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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Fred R. Nene, Administrative Law Judge
Pennsylvania Public Utility Commission
1103 State Office Bldg.
300 Liberty Ave
Pittsburgh, PA 15222-1210

Re: Docket No. A-110150 F0031 – The Amended Application of Duquesne Light Company For the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County

Dear Judge Nene:

Pursuant to your order dated August 18, 2006, enclosed, kindly find a copy of the brief which also has been submitted contemporaneously to the Pennsylvania Public Utility Commission (original and nine) and two copies to opposing counsel.

Respectfully submitted,

Terence J Nypaver

Terence J Nypaver, PE

DOCUMENT FOLDER

encl.

cc Pennsylvania Public Utility Commission – original and nine copies
Regina Sestak/Duquesne Light Company – two copies

IN THE COMMONWEALTH OF PENNSYLVANIA

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Duquesne Light Company For the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless and Ross Townships, Allegheny County	:	A-110150 F0031
Mark R. Janosko, et al. Complainant	:	
v.	:	C-20065987
Duquesne Light Company Respondent	:	
Raymond Jacobs Complainant	:	
v.	:	C-20066500
Duquesne Light Company Respondent	:	

BRIEF ON BEHALF OF THE COMPLAINANTS

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STATEMENT OF FACTS

Duquesne Light Company, hereinafter referred to as "the Company", contracted with GAI Consultants, hereinafter referred to as "GAI", to complete a Line Routing Study on the projected environmental impacts to the selected route, as well as six alternative routes.

On March 4, 2005, the Company submitted to the Pennsylvania Public Utility Commission, hereinafter referred to as "the Commission", the Application of Duquesne Light Company for the Siting and Construction of a 4.1 mile 138 kV Transmission Line in Hampton and McCandless Townships, Allegheny County. Route E-1 was the proposed route in this application. The residents along Route E-1 were notified via certified US Mail.

On March 31 and April 4, 2005, Town Council's Services Committee Meetings were held by the

Town of McCandless to review the Wildwood transmission line project. On June 6, 2005, at the Town of McCandless meeting, the Company and GAI gave a presentation and held a question and answer period following. On June 22, 2005, at the Hampton Township monthly meeting, the Company and GAI gave another presentation, followed by a question and answer period.

On October 6, 2005, the Company submitted the Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless and Ross Townships, Allegheny County. Route E was the proposed route in this application. The residents along Route E were notified via certified US Mail.

On March 23 and April 6, 2006, Prehearing Conferences were held at the State Office Building before the Honorable Fred R. Nene. On April 13, 2006, the Commission sent notices to the affected parties, setting hearing dates. On April 18, 2006, the Commission issued the Prehearing Order. On June 27 and 28, 2006, three public input hearings were held at the Ross Township Municipal Building. On July 11, 12, and 13, 2006, Evidentiary Hearings were held at the State Office Building before Administrative Law Judge Fred R. Nene. Witnesses called by the complainants were Terence J. Nypaver, PE, Dolores Nypaver, Pawel Kalinski, MD, PhD, and Barbara Zaun. Also, the complainants relied upon Mark R. Janosko, MD, Oleg Lapets, PhD, Bruce Krist, and James Moorehead for the purpose of cross-examination. The respondents called as witnesses David W. Fugate, PhD, William H. Bailey, PhD, Paul G. Cass, Robert J. Houston, Thomas B. Schmitt, Alan Berchin, Joannn Noble Choder, and Homer Zucconi.

STATEMENT OF THE ISSUES

Did the Company err in holding that there would be no significant health risks associated with the proposed construction of the 138 kV electrical line on the Wildwood Project?

Did the Company err in holding that the design of the proposed line will provide increased reliable service to its customers?

Did the Company err in holding that the use of resource criteria, initially intended for the GPU DQE proposed 268 mile, 500kV transmission line project, and the subsequent additional weighting factors were appropriate for the 138 kV line Wildwood Project?

Did the Company prove by a preponderance of evidence that it should be granted the amendment for the siting and construction of a 138 kV transmission line without due regard to the diminution of property values and aesthetics of the municipalities in the northern area of Allegheny County?

ARGUMENTS

THE COMPANY ERRED IN HOLDING THAT THE PROPOSED 138 kV ELECTRICAL LINE (PUC DOCKET A-110150 F 0031- 138 kV WILDWOOD PROJECT) DOES NOT CARRY POTENTIAL SIGNIFICANT HEALTH RISKS.

A. Electrical magnetic fields (EMFs) from high-voltage lines and proximity to high-voltage lines have been associated with cancer.

Dr. Bailey acknowledged that the International Agency for Research in Cancer (IARC), of which he was a member (7/12/06;p.561), classifies alternating current magnetic fields as a 2b category carcinogen (7/12/06;p.548) and states that from the IARC assessment of the evidence that magnetic fields from high-voltage lines may cause cancer. (7/12/06;pp.606)

Dr. Bailey commenting on Kabuto et al., *Int. J. Cancer 2006*;pp.119;643-650, acknowledged the study showed an association for one major type of leukemia with calculated magnetic fields of 4 milligauss or above (7/12/06;pp.550)

Dr. Bailey acknowledged Neutra et al., *Executive Summary California EMF Risk Evaluation June 2002*, found evidence of a possible relation between magnetic field exposure and childhood leukemia. (7/12/06;p.557)

Dr. Bailey acknowledged Draper et al., *BMJ 2005;pp.*330;1290-1330, showed an association between childhood leukemia and proximity at birth to high-voltage power lines. (7/12/06;p.547).

Dr. Bailey acknowledged Feychting et al., *A. J. Epidemiology*; 138;467-481, showed an association to exposure to magnetic fields from high-voltage power lines and childhood leukemia. (7/12/06;p.555)

Dr. Bailey agreed that all the studies were published in respected health journals subjected to peer review and that the studies by Draper et al. and Kabuto et al. included thousands of participants. (7/12/06;pp.563, 573, 583)

Dr. Bailey acknowledged that Draper et al. and Kabuto et al. were published after the IARC determined the classification of EMFs as a class 2b carcinogen, and had a larger number of total subjects compared to the studies the IARC had reviewed. (7/12/06;p.584)

Dr. Bailey admitted that Draper et al. reported an association of acute lymphoblastic leukemia (ALL) with distance to high-voltage transmission lines, and Kabuto et al. reported an association of ALL to EMF strength. He was not aware of any newer, larger studies that rejected this association. (7/12/06;p.589)

Dr. Bailey admitted that there are no accepted animal models for ALL, (7/12/06;pp.590-91, 594) thus conclusions from these studies were not applicable to the study of ALL in humans.

Dr. Bailey acknowledged that in 1999 the National Institute for Environmental Health Science recommended that utility companies take passive measures into consideration when constructing electrical lines and that prudent avoidance, as coined by Granger Morgan, PhD, included that spending up to "a few thousand dollars" per person was justifiable to reduce EMF exposure. Prudent avoidance includes positioning a high-voltage line or utility pole so as to limit residential exposure.(7/12/06;p.601-3)

EMFs are recognized by the scientific community as Class 2b carcinogens. EMF exposure has been associated to certain cancers. Reputable scientific papers support an association between childhood leukemia and proximity to power lines. While the credibility of this evidence can be scrutinized, it has been gathered by multiple international researchers studying thousands of individuals. Even Dr. Bailey feels that in regards to EMFs "even a very tiny risk would be a public health importance and should not be ignored". (7/12/06;p.599)

B. Route option E should not be the preferred route since it is the most densely populated residential corridor.

The preferred route by the Company for the Wildwood Project is Route E. The environmental study by GAI that was commissioned by the Company recognized four alternatives as environmentally acceptable. These are Routes A, C, E, and E-1. For Routes E and E-1, the residential density is clearly much higher than either Routes A or C. GAI does not recognize this area of Pennsylvania as having a dense population, comparing it to urban areas. Nonetheless, residential development along route E is 3.3 times denser than Route A and 10.5 times denser than Route C. (RH-3, Table A-1)

Would it be too cost prohibitive to explore an alternative route, or what if the actual construction process was so hazardous or so engineering challenged as to expose workers to too high a level of personal risk or injury? This warrants consideration since the Wildwood Project should not be so expensive as to make it financially infeasible and should not jeopardize employee safety. However, these issues are not relevant as the Company's principal engineer, Mr. Cass, testified that the total cost for proposed construction of a 138 kV transmission power line on Route E was approximately three million dollars, and estimated that the 138 kV transmission power line along the Route A was three million dollars but admitted "there is large variability in what it actually could be because the line has not been designed yet". (7/12/06;p.631) He also estimated pole construction costs along Route C at two and a half million dollars, with additional construction costs estimated at two hundred thousand dollars per mile. (7/12/06;p.632-33) Finally, Mr. Cass stated that in terms of constructability along Routes A, C, and E that they were "all okay, and not just okay, but equally okay" (7/12/06;p.705) and that existing right-of-way (ROW) (4 kV and/or 23 kV **NOT 138 kV**) dominated the decision process on best route choice. (7/12/06;p.706)

As EMFs clearly represent a potential health risk, and viable, cost effective alternatives exist, it would be prudent to opt for one of the less populated routes. Assuming that the expert witnesses for the respondents are correct, other acceptable routes should be examined much more closely, as selection of Route E could prove to cause devastating and irrepararable harm to the families and the communities in

which they live. The other acceptable routes need consideration as each is constructible and the costs are comparable.

C. The Company has not explored the other environmentally acceptable routes in good faith.

The Company has already invested a great deal of resources in the Wildwood Project. The Company has conducted environmental research, has measured electrical and magnetic fields, and has prepared numerous documents and tables to help support its conclusion that the preferred route for the 138 kV line is the Route E corridor. This is a multi-million dollar project; yet, the Company did not provide any detailed cost estimates until ordered by the Court shortly before the evidentiary proceedings commenced. Furthermore, the Company has still not provided a detailed cost analysis of Route E. GAI prepared a meticulous environmental impact study in painstaking detail exploring all seven initial routes. Testimony by the Company's system planners and engineers, however, did not have the same level of thoroughness and echoed a level of development usually associated with preliminary stages of an engineering project of this scope and complexity.

Dr. Fugate was commissioned by GAI to perform calculations and actual measurements of EMFs for the proposed Wildwood Line. He acknowledged that all his measurements for electrical and magnetic fields for 138 kV power lines were calculated and that no actual measurements on existing 138 kV lines in the Company's systems were obtained. (7/11/06; pp.394, 395) He did perform both calculated measurements of electrical and magnetic fields for 23 kV power lines and actual measurements on existing 23 kV power lines in the Company's system. (7/11/06;pp.376, 394) Dr. Fugate admitted that actual measured electric and magnetic fields differ from calculated measurements often "quite a bit". (7/11/06;p.376) Given calculated readings frequently do not correlate with true field readings, obtaining such data would be judicious.

This lack of preparedness indicates the Company never seriously considered the other routes.

THE COMPANY ERRED IN HOLDING THAT THE DESIGN OF THE PROPOSED LINE WILL PROVIDE INCREASED RELIABLE SERVICE TO ITS CUSTOMERS

A. Any fault on the dedicated line from Wildwood to North substation would cause a power outage for all those fed from Wildwood Substation.

The design of the proposed 138 kV line calls for a single source to supply the Wildwood Substation. The North Substation will be the only source of power to the Wildwood Substation via a dedicated line – proposed Route E. (7/11/06;p.275) Mr. Zucconi stated that the best way to guarantee reliability is to create a redundant line feed such as their current "ring system". (7/11/06;p.276) However, with the proposed high-voltage line construction on Route E, this "ring system" would not be implemented. Therefore, the only way to maintain reliability would be to reduce the risk of falling trees, vehicular accidents, equipment malfunctions and equipment failures. Finally, without a redundant system, failure resulting in residential power outages will affect more customers of the Company fed from the new Wildwood Substation.

B. A considerable portion of Route E, the preferred option for the dedicated line, goes along heavily traveled Thompson Run Road.

Mr. Cass stated that there are more accidents on Thompson Run Road because of the visibility and layout of the road (7/13/06;p.672). Commenting on safety issues on Thompson Run Road, Mr. Cass stated "we do have, I believe, traffic safety concerns on Thompson Run Road, probably more than I thought they were, but probably still relative to Route 8, probably the same." (7/13/06;p.671) Furthermore, he could not quantify the frequency of power outages on Route 8. (7/1/3/06;p.738) Traffic studies were never presented into evidence by the Company at the proceedings; therefore, it is unclear whether any were ever performed, underscoring the lack of due diligence. This raises the question of Route E potentially having more problems related to reliability then Routes A or C.

C. The construction of the line along Route E requires a widening of existing ROW and the cutting and/or removal of mature trees thus creating a noticeable negative visual environmental impact.

To maintain the reliability of the proposed Route E to feed the Wildwood Substation, tree trimming, crowning and possible removal would be necessary (7/12/06;p.437, 504). Trees would be cut below the neutral line-in some cases to five feet below the neutral line (7/12/06;pp.498, 505). As over 95% of Route E's length is located on existing ROW, the cutting, trimming and crowning of trees was excluded in GAI's environmental scoring process on that section of the route. (RH-2;Sect. 3.1;p.3-11) Mr. Houston stated that there will be "no significant or any impact on any natural resources, where a 138 kV line will replace existing subtransmission distribution systems. (7/11/06;p.340) According to Mr. Schmitt, trees are one of the biggest problems causing outages and reducing reliability. (7/11/06;pp.436-37) He also testified that maintaining a safe working clearance is "significantly greater" for 138 kV lines vs. 23 kV lines, and "the OSHA clearance for working on a line is about thirteen feet approximately". (7/13/06;p.678) Different ROW agreements determine the ability the Company has to trim or cut down trees (7/13/06;p.710) ROWs will need to be adjusted in accordance with 138 kV line standards. The Company never presented recorded easements into evidence for the majority of the proposed route, only the ROW agreements initially made. Major changes in landscape use would need to occur to maintain system reliability, none of which was taken into consideration during the environmental assessment, making Route E an impractical solution.

THE COMPANY ERRED IN HOLDING THAT THE USE OF RESOURCE CRITERIA, INITIALLY INTENDED FOR THE GPU DQE PROPOSED 268 MILE, 500kV TRANSMISSION LINE PROJECT, AND THE SUBSEQUENT ADDITIONAL WEIGHTING FACTORS WERE APPROPRIATE FOR THE 138 kV WILDWOOD PROJECT

A. A majority of the resource criteria for Exhibit RH-2 was not suitable to the seven alternative routes of the Wildwood Project.

Out of the initial twenty resource criteria initially calculated for use on the GPU DQE Project, only three were relevant to the Wildwood Project. Including the additional three criteria added by GAI for Exhibit RH-2, only 26% (6 of 23) were applicable to one or more of the alternative routes. Out of the three added criteria, there was one artificial criteria related to ROW that trumps the importance of the others.

B. Exhibit RH-2 favors existing ROW with only a minimal consideration to residential areas.

The resource criteria from the GPU DQE Project did not include a "New ROW" criterion. Since many of the Wildwood Project alternative routes included a predominance of existing ROW, the New ROW criterion was developed. Measurements were only taken for portions of the routes that are on new or non-existing ROW. (RH-2;Sect. 3-2;p.3-5) The addition of the New ROW criteria ensured that alternative routes having the greatest length of existing ROW would have the lowest environmental impact scores. Routes that were predominantly along existing ROW also had the highest residential concentration. The New ROW criterion was added to unjustly bias Route E to be the preferred route. Over 95% of this route is along existing ROW, hence, easing the Company's burden of acquiring ROW agreements. The SCC must have believed that there are potential new impacts from high-voltage transmission lines on existing subtransmission ROW, as the ROW criterion was NOT part of the GPU DQE Project Environmental Assessment.

C. The highest weighting factor is for the "Commercial/Densely Populated Areas" resource criteria and its source is unclear.

The GPU DQE Study does not use the resource criterion "Commercial/Densely Populated" defined as industrial, commercial, and closely spaced residential development, including apartment buildings and multistory buildings. There is no testimony, as presented in Exhibit RH-2, indicating that this resource criterion was developed and added by GAI. As such, its origin and therefore propriety is

questionable, especially in light of the fact that this grouping implies that the weighting factor for commercial and densely populated areas is equal to industrial areas.

D. The Company's premise that portions of the routes located on existing ROW compile zero points on the environmental impact score is erroneous.

Mr. Houston stated that if you replace an existing subtransmission ROW with a 138 kV line, pole for pole within an existing footprint:

- the impact is nil. (7/11/06;p.294)
- you would have a somewhat different design for the structure (utility pole) as being taller in the Wildwood Project. (7/11/06;p.294)
- there would be little or no impact from construction of the 138 kV line atop the existing distribution system within the footprint of the existing ROW. (7/11/06;pp.298-99)

The GAI study indicated that exclusion of existing subtransmission ROW for the environmental assessment was based on the premise that the portions of the routes that are located on existing electric line ROW are not considered to generate substantially new impacts. (RH-2;Sect. 3.2;p 3-5)

Mr. Houston's testimony regarding impacts "being nil" is not supported by any studies or facts and is simply opinion. Moreover, modifying GAI's original approach in Exhibit RH-2 to now include routes along existing ROW and include only one criterion as selected solely by the Company, demonstrates that there most certainly are substantial new impacts to residents along Route E. Simply including all of the resource criteria in the scoring would result in an alternate route being preferred.

E. The utilization of the resource criteria for the Wildwood Project by the Company was not supported by any data.

The resource criteria utilized in the GAI Environmental Study (Exhibit RH-2) were initially construed for the GPU DQE Transmission Line Project. This project was proposed to traverse hundreds of miles. Mr. Houston indicated over a thousand miles of alternate transmission routes were evaluated for the GPU DQE Study conducted in the early 1990s, and a fairly large group of people from across Western and Central Pennsylvania were assembled to be able to establish weighting criteria. (7/11/06;p.296) He

further speculated that the Pittsburgh area where the GPU DQE line exited the Beaver Valley Station and also in Harrisburg where it went into the transmission substation were very similar suburban communities to those around the Wildwood Project. (7/11/06;p.297)

Most of the proposed route was very rural and sparsely populated. Upon comparison with the GPU DQE project, the Wildwood Project is substantially different as the route proposed is to extend approximately five miles, predominately through suburban residential neighborhoods. Mr. Houston stated that the development of the weighting factors for the GPU DQE study represented "the best example of stakeholders across the area that would potentially be impacted coming together and establishing weighting criteria or weighting values for the various criteria that we utilize to evaluate alternatives." (7/11/06;p.296) He stated that GAI has used those weights, along with additional weights that have been established by GAI staff, to evaluate lines that have been routed not only for the Company but also for General Public Utilities, Metropolitan Edison and Penelec. (7/11/06;p.296) Mr. Houston stated that GAI had a "staff of urban planners, biologists, environmental specialists, engineers who specialize in construction and the issues of reliability, as well as historians and archeologists, review the weights that we propose to use from the GPU DQE Siting Criteria Council (SCC) to make sure they are applicable." (7/11/06;p.297)

The interests of the stakeholders in the proposed GPU DQE Project of the early 1990s are vastly different than those impacted by the Wildwood Project in 2006. In the GPU DQE Study, the two areas characterized as similar to the Wildwood Project represent only a very small fraction of the total GPU DQE line which is hundreds of miles long, primarily through rural and sparsely populated areas. No specific reasoning was given to explain why the resource criteria from a substantially larger, more complex and topographically diverse project should be used for comparison with the Wildwood Project. Thus, Exhibit RH-2 is flawed and should be dismissed.

F. The regulatory record does not support the exclusion of existing subtransmission ROW from the Wildwood Project Environmental Assessment Chapter 57, Subchapter G, Commission Review of Siting and Construction of Electric Transmission Lines.

The original intent of the Subchapter G regulation for the siting and review of electric transmission lines was built on the premise that these lines can present a substantial impact as compared to low voltage electric lines. The regulatory record is clear that the intent of the Commission was to protect the public interest in the siting of high-voltage transmission lines. They clearly recognized the potential impact of a high-voltage line versus low-voltage lines and to protect the public interest, proposed and later adopted regulations to address and manage these impacts. Exclusion of 3 kV or 23 kV from any proposed 138 kV impact study was not what the Commission intended when adopting Subchapter G.

The regulatory record supports the conclusion that the proposed Routes for the Wildwood Project are not exempt from the formal application process. All studies must assess the impact of the proposed high-voltage line for the entire length of each route. None of the potential exemptions that would allow the Company to file a letter of notification apply to the Wildwood Project. The Company's funding of Exhibit RH-2 & RH-3 along with the filing of the application indicates that they support this conclusion. There are no other opportunities for exempting proposed high-voltage lines from impact studies in Subchapter G. As the entire length of each of the proposed alternative routes meets the definition of a high-voltage line and the regulation requires studies to assess the impact of such lines, the entire length must be evaluated.

THE COMPANY DID NOT PROVE BY A PREPONDERANCE OF EVIDENCE THAT IT SHOULD BE GRANTED THE AMENDMENT FOR THE SITING AND CONSTRUCTION OF A 138 kV TRANSMISSION LINE WITHOUT DUE REGARD TO THE DIMINUTION OF PROPERTY VALUES AND AESTHETICS OF THE MUNICIPALITIES IN THE NORTHERN AREA OF ALLEGHENY COUNTY.

A. Detailed cost estimates for Routes A & C were not adequately determined and presented at the Evidentiary Hearings.

At the Public Input Hearings, The Honorable Judge Fred R. Nene instructed the Company to

provide cost estimates for the routes, including construction time and maintenance costs, to be presented at the Evidentiary Hearings scheduled for July 11th (6/28/06,p.261) At the Evidentiary Hearings, Mr. Cass stated "I have a cost for the construction of option E, the line costs, which would be construction costs, of approximately $3.0 million and that would pretty much represent the construction – the total costs. Option A which is not listed, would be, to our knowledge, also about $3 million. This particular estimate was based on similar type per mile costs to construct the line. It is – it has a relatively – there's a large variability in what it actually could be because the line has not been designed yet and so we do not know the exact configurations." (7/12/06;p.631) Regarding Route C, he stated "I have the sum of all of those costs right here and that would be $2 million to do the various civil type things." (7/12/06;p.639)

This testimony clearly demonstrates that a thorough cost analysis of viable alternative routes was not performed, despite Judge Nene's request.

B. Perception on the part of the public that there are health and safety risks associated with living near a high-voltage power line causes a decline in property values.

The complainants would argue that there is a diminution of property value. The Complainants have argued before The Honorable Judge R. Nene and residents of Ross, McCandless and Hampton Townships testified at the Public Input Hearings that there would be a loss of property value. It is a given that having a 75 foot pole(s) in front of and/or on one's property will adversely affect the aesthetics of the property, and thus decrease it's dollar value. Additionally, there is a perception on the part of the public that there are health and safety risks associated with living in near proximity to a high-voltage power line. Common sense dictates that the installation of the 138 kV line will have an adverse affect on the property values of the homeowners. Nowhere have homeowner concerns regarding their property values been addressed by the Company. At the beginning of this process, McCandless and Hampton residents along Route E-1 met with the Company and GAI for informational hearings. After the amended application was filed, Ross Township and McCandless Township residents on the newly selected Route E were not given the same opportunity to meet with the Company and GAI. Had the Company held meetings with these residents, it would have discovered a variety of negative impacts, for example, one resident runs a

daycare center from her home, and would experience a direct negative impact to her livelihood with the installation of this line.

C. The Environmental Impact Study conducted by GAI was flawed.

The studies never took into account the human factor: the adverse effect on human beings, number of children living in the homes along the route, effect on property values, proximity of public schools, churches, recreational facilities, closeness of residences to the proposed lines, and quality of life.

On or about December 2005, the Company commissioned the following revision to the study as shown on the Company's website:

"The weight given to residential areas adjacent to the alternatives on new right-of-way is very high (76.9). For the criteria for which data exist, only commercial/densely populated areas (88.8), institutional complexes (i.e. churches, schools and hospitals) (83.1), and use of non-existing right-of-way (80.0) have higher weights. However, Duquesne Light has re-evaluated the proposed transmission line alternate routes, with the inclusion of residences within 100 feet of the line as an additional evaluation criterion. This reevaluation was conducted to help alleviate the public's concern over the low scores for the Residential Areas Criterion that some alternate routes received." (www.duquesnelightwildwood.info)

While attempting to appease substantial resident concern over the proposed route selection by including residences within 100 feet, the revised study failed to include all of the critical evaluation criteria along existing ROW of the proposed route before tabulating the result. The Company acknowledges that institutional complexes, i.e. churches, schools and hospitals, have higher weight than inclusion of residences, yet a short drive along Thompson Run Road would reveal that the proposed route is adjacent to seven religious institutions (Temple Ohav Shalom, St. Alexander Nevsky, North Hills Community Baptist, North Hills Church of Christ, North Hills Christian Church, Reformed Presbyterian and Young Women's Christian Academy) and a pre-school/day care center. None of these institutions were factored into the calculations and scoring leading to the proposed route selection, further evidencing bias within the original and revised study. The company must revise the report submitted to the

Commission to address all of the facts heretofore mentioned as critical components in line siting evaluation.

The nature of the property at Shady Oak Circle was misclassified in the GAI Study "This route turns westward approximately 2,500 feet following the existing 23 kV line across North Park to Peebles Road", across North Park refers to the Shady Oak Circle residential development. (RH-2;Sect.1;p.8)

Accordingly, Exhibit RH-2 (and its revision) is flawed in its entirety as it was biased by highly subjective criteria and must be re-evaluated immediately before reaching a conclusion on the preferred route selection.

D. The interests of the Company differ vastly from those of its constituents.

The objective of the Commission is safety first, then reliability, then reasonably priced utilities. The Company's selection of Route E as the "preferred" route shows the Company's disregard for the health, safety and welfare of its customers and their families. "Things that we know today -- or that we do not know today may be known in the future and I think that we should be careful in cases of the existing risks if only we can." (Dr. Pawel Kalinski, 7/13/06;p.793)

Route E has the highest potentially adverse human impact, i.e., the second highest number of residences, and recreational facilities, religious institutions, proximity of several public schools and daycare facilities, all of which are adjacent to the proposed route. Further, Route C, while presumed to be more costly, has the least human impact, and as such is a safer route. Dr. Kalinski's, statement of "Human well-being trump the well-being of trout" (7/13/06;p.794) should not be taken lightly. It is obvious that the Company's rationalization for route selection is based predominantly on having existing ROW, while opting to ignore other vital issues. The Company's rationale is solely motivated and controlled by economics and convenience, and sets aside the health, safety and welfare of its customers, who are a captive clientele to the Company, as they have no say whatsoever in using any other electric distributor. Allowing this line to go through is tantamount to the shifting of the economic burden from the Company to the property owners directly impacted along the proposed route.

CONCLUSION

THE COMPLAINANTS RESPECTFULLY REQUEST THAT THE HONORABLE JUDGE FRED R. NENE DENY THE AMENDED APPLICATION OF DUQUESNE LIGHT FOR THE SITING AND CONSTRUCTION OF A 138 kV TRANSMISSION LINE IN HAMPTON, MCCANDLESS AND ROSS TOWNSHIPS, ALLEGHENY COUNTY FOR THE REASONS, ARGUMENTS AND EVIDENCE PUT FORTH BY THE COMPLAINANTS.

THE COMPLAINANTS FIRMLY BELIEVE AND SUBMIT TO THE HONORABLE JUDGE NENE THAT DUQUESNE LIGHT HAS NOT CARRIED ITS BURDEN OF PROOF BY A PREPONDERANCE OF EVIDENCE. THEREFORE, THE AMENDMENT SHOULD BE DENIED AND DISAVOWED.

Respectfully Submitted by,

Mark R. Janosko, MD

Pawel Kalinski, MD, PhD

Oleg Lapets, PhD

Dolores Nypaver

Terence J. Nypaver, PE

Barbara Zaun

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BRIEF ON BEHALF OF THE COMPLAINANTS

CERTIFICATE OF SERVICE

I hereby certify that on this 21st day of September, 2006, I served the foregoing Brief on Behalf of the Complainants in docket A-110150 F0031 upon each party listed below, and upon the Commission by sending the original and nine copies to the Commission by certified U.S. Mail and two copies to Duquesne Light Company and one copy to the Honorable Judge Fred R. Nene.

Respectfully submitted,

Dolores Nypaver

Dolores Nypaver

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Duquesne Light Company
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September 22, 2006

ORIGINAL

Certificate of Mailing

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: *Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County*, Docket No. A-110150 F0031
Mark R. Janosko v. Duquesne Light Company, Docket No. C-20065987
Raymond Jacobs v. Duquesne Light Company, Docket No. C-20066500

Dear Secretary McNulty:

Enclosed for filing are an original and nine (9) copies of Duquesne Light Company's Initial Brief. Copies of the Initial Brief are being served in accordance with Administrative Law Judge Nene's Order Closing Record and Scheduling the Filing of Briefs and Commission Regulations.

Sincerely,

Regina M. Sestak

Regina M. Sestak
Attorney for Duquesne Light Company

Enclosures

cc: All persons listed on the Certificate of Service (with enclosures)

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SECRETARY'S BUREAU

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Before the
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County	)	No. A-110150 F0031
MARK R. JANOSKO, Complainant, v. DUQUESNE LIGHT COMPANY, Respondent	)	No. C-20065987
RAYMOND JACOBS, Complainant, v. DUQUESNE LIGHT COMPANY, Respondent	)	No. C-20066500

INITIAL BRIEF OF APPLICANT/RESPONDENT DUQUESNE LIGHT COMPANY

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INITIAL BRIEF OF APPLICANT/RESPONDENT DUQUESNE LIGHT COMPANY

AND NOW comes Applicant/Respondent Duquesne Light Company (hereinafter "Duquesne Light" or "DLC"), by and through its attorney Regina M. Sestak, and files its Initial Brief in accordance with Administrative Law Judge Fred R. Nene's Order Closing Record and Scheduling the Filing of Briefs dated August 18, 2006:

Statement of the Case

Duquesne Light filed this Amended Application seeking Commission approval of the siting and construction of a high-voltage transmission line in Hampton, McCandless, and Ross Townships, Allegheny County. Commission Regulation 57.75(e), 52 Pa. Code §57.75(e) delineates the factors to be considered in determining an application to site and construct a proposed high-voltage ("HV") transmission line. These factors include: (1) necessity; (2) safety; (3) environmental impact; and (4) available alternatives. As will be discussed more fully below, the evidence of record overwhelmingly supports the need for the proposed line, its safety, and its minimal environmental impact, as well as clearly demonstrating that the proposed route is the best available alternative.

History of Proceedings

On March 4, 2005, Duquesne Light filed its Application for the Siting and Construction of a 4.1 mile 138 kV Transmission Line in Hampton and McCandless Townships, Allegheny County, at Docket No. A-110150 F0031. Copies of the Application or Notice were served in accordance with Commission Regulation 57.74(b) and (c). Copies of the Application were made

available for public examination in accordance with Commission Regulation 57.74(d) by placing them at two public libraries in the area of the proposed line: the Hampton Community Library and the Northland Public Library. DLC Statement No. 6, p. 5; N.T. 14-15.

On or about June 13, 2005, the Commission received and docketed a document concerning the proposed line that was addressed to the Commission's Bureau of Conservation, Economics and Energy Planning and signed by Oleg Lapets. Duquesne Light was not notified that this document had been filed.

On or about July 25, 2005, the Commission received and docketed a copy of a letter concerning the proposed line that was addressed to Duquesne Light's attorney[1] and signed by Pawel Kalinski and others. Duquesne Light was not notified that this letter had been docketed by the Commission.

On or about August 22, 2005, a document concerning the proposed line, signed by Bruce A. Krist and others, was received by the Commission. Duquesne Light was not notified of the filing of this document.

On September 7, 2005, the Commission issued a Notice that an initial prehearing conference was scheduled for October 4, 2006, before Administrative Law Judge Fred R. Nene (ALJ Nene). By Notice dated September 14, 2005, the Commission cancelled the prehearing conference due to the anticipated filing of an Amended Application by Duquesne Light.

On or about September 20, 2005, the Commission received two documents concerning the proposed line on formal complaint forms signed by Terence J. Nypaver and Matthew J. Nypaver. Neither ALJ Nene nor Duquesne Light were notified of these documents.

On or about October 4, 2005, the Commission received a document concerning the proposed line on a formal complaint form signed by Dolores J. Nypaver. Neither ALJ Nene nor Duquesne Light were notified of this document.

On October 6, 2005, Duquesne Light filed its Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless, and Ross Townships, Allegheny County at Docket No. A-110150 F0031. Copies of the Amended Application or Notice were served in accordance with Commission Regulation 57.74(b) and (c). In addition, copies of the Amended Application were made available for public examination at the Hampton Community Library and the Northland Public Library. DLC Statement No. 6, pp. 5-6; N.T. 14-15.

On or about March 13, 2006, the Commission received a document concerning the proposed line on a formal complaint form signed by Mark R. Janosko (hereinafter "Janosko"). Said document was docketed as a formal complaint at Docket No. C-20065987 and served upon Duquesne Light on March 14, 2006. Upon receipt, Duquesne Light notified ALJ Nene that this formal complaint concerned the proposed line and provided a copy to him. N.T. 7-8.

On March 23, 2006, a prehearing conference was held before ALJ Nene. Only Duquesne Light participated. At said conference, ALJ Nene informed Duquesne Light that the Commission had received a number of letters concerning the proposed line which he had not yet seen. ALJ Nene indicated that he would review the letters to determine whether or not they were protests or comments and that he would make said letters available to Duquesne Light.

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[1] Duquesne Light's attorney, assuming that this document was a letter from persons who had been served

N.T. 7. ALJ Nene further indicated that he would consolidate the Janosko complaint with Duquesne Light's Amended Application. N.T. 8.

On April 4, 2006, Duquesne Light filed a timely[2] Answer to the Janosko complaint.

By Prehearing Order dated April 18, 2006, ALJ Nene: (1) amended the caption to read "Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV line in Hampton, McCandless and Ross Townships, Allegheny County;" (2) consolidated the Janosko complaint with the Amended Application; (3) designated as formal protestants Terence, Dolores and Matthew Nypaver; Oleg Lapets; Bruce Krist; Pawel Kalinski, and Anna Wankowicz-Kalinska; (4) noted that public input hearings had been scheduled for June 27 and 28 at the Ross Township Municipal Building; (5) noted that evidentiary hearings had been scheduled for July 11, 12, and 13 at the Pittsburgh State Office Building; (6) provided that Janosko and the formal protestants may present evidence and cross-examine witnesses at the evidentiary hearings as well as testify at the public input hearings; (7) required all expert testimony to be served on the presiding officer and all other parties no later than June 20, 2006; (8) directed Duquesne Light to continue to maintain copies of its Amended Application at the Northland and Hampton Libraries; and (9) directed Duquesne Light to cause the publication of notice of the hearings.

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with a copy of the Notice, responded by letter to its signers.

[2] Commission Regulation 5.61(a) provided that an answer to a formal complaint shall be filed within 20 days after the date of service. However, because the Janosko Complaint was served upon Duquesne Light by mail, Commission Regulation 1.56(b) added three days to this prescribed period.

Duquesne Light caused notice of the scheduled hearings to be published in accordance with Commission Regulation 57.75(a) in the Pittsburgh Post-Gazette and the Pittsburgh Tribune Review on May 11, 2006 and May 18, 2006.

On June 16, 2006, Duquesne Light served its direct expert testimony upon ALJ Nene, Janosko, and the designated participants.

On or about June 19, 2006, the Commission received a document concerning the proposed line on a formal complaint form signed by Raymond Jacobs (hereinafter "Jacobs"). Said document was docketed as a formal complaint at Docket No. C-20066500 and served upon Duquesne Light on June 21, 2006. Duquesne Light provided a copy of the Jacobs Complaint to ALJ Nene.

On or about June 20, 2006, Terence J. Nypaver mailed a document titled "Protestants' List of Experts and Expert Testimony to be Presented at Scheduled Evidentiary Hearings" to ALJ Nene and Duquesne Light's Attorney. Said document did not specifically identify any expert nor did it provide any expert report or testimony.

On or about June 20, 2006, Pawel Kalinski faxed a letter and a document labeled "Testimony of Pawel Kalinski" to ALJ Nene and Duquesne Light's attorney. Said letter indicated that these documents would also be sent by mail; the Testimony, which is not presented in question-and-answer format with line numbers as required by Commission Regulation 5.412(e), indicates that it is based upon Pawel Kalinski's personal experience as an owner of property and his review of scientific articles and web-based information.

Duquesne Light filed a timely Answer and a Motion to Consolidate the Jacobs Complaint with its Amended Application on July 14, 2006.

Public Input Hearings were held at the Ross Township Municipal Building on June 27, 2006 at 1:00 and 7:00 p.m., and on June 28, 2006 at 7:00 p.m.

Evidentiary Hearings were held in a hearing room on the 11th Floor of the Pittsburgh State Office Building on July 11, 2006 at 10:00 a.m.; on July 12, 2006, at 9:00 a.m.; and on July 13, 2006, at 9:00 a.m.

During the Evidentiary Hearing held on July 11, 2006, Barbara Zaun appeared and ALJ Nene, having confirmed that she had filed a protest, permitted her to participate as a formal protestant. N.T. 357. In addition, James Moorehead who was present at the July 12 hearing was permitted to cross-examine. N.T. 508, 515.

ALJ Nene issued an Order Closing Record and Scheduling the Filing of Briefs dated August 18, 2006.

By notice dated September 7, 2006, the Commission indicated that the Jacobs Formal Complaint had been assigned to ALJ Nene.

Proposed Findings of Fact

1. Duquesne Light is a public utility.

2. Mark R. Janosko is an individual residing at 1649 Pin Oak Drive, Pittsburgh, PA 15237. N.T. 91.

3. Terence J. Nypaver and Dolores Nypaver are individuals residing at 1956 Shady Oak Circle, Allison Park, PA 15101. N.T. 166.

4. Matthew Nypaver is an individual residing at 1921 Shady Oak Circle, Allison Park, PA 15101.

5. Oleg Lapets is an individual residing at 1937 Shady Oak circle, Allison Park, Pa 15101.

6. Bruce Krist is an individual residing at 3954 North Monet Court, Allison Park, PA 15101. N.T. 238-239.

7. Pawel Kalinski and Anna Wankowicz-Kalinska are individuals residing at 8977 Ringeisen Road, Allison Park, PA 15101.

8. Raymond Jacobs is an individual residing at 312 Byron Road, Pittsburgh, PA 15237.

9. Barbara Zaun is an individual residing at 8233 Thompson Run Road, Pittsburgh, PA 15237. N.T. 139.

10. Jim Balik is an individual residing at 2154 Coventry Drive, Allison Park, PA 15101. N.T. 116.

11. In addition to providing notice of the proposed line as required by Commission Regulation 57.74, Duquesne Light established a web-site to provide information to the public at http://duquesnelightwildwood.info, met with McCandless Town Supervisors concerning the proposed line on April 20 and September 23, 2005, and participated in two public meetings, on June 8, 2005 in McCandless and on June 22, 2005 in Hampton. DLC Statement No. 6, pp. 5-7.

12. Duquesne Light provides service to its customers through a system that includes transmission lines operating at 345 kilovolts (kV), 138 kV, and 69 kV; subtransmission lines operating at 23 kV and 11.5 kV; bulk supply substations; and distribution substations. DLC Statement No. 1, pp. 2-3; Exhibit HZ-1.

13. Duquesne Light is phasing out its older 4 kV distribution system because it has become obsolete and the unavailability of spare parts requires

some replacement parts to have to be fabricated at high cost. DLC Statement No. 1, p. 2.

14. Duquesne Light is replacing its 4 kV substations with newer 13.2/23 kV substations. DLC Statement No. 1, pp. 2-3.

15. Wildwood Substation is a 4 kV substation that was built in 1938, when the area it serves was less densely populated. DLC Statement No. 1, p. 3; Exhibit RH-2, p. 1-4; N.T. p. 273, 695-697.

16. Wildwood Substation is presently overloaded. DLC Statement No. 1, p. 4; N.T. 273.

17. Additional electrical capacity in the area of Wildwood Substation is supplied by two bulk substations called North Substation and Pine Creek Substation, resulting in compromised reliability due to very long distribution circuits emanating from these bulk supply substations. DLC Statement No. 1, pp. 3-4, 6-7; Exhibit RH-2, p. 1-4.

18. North Substation and Pine Creek Substation are presently either overloaded or at their operating capacity; they can no longer supply the present electrical load in the Wildwood Substation area and the future growth that is expected. DLC Statement No. 1, pp. 4-5; Exhibit HZ-2; Exhibit RH-2, p. 1-5; N.T. 273.

19. Running substations beyond their operating ratings will accelerate loss of life of the equipment and cause premature failure. DLC Statement No. 1, p. 5; N.T. 274.

20. Duquesne Light intends to alleviate the overload on the Wildwood, North, and Pine Creek Substations by replacing the 4 kV Wildwood Substation with a newer higher voltage substation at the same location, which will improve

service to Hampton, McCandless, Ross, and Shaler Townships. DLC Statement No. 1, pp. 4, 6-7; Exhibit RH-2, pp. 1-5, 1-9.

21. Duquesne Light intends to reconfigure the distribution circuits in the area of the Wildwood Substation following its conversion to 23 kV, which will reduce the load on the Pine Creek and North Substations and reduce the lengths of their distribution circuits. DLC Statement No. 1, pp. 5-7.

22. The new substation will require a power supply by means of a 138 kV line connecting it to Duquesne Light's high-voltage transmission system. DLC Statement No. 1, p. 5; N.T. 275.

23. GAI Consultants, Inc. (hereinafter "GAI") is a consulting firm that has sited transmission lines for utilities throughout the eastern part of the United States, including Pennsylvania, and in other nations. N.T. 291-292.

24. Duquesne Light contracted with GAI to conduct a line route study and environmental assessment on a variety of alternative line routes between Wildwood Substation and Duquesne Light's 138 kV transmission circuits Z-55, Z-56, Z-20 and Z-21. DLC Statement No. 5, p. 1, 5; N.T. 307.

25. A GAI team consisting of ecologists, planners, cultural resource specialists, engineers and transmission system planners sited seven alternative routes, identified as Routes A, B, C, D, D/C, E, and E-1. DLC Statement No. 5, p. 5; Exhibit RH-2, pp. viii-xi, 1-3; N.T. 291, 300, 363, 435.

26. Route A is 4.2 miles long and follows Wildwood Road eastward for approximately 7,480 feet to Pennsylvania Route 8 and then continues southward along Route 8 for approximately 13,000 feet to Pine Creek where it crosses east over Route 8. The route continues for 700 feet on new private property right of way (ROW) to the Anvil Products plant, then turns to the southeast for 1,000

feet along an existing sub-transmission line and terminates at a tap of circuit Z-56 at existing Tower #670. Route A would generally be constructed on public ROW. Exhibit RH-2, pp. ix, 1-6, 2-3, 2-4.

27. Route B is 3.1 miles long and follows an existing 23 kV line toward the south for approximately 12,500 feet. At Duncan Avenue, the route continues to the southwest for approximately 3,900 feet following distribution lines along residential streets and taps circuit Z-56 at existing Tower #660. The northern section of Route B would be constructed on the existing 23 kV ROW between Wildwood Substation and Duncan Avenue. The southern section would be constructed on new private property and public ROW. Exhibit RH-2, pp. ix, 1-6, 2-4, 2-5.

28. Route C is 4.5 miles long and exits Wildwood Substation to the south crossing Wildwood Road and proceeds on new ROW for approximately 400 feet over private property before it drops down to the CSX Railroad ROW in the Pine Creek Valley. This route parallels the railroad (in the railroad ROW) for approximately 23,130 feet; a 600-foot section at Mount Royal Boulevard is on new private property ROW. As this route approaches the north circuit (Z-56) of the Cheswick-North line, it proceeds west over existing transmission line ROW for a distance of approximately 400 feet to a tap of circuit Z-56 at existing tower #669. Exhibit RH-2, pp. ix, 1-6, 1-7, 2-5, 2-6.

29. Route D is 3.2 miles long and exits Wildwood Substation toward the west along the south side of the substation access road for approximately 400 feet before turning southward. The route follows an existing 23 kV line along the eastern boundary of North Park for approximately 5,200 feet with an additional 600 feet on new private property ROW to Hemlock Drive. It

continues southward for approximately 3,100 feet following existing distribution lines to the end of Laurel Lane; this segment includes a 600-foot section of new private property ROW over the Wildwood Golf Club. This route then proceeds approximately 6,000 feet on new private property ROW before crossing Ferguson Road. The route then follows existing distribution lines for 350 feet. After crossing Linwood Drive, it then proceeds 900 feet over new public ROW, on a paper street behind houses along Coventry Drive, turning east for 300 feet on new private property ROW to a tap of circuit Z-56 at existing tower #656. Exhibit RH-2, p. x; Exhibit RH-3, pp. 1-7, 2-6, 2-7.

30. Route D/C is a combination of Route D and Route C, following Route D in the approximate northern half and Route C in the approximate southern half of its alignment. This 4.1-mile long route exits Wildwood Substation toward the west along the south side of the substation access road for approximately 400 feet before turning southward. This route follows an existing 23 kV line along the eastern boundary of North Park for approximately 5,200 feet with an additional 600 feet on new private property ROW to Hemlock Drive. It continues southward for approximately 3,100 feet following existing distribution lines to the end of Laurel Lane; this segment includes a 600-foot section of new private property ROW over the Wildwood Golf Club. Past the south end of Laurel Lane, the route leaves the distribution line ROW, and proceeds on new private property ROW approximately 1,700 feet to connect with Route C along the CSX Railroad line. The route parallels the railroad for approximately 10,100 feet, including a 600-foot section at Mount Royal Boulevard on new ROW. As the route approaches the Cheswick-North line, it proceeds west approximately 400 feet over transmission line ROW to a tap of

circuit Z-56 at existing tower #669. Exhibit RH-2, pp. x-xi, 1-7, 1-8, 2-7, 2-8, 2-9.

31. Route E is 4.8 miles long and exits Wildwood Substation toward the west along the south side of the substation access road for approximately 400 feet on existing ROW. The route follows an existing 23 kV line along the eastern boundary of North Park for approximately 3,900 feet. The route turns southwest for approximately 1,900 feet following the existing 23 kV line across North Park and Hemlock Drive. The route turns westward following along the southern boundary of North Park for approximately 1,600 feet, where it enters McCandless Township. The route continues for another 1,000 feet to Peebles Road. The route then follows Peebles Road to the southwest for 2,400 feet, and turns southward following the existing 23 kV line along existing ROW for 1600 feet. It then generally follows Ringeisen Road and Duncan Avenue for 2,000 feet to the major intersection of Thomson Run Road, Duncan Avenue and Ferguson Road. The route continues along the 23kV line southward following Thomson Run Road for 5,100 feet where it enters Ross Township. The route continues to follow Thomson Run Road for another 5,400, then turns east for 200 feet on Duquesne Light property to a tap of its Crescent-North 138 kV circuit Z-20 at existing Tower #647-1, inside the North Substation. Other than the last 200 feet on Duquesne Light property, the route is primarily on ROW owned by Duquesne Light. DLC Statement No. 5, pp. 8-9; Exhibit RH-2, pp. xi, 1-8, 2-9, 2-10.

32. Route E-1 is 4.1 miles long and follows Route E to the major intersection of Thomson Run Road, Duncan Avenue and Ferguson Road. Route E-1 then diverges from Route E, turning southeast and following an existing 23

kV distribution line along Ferguson Road for approximately 3,200 feet where it enters back into Hampton Township, then continues to follow Ferguson Road for another 2,300 feet. The route then turns southward for 350 feet along an existing 23 kV distribution line on Linwood Road and then follows a paper street behind houses along Coventry Drive on new construction on public ROW for 900 feet. It then turns east on new construction across a proposed 85-foot private property ROW for 300 feet to a tap of circuit Z-56 at existing tower #656. Exhibit RH-2, pp. xii, 1-8, 1-9, 2-10, 2-11.

33. For each of the alternative routes, GAI surveyed the immediate construction ROW, the area adjacent to the proposed ROW, and a four-mile wide corridor, including the area two miles on either side of the centerline of the ROW, for potential impacts by means of field reconnaissance, recent aerial photographs, topographic maps, literature review, and contacts with federal, state and local government agencies. Exhibit RH-2, p. 1-3

34. GAI used 23 resource criteria based upon Commission regulations and traditional environmental assessment criteria to evaluate the seven alternative routes; these criteria were accorded weights established by the Siting Criteria Council for the GPU-DLC 500 kV Transmission line Project; GAI did not consider the relative costs of the alternatives. DLC Statement No. 5, pp. 6-7; Exhibit RH-2, pp. xii, 1-3, 3-1, 3-2 through 3-11; Exhibit RH-3, p. 3; N.T. 293-298, 308-9, 314-317, 336-337; 624, 630.

35. Based upon these 23 weighted criteria, GAI ranked the seven alternatives in the following order: E, E-1, A, C, B, D/C, and D, and determined that Route E is the most suitable alternative. Statement No. 5, p. 7; Exhibit RH-3, p. 4.

36. GAI identified Routes E, E-1, C and A as environmentally acceptable and suitable as licensable alternative routes. Exhibit RH-3, p. 4; N.T. 303, 704.

37. GAI conducted a further evaluation of the alternative routes that considered the number of dwelling units within 100 feet of centerline and ranked the seven alternative routes in the following order: E, A, E-1, C, D/C, B, and D. DLC Statement No. 5, pp. 7-8; Exhibit RH-3, pp. 5-6; N.T. 300-303, 327, 351.

38. Duquesne Light chose between the available alternatives based upon GAI's environmental impact study, constructability, reliability, and health and safety; comparative cost was not a factor. N.T. 433-435, 458, 662-663, 703-711, 714, 716-744.

39. "Constructability" includes being allowed to construct under agreements, ROWs, etc., and field conditions that impact the feasibility of building the line. N.T. 665-667, 719-720.

40. ROWs owned by Duquesne Light are preferable to road ROW, since construction and vegetation management are limited to the width of the road ROW. N.T. 667-668, 705-706.

41. Health issues include EMF concerns; safety issues include the safety of workers and the public during the construction of the line and after the line is in place. N.T. 668-676, 718-722.

42. Reliability of the proposed line is critical because it will be the only source of supply to the upgraded Wildwood Substation. N.T. 275-277, 282, 451.

43. Duquesne Light did not select Route A as the preferred route because of constructability and reliability concerns. N.T. 458.

44. Constructing the line on Route A would create problems with traffic control along Route 8, which could not be completely shut down during installation of hundreds of poles, and with being able to maintain service to customers while the line would be being built. N.T. 665-669, 719.

45. Duquesne Light did not compute the cost of Route A prior to selecting a preferred route; however, at the request of ALJ Nene following the Public Input Hearings, Duquesne Light estimated that the cost of constructing the 138 kV line on Route A would be roughly equivalent to the cost of constructing it on Route E, or about $3 million. N.T. 631-632.

46. Route A is located primarily on road ROW along Wildwood Road and Route 8, where Duquesne Light would not have the right to install steel poles, nor the right to trim vegetation or install anchors beyond the road ROW without acquiring additional private property ROW. N.T. 458-459, 475-476.

47. In road ROW, a public utility has, at most, a defeasible privilege to occupy the road and could therefore be required to relocate facilities at its own expense. N.T. 525.

48. Duquesne Light did not select Route C as the preferred route; subsequent to the Public Input Hearings, at ALJ Nene's request, Duquesne Light studied Route C further. N.T. 443, 477, 481.

49. Route C is not a suitable alternative because of reliability problems, including: (i) Route C would necessitate having to place facilities along or in a trout stream in a flood-prone area on a railroad ROW, with no right to trim adjacent vegetation; (ii) vertical hillsides that may need to be supported and on which there are trees that could fall onto the line, causing damage to equipment and service interruptions; (iii) problems with access to portions of Route C that

would require Duquesne Light to repair or rebuild bridges; and (iv) additional specific problem areas such as a box culvert, curves in the route, and a portion of the line that would have to be built in Pine Creek, necessitating approvals from the Department of Environmental Resources (DER). N.T. 443-4, 518, 523, 530, 638-652, 700-703, 710; Exhibits PC-11 through PC-15.

50. Reliability problems arising from placing a transmission line in a railroad ROW owned by CSX include: (i) CSX's reluctance to permit parallel occupancies; (ii) CSX's unwillingness to grant permanent rights and willingness to grant only a license revocable on 30 days; (iii) the fact that no immediately available alternative route exists to relocate a high-voltage transmission line from the railroad ROW, which runs between privately owned property, and Commission approval would be required if the line is to be relocated more than 500 feet of the centerline of the Commission-approved route; (iv) CSX's requirement that facilities be placed at the edge of the railroad ROW with not less than 25 feet clearance to the nearest track rail; (v) concerns about whether or not the railroad ROW grants CSX the right to permit Duquesne Light to install transmission facilities; and (vi) the Commission's lack of authority to require CSX to modify its requirements because, with limited exceptions, railroads fall within the jurisdiction of federal rather than state government. N.T. 518-524, 526, 527-530, 537.

51. Duquesne Light did not compute the cost of Route C prior to selecting a preferred route; however, at the request of ALJ Nene following the Public Input Hearings, Duquesne Light estimated that the cost of constructing the 138 kV line on Route C would be approximately $5,600,000. N.T. 632-633; Exhibit PC-10.

52. Duquesne Light initially selected alternative E-1 as the preferred route. DLC Statement No. 6, p. 3; N.T. 435.

53. Duquesne Light subsequently determined that Route E was superior to Route E-1 because the final 1.3 miles of Route E-1 would be located on road ROW by permit, which has inherently more reliability problems because a permit confers only a defeasible privilege, which may require Duquesne Light to have to relocate the facilities at its own cost, and because of vegetation management restrictions. DLC Statement No. 6, pp. 2-3; N.T. 436, 478, 525, 747-748.

54. Route E is preferable because it is located almost entirely on existing ROW owned by Duquesne Light. DLC Statement No. 6, pp. 3-5; Exhibits TS-2, TS-3; N.T. 526.

55. Between September 1923 through March 1931, Duquesne Light obtained ROWs for approximately 2.8 miles of Route E that: (i) generally allow for conveying or transmitting electric current for any and all purposes; (ii) provide the right to trim or remove vegetation; and (iii) do not specify an easement width. DLC Statement No. 6, p. 4; Exhibits TS-2, TS-3; N.T. 478-480.

56. Duquesne Light obtained a 50-foot ROW on an approximately 0.9-mile long portion of Route E dated December 31, 1969, for transmission and/or distribution systems that also grants the right to trim or remove vegetation. DLC Statement No. 6, p. 5; Exhibits TS-2, TS-3.

57. Duquesne Light obtained a license to install and maintain facilities on approximately 0.6 miles of Route E by agreement with Allegheny County dated January 18, 1983. DLC Statement No. 6, p. 5; Exhibits TS-2, TS-3.

58. Duquesne Light obtained verbal permission to construct facilities on a 0.3-mile long section of Route E in Allegheny Memorial Park on July 1, 1930; however, recognizing that such verbal permission may not be legally enforceable, it is important to note that this section of the proposed line is on a public road and so could be constructed in the road ROW. DLC Statement No. 6, p. 5; Exhibits TS-2, TS-3.

59. The remainder of Route E is either in road ROW (0.1 miles) or on property owned by Duquesne Light (0.2 miles).

60. Duquesne Light modified Route E as proposed by GAI to supply it through a dedicated line at North Substation rather than terminating at a tap on circuit Z-20; this modification improves reliability by making the proposed line dependent upon a bulk substation with more than one source of supply rather than a single circuit that may be subject to service interruptions. N.T. 275-277, 439, 441, 708-709.

61. The proposed line will be engineered to comply with the National Electrical Safety Code (NESC), Duquesne Light Design Criteria and T & D Standards, and applicable regulations of state agencies, including the Commission, PennDOT, and the Department of Environmental Resources. DLC Statement No. 2, pp. 2-4.

62. The estimated cost of the proposed line is $2,900,000. DLC Statement No. 6, p. 7.

63. Duquesne Light anticipates starting work on the proposed line in mid-2007, to be completed in the first quarter of 2008, with a proposed in-service date of April 1, 2008. DLC Statement No. 6, p. 7.

64. The proposed line will have three phase conductors and one or two shield wires; each phase conductor will be an 853.7 kcmil 24/13 Aluminum Conductor Alloy Reinforced Conductor (ACAR) and each shield wire will be a #1 AWG Aluminum Wire Equivalent (AWAC) shield wire. DLC Statement No. 2, p. 5.

65. The proposed line will replace an existing 23 kV line and will be supported primarily by wood or steel poles, with some wood h-frames. DLC Statement No. 2, pp. 5, 7; Exhibits PC-1, PC-2, and PC-3.

66. The final location of each pole will: (i) be determined using a PLC-Cadd transmission line design program; (ii) seek a balanced looking line with pole spacing approximately the same as the existing pole line; and (iii) be designed to minimize the impact from transmission structures on property. DLC Statement No. 2, pp. 6-7.

67. During construction, Duquesne Light will avoid service interruptions to customers except as necessary to protect the safety of its workers, and will coordinate traffic obstructions with local police departments to achieve minimal impact. DLC Statement No. 2, p. 8.

68. After construction, Duquesne Light will install reflective pole bands along Thompson Run Road to improve visibility of the poles. N.T. 672-674, 682-683, 725-728.

69. In response to concerns raised by property owners in Shady Oak Circle, Duquesne Light has offered to relinquish its existing ROW in exchange for a grant of ROW at the rear of the properties by the Shady Oak property owners, provided all affected property owners agree; the proposed relocation

would be within 500 feet of proposed Route E and, as a result, would not require additional Commission proceedings. N.T. 524-525, 527.

70. William H. Bailey (hereinafter "Bailey"), who holds a Ph.D. in Neuropsychology from City University of New York, has studied the health effects of electric and magnetic field (EMF) for 25 years and has authored or presented more than 50 scientific papers on EMF and related subjects, as well as holding academic positions and serving as advisor to state, federal, and international agencies. DLC Statement No. 4, pp. 1-4; Exhibit WHB-1; N.T. 546-547.

71. Bailey explained that voltage produces an electrical field, measured in "volts per meter" ("V/m"), while current produces a magnetic field, measured in "milligauss" ("mG"). DLC Statement No. 4, p. 2.

72. Anything that uses electricity creates EMF, including small appliances. N.T. 390-391, 552.

73. Raising voltage causes current to go down, which produces lower magnetic fields for the amount of power being transmitted. N.T. 285, 378-9.

74. David W. Fugate (hereinafter "Fugate") of Electric Research & Management, Inc. (ERM) calculated the impact of the proposed line on EMF. DLC Statement No. 3, p. 1, Exhibit DWF-2.

75. Fugate, who holds a Ph.D. in electrical engineering from Carnegie Mellon University, has over 16 years of professional experience in modeling and measuring EMF, including consulting for utilities, hospitals, universities, architects and government organizations. DLC Statement No. 3, p. 1; Exhibit DWF-1.

76. Fugate's calculations show that the electric field will increase due to the increased operating voltage of the proposed line; however, electric field calculations are generally higher than actual measurements because electric fields are attenuated by nearly all objects, including telephone/cable lines, trees, and nearby structures. DLC Statement No. 3, pp. 3-4; Exhibit DWF-2, pp. 1-18, 21; DLC Statement No. 4, p. 6, N.T. 377, 413-5.

77. Operation at a higher voltage reduces magnetic fields; also, location of distribution circuits on the same poles underneath the transmission circuit reduces the magnetic field levels because of the mutual 'cancellation' of the fields from both circuits on the same structure. DLC Statement No. 4, p. 9.

78. Fugate's calculations show that the magnetic fields produced by the proposed 138 kV line will be similar or lower in magnitude than those produced by the existing 23 kV line. DLC Statement No. 3, p. 3; Exhibit DWF-2, pp. 1-18, 21; DLC Statement No. 4, p. 7, N.T. 380-384.

79. A comprehensive review of relevant research performed for the World Health Organization and published in 2002, as well as Bailey's review of more recent studies, found scientific evidence inadequate to establish a statistical association between EMF and the risk of any disease, with the exception of a weak statistical association between magnetic fields and childhood leukemia. DLC Statement No. 4, pp. 10-15; N.T. 547-599, 605-606.

80. Bailey offered the opinion that, if magnetic fields were in fact found in the future to create health problems, as Fugate's calculations demonstrate, the installation of the proposed 138 kV line along Route E would result in lower levels of magnetic field exposure to residents. N.T. 619, 622.

81. Fugate's calculations show that 40 feet from centerline of the proposed line, audible noise will be essentially inaudible in fair weather and relatively quiet during wet weather. DLC Statement No. 3, p. 4; Exhibit DWF-2, p. 19, 21.

82. Fugate's calculations show that radio interference will be well below the estimated interference threshold in fair weather and essentially right at the threshold in foul weather at 40 feet from centerline of the proposed line; interference is not expected or would affect only weak signals at the low end of the AM band and would not affect emergency radio communications. DLC Statement No. 3, pp. 4, 5; Exhibit DWF-3, pp. 19-22.

83. Fugate's calculations show that television interference is low enough that interference is not expected at 40 feet from centerline of the proposed line. DLC Statement No. 3, p. 4; Exhibit DWF-3, pp. 19-22.

84. Fugate's calculations indicate that interference at Ham radio frequencies is possible during wet weather, but not expected. DLC Statement No. 3, pp. 5-6.

85. Fugate's calculations indicate that EMF levels resulting from the proposed line will be lower than typical recommended safety levels for medical implant devices established by the American Conference of Governmental Industrial Hygienists (ACGIH); nevertheless, information from the manufacturer and medical experts should be used to ensure safe operation. DLC Statement No. 3, p. 6; DLC Statement No. 4, p. 8; N.T. 389.

86. There are no federal or Pennsylvania standards for EMF exposure; standards for new transmission lines at maximum loading have been set by New

York and Florida, and the fields from the proposed line would be well below these standards. DLC Statement No. 4, p. 8.

87. The highest electric and magnetic field levels associated with the proposed line are well below limits on public exposure recommended by the International Committee on Non-ionizing Radiation Protection and the International Committee on Electromagnetic Safety. DLC Statement No. 4, pp. 4, 9; N.T. 559.

Statement of the Issues Involved

I. Whether there is a present and future necessity for the proposed line in furnishing service to the public.

II. Whether the proposed line meets applicable safety standards.

III. Whether the proposed line impacts the environment and, if so, whether the proposed route and design will minimize the impacts.

IV. Whether the proposed route is the best choice among available alternatives.

Summary of the Argument

I. Due to population growth in the area served by its Wildwood, North, and Pine Creek substations, Duquesne Light's existing distribution system has reached its operating limit. To meet the present and anticipated future increased demand, it is necessary to upgrade the Wildwood Substation from 4 kV to 23 kV, which necessitates siting and constructing a 138 kV transmission line to provide power to the upgraded substation.

II. The proposed line meets applicable safety standards. The line will comply with the National Electric Safety Code. Additional steps will be

taken to minimize traffic hazards. Magnetic fields will decrease or remain the same if the proposed line is constructed.

III. A comprehensive environmental impact study and other evidence of record demonstrates that the proposed line will have little, if any impact upon: (i) Land use, (ii) Soil and Sedimentation, (iii) Plant and wildlife habitats, (iv) Terrain, (v) Hydrology, (vi) Landscape, (vii) Archeologic areas, (viii) Geologic areas, (ix) Historic Areas, (x) Scenic areas, and (xi) Scenic Rivers. Duquesne Light made reasonable, prudent efforts to mitigate and/or minimize the proposed line's impact upon the environment.

IV. Evidence of record demonstrates that the proposed route is the best available alternative.

Argument

I. THE PROPOSED LINE IS NECESSARY TO MEET PRESENT AND FUTURE NEEDS

The Public Utility Code grants the Commission the power and authority to supervise and regulate all public utilities doing business in the Commonwealth, and to make such regulations as may be necessary or proper in the exercise of its power or for the performance of its duties. 66 Pa. C.S.A. §501. To this end, the Commission has adopted regulations that govern the siting and construction of HV transmission lines. 52 Pa Code §57.71 et seq. A high voltage transmission line is defined as "an overhead electric supply line with a design voltage greater than 100,000 volts." 52 Pa. Code §57.1. Commission Regulation 57.75(e) delineates criteria to be considered in determining whether or not to grant an application for permission to site and

construct a HV transmission line. The first criteria is set forth in Commission Regulation 57.75(e)(1) which reads:

> At hearings held under this section, the Commission will accept evidence upon, and in its determination of the application it will consider, *inter alia*, the following matters:
> (1) The present and future necessity of the proposed HV line in furnishing service to the public. . . .

Section 1501 of the Public Utility Code, 66 Pa.C.S.§1501, requires public utilities to furnish and maintain adequate, efficient, safe, and reasonable service and facilities. This service is further required to be reasonably continuous, without unreasonable interruptions or delays.

In re: Letter of Notification of Metropolitan Edison Company in Lieu of Application for Construction of 115 kV High Voltage Electric Transmission Line Having a Proposed Route of Approximately 5.45 Miles or Less and Situated in the Townships of Windsor, York, and Spring Garden, York County, Docket No. A-110300 F0063, applied the 57.75(e)(1) criterion in light of the requirements of Section 1501 as follows:

> The current facilities are near their load limits and the area is rapidly expanding. The proposed rebuild of the line from its existing 69 kV to 115 kV is necessary in order to increase load capacity in a rapidly expanding York County area where facilities are currently near their load limits . . . Essentially, the rebuild of the existing 69 kV to 115 kV is necessary in order to provide efficient and reliable electric service for the current and future needs of . . . customers. Initial Decision, 9, 11; adopted by Final Order entered June 20, 1994.

Similar to Metropolitan Edison Company, Duquesne Light established present and future necessity by showing that its 4 kV Wildwood Substation is presently overloaded. DLC Statement No. 1, p. 4; N.T. 273. Pine Creek and North Substations, which supply additional capacity to the Wildwood Substation area, are presently overloaded or at their operating capacity. In addition, long

distribution lines from the Pine Creek and North Substations negatively impact reliability due to increased exposure to potential service interruption causes. DLC Statement No. 1, pp. 3-4, 6-7; Exhibit RH-2, p. 1-4.

Duquesne Light intends to replace Wildwood Substation with a newer higher voltage substation at the same location, after which the distribution circuits will be reconfigured, reducing the load on Pine Creek and North Substations and reducing the length of the distribution circuits. DLC Statement No. 1, pp. 4-7; Exhibit RH-2, pp. 1-5, 1-9. The proposed line will provide power to the upgraded Wildwood Substation, which will permit it to meet present and future load needs in the area.

II. THE PROPOSED LINE IS SAFE

Commission Regulation 57.75(e)(2) reads:

> At hearings held under this section, the Commission will accept evidence upon, and in its determination of the application it will consider, *inter alia*, the following matters:
>
> . . .
>
> (2) The safety of the proposed HV line. . . .

In Barnesfeld v. Pennsylvania Public Utility Commission, 155 Pa.Cmwlth. 225 (1993), the Commonwealth Court examined the issue of safety, quoting Commission Regulation 57.76(a):

> *The Commission will not grant the application unless it finds and determines as to the proposed HV line:*
>
> . . .
>
> *(2) That it will not create an unreasonable risk of danger to the health and safety of the public.*

Any determination of whether or not the proposed line will create an unreasonable risk of danger to the health and safety of the public must begin with an examination of Commission Regulations on the issue. Commission Regulation 57.193(a) reads:

> An electric distribution company shall install and maintain its transmission facilities, and ensure that its transmission facilities are operated, in conformity with the applicable requirements of the National Electrical Safety Code. An electric distribution company shall operate its transmission facilities in conformity with the operating policies, criteria, requirements and standards of NERC and the appropriate regional reliability council or successor organizations, and other applicable requirements.

Duquesne Light designed the proposed line to Duquesne Light standards for transmission line design, which meet or exceed the National Electric Safety Code ("NESC"). DLC Statement No. 2, p. 3.

The Commission has consistently approved high-voltage transmission lines to be designed, constructed, operated and maintained in accordance with NESC. In re: Letter of Notification of PPL filed pursuant to 52 Pa. Code Chapter 57 with respect to the construction of the Cumberland 138/69 kV Transmission Line, Docket No. A-110500 F0297, Order adopted at Public Meeting held June 2, 2000 and entered June 2, 2000. In re: Letter of Notification of West Penn Power Company d/b/a Allegheny Power filed pursuant to 52 Pa. Code Chapter 57 for construction of a 731-foot 138 kV transmission line in South Fayette Township, Allegheny County, Pennsylvania, Docket No. A-111250 F0097, Order adopted at Public Meeting held July 8, 2004 and entered July 12, 2004. In re: Letter of Notification of Metropolitan Edison Company, a FirstEnergy Company filed pursuant to 52 Pa. Code Chapter 57 for construction of a 115 kV high voltage electric transmission line, from existing 986 line, to proposed Harley-Davidson Substation situated in the Township of Springettsbury, York County, Pennsylvania, Docket No. A-110300 F0100, Order adopted at Public Meeting held November 7, 2002 and entered November 7, 2002. In re: Letter of Notification of Pennsylvania Electric Company, d/b/a

FirstEnergy, filed pursuant to the construction of a 230 kV High Voltage Electric Transmission Line, from the existing ETP Line to North Meshoppen Substation situated in the Township of Auburn, Susquehanna County, Commonwealth of Pennsylvania, Docket No. A-110400 F0042, Order adopted at Public Meeting held September 25, 2002 and entered September 25, 2002. In re: Application of West Penn Power Company, d/b/a Allegheny Power filed pursuant to 52 Pa. Code Chapter 57, for the construction of the proposed Cabot-Saxonburg 138 kV Transmission Line located in Jefferson Township, Butler County, Pennsylvania, Docket No. A-111250 F0296, Order adopted at Public Meeting held June 24, 2004 and entered June 25, 2004. In re: Letter of Notification of Duquesne Light Company filed pursuant to 52 Pa. Code Chapter 57 with respect to the 138 kV Transmission Line Segment identified as the Cheswick-Wilmerding Tap to Evergreen Substation, Docket No. A-110150 F0024, Order adopted at Public Meeting held March 28, 2002 and entered April 1, 2002. In re: Letter of Notification of Duquesne Light Company filed pursuant to 52 Pa. Code Chapter 57 for the siting and construction of two segments of a 138 kV Transmission Line in Findlay Township, Allegheny County, Pennsylvania, Docket No. A-110150 F0028, Order adopted at Public Meeting held June 26, 2003 and entered June 26, 2003. In re: Letter of Notification of Pennsylvania Power Company, filed pursuant to 52 Pa. Code Chapter 57 with respect to extending a 138 kV high voltage electric transmission line tap from American Transmission Systems, Inc.'s Crossland-Sharon 138 kV Transmission Line located at Pennsylvania Power Company's Clark Avenue Switching Substation to the Winner Steel Substation, located in the City of Sharon, Mercer County, Commonwealth of Pennsylvania, Docket No.

A-110450 F0020, Order adopted at Public Meeting held October 2, 2003 and entered October 2, 2003. In re: Application of PPL Electric Utilities Corporation Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, with Respect to the Proposed Yorkana-Otter Creek 230 kV Transmission Line to be Constructed in Lower Windsor, Windsor and Chanceford Townships, York County, Pennsylvania, Docket No. A-110500 F0325, Order adopted at Public Meeting held April 17, 2003 and entered April 17, 2003. In re: Letter of Notification of West Penn Power Company d/b/a Allegheny Power, to reconductor and reconstruct the existing Van Kirk Junction-Gordon 138 kV transmission line located in Canton and North Franklin Townships, Washington County, Pa., Docket No. A-111250 F0092, Order adopted at Public Meeting held August 29, 2002 and entered August 29, 2002. In re: Letter of Notification of West Penn Power Company d/b/a Allegheny Power, to locate and construct the Ronco Loop 500 kV transmission line located in German Township, Fayette County, Pa., Docket No. A-111250 F0093, Order adopted at Public Meeting held September 25, 2002 and entered September 25, 2002.

Duquesne Light's Principal Engineer Paul Cass testified that the proposed line will be engineered to comply with the NESC, Duquesne Light Design Criteria and T&D Standards, and applicable regulations of state agencies, including the Commission, PennDOT, and the Department of Environmental Resources. DLC Statement No. 2, pp. 2-4. In addition, during construction of the line, all traffic obstructions will be coordinated with the respective police departments to achieve minimal impact. DLC Statement No. 2, p. 8. After the line has been constructed, reflective pole bands will be

installed along Thompson Run Road to improve pole visibility. N.T. 672-674, 682-683, 728.

Duquesne Light also examined the current health issues associated with HV transmission lines. Writing in 1991, the Commission noted:

> Although the Commission has not independently investigated the issue of EMF, it is well apprised of current scientific thought on this subject. We, therefore, cannot agree with the Petitioners' conclusion that EMF from high voltage transmission lines represents an acknowledged health risk. The overwhelming consensus in the technical community, after review of available epidemiological and scientific studies, is that there is no conclusive evidence of the adverse health effects associated with EMF from electric transmission lines. Re Emergency Petition of Non-Noticed Property Owners, No. A-110500 F.055, Order adopted at Public Meeting on March 6, 1991; entered March 8, 1991; 74 Pa.P.U.C. 542, 1991 WL 476317 (Pa.P.U.C.)

Additional studies in the intervening years have failed to produce conclusive evidence of adverse health effects associated with EMF from electric transmission lines. William H. Bailey, an expert on the health impact of EMF, testified:

> Over the past 30 or 40 years there have been many reviews of those scientific literature on the question about whether electric or magnetic fields might have adverse health effects including effects on cancer. None of the scientific reviews have concluded, in fact, that there is a causal relationship between exposure to electric and magnetic fields and any type of cancer, including sources of these fields from transmission lines. N.T. 551.

Even if magnetic fields should be determined to be harmful to human health, Fugate explained that increasing voltage from 23 kV to 138 kV along the proposed route would not increase, and over much of the route would actually decrease, the magnetic field:

> The power that's transmitted is the product of the voltage times the current and so actually going to a higher voltage allows you to have a lower current and thus lower magnetic fields for a given amount of power that you're transmitting. N.T. at 378.

In the present case, it is clear Duquesne Light has considered the complexities of safety issues involved in the design, construction, and maintenance of HV lines. It has specifically looked into the possible health risks of the proposed line by eliciting the expert opinions of Dr. Bailey and Fugate. Clearly, the proposed line does not create an unreasonable risk of danger to the health and safety of the public.

III. THE PROPOSED LINE'S IMPACT ON THE ENVIRONMENT IS MINIMAL

Section 57.75(e)(3) reads in pertinent part:

> In determination of the application, the Commission will consider:
> . . .
> (3) The impact and efforts which have been and will be made to minimize the impact, if any, of the proposed HV line upon the following:
>
> (i) Land use.
> (ii) Soil and sedimentation.
> (iii) Plant and wildlife habitats.
> (iv) Terrain.
> (v) Hydrology.
> (vi) Landscape.
> (vii) Archeologic areas.
> (viii) Geologic areas.
> (ix) Historic areas.
> (x) Scenic areas.
> (xi) Wilderness areas.
> (xii) Scenic rivers.

Duquesne Light made reasonable, prudent efforts to mitigate and/or minimize the proposed line's impact upon the environment through choosing Route E, the route deemed to have the lowest environmental impact by GAI.

The Commission examined the environmental aspect of constructing transmission lines in In re: Letter of Notification of PPL filed pursuant to 52 Pa. Code Chapter 57 with respect to the construction of the Cumberland 138/69 kV Transmission Line, Docket No. A-1105000 F0297, Opinion and Order

adopted at Public Meeting held June 2, 2000 and entered June 2, 2000. The Commission approved the construction, reasoning that:

> The proposed project will have no significant environmental impacts. The project will not impact any unique geological, scenic or natural areas. No wetlands, water bodies or streams will be affected by the proposed line. No threatened or endangered plant or animal is found within the study area of the proposed line. No significant woodland vegetation will be removed for the proposed line. Id. at 3.

Similarly, the proposed line (Route E) is not expected to impact unique geological, scenic or natural areas. The portion of the proposed line in North Park will follow existing ROW. The proposed line will cross Pine Creek and an unnamed tributary of Pine Creek, but no impact is expected because the route is adjacent to existing roadways. No threatened or endangered plant or animal is found within the study area, with the exception of the snow trillium, which the proposed line is not expected to impact. Minimal woodland vegetation will be impacted by the proposed line. Exhibit RH-2, pp. 2-1 through 2-58.

Removal of other vegetation along the line will be performed in a responsible manner. Andrew Berchin (hereinafter "Berchin"), a Supervisor of Forestry for Duquesne Light, has a degree in environmental conservation and is a certified arborist and a certified utility arborist. N. T. 492. Berchin testified that in a new line installation, Vegetation Management reviews every single tree on the line and makes the determination whether the tree will be removed or trimmed. This tree-by-tree assessment will be made by Berchin or another Duquesne Light forester, a Subcontractor, and the property owners. N. T. 493-4. Duquesne Light will attempt to work with property owners regarding vegetation removal. N. T. 494.

The proposed line clearly meets Commission environmental requirements.

IV. THE PROPOSED ROUTE IS THE BEST AVAILABLE ALTERNATIVE

The final consideration under Section 57.75(e) is the availability of alternative routes. 52 PA Code §57.75(e)(4) reads:

> At hearings held under this section, the Commission will accept evidence upon, and in its determination of the application it will consider, *inter alia*, the following matters:
>
> . . .
>
> (4) The availability of reasonable alternative routes. . . .

Duquesne Light Company contracted with GAI for an environmental assessment and line route study in order to make an informed decision regarding the best route for the proposed line. The objective of the route selection process was to site an environmentally sound, economically feasible, and licensable route between the Wildwood Substation and Duquesne Light Company's 138 kV transmission lines. Exhibit RH-2, p. 3-1. The study identified seven possible routes, labeled Routes A, B, C, D, D/C, E and E-1, and determined that Routes E, E-1, C and A were environmentally acceptable and suitable as licensable alternative routes.

Duquesne Light chose between the available alternatives based upon the environment, constructability, and reliability. Comparative cost was not considered. N.T. 434-5. Reliability is a key factor in the choice of route because the proposed line will be the only source of power to the Wildwood Substation. N.T. 275-277, 282, 451.

GAI found Route E to be the most suitable alternative from an environmental perspective. *See* Argument Section III, *supra*, at p. 31.

Route E is superior to the other alternatives in terms of constructability because it is located primarily on ROWs currently owned by Duquesne Light, giving Duquesne Light the legal right to install and maintain the line. The ROW agreements along Route E generally grant Duquesne Light the right to transmit or convey electric power, and contain no limitation on voltage. Exhibit TS-3. The utility, as an easement holder, has the right to reasonably expand its use of the ROW, so long as the expansion is within the purpose of the original easement and does not infringe past the scope of the ROW. N. T. 526; Bodman v. Bodman, 456 Pa. 442, 321 A.2d 910, 912 (1974). In Hoch v. Philadelphia Electric Co., 341 Pa. Super. 598, 492 A.2d 27 (1985), recognizing the right of a utility to expand its ROW, the Superior Court noted that whether construction of a 500 kV transmission line exceeded the scope of the original ROW was an issue of fact. In West Penn Power Company v. Bruni, 36 Pa.Cmwlth. 116, 387 A.2d 1316 (1978), the Commonwealth Court determined that West Penn Power's replacement of wooden poles carrying 12 kV and 25 kV lines with steel poles that carried a 138 kV line did not exceed the rights granted in the right of way agreement. *See also* Bowers v. Texas Eastern Transmission Corp., 148 Pa.Cmwlth. 500, 611 A.2d 1350 (1992); In Re Matter of Condemantion of Premises of D.R.E. Land Development Inc., 149 Pa. Cmwlth. 290, 613 A.2d 96 (1992); Florek v. Department of Transportation, 89 Pa.Cmwlth. 29, 493 A.2d 133 (1985); Zettlemoyer v. Transcontinental Gas Pipeline Corp., 540 Pa. 337, 657 A.2d 920 (1995).

Finally, Route E is superior to the other alternatives because the ROWs permit vegetation management, which will improve reliability. Exhibit TS-3. The Federal Energy Regulatory Commission discussed the impact of vegetation

management on transmission line reliability in Midwest Independent Transmission System Operator, Inc. and American Transmission Systems, Inc., Docket No. ER06-800-000:

> Electric transmission owners and operators conduct vegetation management, *i.e.*, tree trimming, vegetation pruning and removal, etc., to prevent physical contact between transmission lines and nearby vegetation that could cause a transmission line to fail. Such failures precipitated the August 14, 2003 power blackout that affected large portions of the Midwest and Northeast United States and Ontario, Canada. The report of the joint U.S.-Canada Power System Outage Task Force (Task Force) that investigated the causes of this blackout and how to reduce the possibility of future outages identified a failure to adequately trim trees and manage vegetation in transmission rights-of-way as one of the primary causes of the blackout. Id. at 1.

Similarly, the Commission acknowledged the importance of vegetation management to transmission line reliability in its Proposed Rulemaking Order adopted at Public Meeting held April 20, 2006, and entered April 21, 2006, at Docket No. L-00040167:

> In particular, new information arising out of the blackout on August 14, 2003 formed a basis for evaluating the need for inspection and maintenance standards. One of the causes of the blackout was the failure to adequately manage tree growth along transmission lines. . . Proposed Rulemaking for Revision of 52 Pa. Code Chapter 57 pertaining to adding Inspection and Maintenance Standards for the Electric Distribution Companies, p. 2.

Reliability is further enhanced because Route E allows Duquesne Light to terminate the line at a tap in North Substation, which has more than one power source. N.T. 275-277, 439, 441, 708-709. The other alternative routes tap transmission circuits, which makes them vulnerable to loss of power should the transmission circuit experience a service interruption. Exhibit RH-2, pp. ix-ix, 1-6 through 1-8, 2-3 through 2-11.

Route A is a less suitable alternative because Duquesne Light is limited to the road right of way along Wildwood Road and Route 8, which adversely

impacts both construction and maintenance. Route A would also require Duquesne Light to obtain new private property ROW for 700 feet. Exhibit RH-2, pp. ix, 1-6, 2-3, 2-4. Traffic on Route 8 would not be completely stopped to install poles, which could compromise worker and driver safety and increase the risk of service interruptions to customers. N.T. 665-669, 719. Use of steel poles would not be permitted and the installation of anchors would be limited to the road ROW unless Duquesne Light obtained additional rights. N.T. 458.

Joann Noble (hereinafter "Noble"), Assistant General Counsel to Duquesne Light Company, explained that public utilities are permitted to locate their facilities along road ROWs through a process of applying for and receiving a permit of occupation, but their rights are limited. Delaware River Joint Comm'n. Case, 342 Pa. 119, 19 A.2d 278 (1942). Utilities can be forced to relocate facilities at their own expense. N. T. 525. *See also* Philadelphia Electric Co. v. Commonwealth, 311 Pa. 542, 166 A. 892 (1933); Equitable Gas Co. v. Pa. P.U.C., 65 Pa. Cmwlth. 388, 442 A.2d 419, 421 (1982).

Route C is not constructable because it is located almost entirely in a railroad ROW along a trout-stream in a flood-prone area; it would also require Duquesne Light to obtain new private property ROW for 600 feet. Exhibit RH-2, pp. ix, 1-6, 1-7, 2-5, 2-6; N.T. 443-4, 523. Noble explained that the railroad would not grant permanent rights but, rather, Duquesne Light would be subject to relocation upon 30-day notice by the railroad. N. T. 526. Further, CSX imposes restrictions upon utilities, such that Duquesne Light would be required to place its facilities at the edge of the railroad ROW, at least 25 feet from the nearest track rail. N.T. 521-524; Exhibit JNC-1.

Paul Cass (hereinafter "Cass"), a civil engineer, and Thomas P. Schmitt (hereinafter "Schmitt"), an electrical engineer, described problems they observed along Route C, including: (i) four bridges that would require extensive work before Duquesne Light could use them to access facilities within the railroad ROW; (ii) vertical hillsides that may need to be supported and on which there are trees that could fall onto the line, damaging equipment and interrupting service; and (iii) portions of the line that would have to be built in Pine Creek, which would require DER approval. N.T. 638-652, 700-703, 710, Exhibits PC-11 through PC-15.

Schmitt testified that he, along with Cass and another Duquesne Light employee, Robert Stojanovic, initially chose Route E-1 as the proposed route. N. T. 433, 435. However, they subsequently changed their selection to Route E because of reliability concerns after Duquesne Light's Vegetation Management Department looked at Route E-1 and determined that Duquesne Light does not have the right to trim the trees adequately beyond the road ROW. N. T. 436. :

Route E is clearly the most suitable alternative for Duquesne Light to furnish adequate, efficient, safe and reasonable service that is reasonably continuous and without unreasonable interruption.

Proposed Conclusions of law

1. The Public Utility Commission has jurisdiction to determine this matter. 66 Pa. C.S. §501.
2. Public utilities are required to furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and to provide service that is reasonably continuous and without unreasonable interruptions or delay. 66 Pa.C.S. §1501.

3. Commission Regulations 57.71 through 57.77 govern the siting and construction of high voltage transmission lines.
4. Commission Regulation 57.75(e) sets forth criteria that must be met in order for the Commission to approve the siting and construction of a high voltage transmission line.

Proposed Ordering Paragraph

The Amended Application of Duquesne Light is hereby approved.

Conclusion

For the reasons set forth above, it is clear that the proposed line is necessary, is safe, has minimal environmental impact, and is the best of the identified alternatives.

Respectfully submitted

Regina M. Sestak
Attorney for Applicant/Respondent
Duquesne Light Company

CERTIFICATE OF SERVICE

I hereby certify that I have this day served true copies of the Initial Brief of Applicant/Respondent Duquesne Light Company in accordance with the Order Closing Record and Scheduling the Filing of Briefs upon:

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Pennsylvania Public Utility Commission
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Dated this 22nd day of September, 2006.

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October 13, 2006

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Certificate of Mailing

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: *Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County*, Docket No. A-110150 F0031
Mark R. Janosko v. Duquesne Light Company, Docket No. C-20065987
Raymond Jacobs v. Duquesne Light Company, Docket No. C-20066500

Dear Secretary McNulty:

Enclosed for filing are an original and nine (9) copies of Duquesne Light Company's Reply Brief. Copies of the Reply Brief are being served in accordance with Administrative Law Judge Nene's Order Closing Record and Scheduling the Filing of Briefs and Commission Regulations.

DOCUMENT FOLDER

Sincerely,

Regina M. Sestak

Regina M. Sestak
Attorney for Duquesne Light Company

Enclosures

cc: All persons listed on the Certificate of Service (with enclosures)

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Before the
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Duquesne Light Company for the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County	)	No. A-110150 F0031
MARK R. JANOSKO, Complainant, v. DUQUESNE LIGHT COMPANY, Respondent	)	No. C-20065987
RAYMOND JACOBS, Complainant, v. DUQUESNE LIGHT COMPANY, Respondent	)	No. C-20066500

REPLY BRIEF OF APPLICANT/RESPONDENT DUQUESNE LIGHT COMPANY

REPLY BRIEF OF APPLICANT/RESPONDENT DUQUESNE LIGHT COMPANY

AND NOW comes Applicant/Respondent Duquesne Light Company (hereinafter "Duquesne Light" or "DLC"), by and through its attorney Regina M. Sestak, and files its Reply Brief in accordance with Administrative Law Judge Fred R. Nene's Order Closing Record and Scheduling the Filing of Briefs dated August 18, 2006:

PRELIMINARY MATTER

By Prehearing Order dated April 18, 2006, Administrative Law Judge Fred R. Nene (hereinafter "ALJ Nene") designated the following individuals as formal protestants: Terence, Dolores and Matthew Nypaver; Oleg Lapets; Bruce Krist; Pawel Kalinski, and Anna Wankowicz-Kalinska. On or about March 13, 2006, Mark R. Janosko filed a document with the Commission concerning this matter that was docketed as a formal complaint at Docket No. C-20065987. At the evidentiary hearing held July 11, 2006, ALJ Nene permitted Barbara Zaun to participate as a protestant. On or about September 21, 2006, Mark R. Janosko (hereinafter "Janosko"), Pawel Kalinski (hereinafter "Kalinski"), Bruce Krist (hereinafter "Krist"), Barbara Zaun (hereinafter "Zaun"), Oleg Lapets (hereinafter "Lapets"), Terence Nypaver, and Dolores Nypaver, filed their initial brief, which they titled "Brief on Behalf of the Complainants." Because only one of the named filers is in fact a Complainant, they are referred to collectively herein as Protestants.

STATEMENT OF FACTS

At Page 1 of their Brief, Protestants assert that Duquesne Light contracted with GAI Consultants to complete a Line Routing Study on the projected environmental impacts to the selected route, as well as six alternate routes. This assertion is misleading in that it makes it appear that Duquesne Light had already chosen the proposed route and alternatives before contracting with GAI Consultants, Inc. (hereinafter "GAI"). In fact, GAI also sited the seven alternative routes, identified as Routes A, B, C, D, D/C, E, and E-1. *See* Proposed Finding of Fact No. 25, DLC Initial Brief, p. 9.

At Pages 1-2 of their Brief, Protestants make various assertions concerning actions of the Town of McCandless and Hampton Townships which, except for the Hampton Township meeting on June 22, 2005 [DLC Statement No. 6, p. 7], are not supported by competent evidence of record.

COUNTER-STATEMENT OF THE ISSUES

Protestants present four unnumbered issues couched in the language of appeal, asserting that Duquesne Light "erred" in its "holding." For the sake of clarity, Duquesne Light will identify the unnumbered issues by Roman numerals I through IV, and counter-state each of them below:

I. Whether significant health risks are associated with the proposed construction of the 138 kV electrical line on the Wildwood Project?

II. Whether the proposed line will increase service reliability?

III. Whether the resource criteria and weighting are appropriate for the 138 kV Wildwood Project?

IV. Whether the preponderance of the evidence supports the siting and construction of the proposed line?

ARGUMENTS

Introduction

Throughout their Arguments, Protestants assert various facts that are purportedly based upon evidence of record. As a preliminary matter, it is necessary to address both the weight to be accorded to these "facts" and the manner in which they are presented.

As the party seeking Commission approval of the siting and construction of a high-voltage transmission line, Duquesne Light is the proponent of a rule or order within the meaning of Section 332(a) of the Public Utility Code, 66 Pa.C.S.A.§332(a), *which reads:*

> Except as may be otherwise provided in Section 315 (relating to burden of proof) or other provisions of this part or other relevant statute, the proponent of a rule or order has the burden of proof.

> 'Burden of proof' imports the duty of finally establishing the existence of a certain fact or set of facts by evidence which preponderates to a legally required extent. Se-Ling Hosiery v. Margulies 364 Pa. 45, 70 A.2d 854(Pa.1950).

Once the existence of a fact or facts has been established by prima facie evidence, the burden shifts to the adverse party to produce evidence of at least coequal value.

> When, during the course of a proceeding, a prima facie case has been established, the burden of rebutting that prima facie case shifts to the adverse party, Baumel v. Travelers Insurance Co. 279 F.2d 780(C.A.2 1960), and the adverse party may, by the production of evidence, rebut the prima facie case against him, satisfy the burden, and restore it to the original party. Re Carr's Estate 371 Pa. 520, 92 A.2d 213 (Pa. 1952).

The criteria for the content and form of briefs is set forth in Commission Regulation 5.501. One of the criteria involves referencing the evidence of record:

> (a) Briefs must contain the following:
>
> . . .
>
> (2) Reference to the pages of the record or exhibits where the evidence relied upon by the filing party appears. 52 Pa. Code §5.501(a)(2).

In several instances, which will be discussed more fully below, Protestants have failed to reference record pages or exhibits, making it unreasonably difficult for Duquesne Light to formulate its response.

As will be discussed more fully below, Respondent established the facts necessary to support Commission authorization to site and construct the proposed line, while Protestants failed to produce evidence of at least coequal value.

Counter-Statement of the Arguments

Protestants present four unnumbered statements in bold capital letters, each followed by several sub-parts labeled with letters of the alphabet. For the sake of clarity, Duquesne Light has identified the Protestants' unnumbered issues by Roman numerals and will similarly

identify Protestants' unnumbered statements by Roman numerals I through IV, assigning I to the statement on Page 3 of Protestants' Brief, II to the statement on Page 7, III to the statement on Page 8, and IV to the statement on Page 12. Assuming that these statements are meant to define the subject matter that follows, Duquesne Light will counter-state each statement before replying to the material that follows it. Duquesne Light will also counter-state each subpart labeled with letters of the alphabet.

Counter-Statement I:
NO SIGNIFICANT HEALTH RISKS ARE ASSOCIATED WITH THE PROPOSED 138 KV LINE

Counter-Statement A. Electric and magnetic fields (EMF) and high voltage (hV) lines have not been proven to cause cancer

As discussed more fully in Duquesne Light's Initial Brief, the Commission has adopted regulations that govern the siting and construction of HV transmission lines. 52 Pa Code §57.71 et seq. Commission Regulation 57.76(a)(2) provides that the Commission will not grant an application unless it finds and determines that the proposed hV line will not create an unreasonable risk of danger to the health and safety of the public. This section of Protestants' Brief focuses on the health aspect and, as will be discussed more fully below, misstates the evidence of record.

At page 3, Protestants misconstrue the testimony of Duquesne Light's witness William H. Bailey, Ph.D. ("Bailey") at N.T. 548 regarding alternating current magnetic fields being a 2b category carcinogen, making it appear that Bailey acknowledged that alternating current

magnetic fields are a recognized cause of cancer. In fact, Bailey explained:

> They [the International Agency for Research in Cancer ("IARC")] did not, however, classify it [alternating current magnetic fields] as a probable carcinogen or a known carcinogen. So, the classification of 2b just means that its possible or conceivable that there could be a relationship, but no assessment as regarding the causality should be imputed to that. N.T. 549

Protestants assert at Page 3 that Bailey stated that from the IARC assessment of the evidence, magnetic fields may cause cancer. This misconstrues Bailey's testimony concerning conclusions drawn by the IARC panel on which he served or other IARC panels:

> But the evidence did not convince us, nor any of the other expert panels, that the weight of the evidence was sufficient to conclude that, in fact, there was a causal relationship. We don't know what the basis for that association is and there are very few known risk factors for childhood leukemia and there are many efforts going on around the world to find those risk factors. N.T. 606.

Protestants assert at Page 3 that Bailey acknowledged the Kabuto article[1] showed an association for one major type of leukemia with magnetic fields of 4 milligauss or above. While Bailey did acknowledge that this is what the Kabuto article said, he questioned the study's validity on many bases, including the low number of cases and controls. N.T. 550.

Protestants' assertion at Page 3 that Bailey acknowledged the Neutra summary[2] "found evidence of a possible relation between magnetic field exposure and childhood leukemia" overstates Bailey's testimony. In

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[1] *See* N.T. 549-550, 573-583.
[2] *See* N.T. 557-558.

fact, Bailey stated that the employees of the California Department of Health Services, who prepared the summary on the basis of a literature review, "felt that the evidence suggested the possibility that there was a relationship." N.T. 557.

Protestants also assert that Bailey acknowledged the Draper article[3] showed an association between childhood leukemia and proximity at birth to high voltage power lines. This misstates Bailey's testimony, which was:

> All that article really studied was the relationship between the distance at birth between a group of children with various types of cancer and the control group of children, as to how far they lived from high voltage transmission lines. N.T. 547.

Further, Bailey pointed out that "the authors did not have measurements of magnetic fields and made no specific attempt to relate the study to magnetic fields or electric fields from transmission lines." N.T. 547.

Protestants assert at Page 4 that Bailey acknowledged that the Feyching article[4] "showed an association to exposure to magnetic fields from high-voltage power lines and childhood leukemia." This misstates Bailey's testimony:

> What they report is that there was an association based upon a few number of cases and controls with childhood leukemia. . . . However, during that whole period of time, there were only 38 cases of childhood leukemia studied and the vast majority of those subjects-- in fact, all but seven – had

[3] *See* N.T. 547.
[4] *See* N.T. 554-557.

> exposures below the upper level where they saw an association.
> . . . But even at the time it came out, there were numerous questions that were raised: Why was it that when they calculated exposure based upon the current – historical current flowing in power lines they saw this association, but when they took measurements of the magnetic fields in the residences, the association weakened or disappeared. In further analysis, this association was only present during the half of the time period that they studied and not throughout the whole period.
>
> Also, the association was present in areas outside of Stockholm, the main city, but when they analyzed those cases and controls within the city of Stockholm, the association disappears.

Protestants assertion at Page 4 that Bailey agreed that the Kabuto study included thousands of participants misstates the evidence. On the contrary, Bailey testified that only a small number of potential control subjects were actually interviewed. N.T. 573-574.

Protestants' assertion that Bailey agreed that all the studies were published in respected health journals subject to peer review is contrary to the evidence. In fact, Bailey discussed only the International Journal of Cancer and the British Medical Journal in his testimony. N.T. 563-564.

Protestants' assertion at Page 4 that Bailey acknowledged at N.T. 584 that the Draper and Kabuto studies had a larger number of total subjects compared to the studies IRAC had reviewed misstates the evidence. Bailey's testimony at N.T. 584 concerns only the Draper study, concerning which he testified:

> It has, as you correctly stated, a larger number of total subjects, but the number – we don't know what the number of subjects are who have exposure to magnetic fields. . .
> Because they were not measured, unlike the previous studies

in which they attempted to estimate or measure the magnetic field exposure. N.T. 584.

Protestants' assertion at Page 4 that Bailey admitted at N.T. 589 that the Kabuto study reported an association of ALL (acute lymphoblastic leukemia) to EMF strength mistakes Bailey's testimony. His testimony was that "the Kabuto study reported an association with electromagnetic field." N.T. 589.

Protestants' assertion at Page 4 that Bailey admitted that there are no accepted animal models for ALL is directly contrary to the evidence. In fact, Bailey testified in response to a question from Protestant Kalinski:

> Q. Have any of the studies been performed in the model acute lymphoblastic leukemia? I don't think the model exists, I just want an answer to my question.
> A. I don't know of an exact model to acute lymphoblastic leukemia. N.T. 591.

The fact that Bailey said he does not know of a model is not the same as saying that no model exists. In response to a further question by Kalinski, Bailey testified:

> Q. Would you agree with me that there are no mouse models for acute lymphoblastic leukemia, yes or no?
> A. No, and referencing my prior answers – [at which point Bailey was cut off by Kalinski]. N.T. 594.

The conclusions set forth in the final paragraph of Page 4 are not supported by competent evidence of record. Rather than citing evidence in support of their position, Protestants have taken portions of Bailey's testimony out of context, making it appear to say what it does not, or

completely misstated his testimony. All competent evidence of record clearly demonstrates that the proposed line would not pose an unreasonable health risk due to EMF.

Counter-Statement B. Population density does not adversely impact Route E's suitability

Protestants assert at Page 5 that "GAI does not recognize this area of Pennsylvania as having a dense population, comparing it to urban areas." Protestants reference Table A-1, Exhibit RH-3 at the end of the paragraph, but nothing in said table supports this assertion.

Protestants then go on to speculate about a series of possibilities, such as hazardous construction, risk to workers, engineering challenges, expense, etc. that are not based upon competent evidence of record. They assert that Duquesne Light witness Paul Cass (hereinafter "Cass") estimated pole construction costs along Route C at two and a half million dollars, but no such testimony appears at the cited transcript pages, 632-633. In fact, Cass estimated that the cost of constructing the proposed line on Route C would be $5,600,000.00. Exhibit PC-10. They also take a portion of Cass's testimony out of context to assert that, in terms of constructibility, Routes A, C, and E were "all okay, and not just okay, but equally okay." In fact, Cass explained that this had been true of Routes A, C, E and E-1, when it was assumed that Duquesne Light could construct the proposed line on an existing railroad bed in the railroad right of way on Route C or, as Cass put it, "until we got off the railroad

bed and had to go into the creek." N. T. 704-705. As discussed more fully in DLC Initial Brief, Proposed Finding of Fact No. 50, pp. 16, 30, the right of way (hereinafter "ROW") owner, CSX, requires parallel constructions to be located as close to the edge of the railroad ROW as possible, at least 25 feet from the nearest rail. N. T. 522-523; Exhibit JNC-1.

Protestants further characterize the existing ROW as "(4 kV of 23 kV **Not 138 kV**). This is directly contrary to the evidence of record because none of the existing ROWs specify 4 kV or 23 kV. *See* Exhibit TS-3.

Protestants suggest, at Page 5, "it would be prudent to opt for one of the less populated routes. . . other acceptable routes should be examined much more closely. . ." As discussed more fully in Duquesne Light's Initial Brief, pp. 29-31, 33, and as will be discussed more fully below, Duquesne Light did examine the available alternative routes in a manner that was both systematic and thorough. Even when population was factored in, Route E remained the best available alternative. *See* Proposed Finding of Fact No. 37, DLC Initial Brief, p. 14; Exhibit RH-3; pp. 5-6; N. T. 300-303, 327, 351.

Counter-Statement C. Duquesne Light explored other environmentally acceptable routes in good faith

Protestants begin this section of their Brief, at Page 6, with the statement, "The Company has not explored other environmentally acceptable routes in good faith." No evidence of record, however,

supports this assertion. In fact, all competent evidence of record supports the opposite conclusion. Even Protestants admit in the same paragraph that, "GAI prepared a meticulous environmental impact study in *painstaking detail exploring all seven initial routes.*"

Protestants fault Duquesne Light for not providing cost estimates until ordered by the Court. However, as Duquesne Light witness Thomas Schmitt (hereinafter "Schmitt") explained, comparative cost was not considered in choosing the proposed route. N. T. 434. Duquesne Light therefore had no reason to prepare detailed cost analyses of the alternate routes.

As discussed more fully in DLC Initial Brief at page 33, Duquesne Light chose between the available alternatives based upon the environment, constructability, and reliability; comparative cost was not considered.

Protestant's assert at Page 6 that, "Testimony by the Company's system planners and engineers, however, did not have the same level of thoroughness and echoed a level of development usually associated with preliminary stages of an engineering project of this scope and complexity." Protestants have not supplied a reference to any part of the record for this assertion, apparently because it is unsupported by any evidence of record.

Protestants fault Duquesne Light witness David W. Fugate (hereinafter "Fugate") for not having measured EMF on other 138 kV

lines in Duquesne Light's system. Fugate did say that he had not done such measurement for this study of the proposed line. N. T. 393-396. However, he explained that:

> Q. And just by way of background, when you calculate these field levels, do you sometimes find in practice that when you go out and actually measure, the actual measurement differs from your calculation?
> A. Oh, yes, quite a bit, and that's something to keep in mind with the calculations in general, that they're representative of a certain condition and the electric and the magnetic fields depend on a wide range of factors and so they're basically representative...
>
> With respect to electric fields, they depend on the voltage of the phase conductors and the height and the configuration of phase conductors. In general when we go out and measure the electric fields, they're relatively stable because the voltages don't change on the lines, but the other thing that we do find is that generally nearby structures, other phone and cable shielded lines or shrubbery and trees and things like that will tend to reduce the fields when you go under and measure them. So generally what that says is that our calculations are fairly conservative in that they tend to overestimate the electric field that's actually going to be there with the magnetic field.
>
> If I could just elaborate on it, why its difficult to hit right on is again because there are a number of factors, but the biggest one for magnetic fields, unlike electric fields, which are relatively constant because of the constant voltage, the magnetic field from the power line depends on the load currents flowing at the time and loads vary, just as Homer Zucconi testified, there are cycles through the day, there are seasonal cycles and things like that and so the actual magnetic field that you would measure depends on the loads that are being carried at the time you would make the measurements and oftentimes you're making measurements in locations where the exact currents are not metered, so you're estimating the currents and things like that .
>
> One final thing, because they vary so much, you tend to talk about magnetic fields in a statistical sense. In the graph you will see an average and a peak where the average is kind of representative of what it would be over a long-term. The peak is kind of toward the maximum end of what you would see for a very brief period of time. N. T. 376-378.

Protestants assert that "obtaining [actual measured EMFs] would be judicious." However, Fugate did actually measure EMF at the existing facilities at locations along the proposed route. He did not, and could not, measure the proposed line because it does not exist. Instead, he calculated electric and magnetic fields for anticipated peak and average conditions. N. T. 376; DLC Statement No. 3, pp. 1-2. In addition Fugate calculated EMF for the maximum potential peak load were the Wildwood Substation in the future to operate at its ultimate long-term maximum capacity of 30 MVA. N. T. 276, 384-5; Exhibit DWF-3.

It is not clear how Protestants reached their characterization of Fugate's calculations as a "lack of preparedness" that "indicates the Company never seriously considered the other routes." Certainly, it is not supported by any competent evidence of record.

Counter-Statement II:
THE PROPOSED LINE WILL INCREASE SERVICE RELIABILITY

Counter-Statement A. Although a failure of the proposed line would affect customers served through Wildwood Substation, reliability would be enhanced by the proposed line

The proposed line will be the only source of power to the Wildwood Substation. N. T. 282, 451. However, Protestants completely misconstrue the evidence of record at Page 7 when they assert:

> [W]ith the proposed HV line construction on Route E, this "ring system" would not be implemented. Therefore, the only way to maintain reliability would be to reduce the risk of falling trees, vehicular accidents, equipment malfunctions and equipment failures. Finally, without a redundant system,

failure resulting in residential power outages will affect more customers of the Company fed from the new Wildwood Substation.

Wildwood Substation is a distribution substation; it is not a bulk supply substation that would be part of Duquesne Light's ring system. Duquesne Light's witness Homer R. Zucconi (hereinafter "Zucconi") used Exhibit HZ-1 to illustrate the ring system which includes all of Duquesne Light's bulk supply substations which have two or more 138 kV lines feeding into them. N. T. 275-276. Wildwood Substation is a distribution substation, fed through a tap on the ring system. N. T. 451-452.

It is not clear why Protestants, while objecting to Duquesne Light building one 138 kV line in their area, nevertheless fault Duquesne Light for not building an additional 138 kV line to provide a redundant power supply to Wildwood Substation. They assert that, without a redundant system, failure resulting in residential power outages will affect more customers fed from the new Wildwood Substation. This assertion is purely speculative, unsupported by any competent evidence of record.

As set forth more fully in DLC Initial Brief, pp. 25-26, the proposed line will provide power to the enhanced Wildwood Substation, enhancing reliability in the area.

Counter-Statement B. Although a portion of Route E follows Thompson Run Road, it remains the most appropriate available alternative

Protestants assert that a "considerable portion" of Route E goes along Thompson Run Road, which they characterize as "heavily traveled."

In fact, the 4.9 mile long proposed line follows Thompson Run Road for 10,500 feet. Exhibit RH-2, p. 2-9. Protestants cite Cass's testimony concerning traffic concerns on Thompson Run Road at Page 7, while ignoring his proposal to enhance pole visibility through the use of reflective bands and being proactive with the various municipalities in terms of pole placement. N. T. 673-674.

Protestants fault Duquesne Light at Page 7 for not presenting "traffic studies" into evidence. However, traffic studies are not required by the Commission in the siting and constructing of an HV line. If Protestants believed that traffic studies were necessary, they had the opportunity to have traffic studies conducted and presented into evidence They failed to do so.

Protestants' assertion concerning Route E potentially having more problems related to reliability than Routes A or C is unsupported by any competent evidence of record. In fact, the evidence of record clearly indicates that Route E presents the best alternative in terms of reliability. *See* DLC Initial Brief, pp. 33-37.

Counter-Statement C. The construction of the proposed line along Route E will not require a widening of the existing ROW; it may require removal of mature trees thus creating a noticeable visual environmental impact

No competent evidence of record supports Protestants' assertion that the construction of the proposed line along Route E will require a widening of the existing ROWs. This assertion may be based upon a misunderstanding of testimony provided by Duquesne Light witness Joann

Noble Choder (hereinafter, "Choder"), who testified about Duquesne Light's right to reasonably expand the use of a ROW. N. T. 531-532. *See* also DLC Initial Brief, p. 34.

Protestants assert at p. 8 that tree removal and trimming will cause a "noticeable negative visual environmental impact." Duquesne Light addressed the issue of environmental impact in its Initial Brief, pp. 31-33. Under Section 57.75(e)(3), (vi) Landscape appears to be the only term that could conceivably encompass "noticeable negative visual environmental impact." However, vegetation management has been regarded as part of a utility's service, and therefore within the Commission authority to regulate, since West Penn Power Company v. Pennsylvania Public Utility Commission, 578 A.2d 75 (Pa.Cmwlth. 1990):

> Section 102 of the Code, 66 Pa. C.S. §102, defines the word "service" as follows: Used in its broadest and most inclusive sense, includes *any and all acts* done, rendered, or performed, and any and all things furnished or supplied, and any and all facilities used, furnished, or supplied by public utilities, ... (Emphasis added.)
> Thus, the section clearly indicates that the utility's "service" is not confined to the distribution of electrical energy, but includes "any and all acts" related to that function.

Protestants quote portions of the testimony of Duquesne Light's witness Andrew Berchin (hereinafter "Berchin") at Page 8 concerning tree trimming, crowning and removal that may be necessary to maintain reliability of the proposed line. Berchin, a certified arborist and certified utility arborist, further testified that removal of vegetation along the line will be performed in a responsible manner after a tree-by-tree assessment

that will involve the property owner. *See* DLC Initial Brief, p. 32; N.T. 492-494.

Counter-Statement III:
GAI PROPERLY APPLIED RESOURCE CRITERIA AND WEIGHTING FACTORS

Protestants fault GAI for failing to address vegetation management on the existing ROW as part of its study, but ignore the explanation provided by Duquesne Light's witness, GAI Environmental Studies and Planning Department Manager Robert Houston (hereinafter "Houston"):[5]

> ...[I]f you replace pole for pole within an existing footprint, then essentially the impact is nil because you have - - with the exception of perhaps some side trimming or some minor vegetation removal, you wouldn't be imposing a new land use or a new facility in areas where they currently do not exist. N. T. 294.

Protestants make the assertion at Page 8 that, "ROWs will need to be adjusted in accordance with 138 kV line standards," but do not cite any evidence of record in support of this assertion. Further, it is not clear what this assertion is intended to mean. The existing ROWs speak for themselves [*See* Exhibit TS-3]; no evidence of record indicated any plan to "adjust" them, with the possible exception of Schmitt's explanation that a 0.3-mile long section of Route E in Allegheny Memorial Park by "verbal permission" could remain in its current location on road ROW. DLC Statement No. 6, p. 5.

[5] DLC Statement No. 5, p. 1.

Counter-Statement A. The resource criteria for Exhibit RH-2 are suitable to the seven alternative routes

Protestants cite no authority for their assertion at page 9 that, "A majority of the resource criteria for Exhibit RH-2 was not suitable to the seven alternative routes of the Wildwood Project." If Protestants intend this assertion to rest upon Section 3-6 of Exhibit RH-2, they are misstating the evidence. In fact, this section notes that:

> Following data acquisition, it was found that 17 of the criteria to be used for comparing the alternative routes did not occur on or in proximity to any of the routes.

In other words, as part of its study, GAI determined that none of the proposed routes would impact 17 specific resource criteria, and was therefore able to eliminate these criteria from further consideration. These criteria include state forests, state parks, state game lands, national natural landmarks, designated natural areas, wilderness areas, unique geologic sites, historic sites, designated scenic areas, national wild and scenic rivers, state scenic rivers, hiking and bike trails, airports, streams, archeological sites, institutional complexes, and wetland cleared.

Protestants also assert, "Out of the three added criteria, there was one artificial criteria related to ROW that trumps the importance of the others." Again, Protestants fail to cite any authority for this assertion, nor do they explain what they mean by "artificial criteria" or what three criteria they believe were added to Exhibit RH-2. Duquesne Light is therefore unable to respond to this assertion in any meaningful way.

Protestants' heading for this issue references "GPU-DQE proposal 268 Mile, 500 kV transmission line project," implying that GAI improperly applied criteria specific to that project to its studies. Uncontroverted evidence of record, however, clearly demonstarates that the resource criteria were developed based upon federal and state requirements, sensitivity to impact by electric transmission lines, and sources of data available. Exhibit RH-2, §3-2. GAI developed weighting of these criteria based upon the GPU-DQE Siting Criteria Council. Exhibit RH-2, §3-4. As Houston explained:

> We have our staff of urban planners, biologists, environmental specialists, engineers who specialize in construction and the issues of reliability, as well as historians and archeologists, review the weights that we propose to use from the GPU DQE Siting Criteria Council to make sure they are applicable, to make sense in terms of the connection we're using them to evaluate current projects. So, those folks, having a knowledge of the potential affects that the line might have and the character of area that the line is traversing, would be able to judge and discuss within our group that the applicability of the GPU DQE Council weights. N.T. 297.

Counter-Statement B. Exhibit RH-2 speaks for itself

Protestants make a series of assertions at Page 9 concerning Exhibit RH-2 that are unsupported by competent evidence. Nothing cited by Protestants supports their assertion that, "New ROW criterion was added to unjustly bias Route E to be the preferred route." "New ROW" appears to be just another way of saying "Non-existing ROW," which is listed in Exhibit RH-2, p. 3-5, with the other resource criteria.

Protestants' conclusion, "The SCC must have believed that there are potential new impacts from HV transmission lines on existing subtransmission ROW," is speculative and unsupported by any competent evidence of record. Protestants' assertion that the ROW criterion was NOT part of the GPU DQE Project Environmental Assessment," is unsupported by, and in fact directly contrary to, the evidence of record, as discussed above.

Counter-Statement C. Protestants' assertions regarding "Commercial/Densely Populated" criteria are not supported by competent evidence of record

Without citation to the record, Protestants assert that the GPU/DQE Study does not use the resource criterion "Commercial/Densely Populated," followed by the definition set forth in Exhibit RH-2 at p. 3-4. Similarly, there is no citation to evidence in support of the source Protestants' assertion at Page 9 that, "the highest weighting factor is for the 'commercial/densely populated areas' resource criteria and its source is unclear." It is therefore impossible for Duquesne Light to formulate a meaningful response to these assertions.

Counter-Statement D. Portions of the routes located on existing ROW have been properly evaluated

Protestants assert at Page 10, "Houston's testimony regarding impacts 'being nil' is not supported by any studies or facts." This is a misrepresentation of the evidence of record. Houston explained:

> Essentially, in the case of the study that's the subject here today, utilizing the same footprint in terms of a right-of-way that's owned by Duquesne Light or another right-of-way such

> as a railroad or highway right-of-way, it reduces the amount of vegetation that has to be trimmed, it reduces potential land use conflict—which is one of the guidelines that the Public Utility Commission requires we study. It also reduces conflicts with all of the issues the Public Utility Commission wishes us to study, ... N.T. 294.

It is not clear what Protestants intend to mean by their assertion at page 10.

> Modifying GAI's original approach in Exhibit RH-2 to now include routes along existing ROW and include only one criterion as selected solely by the Company, demonstrates that there most certainly are substantial new impacts to residents along Route E.

Duquesne Light is therefore at a loss as to how to respond.

Protestants go on to assert that Houston's testimony is "simply opinion." Houston's qualifications and experience in the field illustrate his expertise, hence it is proper that he give an opinion and his opinion should be weighed as that of an expert. *See* Exhibit RH-1. Pa. R.E. 702 provides:

> If scientific, technical or other specialized knowledge beyond that possessed by a layperson will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education may testify thereto in the form of an opinion or otherwise.

Counter-Statement E. The use of resource criteria for the Wildwood Project was supported by data

Protestants assert at Page 11 that, "the two areas characterized as similar to the Wildwood Project represent only a very small fraction of the total GPU DQE line. . ." This is an apparent reference to Houston's testimony:

> Certainly in the Pittsburgh area when the GPU DQE line exited the Beaver Valley Station, and also in Harrisburg when it went into the transmission substation not too far from Three Mile Island—which is what this power was supposed to replace—there are very similar suburban communities through which those—through which the GPU DQE line alternatives traversed. So the Siting Criteria Council did have a vision of the types of communities and areas that the—that this line traverses. N.T. 297-298.

Clearly, Houston addressed the similarities between the two. Taken alone, however, the fact that the area covered by the GPU-DQE Project is not identical to that covered by the present line siting does not support Protestants' assertion that Exhibit RH-2 is "flawed and should be dismissed."

Counter-Statement F. Protestants' analysis of Chapter 57, Subchapter G, Commission Review of Siting and Construction of Electric Transmission Lines is incorrect

Protestants base this section on the assumption that existing subtransmission ROW was excluded from the environmental assessment. This is incorrect. As set forth more fully above, all alternatives were examined by GAI. It is not clear where Protestants intend this line of argument to lead. Do they believe that further examination of existing ROW along Route E will reveal previously unknown wild scenic rivers or federal parks? As discussed above, Houston's testimony made clear that the purpose of GAI's study was to site alternative transmission line routes and to evaluate them according to Commission regulations and traditional environmental impact assessment criteria. RH-2, p. xii.

Protestants speculate at Page 12 about the "organized intent" of "Subchapter G" (i.e., Commission Regulations 57.71 through 57.77), with no citation to authority, then reach the incomprehensible conclusion: "Exclusion of 3kV or 23 kV from any proposed 138 kV impact study was not what the Commission intended when adopting Subchapter G."

Protestants assert at Page 12 that, "None of the potential exemptions that would allow the Company to file a letter of notification apply to the Wildwood Project." Duquesne Light agrees, which is why it filed a full application rather than a letter of notification.

Protestants assert at Page 12, "As the entire length of each of the proposed alternative routes meets the definition of a high-voltage line and the regulation requires studies to assess the impact of such lines, the entire length must be evaluated." This is also correct. Duquesne Light contracted with GAI to conduct a line route study and environmental assessment on alternative line routes. As noted in Proposed Finding of Fact No. 33, DLC Initial Brief, p. 13:

> For each of the alternative routes, GAI surveyed the immediate construction ROW, the area adjacent to the proposed ROW, and a four-mile wide corridor, including the area two miles on either side of the centerline of the ROW, for potential impacts by means of field reconnaissance, recent aerial photographs, topographic maps, literature review, and contacts with federal, state and local government agencies. Exhibit RH-2, p. 1-3.

The entire length of each line was evaluated.

Counter-Statement IV:

DUQUESNE LIGHT PROVED BY A PREPONDERANCE OF THE EVIDENCE THAT THE PROPOSED LINE MEETS COMMISSION REQUIREMENTS

Counter-Statement A. Detailed cost estimates for Routes A & C were not required at the evidentiary hearings

Protestants fault Duquesne Light at Page 13 because "a thorough cost analysis of viable alternative routes was not performed." ALJ Nene had asked Duquesne Light to provide estimated costs. N.T. 261. However, cost is not part of the Commission criteria for the siting and construction of a proposed HV line, nor was it used by Duquesne Light in choosing the proposed route. N. T. 434. It is not clear what impact a detailed cost analysis could have in the determination of this matter. Nevertheless, Duquesne Light provided the estimated costs of Routes A and C through the testimony of Paul Cass. N. T. 631-633; Exhibit PC-10.

Counter-Statement B. No competent evidence of record supports Protestants' assertion that public perception is that there are health and safety risks associated with living near a high-voltage power line and a decline in property values

Protestants presented absolutely no competent evidence that, "living near a high-voltage power line causes a decline in property values." Protestants assert that unidentified residents of Ross, McCandless and Hampton who testified at the Public Input Hearings stated that there would be a loss of property values. The Commission addressed such opinion testimony in Campbell v. Metropolitan Edison Co., PUC Docket No. C-20016194, Opinion and Order entered April 14, 2005.

> It is evident that the Protestant has firmly stated opinions. However, to carry his evidentiary burden, those opinions must rise directly from factual evidence or result from technical expertise and an examination of the facts of the case. Neither of those circumstances supports the Protestant here.

Protestants' assertions concerning any impact the proposed line might have on property values are purely speculative. However, if the line did adversely impact property values, Protestants and others similarly situated would have a remedy at law. N.T. 540.

Counter-Statement C. The environmental impact study conducted by GAI was not flawed

At Page 14, Protestants fault the GAI environmental impact study [Exhibit RH-2], for failing to take into account adverse effects on human beings; the number of children living along the route; the effect on property values; proximity of public schools, churches, recreational facilities; closeness to residences; and quality of life. No competent evidence of record established that Commission regulations or precedent require the listed things to be considered in an environmental impact study. As noted above, GAI's study was based upon Commission requirements and traditional environmental impact assessment criteria. Exhibit RH-2, p. xii. Nevertheless, Duquesne Light directed GAI to perform a further study that took into consideration the number of dwelling units within 100 feet of each alternative route. Exhibit RH-3. This study also found Route E to be the most suitable alternative. *See* Proposed Finding of Fact No. 37, DLC Initial Brief, p. 14.

Protestants quote from a website. This website was established by Duquesne Light to provide information to the public about the Wildwood Project. DLC Statement No. 6, pp. 5-6. However, the contents of said website are not in evidence.

Protestants assert at Page 14 that seven religious institutions as well as a pre-school/day care center were not factored into the calculations and scoring leading to the proposed route selection, but provide no citation to record evidence in support of this assertion. Protestants fault the GAI study because its description of Route E does not note that, while following the existing 23 kV line, it passes behind homes on Shady Oak Circle. This omission would be of *de mimimus* import if, as Protestants have repeatedly stressed, GAI determined the environmental impact within an existing ROW to be nil. In fact, Shady Oak Circle, complete with residences, is clearly shown on Figures 3-1 and 3-2 in Exhibit RH-2.

Protestants conclusion that Exhibit RH-2 "and its revision" (by which they apparently mean the additional study admitted into evidence as Exhibit RH-3) are flawed is not supported by competent evidence of record. No evidence supports Protestants' assertion that "it" was biased by highly subjective criteria.

Counter-Statement D. No competent evidence shows that Duquesne Light's interests differ "vastly" from those of its customers

Protestants assert at Page 15 that the interests of Duquesne Light "differ vastly from those of its constituents." It is not clear what

Protestants intend to mean by "constituents." The American Heritage Dictionary, 3rd ed., provides two definitions of the noun "constituent:" 1. A component; and 2. A resident of a district represented by an elected official. Since neither definition makes sense in context, Duquesne Light assumes that Protestants intend "constituents" to mean "customers." If so, there is no evidence of record to support their assertion.

Protestants go on to assert "the objective of the Commission is safety first, then reliability, then reasonably priced utilities." Protestants provide no citations to the record or other evidence in support of this assertion.

Protestants conclude that Duquesne Light's selection of Route E shows "disregard for the health, safety and welfare of its customers and their families." Protestants do not, however, provide any basis for this assertion. On the contrary, Duquesne Light's responsibilities are set forth in the Section 1501 of the Public Utility Code, 66 Pa.C.S.A. §1501, which reads in pertinent part:

> Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall also be reasonably continuous and without unreasonable interruptions or delays. Such service and facilities shall be in conformity with the regulations and orders of the commission. . . .

Competent evidence of record clearly shows that the proposed line will be in accord with this section.

Protestants assert at Page 15 that Route C is safer than Route E in terms of "adverse human impact." This assertion is unsupported by competent evidence of record.

Protestants further assert at Page 15 that Duquesne Light's "rationale is solely motivated and controlled by economics and convenience, and sets aside the health, safety and welfare of its customers . . ." Nothing in the record supports this assertion. On the contrary, Duquesne Light clearly established that the proposed line is necessary, is safe, impacts the environment minimally, and is superior to the alternative routes. *See* DLC Initial Brief, pp. 23-37.

CONCLUSION

For the reasons set forth above, it is clear that the competent evidence of record overwhelmingly supports Commission authorization of Duquesne Light's proposed hV transmission line on Route E.

Respectfully submitted

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Attorney for Applicant/Respondent
Duquesne Light Company

CERTIFICATE OF SERVICE

I hereby certify that I have this day served true copies of the Reply Brief of Applicant/Respondent Duquesne Light Company in accordance with the Order Closing Record and Scheduling the Filing of Briefs upon:

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Dated this 13th day of October, 2006.

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OCT 13 2006

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

October 13, 2006

Certificate of Mailing

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: *Amended application of Duquesne Light Company for the Siting and Construction of a 138 kV Line in Hampton, McCandless and Ross Townships, Allegheny County,* Docket No. ~~A-110150F00031~~ A-110150 F0031
Mark R. Janosko v. Duquesne Light Company, Docket No. C-20065987
Raymond Jacobs v. Duquesne Light Company, Docket No. C-20066500

Dear Secretary McNulty:

Enclosed for filing are an original and nine (9) copies of Complainants Response Brief. Copies of the Response Brief are being served in accordance with Administrative Law Judge Nene's Order Closing Record and Scheduling the Filing of Briefs and Commission Regulations.

Sincerely,

Dolores Nypaver

Dolores Nypaver

Enclosures

cc: All persons listed on the Certificate of Service (with enclosures)

DOCUMENT
FOLDER

137

ORIGINAL

IN THE COMMONWEALTH OF PENNSYLVANIA

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Duquesne Light Company For the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless and Ross Townships, Allegheny County	:	A-110150 F0031
Mark R. Janosko, et al. Complainant	:	
v.	:	C-20065987
Duquesne Light Company Respondent	:	
Raymond Jacobs Complainant	:	
v.	:	C-20066500
Duquesne Light Company Respondent	:	

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Duquesne Light Company Respondent	:	

RESPONSE BRIEF ON BEHALF OF THE COMPLAINANTS

I. THE RESPONDENT ALLEGES THAT THE PROPOSED LINE IS NECESSARY TO MEET PRESENT AND FUTURE NEEDS.

ON THE CONTRARY, THE COMPLAINANTS WOULD ARGUE AGAINST THIS FOR THE FOLLOWING REASONS:

Although a 138 kV transmission line may be necessary, the proposed line, Route E, is clearly NOT the best choice to meet present and future needs.

It would appear that the way the line is currently designed, Duquesne Light Company has reduced the distribution circuit length since the Wildwood Substation is miles closer than the North Substation. A closer examination of the line design shows otherwise. Basically, Duquesne Light Company is proposing to cut the existing distribution circuits in two, make one part a 138 kV transmission line, add a substation

at the split, keep the other part as distribution lines, and move the circuits to the new Wildwood Substation (DL Statement Part 1;pp.6-7). They have only changed part of the circuit to a higher voltage with a single source (July 11, 2006;p.282). They are reducing the length of exposed circuit at the expense of threatening the whole substation by providing a single source to feed the substation. Any fault that occurs on the 138 kV feed to the substation will totally knock out the substation, affecting everyone connected to the new substation and reducing reliability.

Changing the location of the termination of the tap from the initial design for only one of the routes biased the selection to Route E, the route that changed. Originally, the proposed route went to a tap of the transmission line for all routes. In 2005, for Route E only, the location was moved to terminate the tap at the North Substation (July 13, 2006;p.741). All of the routes should have been modified to move their termination point into the North Substation when the opportunity occurred in 2005, not just Route E. All the other routes remained the same – terminating on the tap of a transmission line (July 11, 2006;p.278). Testimony was given that there were no plans to extend the other alternative routes to the North Substation (July 12, 2006, pp.440, 510). Why not? Changing only one of the routes clearly biased the selection process.

Additionally, there is no redundant or secondary feed to the North Substation in the proposed design. Therefore, when service has to be performed on the line or equipment, the line may need to be de-energized to perform the service (July 13, 2006;p.731). This would result in a power outage to Duquesne Light Company's customers, thus reducing reliability.

II. DUQUESNE LIGHT COMPANY IN ITS INITIAL BRIEF ATTEMPTS TO AVER THAT THE PROPOSED LINE IS SAFE.

THE COMPLAINANTS DISAGREE WITH THIS AND WOULD ON THE CONTRARY STATE THAT:

Although much evidence pertaining to EMFs has been presented by both parties, the bottom line is that the definitive answer to whether or not living within close proximity poses health risks, how strong of a risk and to whom is still an uncertainty; as such, the responsible action would be to avoid placing these lines in high residential areas, especially when other alternatives exist. Clearly, Duquesne Light Company has other more responsible options.

Is Duquesne Light Company conveniently downplaying the possible EMFs the residents along the line will be exposed to in the future? Are they doing so at the risk of reliability of the line design? The stated reason for the upgrade of the system is that the current line has reached the maximum rated current allowed. Duquesne Light Company states the maximum load for the new substation will be 30 MVA or 125 amps (July 11, 2006;pp.285-86). Duquesne Light Company stated the exposure to EMFs will be the same or less than what is currently there "based on projections that at the time that the new line goes into service" (July 11, 2006;p.407) which would be approximately 20MVA. That would be true if everything in the future remains the same. However, things do not remain the same.

Let us look at the data entered into testimony. Most of Duquesne Light Company's bulk supply substations have two or more 138 kV lines feeding into them – what is termed a ring system (July 11, 2006;p.276). Formulae have been given in testimony that power equals voltage times current times the square root of three (July 11, 2006;p.392). The capacity or rating of the proposed line is between 800 and 830 amps (July 13, 2006;p.662). A transmission line is generally good for 200 megawatts at 138 kV (July 11, 2006;p.281). A quick calculation using the formula proves the validity of these numbers.

Just as the current will go down as the voltage is increased and power remains a constant (July 11, 2006;p.378), the current will go up if the power goes up and the voltage remains a constant. In the

ring system, the "power can flow through the ring the other way and still supply that substation" (July 11, 2006;p.276), so the formula can be used to verify current will also go through the ring in the opposite direction. Therefore, the current flowing between substations can be greater than the current needed to supply the substation only. As most of the bulk supply substations have ring systems, it is only logical to assume that the Wildwood Substation will join a ring or redundant system in the future for reliability, allowing for the load on a circuit to increase up to the maximum rated current allowed (830 amps). The increase in load will result in an increased exposure to EMFs. Duquesne Light Company joined the PJM Interconnection on January 1, 2005 (http://duquesnelightwildwood.info/faq.html) (July 11, 2006; pp365-66). PJM is a regional transmission organization (RTO) that facilitates a collaborative stakeholder process. Stakeholders include participants who produce, buy, sell, move and regulate electricity (www.pjm.com).

Dr.Fugate stated the EMFs at 200 MVA would be ten times greater than the readings calculated at 20MVA (July 11, 2006;p.408). Installing a line with a rating of 830 amps, and saying it will never go above 125 amps for the 30 MVA substation load will only happen if the 138 kV line is never connected to another 138 kV line in the future. How reliable is a single source supply?

The testimony of Mr. Bailey on adverse health effects associated with EMFs referred to data from the last 30-40 years. During the last 40 years the population of the country has almost doubled and the consumption of electric energy has more than quadrupled. Studies from the last 5-10 years would be more relevant. Furthermore, Mr. Bailey, who was involved in the International Agency for Research on Cancer's listing EMFs as a class 2b carcinogen, agreed with that rating (July 12, 2006;p.561). On May 4, 1999, the National Institute of Environmental Health Sciences (NIEHS) (July 12, 2006;pp.601-4) issued a report evaluating the evidence of a risk of cancer and other human disease from exposure to the electromagnetic fields (EMF) around power lines. This report is based on a literature review and six years and $60 million of accelerated, Congressionally-mandated research. The report applies to the extremely low frequency electric and magnetic fields surrounding the big power lines that distribute power and the smaller but closer electric lines in homes and appliances. The report concludes that "while

the support from individual studies is weak, these epidemiological studies demonstrate, for some methods of measuring exposure, a fairly consistent pattern of a small, increased risk with increasing exposure that is somewhat weaker for chronic lymphocytic leukemia than for childhood leukemia." Significantly, the NIEHS report also recommends recognizing magnetic fields as a "possible" cancer hazard, although the report emphasized the weakness of the data and the low risk that may be involved.

The assumption by Mr. Bailey that "statistically significant associations could happen by chance" (July 12, 2006;p.616) questions the scientific correctness of his conclusions. Statistical significance of results published in scientific journals is based typically on levels of probabilities: 95% and 99%. If it states that association or the lack of one is statistically significant, this means that it is true in 95% or 99% of cases that could happen, not cases that had been studied. In this lies the principal difference between scientific statement of fact and a simple everyday statement of fact.

While commenting on the long-term exposure of landowners adjacent to the proposed line he assumed that the proposed line will be "sufficiently far for most adjacent landowners, approximately 50 feet" (N.T. 4;p.7). This is untrue; in many cases the distance is much less then 50 feet and in some cases the line passes over a house. He also stated that the EMFs will not change or will be substantially reduced after installation of 138KV line (N.T. 4;p.7). That is also untrue.

One would be naïve to agree with the assertion of Duquesne Light Company that the increase of voltage being proposed will primarily reduce the exposure of residents to the magnetic fields generated by the current 23 kV line. The reason for the proposed high voltage line upgrade is the need for more power to accommodate businesses and to provide the ability to transmit power to or from the area north of McCandless Township. This means that the amount of transmitted power will be many times (not fewer than 10 times) greater than it currently is. Thus, the EMF will noticeably increase: electric field – 6 times and magnetic fields 2-3 times. In addition, the 23 kV line will be placed on the new taller poles just below the 138 kV line. The combined effect of EMFs of two lines would be similar to the effect of water waves coming from a large boat and a smaller one; in some cases the effect could be small, in the other – much larger; but, the combined effect is always larger.

The construction of the 138 kV line along Route E would create more adverse health effects than if the line was constructed along Route A or C: there are 116 households, the majority of which are within 50 feet from the center of the proposed high voltage line along Route E (Zaun Exhibit A-S), while there are only 40 along Route A and 16 along Route C (Exhibit RH-2).

In its initial brief, Duquesne Light Company alleges that traffic would not be completely stopped to install poles which would compromise worker and driver safety and increase the risk of service interruptions. As there are existing poles along the entire length of Route 8 that make up Route A, this concern has been successfully addressed in the past. In fact, the 138 kV line installed along Kennywood Boulevard (July 13, 2006;p.686) was installed along a four-lane undivided commercial roadway. In addition, First Energy successfully installed over six miles of 138 kV line along Route 19 using steel poles through Cranberry (Exhibit Nypaver A), a heavily commercialized district. Lastly, any safety issues or service interruptions will only be in effect for the short term of the project, whereas the impact of the 138 kV line to residents and residential properties along Route E will be forever.

III. IN ITS INITIAL BRIEF DUQUESNE LIGHT COMPANY SUPPOSED THAT THE PROPOSED LINE'S (ROUTE E) IMPACT ON THE ENVIRONMENT IS MINIMAL.

THE COMPLAINANTS WOULD STRENUOUSLY DISAGREE FOR THE FOLLOWING REASONS:

The complainants maintain that the GAI study for the proposed Wildwood Project was designed and applied to ensure the route with the most existing right-of-way (ROW) would yield the most favorable scoring, irrespective of the impact to residents and residential properties. This was accomplished by **excluding all existing ROW** from the analysis, by employing 20 Resource Criteria from a study conducted over 15 years ago of which only 17 of the 20 criteria applied, and by adding three additional Resource Criteria, one of which was "New Right-of-Way" to further drive the results to overwhelmingly favor routes with the most existing ROW. As evidence of the bias to their results, GAI

amended the original study based upon public concern that not enough weight was placed on residential areas during the original study.

The environmental study conducted by GAI biased the route selection process. **For each route, only sections without existing electric ROW were used for analysis. Only 200 feet of the 4.8 miles of proposed Route E were used in the study.** As a result, the impact of the new 138 kV line on the environment was grossly underestimated: **no densely populated, commercial or residential areas or recreational facilities that could be affected by the 138 kV line were identified on Route E** (Exhibit RH-2;pp.2-39, 3-11) and **facilities such as North Park, Wildwood Golf Course, Hosack Elementary School, several religious institutions, a day care center and 116 residences were listed but omitted from the study.** Whether intentionally overlooked or mistakenly overlooked, the facts remain the same – the misrepresentation exists and is unconscionable.

For the acceptable alternative routes, there is a 100% correlation between the final scores (the higher the score, the greater the environmental impact) from the environmental study to the length of new ROW Duquesne Light Company would need to acquire:

Route	Score	New ROW
A	1417	700 feet
C	1822	1100 feet
E	437	200 feet

The route with the shortest new ROW ends up being the preferred route. Simply, neither the health risks, nor the impact to the residential or commercial areas, nor the vicinity to schools or recreational institutions defined the final score; it was the length of the new ROW.

Duquesne Light Company alleged that Route C is not constructible because "it is located almost entirely in a railroad ROW along a trout stream in a flood prone area; it would also require Duquesne Light Company to obtain new private property ROW for 600 feet". The GAI study did not raise any concerns from an environmental standpoint for Route C. In fact, GAI stated that while wetlands are present along the route, they will not be affected unless safety clearances require trees to be trimmed. GAI further indicated that no activity will take place in the stream so there will be no effect on Pine Creek

(GAI study;p.2-27). Duquesne Light Company has already constructed 138 kV lines along flood prone areas, one example being the former Montour Railroad line that is directly adjacent to Montour Run.

Testimony was presented that there is an existing Duquesne Light Company ROW from the Wildwood Substation that can eliminate the need for the 600 feet of new private property ROW (N.T.461). The resulting Route C would then lie entirely on existing ROW. If necessary, however, the proposed new, 600 feet of private property ROW lies on land zoned industrial by Hampton Township. Lastly, Duquesne Light Company has limited its examination of Route C to the railroad ROW. Over 80% of the land along Route C is zoned light or heavy industrial by Hampton Township. To eliminate specific constructability issues, it could obtain new ROW from these areas.

Route A with a total length of 4.2 miles is 12% shorter than Route E. The majority of its length follows interstate highway Route 8 through moderately developed commercial and industrial area. The environmental impact of a proposed 138 kV line along Route A would be very small: there are no trees along Route 8, and the number of outages of electric power due to traffic accidents are not known compared to Route E (July 13, 2006;p.671-72, 738). Exhibit Nypaver A contains an Excel spreadsheet that represents a personal effort to list all the businesses and residences along both sides of the Route A corridor. It is a lightly commercial area, and temporary wiring power arrangements could be made for critical businesses or the work could be done after hours when businesses are closed, if necessary. This is a short term outage versus a permanent fixture.

The environmental, visual and other impacts of the other alternative route, Route C, would be the most minimal of all; it follows the existing railroad tracks for the majority of its length.

Mr. Huston admitted during his testimony that no analysis of the existing ROWs owned by Duquesne Light Company was done, specifically no review of the correspondence of current easement widths in existing ROW to the easement width requirements for upgrading to a 138 kV line was done (July 11, 2006;p.338-39). Along Route E, there are 2.8 miles of ROW acquired in 1931. The ROW does not have an easement width specified. This by itself does not mean that the width could be extended at Duquesne Light Company's will, but rather suggests there is a need for an acquisition of a new easement

with the required width of 50 feet. These changes to easement widths would need to be renegotiated with the property owners.

IV. THE RESPONDENT ALLEGES IN ITS INITIAL BRIEF THAT THE PROPOSED ROUTE IS THE BEST AVAILABLE ALTERNATIVE.

ON THE CONTRARY, THE COMPLAINANTS WOULD ARGUE AGAINST THIS FOR THE FOLLOWING REASONS:

In its initial brief, Duquesne Light Company alleged that Route A is a less suitable alternative because they are limited to the road ROW along Wildwood Road and Route 8, which adversely impacts both construction and maintenance. Use of steel poles would not be permitted and the installation of anchors would be limited to road ROW unless Duquesne Light Company obtained additional rights. The limitation to a "road right-of-way" is not unique to Wildwood Road or Route 8, as Duquesne Light Company has many power lines, including 138 kV lines with the same limitations, such as the line along Kennywood Boulevard (July 13, 2006;p.686). Moreover, testimony was presented that Route 8 was fairly straight and the line may not need anchors along Route 8 (N.T. 458). Lastly, the inconvenience in obtaining additional rights for any limited amount of anchoring along Route 8 appears to override the impact to residents and residential properties along Route E.

In its initial brief, Duquesne Light Company made the statement that the traffic on Route 8 would need to be stopped completely for the overbuilding of the existing electric with the new 138 kV and that the use of steel poles would not be permitted. This statement is either a gross exaggeration or the sign of incompetence. The proof of the opposite is happening right now as the reconstruction and widening of Route 8 has been underway for over six months, with no major disasters having occurred. Exhibit Nypaver A shows that the high voltage line in Cranberry along Route 19 was constructed using steel poles, demonstrating the fact that high voltage lines have been constructed along state routes, using steel poles which do not need guy wires (July 12. 2006; p 632).

Duquesne Light Company alleged that there are constructability problems along Route C, including 4 bridges that would require extensive work, vertical hillsides that may need to be supported and on which there are trees that could fall, and portions of the line would have to be built in Pine Creek. The complainants remain skeptical that four bridges would "require extensive work". According to Duquesne Light Company testimony, four trains use the CSX railroad daily and cross the same bridges. No documentation was given to support why the extensive work was needed. Additionally, a review of the GAI line routing map shows four access points to the railroad that would obviate the need for crossing three of these bridges. These points are Duncan Avenue, Sample Road, and Banks School Road. The GAI study also indicated, "A service road follows the railroad and is suitable for construction of this route" (Exhibit RH-2;p.2-27). The GAI study concluded that this is the route that has the least environmental impact of all the proposed routes. In reviewing this route, Duquesne Light Company limited the review to looking at the railroad ROW, not even looking at obtaining new ROW. Several Lot and Block number diagrams from the Recorder of Deeds show the property the railroad owns around the railroad track (Exhibit Nypaver A). Duquesne Light Company agreed that it may be easier to obtain the new ROW, which may be less expensive than leasing the ROW along the railroad. (July 12, 2006;p.530) As Route C travels through the open space along the railroad, there is no car traffic to hamper construction or endanger the welfare of the workers.

The section of Route E traveling along North Park and continuing to Peebles Road has only center line ROW, without specified easement width. The rights to service the line were purchased 75 years ago, and under the conditions at that time. The ROW acquired does not meet the ROW with a specific easement width requirement for upgrading to a 138 kV line. The legal issues Duquesne Light Company would face related to ROWs without easement widths could create lengthy litigation procedures.

Route E also contains public ROW, just as Routes A and C do. Construction along the public ROW on Route E inherently has more reliability problems because a permit confers only a defeasible

privilege, which may require Duquesne Light Company to have to relocate the facilities at its own cost and because of vegetation management restrictions.

From a constructability standpoint, Route A is the most preferable. Route C may require additional efforts in the construction on some sections and potentially may cost more. However, the overall benefits (less visual and environmental impact, minimal or no health risk, no risk for drivers during the construction and minimal risk for construction workers), outweigh the extra costs. Each one million dollars in costs translates to 1.3 cents per share (June 28, 2006;p.181).

CONCLUSION

The Respondent's assertion that Route E represents the best available option, in spite of substantial public opposition, is astounding considering the existence of several less obtrusive viable alternatives. The Respondent's own expert engineer, Mr. Paul Cass has provided testimony to the fact that several equally viable alternatives exist. The Respondent has displayed complete disregard for the resulting human impact of its actions, as evidenced in its selection of Route E, which comprises the greatest residential density of all alternate routes. Route E is 3.3 times denser than Route A and 10.5 times denser than Route C, which may explain why the Pennsylvania Public Utility Commission and the office of Pennsylvania State Senator Jane Orie have logged hundreds of formal complaints in opposition to the project.

The Complainants maintain that while the Respondent has attempted to meet the spirit of the required Pennsylvania regulations, it has most certainly failed to comply with the regulation's intent. In addition to the Complainants arguments heretofore mentioned, the following items are presented to support its allegation that Duquesne Light Company simply "went through the motions" to support a predetermined conclusion on optimal route selection:

- The Respondent wrongfully endorsed GAI's conclusion that was flawed through the subjective inclusion/exclusion of certain siting criteria, which was further biased through improper weighting methodology.
- Repeated changes in project design, plan and scope have occurred since project inception. These changes have created significant conflicts and irreconcilable differences in supporting evidence represented as fact and relied upon by the Respondent in route selection.

- No cost-benefit studies were performed on alternate routes until nearly eighteen months after the Respondent's selection of the preferred route.
- No traffic studies were ever performed on the preferred route that would invalidate or address repeated public safety concerns.
- No visual impact studies, alternative subsurface routing configuration or weighting criteria were considered to adequately assess the aesthetic impact on any of the alternate routes despite the substantial residential density of the proposed route.
- No alternate routes were ever thoroughly analyzed or given serious consideration.
- No detailed cost estimates for labor, materials, engineering and additional ROW were ever performed to adequately determine and objectively analyze the alternative routing solutions.
- No consideration was ever given to any potentially new ROW that may have to be required for determination of line siting, viability, with the specific intent to mitigate constructability and reliability issues along Route C, which is the route containing the least environmental impact and represents the least intrusive residential option.

The Complainants aver that the aforementioned items suggest behavior that is unbecoming and uncharacteristic of the Respondent's reputation and technical expertise of a nearly 100-year-old, three billion dollar public organization. While the estimated $3,000,000 Wildwood Project is small at less than ½ of one percent of the Respondent's publicly announced $600,000,000 three-year capital improvement plan, the Complainants respectfully request that significantly greater due diligence and objective analytical information be required to be performed before haphazardly proceeding to permanently and forever alter portions of the landscape in this 150+ year old residential community, as well as to alter the lives of hundreds of residents along the current proposed route.

Lastly, the Respondent has ignored the Complainant's request to address even remotely the negative economic impact that this project is likely to have on property values along the proposed route. With real estate valuation acknowledged as both an art and science, neither party can quantify with accuracy and certainty the actual deterioration in value of the 116 homeowners directly impacted by the proposed route. However, with a 2005 median home value of $204,000 in McCandless Township, aggregate property value of approximately $25,000,000 is at stake by the Respondent's choice of Route E (June 28, 2006;p.224). The Complainants have repeatedly requested the Respondent to justify rationally a defensible position that the installation of 75-foot telephone poles (approximately 150% in height of the existing poles), potentially made of metal and of H frame design (aesthetically different/incompatible with that of immediate/surrounding neighborhoods), containing new reflective metal bands, unobstructed

by the Respondent's planned decimation (i.e. vegetation management program) of 100-year old oak trees (native to Route E), emitting increased real or perceived possibly carcinogenic EMFs, all of which the Respondent proposes to protect by installation of a shiny new guardrail system fronting residences along the length of the route cannot possibly result in anything but a substantial detriment in homeowner property values. The Respondent's silence on the issue suggests an alarming moral indifference in knowingly and willfully selecting a route that is so densely populated by hundreds of complainants, their children and friends who, through no choice of their own, will now be forced to live and to play in their backyards on a daily basis in dangerously close proximity to these high voltage industrial power lines. The Respondent's complete disregard for adherence with *prudent avoidance* principles in the line siting selection process is particularly disturbing in light of testimony from Duquesne Light Company's own engineer that equally viable alternate routes exist, **particularly Route A, that upon comparison to Route E, is "not just Ok, but equally Ok"** (July 12, 2006;p.705).

The Complainants allege that Duquesne Light Company's plan is intentionally lacking in detail and firmly believe that its choice of route is purely motivated by matter of convenience and profit initiative with a total disregard for the health, safety and welfare of the people. A plan that substantially increases voltage capacity to this magnitude clearly provides additional profit incentive to the Respondent through proposed tariff increases and the potential sale of increased power beyond the immediate service territory. The Complainants do not deny Duquesne Light Company's desire to upgrade service, increase capacity and maximize profitability; but, to implement a plan that is obviously lacking in detail and preparedness when equally viable alternatives exist is viewed as egregious, unfair and tantamount to shifting the economic burden for the project entirely to the Complainants and the residents directly impacted by the proposed route.

A vote in the affirmative by the Pennsylvania Public Utility Commission is an endorsement of Duquesne Light Company's plan for the disregard of our children's safety and well-being---particularly when at least two equally viable alternatives exist that would substantially minimize the residential impact

and the economic interests, health and financial well-being of hundreds of families and children that live and play along the proposed route.

The Complainants respectfully request that the Pennsylvania Public Utility Commission deny the Amended Application of Duquesne Light Company For the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless and Ross Townships, Allegheny County.

Respectfully Submitted by,

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IN THE COMMONWEALTH OF PENNSYLVANIA

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Amended Application of Duquesne Light Company For the Siting and Construction of a 138 kV Transmission Line in Hampton, McCandless and Ross Townships, Allegheny County	:	A-110150 F0031
Mark R. Janosko, et al. Complainant	:	
v.	:	C-20065987
Duquesne Light Company Respondent	:	
Raymond Jacobs Complainant	:	
v.	:	C-20066500
Duquesne Light Company Respondent	:	

RESPONSE BRIEF ON BEHALF OF THE COMPLAINANTS

CERTIFICATE OF SERVICE

I hereby certify that on this 13th day of October, 2006, I served the foregoing Brief on Behalf of the Complainants in docket A-110150 F0031 upon each party listed below, and upon the Commission by sending the original and nine copies to the Commission by certified U.S. Mail and two copies to Duquesne Light Company and one copy to the Honorable Judge Fred R. Nene.

Respectfully submitted,

Dolores Nypaver

Dolores Nypaver, MPM

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