Chattanooga
Chattanooga

innovation district

A 140-acre innovation district has been established downtown. The business accelerator Co.Lab will anchor the district, which encompasses a dozen key businesses and organizations.

1. Society of Work
2. Lamp Post Group
3. EPB
4. Public Library
5. Coyote Logistics
6. Swifting Ventures
7. Causeway
8. Public Education Foundation
9. Lamp Post/Cornerstone Bank
10. James A. Mapp Building
11. Edney Building — headquarters
12. AT&T

Source: The Enterprise Center

Design: Laura W. McKee
Innovation
Chattanooga
TVA Power Operations
DECEMBER 2015
EXTREME RAINFALL

Sometimes the biggest news is what didn’t happen. December 2015 brought torrential rain to the eastern U.S., including the Tennessee Valley. And while serious flooding did strike other states, the good news in our region was the flood damage avoided — thanks to coordinated use of TVA’s system of dams to control the water.

8.61 INCHES DECEMBER RAINDROP IN THE VALLEY
184% OF NORMAL
Wettest December since 1991 and 6th wettest in records going back 126 years

6.07 INCHES DECEMBER RUNOFF IN THE VALLEY
288% OF NORMAL
Set a new record for highest December runoff — previous record was 5.82 inches set in 1990
Weather Challenges
RISE IN LAKE LEVELS

- Fontana: 31 feet
- Hiwassee: 24 feet
- Douglas: 21 feet
- Blue Ridge: 19 feet
- Nottely: 14 feet
- Chatuge: 8.5 feet

Within 3 feet of the top of the gates for Fontana, Hiwassee, Douglas, Blue Ridge, Nottely, and Chatuge.
Weather Challenges
Financial Performance Update
Pole Attachments

TYPICAL POLE DEPICTION:
NOT TO SCALE

Support Space

Safety Space

Cable Telephone

Electric
Retirement System
## Retirement System

<table>
<thead>
<tr>
<th></th>
<th>FY2000</th>
<th>FY2015</th>
<th>FY2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits Paid</td>
<td>$290M</td>
<td>$690M</td>
<td>~$800M</td>
</tr>
<tr>
<td>Pension Liability</td>
<td>$5.5B</td>
<td>$12.8B</td>
<td>?</td>
</tr>
</tbody>
</table>
Operational Performance

Serve the people of the Tennessee Valley

Maintain low rates

Meet reliability expectations & provide a balanced portfolio

PEOPLE PERFORMANCE EXCELLENCE

Be responsible stewards

Asset Portfolio

Rates

Stewardship

Debt

Live within our means
Energy

Nuclear – Watts Bar Unit 2
Energy

Natural Gas – Allen
Energy

Solar
Energy

Hydro
Stewards of the Environment
Stewards of the Environment

Public Meetings
Economic Development
Economic Development

Stimulating economic development and investment in the Valley

FY 2016 thru December results

30,400 jobs created and/or retained

$4.2 billion of capital investment
Energy
Energy

Engineer of the Year
Committee Charters
Board Practice on Confidential Information
Audit, Risk, and Regulation Committee
Purpose

Seek TVA Board Approval of Determination on Pole Attachment Regulation:

• Approval of cost methodology
• Delegation to CEO to take actions for implementation
Background
TVA staff undertook an effort to refine TVA’s pole attachment regulation:

• Need for consistency in approach among Local Power Companies
• Prevent subsidization of non-electric activities

Scope
• Limited to regulation of pole attachment rates for communication attachments
Propose Fully Allocated Cost Methodology

- Allocates total costs of pole ownership based upon the space used by and necessitated by each attaching party
- Provides a credible methodology consistent with TVA’s regulatory requirements
Recommendation

Recommend Board Approval of Determination on Pole Attachment Regulation:

• Recommend fully allocated cost methodology, which will be implemented through contract amendment

• Delegation to CEO to take actions necessary or appropriate to implement the Board’s determination
Finance, Rates, and Portfolio Committee
Q1 Fiscal Year 2016

Net Loss: $37 million
  • $17M less than budget and $118M below last year

Operating Revenues ($138M below budget)
  • Warmer weather resulting in 36% fewer degree days

Operating & Maintenance Expenses ($9M favorable to budget)
  • Timing associated with outages

Interest Expense ($18M favorable to budget)
  • Reduced debt rates and volume
  • Total Financing Obligations: $238M less than budget
Weather Patterns

First Quarter Total Degree Days

- FY16: 880
- FY15: 1,443
- FY14: Milder, 1,369
- FY13
- FY12

°F Days

Fiscal years 1962 through 2016 (ranked low to high)
### Q1 Summary Income Statement

Net Loss unfavorable to budget due to lower revenues as a result of warmer weather

<table>
<thead>
<tr>
<th></th>
<th>FYTD 2016</th>
<th>Variance</th>
<th>FYTD 2015</th>
<th>'16 v '15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Budget</td>
<td>Fav/(Unfav)</td>
<td>Actual</td>
</tr>
<tr>
<td>Operating Revenue</td>
<td>$2,280</td>
<td>$2,418</td>
<td>$(138)</td>
<td>$2,411</td>
</tr>
<tr>
<td>Fuel &amp; Purchased Power</td>
<td>727</td>
<td>801</td>
<td>74</td>
<td>783</td>
</tr>
<tr>
<td>Business Unit O&amp;M</td>
<td>636</td>
<td>656</td>
<td>20</td>
<td>597</td>
</tr>
<tr>
<td>Other O&amp;M, Reagents</td>
<td>104</td>
<td>93</td>
<td>(11)</td>
<td>91</td>
</tr>
<tr>
<td>Total Operation &amp; Maintenance</td>
<td>740</td>
<td>749</td>
<td>9</td>
<td>688</td>
</tr>
<tr>
<td>Taxes, Depreciation, Other</td>
<td>573</td>
<td>593</td>
<td>20</td>
<td>567</td>
</tr>
<tr>
<td>Interest</td>
<td>277</td>
<td>295</td>
<td>18</td>
<td>292</td>
</tr>
<tr>
<td>Net Income (Loss)</td>
<td>$(37)</td>
<td>$(20)</td>
<td>$(17)</td>
<td>$81</td>
</tr>
</tbody>
</table>

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## Q1 Summary Cash Flow Statement

<table>
<thead>
<tr>
<th>$ million</th>
<th>FYTD 2016</th>
<th></th>
<th>FYTD 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Budget</td>
<td>Variance</td>
</tr>
<tr>
<td>Cash Flow from Operating Activities</td>
<td>$ 516</td>
<td>$ 522</td>
<td>$ (6)</td>
</tr>
<tr>
<td>Cash Flow used in Investing Activities</td>
<td>(968)</td>
<td>(834)</td>
<td>(134)</td>
</tr>
<tr>
<td>Cash Flow from Financing Activities</td>
<td>463</td>
<td>312</td>
<td>151</td>
</tr>
<tr>
<td>Net Change in Cash &amp; Cash Equivalents</td>
<td>11</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Ending Cash &amp; Short-Term Investments</td>
<td>311</td>
<td>300</td>
<td>11</td>
</tr>
<tr>
<td>Ending Debt and Financing Obligations</td>
<td>$ 26,560</td>
<td>$ 26,798</td>
<td>$ (238)</td>
</tr>
<tr>
<td>Statutory Debt</td>
<td>24,344</td>
<td>24,582</td>
<td>(238)</td>
</tr>
</tbody>
</table>
First Quarter Summary (Results v. Plan)

Lower Electricity Sales – warmest Q1 since 1962

Lower Fuel Cost – increased hydro generation

Lower Expenses – operating and maintenance, depreciation, and interest

Lower Debt Balance
Chair Selection