

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-1
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTE

QUESTION:

Direct, p. 2, provide all pre-filed testimony you have provided for projects within the PJM area.

ANSWER:

See Exhibit STL-D-Halpern-1.

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-2
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTE

QUESTION:

Direct, p.3, l. 13, provide copy of the "ARI" or comparable document for the Pennsylvania portion of this project.

ANSWER:

See <http://www.pplreliablepower.com/PUC+Filing+2009.htm> for Exhibits B and C.

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-3
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
SCHEDULES

QUESTION:

Direct, p. 3-4, provides copy of work plan and GANTT or similar timing chart for the Susquehanna-Roseland line.

ANSWER:

PSE&G has not completed a detailed construction schedule to date. Please see response to STL-D-Millies-1 for a preliminary, high level schedule.

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-4
WITNESS(S): POLLOCK
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HOPATCONG SWITCHING STATION MAP

QUESTION:

Regarding Ex. JH1, Alternative Route Identification Report for the Susquehanna to Roseland Project - New Jersey Portion, provide substitute maps for each map that will change with use of the recently announced switching station.

ANSWER:

There will be no changes in maps for Ex. JH1, Alternative Route Identification Report for the Susquehanna to Roseland Project - New Jersey Portion because of the new Hopatcong Switching station. The route selection report did not rely on the location of the original switching station for its recommendation for Route B or the new location.

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-5
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, provide chart showing number of residences affected at intervals from right-of-way edge, in 20 foot increments (i.e., 20, 40, 60, 80, 100, etc., increments).

ANSWER:

Below is a chart showing number of residences at intervals from the proposed right-of-way edge, in 20 foot increments. It should be noted that all measurements are based on aerial photo interpretation. To avoid any confusion, it should also be noted that the numbers presented in JH-1 are not directly comparable to the numbers presented below due to differences in measurement reference points (i.e. distances from the route centerline versus distance from right-of-way edge).

Distance from ROW Edge in Feet	Count
20	32
40	37
60	68
80	39
100	46
120	54
140	40
160	50

RESPONSE TO STOP THE LINES
REQUEST: STL-D-HALPERN-6
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
USE OF HIGHWAY RIGHT-OF-WAYS

QUESTION:

Provide copies of federal and state policies on accommodation of utility construction in rights-of-way. Dated: June 5, 2009.

ANSWER:

PSE&G objects to this question because it is unclear as to what is meant by federal and state policies on "utility construction in right-of-way". Without waiving this objection, if the request is referring to the Federal and State policies on the use of highways for utility facilities, please refer to N.J.A.C. 16:25-1.1 et seq. for a copy of the State of New Jersey's policy of utility accommodation in state highways. Please refer to 23 CFR 645 for the Federal Highway Authority's utility accommodation policy.

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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HALPERN BACKGROUND

QUESTION:

Direct, p. 1, l. 30, for how long have you been employed by Berger?

ANSWER:

I was a contractor for Louis Berger Group for over three years before I joined them as a salaried employee on January 1, 2009.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HALPERN BACKGROUND

QUESTION:

Direct, p. 2, over the past 40 years of your consulting for the power industry, identify the "over one hundred (100) siting or routing projects" in which you have participated or directed your employer at that time, and if consultant, the entity contracting your services.

ANSWER:

Below is presented a list of approximately fifty siting or routing projects that I have managed, directed or participated. In many cases multiple facilities were being sited for comparison purposes as part of an alternatives evaluation. In addition there are a number of older projects that I do not still have the details.

- Directed Site Selection Studies that identified the 300 Mwe coal-fired Dorchester Power Plant. Supported Delmarva Power in their CPCN siting hearings before the Maryland PSC.
- Directed a siting study for Atlantic Electric that identified a Millville, New Jersey site for development of the Cumberland Generating Station and supported PUC submittals.
- Advised the Virginia legislature on resolution of uranium development issue, provided expert consultant services at public meetings, hearings, and press sessions; and managed a study of theoretical uranium mine, mill and tailings disposal effects and later site-specific studies at Chatham, VA.
- Developed a power plant siting seminar for in-house use at Texas Utilities. Also served as senior consultant for a system-wide siting study that considered all options/ sizes and used GIS.
- Directed an intake siting study for a proposed power plant on the Nanticoke River for Delmarva Power.
- Directed two siting projects for Pennsylvania Power & Light Company: a site selection study for an anthracite-fired power plant, an evaluation of existing sites for expansion and related waste disposal siting studies, and development of a state-wide public advisory committee on siting.
- Directed an urban coal-fired power plant site selection study to identify sites to supply steam to Detroit Edison's Center City steam loop.
- Directed a project for Environment Canada that developed a detailed program for creating regional siting criteria that were adequate for assessing terrestrial ecology issues in geographically separated provinces -- Ontario and Alberta were used as examples

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SUSQUEHANNA-ROSELAND

- Reviewed and provided critical comments on the Virginia statewide low-level waste disposal facility siting study.
- Critically reviewed the DOE crystalline high-level radioactive waste disposal facility siting study and applicable results for Hanover County, VA.
- Represented the United States on a four-person international working group that developed guidelines on nuclear facility siting for the International Atomic Energy Agency.
- Consulted the Atomic Industrial Forum on proposed NRC regulations and their impact on industry site selection practices.
- Designed and led seminars of up to eight weeks in length at Argonne National Laboratories on power plant siting, environmental effects, conflict resolution and safety considerations related to natural phenomena.
- Managed a study to develop proposed energy facility siting guidelines for Environment Canada by reviewing approaches in the United States and then developing a generic methodology for Canada.
- Consultant to a joint Environment Canada-Canadian Electric Association Task Force that developed criteria for siting thermal generating stations throughout Canada by creating a methodology that could be applied to all sizes and types of thermal generating facilities.
- Directed a study for New Jersey Department of Environmental Protection to develop siting approaches and methodology for energy facilities.
- Senior Consultant on coal-fired site selection studies for Associated Electric Cooperative, Montana Power and Northern States Power that included the states of Minnesota, Missouri, Montana and Wisconsin.
- Directed a study for Mexico's electric utility, CFE over the central third of Mexico to identify sites for their next generation of power plants. Used GIS in the siting process.
- Project Manager in support of the siting studies for Eastern Maryland for Maryland Power Plant Siting Program.
- Senior Consultant on a siting study for Baltimore Gas & Electric to identify alternative sites to their proposed Perryman Project.
- Invited member of a panel for Brookhaven National Laboratory to review siting methodology.
- Assisted site selection studies for gas-fired peaking sites (150 Mwe) for Delmarva Power.

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WITNESS(S): HALPERN

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SUSQUEHANNA-ROSELAND

- PPL Electric Utilities. Directing the route selection and permitting for PPL's 100 mile 500 k-v portion of the Susquehanna-Roseland Project.
- PSE&G. Directing the route selection, permitting, ROW acquisition and preliminary engineering for PSE&G's 50 mile 500 k-v portion of the Susquehanna-Roseland Project
- Exelon Infrastructure Services. Part of a team that developed an approach for a Design-Build-Operate 345 kv transmission system in Vermont
- Joint Environment Canada-Canadian Electric Association Task Force. Developed siting approaches and criteria for generation and transmission facilities throughout Canada.
- Florida Governors 2020 Study Commission on the Future of Energy in Florida. Invited Speaker.
- Allegheny Energy 500-kv Electric Transmission Line Routing Study. Director for route selection, public involvement and three state's PSC submittals for Allegheny Energy's TrAIL 210 mile 500 kV transmission line through PA, WV and VA. He served as an expert witness before these three states.
- Atlantic Electric, New Freedom-Cardiff (32 miles 230 k-v). Assisted with route selection, directed field investigations, prepared permit applications and developed a mitigation plan to compensate for wetlands being affected along the transmission line right-of-way. The Pinelands Commission was involved in the permit reviews.
- PPL Electric Utilities, Coopersburg 138/69 k-v TAP. Provided a review and evaluation of impacts of a proposed 138/69 k-v Tap from Coopersburg to Quakertown and provided expert witness before the PA PUC on siting of the line and also evaluation of a prior used rail ROW
- Atlantic Electric, Mickleton-Churchtown (21 miles 230 k-v). Directed route selection and preparation of all permits and a wetland mitigation (palustrine forested wetland) and monitoring plan. A 100-acre site was screened as a possible staging area for construction of the line, as well as for wetland mitigation. .
- First Energy's Shawville-Madera line in Clearfield County. Directed the route selection, permitting and PA PUC submission for a 115 k-v line which was approved in record time.
- FirstEnergy identification and evaluation of 500 kV alternative corridors. Project Manager for about 85 miles of line in Southern NJ and support as an expert witness before Federal Energy Regulatory Commission Hearings.
- FirstEnergy, 115-kV Electric Transmission Line Routing Study, Project Director for study to identify several alternative routes and substation locations for a proposed 115-kV transmission line in northeastern Pennsylvania (Pike and Monroe Counties).

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SUSQUEHANNA-ROSELAND

- PPL. Managed one of the first major public outreach programs in the United States for Pennsylvania Power & Light, where he pioneered the use of the NGT process.
- PSEG. Directed the Mount Rose Substation Alternatives Assessment Study including an environmental evaluation of the alternatives.
- El Paso Corporation. Analysis for re-powering the Riviera Power Plant that included an assessment of the transmission system for taking out additional load and evaluation of co-locating a gas pipeline within the existing ROW.
- FirstEnergy. Geauga County Supply Project, double circuit 138 kv- Project Director for EMF and Noise Calculations and support for Public Meetings and Hearings
- Public Perceptions of Electric Transmission Facilities. Organizing committee for an Advanced Workshop held at EEI.
- Virginia Power. Mr. Halpern has served as the project engineer on foundation investigations for proposed transmission lines from Fentress to Yadkin substation (500 KV), Fentress to Wynhaven (230 KV), and Fentress to Hickory (230 KV); and the Lynnhaven substation expansion.
- Jersey Central Power & Light. Conducted a comparative analysis of alternative 230 kv transmission corridors in Monmouth County, NJ to connect three existing substations that incorporated public input. Three ROWs were evaluated, one within or parallel to existing ROWs, a second adjacent to limited-access highways and a third along a rail ROW. Project was terminated during permitting.
- Atlantic Electric. Directed studies and permitting for a rebuild of the Deepwater-Beckett 69 kV (12 miles) transmission line.
- Atlantic Electric. Directed studies and permitting for the upgrade and a rebuild of the Churchtown-Cumberland 230 kV (38 miles) transmission line.
- Geological and geotechnical investigations and design, Eastern and northern Iran. Directed more than 2,000 kilometers of transmission lines.
- Exelon Infrastructure Services. Evaluated Florida Municipal Electric Utilities for Design-Build-Operate opportunities for transmission systems.
- Department of Energy. Senior Consultant for the siting of the FutureGen Project including development of multiple Environmental Impact Studies four proposed locations. Mr. Halpern assisted in evaluating transmission alternatives for the final proposed sites.

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WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HALPERN BACKGROUND

QUESTION:

Direct, p. 2, l. 17-19, identify the entity for which you "have been chosen to represent the United States in the development of the first international guideline for siting nuclear facilities."

ANSWER:

International Atomic Energy Agency (IAEA).

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-4
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HALPERN BACKGROUND

QUESTION:

Direct, p. 2, regarding PJM projects, identify each PJM project you have worked on and your responsibilities on each project.

ANSWER:

PSE&G assumes that the question refers to transmission projects for PJM and provides the list below.

- PPL Electric Utilities. Directing the route selection and permitting for Pal's 100 mile 500 k-v portion of the Susquehanna-Roseland Project.
- PSE&G. Directing the route selection, permitting, ROW acquisition and preliminary engineering for PSE&G's 50 mile 500 k-v portion of the Susquehanna-Roseland Project
- Allegheny Energy 500-kv Electric Transmission Line Routing Study. Director for route selection, public involvement and three state's PSC submittals for Allegheny Energy's TrAIL 210 mile 500 kV transmission line through PA, WV and VA. He served as an expert witness before these three states.
- Atlantic Electric, New Freedom-Cardiff (32 miles 230 k-v). Assisted with route selection, directed field investigations, prepared permit applications and developed a mitigation plan to compensate for wetlands being affected along the transmission line right-of-way. The Pinelands Commission was involved in the permit reviews.
- PPL Electric Utilities, Coopersburg 138/69 k-v TAP. Provided a review and evaluation of impacts of a proposed 138/69 k-v Tap from Coopersburg to Quakertown and provided expert witness before the PA PUC on siting of the line and also evaluation of a prior used rail ROW
- Atlantic Electric, Mickleton-Churchtown (21 miles 230 k-v). Directed route selection and preparation of all permits and a wetland mitigation (palustrine forested wetland) and monitoring plan. A 100-acre site was screened as a possible staging area for construction of the line, as well as for wetland mitigation. .
- First Energy's Shawville-Madera line in Clearfield County. Directed the route selection, permitting and PA PUC submission for a 115 k-v line which was approved in record time.
- FirstEnergy identification and evaluation of 500 kV alternative corridors. Project Manager for about 85 miles of line in Southern NJ and support as an expert witness before Federal Energy Regulatory Commission Hearings.

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REQUEST: STL-HALPERN-4

WITNESS(S): HALPERN

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SUSQUEHANNA-ROSELAND

- FirstEnergy, 115-kV Electric Transmission Line Routing Study, Project Director for study to identify several alternative routes and substation locations for a proposed 115-kV transmission line in northeastern Pennsylvania (Pike and Monroe Counties).
- PSEG. Directed the Mount Rose Substation Alternatives Assessment Study including an environmental evaluation of the alternatives.
- FirstEnergy. Geauga County Supply Project, double circuit 138 kv- Project Director for EMF and Noise Calculations and support for Public Meetings and Hearings
- Virginia Power. Mr. Halpern has served as the project engineer on foundation investigations for proposed transmission lines from Fentress to Yadkin substation (500 KV), Fentress to Wynhaven (230 KV), and Fentress to Hickory (230 KV); and the Lynnhaven substation expansion.
- Jersey Central Power & Light. Conducted a comparative analysis of alternative 230 kv transmission corridors in Monmouth County, NJ to connect three existing substations that incorporated public input. Three ROWs were evaluated, one within or parallel to existing ROWs, a second adjacent to limited-access highways and a third along a rail ROW. Project was terminated during permitting.
- Atlantic Electric. Directed studies and permitting for a rebuild of the Deepwater-Beckett 69 kV (12 miles) transmission line.
- Atlantic Electric. Directed studies and permitting for the upgrade and a rebuild of the Churchtown-Cumberland 230 kV (38 miles) transmission line.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-5
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HALPERN BACKGROUND

QUESTION:

Direct, p. 2, identify those projects in the PJM area for which you have provided testimony.

ANSWER:

PSE&G assume that the question refers to transmission projects for PJM and provides the list below.

- PSE&G. Directing the route selection, permitting, ROW acquisition and preliminary engineering for PSE&G's 50 mile 500 k-v portion of the Susquehanna-Roseland Project
- Allegheny Energy 500-kv Electric Transmission Line Routing Study. Director for route selection, public involvement and three state's PSC submittals for Allegheny Energy's TrAIL 210 mile 500 kV transmission line through PA, WV and VA. He served as an expert witness before these three states.
- Atlantic Electric, New Freedom-Cardiff (32 miles 230 k-v). Assisted with route selection, directed field investigations, prepared permit applications and developed a mitigation plan to compensate for wetlands being affected along the transmission line right-of-way. The Pinelands Commission was involved in the permit reviews.
- PPL Electric Utilities, Coopersburg 138/69 k-v TAP. Provided a review and evaluation of impacts of a proposed 138/69 k-v Tap from Coopersburg to Quakertown and provided expert witness before the PA PUC on siting of the line and also evaluation of a prior used rail ROW
- FirstEnergy identification and evaluation of 500 kV alternative corridors. Project Manager for about 85 miles of line in Southern NJ and support as an expert witness before Federal Energy Regulatory Commission Hearings.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-6
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Direct, p. 3, l. 8-9, describe the process by which a route is "recommended" by Berger and selected.

ANSWER:

See Exhibit JH1 Chapters 2 and 3 for an example description of the process by which a route is recommended by Berger. The actual route selection decision is made by the utility in this case PSE&G.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-7
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Direct, p. 3, l. 8-9, where a "particular route has been selected," identify the entity and/or entities selecting the route.

ANSWER:

See Exhibit JH1 2.2 Table 2.2 for the routing team for PSE&G's portion of the Susquehanna-Roseland Project.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-8
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
BERGER BACKGROUND

QUESTION:

Direct, p. 3, l. 13, is Berger also handling the Pennsylvania portion of this project?

ANSWER:

Yes.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-9
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Direct, p. 3, l. 13, identify impact of Pennsylvania routing issues on route identification and selection in New Jersey.

ANSWER:

The PSE&G route selection process was performed independently of Pennsylvania. There were two separate project teams managed by two separate project managers with minimal staff overlap between the two project teams. The major coordination related to possible crossing points of the Delaware River which were agreed by both firms after independent evaluations were conducted.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-10
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Direct, p. 3, l. 13, identify impact of New Jersey routing issues on route identification and selection in Pennsylvania.

ANSWER:

See STL-Halpern-9.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-11
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

ROUTING

QUESTION:

Direct, p. 3-4, describing study areas, describe how these areas and duties were allocated between Berger and Commonwealth

ANSWER:

Duties were allocated between Louis Berger Group (Berger) and Commonwealth Associates (CAI) based on the areas of expertise of the individual firms. CAI generally supported the project in transmission line engineering and right-of-way services.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-12
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

ROUTING

QUESTION:

Direct, p. 3-4, describes many aspects which may be criteria for routing alternatives. What system alternatives were analyzed by the Berger Team and what were the results? If no system alternatives were analyzed, explain why not.

ANSWER:

Berger was hired to conduct a route selection study and recommend a route to PSE&G. System alternatives are not part of a routing study and therefore were not analyzed by Berger Team.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-13
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
SINGLE 230KV

QUESTION:

Direct, p. 4, l. 11-13, given present line is single 230kV, and proposal is for doubling the 230kV and installing quad 500kV lines.

ANSWER:

PSE&G objects to this questions as ambiguous, confusing and/or not complete.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-14
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
STATION CHANGES

QUESTION:

Direct, p.4, l. 23 - p. 5, l. 4, reflects a Jefferson switching station, which has been eliminated as a switching station site. How does this change your testimony? Please provide amended language.

ANSWER:

See response to STL-Ribardo-1.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-15
WITNESS(S): CROUCH
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
JEFFERSON SWITCH

QUESTION:

Direct, p. 4, l. 23 - p. 5, l. 4, identify and describe the recently announced switching station and the route to get to and from that switching station.

ANSWER:

Please see response to STL-Ribardo-1 and Exhibit STL-Halpern-15.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-16
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Regarding Ex. JH1, Alternative Route Identification Report for the Susquehanna to Roseland Project - New Jersey Portion, provide substitute language for each section of this report that will change with use of the recently announced switching station.

ANSWER:

There will be no changes in Exhibit JH1, Alternative Route Identification Report for the Susquehanna to Roseland Project - New Jersey Portion because of the new Hopatcong Switching station. The route selection report did not rely on the location of the original switching station for its recommendation for Route B or the new location.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-17
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NO BUILD ALTERNATIVE

QUESTION:

Regarding Ex. JH1, provide detailed analysis of "No Build Alternative."

ANSWER:

A "No Build Alternative" is not part of a Route Selection Project.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-18
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LAND USE - ROUTING

QUESTION:

Direct, p. 6, l. 12-14, identify rationale for statement that "the proposed route would not result in any change in existing or potential future land use because it would be constructed entirely within an existing transmission right of way.

ANSWER:

The ARI discusses potential impacts and provides conclusions relative to land use on pages 51 and 52 of the Alternative Route Identification Report. The presence of an existing transmission line right-of-way limits the type of development that can occur within the boundaries of that right-of-way. These limitations serve to ensure the integrity of the transmission line and public safety. Limitations on land use therefore represented an impact when that existing transmission line was first constructed and continue to the present. By constructing the new transmission line within the existing right-of-way, there will be no additional restrictions on land use.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-19
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ARI REPORT

QUESTION:

Direct, p. 6, l. 12 - 14, the question refers to "material adverse effects upon human life located along the right-of-way, and the answer addresses "land use." In what ways, other than land use, might "human life" be affected, and in those ways, analyze impacts of line for each.

ANSWER:

PSE&G objects to this question as it is irrelevant, leading and unlikely to lead to discoverable evidence. Without waiving this objections, besides land use, the response to this question in the testimony also addresses aesthetic impacts on human life along the right-of-way.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-20
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LAND USE; ROUTING

QUESTION:

Direct, p. 6, l. 14-15, is it your contention that the project, because it would be constructed entirely within an existing transmission line right-of-way, has no direct impact on land use? If so, please cite authority, studies and research upon which this opinion is based.

ANSWER:

Yes. See the response to STL-Halpern-18. Restrictions on land use within an existing transmission line right-of-way are discussed on page 87 of the ARI and relate primarily to maintaining proper electrical clearances consistent with the National Electrical Safety Code and appropriate physical clearances that meet North American Electric Reliability Corporation (NERC) standards which define the reliability requirements for planning and operating the North American bulk power system, and New Jersey Board of Public Utilities requirements regarding vegetative clearing.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-21
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Direct, p. 6, l. 15-18, is it your testimony that "visual impact" is the only impact?

ANSWER:

No.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-22
WITNESS(S): RIBARDO
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PUBLIC SESSIONS; SWITCHING STATION

QUESTION:

Direct, p. 6, l. 21-22, will public open houses be held for those affected by the change of switching station locations? If so, where and when. If not, why not?

ANSWER:

No, public workshops or open houses will not be held only to discuss the relocation of the proposed switching station from Jefferson Township to Hoptacong Borough. Public sessions on this entire Project were held on June 11, 2009 and June 18, 2009 at the Sussex County Community College and third session will be held on June 30, 2009 at the Frelinghuysen Arboretum. Additionally, on June 25, 2009 the Highlands Council will meet to consider the pending Highlands Applicability Determination ("HAD").

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-23
WITNESS(S): RIBARDO
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PUBLIC WORKSHOP; SWITCHING STATION

QUESTION:

Direct, p. 7, l. 3-4, will public workshops be held for those affected by the change of switching station locations? If so, where and when. If not, why not?

ANSWER:

Please see response to STL-Halpern-22.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-24
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
GIS

QUESTION:

Direct, p. 7, l. 21-23, provide GIS database in a readable and searchable format.

ANSWER:

The information requested is readable and searchable only in the GIS software environment within which it was used. This software would need to be purchased by the inquiring party in order to use the information. In addition, much of the data was purchased or downloaded from sources that do not allow for redistribution as part of their usage agreements.

(NOTE to PSEG COUNSEL: This data request is difficult in that the volume of information is large, the search ability of the data in its current form without appropriate software is limited, and that use of this information as requested in the question would require someone with GIS knowledge and understanding. If this is required, we may suggest that Berger set up a computer in Morristown where the intervener can come and review and query the information at a computer set up specifically for that purpose.

This has been done recently for the TrAIL project, wherein an intervener asked to see all paper maps and notes for the project. The amount of time scanning and preparing the information would have been extensive and scanning may not have presented the information at a resolution suitable to accurately depict the detailed notes on the large format maps. As a response to this, we set up a room for the intervener to come and review map materials at their discretion.)

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-25
WITNESS(S): RIBARDO
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PUBLIC COMMENTS

QUESTION:

Direct, p. 8, l. 1-13, provide copies of all comments received as of August 4, 2008.

ANSWER:

Please see S-ENR-60 for all comments received up through March 5, 2009.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-26
WITNESS(S):
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PUBLIC COMMENTS

QUESTION:

Direct, p. 8, l. 1-13, provide copies of all comments received after August 4, 2008, and ongoing.

ANSWER:

See Exhibit S-ENR-60. Please see Exhibit STL-Halpern-26 for all comments received since March 5, 2009.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-27
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NO BUILD ALTERNATIVE

QUESTION:

Direct, p. 9, l. 4- p. 10, l. 2, provide analysis of Route B compared to "No Build" alternative.

ANSWER:

A "No Build Alternative" is not part of a Route Selection Project.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-28
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NO BUILD ALTERNATIVE

QUESTION:

Direct, p. 10, l. 3 - 15, in your opinion, does a reasonable and thorough study consistent with current siting methods include a "No Build" alternative?

ANSWER:

A route selection study assumes that a line is needed to be built. Alternatives such as "No Build" are part of an Environmental Impact Statement process required for Federal Actions and not part of a route selection process.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-29
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING; URBAN AREAS

QUESTION:

Ex. JH1, 2.5.1 lists urban areas as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many urban areas are traversed by or adjacent to the proposed route? How many residents are affected?

ANSWER:

According to the Environmental Systems Research Institute (ESRI) 2008 GIS U.S. National Atlas Urbanized Areas (urban_dtl) data layer, which represents urban areas in the United States derived from the urban areas layer of the Digital Chart of the World, the Proposed Route passes through one urban area, Boonton, for approximately 2.3 miles. The Proposed Route passes adjacent (for these purposes assumed to be less than 1 mile) to three urban areas; Newton, Sparta, and Livingston. A list of residences within 75, 100, and 250 feet can be found in Exhibit JH1, Table 3.1-2.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-30
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING; CULTURAL RESOURCES

QUESTION:

Ex. JH1, 2.5.1 lists National Register Historic Districts and adjacent areas as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many National Register Historic Districts and adjacent areas are traversed by or adjacent to the proposed route. How many historic sites?

ANSWER:

A detailed description of cultural resources adjacent to or traversed by all three Alternative Routes including the Proposed Route can be found in Exhibit JH1, Table 3.1.8.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-31
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists large recreation sites as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many large recreation sites are traversed by or adjacent to the proposed route?

ANSWER:

Large recreation sites are National Park Service designated lands, county/local parks as designated in the data received from Warren, Sussex, and Morris County, and lands that were included in the State of New Jersey Department of Environmental Protection (NJDEP) open space GIS data layer, which contains protected open space and recreation areas owned in fee simple interest by NJDEP. Twenty-one large recreation sites are traversed by or adjacent to the Proposed Route.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-32
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists large wetlands as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many large wetlands are traversed by or adjacent to the proposed route?

ANSWER:

Large wetlands were considered to be wetlands that would be difficult to span between structures and therefore might require a structure to be placed in the wetland. The Proposed Route traverses or is adjacent to ten large wetlands.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-33
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists critical habitat areas as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many critical habitat areas are traversed by or adjacent to the proposed route?

ANSWER:

Critical habitat areas are delineated for Threatened and Endangered species listed under the Endangered Species Act. The only Threatened and Endangered species with potential to occur in the project area for which the U.S. Fish and Wildlife Service has designated critical habitat is the Indiana bat. However, no critical habitat for this species exists in New Jersey. The Proposed Route does not traverse and is not adjacent to any areas of critical habitat.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-34
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists large water bodies as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many large water bodies are traversed by or adjacent to the proposed route?

ANSWER:

Large water bodies were considered to be water bodies that would be difficult to span between structures and therefore might require a structure to be placed in the water body. The Proposed Route traverses or is adjacent to six large water bodies.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-35
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists Designated State Forests as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many Designated State Forests are traversed by or adjacent to the proposed route?

ANSWER:

No Designated State Forests are traversed by or adjacent to the Proposed Route.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-36
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists State Parks as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many State Parks are traversed by or adjacent to the proposed route?

ANSWER:

Four State Parks are traversed by or adjacent to the Proposed Route.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-37
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists State Game Lands as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many State Game Lands are traversed by or adjacent to the proposed route?

ANSWER:

No State Game Lands are traversed by or adjacent to the Proposed Route.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-38
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

ROUTING; WMA

QUESTION:

Ex. JH1, 2.5.1 lists Wildlife Management Areas as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many WMA's are traversed by the proposed route, encompassing how many acres of directly affected WMAs.

ANSWER:

Three WMA's are traversed by the Proposed Route; Rockaway River WMA, Wildcat Ridge WMA, and Highlands Greenway, encompassing 37.1, 0.2, 0.3 acres respectively within the proposed right-of-way.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-39
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING; WMA

QUESTION:

Ex. JH1, 2.5.1, for each WMA, identify whether it is federal or state or both.

ANSWER:

The 3 WMA's traversed by the Proposed Route, Rockaway River WMA, Wildcat Ridge WMA, and Highlands Greenway, are all New Jersey Department of Environmental Protection- Division of Fish & Wildlife managed properties.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-40
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1, 2.5.1 lists natural and conservation areas as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many natural and conservation areas are traversed by or adjacent to the proposed route?

ANSWER:

The Proposed Route traverses two natural areas, Troy Meadows and Wildcat Ridge. Several large land areas already referenced in STL-Halpern- 31, 36, and 38 also have conservation goals associated with their management objectives, they include the Delaware Water Gap National Recreation Area, Pyramid Mountain, Buck Mountain, Great Piece Meadows and Kittatinny Valley State Parks, Rockaway River, Highlands Greenway, and Wildcat Ridge Wildlife Management Areas, the Highlands Planning Area and the Highlands Preservation Area.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-41
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING; LANDS TRUST PRESEVE

QUESTION:

Ex. JH1, 2.5.1 lists natural Lands Trust Preserve as a "Large Area Constraints," defined as criteria used to eliminate, to the extent possible, areas in the study area considered unfavorable by the routing team for developing Potential Routes." How many natural Lands Trust Preserve are traversed by or adjacent to the proposed route?

ANSWER:

No natural Lands Trust Preserves are traversed by or adjacent to the Proposed Route.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-42
WITNESS(S): HALPERN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
USE OF HIGHWAYS

QUESTION:

Ex. JH1, section 2.6, the I-80 Corridor was eliminated. What is federal policy on accommodation of utilities for a right-of-way? What is New Jersey policy on accommodation of utilities for a right-of-way?

ANSWER:

Longitudinal occupation of limited access highways is not permitted by the States of Pennsylvania and New Jersey. Perpendicular crossings and some very limited conditions for longitudinal occupancy are sanctioned under very specific criteria. Federal Regulations require that utility facilities to be accommodated on the right-of-way of a Federal-aid or direct Federal highway project such that use and occupancy of the highway right-of-way do not adversely affect highway or traffic safety, or otherwise impair the highway or its aesthetic quality, and do not conflict with the provisions of Federal, State or local laws or regulations. This does not allow for compatibility of longitudinal occupation of an existing limited access highway. "No new above ground utility installations are to be allowed within the established clear zone of the highway unless a determination has been made by the transportation department that placement underground is not technically feasible or is unreasonably costly and there are no feasible alternate locations." 23 CFR 645, Subpart b.

RESPONSE TO STOP THE LINES
REQUEST: STL-HALPERN-43
WITNESS(S): HALPERN
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SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ROUTING

QUESTION:

Ex. JH1 - provide comparison of I-80 corridor "state parks, Highlands Preservation Area, and development" with Routes A, B and C.

ANSWER:

Route I-80 was not a viable corridor as discussed in STL-HALPERN-42 and therefore was not evaluated