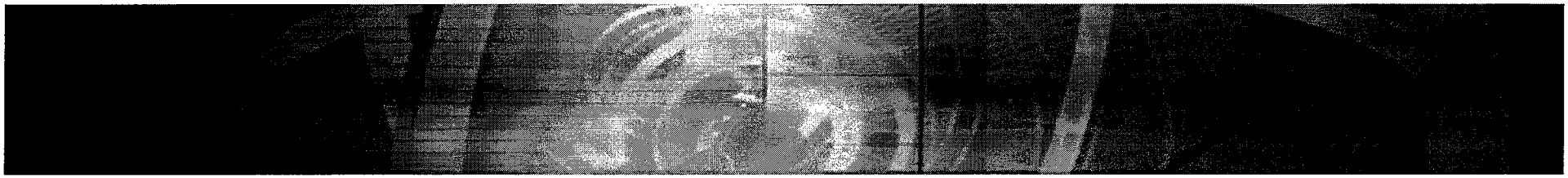
McDERMOTT, WILL & EMERY



KEY ISSUES FOR UTILITIES IN THE 800 MHz INTERFERENCE DOCKET (WT Docket No. 02-55)

January 14, 2004

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NEW YORK | ORANGE COUNTY | ROME | SAN DIEGO | SILICON VALLEY | WASHINGTON, D.C.

Presentation Overview

- Who We Are
- Why Utilities Are So Concerned About This Docket
- Utilities' "Top 3" Issues and Suggested Solutions

Who We Are

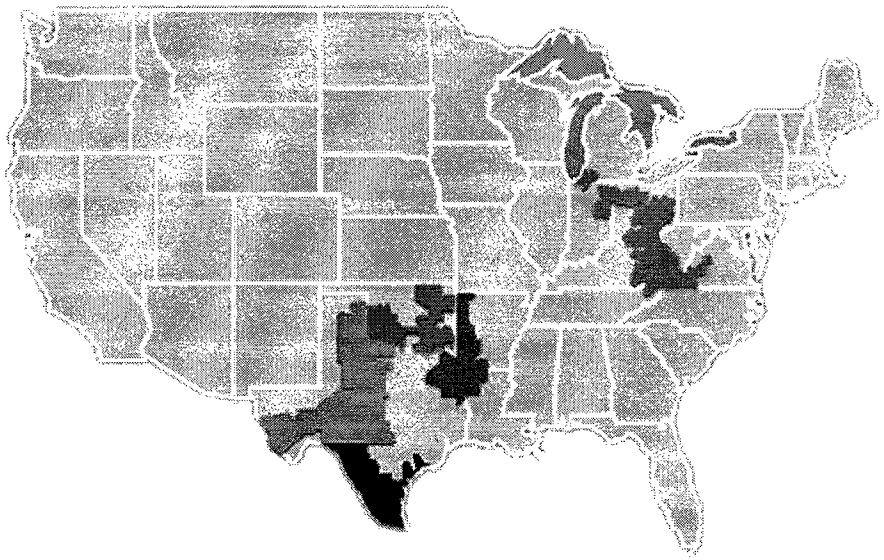
American Electric Power

Cinergy

Consumers Energy

Entergy

American Electric Power Co. Service Area



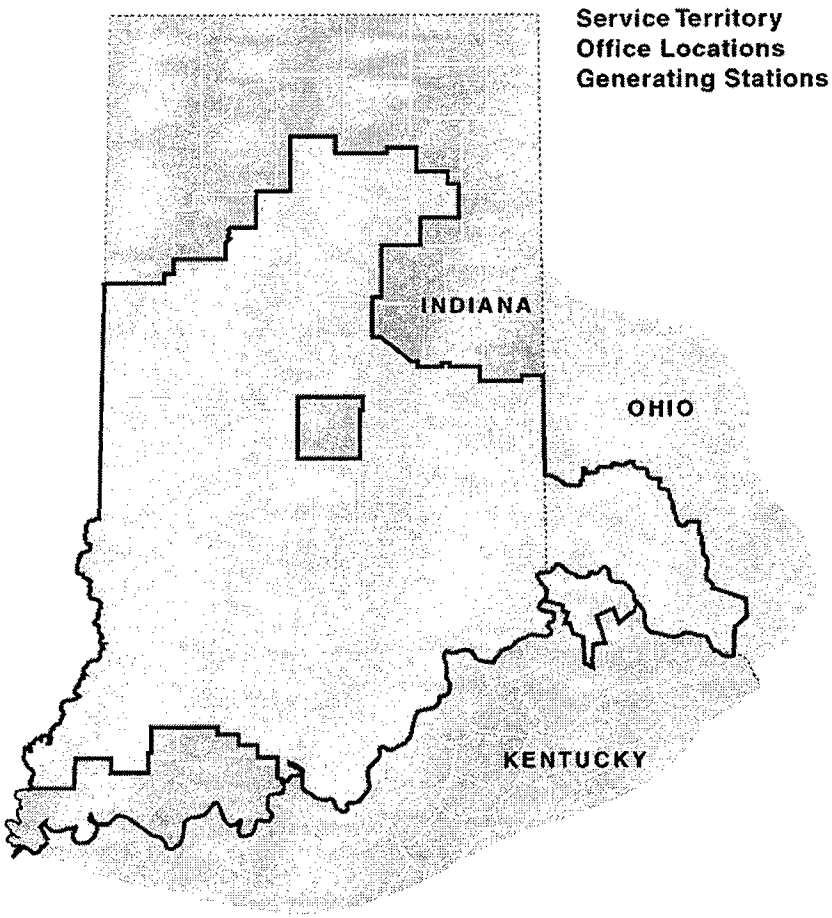
- 23,000 U. S. employees
- 11 States served: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee,Texas, Virginia, West Virginia
- 197,500 square miles of service territory
- 38,000 Miles of transmission lines
- 4.9 million U.S. customers
- AEP Trunked Radio System:
  - 280+ current sites (31 add'l sites in planning stage)
  - 10,500+ mobiles and portables

AEP®

TELECOMMUNICATIONS

CINERGY
the power of change

Cinergy Overview

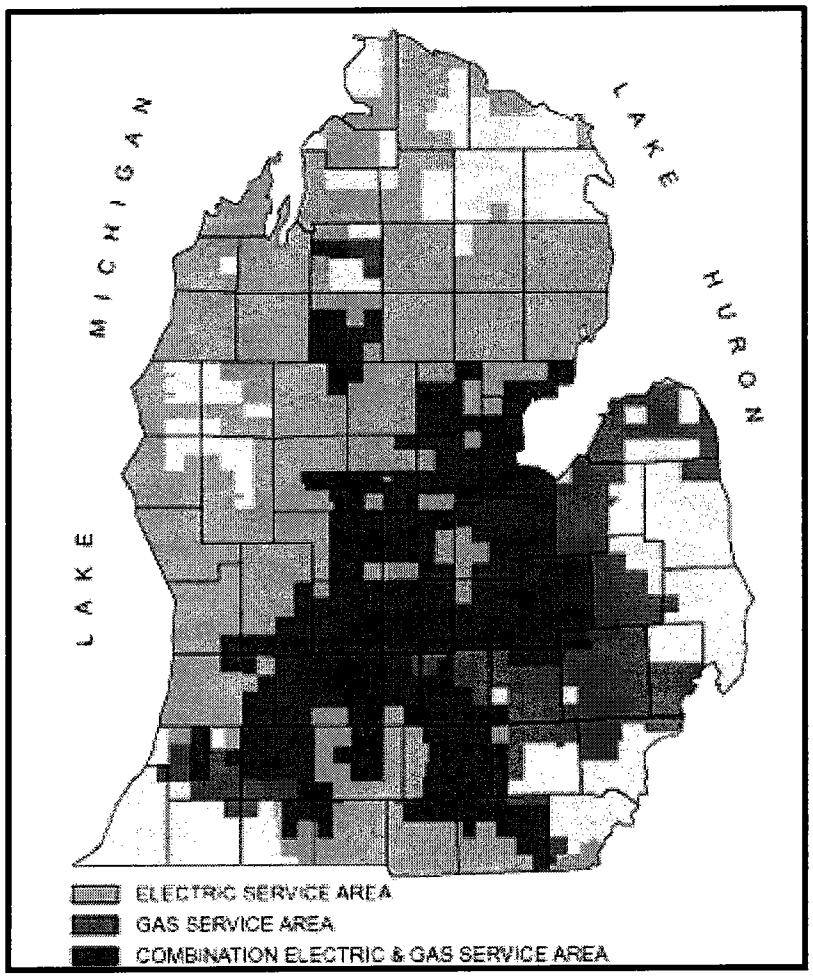


Existing Systems:

- 25,000 Square Miles of Territory, including many rural areas
- 1.4 Million Electric Customers
- 478K Gas Customers
- Ohio: 9 site, 15-channel 800 MHz Trunking system that is 13 years old.
- Indiana: 65 site 800 MHz Conventional Repeater system that is 18 years old.
- 2800 mobile and portable users.

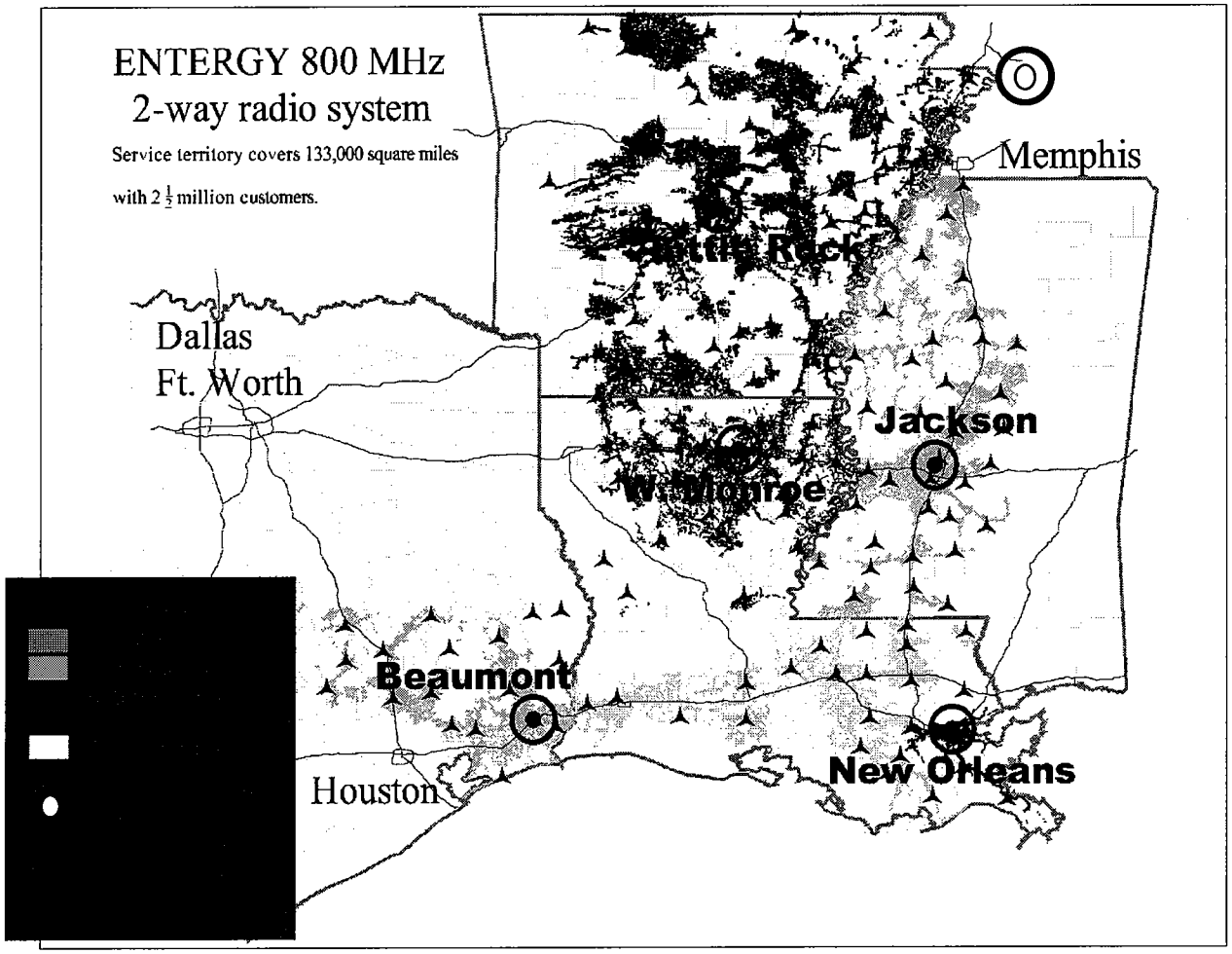
Consumers Energy

Count on Us



- Consumers Energy Company
  - 1.6 million gas customers
  - 1.7 million electric customers
  - Serves over 6 million of Michigan's 10 million residents
- 800 MHz Trunked Radio System
  - 67 Tower Sites
  - -110dBm Coverage threshold
  - Constructed 1994-2001
  - 97% coverage over service area
  - 3500 Radios
  - Packet Data
  - $70 M Ratepayer Investment

800 MHz Radio System Coverage



- 133,000 square mile service territory

Presentation Background

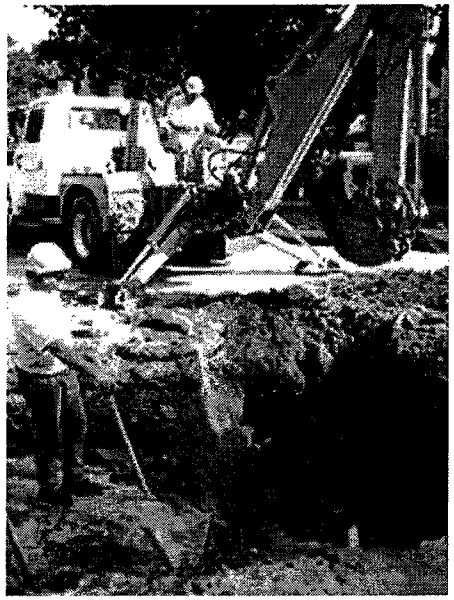
- Utilities continue to oppose Nextel's "Consensus Plan" and support the "Balanced Approach" as the least disruptive, most efficient and effective means to correct interference in the near term and on a going-forward basis.

- The following presentation emphasizes the key issues of concern to utilities regardless of which direction the FCC adopts.

Utilities Directly Support Public Safety

For example, Consumers Energy supports Public Safety in the following ways:

- Emergency Operations-2003
  - Electric emergency operations
    - November 240,000 High winds
    - August 100,000 Blackout
    - July 126,000 T-storms/wind
    - May 101,000 High winds
    - April 425,000 Ice storm



- Gas emergency operations
  - 102,000 Gas Leak calls/year
  - 3,000 Carbon Monoxide calls/year

280+ Emergency Calls per Day

Over six million people in Michigan depend on our ability to respond to these regular events.

Utilities Routinely Respond to Emergency Dispatch Requests

Utility	Customers (approx.)	Dispatches per Year At Police/Fire Department Request (approx.)
Alabama Power	1.3 million	2,000
AEP	4.9 million	3,000 police/fire responses; 15,000 total dispatches for first response-type calls
Cinergy	1.5 million	1,200-1,500
Commonwealth Edison	3.4 million	6,000 at direct police/fire request; additional 29,000 times for other dangerous conditions (e.g., poles or wires down)
ConEd (NY)	3.1 million	Full time staff of 9 to respond to fires of 2 alarms or higher; approximately 100 emergency shut-offs per day.
Duke Power	2 million	1,800
Entergy	2.6 million	10,000
Niagara Mohawk	1.5 million	3,000

Source: Edison Electric Institute

Post-9/11, Utilities' Need for Reliable Communications Is Even Greater

- Utilities are part of of the nation's Critical Infrastructure
- Utility plants are considered subject to terrorist attacks.
- Utilities are subject to heightened sense of security.
- The August 2003 Northeast Blackout reaffirmed the importance of maintaining reliability and using communications to prevent and restore outages.

Key Issue #1: Availability of 800 MHz Channels for Utility Use

- **The Problem:**
  - Potential "Freeze" on licensing during any band realignment
  - Public Safety "set-aside" of greenspace for 5 years.
    - Utility radio systems need opportunity to expand or evolve to meet changing service needs, coverage enhancement, resolving interference, or adding new services (*e.g.,* mobile data).
- **The Solution:**
  - If there is any rebanding, there should be no freeze, or limit any freeze to just long enough to develop channel mapping plan for each Region (*e.g.,* no greater than 3 months per Region).
  - No additional set-aside for Public Safety at 800 MHz, unless eligibility is based on "public safety radio service" in Section 309(j)(2) of the Act:
    - Private internal radio services used by state and local governmental entities and non-governmental entities;
    - That are used to protect safety of life, health or property; and
    - That are not made commercially available to the public.

Key Issue #2: Disruption to Ongoing and Future Utility Operations

- **The Problem:**
  - Challenges associated with retuning utility radio systems:
    - 24x7 utility service to public must be maintained
    - Primarily vehicular versus portable radios
    - Geographic diversity and scope of utility service areas.
    - Limited windows of opportunity due to seasonal weather changes and storms.
  - Cannot compromise employee safety or safety of public during transition.
  - Cannot accept potential loss of existing capabilities.
  - Must maintain ability to roam during transition period.
  - Must be within the technological capabilities of the equipment

- **The Solution:**
  - Use "transactional" process instead of the "command-and-control" process dictated by a "relocation coordination committee."
  - Use Alternative Dispute Resolution (ADR), such as non-binding arbitration, as pre-condition to filing FCC complaints, thereby minimizing or eliminating the need for FCC involvement in dispute resolution.

Key Issue #3: Prevent Recurrence of Nextel-Type Interference Without Limiting Technologies or Architectures

- **The Problem:**
  - Consensus Plan would prohibit "cellularized" systems below 861 MHz
    - Definition is arbitrary
    - Limits use of more efficient technology
    - Not tied to the real problem
- **The Solution:**
  - Define coordination and technical requirements intended to protect against interference and do not prohibit the use of particular technologies or architectures; for example,
    - Limit sites with antennas less than 30m AGL to 100 watts ERP/25 kHz channel.
    - Require prior coordination, and registration in a publicly accessible database of all low sites.
    - Adopt Out-of-Band Emission limitations applicable to digital systems.

Conclusion

- All "public safety radio services," as defined in the Act, should receive the same protections and benefits as "traditional" public safety entities.

- Instead of a "command and control" process dictated by a central committee of interested parties, use a transactional process with ADR to resolve any disputes.

- Do not set arbitrary limits on technology such as Nextel's proposal to prohibit all other "cellularized" systems at 800 MHz, but control the potential for recreation of Nextel-type interference through reasonable coordination and interference rules.