

Southwestern Power Administration

*Overview of Southwestern's
operations in the Red River Basin*

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August 24, 2017



Southwestern Power Administration

- ◆ Federal agency under the U.S. Department of Energy
- ◆ Congressionally authorized by Section 5 of the 1944 Flood Control Act
- ◆ One of Four Power Marketing Administrations in the United States



Southwestern Power Administration

- ◆ Markets power generated at 24 Federal, multi-purpose hydropower projects operated by the U.S. Army Corps of Engineers (Corps).
- ◆ Power is cost-based, wholesale power to preference customers: cooperatives(21), municipalities(78), and military bases(3).
- ◆ Over 8 million end-users in 6 states
- ◆ Operates 1,380 miles of high-voltage transmission line, 26 substations, and 46 communications sites.





Southwestern is not...

- ◆ Southwestern Electric Power Company (SWEPCO)
 - investor owned utility in Shreveport
- ◆ Southwest Power Pool (SPP)
 - regional transmission organization for 14 states
- ◆ A power company
 - Southwestern is a not-for-profit Federal agency that markets power to not-for-profit preference customers

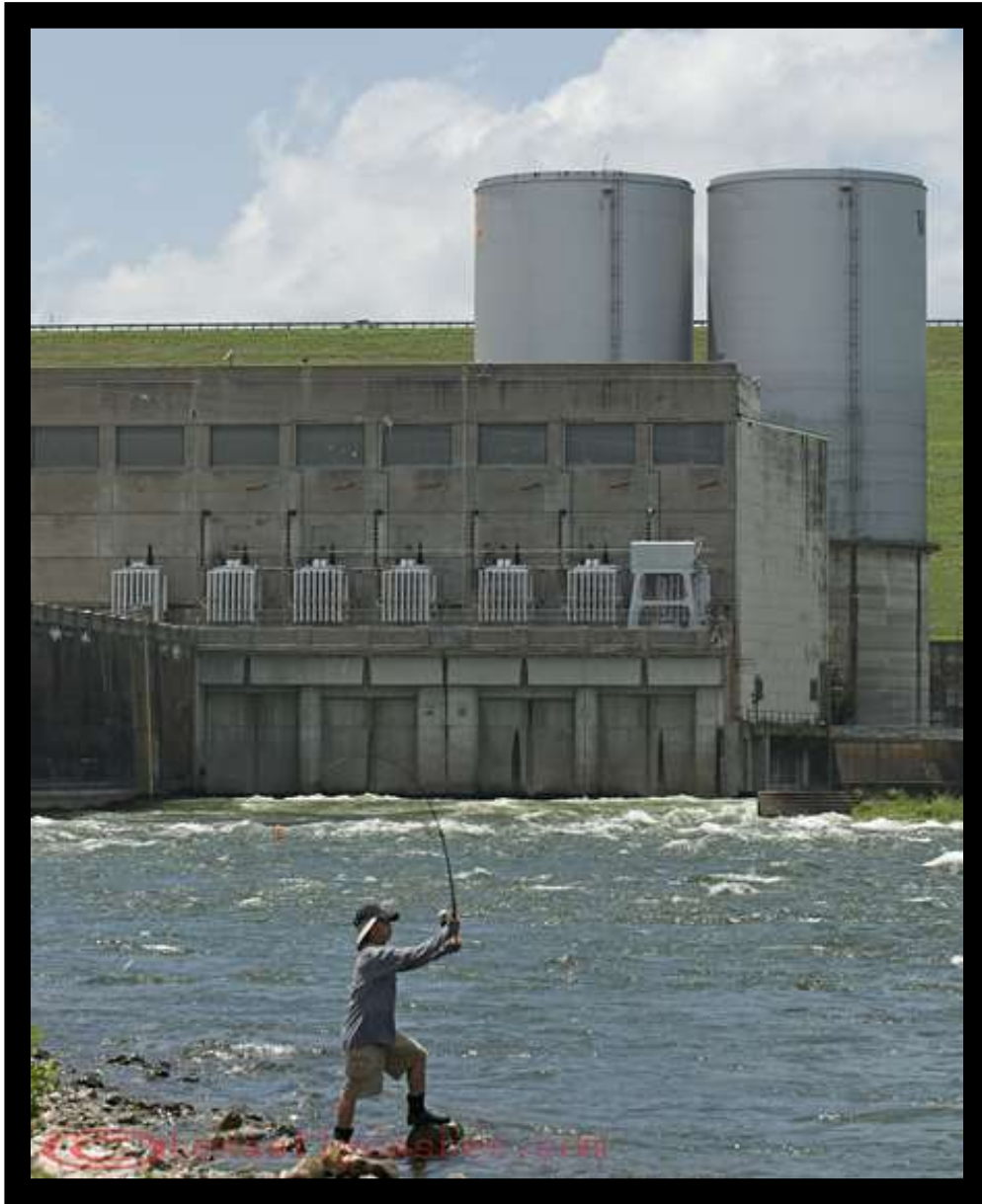


Southwestern's Federal Power System – Original Investment

- ◆ Southwestern repays the Federal Investment
- ◆ Total estimated Repayment through FY2016 is \$5.3 Billion:
 - ◆ Investment \$1.2 Billion
 - ◆ Interest \$0.9 Billion
 - ◆ O&M \$3.2 Billion
- ◆ \$199 Million current estimated annual revenue to recover:
 - ◆ Initial construction costs plus interest
 - ◆ Annual operation and maintenance
 - ◆ New replacement equipment and interest



Lake Texoma (Denison Dam)



- ◆ Powerhouse online in 1945
- ◆ 80.5 MW capacity powerhouse
- ◆ 219,000 MWh estimated annual energy
- ◆ \$6.4 Million estimated annual revenue
- ◆ \$15.4 Million estimated annual benefits

Lake Texoma (Denison Dam)



- ◆ 59% of Conservation Storage is hydropower
- ◆ Power goes to ERCOT (Texas)
- ◆ Original design and operation sent half to TX and half to OK



Broken Bow



- ◆ Powerhouse online in 1970
- ◆ 115.0 MW capacity powerhouse
- ◆ 129,000 MWh estimated annual energy
- ◆ \$7.0 Million estimated annual revenue
- ◆ \$15.3 Million estimated annual benefits

Blakely Mountain (Lake Ouchita)



- ◆ Powerhouse online in 1956
- ◆ 75 MW capacity powerhouse
- ◆ 169,000 MWh estimated annual energy
- ◆ \$6.02 Million estimated annual revenue
- ◆ \$14.6 Million estimated annual benefits

Degray Lake



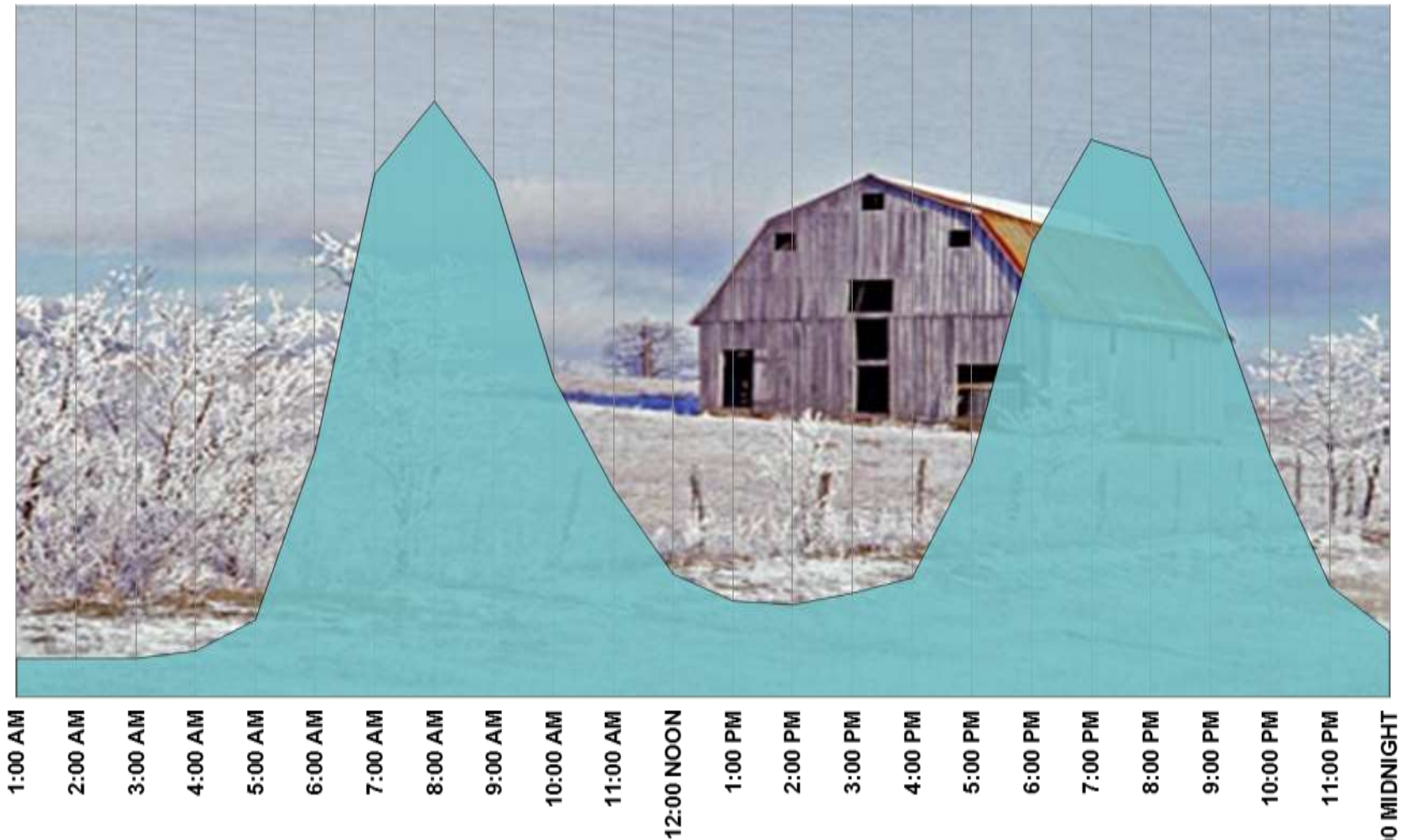
- ◆ Powerhouse online in 1972
- ◆ 68.0 MW capacity powerhouse
- ◆ 97,000 MWh estimated annual energy
- ◆ \$4.97 Million estimated annual revenue
- ◆ \$11.3 Million estimated annual benefits

Narrows (Lake Greeson)

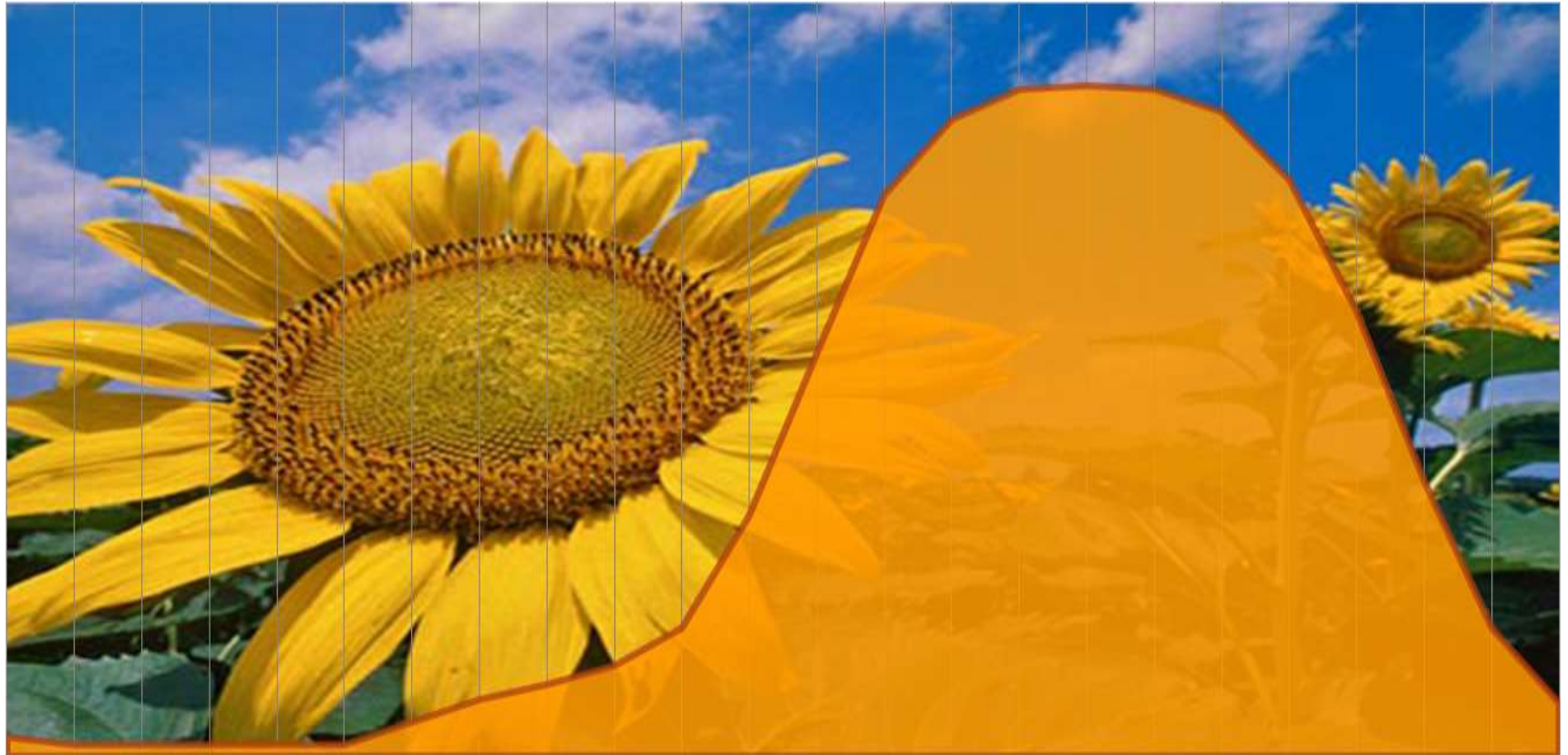


- ◆ Powerhouse online in 1950
- ◆ 25.5 MW capacity powerhouse
- ◆ 30,000 MWh estimated annual energy
- ◆ \$1.65 Million estimated annual revenue
- ◆ \$4.2 Million estimated annual benefits

Winter Peaking Loads



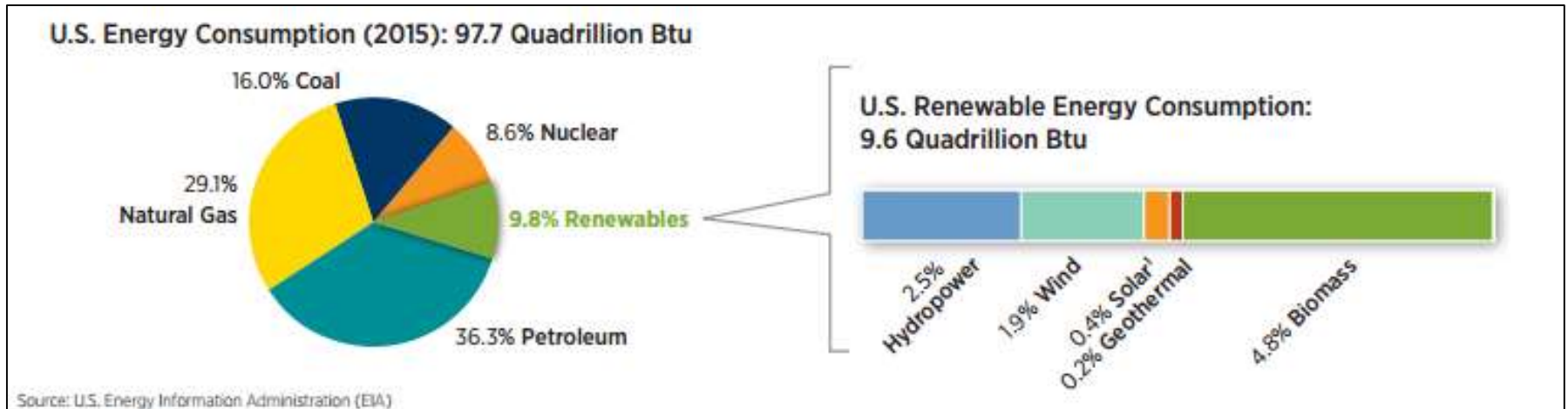
Summer Peaking Loads



1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 NOON
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
12:00 MIDNIGHT



Renewable Energy



- ◆ Hydropower plays a significant role (25%) in the Nation's renewable resources.
- ◆ The ability to dispatch hydropower on demand is significant when other renewable energy options are considered.



Estimated Greenhouse Gas Emissions Offset per year

Tons Carbon Dioxide

24 Projects

4.6 Million



Estimated Fuel to Produce Equivalent Energy per year

Barrels of Fuel Oil, or
Tons of Coal, or
Cubic feet of Natural Gas

24 Projects

9.7 Million

3.0 Million

44.7 Billion



Questions?

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