Reinhold Environmental Ltd.

2007 APC Round Table & Expo Presentation

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Hosted by TVA

TVA

Improving life in the Tennessee Valley for 74 years

Marci Cooper,
Title

TVA Today

TVA at a glance

- 49 dams for integrated river management
- 11,000 miles of reservoir shoreline
- $376 million in tax-equivalent payments to Valley states and counties
- $2.4 billion spent in Valley states for goods, fuel, and services
- Over 17,000 miles of transmission lines

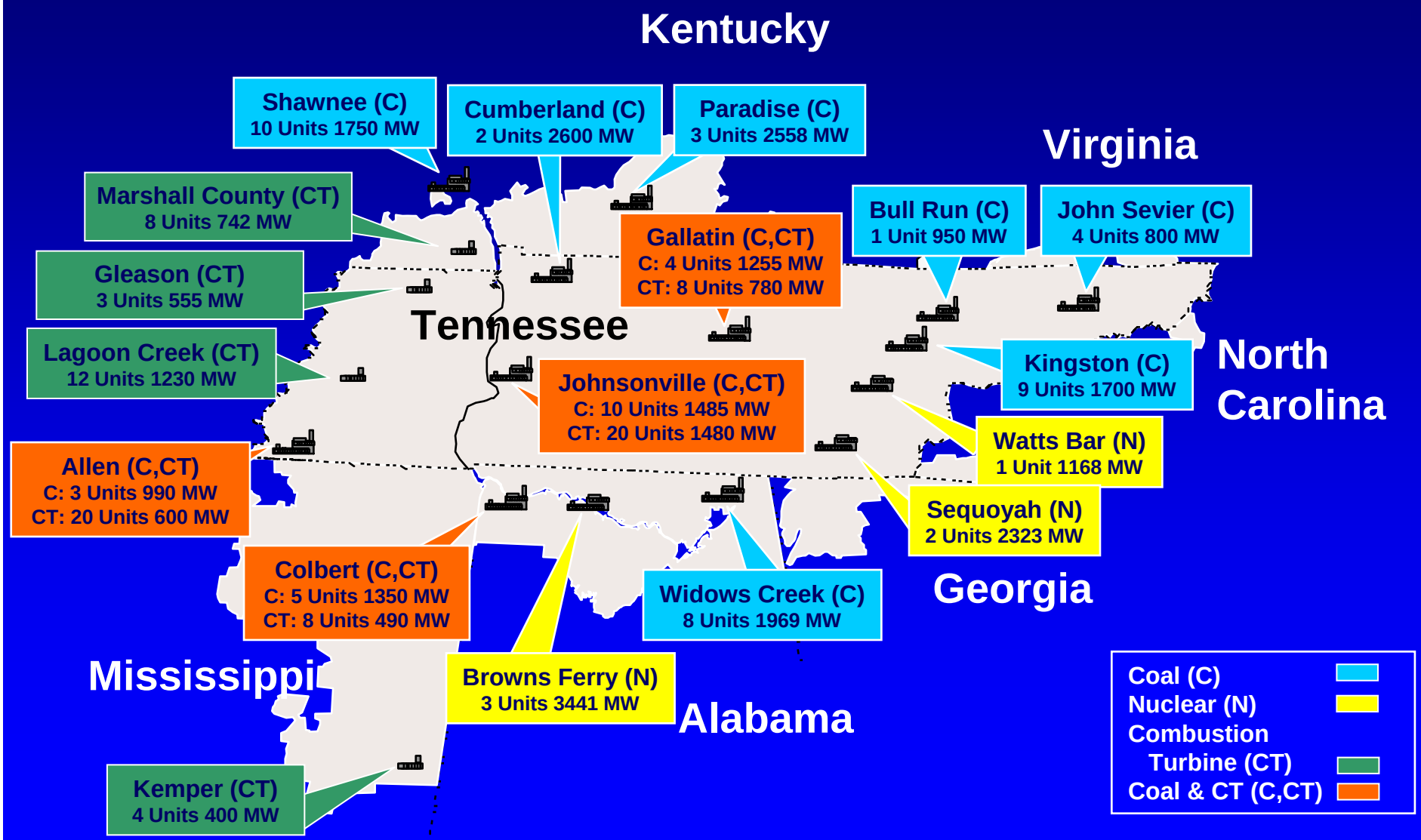
TVA at a glance

- $9.2 billion in annual revenue
- 80,000-square-mile service area
- 158 distributors, 8.7 million residents
- 62 directly-served large industrial and federal customers
- Financially self-supporting
- No taxpayer support
- No stockholders

Scope of TVA's Power System

- Generating Capacity of 33,128 Megawatts (MW)
  - 109 Hydro units (3,526 MW)
  - 4 Pumped storage units (1,618 MW)
  - 59 Coal-fired units (15,081 MW)
  - 6 Nuclear units (6,925 MW)
  - 83 Combustion turbines (5,960 MW)
  - 9 Diesel generators (13 MW)
  - Renewable (wind, solar, methane gas) (5 MW)

TVA Steam and Combustion Turbine Plant Locations



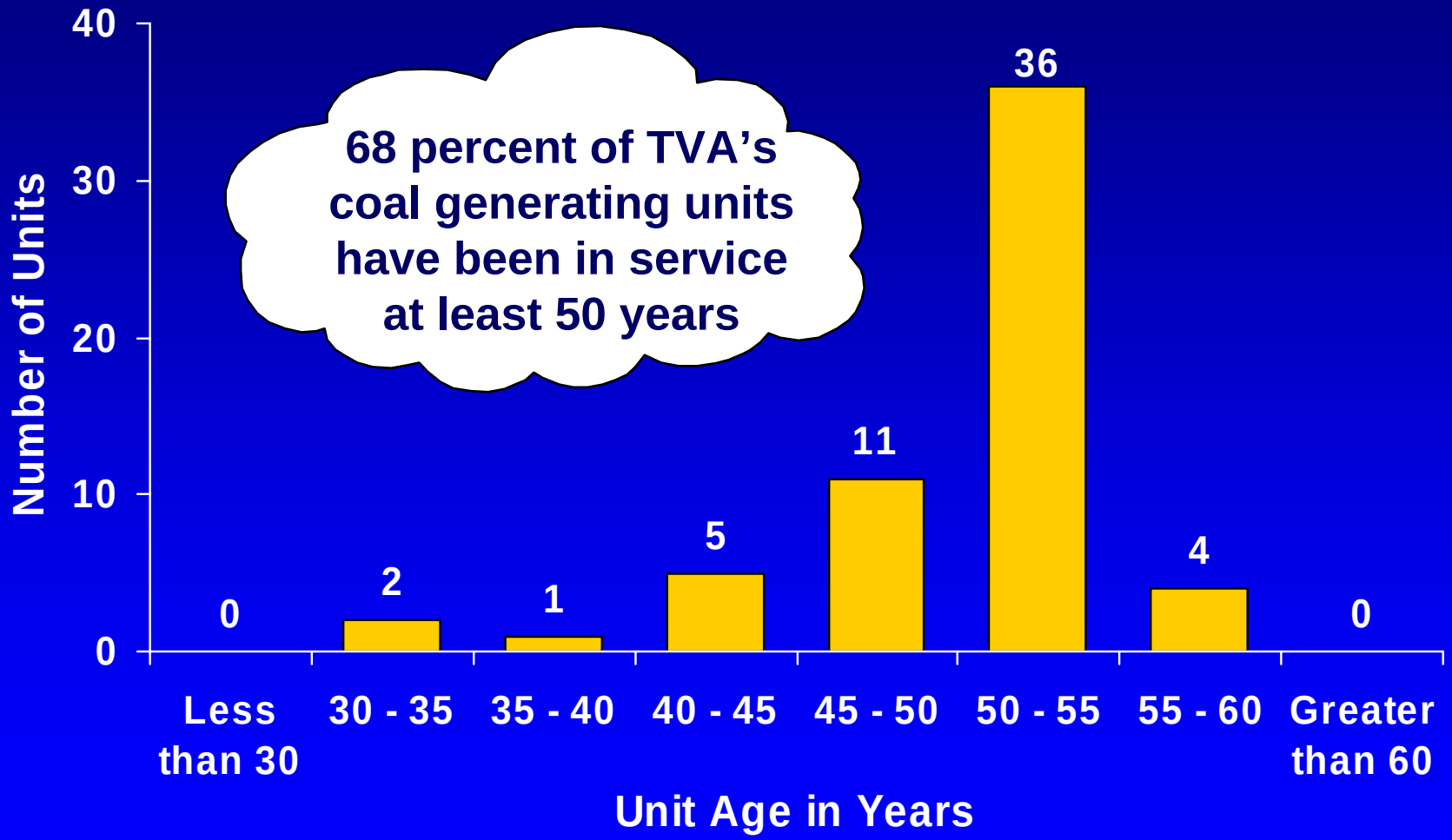
TVA Coal-Fired Plants

Plant	Number of Units	Year Online (First Unit)	Winter Dependable Capacity (MW)
Allen	3	1959	750
Bull Run	1	1967	889
Colbert	5	1955	1,201
Cumberland	2	1973	2,524
Gallatin	4	1956	988
John Sevier	4	1955	712
Johnsonville	10	1951	1,254
Kingston	9	1954	1,448
Paradise	3	1963	2,318
Shawnee	10	1953	1,369
Widows Creek	8	1952	1,628
Total	59		15,081

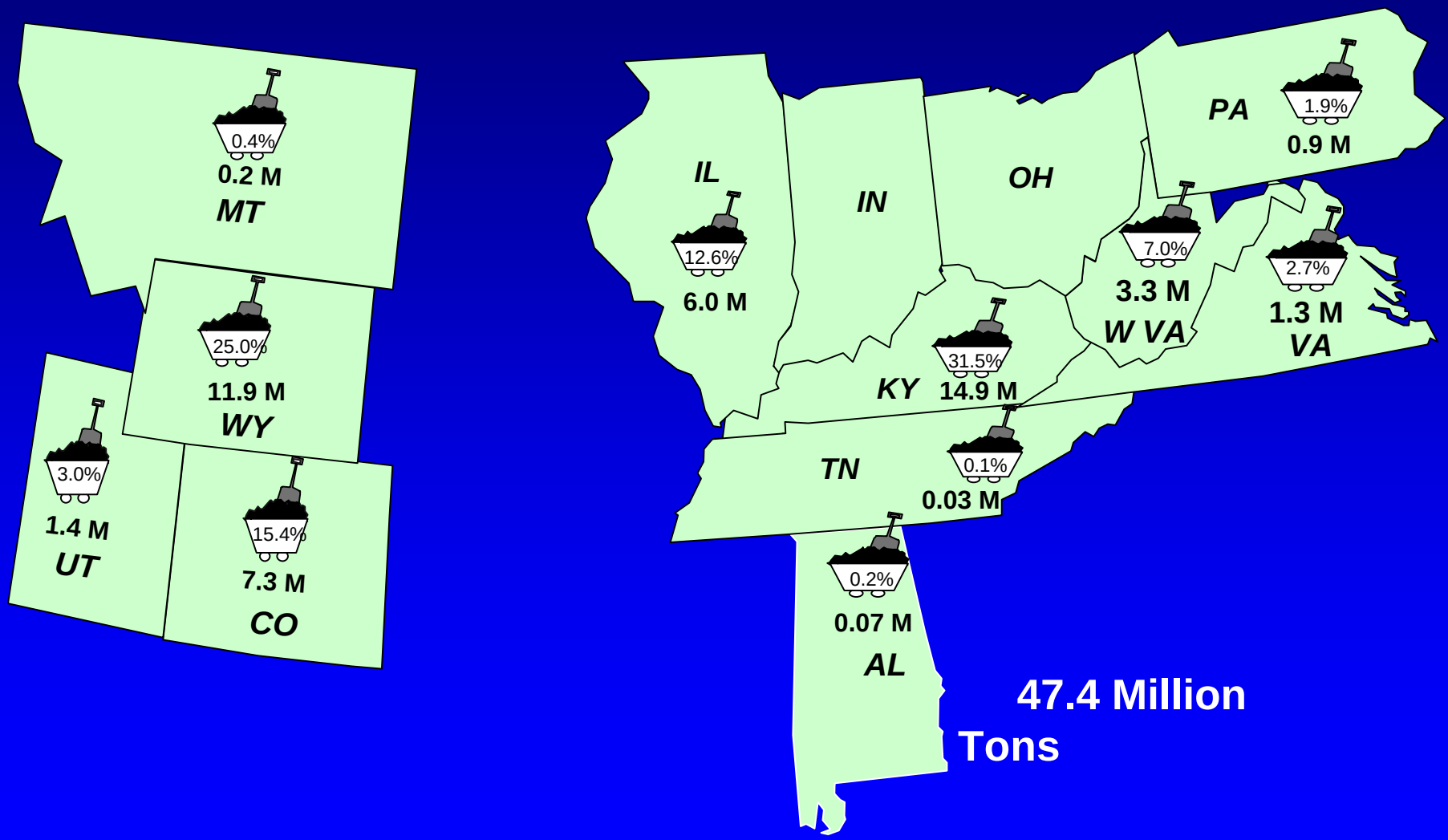
TVA ‘s Johnsonville Fossil Plant (near Waverly, TN)

TVA's Cumberland Fossil Plant (near Clarksville, TN)

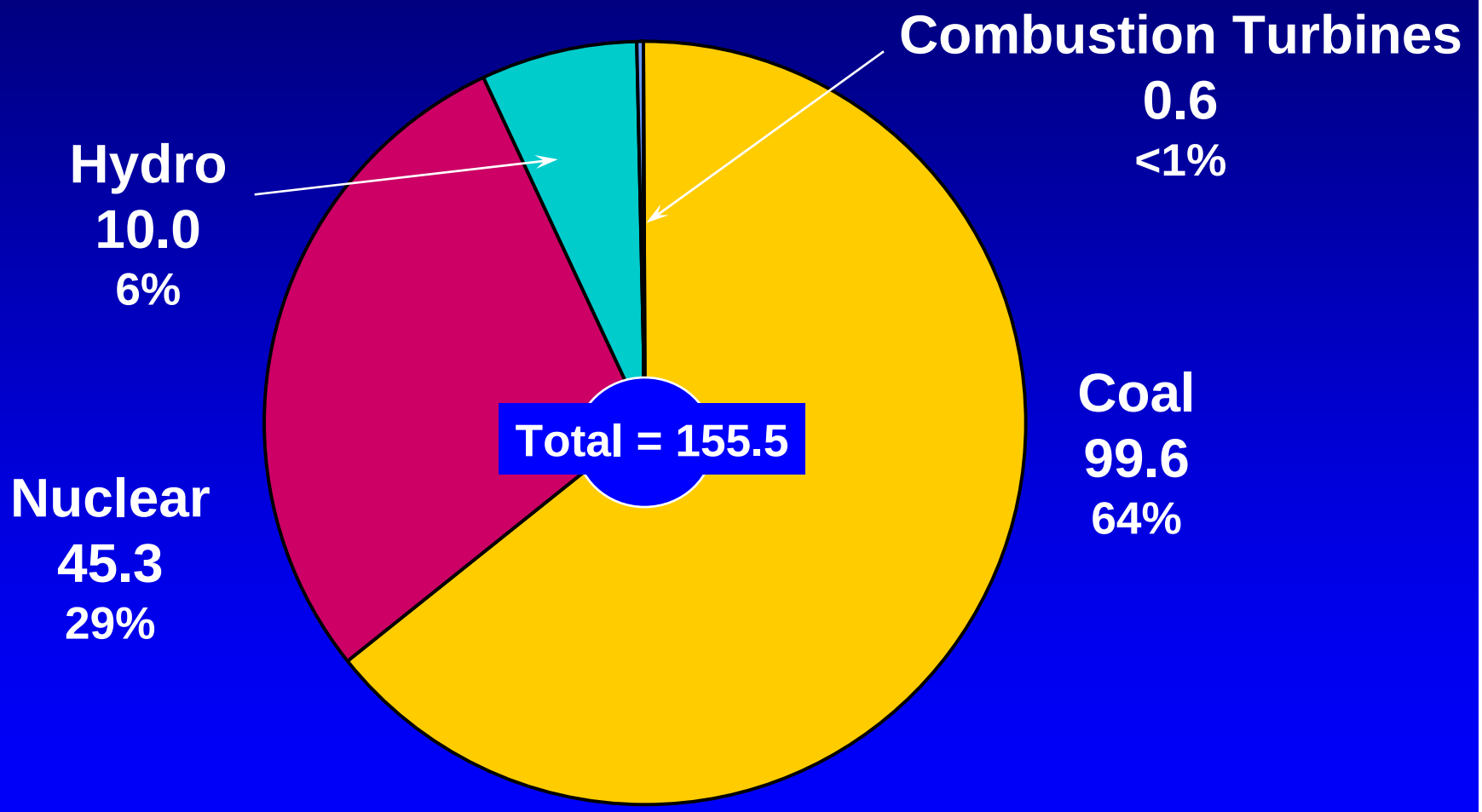
TVA Coal Unit Age Profile



TVA Fiscal Year 2006 Coal Receipts



TVA Net Generation Summary – 2006
(Millions of Megawatt hours)



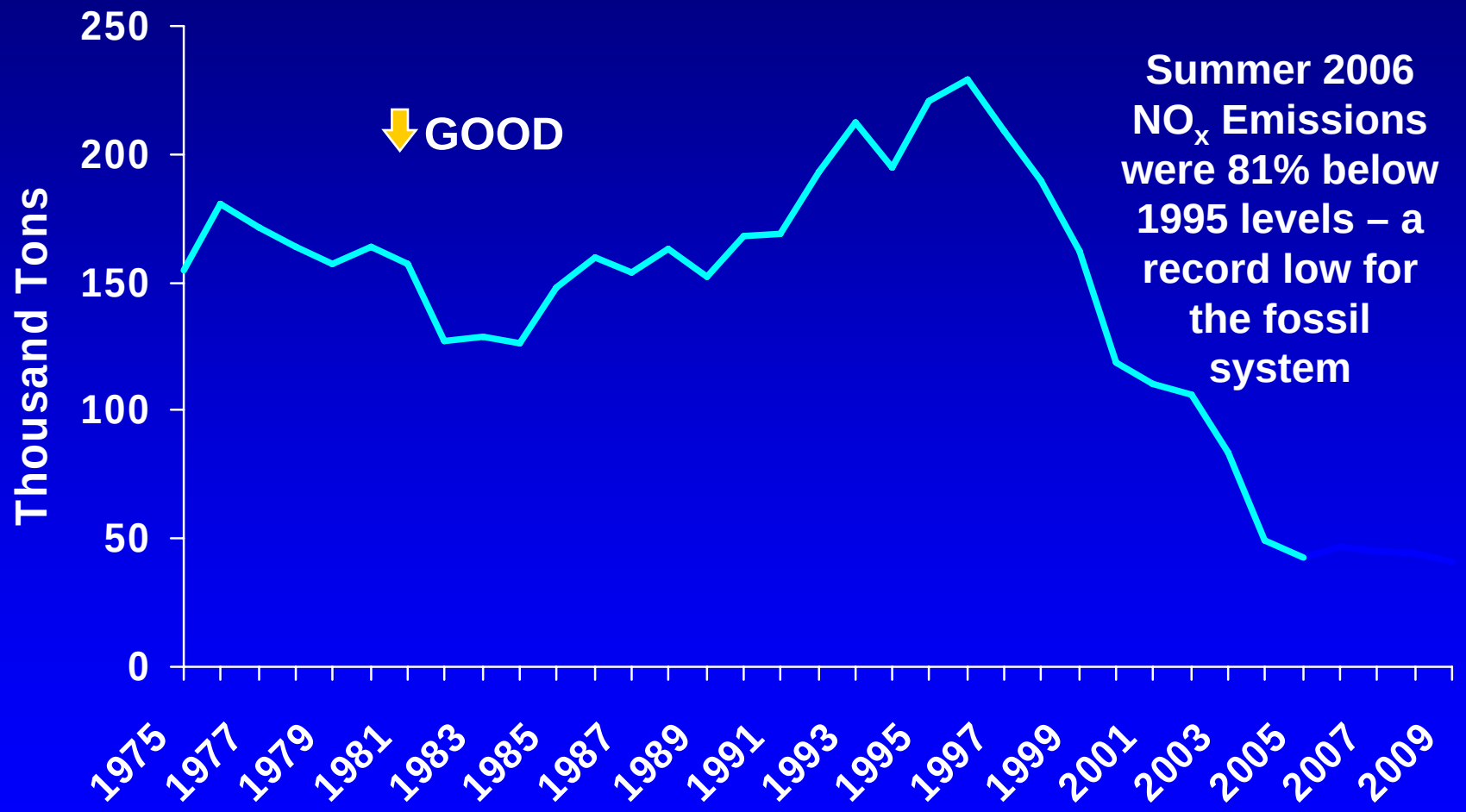
Renewables = 0.019 Million MWhr

Recent Highlights

- TVA fossil system generation of 100 million megawatt hours in fiscal year 2006 was the second highest on record
- TVA fossil system reliability in fiscal year 2005 was the best in the history of the fossil system
- Sulfur dioxide emissions and summer-time nitrogen oxide emissions in 2006 were at their lowest level since all of TVA's fossil units have been operating
- Unit 6 at TVA's Shawnee Fossil Plant near Paducah came offline February 15, 2007 after having operated 1,093 days straight, establishing a new national record for the continuous operation of a steam generating unit.
- Thirteen coal-fired units set all time high continuous run levels in fiscal year 2006

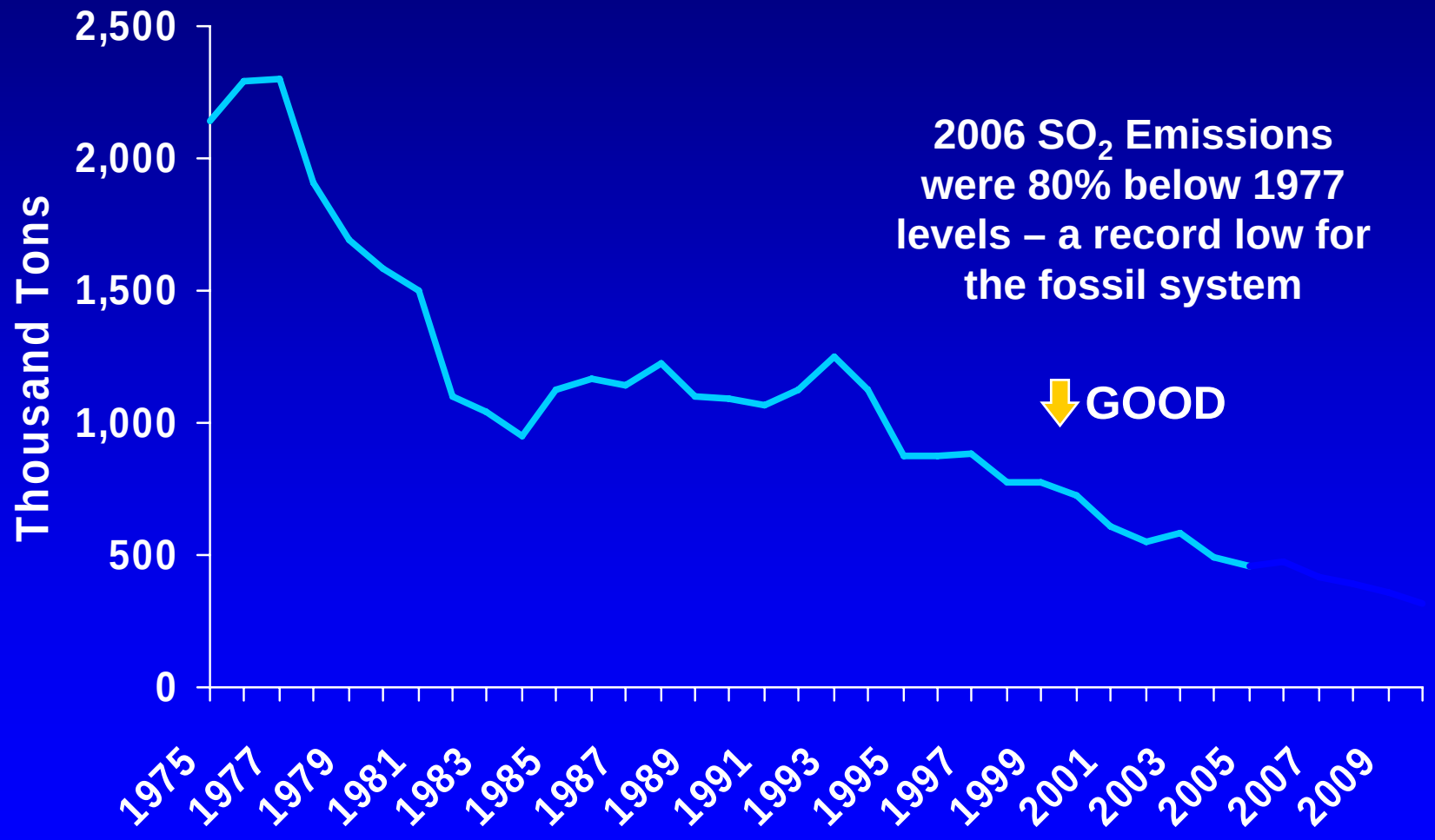
Clean Air Performance

TVA Ozone-Season NOx Emissions



Summer 2006 NO_x Emissions were 81% below 1995 levels – a record low for the fossil system

TVA Annual SO2 Emissions



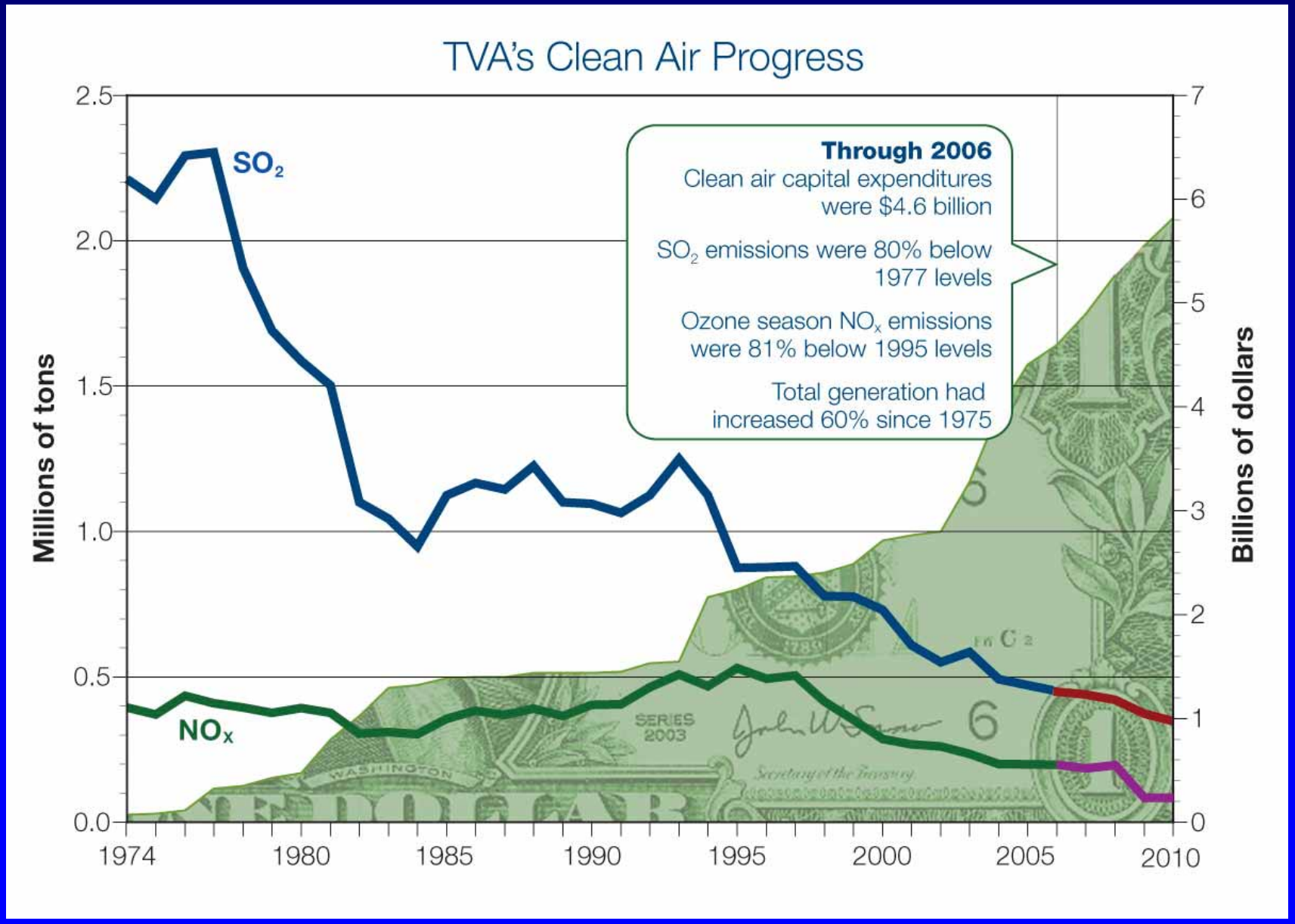
Diversity of TVA Environmental Controls

Plant	Unit(s)	NO_x		SO_2	
		Combustion Controls	Post-Combustion Controls	Scrubber Online Date	Current Fuel
Allen	1-3	Staged Overfire Air	SCR (2002/2003)		West
Bull Run	1	Boiler Optimization	SCR (2004)	2009	CAP
Colbert	1-4	Low-NOx Burner			West
Colbert	5	Low-NOx Burner	SCR(2004)		West
Cumberland	1-2	Low-NOx Burner	SCR (2003/2004)	1994	ILB
Gallatin	1-4	Low-NOx Burner and Staged Overfire Air			West
John Sevier	1-4	Low-NOx Burner and Staged Overfire Air	U1 HERT (2007) U2-4 HERT (2009)	2012	CAP
Johnsonville	1,5-6	Boiler Optimization	U1 SNCR (2005) U5-6 SNCR (Future)		Blend
Johnsonville	2-4	Boiler Optimization	U2 HERT+OFA (2007) U3-4 HERT+OFA (Future)		Blend
Johnsonville	7-10	Low-NOx Burner			West

Diversity of TVA Environmental Controls
(continued)

Plant	Units	NOx		SO2	
		Combustion Controls	Post-Combustion Controls	Scrubber Online Date	Current Fuel
Kingston	1-4	Boiler Optimization	SCR (2004)	2010	Blend
Kingston	5-8	Low-NOx Burner and Staged Overfire Air	U5-6 SCR (2005) U7-8 SCR (2004)	2010	Blend
Kingston	9	Boosted Overfire Air	SCR (2006)	2010	Blend
Paradise	1-2	Staged Overfire Air	SCR (2001/2000)	1983	ILB
Paradise	3	Staged Overfire Air	SCR (2003)	2006	ILB
Shawnee	1-9	Low-NOx Burner	U1 SNCR (2005)		West
Shawnee	10	AFBC (1988)			Blend
Widows Creek	1-6	Low-NOx Burner			Blend
Widows Creek	7	Low-NOx Burner	SCR (2003)	1981	ILB
Widows Creek	8	Low-NOx Burner	SCR (2004)	1977	ILB

TVA Clean Air Expenditures



Future Compliance

- Regulatory
  - National Ambient Air Quality Standards
  - Mercury rulemaking
  - Regional Haze Requirements
- Judicial
  - Supreme Court Case on CO_2 for mobile sources
  - Litigation on the Clean Air Interstate Rule & Clean Air Mercury Rule
  - 316 b
- Legislative
  - Carbon
  - Four Pollutant Bills

TVA's Future Direction

New Strategic Plan Supports TVA Mission

- Energy
- Environment
- Economic Development

TVA Strategic Plan
Environmental Focus

- Energy efficiency
- Load shaping
- Renewable resources
- Reduce TVA's carbon footprint
- Reduce emissions by adding controls and using cleaner coal at fossil plants
- Examine opportunities to retire fossil plants with high emissions as demand is reduced through energy-efficiency efforts

Summary

- TVA has had a profound influence on improving the life of the people in the Tennessee valley
- TVA has grown into the nation's largest provider of public power using a diverse mix of generating resources
- TVA produces over 60% of its power from coal and does so in an environmentally responsible manner.
- Future environmental issues will result in more reductions
- The value of coming together as a group to share ideas and experience will only increase in the future as new challenges arise and technologies continue to changen


TVA