

EPA RICE NESHAP Update

House Energy & Utilities Committee

January 12, 2012

Municipal Electric Utilities

- Kansas Municipal Utilities (KMU)
- Kansas Municipal Energy Agency (KMEA)
- Kansas Power Pool (KPP)

Background

- **Acronyms**
 - RICE = Reciprocating Internal Combustion Engines
 - NESHAP = National Emission Standards for Hazardous Air Pollutants
- Complex Matrix of Rules
 - NESHAP First time to include <u>existing</u> units
 - Regulation: Title 40, Part 63 of Code of Federal Regulations (CFR)
 - New regulations were widely unnoticed, overlooked until rule finalized
- Two Classifications
 - Compression Ignition (CI)
 - Diesel, Dual Fuel
 - EPA Final Rule: February 17, 2010
 - Spark Ignition (SI)
 - Natural Gas, Gasoline, etc.
 - EPA Final Rule: August 10, 2010

Compliance

- Retrofit (Catalytic Converters, Periodic Testing)
- Emergency Designation
- Retire Units
- Close Power Plants

		Municipal	Municipal	
	Cities	Units	Capacity (MW)	
Kansas	56	306	603	
lowa	67	287	549	
Minnesota	46	192	401	
Missouri	44	201	388	
Nebraska	34	100	120	
Wisconsin	13	47	182	HOUSE ENERGY AND UTILITIES
	760	1122	22/13	1

DATE:

1.18,2017

The Problem

- Existing transmission system in Kansas reliant on RICE units
 - Majority of municipal utilities served at lower transmission voltages
 - Lines tend to be radial, some unreliable
- Units seldom operated, but critical when they do
- Declining populations in Kansas cities with RICE units
 - 51 of 56 communities have declining populations
 - Median = -8.7%
- Small communities ill-equipped to bear the costs of retrofitting units, particularly
- for very questionable environmental benefits
- Unrealistic deadline: May 3, 2013
- Two EPA reconsiderations
 - Demand Response
 - Peak Shaving
 - No resolution until after November elections? Leaves less than six months to comply

Costs

- Cost estimates: \$60,000 to \$100,000 per engine
- Physical space considerations in some power plants
- Some older units unable to comply (exhaust temperatures insufficient)

Examples

- Attica
- Operated 4 RICE units for 29 hours total in 2010
- Estimated cost to retrofit = \$240,000+
- Likely to Close Power Plant
- ≅ lola
- Peak load = 24 MW
- Transmission system can only deliver 17 MW
- RICE units necessary for voltage support

EPA Demand Response Reconsideration – KMU Comments (February 14, 2011)

- Limiting to Grid-Wise Emergency Alert by an RTO is Too Restrictive
 - Behind-the-Meter Generation
 - Localized Emergency Situations Not Captured, Seen by RTO
- Need to Broaden Definition of Emergency
 - Prevent Localized Blackouts
 - Voltage Support, Particularly in Transmission-Constrained Areas
- "KMU units in particular are so embedded in the plans for local reliability that its member communities cannot rely on uninterrupted service year-round without the units."