



# Board Meeting

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May 7, 2020  
Knoxville, TN



# Board Meeting

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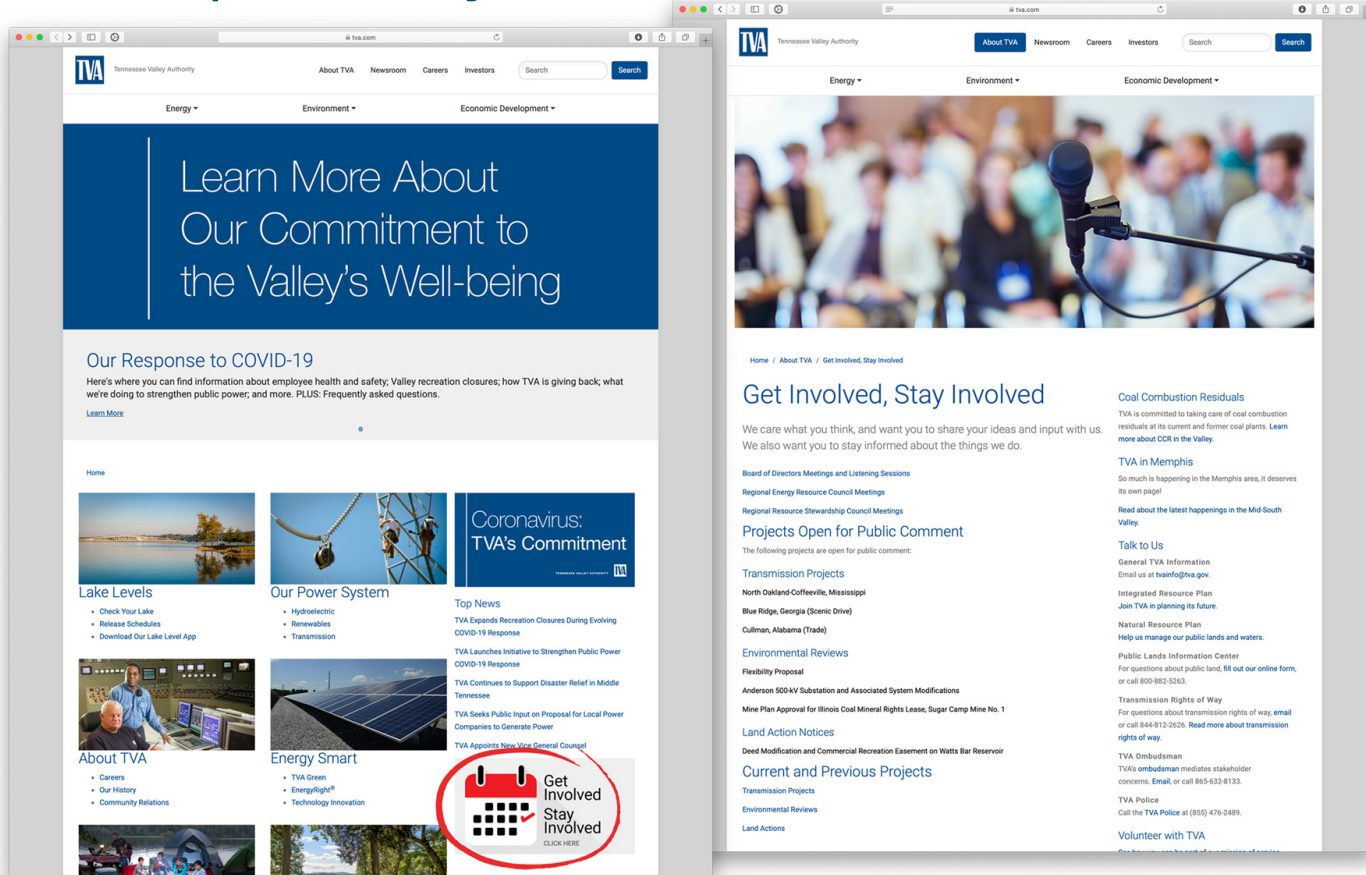
May 7, 2020  
Knoxville, TN



# President's Report

JEFF LYASH  
President and CEO

# Transparency



# Our Mission



To serve the people  
of the Tennessee Valley  
to make life better.

# Local Power Companies

This map illustrates the service territories of various local power companies across the Southeastern United States, including parts of Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Tennessee. The map is color-coded to distinguish between different utility regions. Major cities and towns are labeled, along with specific power companies and their service areas. For example, in the northern part of the map, companies like Warren RECC, Pennyrile RECC, and Russellville, KY are shown. In the central part, companies like Upper Cumberland EMC, Middle Tenn. EMC, and Murfreesboro are listed. The southern part of the map shows companies like Northcentral MS EPA, North East MS EPA, and Tallahatchie Valley EPA. The map also includes labels for major water bodies and geographical features.

Warren RECC

Bowling Green

Glasgow

Russellville, KY

Pennyrile RECC

Mayfield

Benton

Hopkinsville

Franklin

Clarksville

Springfield

Gallatin

Tri-County EMC

Jellico

Bristol, VA

Bristol, TN

Elizabethton

Bright Ridge

Mountain EC

Erwin

Greeneville

Appalachian EC

Knoxville

Morrisstown

Powell Valley EC

Holston EC

LaFollette

Plateau EC

Clinton

Oak Ridge

Harriman

Rockwood

Lenoir City

Alcoa

Sevier Co.

Newport

Volunteer EC

Loudon

Sweetwater

Fort Loudoun EC

Athens, TN

Etowah

Murphy

Chattanooga

Tri-State EC

Cleveland

Winchester

Fayetteville

Pulaski

Lawrenceburg

Tennessee Valley EC

Lexington

Meriwether Lewis EC

Dickson

Nashville

Murfreesboro

Smithville

Sparta

Caney Fork EC

McMinnville

Sequachee Valley EC

Shelbyville

Duck River EMC

Columbia

Shelbyville

Tullahoma

Lewisburg

Memphis

Chickasaw EC

Bolivar

Pickwick EC

Southwest TN EMC

Lexington

Jackson

Millan

Carroll County

Union City

Gibson

Weakley County

Fulton

Hickman

Newbern

Forked Deer EC

Ripley

Covington

Northcentral MS EPA

Holly Springs

Tippah EPA

Alcorn Co. EPA

Tishomingo Co. EPA

Prentiss Co. EPA

New Albany

North East MS EPA

Tombigbee EPA

Oxford

Pontotoc EPA

Water Valley

Natchez Trace EPA

Okolona

Amory

Monroe Co. EPA

Aberdeen

West Point

Starkville

4-County EPA

Columbus

Louisville

Macon

Philadelphia

Central MS EPA

Central EPA

Tallahatchie Valley EPA

Franklin EC

Sheffield

Courtland

Joe Wheeler EMC

Decatur

Hartselle

Arab EC

Marshall-Decal EC

Alberville

Guntersville

Cullman EC

Cullman

Huntsville

Athens, AL

Muscle Shoals

Florence

Tusculumbia

North Alabama EC

Sand Mountain EC

Chickamauga

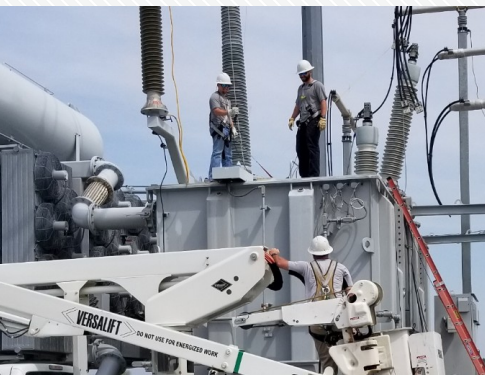
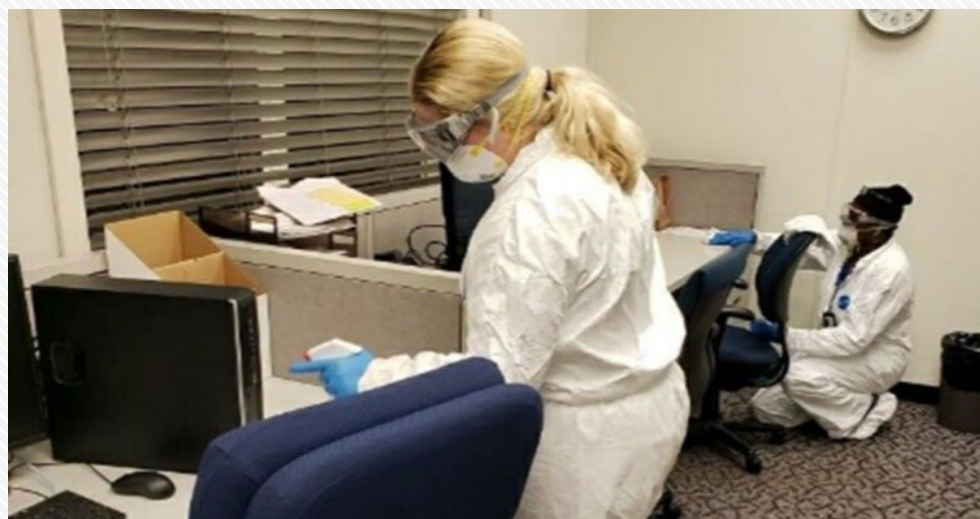
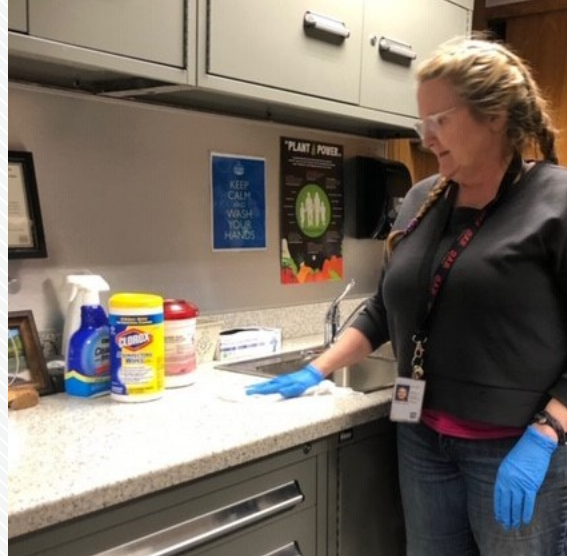
North GA EMC

Cherokee EC

Flt. Payne

Tarrant

Bessemer





# President's Report

JEFF LYASH  
President and CEO



# 87 Years of Service

May 18, 2020



# President's Report

JEFF LYASH  
President and CEO



# President's Report

JEFF LYASH  
President and CEO



# Board Meeting

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# External Relations Committee





# TVA Environmental Policy

REBECCA TOLENE

Vice President, Environment

# Purpose and Background

## Purpose

- Request that the TVA Board of Directors approve an updated TVA Environmental Policy

## Background

- Benchmarked policy statements of other utilities, industries, and federal agencies
- Revised and updated the policy with review from company leaders
- Presented and gained approval of revised policy by the External Relations Committee

# Environmental Policy Statement

TVA is committed to improving quality of life and the environment in the Tennessee Valley by providing increasingly cleaner, reliable and affordable energy; engaging in proactive stewardship of the Tennessee River system and public lands; and supporting sustainable economic growth.

# Goals of Policy Update

- Align with TVA's overall mission
- Focus on strong Environmental Management System
- Set clear direction and better communicate environmental goals
- Partnerships with local power companies and communities across the Valley
- Better clarify the path to continued sustainability

# Environmental Policy

TVA improves quality of life and the environment in the Tennessee Valley by providing reliable, affordable and increasingly clean energy; engaging in proactive stewardship of the TN River system and public lands; and supporting sustainable economic growth.

We comply with applicable environmental laws, regulations, and commitments. We maintain an Environmental Management System (EMS) that fosters continuous improvement.



## ENVIRONMENTAL PROTECTION & COMPLIANCE

We deliver energy that is reliable, affordable, and **increasingly clean**.



We integrate **environmental considerations** into strategy and operational decisions to mitigate impacts.



We will continue TVA's strong history of **environmental stewardship** by managing public lands.



We strive to protect the Valley's **water, wildlife, cultural, and recreational resources**.



## CONTINUOUS IMPROVEMENT

We collaborate across the enterprise to address environmental issues and to **reduce the environmental impacts of our business**.



We **track our environmental performance**, set targets and measure regularly.



We invest in research to develop energy technologies and manage resources to **reduce environment impacts**.



## PARTNERSHIP & TRANSPARENCY

We partner with **local power companies, direct-served customers and communities** to meet environmental goals.



We work with our partners to make an **environmental difference**.



We communicate our environmental commitment and progress through **transparency**.



# Recommendation

## Approve TVA's updated Environmental Policy

- Environmental performance and strategy will be reviewed by the Board of Directors at least once annually.



# External Relations Committee





# 2020 Natural Resource Plan Update

DAVID BOWLING

Vice President,  
River & Resources Stewardship

# Purpose and Background

## Purpose

- Request that the TVA Board of Directors accept the 2020 Natural Resource Plan (NRP) update and authorize TVA's President and Chief Executive Officer to approve future updates to the NRP

## Background

- The NRP was initially approved by the Board and published in 2011.
- A holistic review of the NRP determined an update was needed.

# NRP Update

- Improves alignment with TVA's Mission
- Updates areas of focus and defines objectives and programs for each focus area
- Creates a more flexible and effective method to plan, execute, and measure stewardship work
- Strengthens engagement with the public

## Focus Area Summary

- Reservoir Lands Planning
- Section 26a and Land Use Agreements
- Public Land Protection
- Land and Habitat Stewardship
- Nuisance and Invasive Species Management
- Cultural Resource Management
- Water Resources Stewardship
- Recreation
- Nature-based, Outdoor Adventure and Sustainable Tourism
- Public Outreach

# NRP Public Involvement

- Prepared and released for public comment a Supplemental Environmental Impact Statement in May 2019
- Held public meetings
- Utilized the Regional Resource Stewardship Council as a stakeholder review group

## Public Input Summary

- Comments received included expressions of support, as well as suggestions for improvement.
- Comments were addressed, as appropriate, in the final NRP and Supplemental Environmental Impact Statement.
- Updated NRP and Supplemental Environmental Impact Statement documents were released to the public in February 2020.

# Benefits of 2020 NRP Update

- Enhances strategic guidance and alignment of natural resources work
- Creates a flexible and responsive plan
- Broadens programmatic scope
- Includes measures of success
- Increases public input opportunities and transparency

# Recommendation

Accept the 2020 NRP update and authorize TVA's President and Chief Executive Officer to approve future updates to the NRP

- Updates will be provided annually to the External Relations Committee.



# External Relations Committee





# Finance, Rates, and Portfolio Committee



# Financial Update

JOHN THOMAS

Executive Vice President  
and Chief Financial Officer

The image shows a large, modern building with a prominent blue sign on its side that reads "TVA" in white, bold, sans-serif capital letters. The building is white with blue accents. To the left of the TVA building, there is a classical stone building with columns. The sky is clear blue.

TVA

# Evolving Uncertainties

## What we know

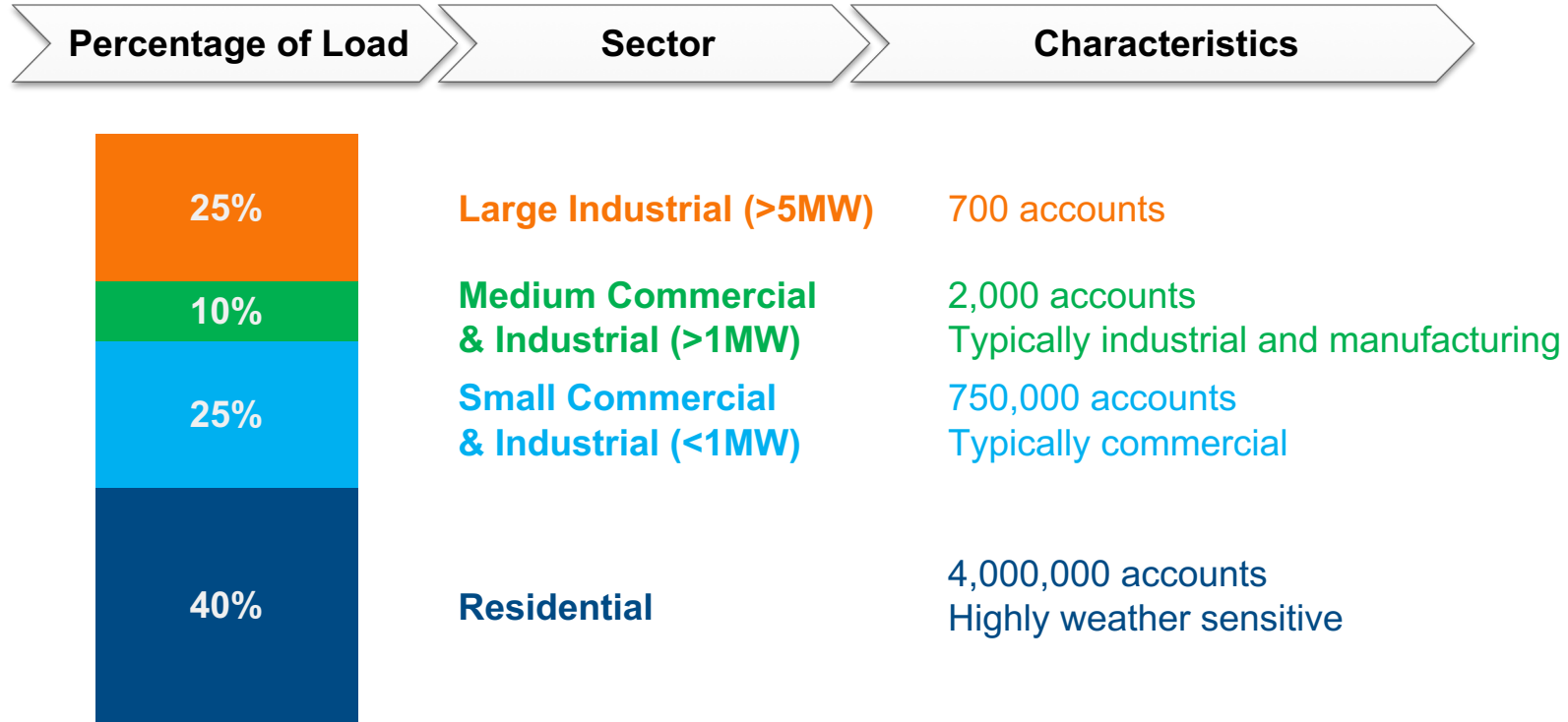
- FY20 and FY21 load and revenues will be lower than FY20 Budget
- Daily energy averaging 4%-8% lower than expected
- Currently, 74 large Commercial and Industrial (C&I) customers scaling back operations; average hourly energy of 576 MWs
- \$2.2T stimulus bill signed by the President
- Over 26 million\* Americans became unemployed in the last five weeks

## What we do not know

- Extent of social distancing practices
- Length and depth of economic downturn
- Operational impacts to C&I customers
- Permanent demand reductions from failed businesses
- Effect of federal stimulus packages
- Losses due to uncollectible revenue
- Anything medically related to COVID-19

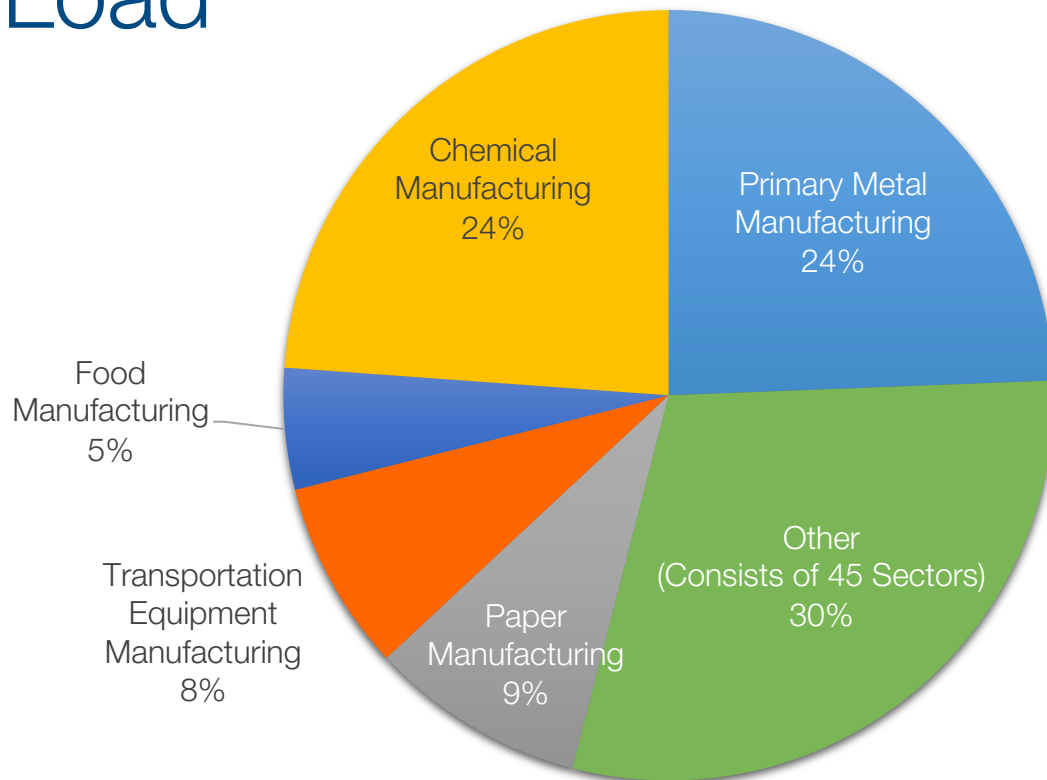
\*Seasonally adjusted

# Breakdown of TVA's Load

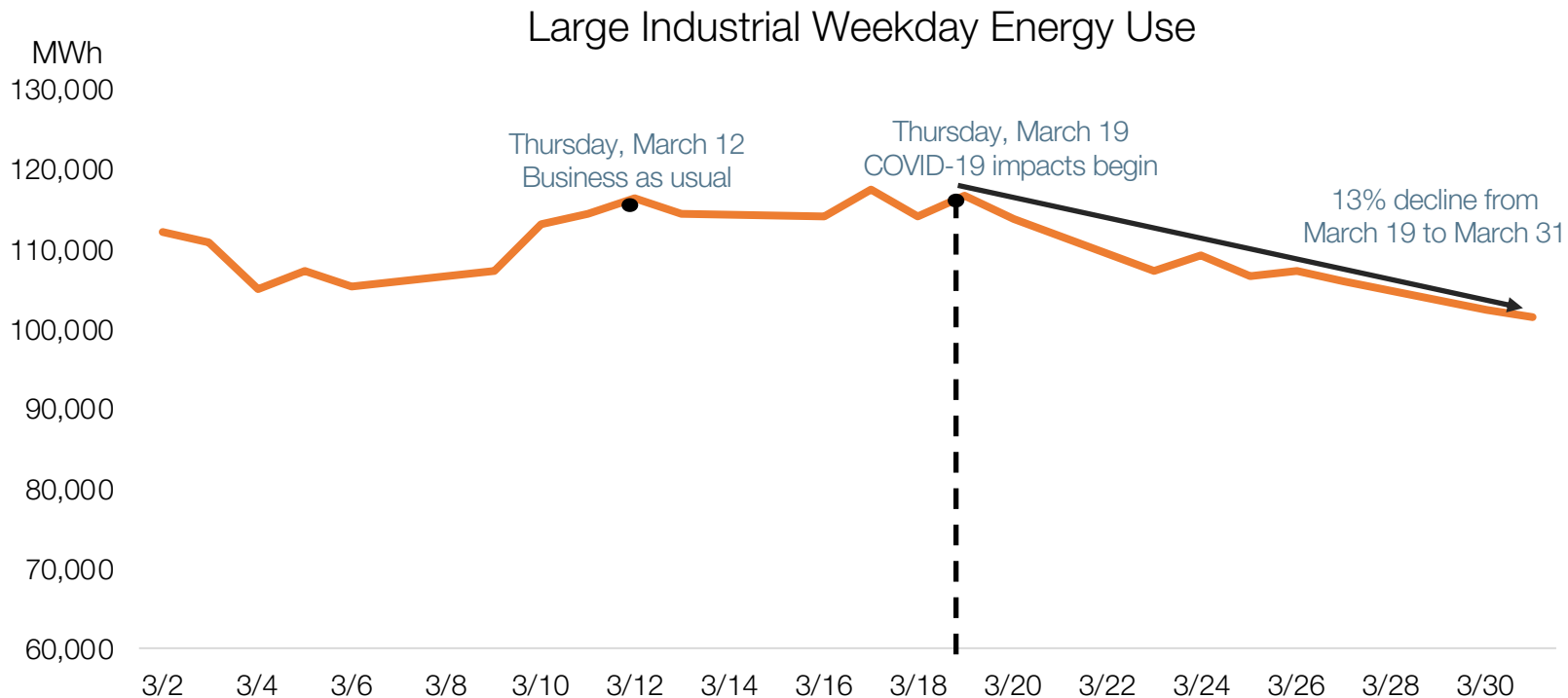


# Breakdown of Large Industrial Customer Load

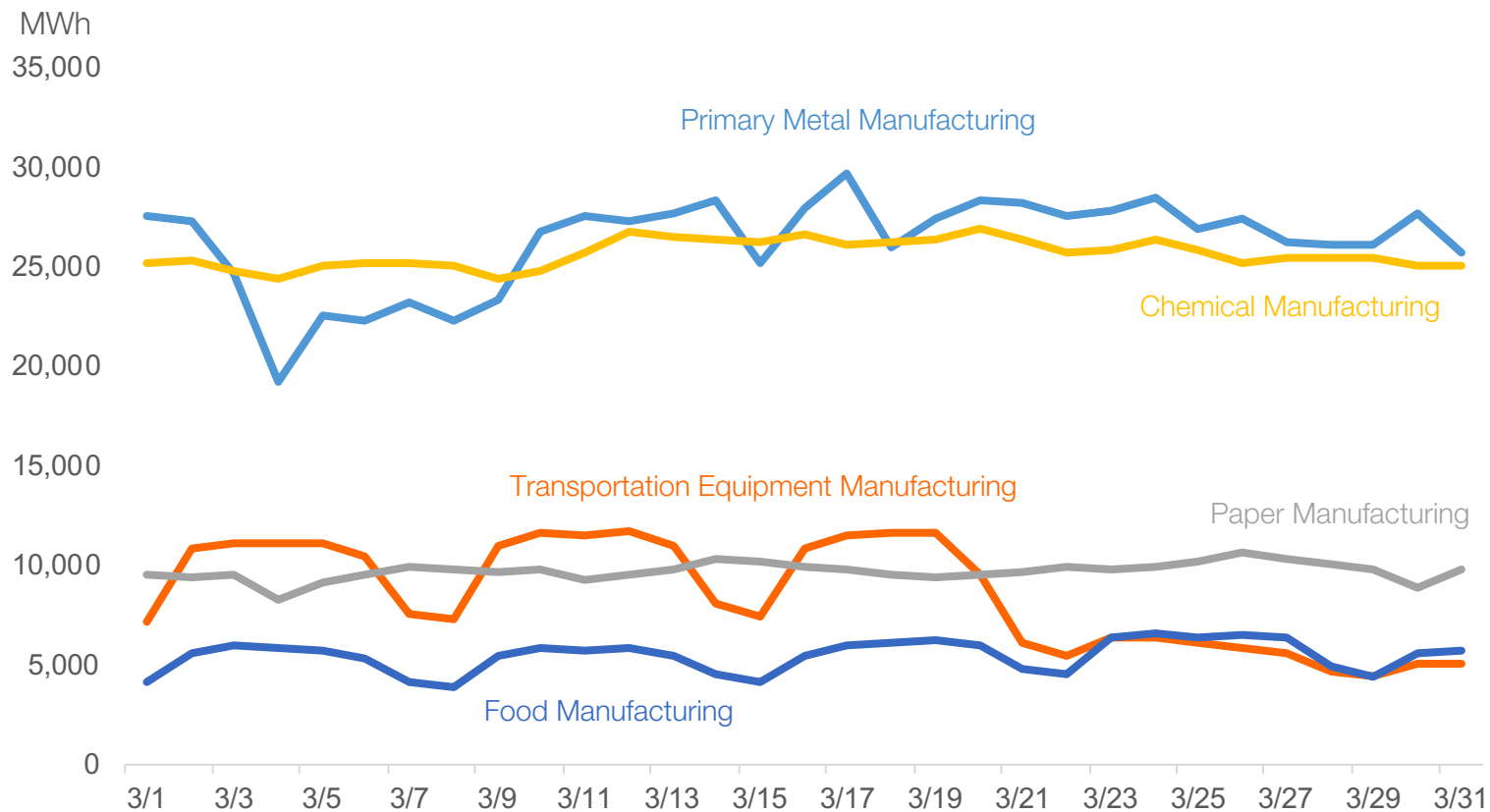
70% of large industrial energy used in one of five sectors



# Large Industrial Energy Use Down 13%

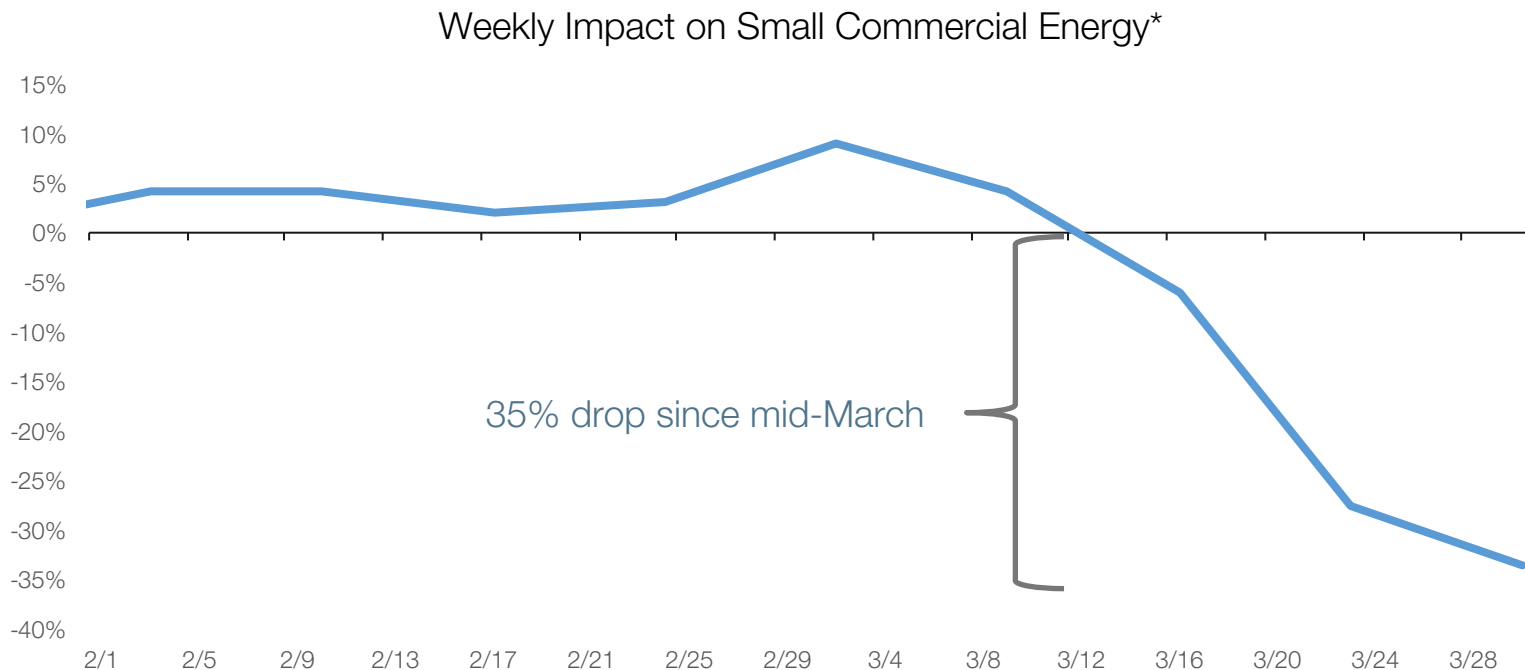


# March Daily Energy Use By Sector\*



\*Large Industrial

# Small Commercial Accounts Taking Large Hit



Includes restaurants, small retail shops, schools, malls, etc.

\*Based on end-user data from eight Local Power Companies

# Quarterly Forecasts All Negative in Q2 2020

## High Impact

■ **Moody's Extreme Downside**

■ ING Group

■ Goldman Sachs

■ Conference Board

■ Deutsche Bank

■ Julius Baer

## Medium Impact

■ **TVA Baseline**

■ Wells Fargo

■ Moody's Base

■ UBS

■ Bank of America

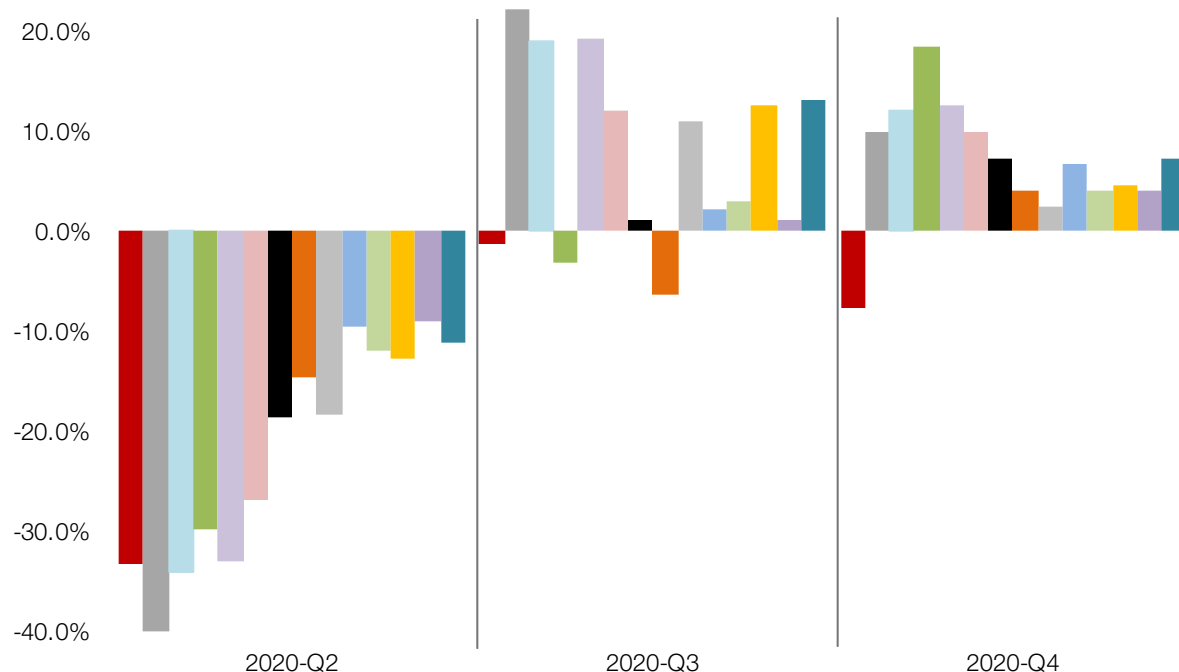
## Low Impact

■ **Moody's Upside**

■ Bloomberg

■ **Moody's Extreme Upside**

## Quarterly U.S. GDP Growth: 2020



# What's Next?

- Evaluating new economic data and scenarios
- Tracking actual impacts to daily load and customers
- Developing management dashboards and updates
- Monitoring credit risks and relief efforts



## Q2 Financial Update



# Q2 Fiscal Year 2020\*

Net Income was \$88M favorable to budget

Base Revenue was \$39M favorable to budget

Total Financing Obligations (TFO) were \$445M less than budget

\*Excluding Partnership Credits. TFO variance is net of Additional Cash Held and Cash Partnership Credits.

# Q2 Summary Income Statement

\$ millions	FYTD20			FYTD19	
	Actual	Budget	Variance Fav/(Unfav)	Actual	'20 v '19 Fav/(Unfav)
Total Operating Revenue	\$ 5,099	\$ 5,130	\$ (31)	\$ 5,475	\$ (376)
Fuel & Purchased Power	1,323	1,318	(5)	1,494	171
Total O&M	1,333	1,331	(2)	1,545	212
Taxes, Depreciation, Other	1,420	1,439	19	1,170	(250)
Interest	576	613	37	602	26
<b>Net Income (Loss)</b>	<b>\$ 447</b>	<b>\$ 429</b>	<b>\$ 18</b>	<b>\$ 664</b>	<b>\$ (217)</b>
Partnership Credits	70	-	70	-	70
<b>Net Income (Loss) excluding Partnership Credits</b>	<b>\$ 517</b>	<b>\$ 429</b>	<b>\$ 88</b>	<b>\$ 664</b>	<b>\$ (147)</b>

# Q2 Summary Cash Flow Statement

**\$ millions**

	FYTD20			FYTD19	
	Actual	Budget	Variance	Actual	'20 v '19
<b>Net Cash Provided by / (Used in)</b>					
Operating Activities	\$ 1,870	\$ 1,807	\$ 63	\$ 1,747	\$ 123
Investing Activities	(1,010)	(1,117)	107	(1,040)	30
Financing Activities	(324)	(691)	367	(706)	382
<b>Ending Debt and Financing Obligations</b>	<b>\$ 22,491</b>	<b>\$ 22,338</b>	<b>\$ (153)</b>	<b>\$ 23,590</b>	<b>\$ 1,099</b>
Additional Cash Held	(535)	-	535	-	535
<b>TFO Net of Additional Cash Held</b>	<b>\$ 21,956</b>	<b>\$ 22,338</b>	<b>\$ 382</b>	<b>\$ 23,590</b>	<b>\$ 1,634</b>
Cash Partnership Credits	(63)	-	63	-	63
<b>TFO Net of Additional Cash Held and Partnership Credits</b>	<b>\$ 21,893</b>	<b>\$ 22,338</b>	<b>\$ 445</b>	<b>\$ 23,590</b>	<b>\$ 1,697</b>

# Q2 Summary (Results v. Plan)

Revenues essentially on plan

Expenses favorable to plan

TFO net of cash favorable

Increased liquidity (\$500M cash)

Q3 will be challenging



# Finance, Rates, and Portfolio Committee



A blurred background image showing several people in business attire sitting around a table, writing in notebooks or looking at documents. The image is used as a backdrop for the title and speaker information.

# Commercial Energy Agreements, Programs, and Related Contracts

DOUG PERRY

Vice President

Commercial Energy Solutions

# Background

In March 2020, TVA released a renewable request for proposals.

Commercial energy agreements, programs, and related contracts are funded through the annual budget approved by the Board and have become a routine part of TVA distributed energy resources and power supply operations. An updated delegation for these contracts would improve efficiency and better meet the TVA Bylaws' directive that calls for broad goals and objectives to be established by the Board and achieved by the CEO.

# Overview

- A single comprehensive TVA Board Practice or delegation of authority regarding commercial energy agreements, programs, and related contracts does not exist
- An opportunity exists to develop a singular delegation for these contracts that would streamline activities and increase organizational efficiencies
- In FY20, due to system and customer capacity needs, TVA expects to surpass the 1,250 MW supplemental delegation limit, which was approved in August 2019 as part of TVA's Annual Contracting Plan

# Recommendation

- Implementation of a new Board Practice, replacing existing delegations, that will allow the CEO to approve any commercial energy agreement, program, or related contract in any amount with energy durations of up to 20 years and terms of up to 25 years, that is consistent with the annual Board approved Contracting Plan or has been previously approved by the Board, beginning with the August 2020 approval of the FY21 Contracting Plan
- Increase the CEO's contracting authority in FY20 from 1,250 MW to 3,000 MW, in order to execute additional natural gas-fired and renewable capacity opportunities for meeting system and customer needs



# Finance, Rates, and Portfolio Committee





# Nuclear Oversight Committee



# Audit, Risk, and Regulation Committee





# People and Performance Committee





# Board Meeting

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