

JACKSON WALKER L.L.P.

*PRESENTS THE*

**2011** A Texas Legislative Update and  
Report on the Latest EPA Threats

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# Presentation Outline



## Legislative Update

- Sunset
- Oil & Gas
- Electricity
- Energy Efficiency
- Air Quality
- Alternative Fuel Vehicles
- Other Regulatory Reform
- Energy Tax Policy

## EPA Regulatory Threats

- The EPA Avalanche
  - Oil & Gas
  - Electricity
- Risks to Texas
- What Can Texas do to Respond?





# Overview of Process Sunset Legislation



- **“Sunset date”**: Each agency is set to expire or “sunset” on a specific date.
- **Sunset review**: For the two years before an agency’s sunset date, the agency will undergo a review by the Sunset Advisory Commission, which involves interviews, analysis, and the publication of a report on the agency.
- **Sunset recommendation**: Sunset Advisory Commission will recommend to abolish the agency, continue the agency, or continue the agency with revisions.
- **Development of legislation**: The Commission will ultimately prepare legislative language that accomplishes its recommendation.
- **“Safety net”**: Near the end of the session, a bill will be passed that continues key agencies for which sunset legislation has not yet been made final.



# TCEQ

## Sunset Legislation



- **HB 2694 (W. Smith/Huffman):** Passed and will continue the agency for 12 years.
- **Key issues**
  - Compliance history policy modified
  - Maximum penalty increased from \$10,000 per day to \$25,000 per day
  - Dam safety policy modified, directing TCEQ to focus on most dangerous dams, exempting dams impounding less than 500 acre-feet of water in rural areas
  - Transferred “water board” letter process to the Railroad Commission
  - Petroleum Storage Tank program reauthorized





# TCEQ Sunset Legislation: Key Issues Continued



- **Utility MACT Permitting:** Provides electric generating facilities with agency led, abbreviated contested case permit process, if requested by intervenor, limited to fact specific technology issues for permit amendments required for compliance with the “Utility MACT” rules to be issued by the EPA; 45 days for TCEQ to issue draft permit; 120 days for TCEQ to issue order after draft permit.
- **Executive Director’s Role in Contested Cases:** Requires the TCEQ Executive Director to participate in contested case hearings both to provide information to complete the record and to support the Executive Director's position developed in the underlying proceeding.
- **Discovery Deadline in Contested Cases:** Requires all discovery to be completed before the deadline for submission of prefiled testimony. This provision will effectively cut off discovery that in some cases now continues after prefiled testimony is filed.





# RRC

## Sunset Legislation



- **SB 655 died in Conference Committee:** The House and Senate passed different versions of the bill, and the Conference Committee was not able to reconcile the differences.
- **Key Issues:**
  - 1 Commissioner vs. 3 Commissioners
  - Moving hearings to SOAH
- **Next Step:** The RRC was included in the safety net, and RRC will undergo sunset review again in 83rd Legislature.





# PUCT Sunset Legislation



- **SB 661 (Nichols/Solomons):** Bill died
- **Next Step:** The PUCT was included in the safety net, and the PUCT will undergo sunset review again in 83rd Legislature.
- Market structure is a major issue of discussion moving forward



# Oil & Gas Environmental Legislation Passed



- **HB 3328 (Keffer/Fraser):** Requires disclosure of the composition of hydraulic fracturing fluids used in hydraulic fracturing wells.
- **SB 1134 (Hegar/Craddick):** Requires the TCEQ, before issuing a new standard permit and PBR for the oil and gas industry, to:
  - consider monitoring data and adopt modeling protocols that are consistent with this data.
  - make a determination, based on this data, that changes to the existing permit by rule are necessary to protect public health and safety.
- **SB 527 (Fraser/Geren):** Requires the installation of air monitors in the Barnett Shale (TERP-funded).







# Electricity Legislation



- **SB 1133 (Hegar/Harless):** Requires the PUC to prepare a weather emergency preparedness report on the ability of the state's electric generators to respond to abnormal weather conditions.
- **SB 943 (Carona/Anchia):** Clarifies regulatory status of energy storage facilities.
- **SB 15 (Fraser):** Failed to Pass. Would have created a State Energy Planning Council – controversial origins/intentions
- **HB 355 (Burnam):** Failed to pass. Would have imposed a tax on coal loaded on or unloaded from railcars in Texas.





# Energy Efficiency Legislation



- **SB 1125 (Corona/Anchia):** Expands the PUC's energy efficiency goal program by focusing the goals on peak demand and by expanding the programs into the residential and commercial customer classes.
- **HB 51 (Lucio III/Hinojosa):** Amends building efficiency standards for state buildings and gives municipalities authority to require additional building standards.
- **SB 898 (Carona/Cook):** Requires political subdivisions, institutions of higher ed, and state agencies to set a goal of reducing the entity's electric consumption by 5% for each of the 10 state fiscal years beginning Sept. 1, 2011.
- **SB 924 (Carona/Keffer):** Requires municipally owned utilities and electric cooperatives to submit a report to SECO on the combined effects of the utility's or cooperative's energy efficiency activities. Also requires the Energy Systems Laboratory at Texas A&M to analyze the data in the reports.



# Air Quality Legislation Passed



- **SB 875 (Fraser/Hancock):** Provides a defense to a GHG-related nuisance or trespass claim if the operator of the facility is in “substantial compliance” with its air permit.
- **HB 1981 (W. Smith/Gallegos):** Codified in statute the TCEQ’s Air Contaminant Watch List.
- **HB 2694 (W. Smith/Huffman)(TCEQ Sunset Bill):** Contested case process for “Utility MACT” compliance.





# Air Quality Failed Legislation



- **HB 822 (Farrar):** Failed to pass. Would have required all electric generating units to reduce mercury emissions by 90%.
- **SB 506 (Deuell):** Failed to pass. Would have required fish consumption advisories for lakes in Texas based on potential mercury contamination found in the lakes.
- **HB 820 (Farrar):** Failed to pass. Would have required fence-line monitoring of emissions of air contaminants.
- **HB 3196 (Coleman)/SB 1576 (Ellis):** Failed to pass. Would have required reporting of emissions events within one hour of the event.



# Alternative Fuel Vehicle Incentives



- **SB 20 (Williams/Strama):** Created the Texas Natural Gas Vehicle (NGV) Grant Program, directing the TCEQ to create a rebate grant program that is streamlined and limited to NGVs.
- **HB 3399 (Legler):** Made several changes to the program requirements for TERP and Clean Fleet to streamline programs and expand applicability.
- **SB 385 (Williams/Otto):** Created the Alternative Fueling Facilities Program, directing the TCEQ to create a grant program for alternative fueling stations.





# Other Regulatory Reform

- **SB 1478 (Kegar/Crownover):** Codified permit review timelines for surface mining permit applications before the Railroad Commission.
- **HB 3037 (Chisum):** Failed to pass. Would have made significant revisions to the contested case hearing process, including shifting the burden of proof, requiring ED involvement, and reforming discovery and prefiled testimony process.
- **HB 125 (Legler):** Failed to pass. Would have required the TCEQ to conduct a regulatory impact analysis for environmental rules that compares the environmental benefit of the rule to the impact on the regulated community.



# Energy Tax Policy



- **HB 2280 (Eiland/M. Jackson):** Provides that one member of the Permanent Advisory Committee for the Pollution Control Property Tax Abatement Program must be a representative of a school district or junior college district.
- **Texas Tax Code, Chapters 312 & 313**
  - Property tax abatement agreements for new projects
  - Cities, counties, local school districts
  - Critical to success of renewable energy projects, particularly wind projects
- **Ch. 313 Extension:** An extension of the Ch. 313 program was included in SB 1811 (fiscal matters), but the bill died after a filibuster by Sen. Wendy Davis.

# EPA Regulatory Threats



## The EPA Avalanche

- Regulating Use of Diesel in Fracking
- Range Resources Order
- EPA Study on Fracking
- Greenhouse Gas NSPS for EGUs
- 316(b) Rule
- Coal Combustion Residuals Rule
- Utility MACT Rule
- Cross-State Air Pollution Rule
- Ozone Rule

## Risk to Texas' Electric Generating Fleet

- Relative Resilience of the Texas Power Fleet
- Meeting Regulatory and Consumer Electricity Demands

## What Can Texas do to Respond





# Federal Regulation of Fracking

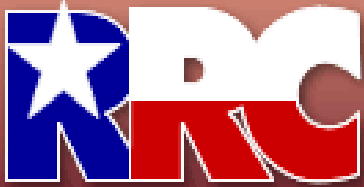


- Safe Drinking Water Act exempts fracking (except w/ diesel fuel) from regulation as “underground injection” by the Energy Policy Act of 2005. (42 U.S.C. 300h(d)(1)(B)(ii)).
  - Bills introduced in House March 15, 2011 to remove exemption (HR 1084).
  - Similar bills introduced in Senate (S 587) and in past (2009 – HR 2766).
- April 12, 2011: EPA Deputy Administrator Bob Perciasepe testified before Congress that using diesel in fracking requires an SDWA permit or is a violation.
  - Some members of industry have previously stated that diesel is used, but also report being unable to obtain diesel fracking permits from EPA in past despite efforts.
- EPA is in process of creating permitting guidance for fracking using diesel, with expected finalization by late fall 2011.

# Range Resources: EPA Emergency Order



- December 7, 2010: EPA issues emergency order alleging contamination of two wells.
- Order requires Range Resources, amongst other requirements, to:
  - Provide drinking water within 48 hours to affected residents;
  - Install explosivity meters within 48 hours;
  - Identify gas flow, eliminate gas flow if possible, and remediate areas of aquifer that have been impacted.
- Alleges methane contamination, not fracking fluid specifically
- Alleges that state and local authorities had not taken sufficient action to address endangerment
- Emergency Order under Section 1431 of SDWA.
  - No notice, no opportunity for Range Resources to comment, and no presentation evidence.
  - Failing to comply with Emergency Order could lead to \$16,500 per violation per day penalty.



# Range Resources *(cont.)* EPA Suit & RRC Finding



- January 18, 2011: U.S. DOJ files complaint against Range Resources for not complying with EPA's emergency order.
- January 20, 2011: Range Resources appeals order.
- March 22, 2011: Following investigation, RCT Commissioners unanimously vote to clear Range Resources of EPA allegations. EPA did not testify at hearing.



# EPA Fracking Study Plans

- February 8, 2011 EPA releases Draft Hydraulic Fracturing Study Plan
- Study designed to examine “life cycle” of fracking, particularly potential affect to drinking water resources and human exposure to chemicals.
- Study will analyze and research questions involving:
  - Water Acquisition; Chemical Mixing; Well Injection; Flowback and Produced Water; and Wastewater Treatment and Waste Disposal
- Study will include:
  - Retrospective case studies, possibly in Barnett Shale counties of Wise and Denton Counties
  - Prospective cases studies, possibly in Flower Mound/Bartonville.
- Study expected to be completed in 2012, with 2014 follow-up.
- In 2004, EPA conducted study finding that hydraulic fracturing in coal-bed methane wells pose little to no threat to underground drinking water.





# GHG NSPS for EGUs

- December 23, 2010: EPA announced settlement agreement to propose GHG New Source Performance Standards (NSPS) for certain EGUs.
- July 26, 2011: EPA intends to propose NSPS for new and modified gas, oil, and coal-fired EGUs and emission guidelines for existing gas, oil, and coal-fired EGUs.
- Would require best demonstrated technologies (BDT) to be installed for new and modified facilities; still not clear what complies with BDT.
  - EPA has discussed energy efficiency or post-combustion capture and may even require fuel switching.
- Projected final rule by May 26, 2012.



# EPA's 316(b) Rule

- Most steam-generating power plants use surface water for cooling.
- New rule to require far costlier closed-cycle cooling towers to prevent fish impingement and entrainment.
- Could cost \$64 billion, forcing retrofit of 444 plants, affecting 33 percent of U.S. electric generating capacity.
- Could significantly impact natural gas power plants
  - ERCOT predicts 9,800 MW of gas retirements in the state due to 316(b) Rules.



# EPA's CCR Rule

- Proposed June 2010; expected finalization by Spring/Summer 2012.
- Two CCR Regulatory Options (Haz & Non-Haz).
- Industry: \$75 billion compliance cost.
- EPA: \$20 billion compliance cost (assumed recycling would increase, not decrease).
- EPA's own study found in 2005 that the biggest barrier to recycling was regulation as Haz waste.

# CCR Beneficial Use

## The World's Best Recycling Program



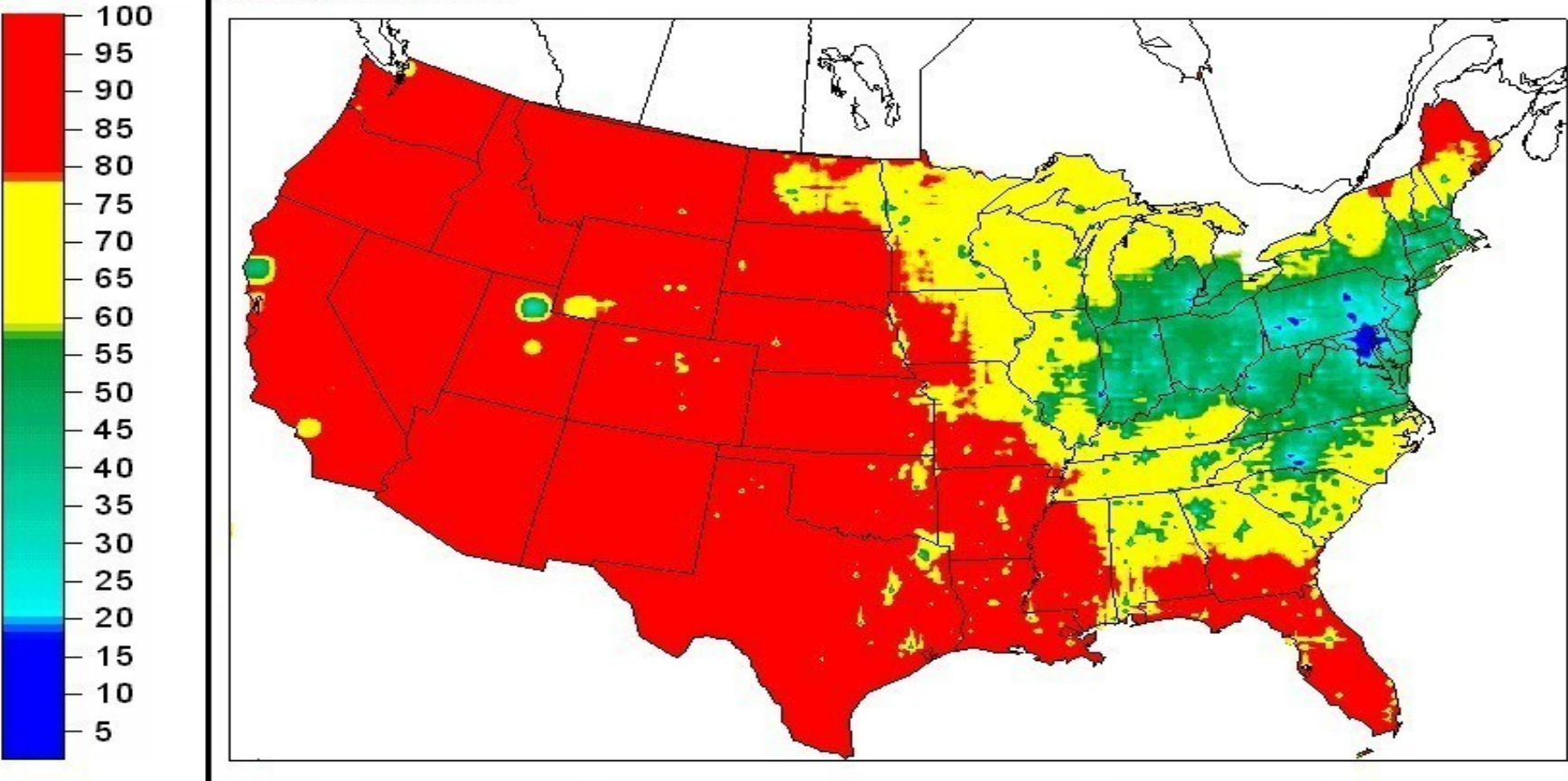


# EPA's Utility MACT Rule



- Proposed May 2011; expected finalization by November 2011.
- EPA's proposal to regulate mercury and other hazardous air pollutants from coal, lignite, and oil-fired power plants.
- Texas has vast deposits of lignite and lignite-fired units that will be affected because of their type and variability of mercury.
- Annual compliance costs by 2015:
  - EPA estimates cost of ~\$11 billion.
  - Industry estimates cost of ~\$100 billion.

# Mercury Deposition – Foreign Sources



**Percent of mercury deposition that originates outside of the U.S.**

Source: EPRI



# EPA's Ozone Rule



- Proposed January 2010; projected finalization by August 2011.
- 85 ppb limit was replaced in 2008 with 75ppb limit.
- Current proposal revokes 2008 limit and will replace with limit between 60-70 ppb.
- Monitored U.S. counties that would violate primary standard:
  - 70 ppb: 515 counties (76% of monitored)
  - 65 ppb: 608 counties (90% of monitored)
  - 60 ppb: 650 counties (96% of monitored)
- State Nonattainment Designations Due: January 2012 (tentative).
- State SIP Revisions Due: August 2014 (tentative).
- EPA predicts cost of compliance up to \$90 billion.

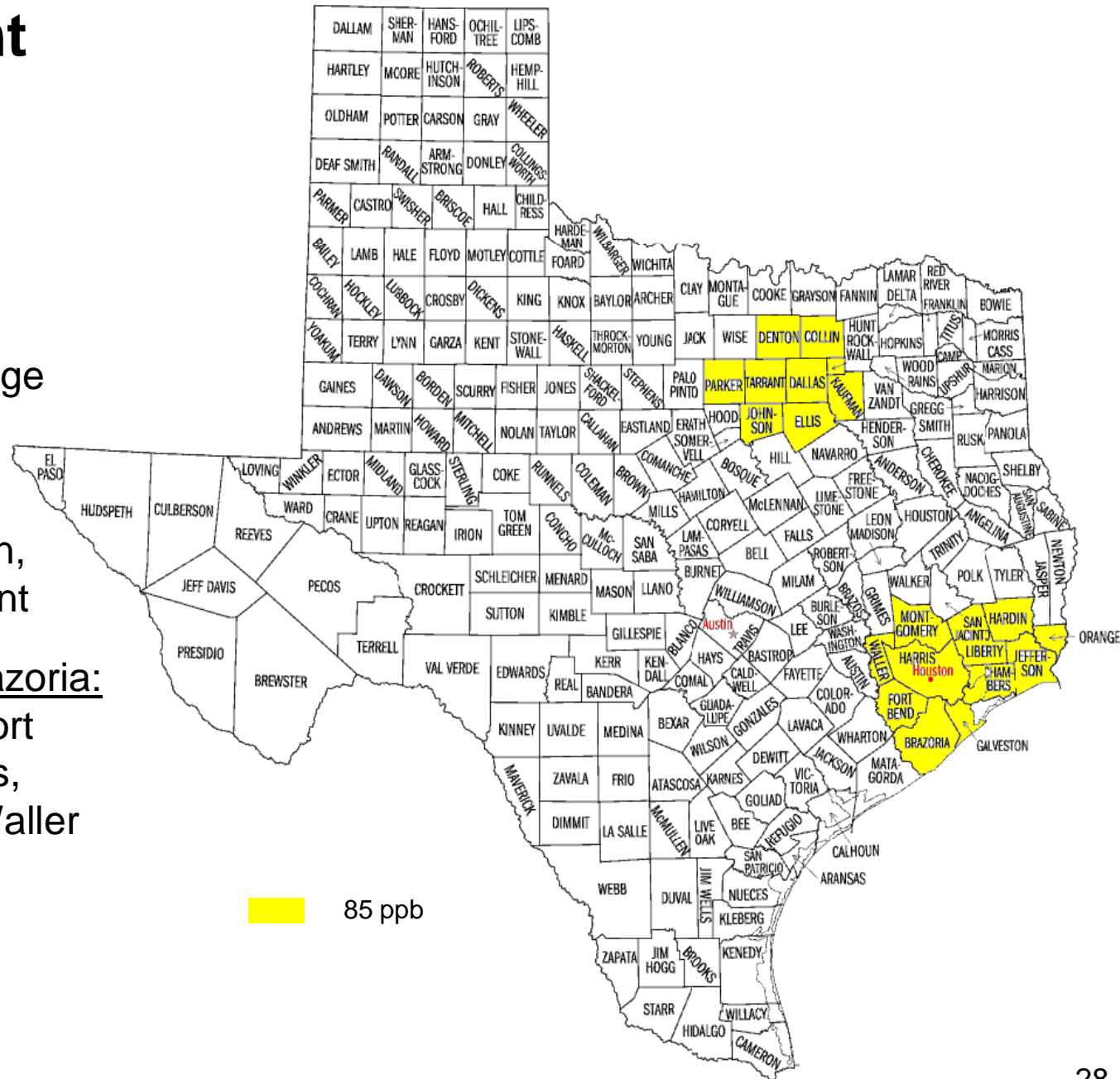


# Nonattainment for 85 ppb (1997 Standard)

Beaumont- Port Arthur:  
Hardin, Jefferson, Orange

Dallas-Fort Worth:  
Collin, Dallas, Denton,  
Ellis, Johnson, Kaufman,  
Parker, Rockwall, Tarrant

Houston-Galveston-Brazoria:  
Brazoria, Chambers, Fort  
Bend, Galveston, Harris,  
Liberty, Montgomery, Waller



# Nonattainment for 75 ppb (2008 standard)

**ADD:**

Bexar

El Paso  
(non-tribal)

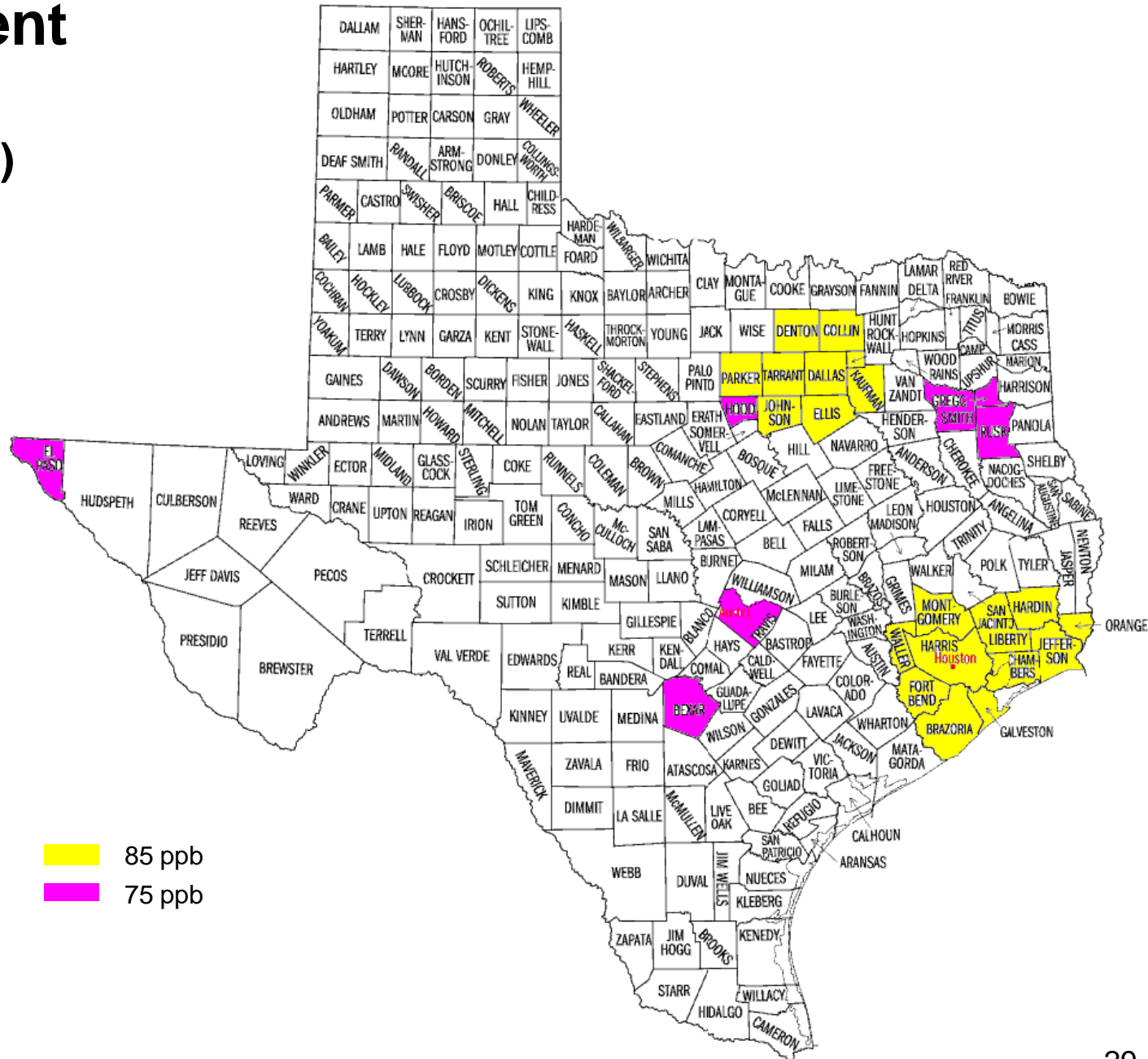
Gregg

Hood

Rusk

Smith

Travis





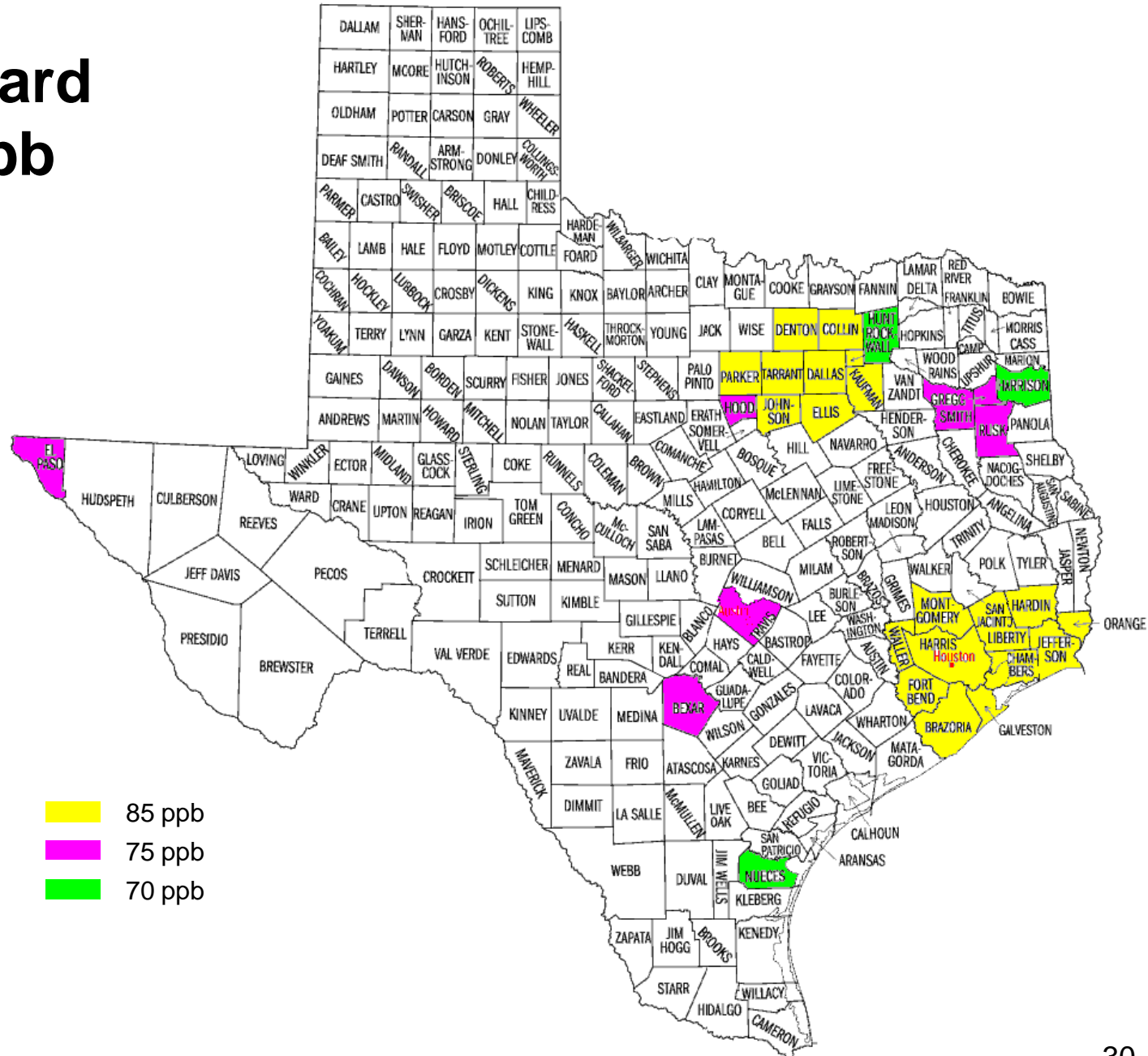
# If new standard set at 70 ppb

ADD:

Harrison

Hunt

Nueces



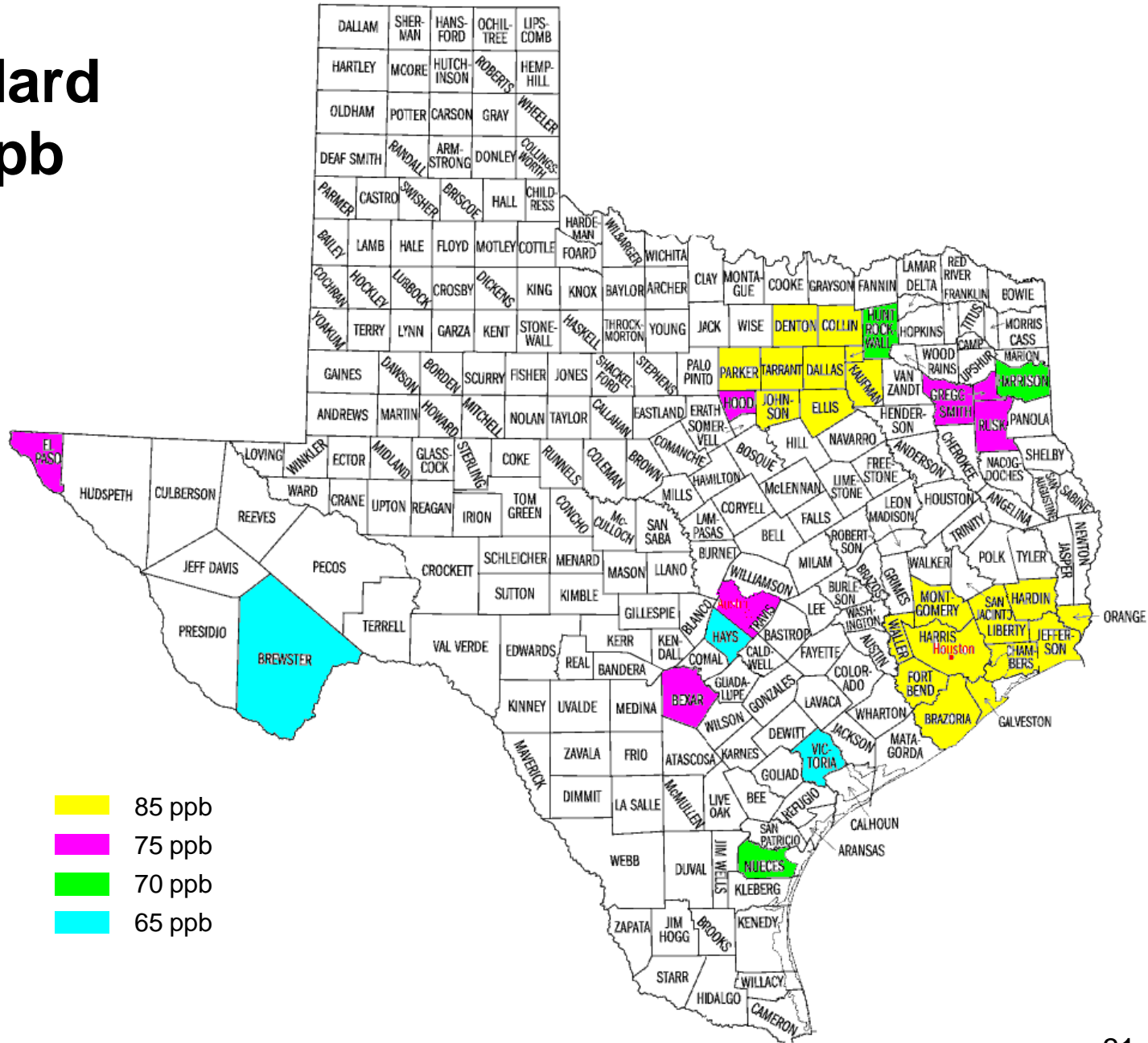
# If new standard set at 65 ppb

**ADD:**

Brewster

Hays

Victoria



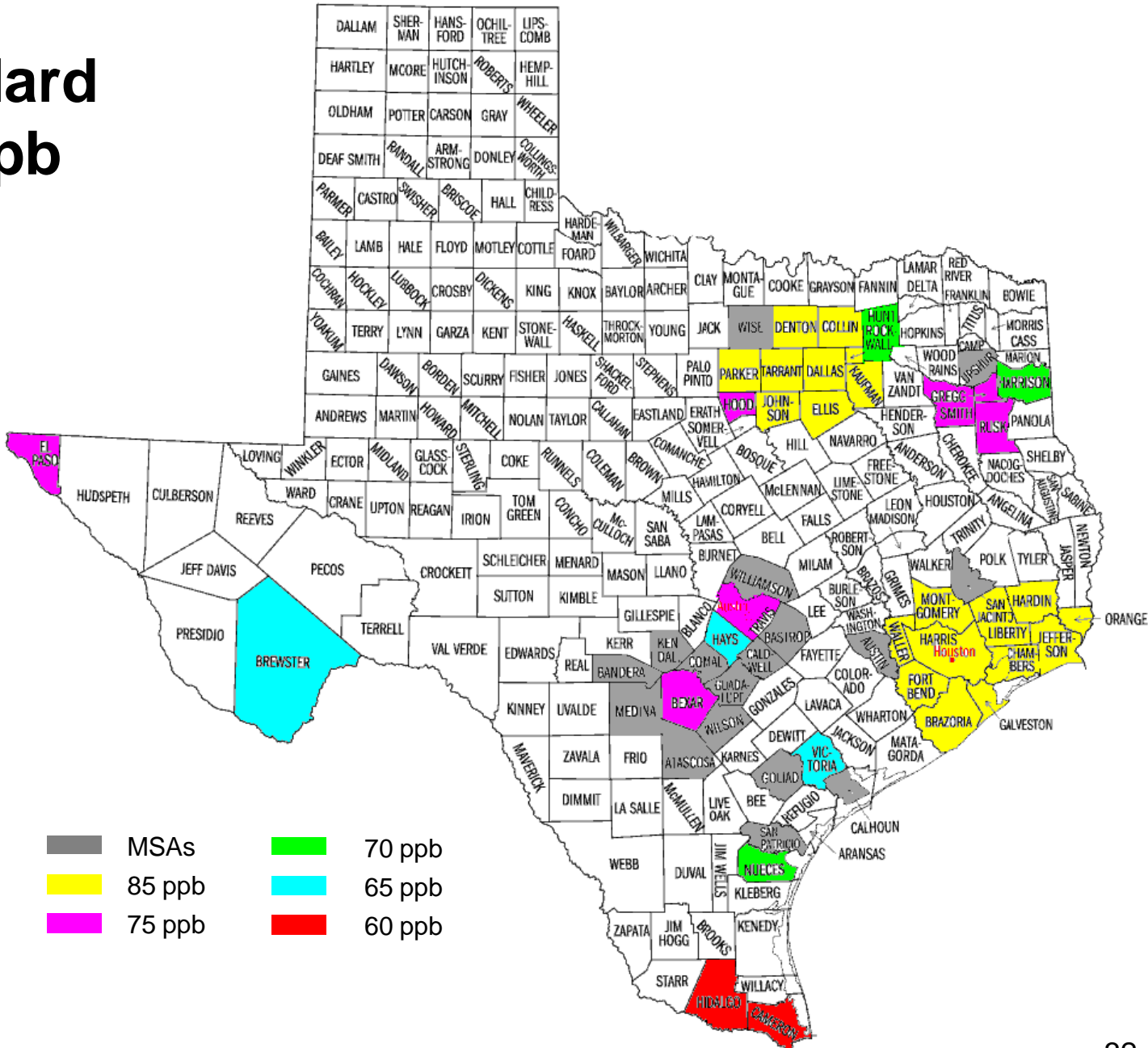
# If new standard set at 60 ppb

**ADD:**

Cameron

Hidalgo

(Metropolitan Statistical Areas also represented on map)





# EPA's Cross-State Air Pollution Rule



- Finalized July 2011; Compliance by January 2012.
- Rule sets state-wide emissions caps on SO<sub>2</sub> and NO<sub>x</sub>, with purpose of reducing PM and ozone exceedances in downwind states.
- Original proposal called for Texas to make NO<sub>x</sub> reductions from May 1 – Sept 30 every year but not to be in annual NO<sub>x</sub> or SO<sub>2</sub> programs; Texas now included in both annual programs.
- Twenty-six percent of the nationwide SO<sub>2</sub> emissions reductions required by the rule in 2012 are to be made in Texas. EPA's new 2012 limits for Texas require a 47 percent reduction relative to 2010 actual SO<sub>2</sub> emissions levels.
- Compliance timeline of January 2012 will likely be impossible for many plants to meet; it typically takes several years for power plants to permit, construct, and install new emissions controls.
- Meeting 2012 compliance date may require shut down of impacted coal-fired units for most of the year; may require permanent shutdown for some plants and multi-million dollar retrofits for others.

# Risk to Texas Electric Generating Fleet

- Despite relative resilience of Texas power plants, suite of EPA regulations will have significant affect on Texas.
- NERC Predicts 5-6 GW of retirements in Texas by 2015.
- ERCOT Predicts 11 GW of retirements in Texas by 2016.
  - 1,200 MW of coal
  - 9,800 MW of gas
- ERCOT estimates a -2.3% reserve margin after retirements (13.75% is the current mandated reserve).
- **Predictions DO NOT include effects of Cross-State Air Pollution Rule (could impact between 5-13 GW).**



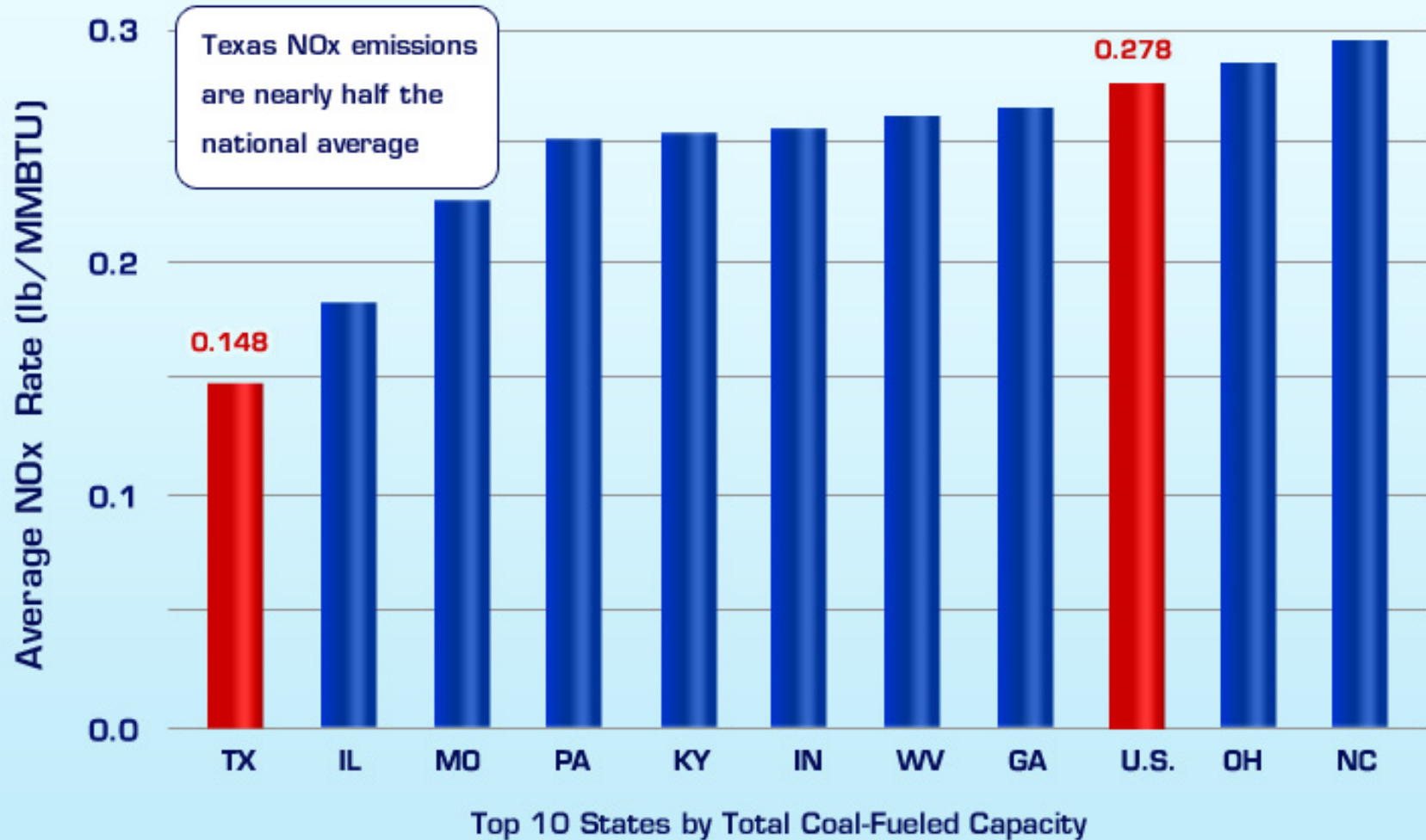
# ERCOT Capacity and Demand Projections – 2011



- Total Requirement MW
- Capacity - 50+ yr. units MW
- Peak Demand MW
- Capacity - 30+ yr. units MW

Based on ERCOT Report May, 2011 and 13.75% reserve margin

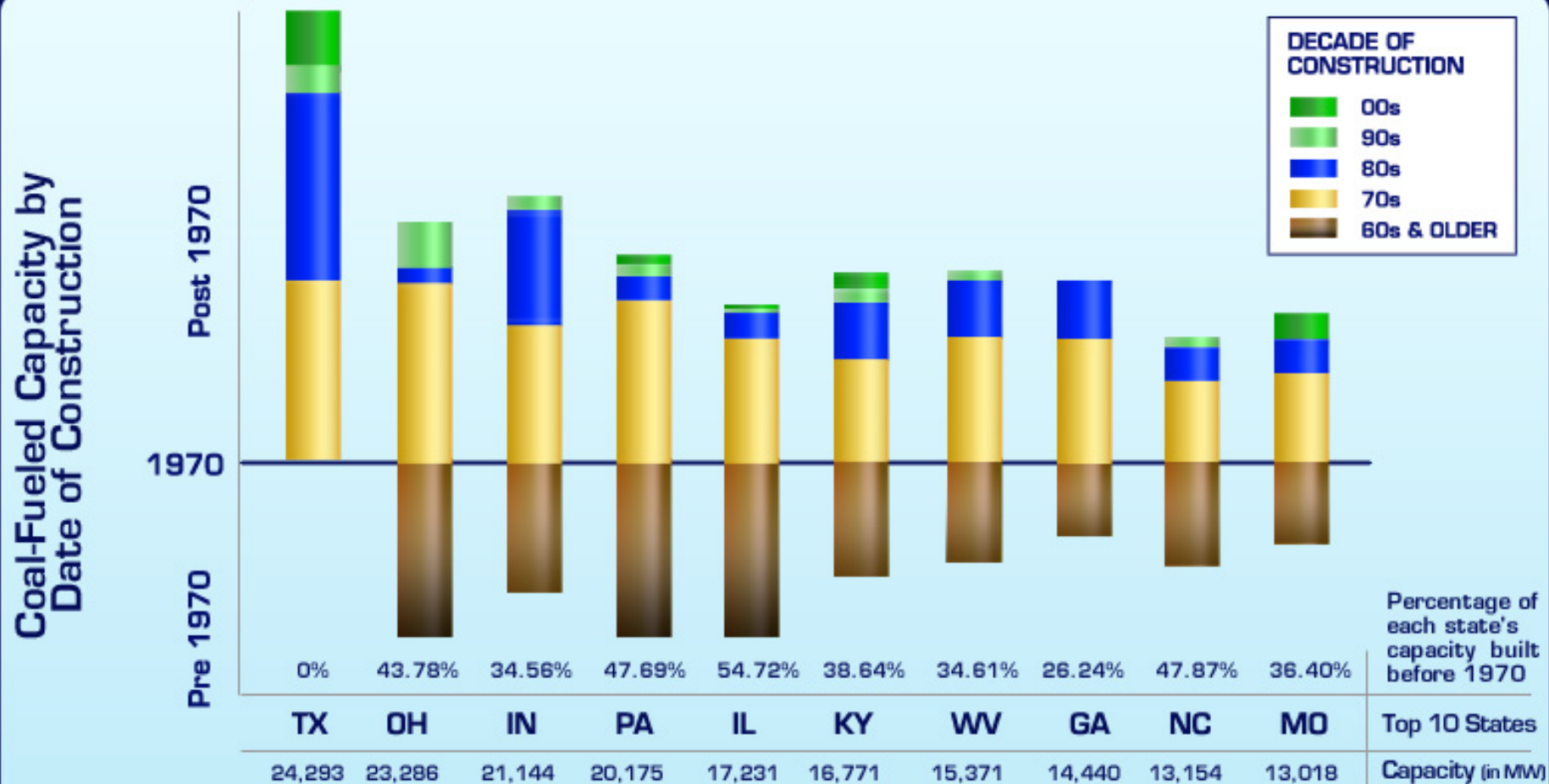
# Average NOx Emissions Top 10 States by Total Coal-Fueled Capacity



\* Based on emissions rate and heat input data from U.S. EPA, Clean Air Markets - Data and Maps and megawatt data from U.S. Energy Information Administration, Form EIA-860-Annual Electric Generator Report, 2009

# Comparing the Age of Coal Fleets

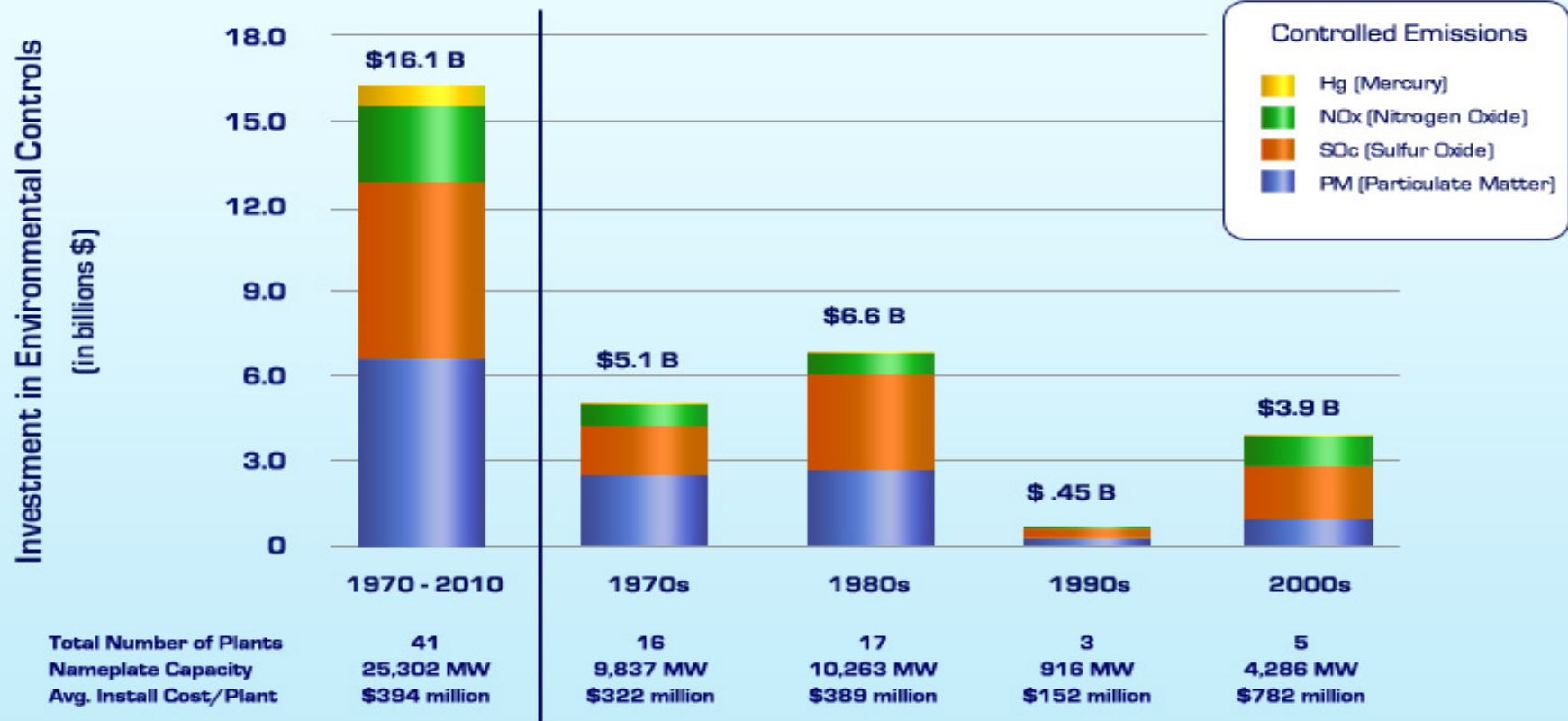
## Top 10 States by Total Coal-Fueled Capacity



\* Based on data from U.S. Energy Information Administration, Form EIA-860-Annual Electric Generator Report, 2009

# Investments in Clean Coal Technology

1970 - 2010



Emission control online date, cost and type information based on data from the U.S. Environmental Protection Agency, EPA IPM v4.10 Documentation and EPA's National Electric Energy Data System (NEEDS) v4.10. Particulate control cost data from Argonne National Laboratories, Environmental consequences of, and control processes for, energy technologies. Park Ridge: Noyes Data Corporation, 1990; reagent injection cost data from Jon Norman, United Conveyor Corporation, "UCC Dry Sorbent Injection: Dry Sorbent Injection as an Alternative to Scrubbers"; additional data compiled from other public sources, including press releases, company websites, etc. Unit characteristic sources based on data from U.S. Energy Information Administration [EIA], Existing Electric Generating Units by Energy Source, 2008, and EIA Form EIA-860 Annual Electric Generator Report, 2009 Data.

\* Additional Sources: Initial operation dates for Sandow 5, Oak Grove 1 & 2, and Sandy Creek are from other sources, including Luminant & CPS websites, press releases, and other publicly available information.

# What Can Texas do to Respond?



- Defend Texas against takeover attempts by EPA regarding the SIP.
- Challenge new regulations that have costs that are not outweighed by their benefit.
- Work with Congressional Delegation to start constraining EPA's overreach.
- Address Texas program inefficiencies to ensure that we do not shoot ourselves in the foot.

# Self-Help Example: Avoiding Procedural Logjams to Power Plant Retrofit Timelines



- HB 2694: Refined, time-certain, procedural process created for retrofits installed responding to EPA MACT regulations.
- Note: The Clinton EPA eliminated evidentiary hearing procedures because it found them to be:

*“unnecessary procedures which do not provide any environmental benefits.”* 65 Federal Register 30886.

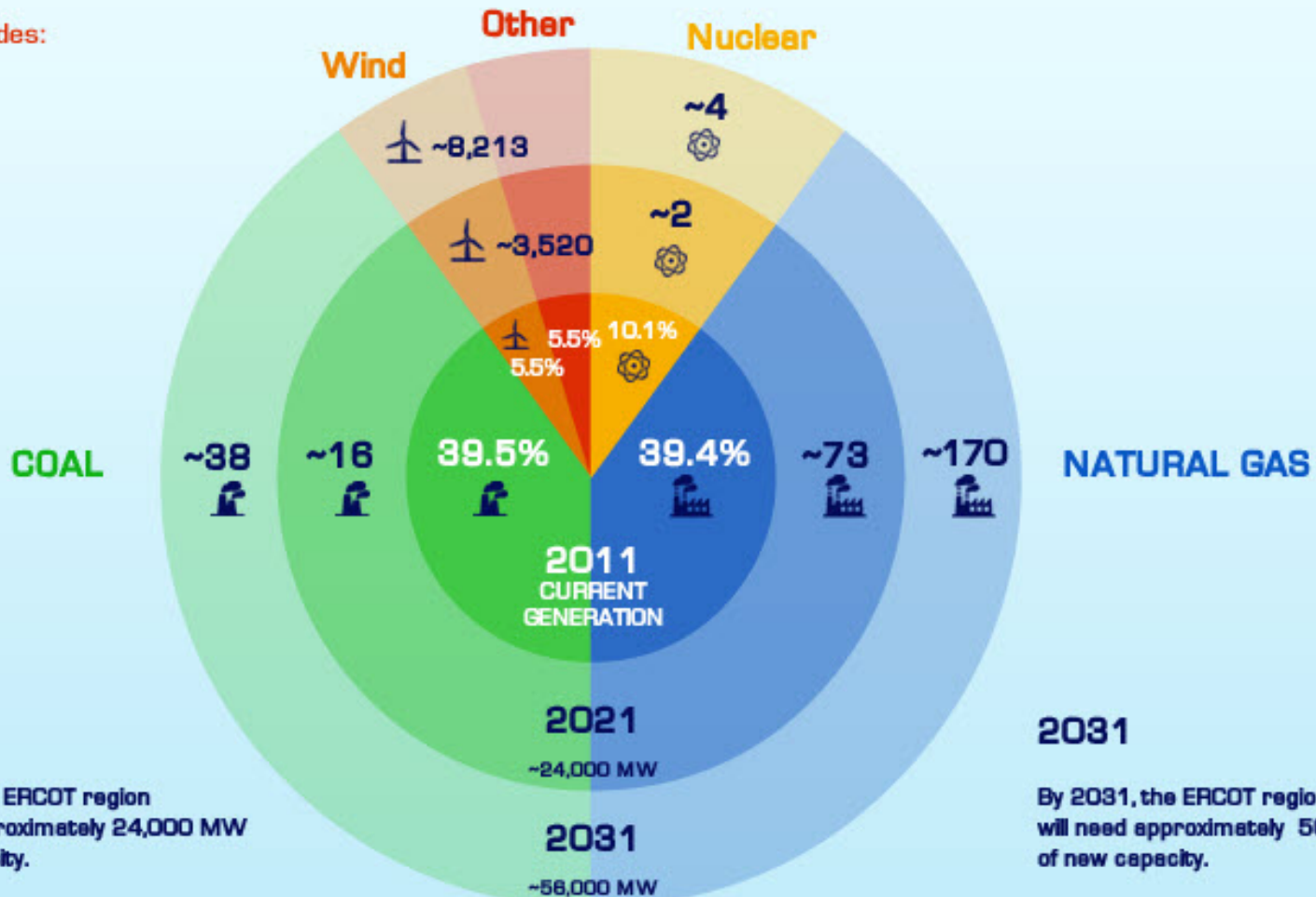


# Texas Generation and Demand Projections – 2011, 2021 and 2031

## Projected New Generation Requirements Based on Current Production

Other includes:

- Petro
- Hydro
- Biomass
- Others



**2021**

By 2021, the ERCOT region will need approximately 24,000 MW of new capacity.

2011  
CURRENT  
GENERATION

**2021**

~24,000 MW

**2031**

~56,000 MW

**2031**

By 2031, the ERCOT region will need approximately 56,000 MW of new capacity.

Based on ERCOT Report on Capacity, Demand and Reserves in the ERCOT Region, May 2011 and average facility baseload according to U.S. Energy Information Administration, Facility Output Capacity, 2009 (Form EIA-860 Database).

Wind calculations are based on 2009 data, which demonstrate an average generating capacity of 1.5 MW per turbine and a 25% capacity factor. 41

Note, however, that ERCOT uses an 8.7% factor for wind generation nameplate capacity when calculating reserve margins.