Approved: March 19, 2010
Date

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 a.m. on March 8, 2010, in Room 785 of the Docking State Office Building.

All members were present except:
Representative Dan Johnson- excused
Representative Rob Olson- excused
Representative Gail Finney - excused
Representative Joe Seiwert - excused

Committee staff present:
Matt Sterling, Office of the Revisor of Statutes
Cindy Lash, Kansas Legislative Research Department
Iraida Orr, Kansas Legislative Research Department
Renae Hansen, Committee Assistant

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

Others attending:
Twenty-three including the attached list.

Representative Richard Proehl introduced Alexandra Kunde a foreign exchange student from Berlin Germany Representative Rocky Fund introduced his grand daughter Layla. Representative Carl Holmes introduced a former legislator Melvin Minor and a KETA board member, Les Evans.

Representative Carl Holmes explained to the committee the plan for the rest of the week.

3/8

Presentation by:
Heather Starnes, Southwest Power Pool, (Attachment 1) gave a presentation to the committee on what is happening at SPP today and in the future.

Ms. Starnes noted that the SPP's mission is to help all of their members to keep the lights on. The Southwest Power Pool was organized in 1941 right after the attack on Pearl Harbor. The SPP oversees power companies' transmission lines in nine states. She noted they are first and foremost a reliability entity. In addition they have six other major service tasks: transmission planning, facilitation, tariff administration, market operation, standards settings, and compliance enforcement. She noted that the footprint for SPP transmission lines is worth about $5 billion. She commented that today's economic transmission project is tomorrow's transmission reliability project. Ms. Starnes spent some time explaining their new integrated transmission planning process that they are implementing to evaluate the need for new transmission lines. She explained to the committee how the cost of constructing transmission lines are paid for and how the decisions on how to pay for them are made. Ms. Starnes spent time talking about the wind integration task force study that was completed to determine how much wind energy the transmission load could handle, and how much added transmission lines would be needed just for reliability. She noted that the expansion of transmission would be difficult because of the right of way issues that would have to be dealt with. She commented that we would need national leadership to help come up with a plan for paying for the expanded transmission lines that the nation would benefit from.

Questions were asked and comments made by Representatives: Cindy Neighbor, Annie Kuether, Tom Sloan, Carl Holmes, Don Myers, Tom Moxley, Milack Talia, and Vern Swanson.

The next meeting is scheduled for March 9, 2010.

The meeting was adjourned at 10:36 a.m.

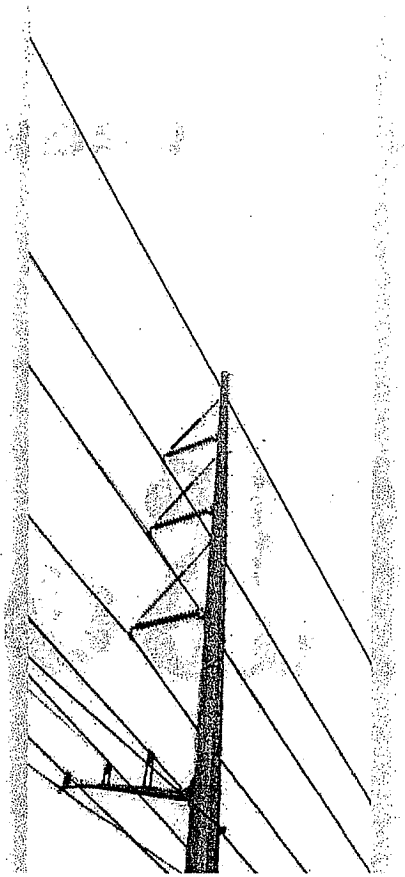
HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: March 8, 2010

NAME	REPRESENTING
Mark Schreiber	Westar
LES EVANS	KEPCo
Scott Jones	KCPL
Nelson Krueger	PAR
Mari Tucker	Commerce
Tom Bruno	Horizon
Mike Reecht	Sachs Braden
Clare Gustin	Sunflower Electric
Robin Jennison	Indeck Energy

HOUSE ENERGY AND UTILITIES
DATE: 3/8/2010
ATTACHMENT 1-1

SPP Southwest Power Pool



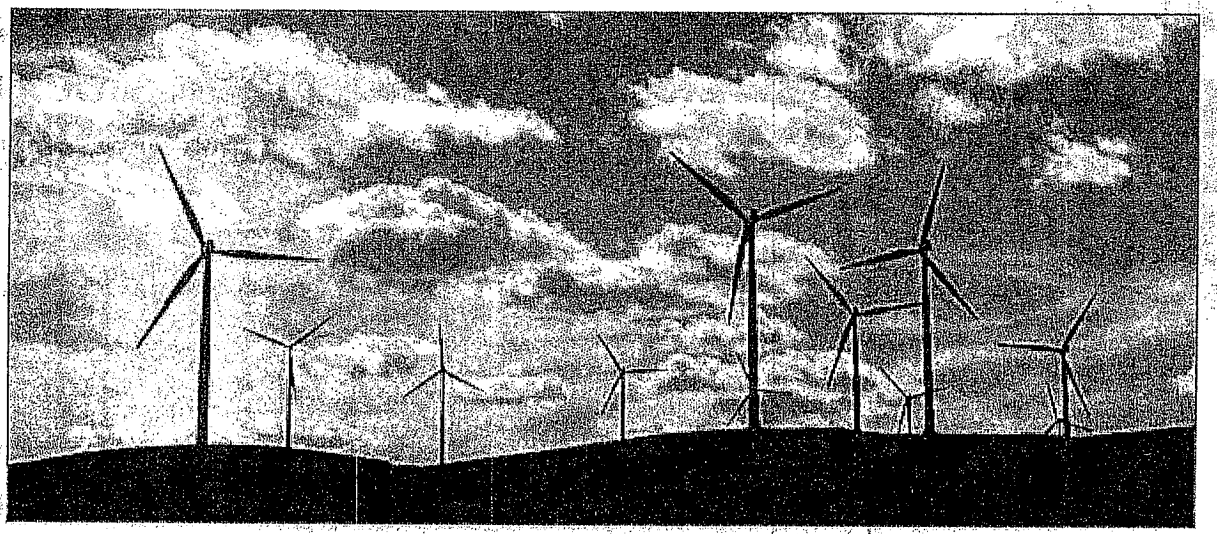
Helping our members work together
to keep the lights on...
today & in the future

SPP Southwest Power Pool

Expansion Planning and Cost Allocations

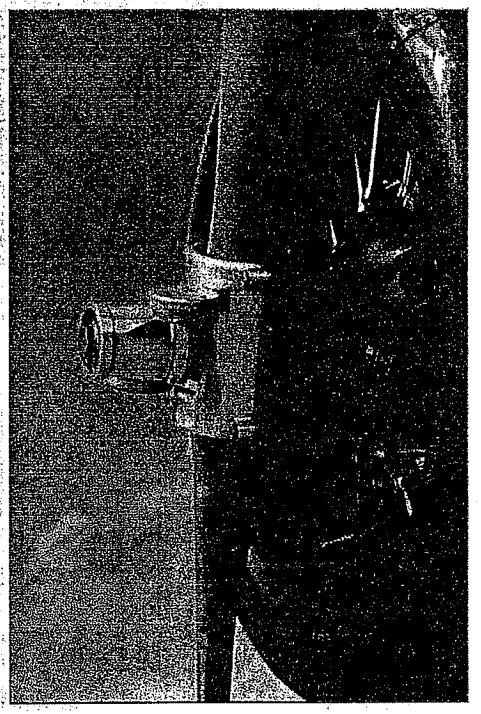
SPP Mission

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



SPP at a Glance

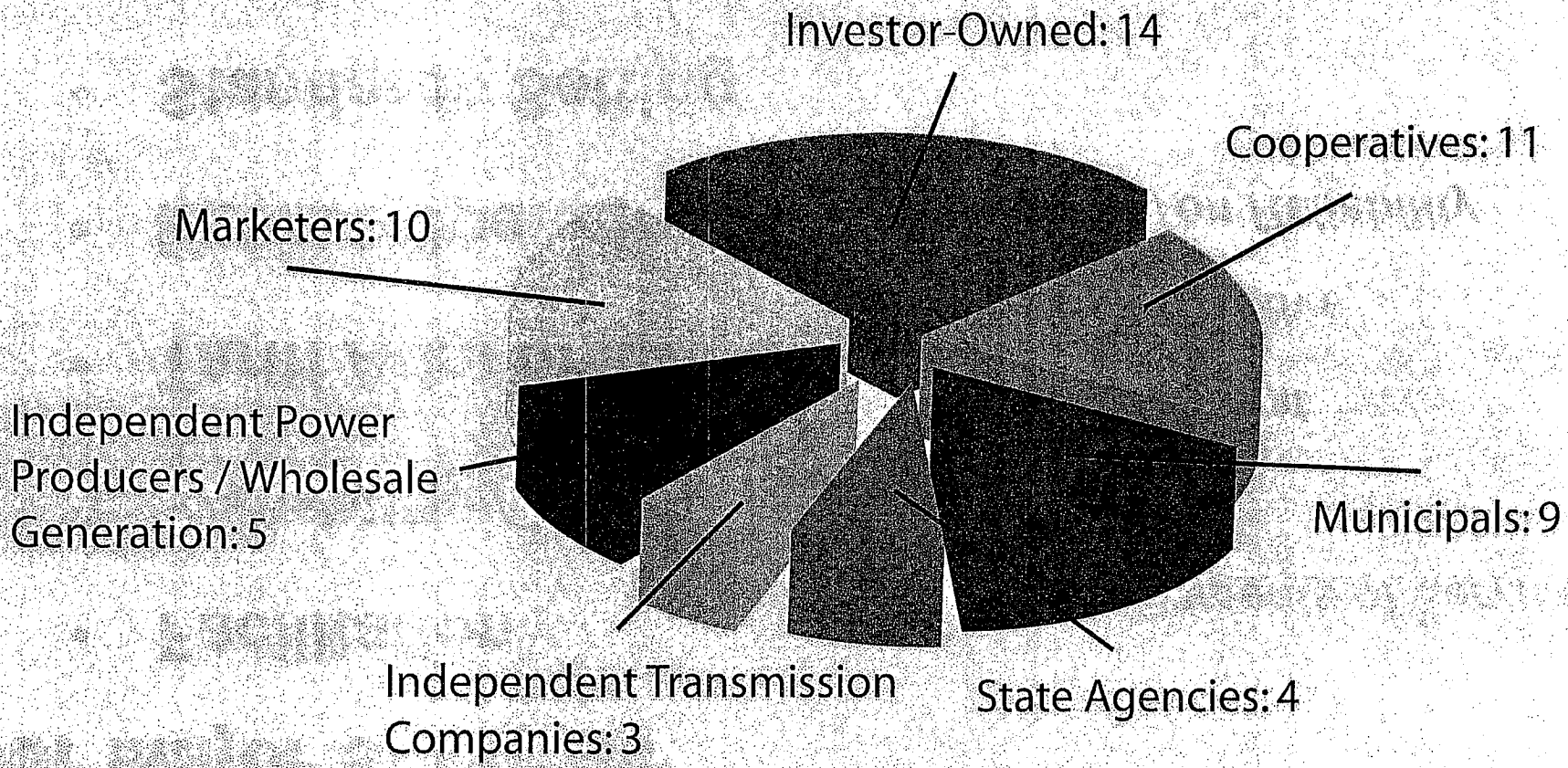
- Incorporated in Arkansas as a 501(c)(6) non-profit corporation
- FERC - Federal Energy Regulatory Commission
  - Regulated public utility
  - Regional Transmission Organization
- NERC - North American Electric Reliability Corporation
  - Founding member
  - Regional Entity

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

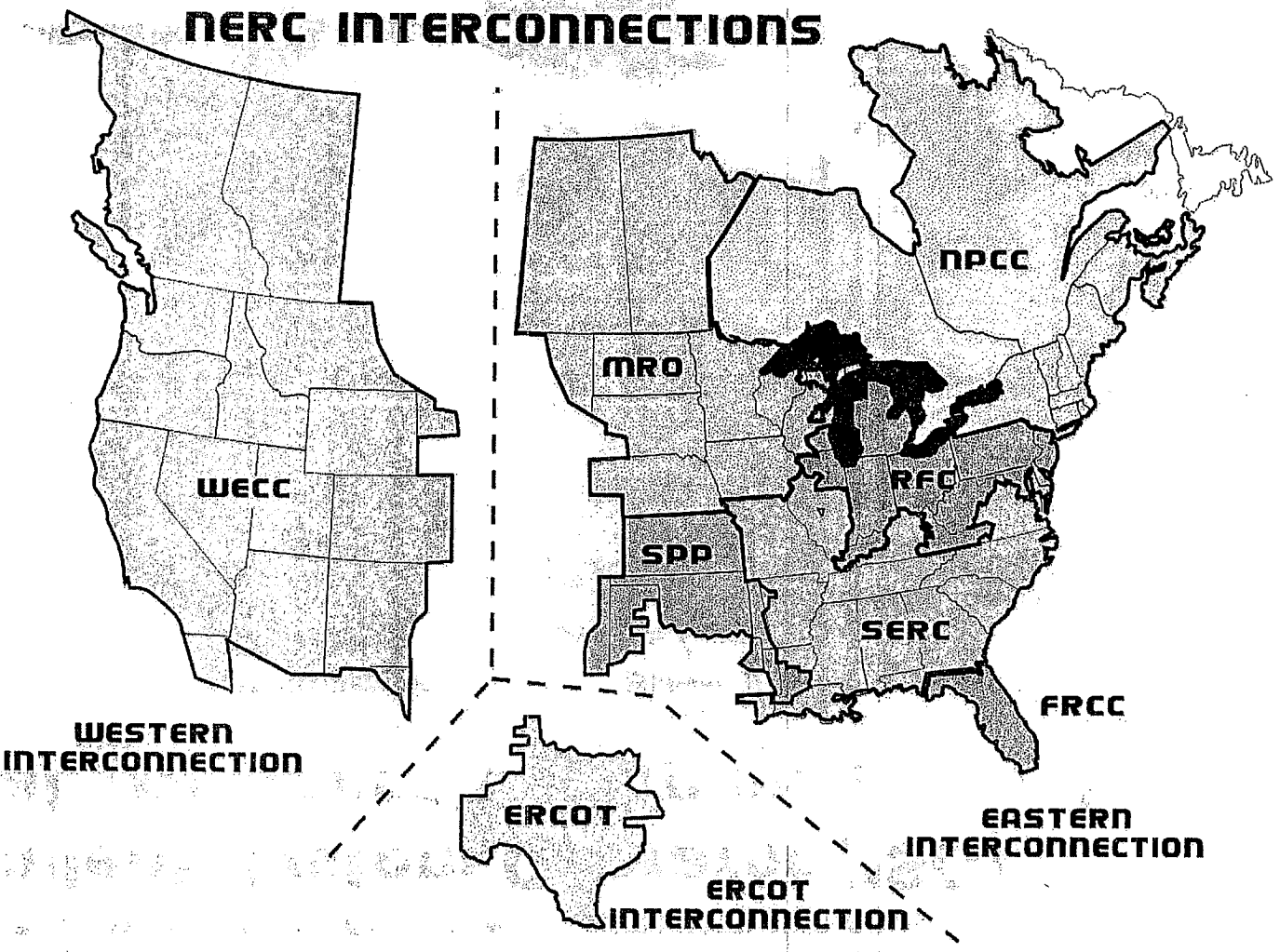
Regional

Independent

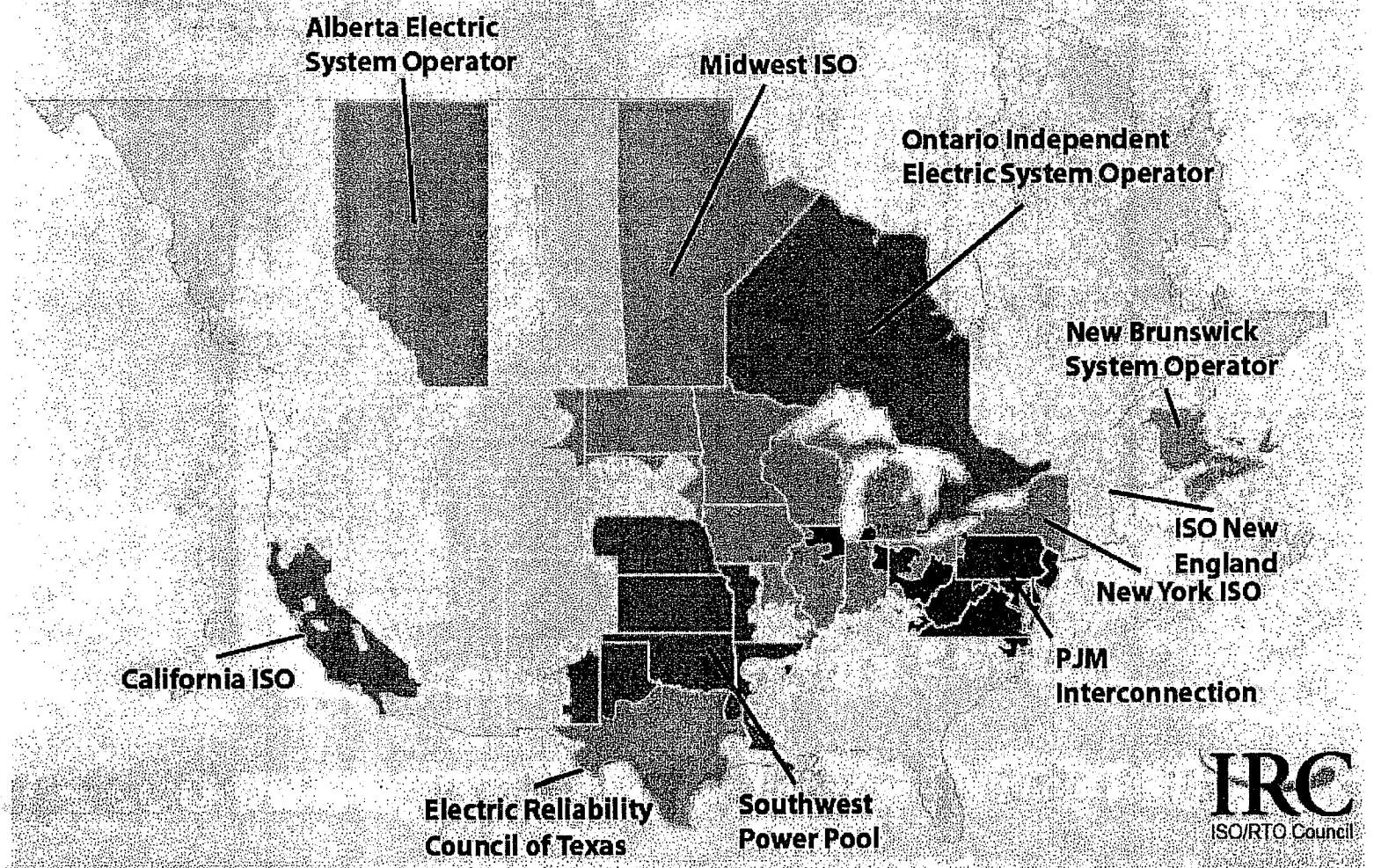
Cost-Effective

Focus on Reliability

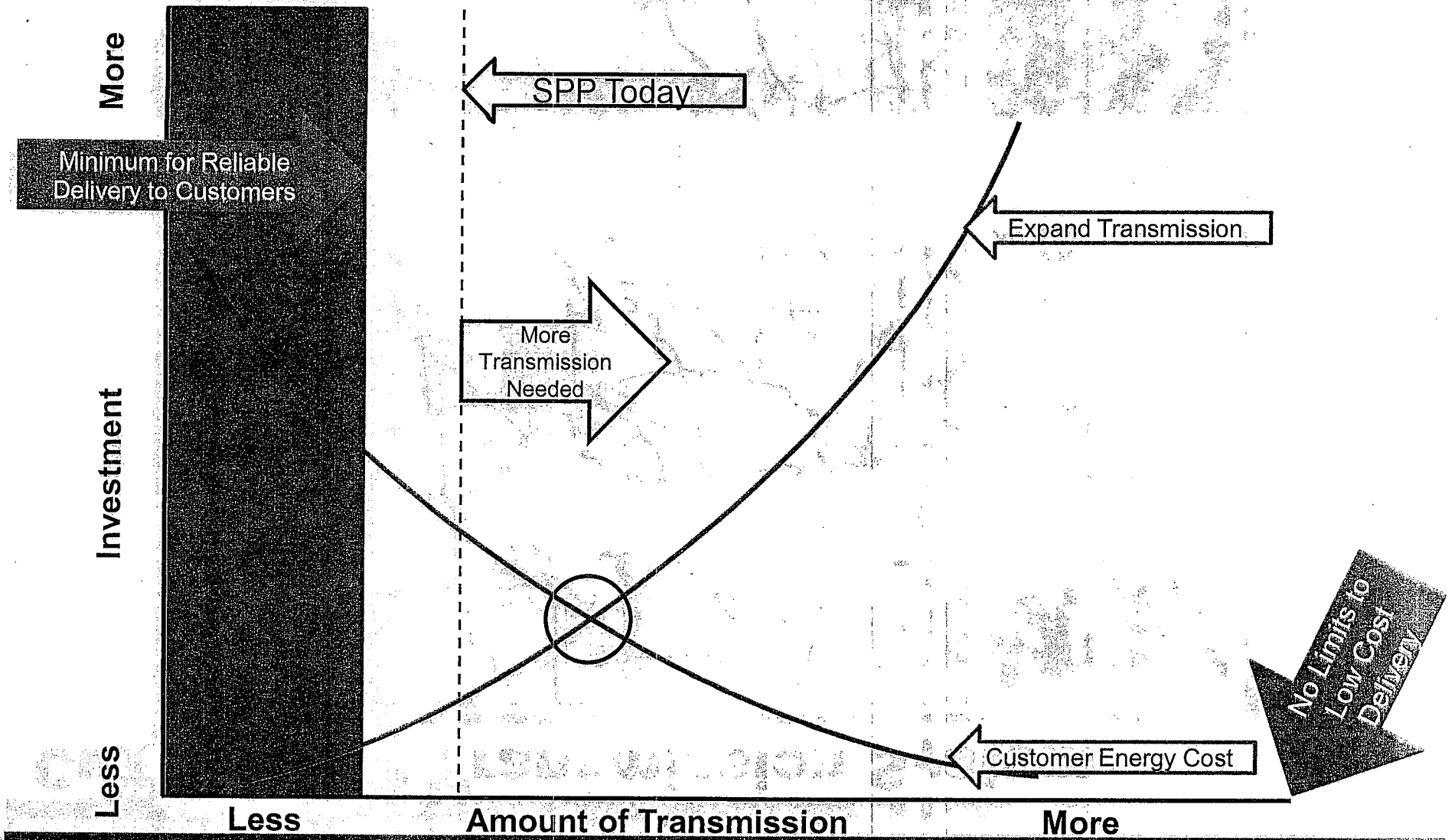
3 Interconnections / 8 NERC Regions



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



Why expand the transmission system?



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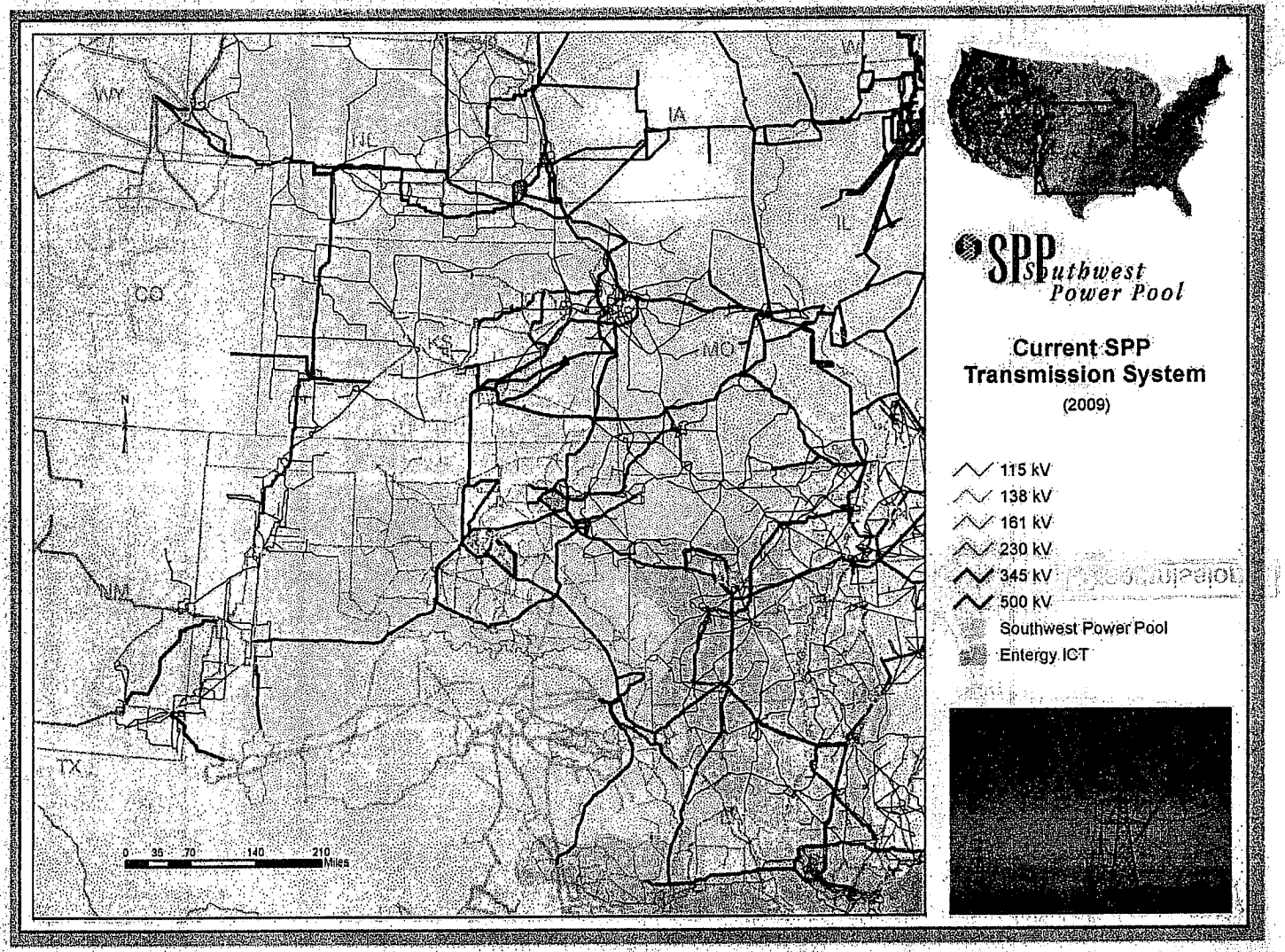
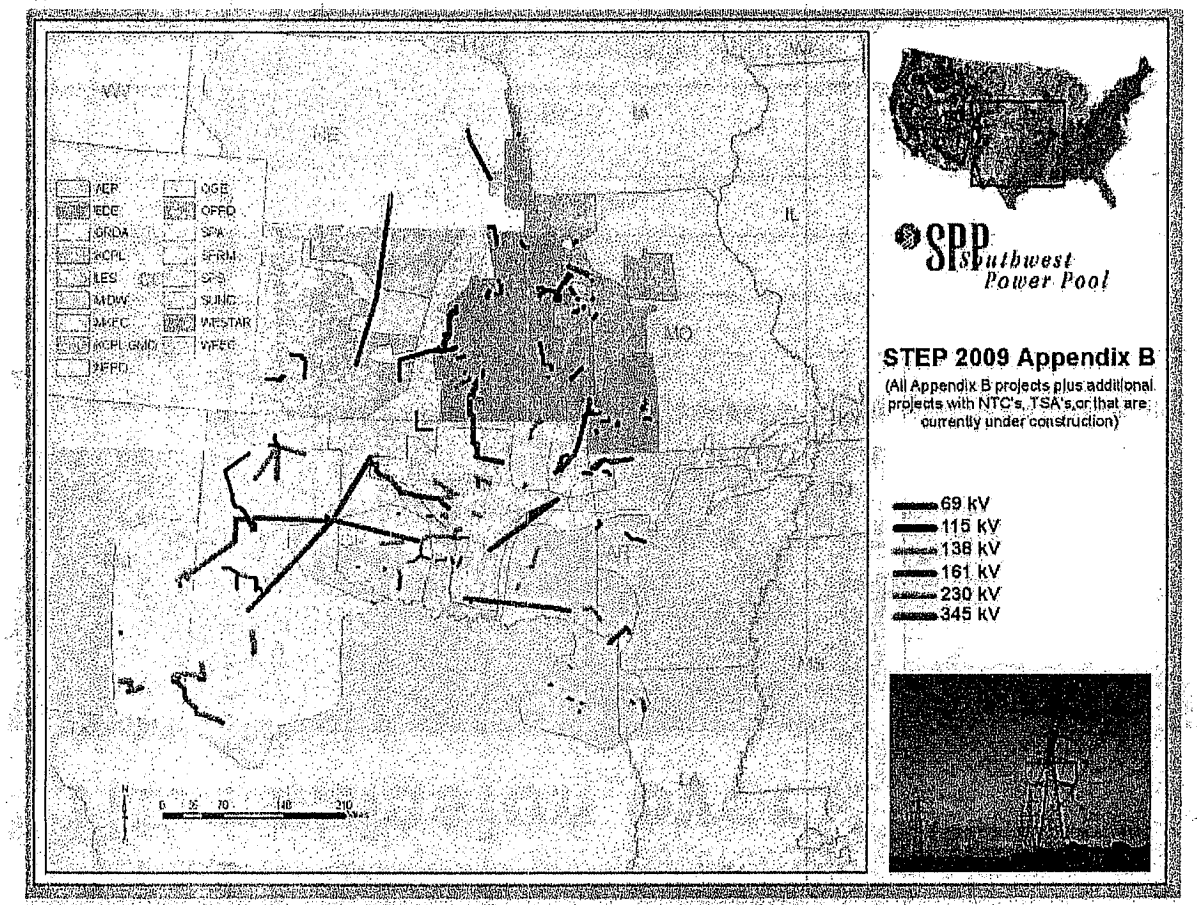
Current SPP Transmission System



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

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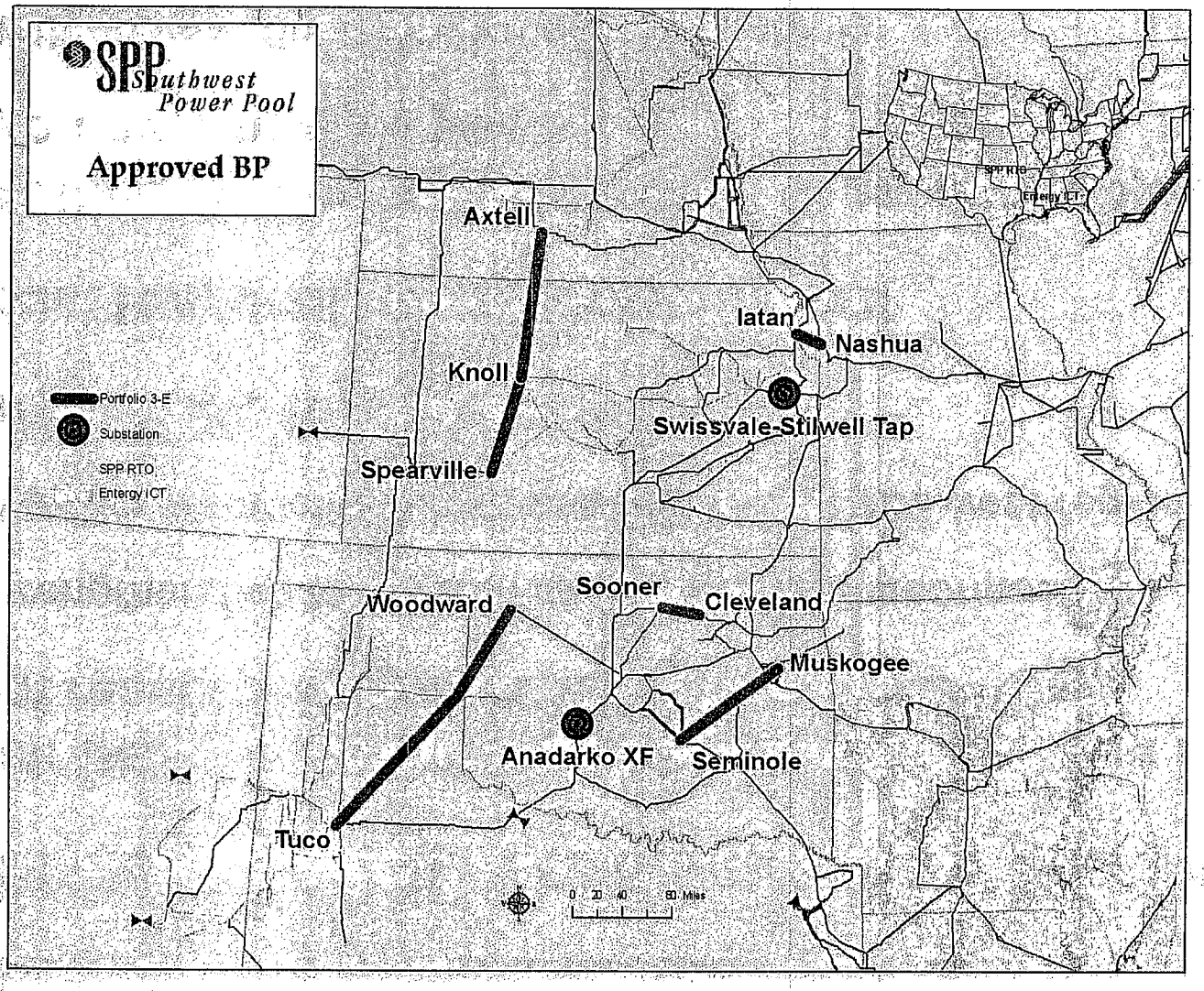
Approved Balanced Portfolio of Projects

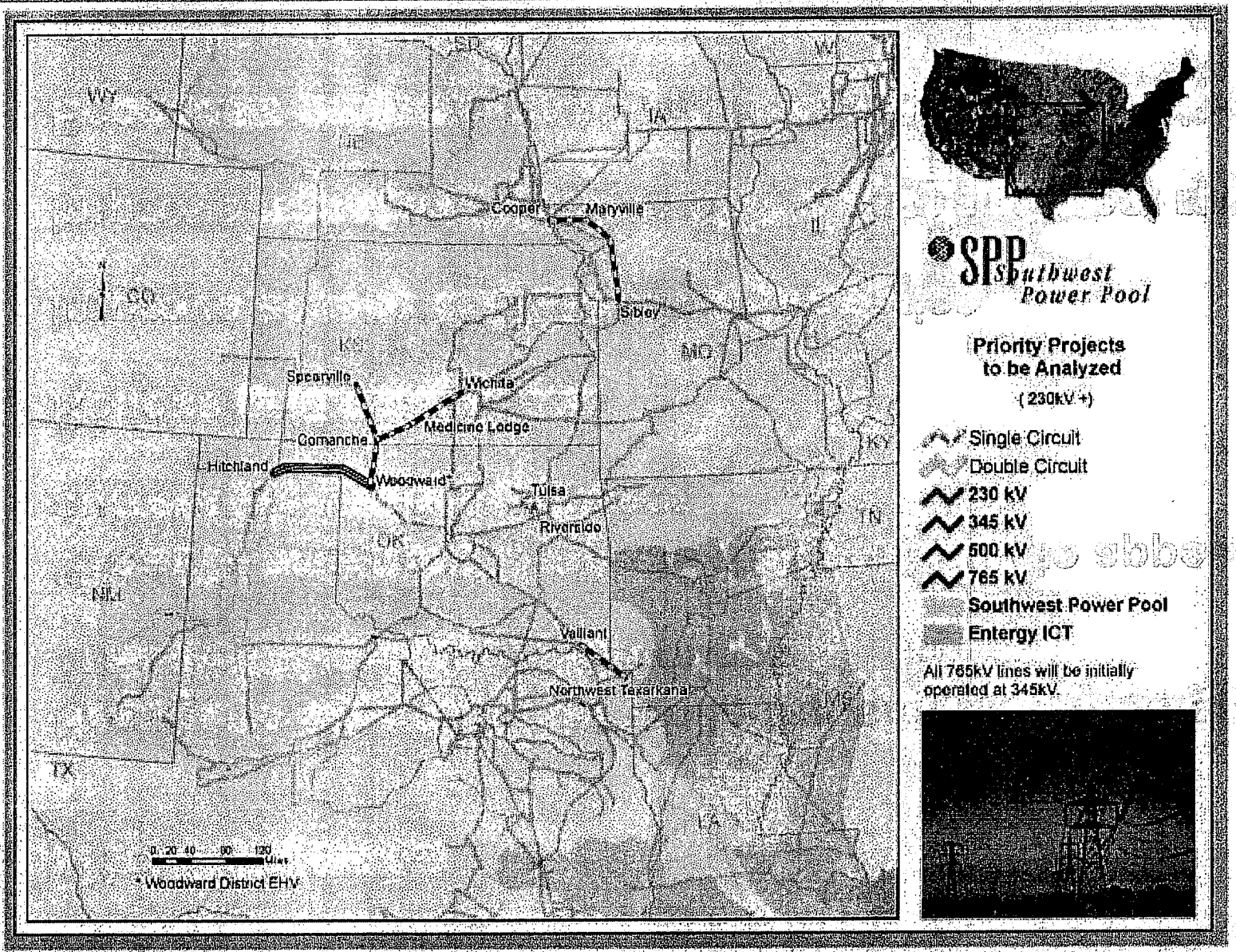


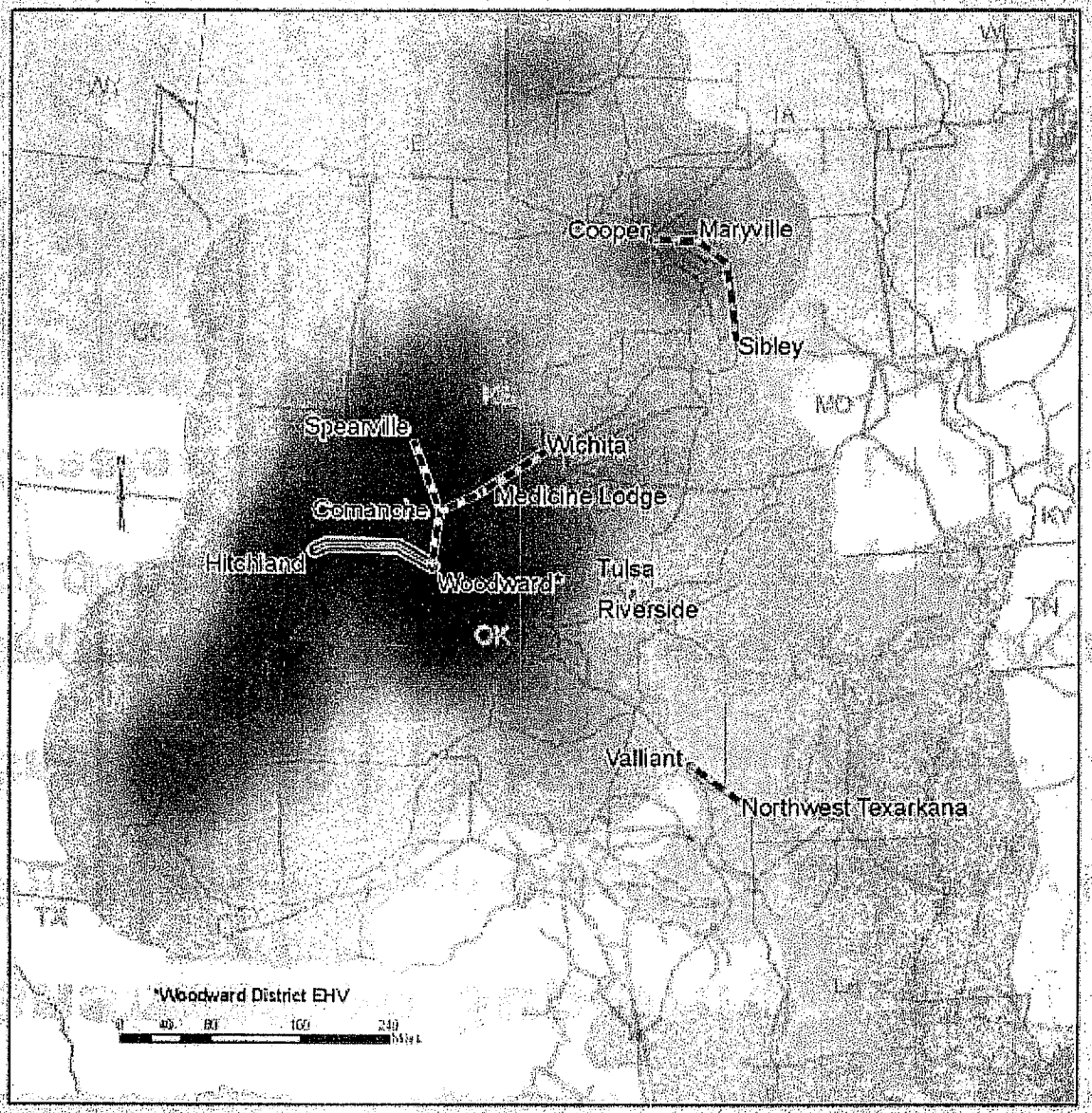
What is Integrated Transmission Planning?

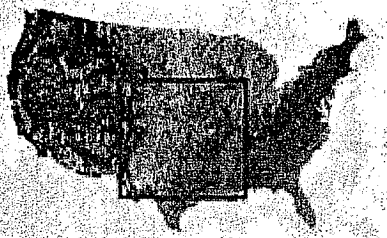
- Goal: Design transmission backbone to connect load to the most reasonable generation alternatives
  - Strengthen ties to Eastern and Western Interconnections
  - Improve connections between SPP's east and west regions
- Horizons: 20, 10, and 4 year
- Focus: Regional, integrated with local
- Resulting 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


Cooper
Maryville
Sibley
Spearville
Wichita
Medicine Lodge
Comanche
Hitchland
Woodward*
Tulsa
Riverside
Valliant
Northwest Texarkana
0 20 40 80 120 Miles
* Woodward District EHV
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 FP
- Double Circuit FP
- 230 kV
- 345 kV
- 500 kV
- 765 kV, OP @ 345kV
- Southwest Power Pool
- Entergy IOT

Wind Generation In Queue

Megawatts

High

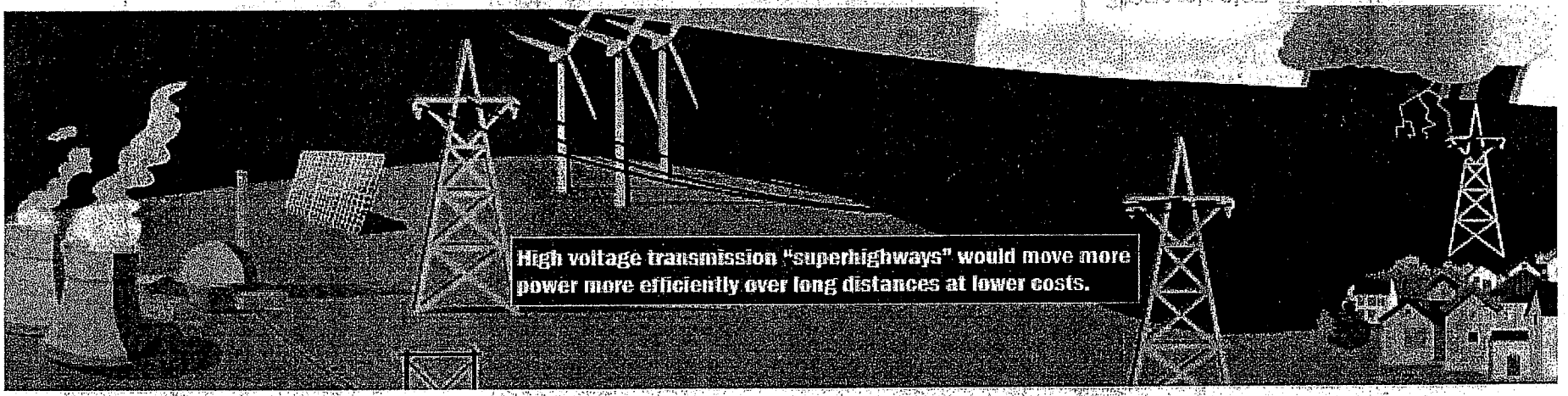
Low

1-19

1-20

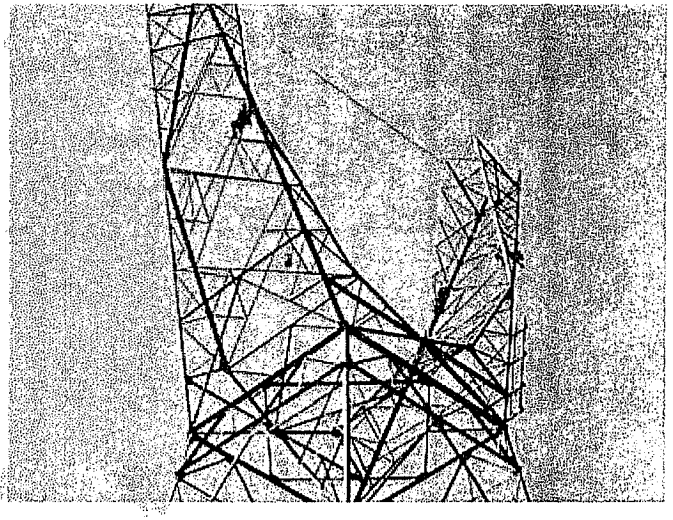
"Transmission Superhighway"

- 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

- 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

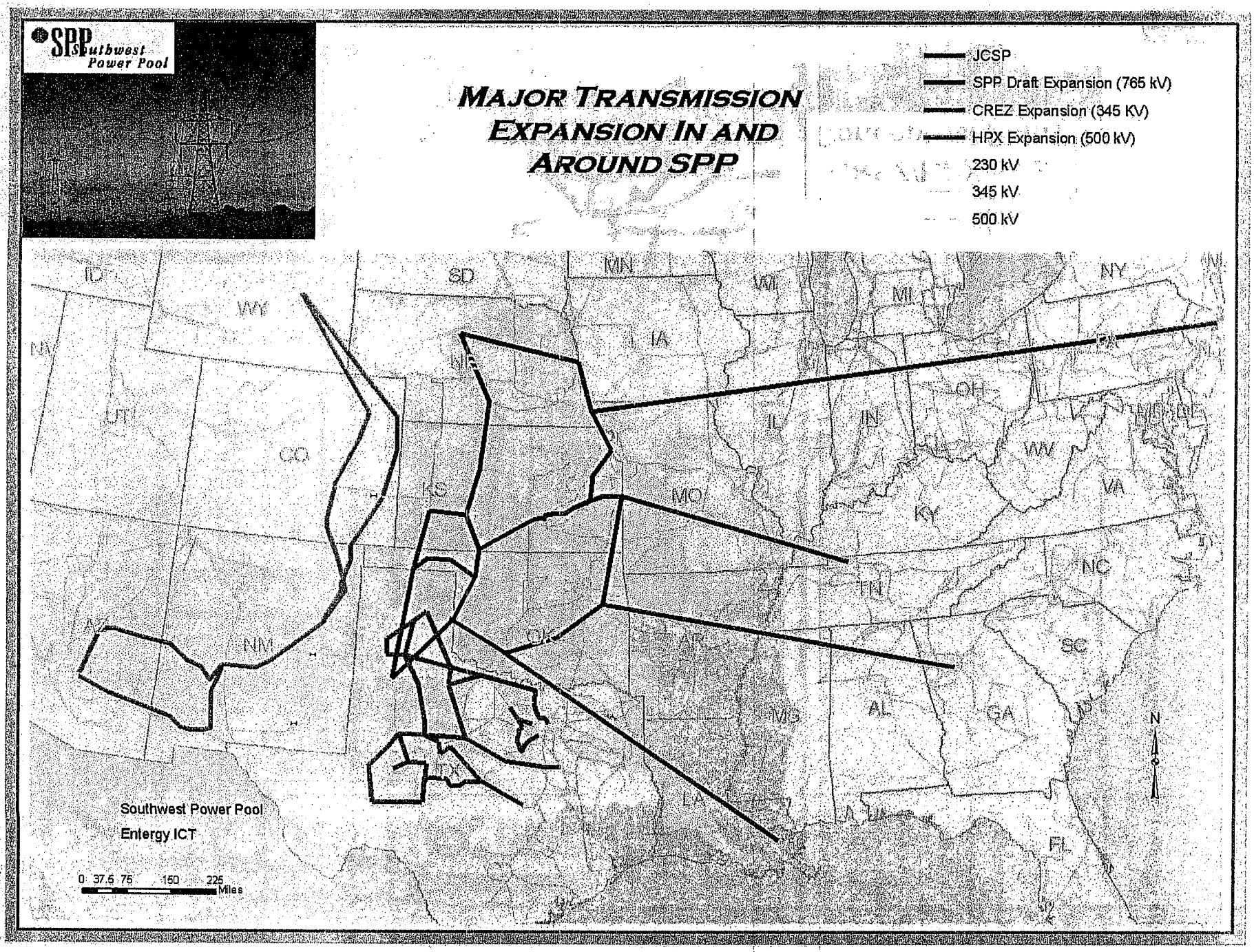
Need Simple and Fair Cost Allocation

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

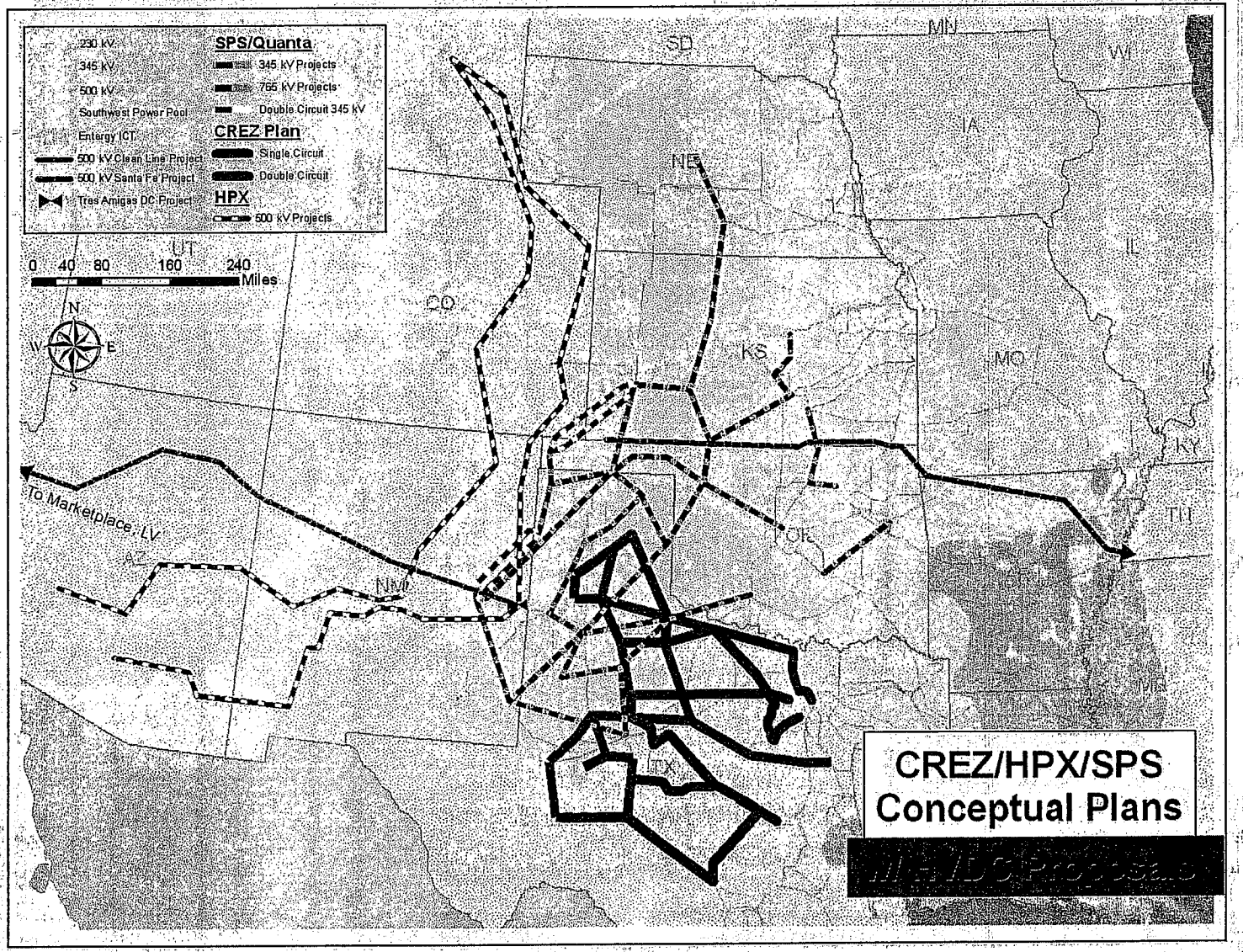
Voltage	Regional	Zonal
300 kV and above	100%	0%
100 kV - 299 kV	1/3	2/3
Below 100 kV	0%	100%

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
JCSP
SPP Draft Expansion (765 kV)
CREZ Expansion (345 KV)
HPX Expansion (500 kV)
230 kV
345 kV
500 kV
ID
WY
NV
UT
CO
AZ
NM
SD
MN
WI
MI
NY
IA
NE
IL
IN
OH
WV
VA
KS
MO
KY
TN
NC
OK
AR
SC
MS
AL
GA
TX
LA
FL
Southwest Power Pool
Entergy ICT
0 37.5 75 150 225
Miles
N

SPP and other Regional Plans



CREZ/HPX/SPS Conceptual Plans

HVDC Projects

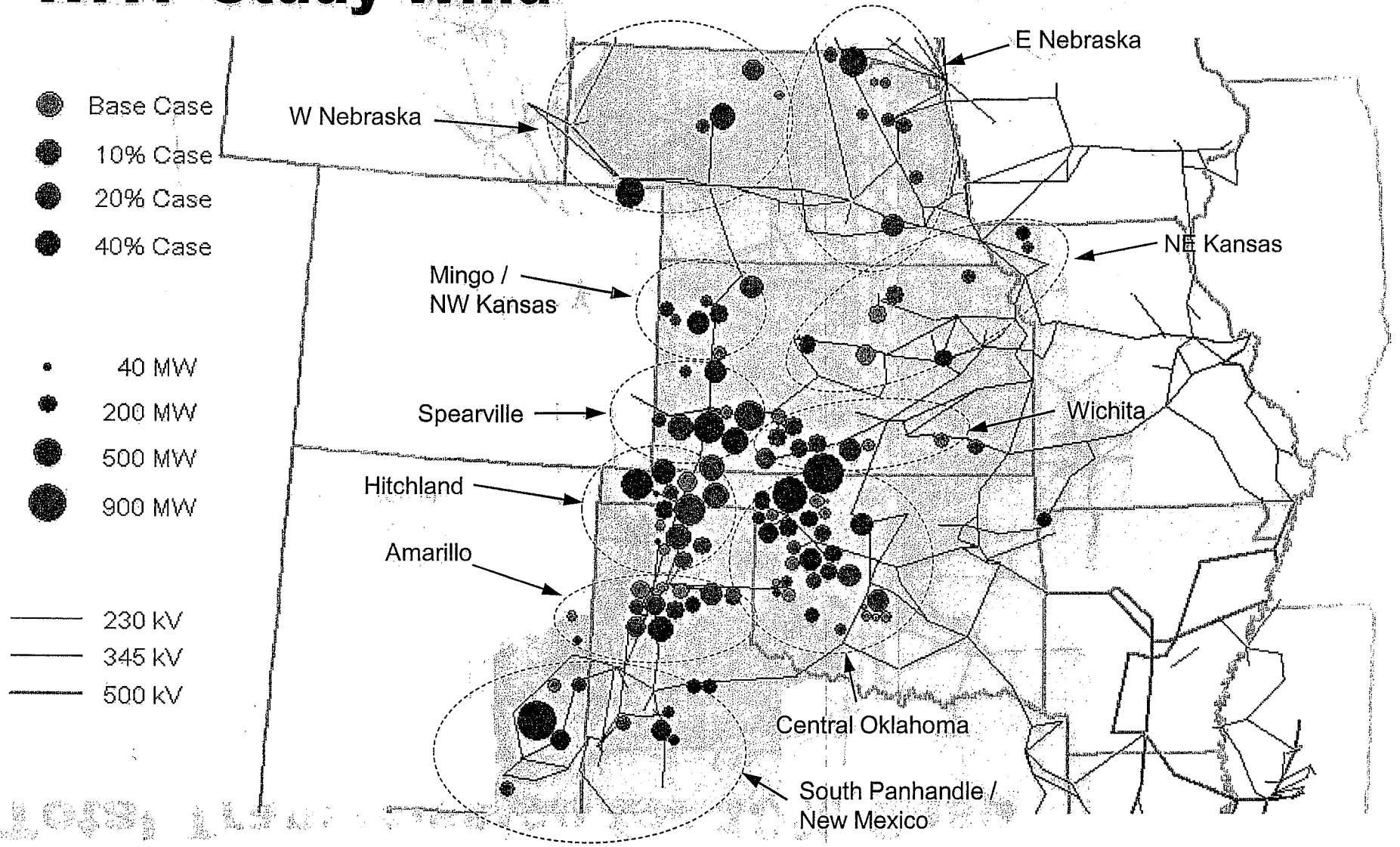
Other Opportunities In Process

- 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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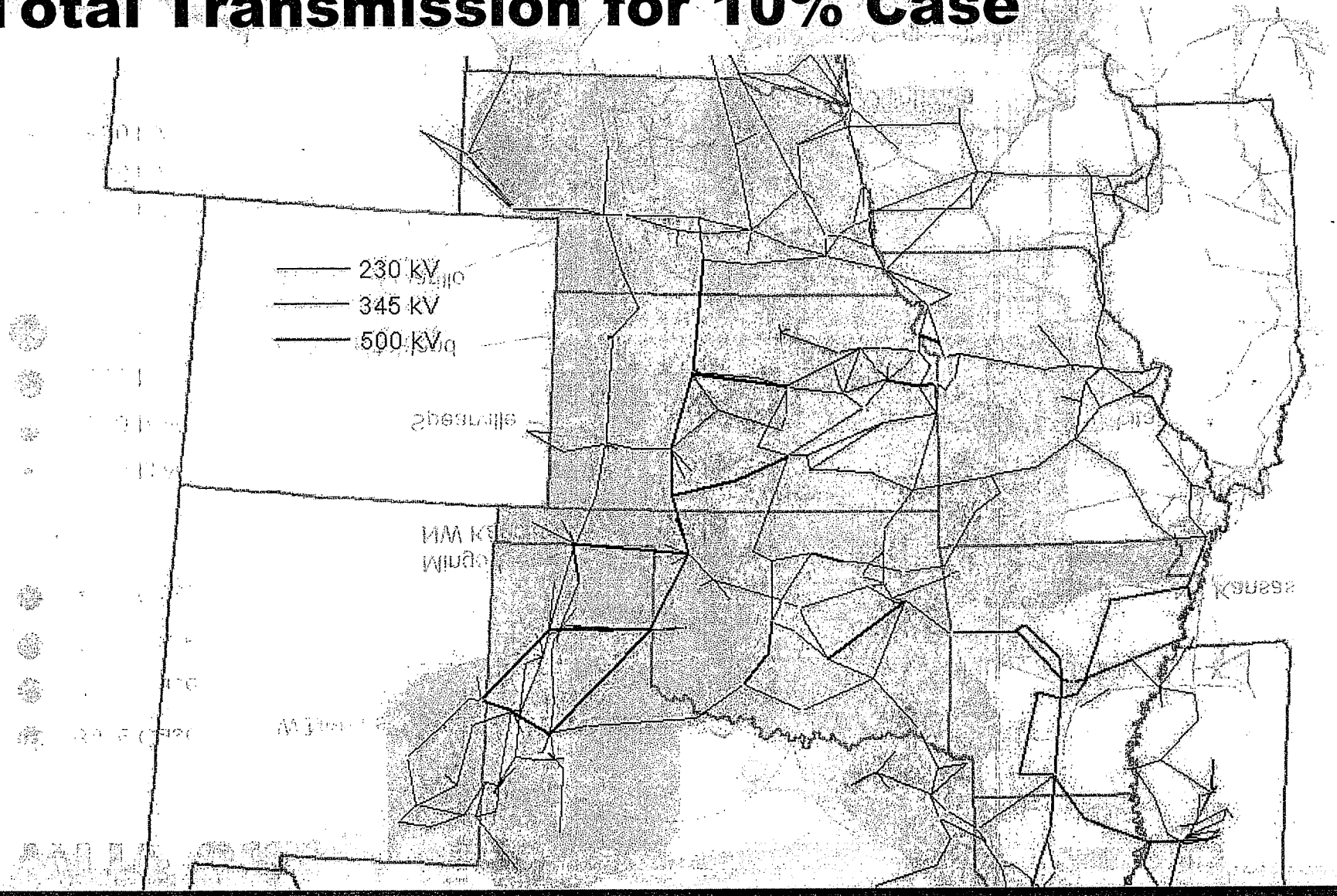
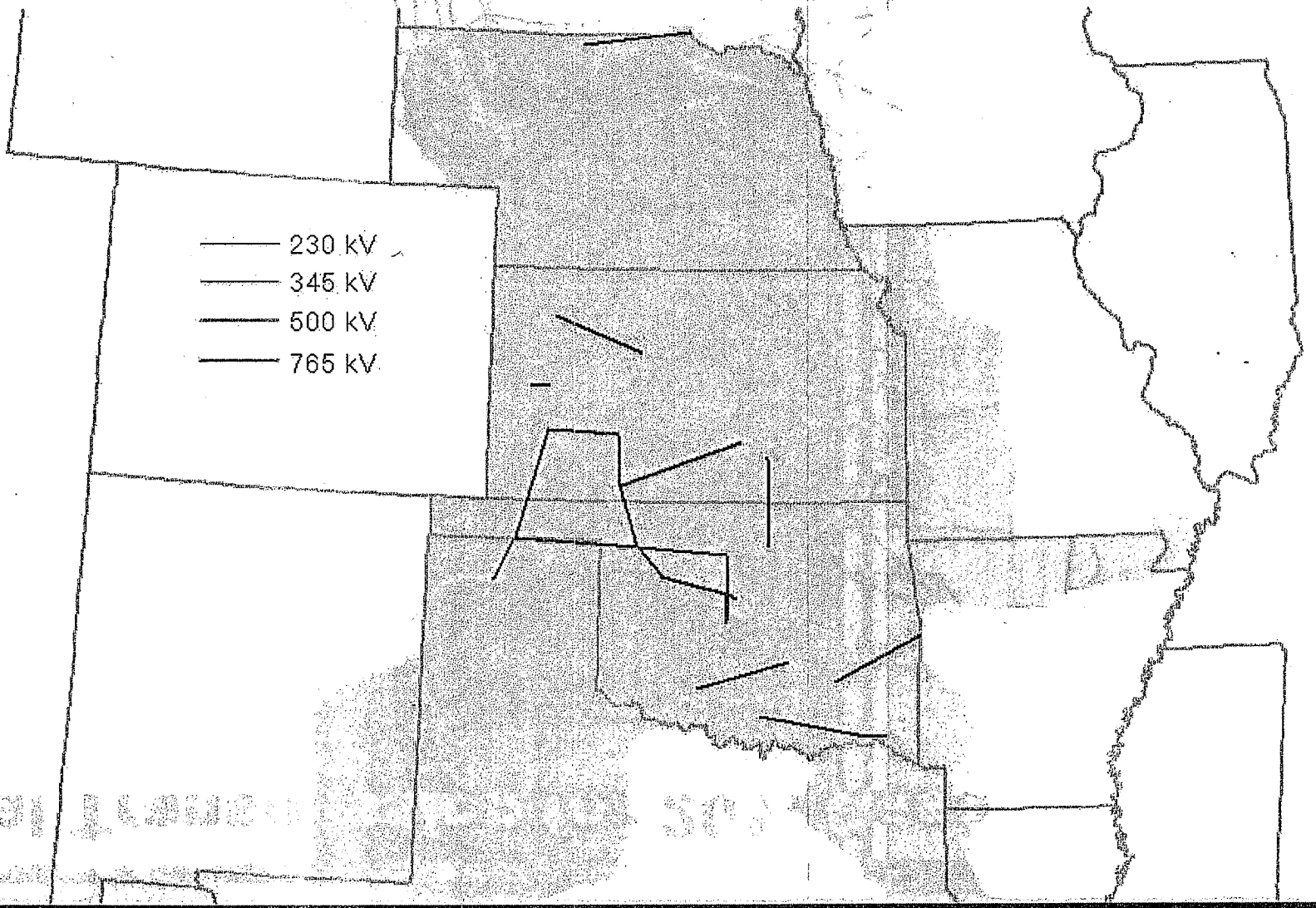
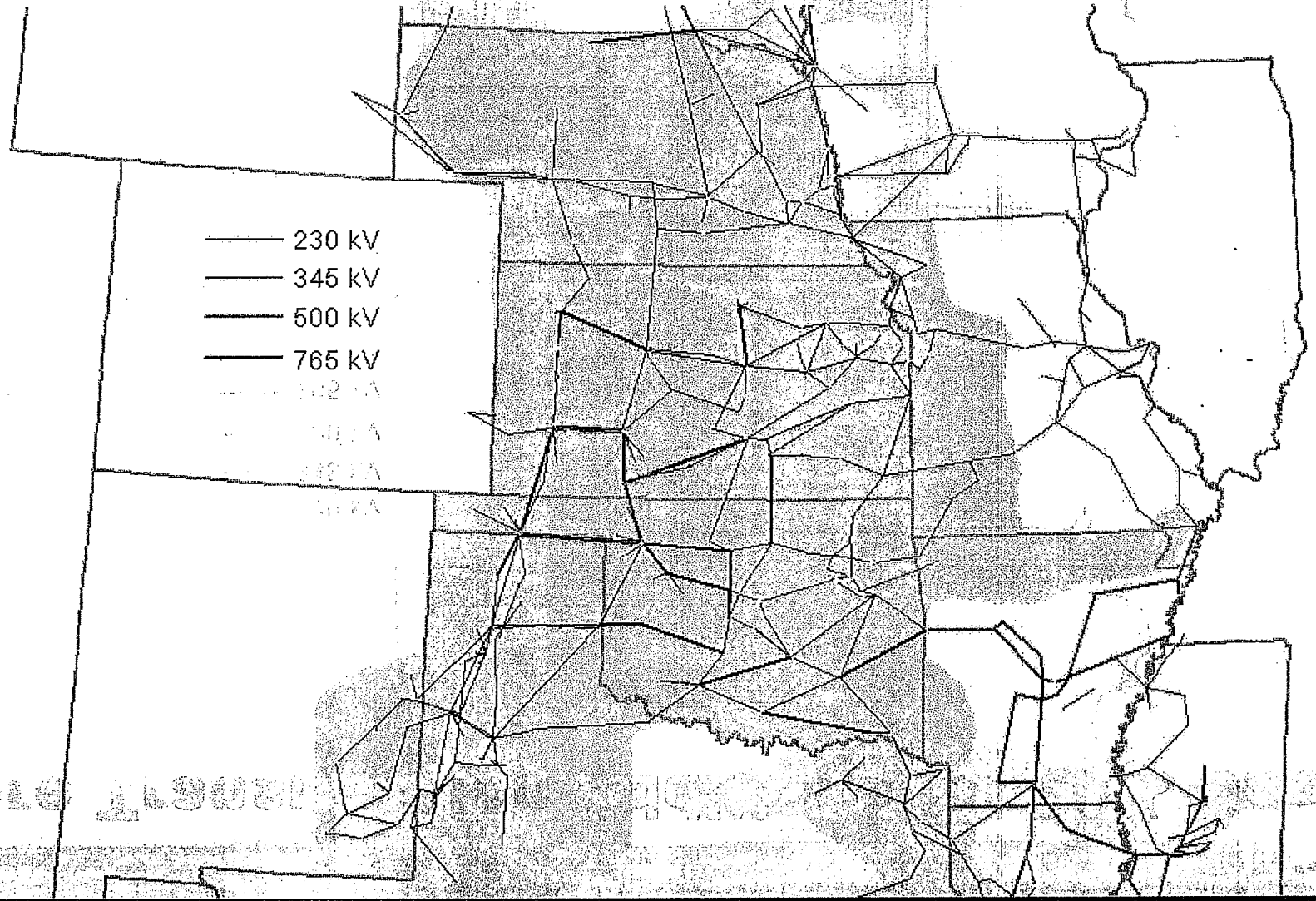
Total Transmission for 10% Case



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.

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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