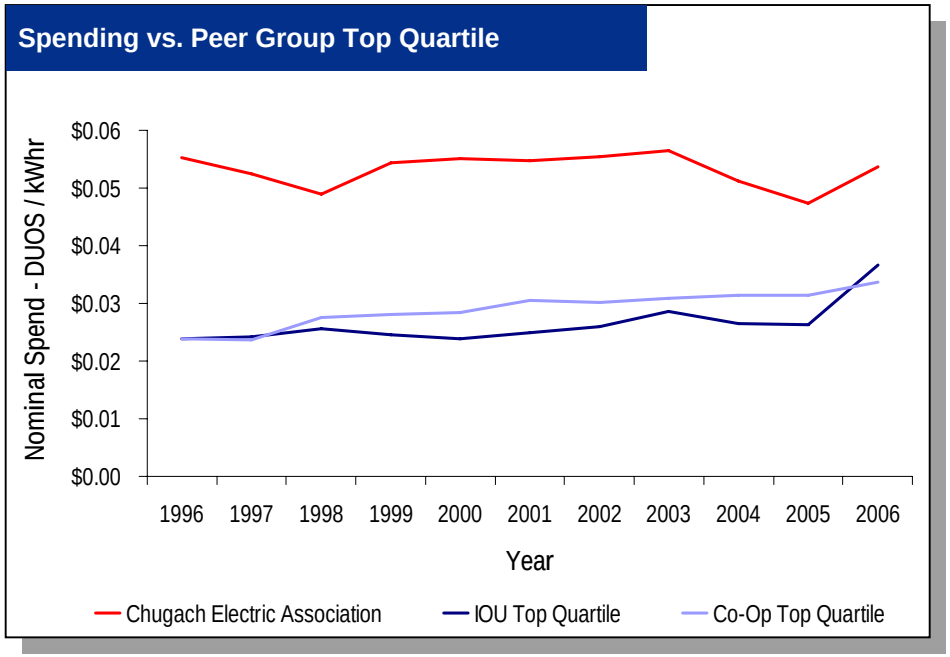
* 2006 Co-op data projected

Inflation-Adjusted Spend (DUOS / Customer)

CEA's Distribution Adder (DUOS) Per kWhr Is Higher Than Average, And More Than 35% Above the Top Quartile For Each Peer Group.



* 2006 Co-op data projected

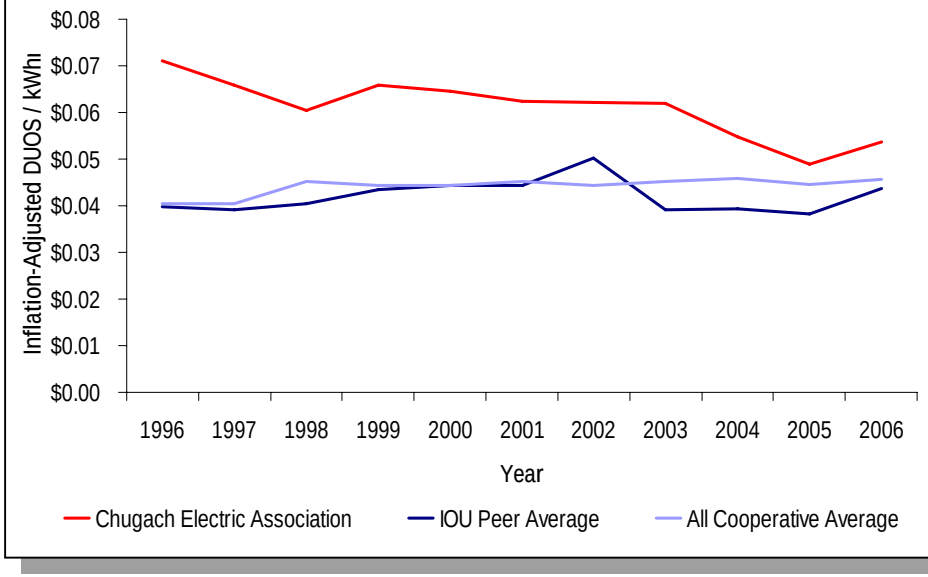


* 2006 Co-op data projected

Nominal Spend (DUOS / kWhr)

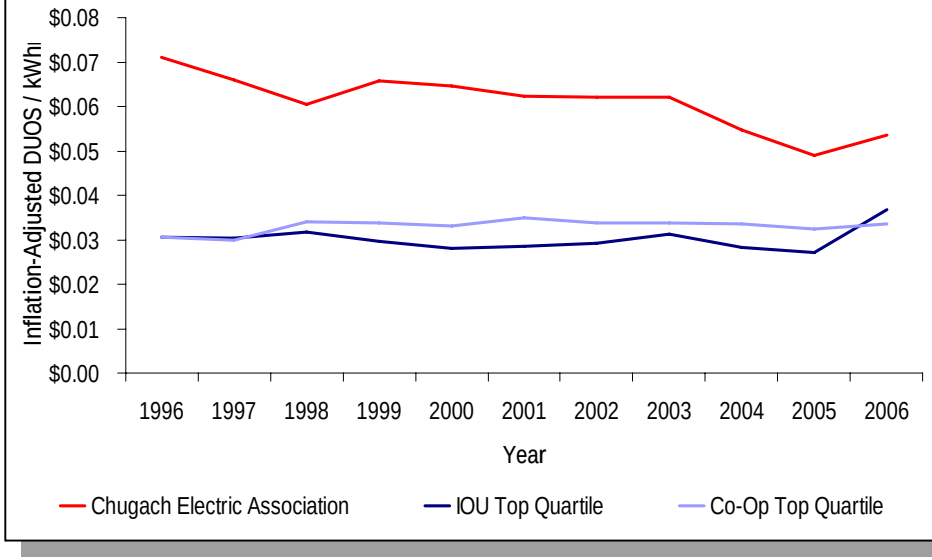
Again, Adjusting the Results For Inflation Doesn't Change These Conclusions, But Does Somewhat Moderate The Apparent Efficiency Gap.

Spending vs. Peer Group Average



* 2006 Co-op data projected

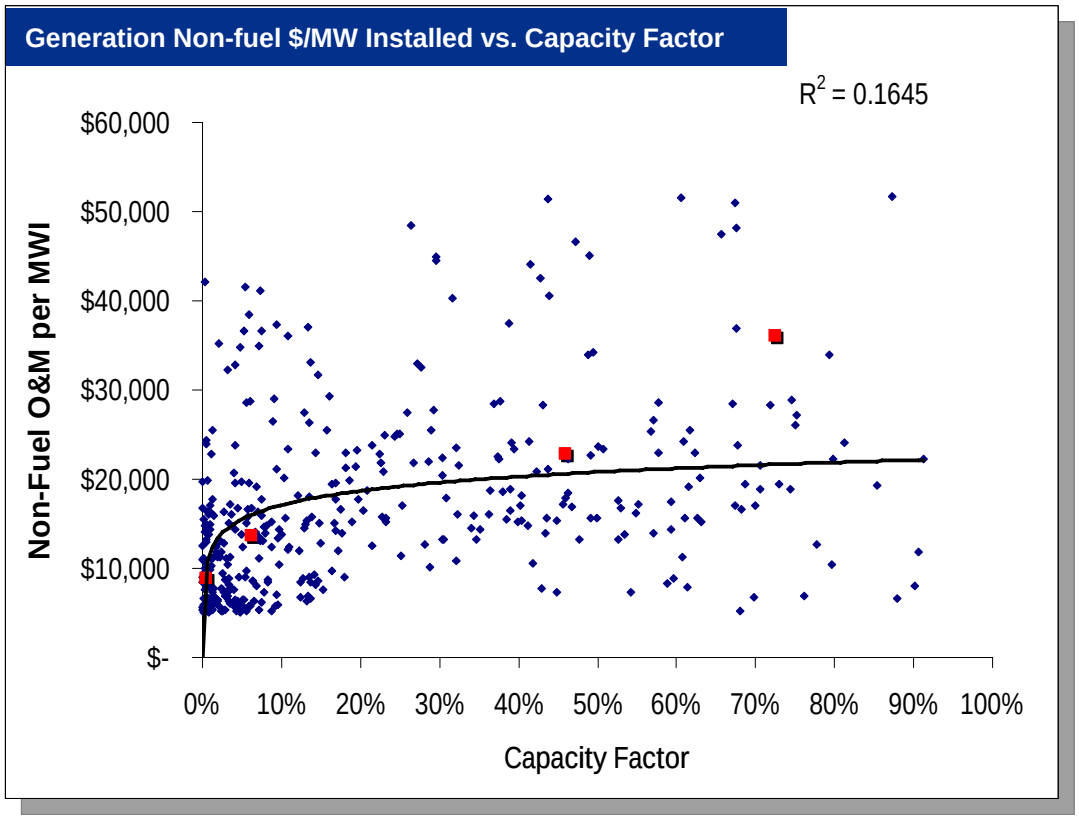
Spending vs. Peer Group Top Quartile



* 2006 Co-op data projected

Inflation-Adjusted Spend (DUOS / kWhr)

CEA's Generation Non-Fuel Costs Are High When Compared to Similar Gas Fired Peer Companies, Even After Capacity Factor Is Considered.



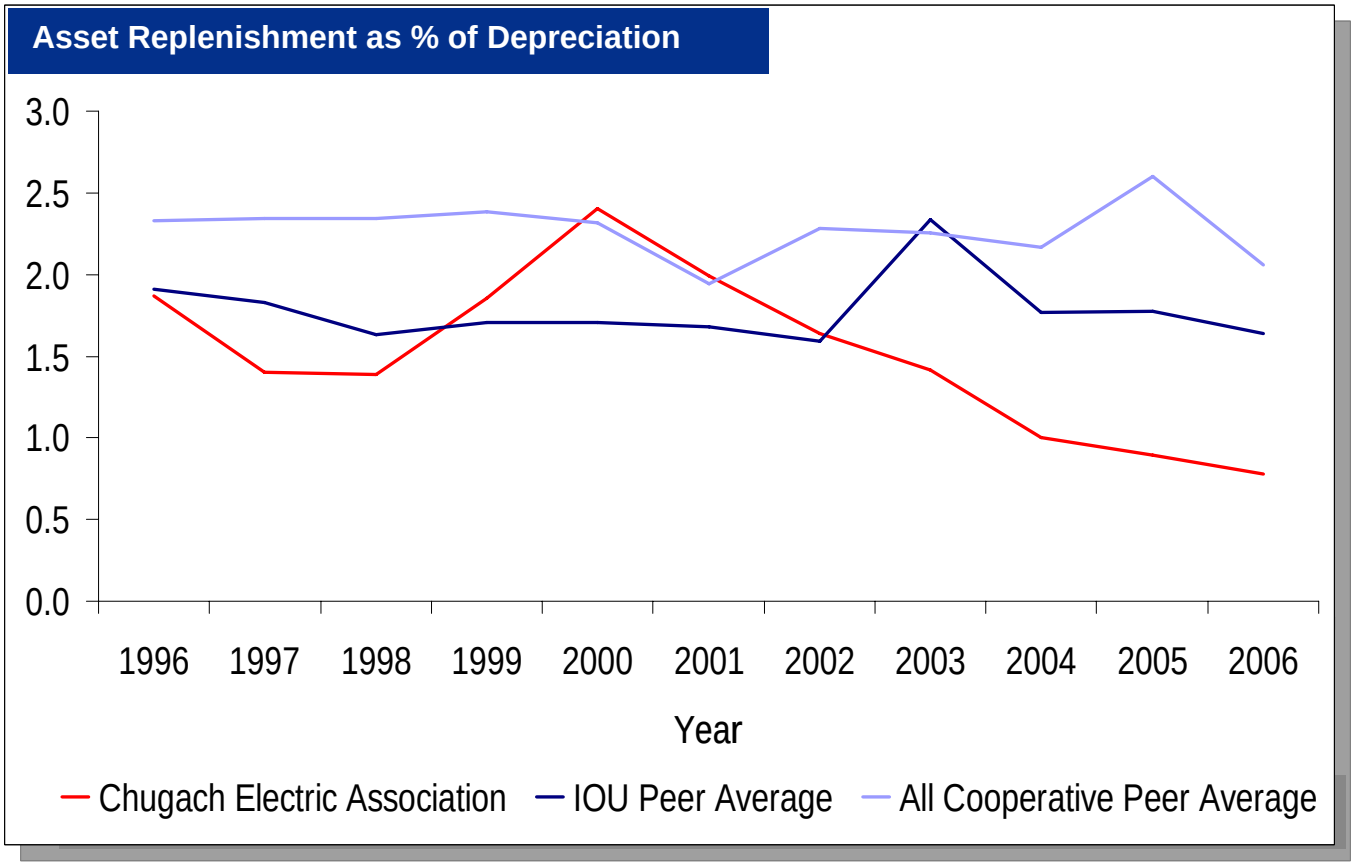
- CEA's Non-Fuel Cost per MW Installed varies dramatically by plant:
  - Beluga CC - $36,001
  - Beluga CT - $22,803
  - Bernice Lake- $13,705
  - International - $8,929

- With Beluga's higher output, a slightly higher cost per installed MW would be expected.

- But Beluga CC is much higher than that, with a gap to average cost of approximately $ 4.0 M, or 47%.

- The other CEA plants are only slightly above average cost, but still significantly higher than what is achievable.

CEA's Capital Investment In The Distribution Network Grew In The Late 90's, But Has Been Steadily Declining Relative To Other Distribution Companies For The Past 6 Years.



Plant Additions / Distribution Depreciation

Gap Analysis

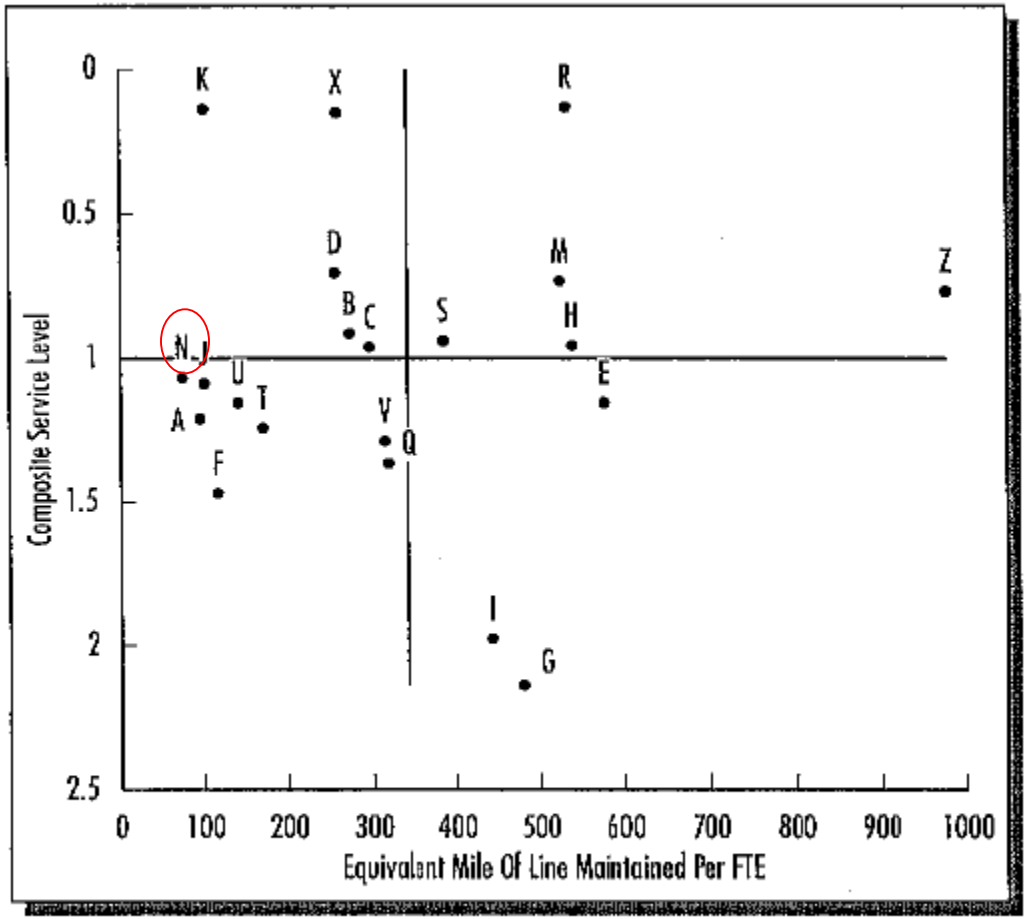
Gap Analysis - 2006

	Absolute Gap to Top Quartile	% above Top Quartile	Absolute Gap to Average	% above Average
Spend per Customer	$134	61%	$71	25%
Spend per kWhr	$0.0096	71%	$0.0047	25%
DUOS per Customer	$279	52%	$112	16%
DUOS per kWhr	$0.0201	60%	$0.0080	17%

In Addition To The Preceding Analysis, We Reviewed The Results Of More Detailed Benchmarking Work That We Conducted For Chugach Several Years Ago.

- This detailed Benchmarking work was conducted during the period 1995 through about 1998.
- The depth of information analyzed and the rigor of the normalization processes used in that work were significantly greater than in the high level analysis presented earlier in this report.
- The accuracy of the results produced from that earlier work, and therefore the credibility of the conclusions that could be drawn from it, were also higher.
- These results are admittedly dated, but our analysis of spending presented on pages 8-15 suggests that while CEA Has Improved Its Overall Efficiency vis-à-vis both IOU and Co Op averages, significant gaps likely remain.
- We have included several pages of this earlier analysis to illustrate the detail and rigor involved, as well as to demonstrate the magnitude and likely nature of the opportunities that existed at the time.
- Clearly, such analysis would need to be updated before management or the Board would be able to rely on it in making future decisions.

One Of The Areas Benchmarked Was Line, Facilities, and Equipment Maintenance – Chugach [Company N] Was About Average In Service Level, But Very High Cost.



Service Level Drivers

Composite Service Level

- OH Primary Sustained Outages Caused By Line, Equipment Failures Per 1000 Miles Of OH Line Maintained
- URD/UCD Primary Sustained Outages Caused By Line Equipment Failures Per 1000 Miles Of URD/UCD Line Maintained

Productivity Drivers

Total Line Maintenance Full Time Equivalent Employees (FTE)

- Company FTEs
  - Regular Time FTEs
  - Overtime FTEs
- Contractor FTEs

Best Performers

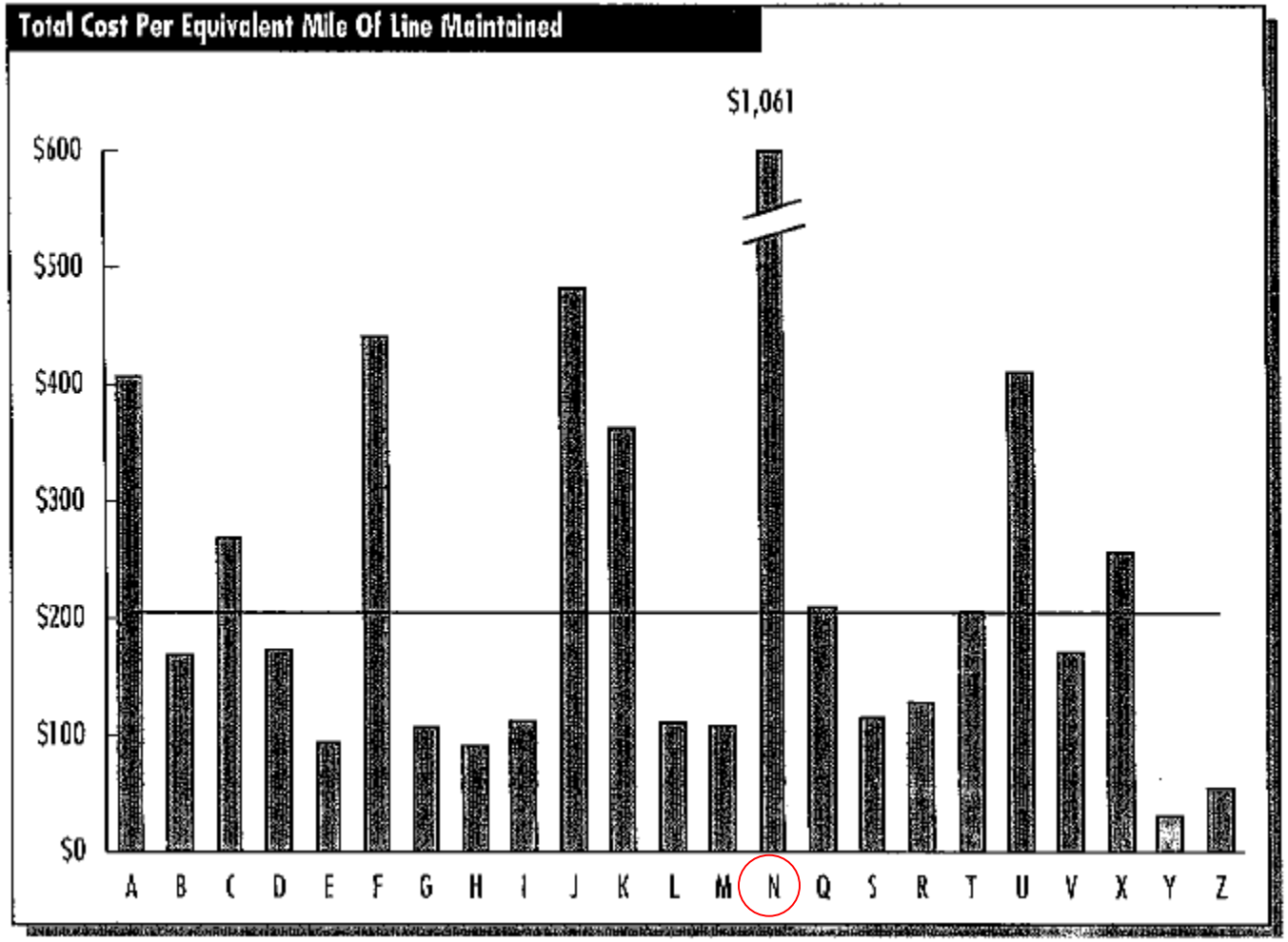
Blue Ridge	Walton
First Electric	
Flint	
Lee County Electric	
New Hampshire Electric	

Outlier - Company Y (1926.0.38)

Outlier - Company L (514,4.79)

Numbers Weighted By The Percent Of Total Line Miles Of Overhead Or URD/UCD

This High Cost Per Mile Of Line Maintained Was More Than 3 Times The Average Cost Of The Peer Group.



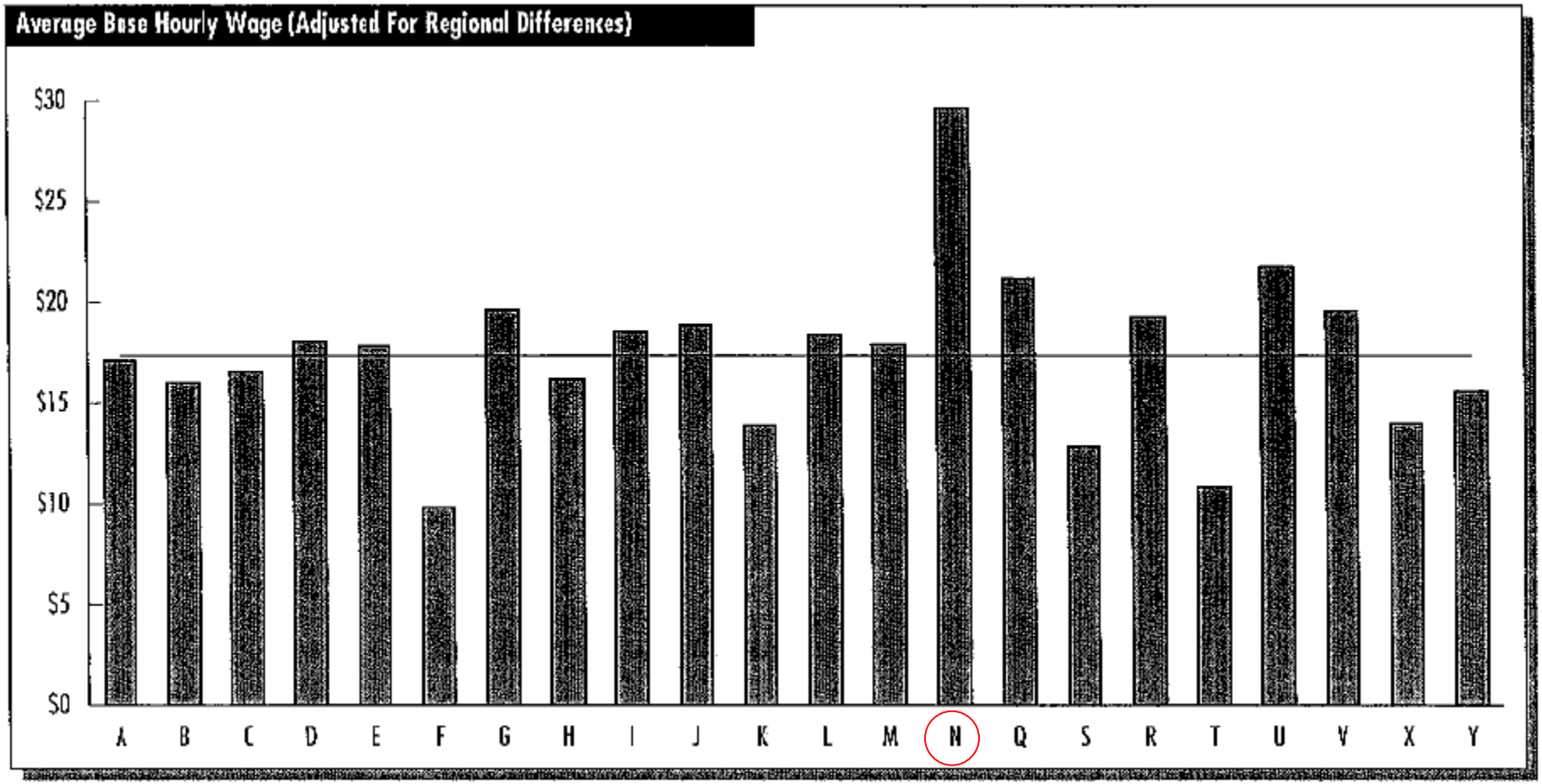
Total Line Maintenance Cost

- Company Costs
  - Company Labor Cost (Adj.)
  - Vehicle & Equipment Cost
- Contractor Cost
  - Contractor Labor Cost
  - Contractor Non-Labor Cost

Equivalent Mile Maintained

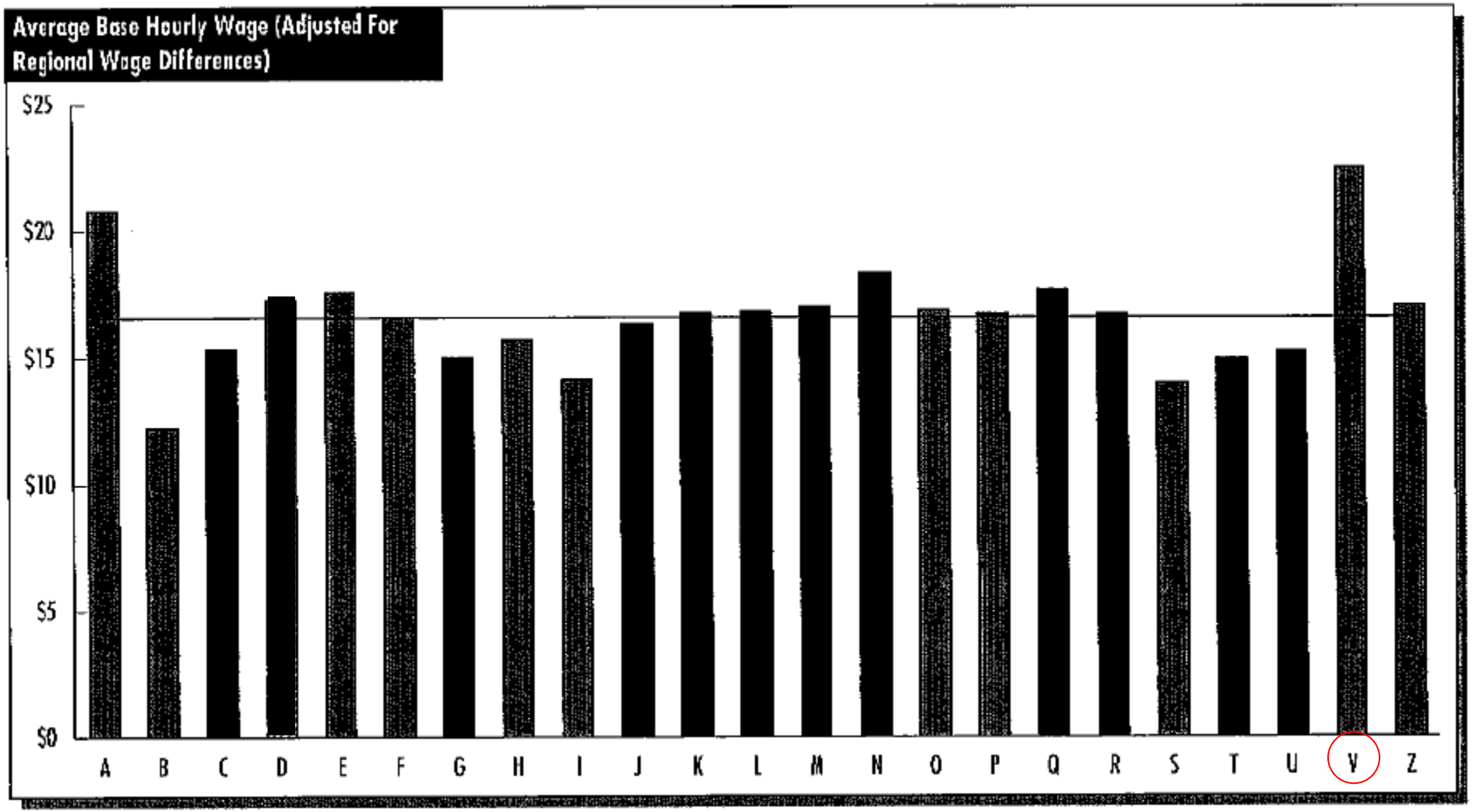
- Miles Of URD/UCD Line
- Miles Of Overhead Line
- Adjusted For:
  - Customer Density
  - Location
  - Number Of Circuits
  - Accessibility

One Possible Reason For Their Relatively High Cost Was Very High Wage Rates.

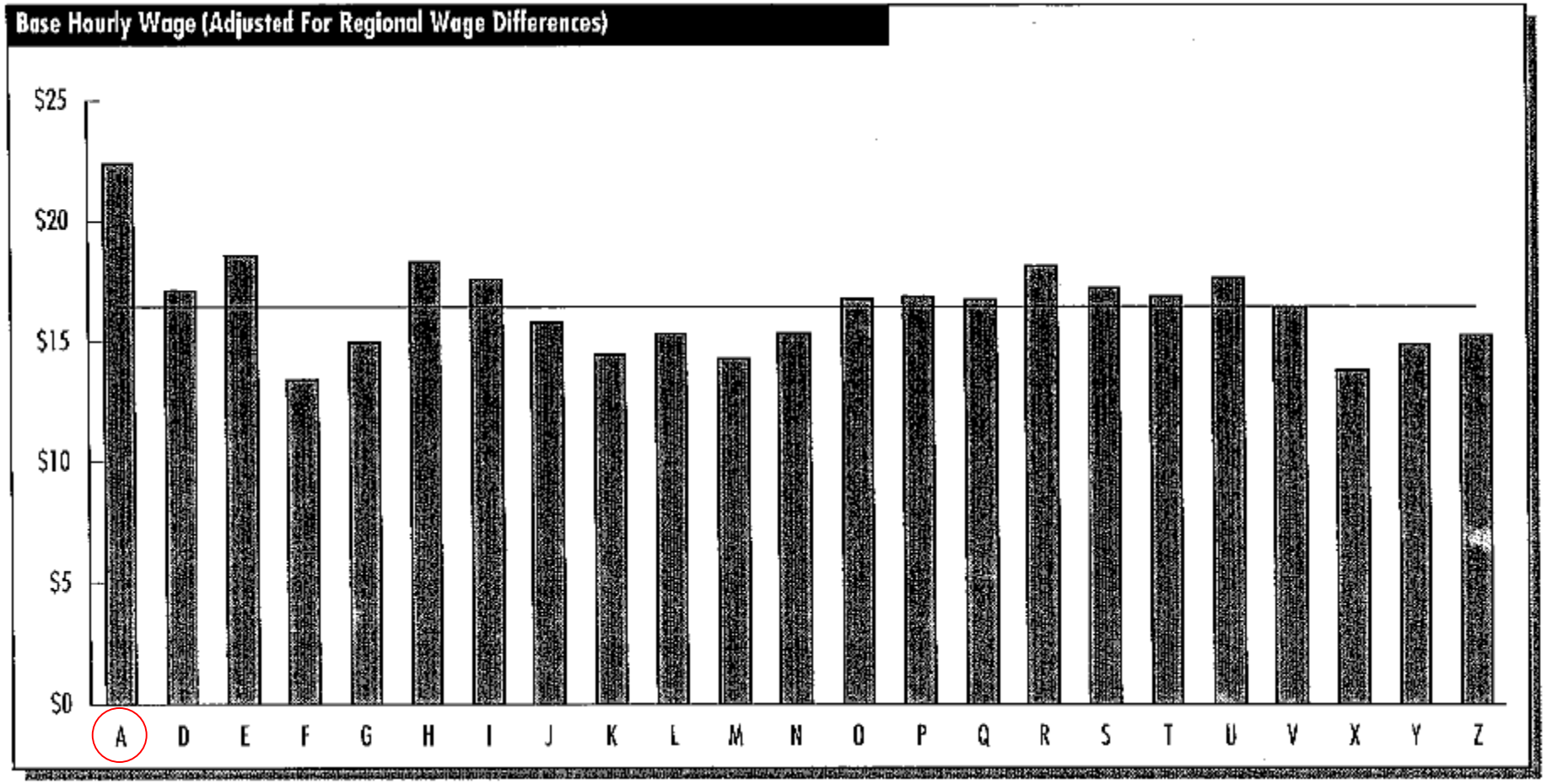


Even After Adjusting To Correct For Higher Than Average Wages In Alaska Compared to The Lower 48, Chugach Was Nearly 2/3 Higher Than Would Be Expected.

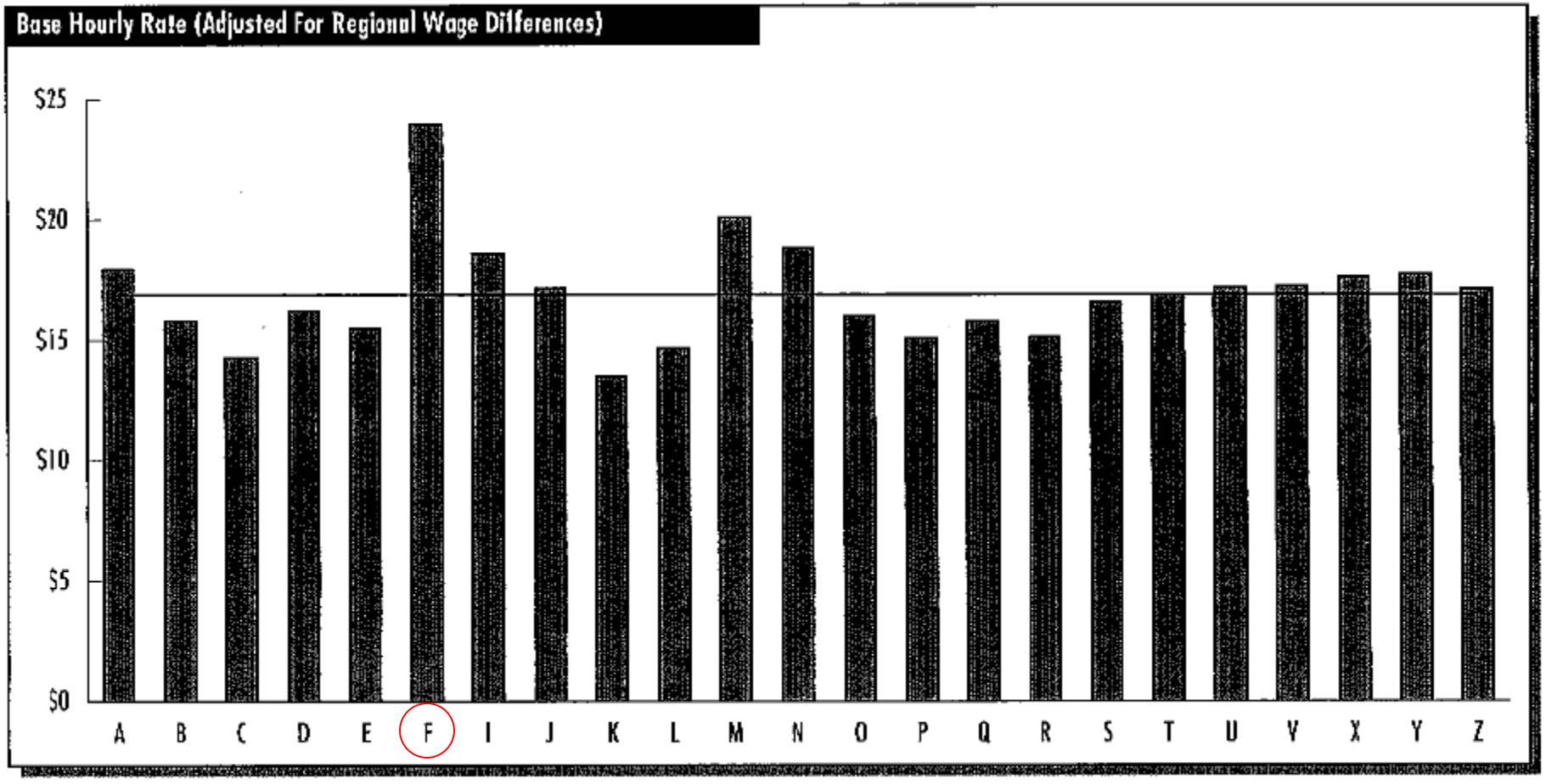
This Relatively High Wage Rate Was Present In Several Other Areas As Well. For Example, In Installation / Replacement of URD/UCD services [Company V] …



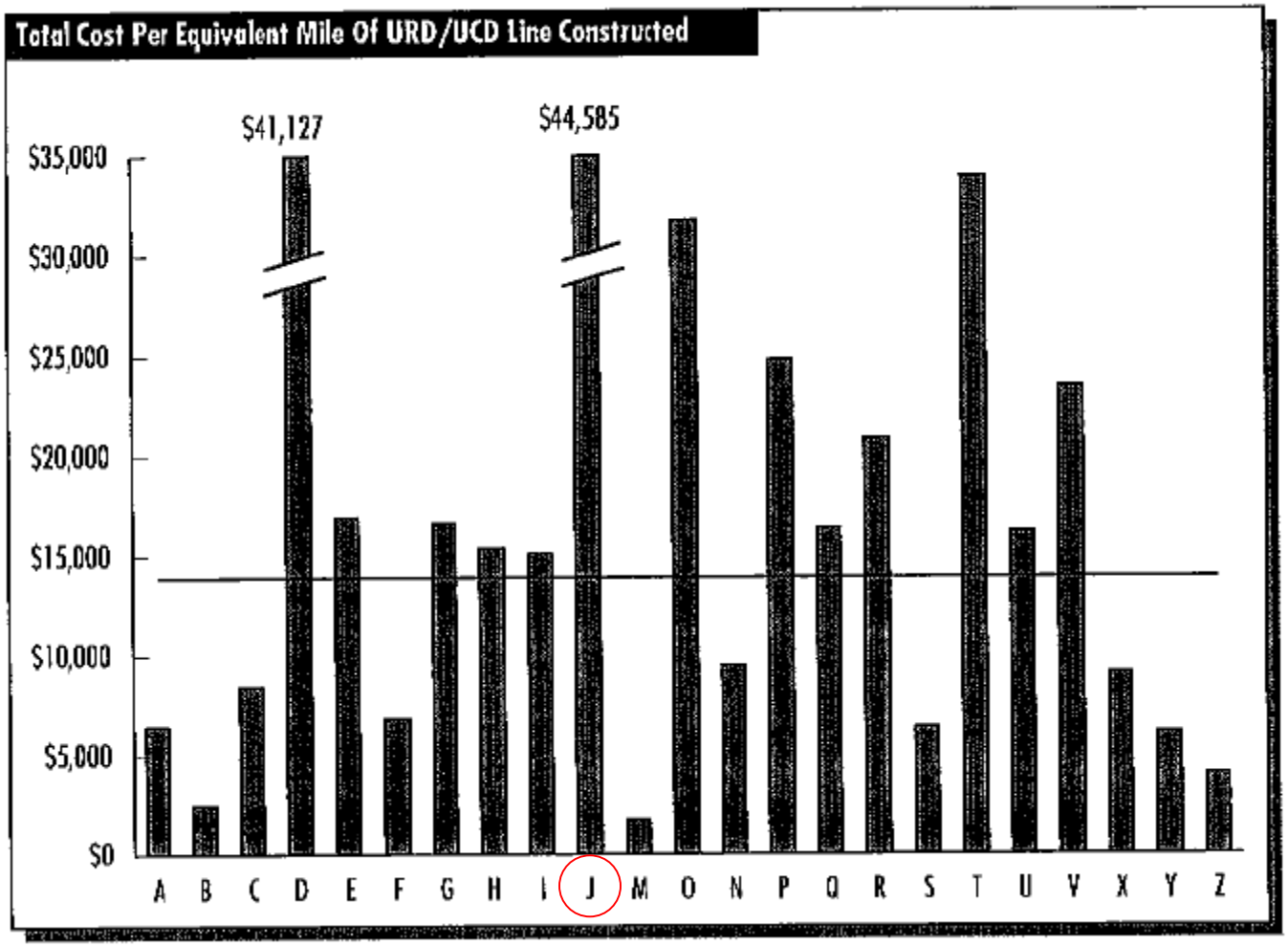
… And In The Installation / Replacement of Overhead services [Company A] …



… And Trouble Calls [Company F].



Chugach's Overall Cost Per Equivalent Mile Of URD/UCD Line Constructed Was More Than 3 Times The Group Average [Company J]…



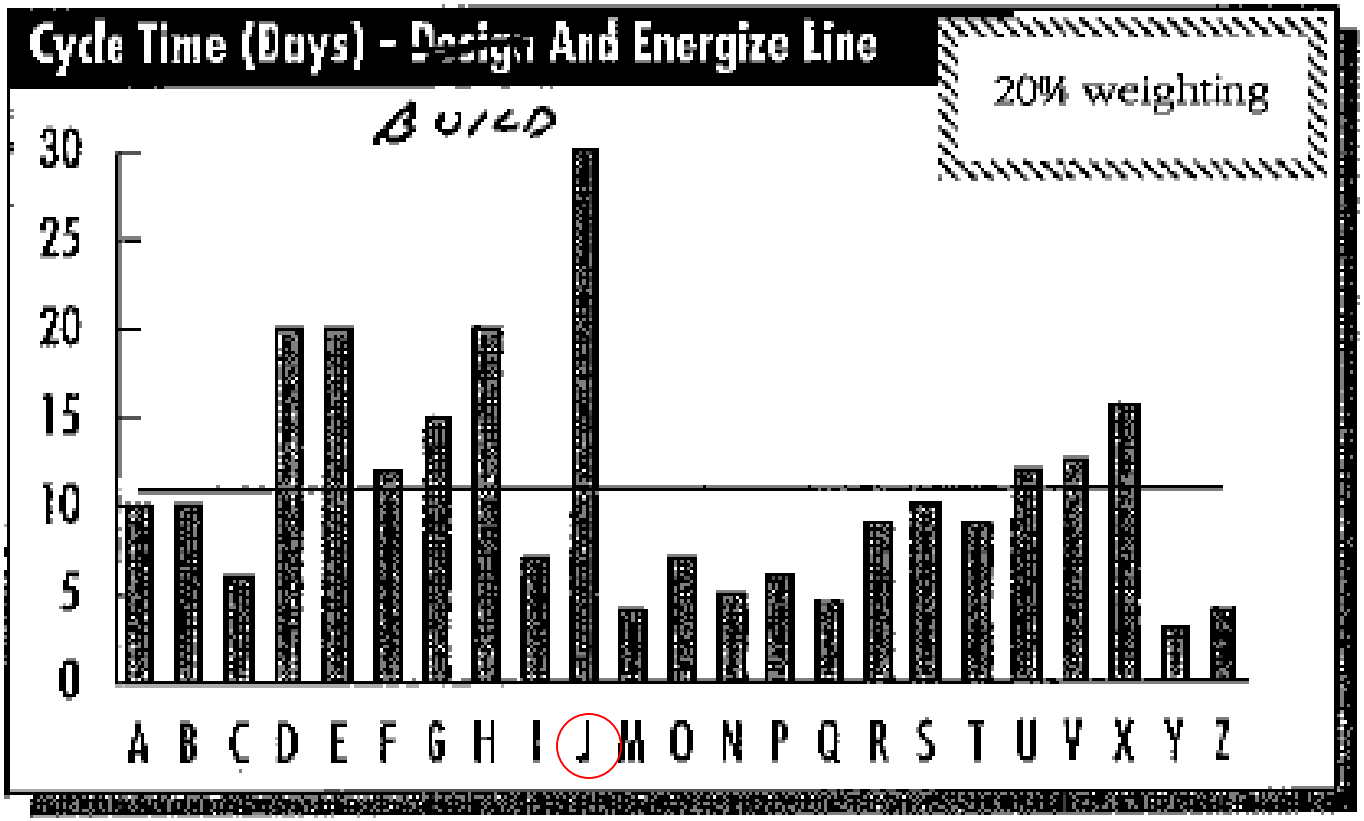
Total URD/UCD Construction Costs

- Company Costs
  - Company Labor (Adj.)
  - Vehicle & Equipment Cost
- Contractor Cost
  - Contractor Labor Cost
  - Contractor Non-labor Cost

Equivalent Miles Constructed

- New URD/UCD Cable Adjusted For:
  - Soil Conditions
  - Trenched By Company/Developer
- Replaced URD/UCD Cable Adjusted For:
  - Soil Conditions

This May Have Been Partially Driven By Factors Beyond Wage Rates. For Example, In URD/UCD Line Construction, Chugach Took Nearly Twice As Long As The Average Co Op To Build A Standard Line Extension…



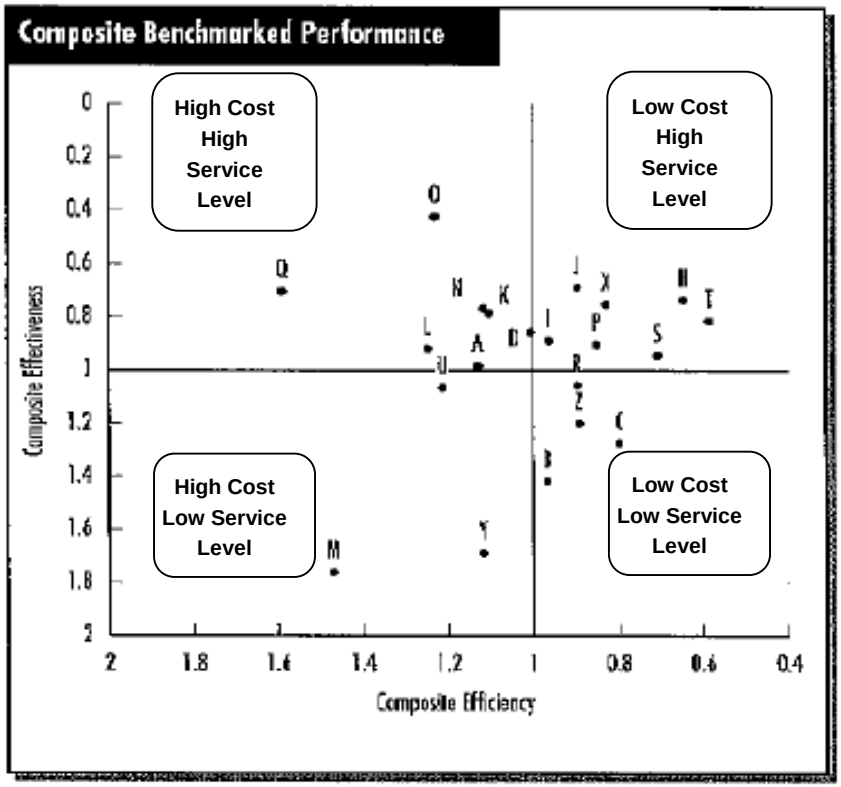
Part Of This Longer Cycle Could Have Been Driven By The Environment In Alaska, But Our Analysis Focused On The Process For Getting Work Done, And Likely Reflected Practices In Place During The Spring And Summer Construction Period…

A Summary Extract From These Earlier Analyses Was Presented In The Report At The Time. This Could Have Been An Effective Framework For Monitoring Performance Improvement Over Time.

Introduction to the Results ….

In Order To Provide Insight Into Your Competitive Position, We Took A Snapshot Of Composite Benchmarked Performance

The scope of this analysis covers only 7 activities: Line Design & Planning, Underground construction, Overhead construction, Install overhead services, Install underground services, Line maintenance, Trouble calls



Composite Service Level Is A Weighted Average Of Your Normalized Service Level Scores Across The 7 Subfunctions. Composite Productivity Is A Weighted Average Of Your Normalized Productivity Scores Across The 7 Subfunctions

Top Innovative Practices

- Smaller, multi-skilled crews
- Partnership with the union
- Use of contractors to shave workload peaks
- Effective implementation of integrated work management systems
- Effective application of CAD, automated standards, AM/FM, GIS
- Risk management of maintenance cycles and effort
- Use of temporary employees to shave peaks
- Job-site reporting and delivery of materials and equipment
- Guaranteed standards for new service connections
- Automated trouble call analysis systems