EK Map No(s)	First name	Last name	Open House comments	EKPC Followup
304	Joe T.	Bilbrey	**B. Sharp:** OK to survey.	
305		Billy S. & Freda M. Pendleton Trust	Mr. Pendleton attended the Oct. 10, 2006 open house for the KU-Lancaster to Garrard Co. project and said he does not want transmission line on his property.	
306	Holton & Nancy	Howard	**B. Sharp:** All of the farm is now a platted subdivision. Could go along the subdivision and south side of the tract. **H.K. Cunningham:** Property has been subdivided. Can live with line on lower end, away from his house.	EKPC's proposed route does not cross #306.
307	Michael J.	King		
308-316		Landmasters AVG LLC		
317	Grover W. & Teresa	Drew		
318, 319, 320	Woodie & Marsha	Leavell		
321	Elizabeth	Clark	**D. Ballard:** Ms. Clark is mother of Virgil Clark who worked in right of way for the state Department of Transportation for 30+ years. Life estate in property. Ms. Clark prefers transmission line be located between their home (#321) and uncle's home (#380), and parallel property line.	EKPC's proposed route does not cross #321.
322	Roy & Debby	Davis		
323	Joseph D.	Beck		
324	Dan & Dorothy	Hall	**R. Terrill:** This parcel is along a rebuild section and existing line does not cross property.	
328	Gary	Jasper		
329	Sue	Poynter		

EK Map No(s)	First name	Last name	Open House comments	EKPC Followup
330, 331	Billy Joe & Janice	Yocum		
332, 334	Roy	Davis		
335	Roy & Sue	Davis		
336	Roy & Sue	Davis		
337	Roy & Sue	Davis		
338, 339	Gabriel & Sharon	Edwards		
340	Patsy K.	Hume		
341	Ernie & Aundria	Davis		
342	Billy & Bruce	McMillian	**H.K. Cunningham:** [redacted]	
343, 344, 347	Shane E. & Sheila K.	Meece		
345	Wm. Carroll & Patsy	Broadus	**G. Harvey:** Mr. Broadus does not want a line on his property. He has had a bad experience with another line. May be a cooperative line.	
346, 348	Thomas Robinson & Vicki	Naylor		
349	Kevin & Keith	Middleton		
350	Mitchell & Connie	Lamb	**D. Ballard**: Locate on back of property. Prefer it not be on their property.	EKPC's proposed route is on the back of #350.
351		Michael C Noe & Merit Livestock		
352	Eulalah	Gilliam		
353	Judith Kirby	Shearer		
354	Elzie & Carlie P.	Barker		

EK Map No(s)	First name	Last name	Open House comments	EKPC Followup
355	Edward & Lucinda	Barker		
356	Kenneth E. & Barbara	Montgomery		
357	Kenneth D.	Norton		
358	Ricky & Vickie	Bolton		
359	Allen & Tami L.	Pickett		
360	Sylvia	Reusche		
361	Sammy & Kimberly	Young		
362	John & Helen	Collins		
363	Earl & Noemi	Lane	**G. Harvey:** Unlikely they will be crossed. They are concerned about devaluing the property. **M.J. Warner:** Collected information about EMF.	
364	Rhonda	Vice		
365	Lorraine	Miller		
366	Joe	Leavell		
367	Kenneth & Phyllis	Underwood	**M.J. Warner:** Mr. Underwood collected EMF information and took some information for neighbor (Ophelia Parker, #368) and took business card. **D. Ballard:** Mr. Underwood does not want transmission line on this side of the corridor. He does not have a problem with the centerline of the corridor.	EKPC's proposed route does not cross #367.
368	Ophelia	Parker		
369	Para Lee	Bean		
370	Jimmy W.	Cox		
371		United Methodist Church	**B. Murrey:** OK to survey.	
372	Tom M. & Susan	Henderson		
373	Kevin E. & Charity M.	Foster	**B. Sharp:** Probably will not cross.	

EK Map No(s)	First name	Last name	Open House comments	EKPC Followup
374	Jimmy Rondal & Mildred	Broadus		
376	Judith	Clark		
377, 378	Donnie & Stella	Prewitt	**R. Terrill:** Gas line on property. Mr. Prewitt prefers that line come down property line. **J. Settles:** Property owner asked what bats were caught on the property. Settles responded that red bats and big brown bats were caught.	
379		David Daniel Mercy Inc		
380	Roy & Hildreth	Patterson		
381	Harry D. & Shirley	Howard	**B. Sharp:** Try to keep the line as far south on property as possible. **H.K. Cunningham:** Prefer to keep line to the south, if possible, south of pond.	EKPC's proposed route does not cross #381.
382	Radford W. & Nancy E.	Jones		
383	David E.	Patterson	**T. Mumm:** Will not be crossed.	
384	Phillip & Deirdre	Price	**D. Ballard:** Prices do not want line to cross their property and do not want to see the transmission line. Will not sell easement. Will start letter-writing campaign. There is a house on the back of the property. Two 4-acre tracts.	
385, 386, 387	Wm. Kirby & Ann C.	Teater		
388	Louis D. & Ann W.	Ball	**H.K. Cunningham:** Property is barely in corridor, unlikely to be affected.	
389,390	Jeffrey C. & Jamie	Hester	**B. Sharp:** OK to survey. **T. Mumm:** Hesters prefer that line go to the north on the back side of the ridge, don't cut trees and stay away from creek. **B. Murrey:** Mr. Hester prefers line to be as far away from residence as possible, along ridge, don't cut trees and stay away from creek. **J. Settles:** Mr. Hester requested that line be located as far away from house as possible and EKPC remove as few trees as possible. Mrs. Hester requested that EKPC take her school class netting.	
391	Wendell R. & Karen S.	Hatfield	**G. Harvey:** Mrs. Hatfield is concerned about cutting trees where her husband hunts. **M.J. Warner:** Mrs. Hatfield had questions about EMF. She took a packet of information.	

EK Map No(s)	First name	Last name	Open House comments	EKPC Followup
392	Patricia D.	Sutton		
393	Arthur L. Jr.	Dunn		
394	Corbett & Deborah	Tolson	**B. Sharp:** Likely to cross.	
395	Colby	Arnold	**T. Mumm:** Prefers that line stay to the north.	EKPC to verify ownership.
396	Colby Clay & Joan C.	Arnold		
397	Samuel & Charles	Bourne		

Comment Summary

Location of Transmission Line

# of Comments	Comment	Issue	EIS Relevance
33	Want the line located on a particular part of their property or certain side of existing line	Engineering	
5	Do not cross fields or prime farmland		
2	Put line along fence lines and property lines		
2	Avoid putting line in areas with trees		
6	Don't want the line on their property		
1	Why can't the line be built somewhere else?		
1	The line should not be built at all		
1	How will the line affect an existing gas pipeline on my property?		

EMFs

# of Comments	Comment	Issue	EIS Relevance
7	Concerns about EMFs	General	

1	Can EMFs affect my health?	Health	
1	Concerns about EMFs causing cancer		
1	Affects on livestock health		
1	How do EMFs affect pacemakers?		

1	Concerns about static on fences and metal roof	Safety	
1	Grounding barns and fences		
1	Interference with hand-held electronic devices		
1	Can EMFs be shielded by a tractor cab?		

Construction

# of Comments	Comment	Issue	EIS relevance
10	Prefer that line be rebuilt using existing line or double circuit the existing line	Construction	
3	Prefer line parallel existing line		
1	Put the line underground		

Herbicides

# of Comments	Comment	Issue	EIS Relevance
1	Prefer use of non-restricted herbicides	Type	
1	Concerned about damage caused by spraying and applicators	Damage	
1	Health effects on livestock, i.e. blind calves	Health	

Damage during Construction

# of Comments	Comment	Issue	EIS Relevance
2	Damage caused by accessing easement	Damage	
1	Heavy machinery tearing up wet fields		
2	Past damage that occurred during construction and maintenance of existing line		
1	Tearing up fences		

Aesthetics

# of Comments	Comment	Issue	EIS Relevance
1	Prefer use of brown, steel poles	Visual Impacts	
2	Line will mar natural beauty of area		
1	Remove old poles		
2	Do not want line to be visible from their home		

Easement

# of Comments	Comment	Issue	EIS Relevance
1	Property owner unhappy about amount received for previous easement	Economic	
1	Want to lease the easement to EKPC instead of selling it		
1	Will not sell easement to EKPC		
1	Concerned about the amount of easement needed for the line		
1	Will property owner be compensated for easement?		

Environmental

# of Comments	Comment	Issue	EIS Relevance
1	Concerns about erosion during and after construction	Environmental	
1	Will vultures roost on the poles?		
1	Try to limit the removal of trees		
1	What will be the effects on streams?		

Property Values

# of Comments	Comment	Issue	EIS Relevance
3	Concerns about the line devaluing their property	Economic	

Development

# of Comments	Comment	Issue	EIS Relevance
2	Will be unable to develop property in the future once line is built	Economic	

Historic Sites

# of Comments	Comment	Issue	EIS Relevance
2	Concerns about damage to two historic home sites	Archeology	

Safety

# of Comments	Comment	Issue	EIS Relevance
2	What about use of machinery, such as cherry pickers, under line?	Safety	

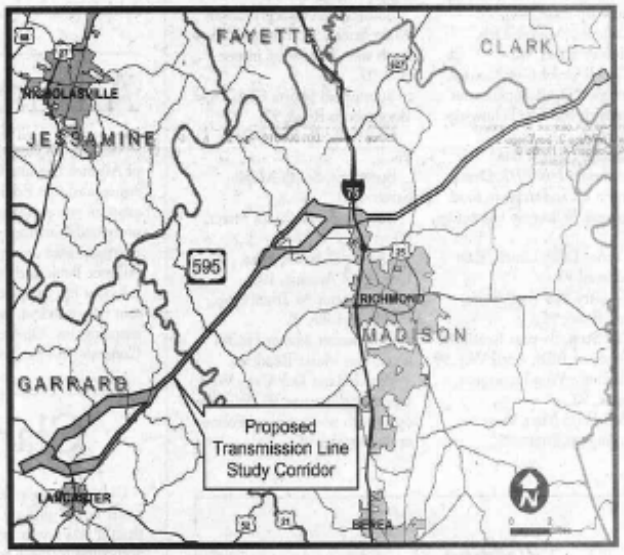
Noise

# of Comment	Comment	Issue	EIS Relevance
1	Will the line make noise?	Noise	

APPENDIX H:
Open House Newspaper Notices

Winchester Sun

We want you involved...



...to learn more about EKPC's proposed project to construct a 345-kilovolt transmission line in Clark, Madison and Garrard counties and an associated switching substation in Garrard County. This project will involve constructing approximately 35 to 37 miles of 345-kV transmission line from EKPC's J.K. Smith Station near Trapp in Clark County to a new substation to be constructed west of Lancaster in Garrard County. The final route is expected to be located in one of the corridors displayed above.

East Kentucky Power Cooperative will conduct two public open houses:

- Tuesday, August 29, from noon to 7 p.m. at Hyattsville Baptist Church, 1365 Richmond Road, Lancaster. (Property owners south and west of Ky. 595 are encouraged to attend this open house.)
- Thursday, August 31, from noon to 7 p.m. at the Best Western-Holiday Plaza located at 100 Eastern Bypass, Richmond. (Property owners north and east of Ky. 595 are encouraged to attend this open house.)

During the open house, we will provide information about this project to accommodate load growth and to improve distribution reliability of the regional transmission grid.

In accordance with 36 Code of Federal Regulations Part 800 and the National Historic Preservation Act of 1966, as amended, East Kentucky Power Cooperative is soliciting the involvement of those who have a legal or economic relation to properties that will be affected by the proposed line or have a demonstrable interest in the historic built and/or archaeological environment in the project area. To become formally involved in the regulatory process as a consulting party, please send a letter, complete with contact information and statement of interest, to Joe Settles at joe.settles@ekpc.coop or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.

By working together we will arrive at the best solutions.

EAST KENTUCKY POWER COOPERATIVE

9-1-06 Property owners discuss power line proposals RICHMOND REGISTER

By Bill Robinson
Register News Writer

“I’d just as soon they stayed away from (my property,) but you can’t fight it,” Bruce McMillian said about a set of high-voltage power lines that East Kentucky Power Cooperative proposes to run across Madison County from a generating plant in Clark County to a substation near Lancaster in Garrard County.

McMillian, who lives on Dale Hollow Lake near Byrdstown, Tenn., drove to Richmond on Thursday with his wife to attend an open house that EKPC conducted at the Best Western-Holiday Plaza on the Eastern Bypass to provide information to property owners potentially effected by the new set of lines.

McMillian said he owns property near the Garrard County substation.

“You can fight them, but you can’t win,” McMillian said. “You’d just end up losing money in attorneys’ fees, so I guess we’ll just roll with the punches.”

Macmillan’s wife said, “We don’t like power lines, but we realize they are necessary. We like to flip a switch and have the lights come on.”

EKPC, a non-profit power generating cooperative, will seek to purchase easements with property owners along a corridor 150 feet wide that will run for about 36 miles, mostly in Madison County, said company spokesman Nick Comer.

As a public utility, EKPC has the power of eminent domain to condemn the property of unwilling sellers.

For most of its length, the new corridor will parallel a set of existing EKPC lines, Comer side. As the line passes Richmond to the northeast, crossing Jacks Creek and Tates Creek roads, EKPC is looking at two alternatives corridors, both with wide latitude.

After meeting with EKPC officials, Jeptha Fortney, who owns farmland in the Red House community, said, “We live with a set of power lines that already runs across our property. I guess we can live with another one.”

Fortney would like for the new lines to follow a different path from the existing set, however.

“We told them we’d rather have the new lines run along the south side of our property instead of parallel to the existing lines on the north side,” he said. “That would put it farther away from our barn.”

“That’s the kind of information we were looking for at these open houses,” Comer said as he and EKPC employees were packing up their displays. “To the extent possible, we will try to accommodate the property owners’ desires.”

Some 77 property owners and 17 other interested persons attended the Richmond open house. Up to 171 property owners in Madison County could be affected by the new lines, Comer said.

EKPC will attempt to minimize impacts, visual, environmental and otherwise,” Comer said. The lines will probably be borne by steel, H-frame supports. Right-of-way negotiations will be conducted in the spring of 2007 with construction likely to begin in 2008 with completion in 2009.

“The new lines are necessary,” Comer said, “to keep pace with the tremendous growth in Kentucky and the accompanying demand for electricity.”

EKPC generates electricity for 16 local cooperatively distributors in Kentucky and will soon add a 17th.

APPENDIX I:
Lancaster Community Meeting Summary and Handout

EAST KENTUCKY POWER COOPERATIVE

MEMORANDUM

Re: Smith-West Garrard Lancaster Community Meeting

A meeting was held on August 3, 2006 at the First Southern National Bank community room. East Kentucky Power employees in attendance included Mary Jane Warner, Nick Comer, Joe Settles, Brandon Grillon and Thad Mumm.

State Rep. Lonnie Napier opened the meeting, stating that EKPC was there to provide information – Nick Comer would speak, and Mr. Napier told the crowd to ask any questions they had.

Nick thanked everyone for coming. His comments were as follows:

- A meeting was held July 11th for environmental reasons.
- Articles appearing in the newspaper had raised questions and concerns.
- EKPC understands that no one wants a line on his or her property and we respect that.
- Maps are available of corridors. Fact sheets are available as well.
- Addressed power lines in general. – (1) Transmission lines are necessary, (2) they are the most effective way of delivering electricity, (3) demand for EKPC for electricity is running at 4 times the national rate. Over a 5-year period, it increased at 17 times the national rate, (4) Garrard County's population during the 1990's has increased by an average of 28% - in contrast, Kentucky's population as a whole increased by 10%, (5) and increased growth results in increased demand.
- EKPC is member-owned, and non-profit. It serves 500,000 houses, farms and businesses. EKPC has existed since 1941 and is made up of member systems.
- Increase in demand results in us having to provide reliable, cost-effective power.
- Planning results in additional generation capacity – Maysville and Clark County. In Clark County, peaking units and a new coal-fired unit are planned.
- We must accommodate generation and transmission.
- Approach for siting is to minimize impact to the extent possible to homeowners, businesses, environmentalists, and preservationists.
- Ratepayers don't want long, expensive power lines.
- The methodology used to site power lines is comprehensive, objective and fair.

Nick introduced Mary Jane Warner, who addressed the line and substation specifically:

- The handout said (1) the line will be 345 kv, (2) the structures are H-frame, (3) will be constructed during Fall 2007 – 2009, (4) will begin in south Clark County

4775 Lexington Road 40391
P.O. Box 707, Winchester,
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

A Touchstone Energy Cooperative

and end in Lancaster, connecting with the KU line, (5) is 35-37 miles long, and (6) there is a 150' easement, blank copies available for review.

- Corridors have been identified.
- Alternatives intended to be within blue areas.
- Develop alternative route corridors.
- Have open houses where people are invited by letter and newspaper notices – probably 2 open houses.
- Submit plan to Kentucky PSC
- Opportunity for public comment
- RUS comment form available.
- Encourage neighbors and community to participate.

Mary Jane addressed the substation:

- Purchased option.
- Property consists of 75 acres.
- Hope to exercise the option.
- Archaeology investigated on substation site.
- There will be chain link fence around the substation
- The substation will occupy at least 6.5 acres.
- Transmission structures 100' going into the substation.
- Most structures within the fence 20-30'
- Substation will be lighted approximately 40' off ground.
- To give a reference MJ stated the KU tower closest to road is 140' tall - the next tower is 115' tall - the next structure is 140' tall – this gives an idea of what you will see.
- Asked if there were any questions.

Questions:

Q: Lonnie Napier – Option made on the site so EKPC's mind must be made up – wants to know what the point is in having meetings if we have already made up our mind.

Q: Tom Buford – State Senator – U.S. 27 Bypass relocation – has it been taken into account? Has it been coordinated?

A: Thad – have contacted DOT and asked for plans. Have not received them – believe it will span over the roadway.

A: Mary Jane – The substation siting – attempt to avoid populated areas with the substation – then suitable terrain and size-wise, then we prefer to find willing seller – prefer not to condemn. Mary Jane asked if visual is the biggest concern to the public.

Q: Why is the only public meeting held in Richmond?

A: Joe Settles - meeting was hosted by RUS. RUS requested meeting be held somewhere central to the project area. RUS stated that 45-minute drive for landowners was acceptable. Therefore, Richmond was the logical choice for the meeting

Q: Richard Arnold – option to buy 75 acres – what will do with the remainder?

A: Mary Jane – Leave alone unless where substation or line is located.

Q: Has there been a cancer research study? Garrard County is the 3rd county in the state with most cancer. He believes existing power lines are the cause of the cancer. Why do we want to continue putting power lines in the same locations? Meeting won't amount to a hill of beans. Doesn't believe it matters. Says nobody would return calls – says didn't hear about meeting. Was in real estate and had house couldn't sell because of power line.

Q. Lonnie Napier - Legislation for state park on Lake Herrington. State having difficulty siting the lodge due to the view of existing lines
- Participant in crowd asked Mr. Napier if he was intending on building power lines into the park

A: Mary Jane – lots of information about health concerns and research that gives a good overview of EMF.

Q: Lonnie Napier - Are you selling this power out of state?

A: Mary Jane – EKPC solely exists to serve native load – sometimes we can sell power. EKPC is non-profit, and money comes back to members. Nick – occasionally, we also have to purchase power.

Q: Bob Naylor? – Primary purpose of junction?

A: Mary Jane – We are interconnected with KU everywhere – interconnecting with KU to get the generation into the bulk system.

Q: Fred Simpson – Former worker for utility – Concerned that Garrard County gets crossed because of the low number of citizens. If it happens too much, then it will end up ruining Garrard County. Do we pay for easements?

A: Mary Jane – Pay taxes on fee simple and not on easement – existing lines are favored for co-location.

Q: Mrs. Dunn? – Kids have property – somebody called and asked several questions – foremost, is there any danger to these people and concerned about condemnation lines on the "back of the farmer".

A: Mary Jane – Will leave sign-up sheet for people with concerns about health concerns. Design and placement of poles can be coordinated with landowners to make less disruptive.

Q: Why not follow line north in service area?

A: Mary Jane – Best scoring path in methodology. Thad – Looked at areas north for substation site but Lake Herrington located to the west.

Q: Joe Ball – Has three KU towers all located in the best part of his property. Lots of family farms. Jeff Hester found farm and now power line near him.

Q: Jeff Hester – Why can't find place that already disturbed and full of people?

A: Mary Jane – If in another area we would have people in that area.

At this point, Mr. Napier closed the meeting since there were no other questions. EKPC employees stayed and answered questions on a one on one basis.

I (Joe Settles) spoke with 4 people (1 couple and 2 individuals). The couple lives on the opposite side of KY 52 from the Bourne property. They wanted to make certain where we planned to build the substation. They also asked what we were planning to do with the property next to the highway. I told them it is my understanding we will leave it alone.

Mr. Bourne – relative of the property owner of the proposed substation site. He said he thought there was a cemetery for his great, great, great, great, great grandfather somewhere in the area and possibly on that property. I told him we had an archaeological survey of the site conducted, and it is my understanding that no cemetery was discovered on the property. I told him I would check with our archaeologists once again. He also wanted to know if he could look around the construction site while they were moving dirt. I told him I didn't care, but he has to check with the construction foreman.

Rob?? – Has farm in the blue shaded area of the map. Doesn't want the line, and he is concerned about the impacts to his property. He thinks the only reason we are doing this is to make money.

* These notes were developed from the handwritten notes taken during the meeting by Joe Settles with EKPC.

About The Smith-West Garrard Transmission Line

- 345-kilovolt transmission line.
- Structures holding wires will be mostly two-pole, H-frame structures made of weathered steel, which looks like wood from a distance.
- Construction will begin Fall 2007 and should be completed by Summer 2009.
- Line will begin at East Kentucky Power Cooperative's (EKPC) J.K. Smith Station in southern Clark County and end at a 345-kV transmission line owned by Kentucky Utilities. EKPC plans to construct a substation in Garrard County to tie the two lines together. The line will be approximately 35 to 37 miles long.
- Will require a 150-foot easement, which grants EKPC the right to locate its poles and wires on the property, to clear trees in the right-of-way, maintain the right-of-way, and to conduct maintenance on its facilities. The existing property owner will continue to own and use the property.
- EKPC has identified alternate corridors where the final proposed route of the line most likely will be located. A map of these alternate corridors is available. Those corridors generally follow existing power lines, for the most part.
- EKPC will develop alternate route corridors and then hold public open houses in the area to collect public input before selecting a proposed route.
- Later this year, once the proposed route is determined, EKPC will submit plans to the Kentucky Public Service Commission for its review and approval. The public also will have an opportunity to participate in this process.

About the West Garrard Substation

- EKPC plans to construct a substation to tie the new Smith-West Garrard line into an existing transmission line.
- EKPC has purchased an option on a piece of property located west of Lancaster on the northwest corner at the intersection of Ky. 52 and Boone's Creek Road. This is the preferred site, but EKPC has not yet exercised its purchase option because we are studying possible historic features located there.
- Planning for the substation still is in the preliminary stages. It will be a minimum of 6.5 acres. The poles coming into the station will be about 100 feet high. Several structures within the station may be as high as 80 feet. Most of the structures within will be 20-30 feet high.

EKPC will finalize plans for the transmission line and substation soon. In the next couple of months, we plan to conduct public open houses where we will show the preferred corridor and will collect input from property owners in the vicinity of the corridor.

EAST KENTUCKY POWER COOPERATIVE

8/3/06

A Touchstone Energy Cooperative

APPENDIX J:
Open House Information Packet

We want you to... be informed about this project.

About the Smith-West Garrard transmission line project.

This is a proposed project to construct a new transmission substation and approximately 35 to 37 miles of 345-kilovolt transmission line. The line will require 150 feet of right-of-way. On sections of the line where an existing line is rebuilt or parallelled, the amount of additional right-of-way could be less than 150 feet. This project will help EKPC to accommodate load growth in Central Kentucky and improve the reliability of the regional transmission grid.

Why does EKPC need to build this particular line?

This transmission line will provide an outlet for EKPC to deliver electricity from additional generating units being constructed at J.K. Smith Station in southern Clark County. It will also provide an additional north-south transmission corridor, which is critically needed to ensure the reliability of the regional transmission grid.

What approvals must be secured for this project?

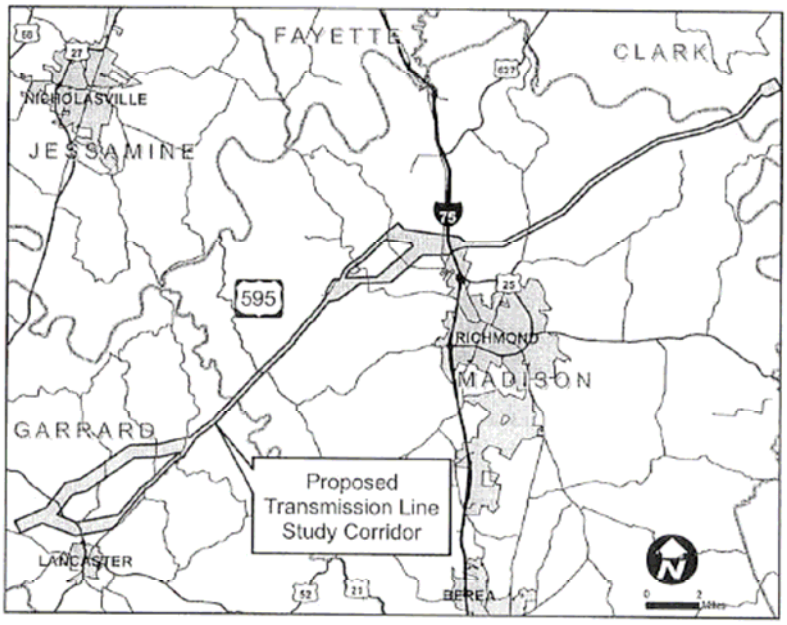
The Kentucky Public Service Commission must grant a Certificate of Public Convenience and Necessity for this project to be constructed. The Rural Utilities Service, an agency that administers the U.S. Department of Agriculture's Rural Development Programs (USDA Rural Development), must ensure that EKPC meets appropriate environmental obligations including compliance with the National Environmental Policy Act and the National Historic Preservation Act.

We want you to...

know where the line will be located.

Where will the line be located?

This transmission line will begin at EKPC's J.K. Smith Station in southern Clark County near the community of Trapp. It will extend through Madison and Garrard counties to a new switching station to be constructed west of Lancaster in Garrard County. This station will tie the new transmission line into an existing 345-kV transmission line owned by Kentucky Utilities.



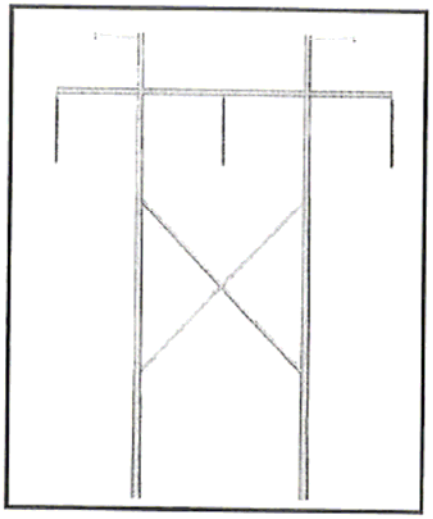
We want you to...
know the project schedule.

1. Open Houses conducted	August 29 & 31, 2006
2. Corridor mapping/surveying	Fall 2006
3. Centerline established	Fall 2006
4. Right-of-way negotiations	Spring 2007
5. Design activity	Spring 2007
6. Structure stakeout	Spring 2008
7. Construction	2008 to Summer 2009

We want you to...

know what the new line will look like.

This project will use H-frame pole construction. Below is a drawing of the typical structures that will be used for the project. EKPC plans to use steel poles for this project.



Typical H-Frame Pole

We want you to...
know who we are.

Winchester-based East Kentucky Power Cooperative is a not-for-profit electric utility that generates and transmits electricity to 16 Touchstone Energy Cooperatives across the state. A 17th cooperative, Warren RECC, will join the system in 2008. These cooperatives distribute the energy to about 1 million co-op customers. Our mission is not to make money, but to improve the quality of life of those we serve.

Here is other information about us:

What a cooperative is

A cooperative is a not-for-profit business that is owned and democratically governed by its members. A co-op exists solely to serve its members.

What "not-for-profit" means

A not-for-profit cooperative is in business for the public good rather than for the financial benefit of an individual owner or stockholders.

Why we build lines

Power lines are built to keep pace with the tremendous growth in Kentucky. Power lines transport electricity like roads carry traffic. If there is too much traffic on a power line, though, the line overloads and people lose power. We build lines to avoid that problem.

Why we can't bury lines

While burying lines is more pleasing to the eye and protects them from ice and weather, the costs of burying lines is prohibitive. Line repairs are also extremely difficult and time consuming. It can cost as much as 10 times more money to construct underground transmission lines.

The process we use to build lines

After the Open House we'll finalize a centerline for any new line section. Affected property owners will be notified. If you are affected, we will seek permission to conduct a survey to confirm the centerline. Negotiations then begin on a payment to affected landowners for the right to run the line across their land. Our goal is always to minimize costs and the impact upon you and your community.

How we choose line routes

We use an objective methodology and computer model developed to strike a balance between a number of factors, including community impacts, geography, environmental impacts and costs. The factors considered in the model were developed with public input and we are able to incorporate public input as we refine the route location.

continued on back

About rights of way

If your property is affected by this project, EKPC will seek to purchase an easement that allows the cooperative to locate its poles and wires on your property, and to enter the property as needed for maintenance. The property owner will continue to own and use the property. The easement allows EKPC to clear and control trees within the right-of-way, as well as other trees that could interfere with transmission lines, and prevents structures from being constructed in the right-of-way.

How we value property

We conduct a market analysis of the area based on recent property sales and assess the impact the line would have on any particular property.

How we work with property owners

Our professionals will work with you respectfully, and we will work closely with each property owner who is affected by any phase of the construction. It is our goal to make sure that property owners are well-informed about the project and have ample opportunity to discuss it with us.

What about environmental impacts?

Our biologists do extensive work prior to project construction in order to assess the environmental impact. The biologists work to ensure EKPC minimizes and avoids impacting endangered plants and animals during line construction.

How property owners and local communities provide input

The input of the community and affected property owners is of primary concern. We host open houses to share and gather information, and we strive to keep property owners and others fully informed about construction projects.

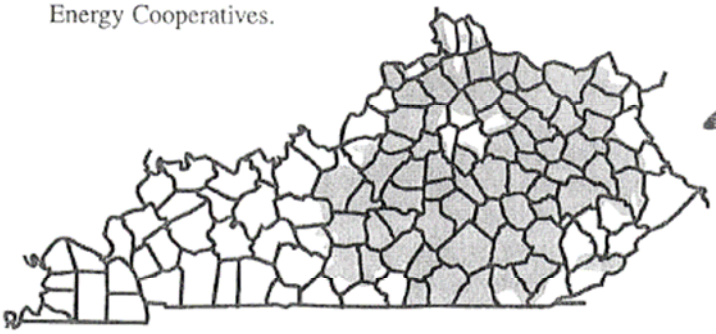
For this project, EKPC seeks input from affected property owners and concerned citizens during the regulatory process. In accordance with 36 Code of Federal Regulations Part 800 and the National Historic Preservation Act of 1966, as amended, East Kentucky Power Cooperative is soliciting the involvement of those who have a legal or economic relation to properties that will be affected by the proposed line or have a demonstrable interest in the historic built and/or archaeological environment in the project area. To become formally involved in the regulatory process as a consulting party, please send a letter, complete with contact information and statement of interest, to Joe Settles at joe.settles@ekpc.coop or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.

We want you to...

know about our system.

East Kentucky Power Cooperative Member Service area

EKPC is a not-for-profit generation and transmission utility with headquarters in Winchester. EKPC generates electric power and transports it to 16 locally-owned cooperatives that distribute it to 500,000 homes, farms, businesses and industries in 89 Kentucky counties. Warren RECC will become the 17th member-owner when it joins the system in 2008. Together, EKPC and member cooperatives are known as Kentucky's Touchstone Energy Cooperatives.



EAST KENTUCKY POWER COOPERATIVE

A Touchstone Energy Cooperative

We want you to...
attend our open house.

Local property owners are encouraged to attend our Open House to help us gather information.

The Open House is a key way we keep property owners involved and informed every step of the way when building a transmission line.

Thank you for your cooperation as we work together.

APPENDIX K:
Open House Questionnaire and Comment Form

QUESTIONNAIRE

FOR

PUBLIC PARTICIPATION IN

SMITH-WEST GARRARD 345 KV

TRANSMISSION LINE SITING

You may leave this form at the registration table as you leave tonight or pick up a return envelope already stamped in which to mail us the form at a later time. Responses must be received by **5:00 p.m. Tuesday, September 5, 2006** to be considered.

This survey will allow us to get your opinions on specific issues regarding the siting of our transmission line. Your response will assist our design group in understanding public concerns and allow them to incorporate those concerns in the final site selection. Thank you for your help.

1. The following information is optional but could be useful if follow-up is needed. (**Names and addresses are considered confidential and are for EKPC use only**)

Name _____ County _____

Address _____

_____

Location of property _____

_____

2. Which of the following applies to your situation?

___ Live and work within the immediate area.
___ Frequently travel the roads in the immediate area.
___ Live in _____ County but not within the immediate area.
___ Other, please specify.

_____

3. Many criteria are involved in the siting of a transmission line. Please choose the four most important to you in regard to the siting of this line. The most important item will be No. 1, the least important No. 4.

___ Crossing Agricultural Land.
___ Crossing Wooded or Forest Land.
___ Crossing Streams or Wetlands.
___ Road Crossings.
___ Proximity to Residences.
___ Proximity to Barns or Sheds.
___ Proximity to Commercial or Industrial Areas.
___ Proximity to Historic or Archaeological Sites.
___ Visibility.
___ Construction Cost.
___ Other, please specify below.

_____

4. Are you aware of any buildings or landmarks in the study area that may be architecturally or historically important? If so, please specify location, names or addresses.

_____

_____

5. You may be aware of unique or specific information regarding this corridor. Please describe any special items of interest or concern below such as scenic areas, recreation areas or new homes. Please give the location of the item or contact one of the representatives to mark it on a map.

_____

_____

6. Please summarize what you feel are the most important qualities or resources of the area.

_____

_____

* If you have any additional comments, please list on back of this page.

PROCESS EVALUATION SURVEY

Please help us to improve the siting procedures, which you have participated in by completing this form.

Did this process give you:

_____ An adequate amount of information?
_____ Too much information?
_____ Not enough information?

Was advertisement for the open house:

_____ Adequate?
_____ Inadequate?
_____ Early enough?

Were most of your questions answered by:

_____ EKPC staff?
_____ Written information?
_____ Displays?

Do you feel that you know more about EKPC and its operation?

_____

Did you voice any questions that were not adequately addressed?_____

If yes, what is your question and may we contact you to discuss?

_____

(h:Smith-WestGarrard.doc)

APPENDIX L:
Electrical Alternatives Analysis and Macro-Corridor Study

Electrical Alternative Analysis

Smith – West Garrard Transmission Line Project

A Touchstone Energy® Cooperative

June 2006

Introduction

To accommodate load growth among its member cooperatives, EKPC plans to construct generating units at its J.K. Smith Power Station (J.K. Smith), located in the community of Trapp, in Clark County, KY. The site currently contains seven combustion turbine units (CT's) with a total generating capacity of 826 MW at winter capacity. Four existing 138-kilovolt transmission lines are currently connected to the J.K. Smith Substation. These lines are insufficient to accommodate delivery of any additional generation at an expanded J.K. Smith Power Station.

EKPC has proposed to construct 5 additional CT's at J.K. Smith. The first of these units is scheduled to become operational in March of 2008. The addition of this generation has created the necessity for additional transmission outlets from the facility. The Smith-West Garrard Transmission Line will provide the outlet necessary for the addition of the five combustion turbines (CT's) proposed for construction at J.K. Smith.

J.K. Smith has been the subject of two environmental impact statements (EIS) and three environmental assessments throughout the facilities history. Typically, the addition of CT's on an existing generation site has required the preparation of an environmental assessment with scoping requirements per USDA Rural Development regulations (7 CFR 1794). Due to the high level of environmental work that has been conducted on the J.K. Smith Power Station site and the amount of disturbance that has occurred on the site, USDA Rural Development has waived the scoping requirements associated with the preparation of an environmental assessment for the CT's (per 7 CFR 1794).

The Smith – West Garrard Transmission Line Project is being evaluated in a separate environmental assessment with scoping requirements than the CT's. USDA Rural Development allowed this classification of the project since the J.K. Smith site has already been studied extensively and the level of environmental review for the transmission line remains at a high level. USDA Rural Development has not waived the scoping requirements for this project.

A System Impact Study (SIS) was prepared to evaluate the transmission facilities needed to provide the necessary capacity for addition of these units. EKPC also included a 278 MW Circulating Fluidized Bed Steam Generator that has been proposed for construction in the study. EKPC felt it would be prudent to include future needs such as this generator when planning proposed transmission to ensure constructed lines would be able to accommodate future load. The environmental impacts of the 278 MW Circulating Fluidized Bed Steam Generator will be analyzed in an Environmental Impact Statement separate from the Smith-West Garrard Transmission Line Project.

System Impact Study

The SIS report was entitled: "System Impact Study, Generation Interconnection Requests #30-33, JK Smith Combustion Turbines #8-12 and CFB Unit #1 Project In Clark County, Kentucky." A copy of the entire report can be made available upon request. The report

evaluates the impact of the addition of the following generators at EKPC's existing J.K. Smith Power Plant:

a) Five (5) combustion turbines, each with a net capacity of 84 MW in the summer and 98 MW in the winter. These units will be designated as J.K. Smith CTs #8, #9, #10, #11, and #12.
b) One (1) Circulating Fluidized Bed (CFB) steam generator with a net capacity of 278 MW in both summer and winter. This unit will be designated as J.K. Smith CFB #1 throughout this report.

J.K. Smith Planned Generation Additions			
Requested Project	**Commercial Operation Date**	**Summer Net Capacity (MW)**	**Winter Net Capacity (MW)**
JK Smith #12	March 2008	84	98
JK Smith #11	April 2008	84	98
JK Smith #10	October 2008	84	98
JK Smith #9	November 2008	84	98
JK Smith #8	December 2008	84	98
JK Smith CFB #1	March 2010	278	278

The existing four 138 kV transmission lines connected to the J.K. Smith Substation are insufficient to accommodate delivery of the total net output of the expanded J.K. Smith Power Plant. In fact, it was determined that the existing transmission outlets cannot accommodate any generation additions at the site. Therefore, the study identified various transmission expansion plans needed to support the total expected output of the expanded J.K. Smith site.

Input was solicited from EKPC's neighboring utilities -- American Electric Power (AEP), Big Rivers Electric Corporation (BREC), Cinergy Corporation (CIN), Dayton Power & Light Company (DPL), LG&E Energy LLC (LGEE), the Tennessee Valley Authority (TVA), and the Midwest Independent System Operator (MISO) -- prior to beginning the SIS.

Thirty-eight possible 345 kV or 138 kV transmission outlets from the J.K. Smith Substation were evaluated to determine their impacts on the thermal overloads identified. The screening process eliminated most of these outlet options for one of the following two reasons:

- An outlet either singularly or in combination with other outlets did not eliminate a substantial number of the thermal overloads caused by the proposed generators

- An outlet did not provide any significant additional benefits when compared to the performance of another outlet that would be shorter and/or less expensive

As a result of the screening analysis, it was determined that one 138 kV outlet from the J.K. Smith site would not be adequate. Screening showed that at least ***three*** 138 kV outlets would be required to accommodate the added generation. Additionally, significant upgrades would still be required on the transmission system with these multiple 138 kV outlets. Furthermore, transmission-system losses will be higher with these 138 kV outlet options than with a 345 kV outlet option. For these reasons, no options were considered that only provided 138 kV outlets from J.K. Smith Substation. All transmission alternatives considered therefore included a new 345 kV outlet from the J.K. Smith site.

The screening analysis performed determined that two of the 345 kV outlet options considered have a greater impact on the transmission-system problems identified than did the remainder of the outlet options. These two outlet options are:

- ✓ The J.K. Smith-Tyner 345 kV line and the installation of a 345-161 kV transformer at Tyner
- ✓ The J.K. Smith-West Garrard 345 kV line and a new 345 kV switching station at West Garrard connecting this line with LGEE's Brown-Pineville 345 kV circuit

These two outlets substantially reduce the number and severity of overloads caused by the proposed generators. The other outlet options screened either did not provide as much benefit as either of these two options or provided similar benefits at the expense of much more construction.

Alternatives Considered

Alternatives are desired that eliminate the overloads of the facilities impacted by addition of the generators. Furthermore, since all four of the existing 138 kV outlets from the J.K. Smith Station are overloaded, the alternatives developed must either upgrade all four of these outlets or establish at least one new outlet from the J.K. Smith Station.

Impact of J.K. Smith-North Clark Proposed Project on Alternatives to be Considered

Concurrently with this J.K. Smith SIS, EKPC conducted a parallel study to identify a solution for existing transmission-system problems. The results of that parallel study are documented in a document developed by EKPC titled *Justification of J.K. Smith-Sideview 345 kV Line*, dated October 31, 2005. [Note that the Sideview endpoint was later re-named North Clark]. The recommended solution from that study was to construct a new 345 kV breaker substation, install 345 kV facilities at the J.K Smith Substation to accommodate a new line exit, install a new 345-138 kV, 450 MVA autotransformer at the

J.K. Smith Substation, and construct 18 miles of 345 kV line between the J.K. Smith Substation and the new North Clark Substation

This recommended construction addresses the problems of the existing transmission system. It also provides some benefits for the proposed generators that are the subject of this SIS. However, power flow analysis with the J.K. Smith-North Clark Project added to the models indicates that transmission-system overloads would still exist with the proposed generators. Therefore, alternatives must be developed that incorporate the planned J.K. Smith-North Clark Project while still addressing overloads identified neighboring facilities. Therefore, as stated above, the alternatives developed must either include capacity upgrades for the four existing 138 kV outlets from the J.K. Smith Station or the construction of at least one additional new outlet from J.K. Smith.

Consideration of Upgrading Existing J.K. Smith Outlets

Increasing the capacity of the existing four 138 kV outlets from the J.K. Smith Station was considered. These four outlets are:

- J.K. Smith-Dale 138 kV Line (9.5 miles)
- J.K. Smith-Fawkes 138 kV Line (14.3 miles)
- J.K. Smith-Union City-Lake Reba Tap 138 kV Line (11.6 miles)
- J.K. Smith-Powell County 138 kV Line (16.3 miles)

In addition to replacement of the conductors in the four 138 kV outlets from J.K. Smith, several other upgrades would be required to eliminate all overloads. The most significant of these facilities to be upgraded are:

- Fawkes LGEE-Clark County 138 kV LGEE Line (18.3 miles)
- Clark County-Mount Sterling 69 kV LGEE Line (12.2 miles)
- Lake Reba-Waco-Rice Tap 69 kV LGEE Line (11.8 miles)
- Dale-Hunt-J.K. Smith-Trapp 69 kV EKPC Line (11.2 miles)
- Dale-Newby #1 69 kV EKPC Line (11.1 miles)
- Powell County-Jeffersonville 69 kV EKPC Line (8.5 miles)
- Dale-Three Forks-Fawkes 138 kV EKPC Line (7.3 miles)
- Boonesboro North-Winchester Water Works-Boone Avenue 69 kV LGEE Line (5.9 miles)
- Davis-Nicholasville 69 kV EKPC Line (3.8 miles)
- Lake Reba Tap 161-138 kV, 200 MVA LGEE Transformer
- Boonesboro North 138-69 kV, 150 MVA LGEE Transformer
- Powell County 161-138 kV, 150 MVA EKPC Transformer
- Powell County 138-69 kV, 100 MVA EKPC Transformer
- Dale 138-69 kV, 82.5 MVA EKPC Transformer
- Beattyville 161-69 kV, 56 MVA LGEE Transformer
- West Irvine 161-69 kV, 50 MVA LGEE Transformer

Each of the facilities to be upgraded would need to be removed from service for construction at some point during the period from June 2006 through March 2010. This would require multiple simultaneous outages in the area, which would create significant reliability and operational concerns. Furthermore, it is not known if all of the upgrades can be completed by their needed dates, since there are more than 20 facilities requiring significant upgrades.

345 kV Alternatives

Three 345 kV alternatives have been identified that may solve the capacity issues associaeted with the added generation at J.K. Smith. The facilities required at J.K. Smith are identical for either Alternative 1 or Alternative 2. Alternative 3 requires an additional 138 kV line exit at J.K. Smith that is not needed for either of the other two alternatives. These substation facilities at J.K. Smith can be constructed without significant difficulty. The relative constructability of the other facilities will be discussed for each alternative.

Alternative 1 includes the construction of a new 345 kV substation in the Garrard County area. This substation needs to be located near LGEE's existing Brown-Pineville double-circuit 345 kV line to minimize the amount of 345 kV line construction required to connect one of the circuits with the new 345 kV line from J.K. Smith. This alternative also calls for the construction of a new 345 kV line between the J.K. Smith Substation and the new substation in the Garrard County area. The approximate length of the new line is 35 to 45 miles depending on line routing and the location of the new 345 kV switching substation. EKPC has several existing 69 and 138 kV transmission line corridors in the area, which may be able to be utilized for rebuild and/or co-location.

Alternative 2 includes addition of all facilities required at the existing Tyner Substation to terminate the proposed J.K. Smith-Tyner 345 kV line and to add a new 345-161 kV autotransformer. Additional land would be needed in the area to construct the new 345-161 kV substation, and to connect it to the existing Tyner Substation. This alternative also includes the construction of a new 345 kV line between the J.K. Smith Substation and the Tyner Substation. The approximate length of the new line is 40 to 50 miles, depending on line routing. The area in a straight-line approximation between these two endpoints does not appear to have any large areas that are densely populated or highly developed. However, the Daniel Boone National Forest is located in a large area between these endpoints. Therefore, the routing of the new 345 kV line may require working with the United States Forest Service (USFS) to identify and select the preferred route through the USFS lands. In addition to the new 345 kV line and the new 345 kV switching substation, the addition of a 138 kV series reactor at EKPC's Dale Station is required.

Aternative 3 has many of the same physical issues as Alternative 2. The primary difference is that this alternative includes construction of a new 17.9-mile 138 kV line between J.K. Smith and LGEE's Spencer Road Substation in lieu of the addition of a series reactor at Dale Station. All of the issues discussed above in subsection 5.5.2 related to the Tyner Substation expansion and the new 345 kV line between J.K. Smith and Tyner are also applicable for this alternative. This alternative would require

expansion of LGEE's Spencer Road Substation and replacement of both 138-69 kV transformers at Spencer Road with larger units. Therefore, a significant amount of work would be required at this site to implement this alternative.

All three Alternatives require significant new 345 kV line construction. Alternative 1 includes a new 345 kV line from J.K. Smith to the Garrard County area and is expected to be 35 to 45 miles in length. Alternatives 2 and 3 both require a new 345 kV line from J.K. Smith to the existing Tyner Substation. This line is expected to be 40 to 50 miles long. This line is expected to be more difficult to construct, since the Daniel Boone National Forest is between the two endpoints. Furthermore, it is expected to have more potential impact, since it is likely to be longer and since there are less opportunities for co-location with existing lines. Also, Alternative 3 requires additional construction of approximately 18 miles of new 138 kV line. Therefore, Alternative 1 appears to have an advantage over both Alternatives 2 and 3 regarding constructability of the transmission lines, based upon a cursory analysis.

In addition to the major 345 kV and 138 kV line and substation construction, each Alternative requires some additional upgrades of EKPC, AEP, and/or LGEE facilities. As discussed earlier, Alternative 1 requires only one potential upgrade on the AEP system. Alternatives 2 and 3 both would require multiple upgrades on the AEP system. Additionally, the earlier discussion indicates that more upgrades of both EKPC and LGEE facilities would be required for Alternatives 2 and 3 than is required for Alternative 1. Therefore, a comparison of the number and expected scope of the additional system upgrades required shows that Alternative 1 holds a substantial advantage over both Alternative 2 and Alternative 3.

Therefore, based on this information, Alternative 1 appears to provide significant advantages over Alternatives 2 and 3 with regard to the physical issues associated with construction and expansion.

Future Expansion

Alternative 1 specifies construction of a new 345 kV substation in Garrard County (West Garrard). The construction of the West Garrard substation will provide opportunities to step-down to 138 kV or 161 kV in the area in the future and will also provide opportunities to build 345 kV transmission into the western part of the EKPC system if necessary. This new substation will be well located in the central part of the EKPC system for opportunities to provide support into the weaker southern and western parts of the EKPC transmission system. Any future expansion involving this new substation would need to be coordinated with LGEE, due to the proposed interconnection at this point and due to the numerous interconnections throughout the two systems.

Alternatives 2 and 3 both include construction of a new 345 kV line into EKPC's existing Tyner Substation, which is located in the southeastern part of the EKPC system. Expansion of the Tyner Substation to accommodate the new 345 kV facilities is expected to be problematic due to proximity to Forest System lands. Furthermore, it may be

difficult to acquire sufficient land to allow for future expansion at this substation. Addition of 345 kV facilities at Tyner connecting it to J.K. Smith does provides valuable support to the Tyner area. However, the value of this addition for future expansion is limited. The EKPC system is expected to need support in its western portion. The additional distance from Tyner to the Garrard County area is approximately 40 miles. Therefore, if future support is needed to the west of the Garrard County area, an additional 40 miles of transmission line construction would be needed to provide it from Tyner compared to providing it from West Garrard.

Based on the location of the proposed West Garrard Substation and the possibilities for future expansion, Alternative 1 has a significant advantage over Alternatives 2 and 3. The table below summarizes the conclusions of the comparison performed for the three Alternatives that were developed. Each Alternative was given a ranking from 1 to 3 in each of the categories considered, with a score of 1 being the best score in each category and a score of 3 being the worst. The data indicates that Alternative 1 provides the best (lowest) total score for the combination of categories considered.

Comparison of the Developed Alternatives			
Issue	**Alternative 1**	**Alternative 2**	**Alternative 3**
Power Flow Impacts	1	3	2
Transmission System Losses	3	2	1
Transient-Stability Impacts	1	3	2
Short-Circuit Impacts	1	1	1
Physical Issues	1	2	3
System Reliability	3	2	1
Future Expansion	1	3	2
Costs	1	2	3
Performance for Double Contingencies	2	3	1
Total Score	14	21	16

Section 7: Conclusions and Recommendations

The following conclusions are based on the analysis contained in the SIS:

- The existing four 138 kV transmission lines connected to the J.K. Smith Substation are not sufficient to accommodate additional generation at the J.K. Smith site. Furthermore, the planned addition of the new J.K. Smith-North Clark 345 kV line and associated facilities at J.K. Smith do not provide significant additional outlet capability for the J.K. Smith generation.
- Upgrading the existing outlets from the J.K. Smith Station is not a practical solution for a number of reasons. First, a large number of additional facilities are overloaded and would also need to be upgraded. Additionally, the outages necessary to perform these upgrades within the necessary timeframe could result in severe operational problems. Furthermore, the scope and cost of these

upgrades is very uncertain. Also, upgrading existing lines does not provide significant transmission capacity margins, particularly when multiple facility outages are occurring on the transmission system. Finally, upgrading existing transmission facilities does not reduce transmission losses as effectively as adding additional transmission facilities does.

- A large number of new transmission outlets from J.K. Smith were evaluated, but were eliminated because the outlet did not either eliminate a substantial number of thermal overloads or the outlet did not provide any significant additional benefits compared to shorter and/or less expensive outlets.
- The studies determined that transmission plans that only include 138 kV outlets from J.K. Smith are not viable, since at least three 138 kV outlets would be required, a significant number of transmission-system upgrades would still be required, and transmission-system losses would not be significantly reduced.
- Two 345 kV outlets were determined to have the greatest impact on the thermal overloads identified with the proposed generators. These are the J.K. Smith-West Garrard 345 kV line and the J.K. Smith-Tyner 345 kV line. One transmission plan that includes J.K. Smith-West Garrard and two plans that include J.K. Smith-Tyner were developed.
- Comparison of the three Alternatives in nine categories indicates that Alternative 1 is the optimal transmission plan. Since this is also the lowest cost plan, Alternative 1 is recommended for implementation.

Based upon the information conatined in the SIS, it is recommended EKPC construct the Smith-West Garrard 345 kV project (Alternative 1).

Macro-Corridor Study

Smith to West Garrard 345-kV Transmission Project

East Kentucky Power Cooperative

June 2006

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PART I: INTRODUCTION

East Kentucky Power Cooperative (EKPC) is a generation and transmission electric cooperative based in Winchester, Ky. EKPC serves 16 member distribution cooperatives, which, in turn, serve nearly 500,000 homes, farms and businesses in Kentucky. Founded in 1941, EKPC operates power plants located in Mason, Clark and Pulaski counties of Kentucky, and renewable energy plants in Boone, Laurel, Greenup and Hardin counties, along with gas peaking units, hydro power and more than 2,800 miles of transmission lines.

To finance the electric transmission line project described in this report, East Kentucky Power Cooperative (EKPC) is applying for loan funding from the Rural Utilities Service, which administers the U.S. Department of Agriculture's Rural Development Utilities Programs, including making direct loans and loan guarantees to electric utilities to serve customers in rural areas. The loans and loan guarantees finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacement required to furnish and improve electric service in rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems.

This project must comply with the National Environmental Policy Act (NEPA), which requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. To comply with the standards of NEPA and related regulations, EKPC has developed this Macro-Corridor Study, which defines the project study area and shows the end points. Alternative corridor routes were developed based on environmental, engineering, economic, land use and permitting constraints.

PART II: PROJECT DESCRIPTION

To accommodate load growth among its member cooperatives, EKPC plans to construct generating units at its J.K. Smith Power Station, located in the community of Trapp, Ky., in Clark County. The site currently contains seven combustion turbine (CT) units with a total generating capacity of 826 MW at winter capacity. Four existing 138-kilovolt transmission lines currently are connected to the J.K. Smith Substation. These lines are insufficient to accommodate delivery of any additional generation at an expanded J.K. Smith Power Station.

EKPC has proposed to construct five additional CT's at J.K. Smith. The first of these units is scheduled to become operational in March of 2008. The addition of this generation has created the necessity for additional transmission outlets from the facility. The Smith-West Garrard transmission line will provide the outlet necessary for the addition of the five combustion turbines proposed for construction at J.K. Smith Station.

J.K. Smith Station has been the subject of two environmental impact statements (EIS) and three environmental assessments throughout the facility's history. Typically, the addition of CTs on an existing generation site has required the preparation of an environmental assessment with scoping requirements per USDA Rural Development regulations (7 CFR 1794). Due to the high level of environmental work that has been conducted on the J.K. Smith Station site and the amount of disturbance that has occurred on the site, USDA Rural Development has waived the scoping requirements associated with the preparation of an environmental assessment for the CTs (per 7 CFR 1794).

The Smith – West Garrard transmission line project is being evaluated in a separate environmental assessment with scoping requirements than the CTs. USDA Rural Development allowed this classification of the project since the J.K. Smith site has already been studied extensively and the level of environmental review remains at the same level. USDA Rural Development has not waived the scoping requirements for this project.

Therefore, EKPC has prepared a Macro-Corridor Study of route alternatives and conducted an Alternative Evaluation Study. This Macro-Corridor Study was conducted to develop options for transmission line routing and to assess potential environmental, social and cultural impacts. The Electrical Alternative Evaluation Study examines the various transmission expansion options needed to support the total expected output of the expanded J.K. Smith site through 2010.

The Electrical Alternative Evaluation Study resulted in plans for a 345-kV transmission line extending from J.K. Smith Power Station that taps into the existing Brown-to-Pineville double-circuit 345-kV line owned by Kentucky Utilities. At the junction of the two lines, EKPC plans to construct the West Garrard Substation. (As a result, this project is named the Smith-West Garrard transmission line project.)

Once constructed, the Smith – West Garrard 345kV transmission line will provide sufficient capacity for the CT units proposed for the J.K. Smith Power Station. In fact, construction of these transmission facilities will provide EKPC enough capacity to handle the addition of a coal-fired power plant that has also been proposed for construction at J.K. Smith Station.

PART III: STUDY AREA DESCRIPTION

1. Study Area Location

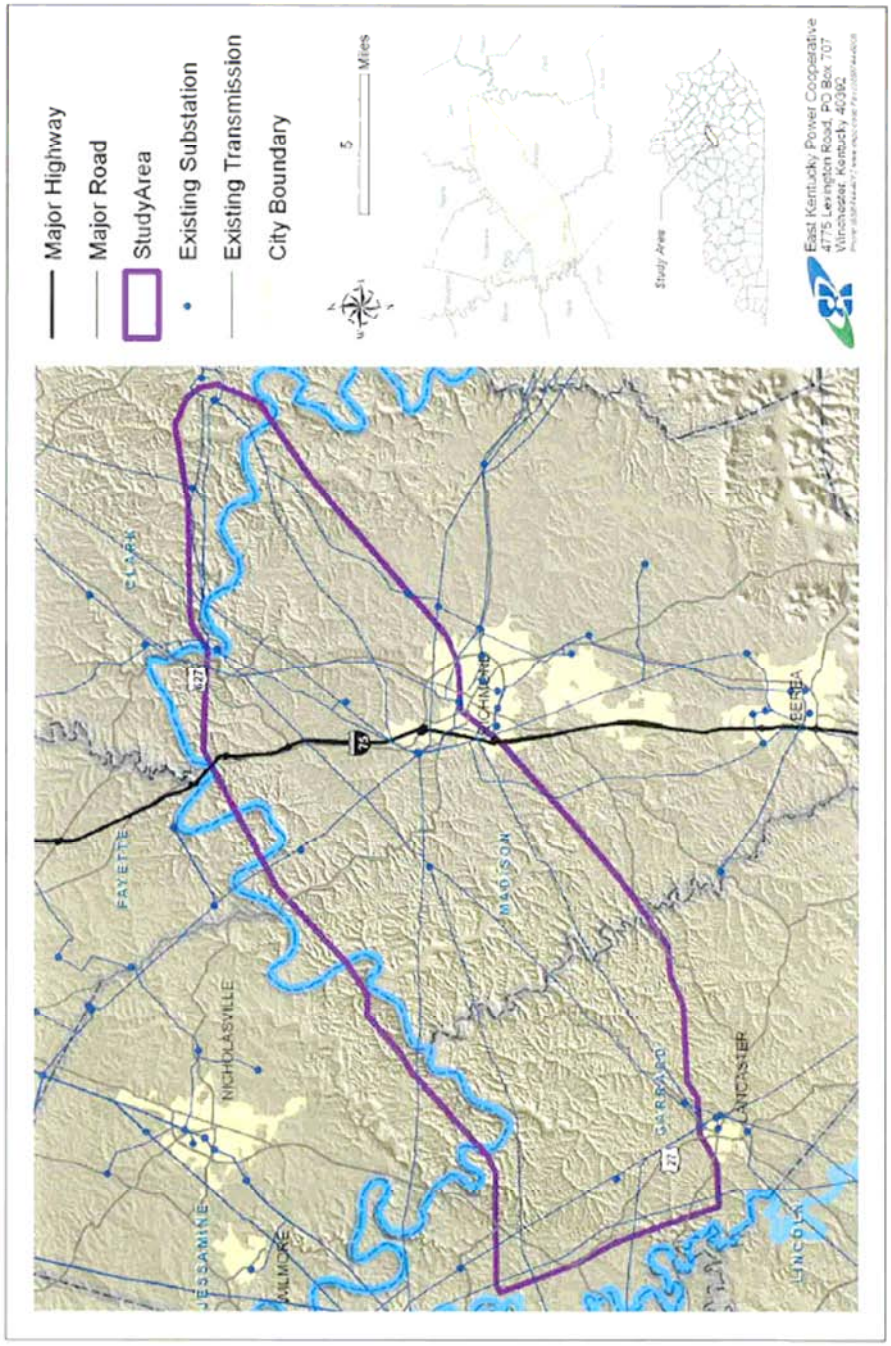
The Smith-West Garrard 345-kV transmission line project Study Area is located in Central Kentucky, approximately 20 to 30 miles south of the Lexington urban area. (See map of Study Area in Figure 1 on Page 4.) The Study Area includes 174,917 total acres. Notable features within or adjacent to the Study Area include the Kentucky River, Interstate 75, the city of Richmond and the city of Lancaster. The Study Area includes parts of five Kentucky counties: Clark, Fayette, Garrard, Jessamine and Madison. The primary impacts are in Madison and Garrard counties.

TABLE 1: Analysis of Study Area Acres by County

County	Total Acres	Acres of Study Area	% of County in Study Area
Clark	163,305	10,278	6.29%
Fayette	182,743	1,142	0.62%
Garrard	149,744	51,394	34.32%
Jessamine	111,704	4,648	4.16%
Madison	283,711	107,454	37.87%
TOTAL	**891,207**	**174,917**	

Source: Aerial, GIS information

FIGURE 1: Smith-West Garrard Study Area



In addition, the Study Area impacts a number of unincorporated rural towns, including:

- Arlington, Madison County
- Baldwin, Madison County
- Bloomingdale, Clark County
- Bourne, Garrard County
- Bryantsville, Garrard County
- Buckeye, Garrard County
- Cottonburg, Madison County
- Crow Valley, Madison County
- Doylesville, Madison County
- Edenton, Madison County
- Ford, Clark County
- Hackley, Jessamine County
- Judson, Garrard County
- Marksbury, Garrard County
- McCreary, Garrard County
- Million, Madison County
- Newby, Madison County
- Nina, Jessamine County
- Redhouse, Madison County
- Round Hill, Madison County
- Ruthton, Madison County
- Stone, Garrard County
- Stringtown, Madison County
- Teatersville, Garrard County
- Three Forks, Garrard County
- Toddville, Garrard County

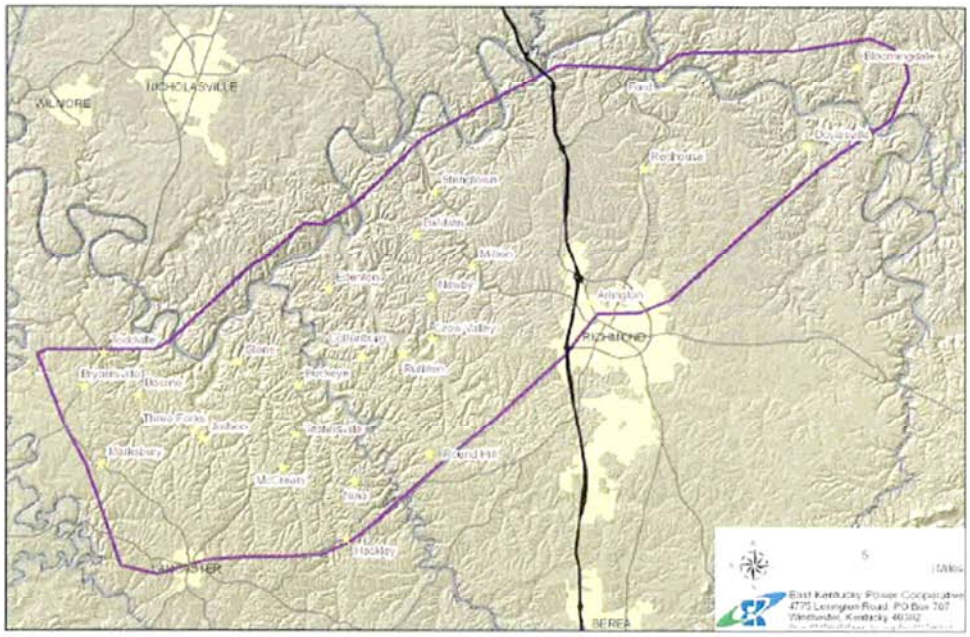



FIGURE 2: Rural Towns in Study Area