

## Colonial Pipeline Overview



## **Largest** refined products pipeline in the United States

## Headquarted in **Alpharetta, Georgia**

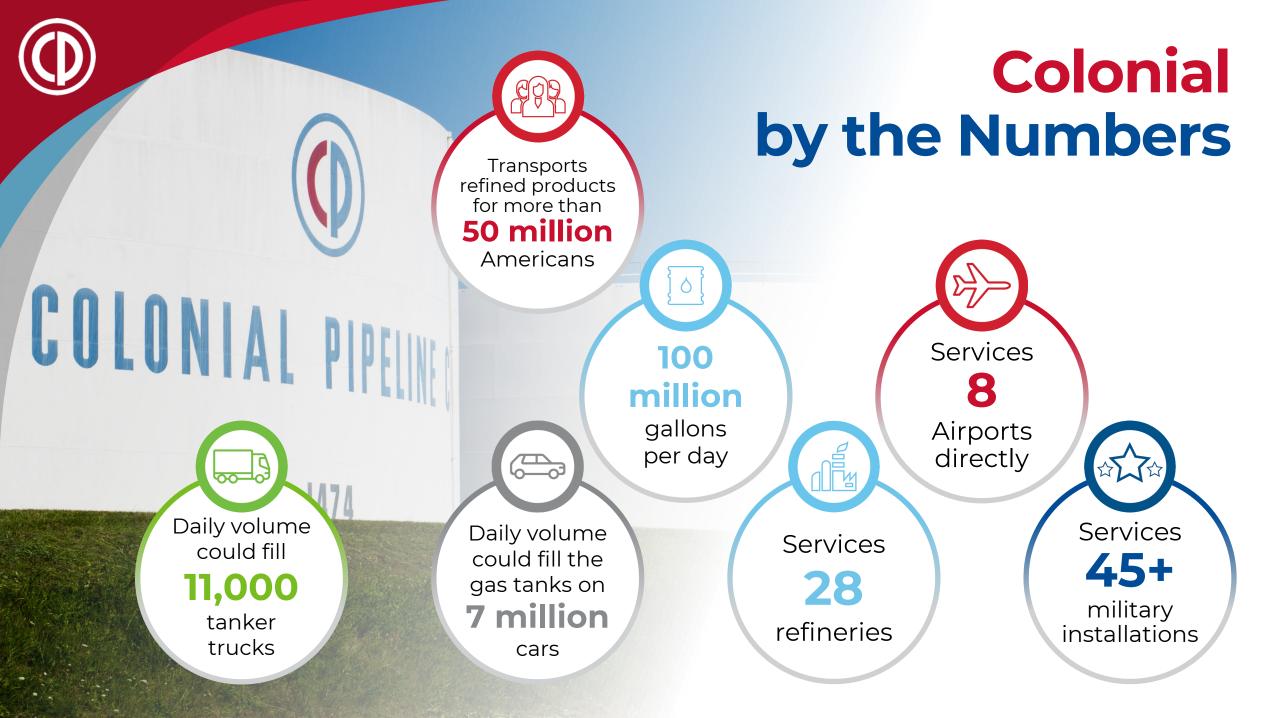
Nearly **1,100** employees **460** in Alpharetta Corporate Office

### Company Overview

COLONIAL P'

Supports communities, commerce, air travel, and our nation's security









## **New Jersey Solar Generation**

- Two locations, Woodbury Junction and Allentown Booster Station
- Total of 18,504 individual solar panels
- Enables the use of renewables for operation of the pipeline
- Panels at Woodbury Junction generate 5 MW, and Allentown generates 3.3 MW
- Generation supplements the energy needed to move product on the Colonial system











# **THANK YOU**

#### GRID RELIABILITY AND HYDROPOWER NASEO 2024 Energy Policy Outlook NATIONAL HYDROPOWER ASSOCIATION





National Association of State Energy Officials

# The New York Eimes

#### California Leaders Credit Cellphone Alert for Sudden Conservation

The jarring message warned millions of residents that blackouts could occur without immediate action.



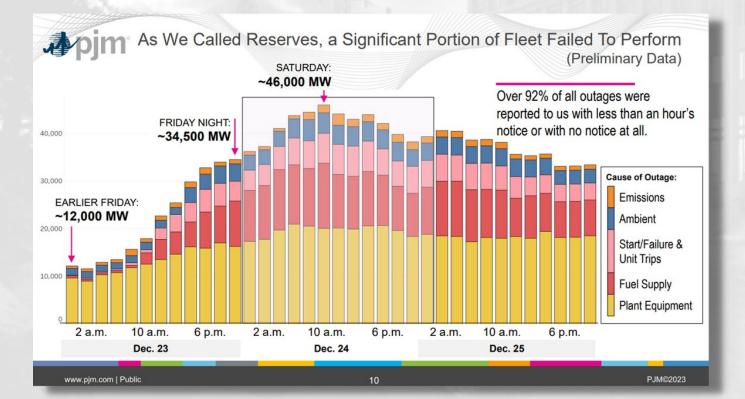


Power lines in Cathedral City, Calif., during the heat wave on Tuesday. Alex Welsh for The New York Times

### CASE STUDY 1: CALIFORNIA'S ENERGY GRID CRISIS



#### **CASE STUDY 2: PJM & THE POLAR VORTEX**



- PJM Dec 24th: Polar Vortex
- PJM lost 46,000 MWs of generation
- Hydro asked to keep generating past midnight
- Moreover, PSH asked not to pump water to reduce load
- To my knowledge, little or none of 45 GW were hydro

### CASE STUDY 3: ORPC AND THE IGIUGIG VILLAGE



- Sustainable, local energy providing baseload power for an off grid village in Alaska
- Proven operations through harsh conditions and reduced the community's diesel consumption by 60-90%
- Set the record as the longest operating riverine hydrokinetic project in all of the Americas
- Replicable technology and partnership for other off-grid, remote and rural communities to firm-up their power source



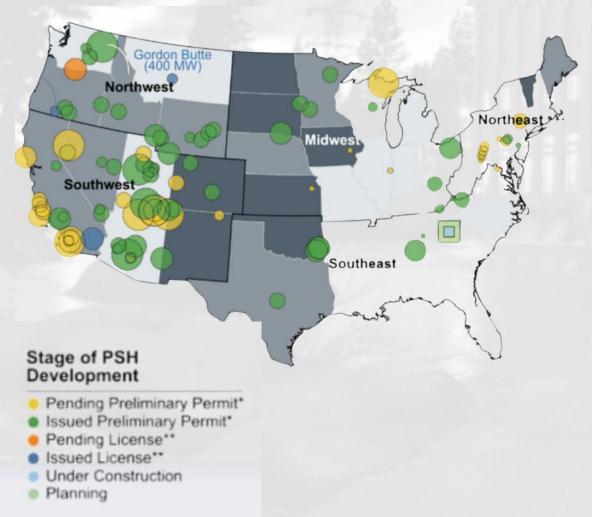


#### STATE OF THE U.S. HYDROPOWER INDUSTRY IS STRONG

- 31% of U.S. renewable energy
- Over 6% of all electricity generated
- 96% of current U.S. long duration energy storage
- 80 GW of hydropower capacity
- 22 GW of pumped storage hydropower capacity

#### **HYDROPOWER HAS POTENTIAL FOR GROWTH**

US Pumped Storage Development Pipeline 2023



- 95+ pumped storage projects in FERC pipeline (over 50 GWs)
- Almost I GWs of new, carbon-free electricity from the existing fleet from DOE's recent \$72M investment
- DOE funded only 34% of requests so lots of additional growth from existing fleet possible



Environmental And Energy Industry Groups Commit To Working Together On (Some) Hydro Projects

NORTHWEST PUBLIC BROADCASTING

#### By Courtney Flo

The New York Times Environmentalists and Dam Operators, at War for Years, Start Making Peace

PBS npr

Facing a climate crisis, environmental groups and industry agree to work together to bolster hydropower while reducing harm from dams.

THE T

#### **ENERGY**WIRE

RENEWABLE ENERGY DOE-backed hydro group launches to cut CO2

David laconangelo, E&E News reporter Published: Wednesday, October 14, 2020

# UNCOMMON

## DIALOGUE

"U.S. Hydropower: Climate Solution and Conservation Challenge"

Los Angeles Times

Can hydropower help solve the climate crisis? This \$63-billion plan is banking on it



HYDROPOWER + RIVER + CLIMATE



#### CLEAN ENERGY GRID AT RISK DUE TO POTENTIAL WAVE OF RETIREMENTS

- Licenses for 459 hydropower facilities, representing 17 GWs, are set to expire by 2035.
- Relicensing takes, on average, 7.6 years to complete
- Projects of greater than 10 MW reporting licensing costs exceeding \$1M, and projects more than 100 MW reporting cost around \$10M or more

JEFFERIES HYDRO PL

 Survey: 36.4% of hydropower industry asset owners said that they were "actively considering" decommissioning a facility

## **CURRENT CHALLENGES**

Lack of Support for Existing Hydropower Antiquated Licensing Process

Market Design Failures

#### **4 HOMEWORK QUESTIONS FOR STATE ENERGY OFFICES**

JEFFERIES HYDRO PLAY

1) Can my state benefit from additional long-duration energy storage to balance variable wind and solar, and if so, are we considering Pumped Storage Hydropower?

2) Can we add generation to existing non-powered dams?

3) As we move to a cleaner grid, is water power being treated similarly to wind and solar on our state clean energy standards?

4) Are local hydro operators in danger of surrendering their hydro licenses?

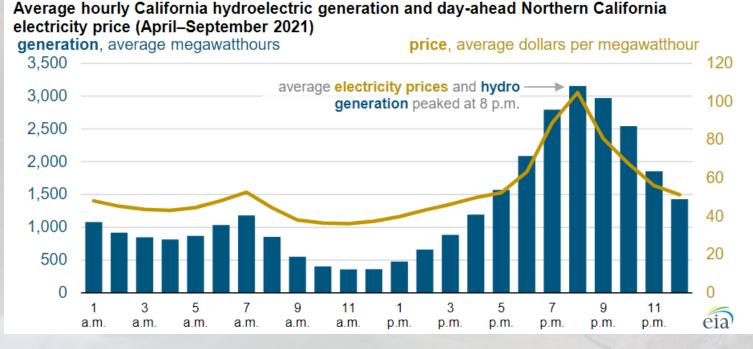
# QUESTIONS?

NHA

## **HYDROPOWER & RELIABILITY**

Even during drought, hydro is still there when we need it the most.

The overall western hydropower fleet sustains about four-fifths of the average power generation during severe droughts.



NHA

Program Description: Solar for All aims to serve up to 100,000 low to moderate income families DC through single family and community solar. Participants should expect to see a 50% savings on their electricity bill, or approximately \$500 annually.

Residents Served: Almost 10,000

Solar Capacity Installed: Over 37 MW

Community Resilience Hub Opportunity

- Serve residents beyond electric bill
- First DC Resilience Hub 2024
- Provide community resilience services
  - 60.8 kW solar system
  - 180 kWh battery storage system
  - Microgrid controller
  - 21 hr min/72 hr typical

#### Faunteroy Community Enrichment Center







GOVERNMENT OF THE DISTRICT OF COLUMBIA