Approved: March 15, 2010
Date

MINUTES OF THE SENATE UTILITIES COMMITTEE

The meeting was called to order by Chairman Pat Apple at 1:30 p.m. on March 8, 2010, in Room 548-S of the Capitol.

All members were present.

Committee staff present:
Kristen Kellems, Office of the Revisor of Statutes
Matt Sterling, Office of the Revisor of Statutes
Raney Gilliland, Kansas Legislative Research Department
Cindy Lash, Kansas Legislative Research Department
Ann McMorris, Committee Assistant
Jeannine Wallace, Sen. Apple's Office Assistant

Conferees appearing before the Committee:
Heather Starnes, Southwest Power Pool, Little Rock, Arkansas

Others attending: See attached list.

Approval of Minutes
Moved by Senator Taddiken, seconded by Senator Petersen, the minutes of the meetings of the Senate Utilities Committee held on February 17, February 23, February 24, and February 25, 2010 be approved. Motion carried.

Presentation on Southwest Power Pool

Heather Starnes of Southwest Power Pool, provided details of SPP expansion planning and cost allocations. By use of a power point presentation, maps and charts pictured the areas in which Kansas was involved and the connection with other states. She discussed integrated transmission planning and priority projects. Cost allocation, risks and avoided costs and other opportunities were featured. (Attachment 1)

Committee asked questions regarding pending legislation, FERC timelines, comparison with other Power Pools and wind transmission.

MAR 8

The next meeting is scheduled for March 9, 2010.

The meeting was adjourned at 2:25 p.m..

Respectfully submitted,

Ann McMorris
Committee Assistant

Attachments - 1

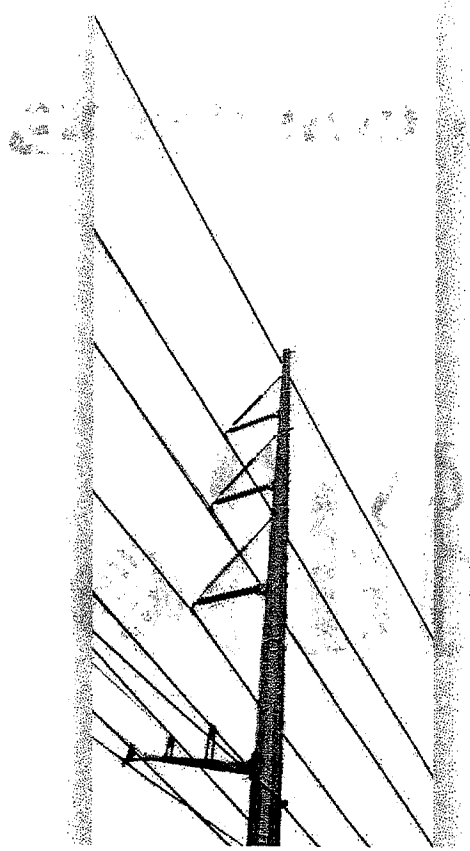
Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

SENATE UTILITIES
COMMITTEE GUEST LIST
MARCH 8, 2010

NAME	REPRESENTING
Dina Fisk	Verizon Wireless
Judith Gadd	NextEra Energy
Mel Minor	" "
Mark Schreiber	Westar
Kimberly Svaty	ITCGP
Nelson Krueger	Pan Electric
Tom Gigstad	~~AT&T~~
Tom Day	KEC
Ashley Ballweg	Pinegar, Smith & Assoc.
Clare Gustin	Sunflower Electric
Mike Reed	Atmos
Jackson Loveday	Hein Law

Senate Utilities Committee
March 8, 2010
Attachment 1-1

SPP Southwest Power Pool



Helping our members work together to keep the lights on... today & in the future

SPP Southwest Power Pool

Expansion Planning and Cost Allocations

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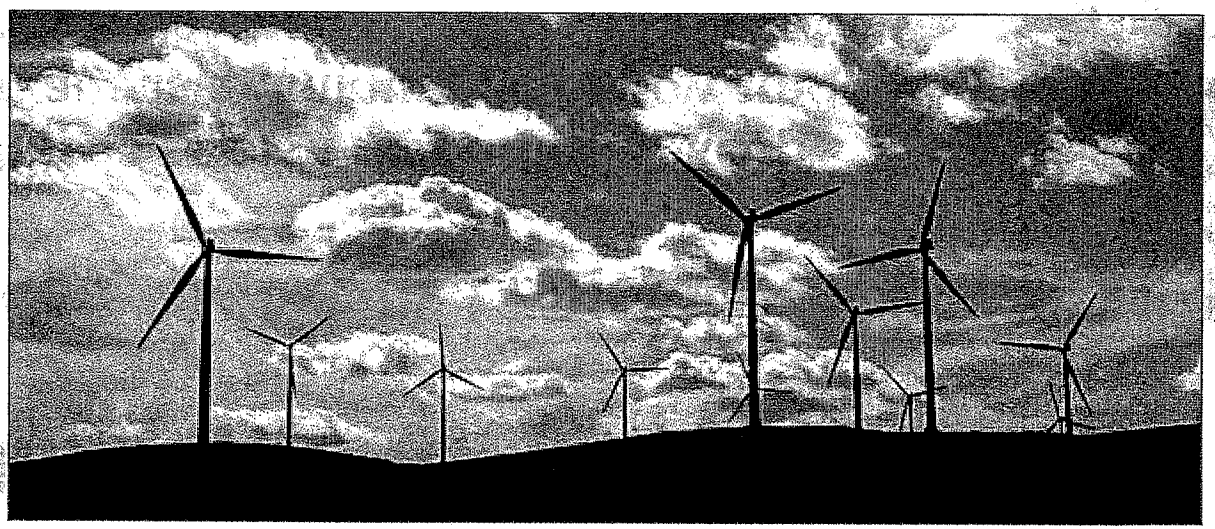
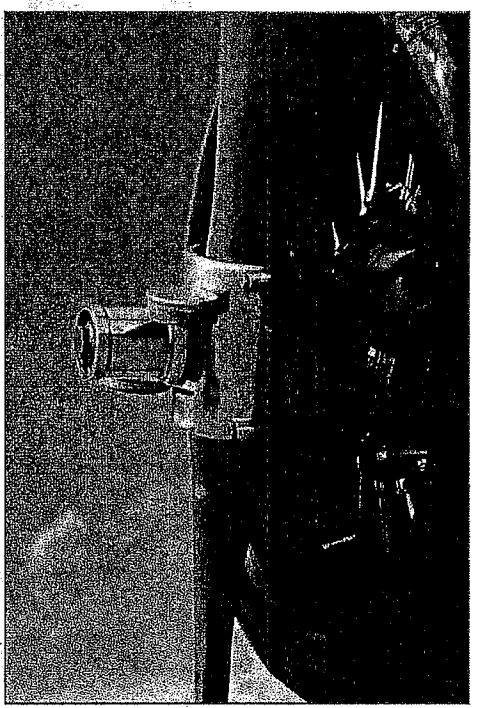
SPP Mission

Helping our members work together to keep the lights on – today and in the future.



Our Beginning

- **Founded 1941 with 11 members**
  - **Utilities pooled resources to keep Arkansas aluminum plant powered for critical defense**
- **Maintained after WWII for reliability and coordination**



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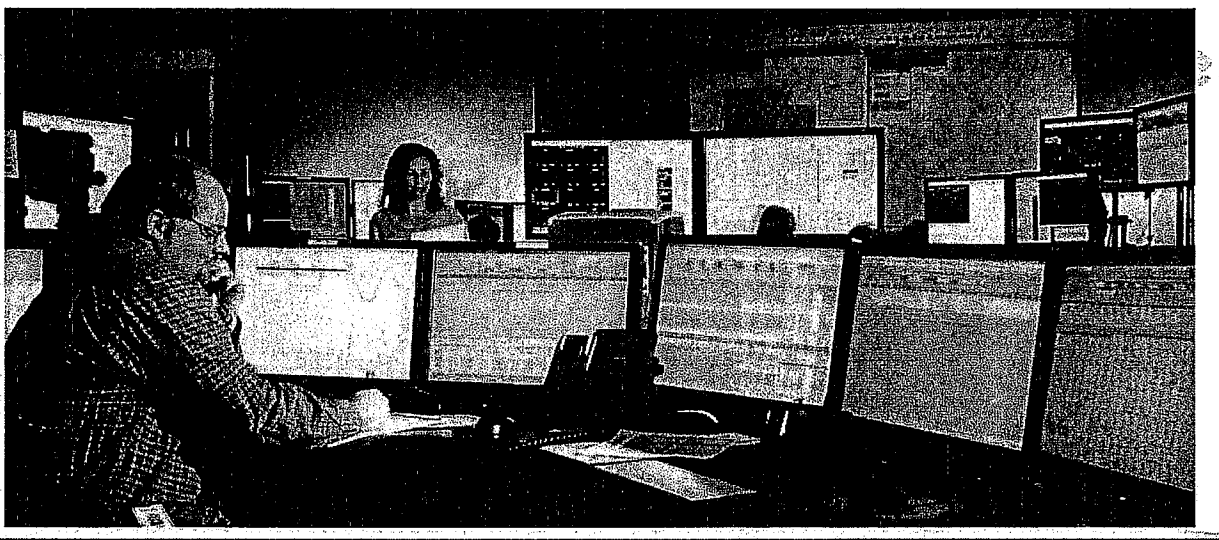
SPP at a Glance

- Incorporated in Arkansas as a 501(c)(6) non-profit corporation
- FERC - Federal Energy Regulatory Commission
  - Regulated public utility
  - Regional Transmission Organization
- NERC - North American Electric Reliability Corporation
  - Founding member
  - Regional Entity

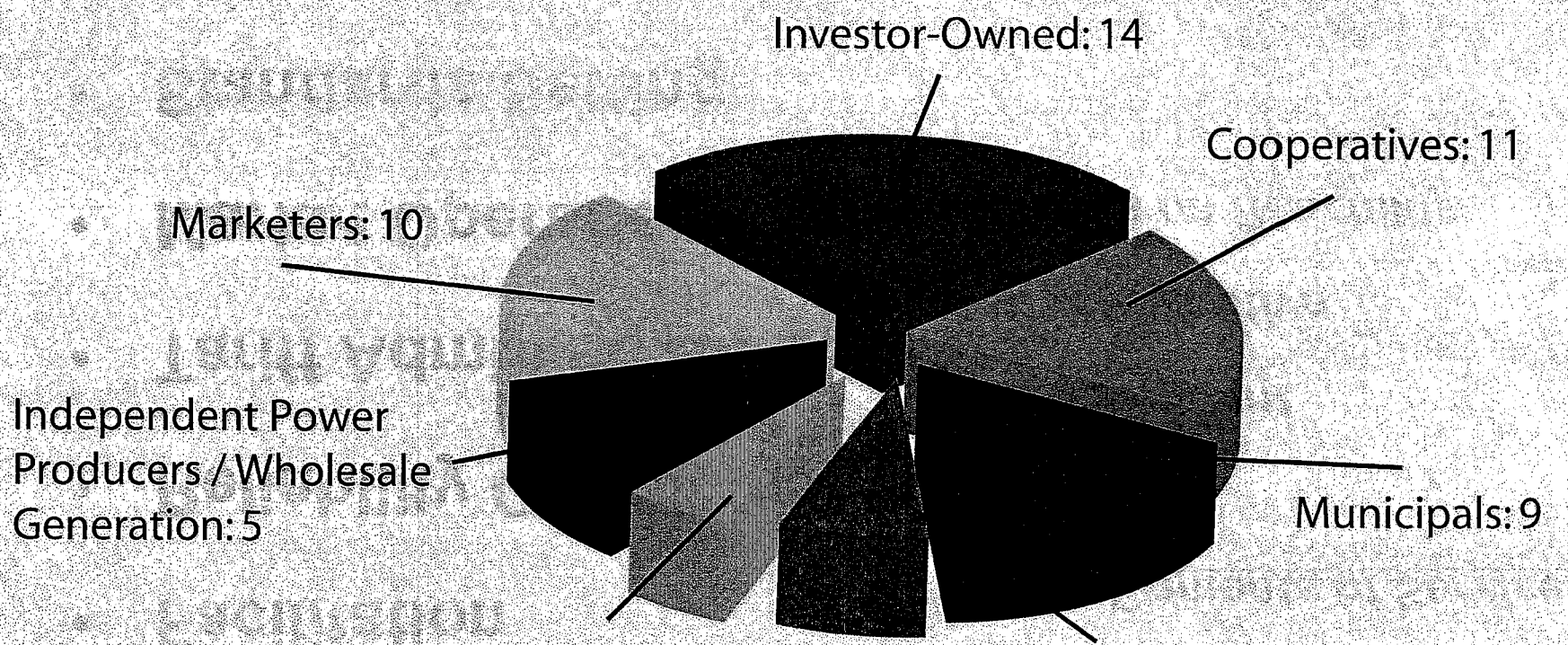
NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Members in nine states:

Arkansas	Mississippi	New Mexico
Kansas	Missouri	Oklahoma
Louisiana	Nebraska	Texas



56 SPP Members



Our Major Services

- Facilitation
- Reliability Coordination
- Tariff Administration
- Market Operation
- Standards Setting
- Compliance Enforcement
- Transmission Planning

Key Elements of Services

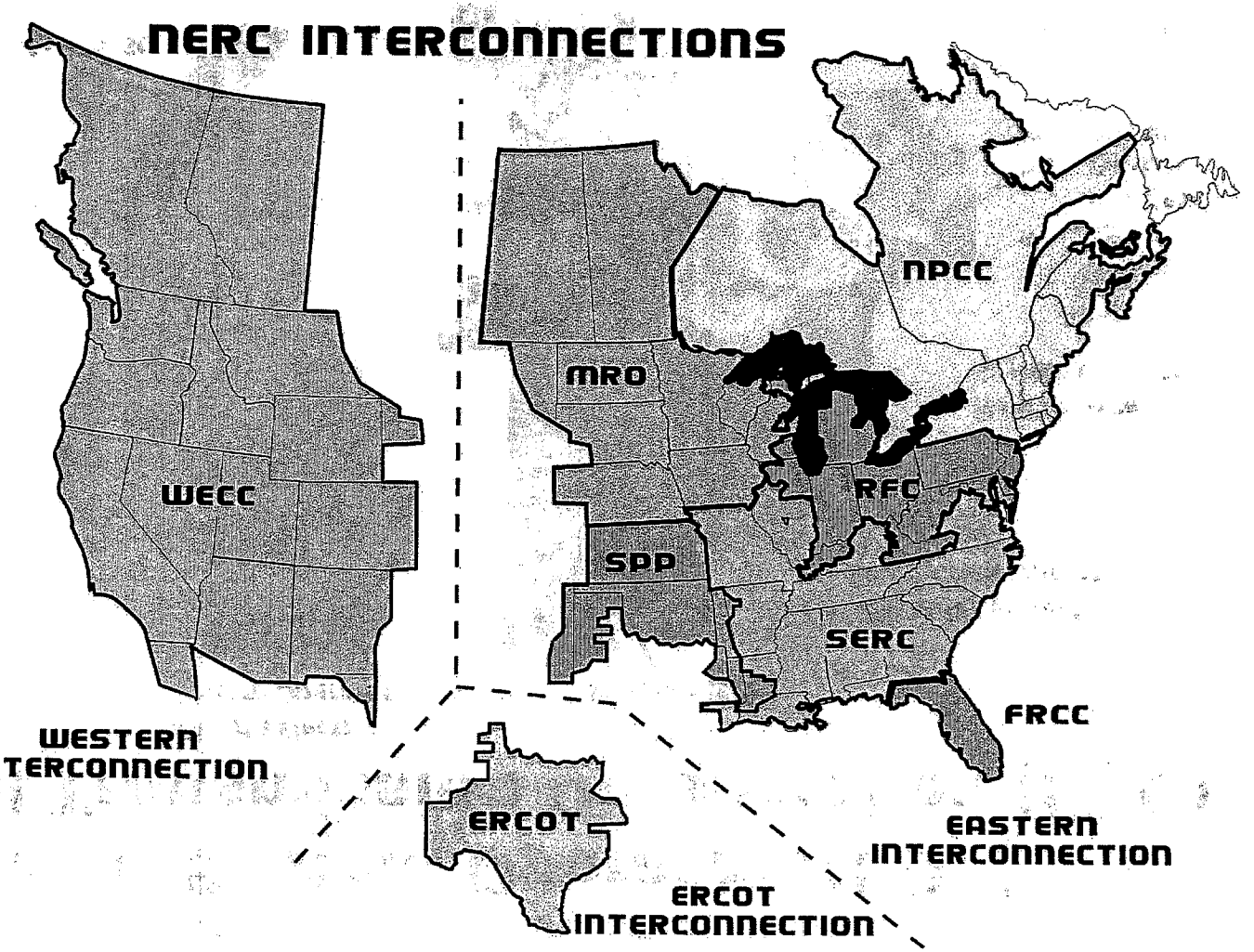
Regional

Independent

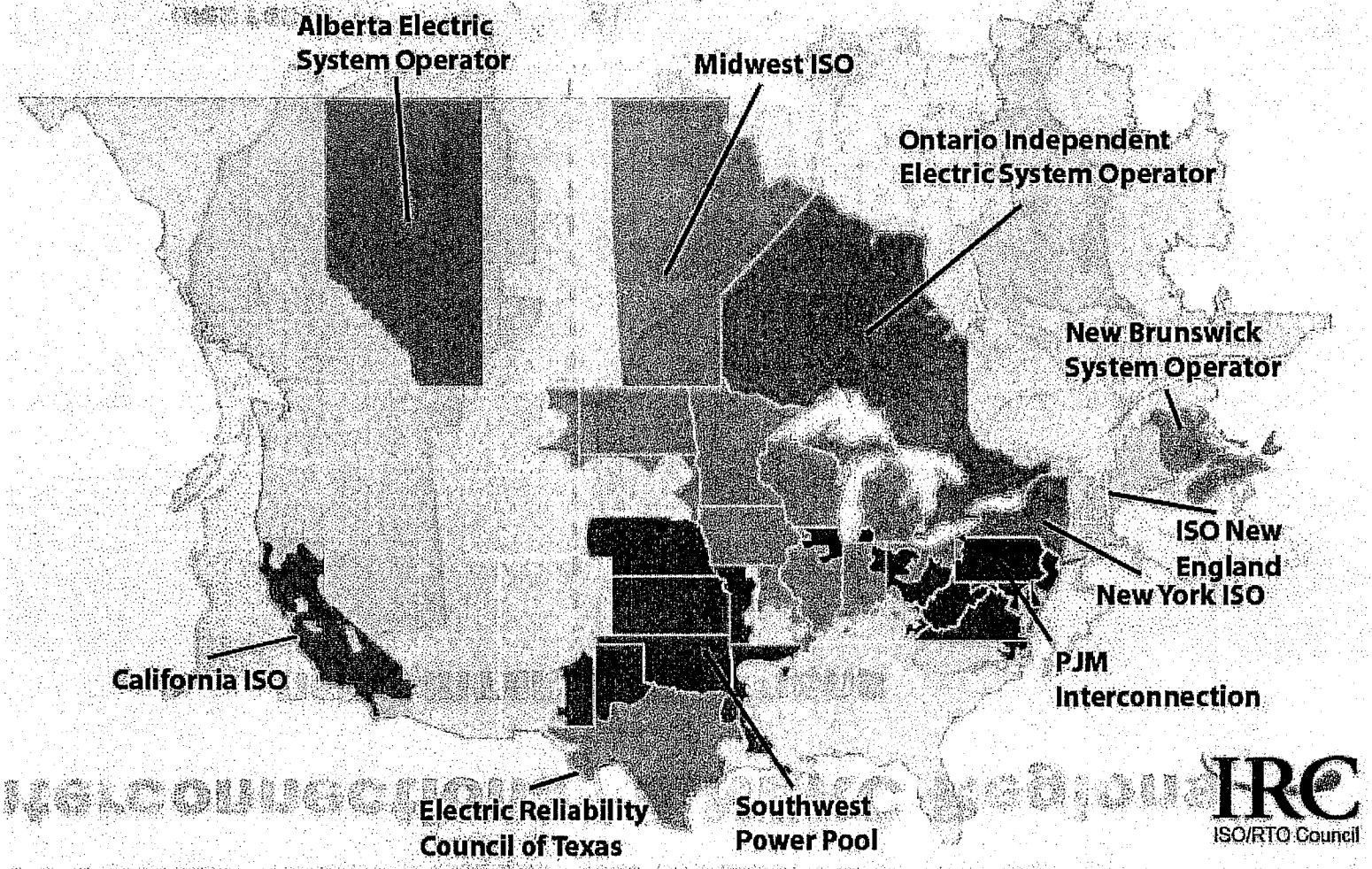
Cost-Effective

Focus on Reliability

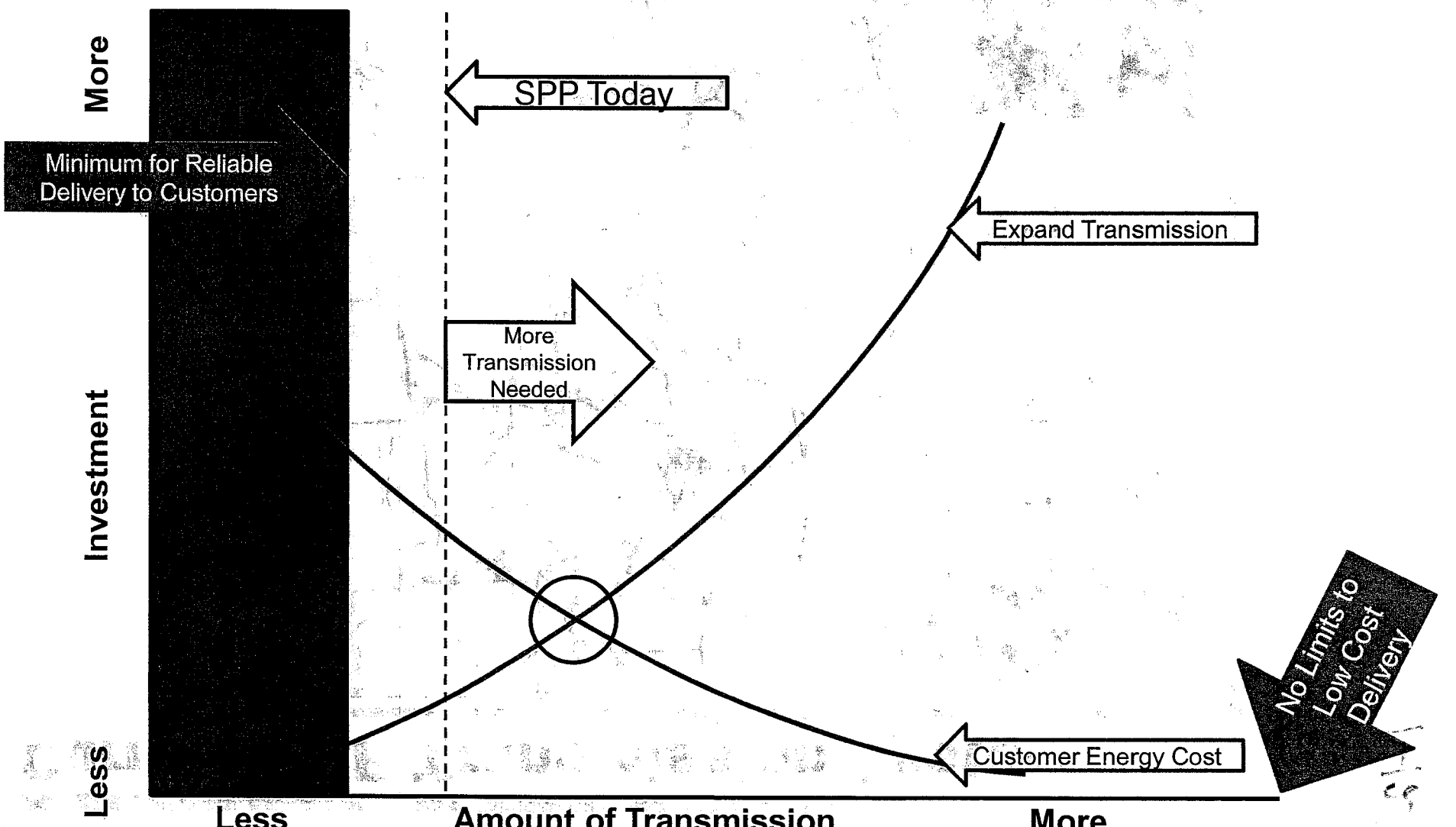
3 Interconnections / 8 NERC Regions



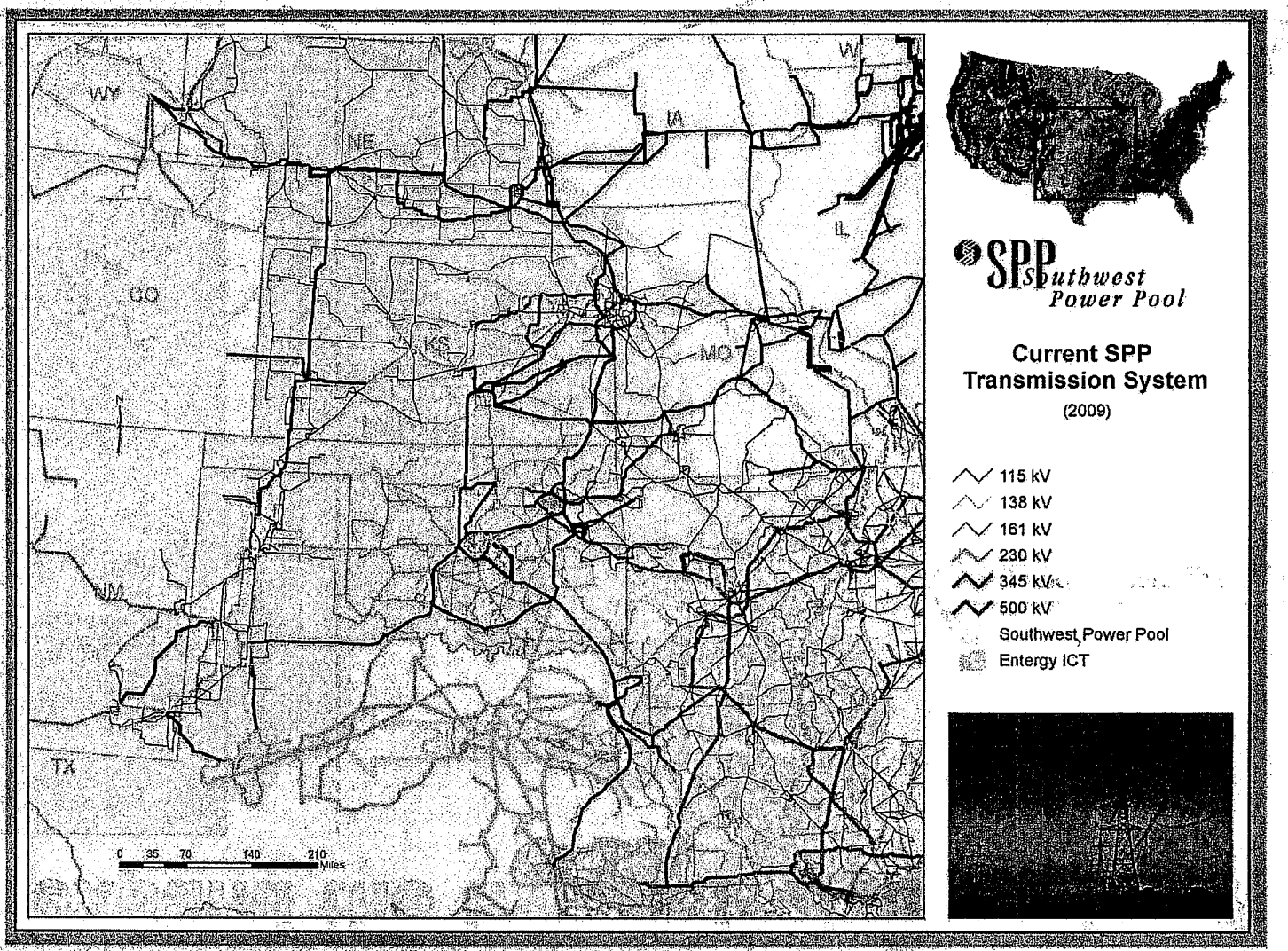
Independent System Operator (ISO) / Regional Transmission Organization (RTO) Map



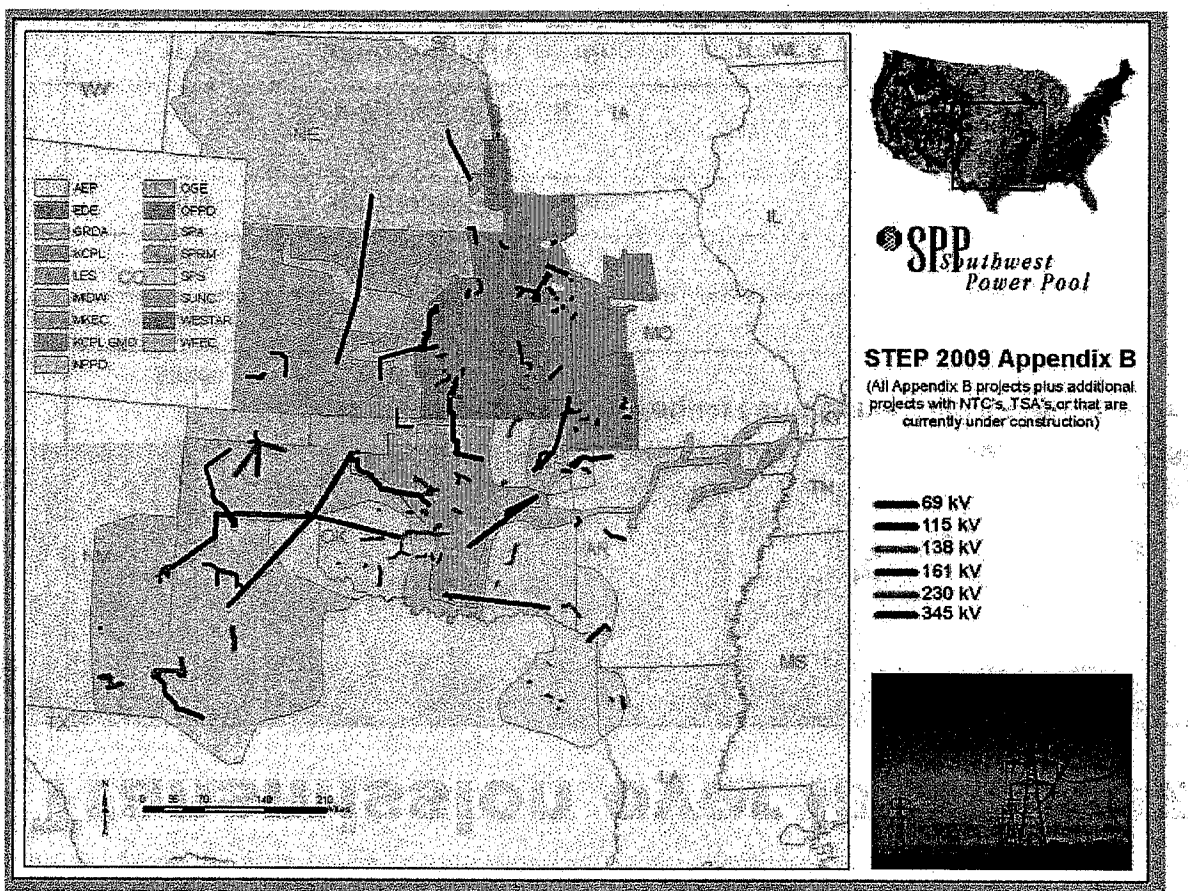
Why expand the transmission system?



Current SPP Transmission System



Upgrades From 2009 STEP Appendix B, Upgrades with NTCs or Upgrades Currently Under Construction – All Voltages

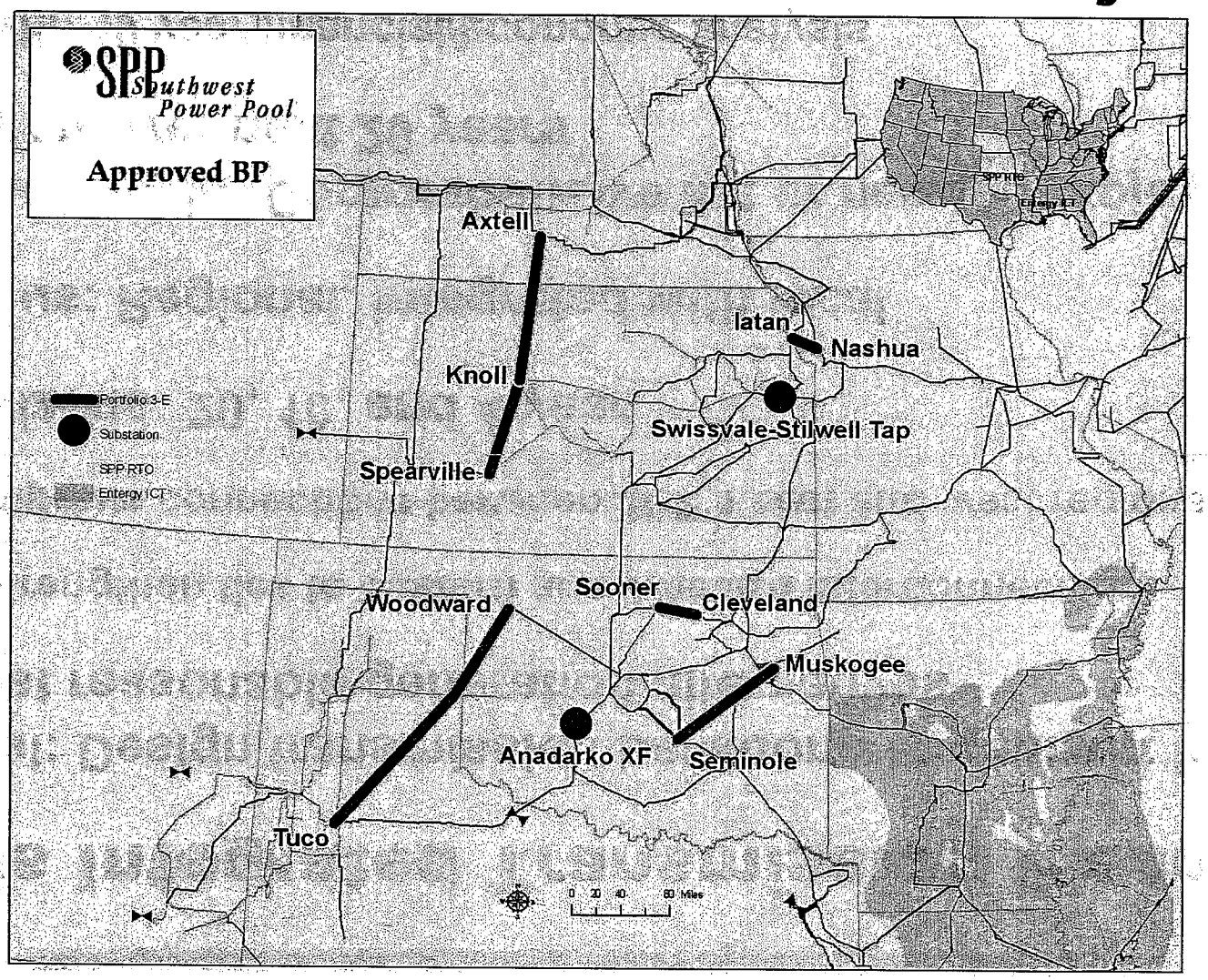


Planned Transmission over last 3 years

2009 STEP	2008 STEP	2007 STEP	Upgrade Type
$540	$320	$290	Transmission Service Request and Generation Interconnection Service Agreements
$2,110	$880	$720	Reliability - Base Plan
$660	$800	$640	Reliability - Other
$320	$620	$460	Sponsored Upgrades
$770			Balanced Portfolio
$60	$60	$90	Interregional Coordinated Upgrades
$4.46B	**$2.7B**	**$2.2B**	**Appendix A - TOTAL**

Has filed Service Agreement or is BOD-approved

Approved Balanced Portfolio of Projects

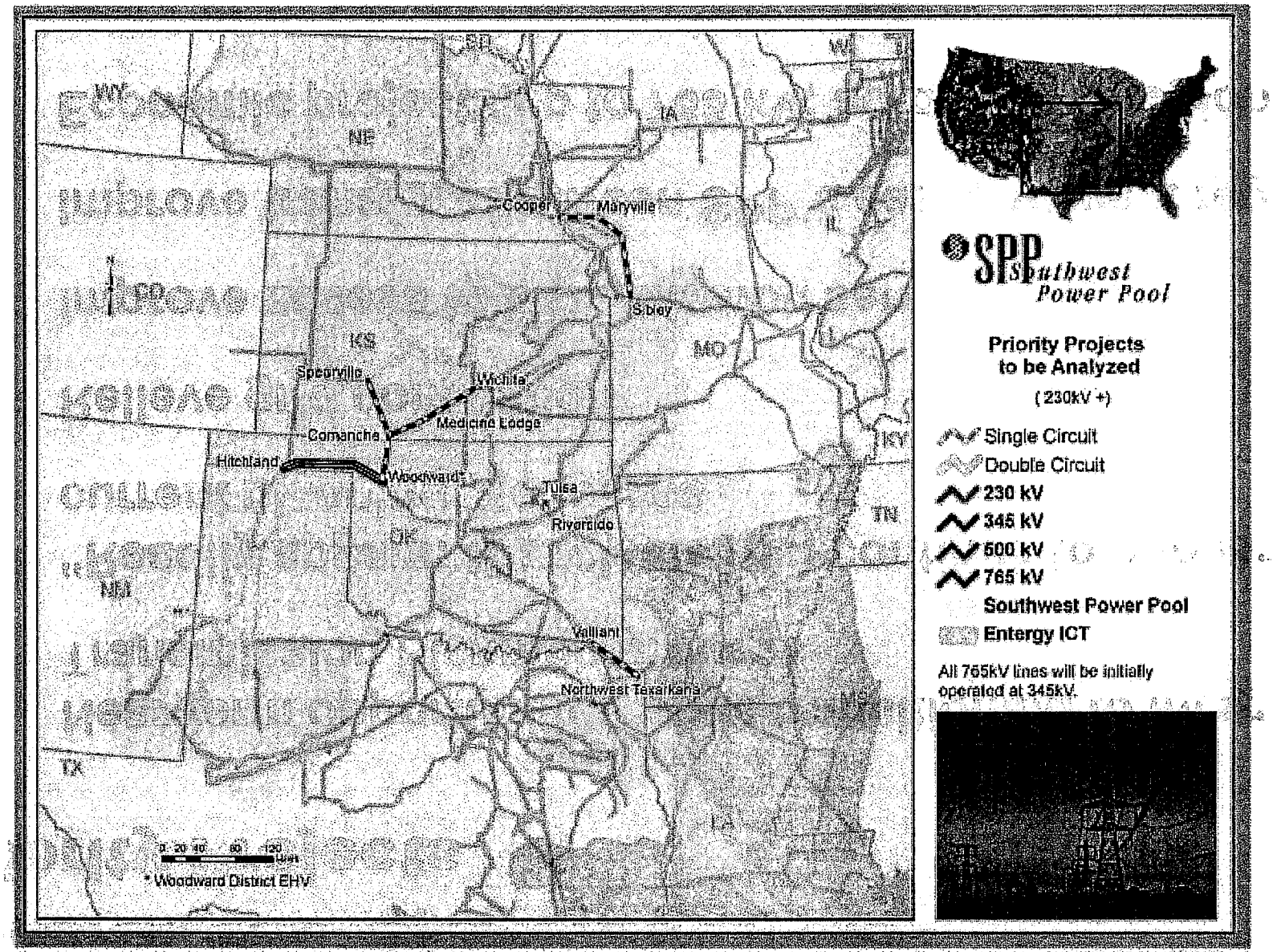


What is Integrated Transmission Planning?

- Goal: Design transmission backbone to connect load to the most reasonable generation alternatives
  - Strengthen ties to Eastern and Western Interconnections
  - Improve connections between SPP's east and west regions
- Horizons: 20, 10, and 4 year
- Focus: Regional, integrated with local
- Resulting in: Comprehensive list of needed projects for SPP region over next 20 years
  - With 40 year financial/economic analysis
- Underlying Value: Reliability and Economics are inseparable

Priority Projects

- Near-term opportunities while transitioning to Integrated Transmission Planning process
- "Readily apparent" projects that continue to appear in current planning processes
- Relieve grid congestion
- Improve access to transmission service
- Improve transfers between SPP's east and west regions
- Economic projects up to 765 kV; across SPP region



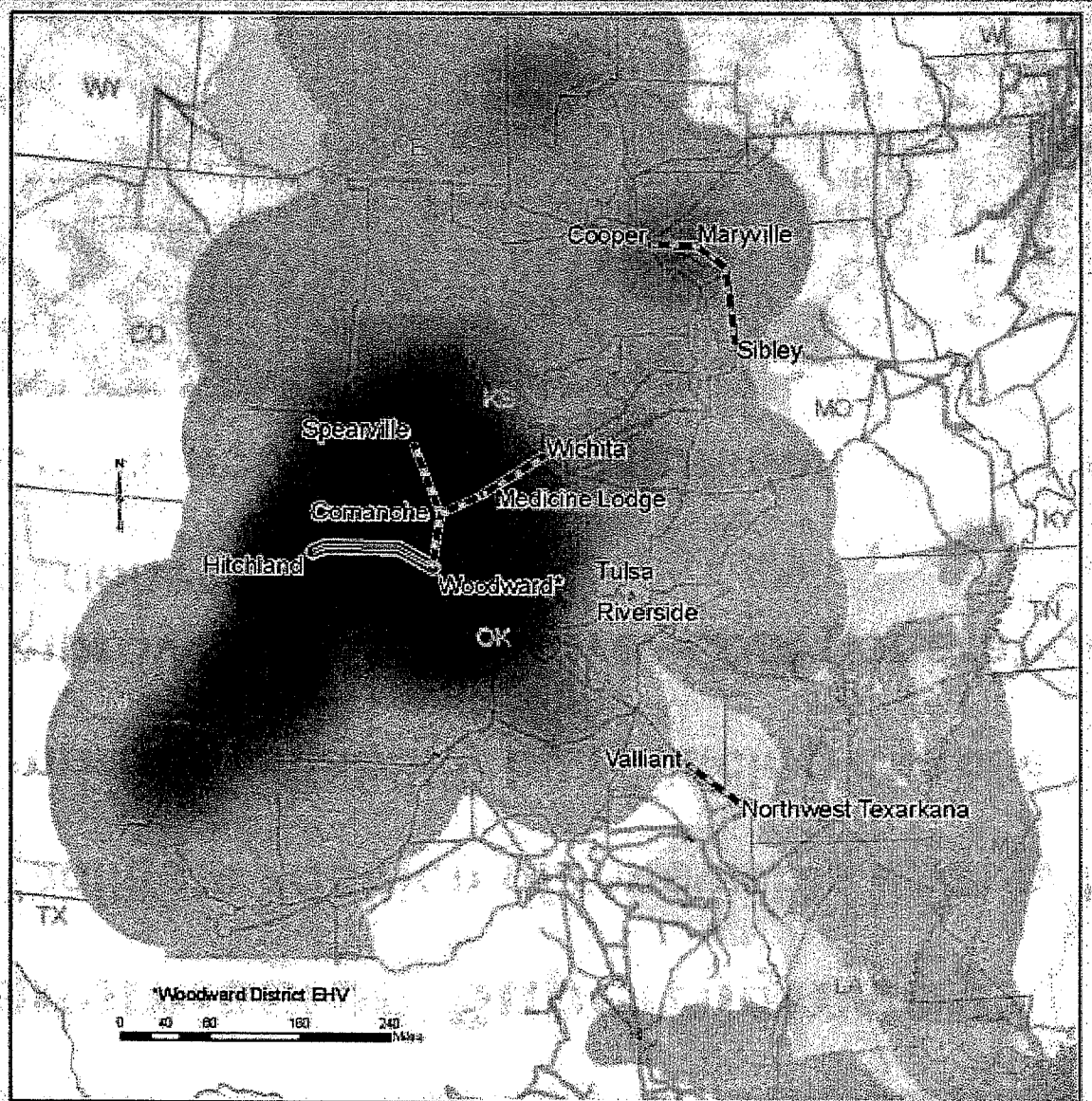
SPP Southwest Power Pool

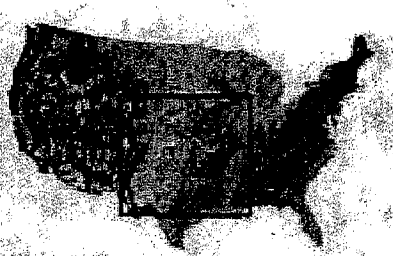
Priority Projects to be Analyzed

(230kV +)

- Single Circuit
- Double Circuit
- **230 kV**
- **345 kV**
- **500 kV**
- **765 kV**
- **Southwest Power Pool**
- **Entergy ICT**

All 765kV lines will be initially operated at 345kV.





SPP Southwest Power Pool

Transmission Expansion (345kV +)

- Single Circuit PP
- Double Circuit PP
- 230 kV
- 345 kV
- 500 kV
- 765 kV, OP @ 345kV
- Southwest Power Pool
- Entergy ICT

Wind Generation In Queue

Megawatts

High

Low

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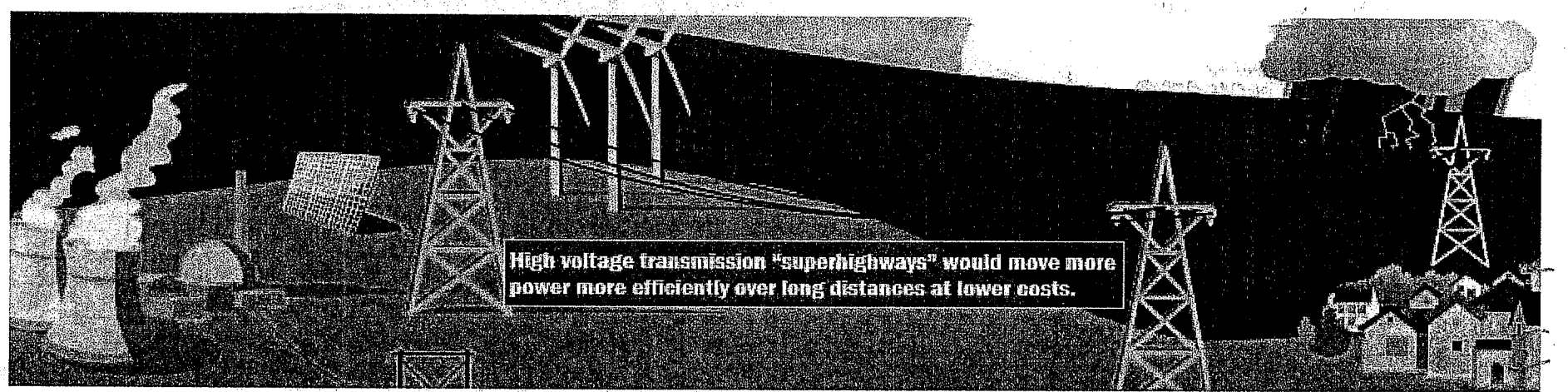
I-20

"Transmission Superhighway"

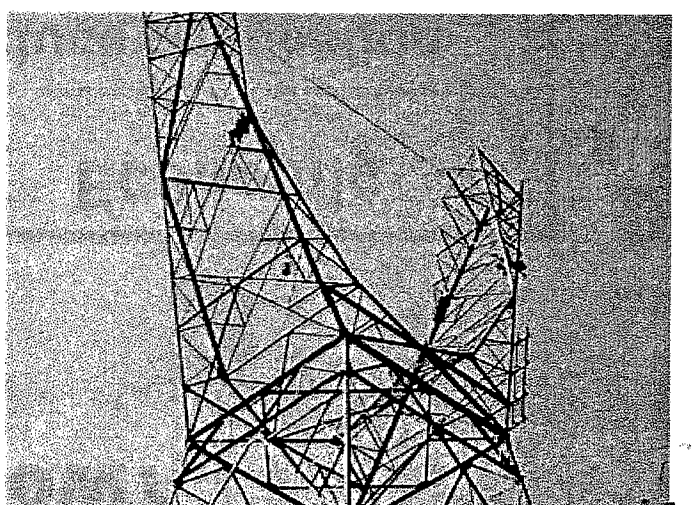
- Facilitate addition of renewable energy to grid
- Improve reliability by reducing chance of high-cost outages
- Improve access to lower-cost generation and diverse mix of generation
- Create economic opportunities beyond electric industry



Regional State Committee – Key to SPP's Success

1-21

- Retail regulatory commissioners – Arkansas, Kansas, Missouri, Nebraska, New Mexico, Oklahoma, Texas
  - Louisiana maintains active observer status
- Functions
  - Cost allocation
  - Ensure adequate supply
  - Market cost/benefit analyses



Who pays for transmission now?

Type	Reliability	Economic
Purpose	Keep lights on	Reduce congestion with benefit/cost ≥ 1
Also Called	Base Plan Funding	Balanced Portfolio
Funded By	Region - 33% Impacted zone- 67%	Shared regionally (postage stamp)
Voltage	All	345 kV+
Implemented	2005	2009

Need Simple and Fair Cost Allocation

- High-voltage "highway" funded with regional rate
- Lower-voltage "byway" funded with local rate

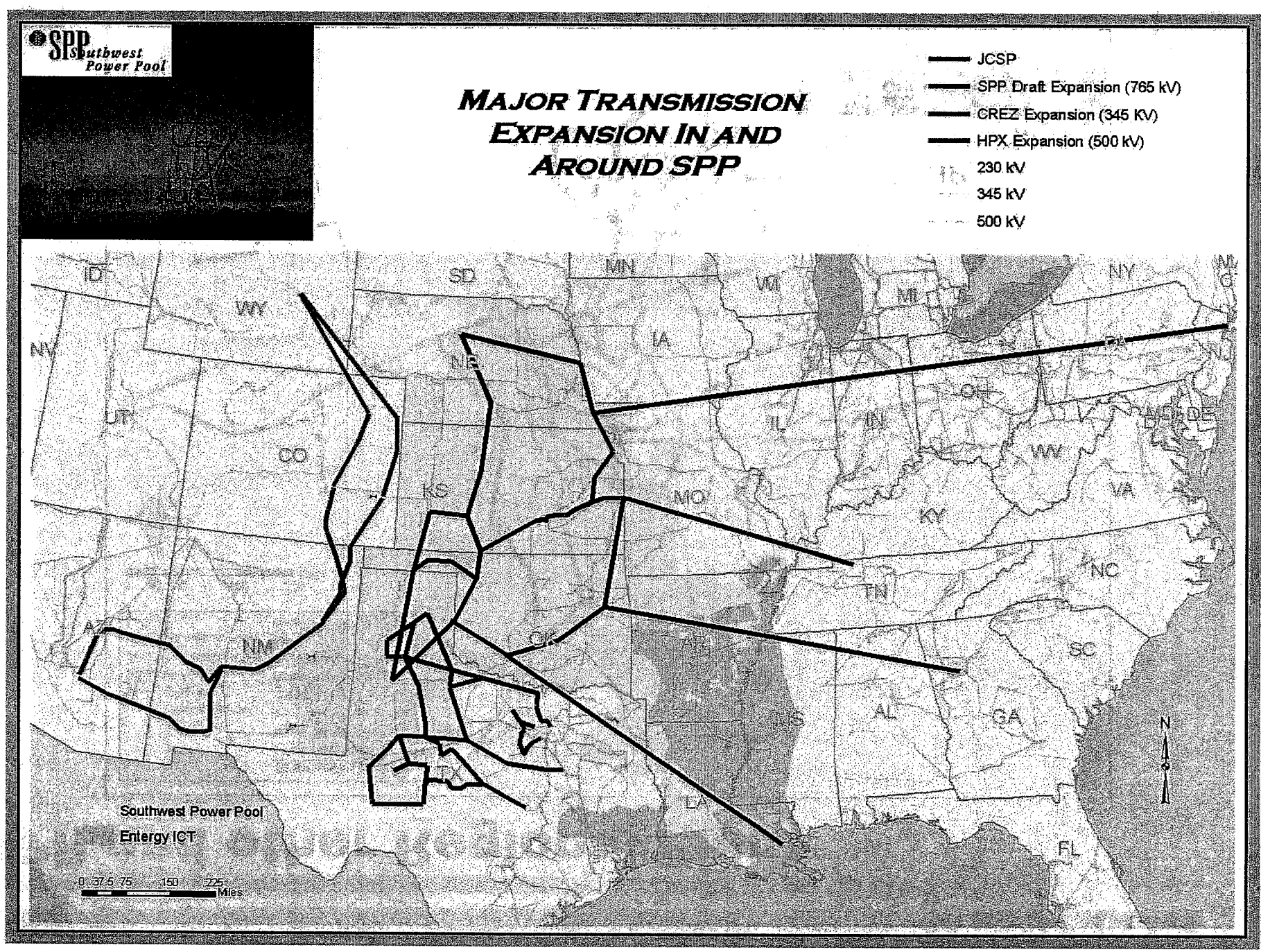
Voltage	Regional	Zonal
300 kV and above	100%	0%
100 kV - 299 kV	1/3	2/3
Below 100 kV	0%	100%

Risks and Avoided Costs

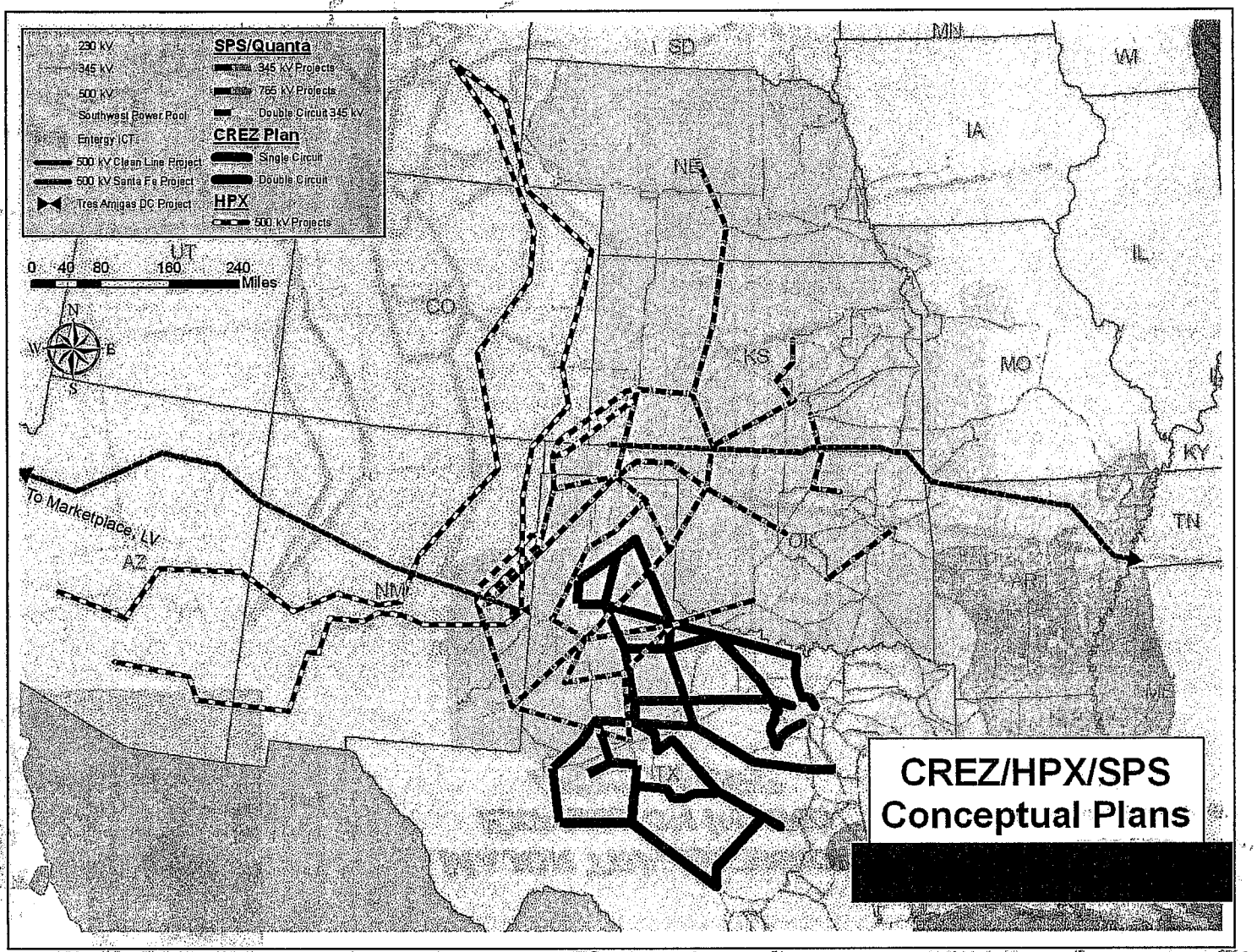
- Hard to overbuild EHV transmission that is a product of regional planning - Relative to cost and potential stranded investment of underbuilding
- Avoided costs can be significant
- To avoid corridor fatigue where Rights of Ways are or will become a major issue, planners must consider:
  - Land use impacts
  - Wildlife fragmentation, etc.

SPP Southwest Power Pool

MAJOR TRANSMISSION EXPANSION IN AND AROUND SPP



SPP and other Regional Plans



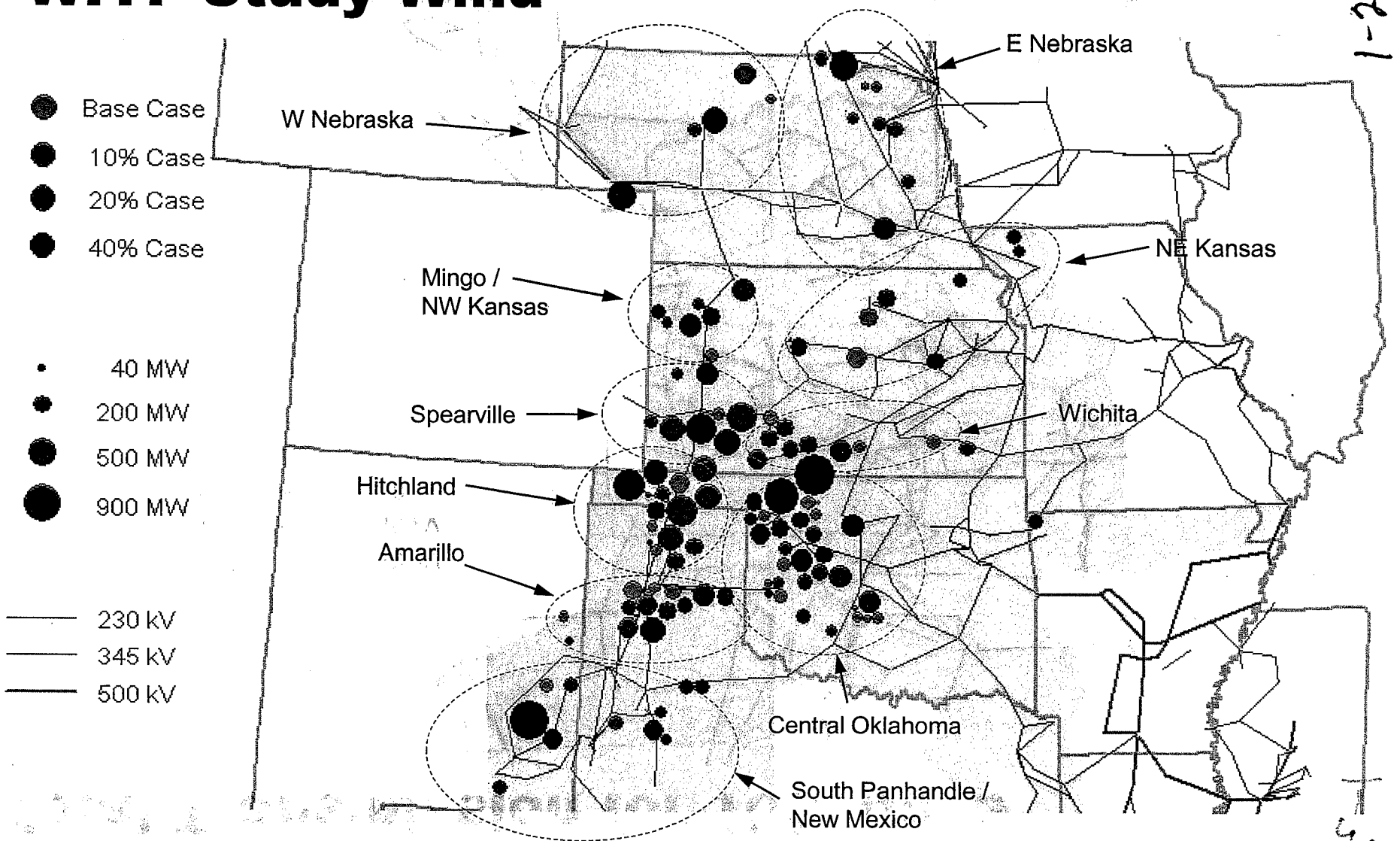
Other Opportunities In Process

- Merchant activities in/around SPP are noteworthy and may need to be part of long range plans
- While transmission projects are making headlines, all these proposed HVDC projects require robust EHV networks

Wind Integration Task Force (WITF) Study

- SPP initiated operational, not economic, analysis to assess impacts of 10, 20 and 40% wind integration levels
- Studies focused on 10 and 20% cases, with transmission expansion based on reliability needs
- Significant transmission expansion required to support 10 and 20% cases with both 345 kV and 765 kV lines in several key corridors, including Woodward District EHV - Comanche

WITF Study Wind



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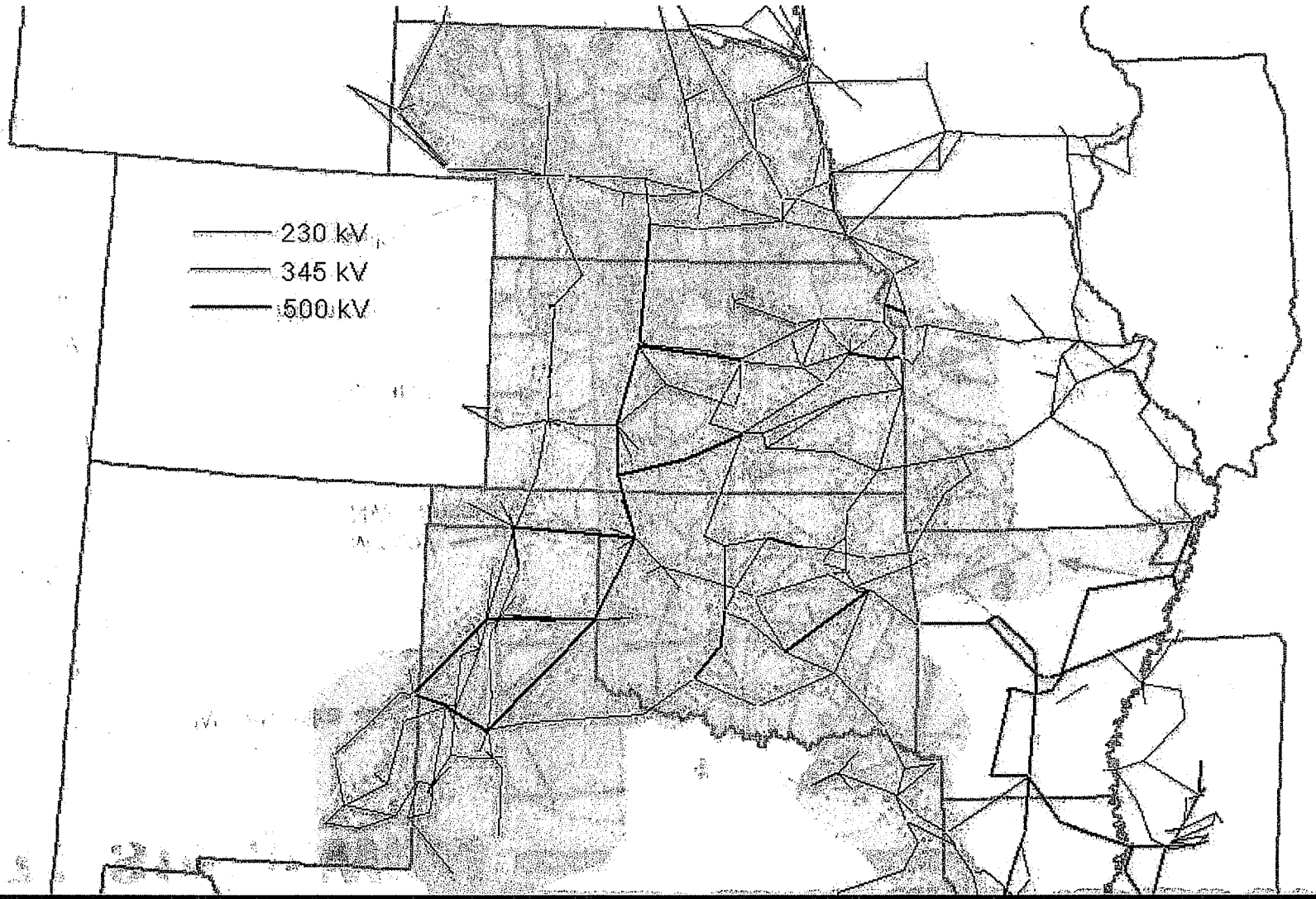
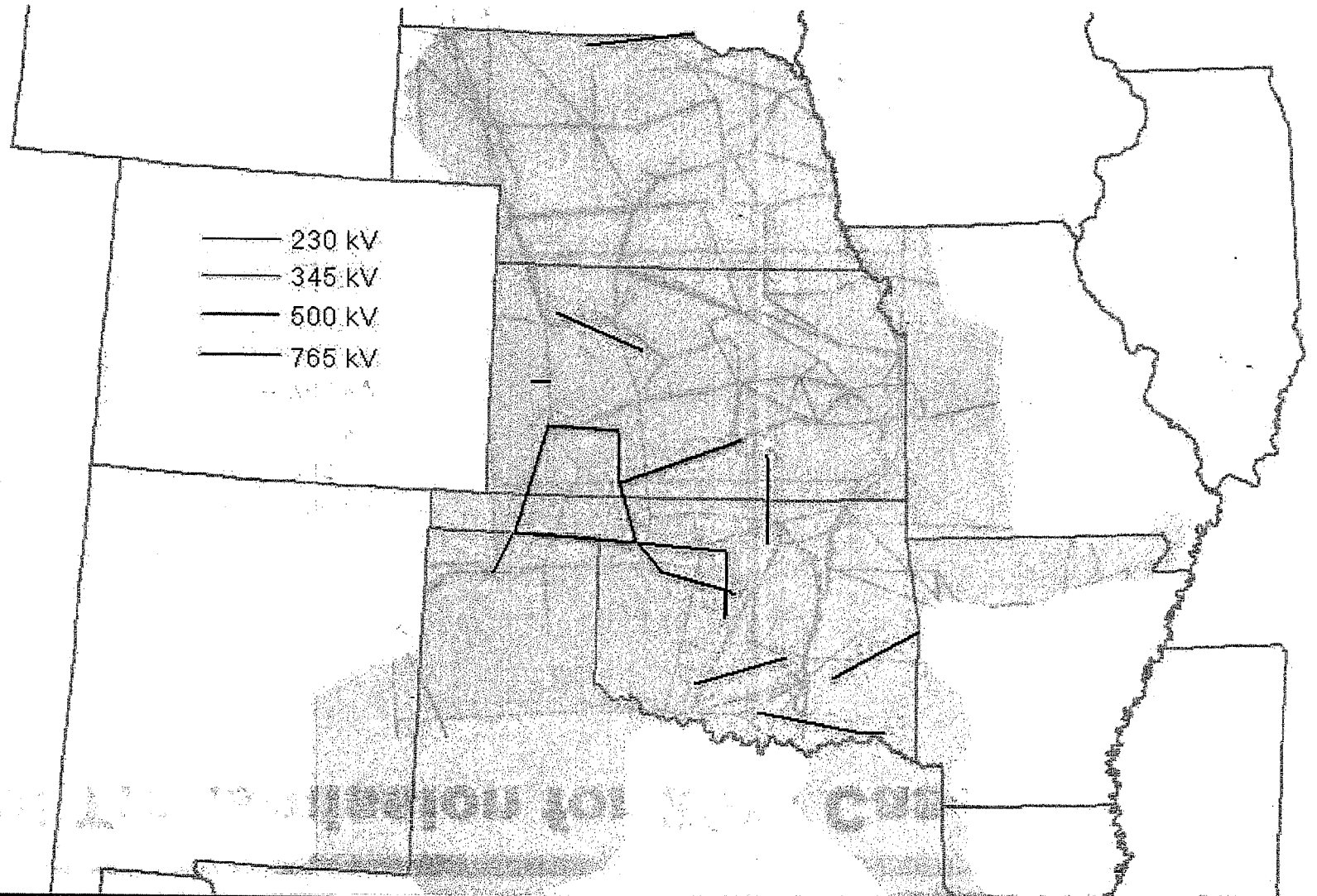
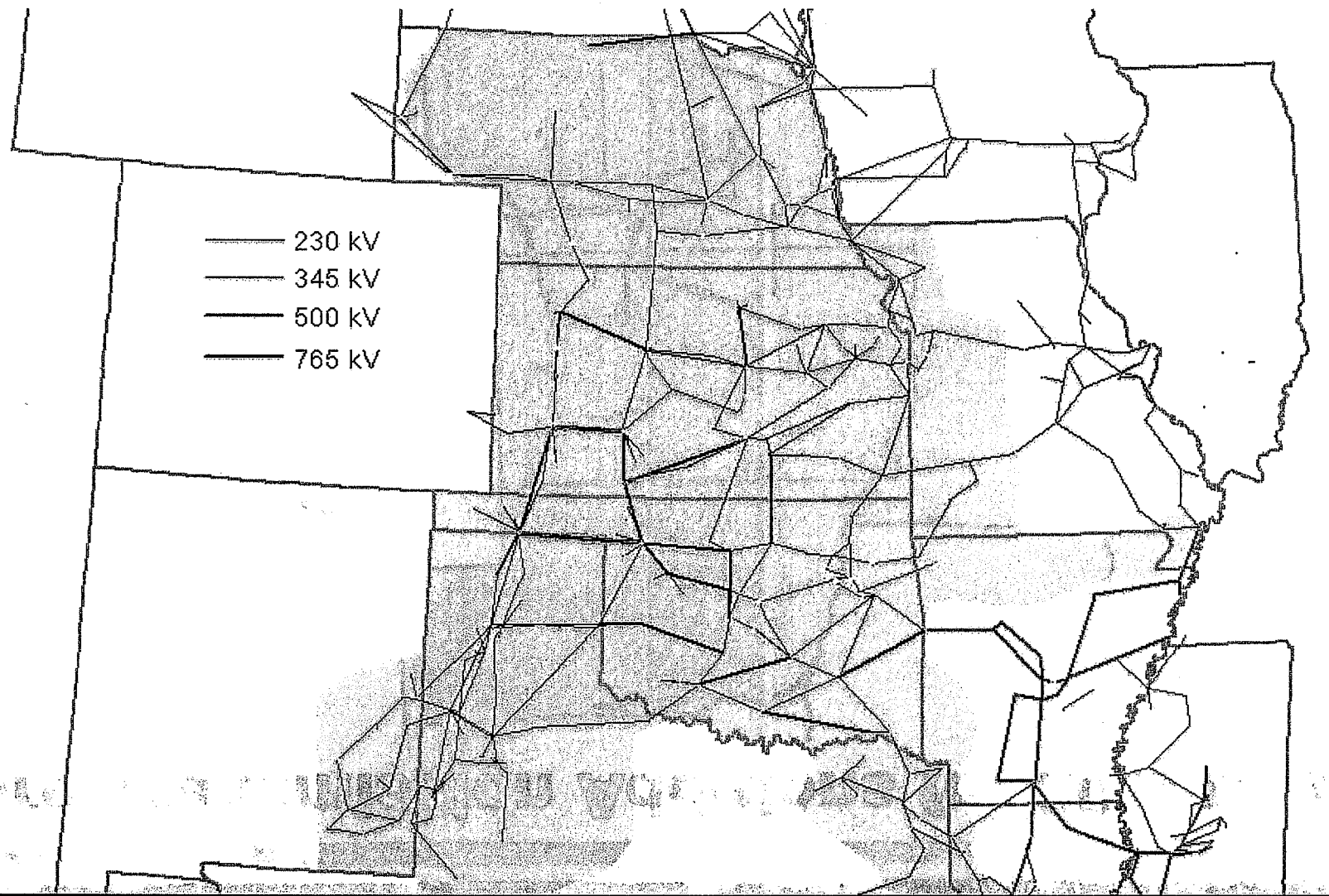
Total Transmission for 10% Case



More Transmission Additions for 20% Case



Total Transmission for 20% Case



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Conclusion

- Wind Integration Task Force, Priority Projects and Integrated Transmission Planning are likely to conclude the need for major EHV transmission capability between Woodward District EHV in OK and Comanche in KS
  - e.g. 345 and 765 kV lines in that critical corridor
- SPP planning decisions on timing and size of corridors and EHV lines will first require support and approvals regarding cost allocation
- Transmission Owners are responsible for details regarding line routes, permitting, etc.

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Summary

- SPP studies show the need for significant transmission capability between EHV substations at Woodward District EHV in OK and Comanche in KS not considering wind plant collector or integration facilities
- Decisions regarding the timing and scope for those facilities will be forthcoming, but uncertainty about cost allocation must be resolved first
- Line routes and permitting are responsibility of Transmission Owners in SPP

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SPP Southwest Power Pool

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