

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PJM TEAC

QUESTION:

How long have you been chair of the PJM TEAC?

ANSWER:

Mr. McGlynn has been the chair of the PJM TEAC since January 2008.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-2
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY

QUESTION:

Direct, p. 1-2 - Explain the intersection of "the baseline reliability analysis with the market efficiency" analysis, and address compatible aspects, conflicting aspects, and incompatible aspects.

ANSWER:

In the direct testimony of Paul F. McGlynn at pp 1-2 it states that one of his responsibilities is "...integrating the results of the baseline reliability analysis with the market efficiency and generation and merchant transmission interconnection analyses into the overall Regional Transmission Expansion Plan ("RTEP") for PJM." Baseline reliability analysis and market efficiency analysis are neither conflicting nor incompatible but are two complementary facets of PJM's comprehensive Regional Transmission Expansion Planning process. The end result of integrating the various pieces of analysis is a single comprehensive expansion plan for the PJM RTO. PJM's Regional Transmission Planning Process is detailed in PJM Manual 14-B of the same name, accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-3
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 3 - When you state you've been asked to "demonstrate the electrical need," provide a map showing Susquehanna-Roseland need locations and areas; indicating type of need, i.e. load service, interconnection, line from A-B has n-1 violation, export, etc.

ANSWER:

In the direct testimony of Paul F. McGlynn at page 19 it describes the load zones affected by the reliability problems. Chart A in the testimony identifies the reliability violations.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-4
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 3, l. 7-12, explain the difference between "electrical need for the New Jersey segment" as provided in your testimony from "electrical need" testimony provided by Herling, Reynolds and Khadr.

ANSWER:

There is no difference in the meaning of the term "electrical need" as used in the direct testimony of Messrs Herling, McGlynn and Khadr. The term "electrical need" is not used in the direct testimony of John M. Reynolds.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-5
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 3, l. 8 and 11, explain distinction between "New Jersey segment" as used in line 8 and "these transmission line segments" as used in line 11.

ANSWER:

There is no distinction between the "New Jersey segment" and "these transmission line segments."

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-6
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RTEP

QUESTION:

Direct, p. 3, l. 14, would you agree that the focus of RTEP is transmission expansion? Explain your answer.

ANSWER:

The purpose of the RTEP is to identify transmission system upgrades and enhancements to preserve the reliability of the electricity grid.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-7
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
INTERCONNECTION QUEUE

QUESTION:

Direct, p. 4 - new generation. Is this all generation in the PJM queue, other queues, generation with an Interconnection Agreement, or some other generation?

ANSWER:

PJM's RTEP process considers all generation in its own queue that is in-service or has executed a Facility Studies Agreement in PJM's interconnection process. As described in the direct testimony of Mr. McGlynn at pages 9 and 10, queued generation in PJM that has executed a Facility Study Agreement is factored into RTEP baseline analysis. PJM Region Transmission Planning Process Manual 14-B describes model development and deliverability assumptions regarding generation. Manual 14-B is accessible from PJM's website via the following URL link: <http://www.pjm.com/documents/~media/documents/manuals/m14b.ashx>

In addition, PJM notes that the question does not define what is meant by "other queues." If the question intended to refer to the queues of other ISOs, then PJM notes that generation queued in those systems is modeled by PJM only to the extent that it is incorporated into the power flow models that those systems provide to PJM by way of Eastern Interconnection Reliability Assessment Group activities.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-8
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 4 - developing trends are incorporated over what time period?

ANSWER:

Developing trends are incorporated into the RTEP over the 15-year planning horizon.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-9
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 4 - Identify developing trends recognized by PJM, i.e., decreased demand related to economic downturn, decreased MWhr sales, mandated DSM, mandated carbon tax, etc., and for those recognized by PJM in its forecasting, address impacts, with specificity. For those not included in the forecasting, explain why they are not included.

ANSWER:

PJM's regional transmission expansion planning process addresses the trends associated with a number of system upgrade drivers. These are discussed in PJM's annual Regional Transmission Expansion Plan reports:

"PJM 2008 Regional Transmission Expansion Plan Report" (February 27, 2009) – in particular Sections 2, 3, 4, 6, 7 and 9 - is accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/reports/rtep-report.aspx>

"PJM 2007 Regional Transmission Expansion Plan Report" (February 27, 2008) – in particular Sections 2, 3 and 5 - is accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/reports/rtep-report/2007-rtep.aspx>

"PJM 2006 Regional Transmission Expansion Plan Report" (February 27, 2007) – in particular Sections 2, 3 and 4 – is accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/reports/rtep-report/2006-rtep.aspx>

"PJM 2005 Regional Transmission Expansion Plan Report" (February 22, 2006) – in particular Sections 2, 3 and 5 – is accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/reports/rtep-report/2005-rtep.aspx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-10
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 5 - explain the relationship between "critical system conditions" and "deliverability" test procedures.

ANSWER:

As the entity responsible for transmission planning PJM is required to establish the "critical system conditions" that the performance of the system must be evaluated against. PJM establishes the "critical system conditions" through the application of the generator deliverability test and load deliverability test.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-11
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 6 - If n-1-1 criteria is used as the standard rather than n-1, is the system more robust? If system is "more robust," what is the impact on transfer capacity?

ANSWER:

NERC Standards require that the performance of the system be evaluated for both the loss of a single Bulk Electric System ("BES") element (i.e. n-1) and the loss of a BES element followed by system readjustments followed by the loss of second BES element (i.e. n-1-1).

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-12
WITNESS(S): MCGLYNN / HERLING
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 7 - Identify with specificity/citation the authority and origin of requirement that "energy must be deliverable from the aggregate of the available capacity resources to load," i.e., FERC, NERC, etc.

ANSWER:

NERC established reliability criteria TPL-001, 002, 003 and 004 in its role as the FERC's approved Electric Reliability Organization. Generation and load deliverability analyses constitute the methodology under PJM's Regional Transmission Expansion Planning Process by which PJM test its compliance with NERC's established standards. PJM, as the regional planning authority, is required to define the critical system condition under which compliance with the NERC standards is tested. The requirement to define a critical system condition is imposed by NERC and FERC, and the parameters of this definition are developed by PJM in conjunction with its members. PJM's deliverability procedures – approved through PJM's stakeholder process - are described in Attachment C PJM Manual M-14-B, accessible from PJM's web site via the following URL link: <http://www.pjm.com/documents/~media/documents/manuals/m14b.ashx>. See also the direct testimony of Paul F. McGlynn at pages 5 through 9 and the direct testimony of Steven R. Herling at pages 13 through 16.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-13
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 7 - Identify with specificity/citation the authority and origin of requirement that "capacity resources within a given electrical area must, in aggregate, be able to be exported to other areas of the PJM region," i.e., FERC, NERC, etc.

ANSWER:

PJM has defined the critical system condition used to test compliance with NERC Planning Standards TPL-001, 002, and 003 through its deliverability criteria. The deliverability criteria is defined so as to ensure that the PJM Transmission System is adequate for delivery of energy from the aggregate of capacity resources to the aggregate of PJM load under specified conditions. See also the response to STL-MCGLYNN-12 regarding established authorities.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-14
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 7 - Identify any and all localized capacity emergency or deficiency.

ANSWER:

The question appears to be referring to localized capacity emergencies or deficiencies that have occurred, operationally, within PJM. The reference to localized capacity emergencies or deficiencies defines a specific set of conditions, through the deliverability criteria, under which compliance with NERC Planning Standards TPL-001, 002, and 003 is tested. There is no operational definition of a localized capacity emergency or deficiency and PJM does not track or record when operational conditions mimic the conditions defined in the deliverability criteria. PJM's deliverability procedures – approved through PJM's stakeholder process - are described in Attachment C of PJM Manual M-14-B, accessible from PJM's web site via the following URL link: <http://www.pjm.com/documents/~media/documents/manuals/m14b.ashx>

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 7 - are there areas where generation is not exportable to areas of PJM?

ANSWER:

All capacity resources within PJM are tested to ensure the generation is deliverable to the aggregate of the PJM load.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-16
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; LOAD DELIVERABILITY

QUESTION:

Direct, p. 8 - Load deliverability - how does PJM's load deliverability test take local generation into account? For analysis, is local generation presumed off line?

ANSWER:

All generation across PJM, including local generation, is taken into account in load deliverability analyses. PJM's load deliverability test procedures, including the specific methodology by which each LDA is examined and the associated generation pattern comprised of local and remote resources, are described in Attachment C of PJM Manual M-14B, accessible from PJM's website via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-17
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ECONOMIC DISPATCH

QUESTION:

Direct, p. 8, does PJM utilize a system of economic dispatch?

ANSWER:

PJM's deliverability study procedures are used to assess the transmission system against NERC's established planning standards TPL-001, 002, and 003. PJM deliverability studies, as discussed on page 8 of Mr. McGlynn's testimony, do not utilize economic dispatch. Rather, they utilize a statistically determined generation pattern. PJM's deliverability procedures, including the development of the generation pattern for each test, are described in Attachment C of PJM Manual M-14B, accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-18
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ECONOMIC DISPATCH

QUESTION:

Direct p. 8, in a system of economic dispatch, how is generation selected for dispatch? What role does price pay?

ANSWER:

See response to STL-McGlynn-17. Economic dispatch was not used to determine the need for the Susquehanna – Roseland Project.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-19
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ECONOMIC DISPATCH

QUESTION:

Direct, p. 8, where price determines dispatch, what factors are included in price, i.e. transmission infrastructure cost, transmission service cost, reactive power, line loss, etc. Provide citations and tariff.

ANSWER:

See response to STL-McGlynn-17.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-20
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 8, identify ways that a localized capacity emergency or deficiency can be satisfied that do not involve transmission.

ANSWER:

If the question refers to operationally experienced localized capacity emergencies or deficiencies, system operators would necessarily resolve such emergencies or deficiencies with the resources available to them at the moment. Should available resources be insufficient to resolve a localized capacity emergency or deficiency, system operators would implement emergency operating procedures, up to and including the curtailment of electric service to customers. These operating procedures are discussed in PJM Manual 13, "Emergency Operations," accessible from PJM's web site via the following URL link: <http://www.pjm.com/documents/~media/documents/manuals/m13.ashx>

If the question refers to localized capacity emergencies or deficiencies as defined in the deliverability criteria used to ensure compliance with NERC Planning Standards TPL-001, 002, and 003, the deliverability criteria can be satisfied through the addition, in the correct amounts and location, of transmission, generation, and/or demand response.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-21
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 8, what non-transmission alternatives have been considered for addressing the localized capacity emergencies or deficiencies identified in Interrogatory 14.

ANSWER:

PJM considered a number of alternatives to resolve identified NERC TPL-001, 002, and 003 planning criteria violations as discussed in Mr. McGlynn's testimony at pages 16-18 and pages 23-24 and as discussed in Section VIII, "Alternatives Considered", beginning on page 32 of the direct testimony of Steven Herling. See also the response to STL-MCGLYNN-20.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-22
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED, LOAD DELIVERABILITY; RELIABILITY

QUESTION:

Direct, p. 8, how does the PJM load deliverability test measure reliability as defined by NERC?

ANSWER:

In the context of the bulk power system, NERC defines reliability as the ability to meet the electricity needs of end-use customers, even when unexpected equipment failures or other factors reduce the amount of available electricity. NERC breaks down reliability into adequacy and security. The load deliverability test examines the ability of the transmission system to deliver energy to end-use customers in a defined area considering unexpected failures. The load deliverability test along with the generation deliverability test establishes the link between resource adequacy and transmission adequacy.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-23
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; GENERATOR DELIVERABILITY; NERC

QUESTION:

Direct, p. 8, how does the PJM generator deliverability test measure reliability as defined by NERC?

ANSWER:

In the context of the bulk power system, NERC defines reliability as the ability to meet the electricity needs of end-use customers, even when unexpected equipment failures or other factors reduce the amount of available electricity. NERC breaks down reliability into adequacy and security. The generation deliverability test evaluates the capability of the transmission system to assure that generation capacity resources can be delivered to the remainder of the PJM system at peak load. The generator deliverability test along with the load deliverability test establishes the link between resource adequacy and transmission adequacy.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-24
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; NERC

QUESTION:

Direct, p. 9, are there means other than transmission recognized by NERC to address a generation capacity emergency?

ANSWER:

NERC assesses compliance with the Planning Standards and does not address the nature of solutions implemented with respect to identified violations of criteria. See response to STL-MCGLYNN-20 and STL-MCGLYNN-21.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; NERC

QUESTION:

Direct, p. 9, are there means other than transmission recognized by NERC to address a generation capacity emergency?

ANSWER:

See response to STL-MCGLYNN-24.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NERC; RELIABILITY

QUESTION:

Direct, p. 9, do NERC reliability criteria require deliverability to anywhere in the PJM system?

ANSWER:

See response to STL-MCGLYNN-12.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-27
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DEMAND RESPONSE

QUESTION:

Direct, p. 9, how are anticipated benefits of demand side management and conservation activities determined?

ANSWER:

The effect of demand side management and conservation is to reduce expected peak load. Demand side management and conservation activities, if measurable, if in sufficient quantities and if in the appropriate locations, are factored into the PJM load forecast consistent with PJM Manual-19. In general demand side management and conservation activities can reduce the need for transmission system upgrades.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; DEMAND RESPONSE

QUESTION:

Direct, p. 9, If demand side management and conservation lowers peak, what is the impact on available energy in the "valleys" below peak?

ANSWER:

The load deliverability test simulates peak load conditions. PJM has not determined the impact of conservation on available energy in the "valleys" below peak. Demand Response programs are not available for implementation during non-peak periods.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 9, what local criteria is there regarding the need for the Susquehanna-Roseland line.

ANSWER:

The criteria driving the need for the Susquehanna-Roseland Project is the NERC reliability standards TPL 001, 002 and 003. There is no local criteria driving the need for the Susquehanna – Roseland line.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 9, what New Jersey specific criteria is there regarding need for a transmission line?

ANSWER:

Neither PSE&G nor PJM are aware of any New Jersey specific criteria regarding the need for a transmission line.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY

QUESTION:

Direct, p. 9, does a higher degree of reliability increase opportunities for economic transactions?

ANSWER:

In general, a reliable transmission system provides for increased opportunities for economic transactions and an economic benefit to customers.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-32
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; GENERATOR INTECONNECTION

QUESTION:

Direct, p. 9, to what extent are generator Interconnection Requests a driver of the Susquehanna-Roseland Projects?

ANSWER:

The Susquehanna-Roseland Project is neither intended to deliver any one specific generator interconnection request nor class of such requests, nor is it designed to promote the future development of any class of new generation. Generation that is in-service or has executed a Facility Studies Agreement in PJM's generation interconnection queue is modeled in PJM deliverability studies – as discussed in direct testimony of Paul F. McGlynn at page 9 - in accordance with PJM's deliverability procedures in Attachment C of PJM Manual M-14B, accessible from PJM's web site via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>.

As explained in the direct testimony of Paul F. McGlynn's, RTEP baseline analysis includes previously processed interconnection requests along with the network upgrades required to integrate the interconnection customer into the transmission system.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-33
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 9, to what extent are transmission Interconnection Requests a driver of the Susquehanna-Roseland Projects?

ANSWER:

The Susquehanna-Roseland Project is neither intended to accommodate interconnection of any one specific merchant transmission interconnection request – such as the recent Neptune project and VFT project in northern New Jersey - nor to promote the future development of any class or group of merchant transmission interconnection requests. Merchant transmission that is in-service or has executed a Facility Studies Agreement in PJM's queue is modeled in PJM deliverability studies – as discussed in the direct testimony of Paul F. McGlynn at page 9 - in accordance with PJM's deliverability procedures in Attachment C of PJM Manual M-14B, accessible from PJM's web site via the following URL link:

<http://www.pjm.com/documents/~media/documents/manuals/m14b.ashx>

As explained in Mr. McGlynn's testimony, RTEP baseline analysis includes previously processed interconnection requests along with the network upgrades required to integrate the interconnection customer into the transmission system.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-34
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; RTEP

QUESTION:

Direct, p. 9, l. 14-17. regarding inclusion of queued generation in the RTEP analysis, is it correct that generators with FSA are included if they contribute to deliverability problems, but not if they relieve system problems?

ANSWER:

See the direct testimony of Paul F. McGlynn at pages 7 through 10 and the direct testimony of Steven R. Herling at pages 38 through 41.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-35
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
INTERCONNECTION; NEED

QUESTION:

Direct, p. 9. 1. 20-22, explain distinction between certainty of connection for those generators contributing to deliverability problems and the certainty of connection for those that relieve system problems?

ANSWER:

Generation projects continue to withdraw from the generation interconnection queue at all stages in that process. The certainty of connection for individual projects increases as the project progresses through the interconnection process. See the direct testimony of Paul F. McGlynn at pages 7 through 10 and the direct testimony of Steven R. Herling at pages 38 through 41. See also PJM's deliverability procedures in Attachment C of PJM Manual M-14B, accessible from PJM's website via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 9, l. 20-22, what is impact on system analysis where only those generators contributing to deliverability problems are considered?

ANSWER:

PJM does not understand the meaning of the question. PJM presumes that the question is attempting to ask what happens if PJM does not allow generation “to back off” or reduce the flow on constrained transmission facilities. PJM has not performed any such analysis, nor is it clear how such analysis could be performed. The aforementioned notwithstanding, Mr. McGlynn’s testimony at pages 9 through 10 addresses the question of power flow modeling for generation with FSAs in the context of deliverability analyses. See also Mr. Herling’s testimony at pages 38 through 41. See also PJM’s deliverability procedures in Attachment C of PJM Manual M-14-B, accessible from PJM’s web site via the following URL link:
<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-37
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELIVERABILITY

QUESTION:

Direct, p. 9, l. 20-22, regarding deliverability,

- Are existing generators subject to the requirement that energy be deliverable to any other area of PJM?
- Are new generators requiring interconnection?
- Is this a consideration for “unit commitment” ?
- Is this a consideration of interconnection studies?

ANSWER:

All existing capacity resources within PJM are tested to determine if they are deliverable to the aggregate of load within PJM.

New capacity resources requesting to interconnect with the PJM system are tested to determine if they are deliverable to the aggregate of load within PJM. Network upgrades required to ensure they are deliverable to the aggregate of the PJM load are identified as part of the interconnection process.

Deliverability is not a consideration for unit commitment.

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
MODELING; DELIVERABILITY

QUESTION:

Direct, p. 9, l. 20-22, how does the analysis account for the modeling disparity between those generators contributing to deliverability problems and those that relieve system problems to protect against a skewing of results towards overbuilding?

ANSWER:

Generators that have executed a Facility Study Agreement, but have not executed an Interconnection Service Agreement, are included in the baseline analysis along with the network upgrades that were identified for the proposed generator through the interconnection study process. In the event a generator that was included in the baseline analysis drops out of the queue, the analysis would be updated to reflect removal of the generator. Any upgrades that were no longer required would be removed.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-39
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 9, l. 20-22 - is there an upper bound to robustness of the grid?

ANSWER:

There is no reference to the "robustness of the grid" in the direct testimony of Paul McGlynn at page 9, lines 20-22. Notwithstanding, the RTEP process identifies transmission enhancements to meet reliability criteria.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-40
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 10, chart – where 5% of projects with Facility Study Agreements drop out, and 95% go forward, and where 4% of projects with Interconnection Service Agreements drop out and 96% go forward, why is there an impact-based distinction, as explained in Interrogatory 34, for that 1% that may drop out?

ANSWER:

The table on page 10 of the direct testimony of Paul F. McGlynn shows the drop out rate of interconnection projects. The table shows that 5% of the projects that enter the interconnection queue will execute a Facility Study Agreement but then drop out of the interconnection queue. 4% of the projects that enter the interconnection queue will execute an Interconnection Service Agreement and then drop out and not go into operation. Only 19% of the projects that enter the interconnection queue will be placed in service.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-41
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
INTERCONNECTION QUEUE

QUESTION:

Direct, p. 10, chart – provide the names and queue numbers of the projects that were considered for purposes of creating this chart, i.e., the underlying data.

ANSWER:

The requested information – including generation interconnection requests extending back to PJM Queue ‘A’ – can be found on PJM’s web site and is accessible via the following URL link:
<http://www.pjm.com/planning/generation-interconnection.aspx>

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

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 10, chart – provide current information explaining the status of projects that were considered for purposes of contributing to deliverability problems referenced and for projects that were considered for purposes of relieving system problems.

ANSWER:

Generation with an executed FSA but not an ISA is modeled off-line in load deliverability analysis. Generation with an executed FSA but not an ISA is included in the generation deliverability test to contribute to system problems but not relieve system problems. This approach is used to ensure that the system can accommodate the proposed generation if it ultimately goes into service. There are five generation deliverability violations noted in Exhibit PFM-1 attached to the direct testimony of Paul F. McGlynn. Of those generation projects with an executed FSA but not an executed ISA, only one is contributing to one of the generation deliverability violations. The Martins Creek to Morris Park line has an approximately 4 MW contribution from Q28 (Raush Creek Wind Energy in Schuylkill County Pennsylvania). That project has since signed an ISA and has proposed a commercial date of April 2011.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-43
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RTEP; RETOOL

QUESTION:

Direct, p. 11, what projects were the focus of "retooling" studies since and including 2005?

ANSWER:

Retool studies update previously completed RTEP analyses to incorporate updated assumptions. These studies are done for a given planning year with updated assumptions. In general, retool studies are not focused on specific projects.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-44
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 11, l. 14-19, based on powerflows or other analysis, identify sources of power flowing into line by generator (where identifiable), MVA and percentages.

ANSWER:

PJM does not attribute the flow on any facility to any specific generator.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-45
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 11, l. 14-19, identify all sources of power, by MVA, flowing into Susquehanna substation. Provide powerflows.

ANSWER:

PJM does not attribute the flow into any substation to any specific generator.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-46
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
MEGA VOLT AMPS

QUESTION:

Direct, p. 11, l. 14-19, identify MVA into and out of the Jefferson substation.

ANSWER:

See response to STL-McGlynn-45.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-47
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PLANNING

QUESTION:

Direct, p. 12, l.1 - states "initially." What is planned or what is being considered in the future?

ANSWER:

Initially two 500 / 230 kV transformers will be installed at Roseland. Assuming that the in-service date for the Branchburg-Roseland-Hudson project does not change, in 2013 only one 500 / 230 kV transformer would be required at Roseland and additional 500/230 kV transformation would be required at PSE&G's Hudson switching station.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-48
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; GENERATOR DELIVERABILITY

QUESTION:

Direct, p. 12, l. 9-10, states you supervised the "generator deliverability" tests -- for what generators? List generators and identify by county and state, summer nominal capacity in MVA, and fuel.

ANSWER:

Generator deliverability testing is done for all generators within PJM. It is not done individually for a single generator as part of the baseline RTEP analysis.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-49
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; NEED

QUESTION:

Direct, p. 12-13, lists "criteria violations" expected to occur beginning in 2012. Of these "criteria violations," which will be eliminated SOLELY by the Susquehanna-Roseland line and which require other changes to the grid. Specify which criteria violations and which additional changes are necessary.

ANSWER:

All of the criteria violations shown in Exhibit PFM-1 are resolved solely by the Susquehanna – Roseland project until at least 2022 with the exception of the Richmond – Camden 230 kV which is resolved until 2018 and the Waneeta – Richmond 230 kV line which is resolved until 2019.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-50
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; RTEP; NEED

QUESTION:

Direct, p. 12-13, of the criteria violations identified, what other projects in RTEP, if modeled, have an impact on these identified violations.

ANSWER:

All other RTEP baseline projects that are expected to be placed in service by June 1, 2012 were modeled in the analysis that identified the criteria violations driving the need for the Susquehanna – Roseland Project.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-51
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD DELIVERABILITY

QUESTION:

Direct, p. 13-14, Chart A, identifies load deliverability violations. Provide chart identifying the generation source and sink for these violations, and identify source by name, county and state, capacity in MVA and fuel.

ANSWER:

Load deliverability testing is done in accordance with the procedure outlined in PJM Manual M-14B. A capacity emergency is simulated by increasing load and decreasing internal generation in the area that is being tested. Generation external to the area being tested is ramped up to deliver energy to the area under test. Chart A identifies load deliverability violations for the Public Service North area, the Public Service area, the JCPL area and the Eastern Mid-Atlantic area. The source generation consists of all generation outside of the area under test. The sink modeled in the area under test is represented by the generation, having had its output reduced, and the load that has been increased as required by the procedures outlined in PJM Manual M-14B. All generation outside the area under test participates as part of the source generation, regardless of their location and fuel type. See Exhibit STL-MCGLYNN-51 for units which participated in these tests.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-52
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
OUTAGES

QUESTION:

Direct, p. 15-16, regarding potential outages, does this analysis take into account TLR procedures or is it a vision of "a world without TLRs."

ANSWER:

Transmission Loading Relief procedures are used in real time operations to manage the power flow on the transmission system. They are not applicable to studies done in transmission planning.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-53
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; OUTAGES

QUESTION:

Direct, p. 16 addresses reliability and outages. In the last five years, identify all transmission outages.

ANSWER:

In the last five years, there have been thousands of transmission outages across the PJM RTO footprint; some planned and some forced. Information concerning forced outages is confidential information maintained by PJM that is related directly to the protection of the reliability of the electric grid.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-54
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY

QUESTION:

Direct, p. 16, are SAIDI, SAIFI and CAIDI reliability indicators for transmission or distribution?

ANSWER:

SAIDI, SAIFI and CAIDI are reliability indicators that could be applicable to either the transmission or distribution system.

RESPONSE TO STOP THE LINES
 REQUEST: STL-MCGLYNN-55
 WITNESS(S): MCGLYNN
 PAGE 1 OF 1
 SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD FORECAST

QUESTION:

Direct, p. 17, regarding load pockets, provide individual substation summer and winter peak loading for 2005-2009 for the substations along the existing Susquehanna-Roseland 230kV route.

ANSWER:

The loadings at the stations noted in the table are for the underlying network under normal operating conditions. They are the maximum hourly average values seen at each substation for the time periods stated with winter being defined as November through April and Summer as May through October. Note that the 2009 summer only includes 19 days of May. The values are non-coincident and they may not be the values at the time of the system peaks. They are indicative of the amount of load served in the load pocket connected to these substations as opposed to the specific distribution load served directly out of these substations.

year	Montville Peak MW		Newton Peak MW	
	Summer	Winter	Summer	Winter
2005	254	168	113	127
2006	301	164	143	101
2007	287	168	139	134
2008	265	168	120	141
2009	127	185	79	97

Year	Stanton Peak MW	Lackawanna Peak MW		Peckville Peak MW		Blooming Grove Peak MW	
	Summer Winter	Summer	Winter	Summer Winter	Summer	Winter	
2005	222 215	285	204	75 75	115	178	
2006	198 186	286	202	66 78	110	188	
2007	201 220	247	206	54 75	104	177	
2008	207 220	259	211	53 82	107	118	
2009	N/A	N/A		N/A	N/A		

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-56
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 17-18, if a 3,000MVA capacity is assumed, and where transmission is presumed the "answer," identify the estimates of potential capacity of local generation, demand response, conservation, etc. for each alternative considered.

ANSWER:

PJM is unclear as to what the "3,000 MVA capacity" refers to in the context of Mr. McGlynn's testimony at pages 17-18. The question lacks sufficient clarity to provide any meaningful answer.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-57
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
OVERLOADING

QUESTION:

Direct, p. 18, 7-17, can overloading be prevented by reducing the load on the lines?

ANSWER:

Yes.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-58
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED; DESIGN AND CONSTRUCTION

QUESTION:

Direct, p. 18, l. 7-17, if the Susquehanna-Roseland line is built, what is its expected capacity over the next 20 years?

ANSWER:

PJM assumes this question is about the rating of the line. The normal and emergency ratings of the Susquehanna – Roseland line are expected to be 2500 MVA / 3000 MVA respectively.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
BLACKOUT

QUESTION:

Direct, p. 18, 18-23, regarding the 2003 blackout:

- What were the precipitating factors of the August 14, 2003 blackout?
- Was there a high transfer volume immediately prior to the blackout?
- Were there signs of problems before the blackout?
- Did operators respond quickly and immediately?
- Did operators immediately follow operating procedures?
- Was line sag due to heat a factor in the line connecting with trees?

ANSWER:

- All information regarding the 2003 Northeast Blackout can be accessed at: <http://www.nerc.com/filez/blackout.html>. The causes of the blackout can be found in Chapter 3, page 17.
- Information about transfer volumes can be found in Chapter 4, page 29. The report states that “Investigation team modeling proves that these flows were neither a cause nor a contributing factor to the blackout.”
- Yes
- According to the US – Canada Power System Outage Task Force’s Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and recommendations, operators did not respond quickly and immediately to the events leading up to the blackout.
- See above
- Line sag due to excessive loading was a factor in the line contacting trees.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-60
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 19, l. 10, does "all facilities" mean that in the modeling, all generation is running at full capacity? If not, what does "facilities" mean in this context?

ANSWER:

All generation is included in "all facilities." However, all generation is not necessarily running at full capacity.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-61
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD DELIVERABILITY; NERC

QUESTION:

Direct, p. 19, l. 17, what is "PJM load deliverability criteria." Does NERC have a mirroring load deliverability criteria?

ANSWER:

The PJM load deliverability criteria can be found in Attachment C at the following link:

<http://www.pjm.com/documents/~/media/documents/manuals/m14b.ashx>

See also response to STL-McGlynn-22 above.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-62
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
GENERATOR DELIVERABILITY; NERC

QUESTION:

Direct, p. 19, l. 19-20, what is "PJM Generator Deliverability criteria." Does NERC have a mirroring generator deliverability criteria?

ANSWER:

See response to STL-McGlynn-61.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-63
WITNESS(S): MCGLYNN
PAGE 1 OF 2
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 20, l. 5-11, since 2007, there have been significant decreases in demand. Provide PJM Annual, Financial and quarterly reports for 2005-2009, and same for all the "major utilities" named on p. 20.

ANSWER:

There has not been a significant decrease in demand since 2007 on a weather normalized basis. The rate of load growth has declined.

Notwithstanding, the PJM Annual, Financial and quarterly reports which are available can be accessed at:

<http://www.pjm.com/about-pjm/who-we-are/annual-report.aspx> for 2008.

For 2007: See Exhibit STL-McGLYNN-63

For previous years:

<http://www.pjm.com/committees-and-groups/committees/fc/fc-financial-reports-archive.aspx>

See the links to the PJM FERC Form No. 1 Annual Reports for 2005 – 2009, as well as the PJM FERC Form 3-Q Quarterly Reports for 2005 – 2009.

2008-Q3 (2008 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11868934>

2008-Q2 (2008 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11793557>

2008-Q1 (2008 FERC Form No. 1)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11697866>

2007-Q3 (2007 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11513947>

2007-Q2 (2007 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11438933>

2007-Q2 (2007 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11437638>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-63
WITNESS(S): MCGLYNN
PAGE 2 OF 2
SUSQUEHANNA-ROSELAND

2007-Q1 (2007 FERC Form No. 1)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11353107>

2006-Q3 (2006 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11193308>

2006-Q2 (2006 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11125309>

2006-Q1 (2006 FERC Form No. 1)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=11046461>

2005-Q3 (2005 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10930977>

2005-Q3 (2005 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10891389>

2005-Q2 (2005 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10776912>

2005/Q2 (2005 FERC Form No. 3-Q)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10779011>

2005-Q1 (2005 FERC Form No. 1)

<http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=10637469>

PJM does not have such information for the “major utilities” referenced in the testimony. PSE&G’s financial reports can be found at its website – www.pseg.com.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-64
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD FORECASTING

QUESTION:

Direct, p. 20, l. 5-11, how has forecasting taken the demand decreases identified above into account?

ANSWER:

Updated forecasts have been incorporated into the RTEP through the retool studies that PJM has completed. The original 2007 RTEP analysis used the PJM 2007 Load Report. In 2008, this analysis was updated using the PJM 2008 Load Report.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-65
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD FORECASTING

QUESTION:

Direct, p. 20, l. 5-11, over the last 10 years, annually, how much lower has winter peak been than summer peak?

ANSWER:

Historic summer and winter peak loads can be accessed in Table F-1 on page 67 of the 2009 PJM Load Forecast Report which is accessible at:

<http://www.pjm.com/~media/documents/reports/2009-pjm-load-report.ashx>

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-66
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD FORCAST; DEMAND RESPONSE

QUESTION:

Direct, p. 20, l. 5-11, what is impact on size, type and timing of decreased demand?

ANSWER:

Based on PJM latest analysis which includes the results of the PJM 2009 Load Report, the Susquehanna – Roseland line is still required to be placed in-service by June 1, 2012.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
LOAD FORECASTING

QUESTION:

Direct, p. 21, l. 3-4, where "consumer demand... is the main factor causing the electrical need for these facilities," and where consumer demand has dropped significantly, as reflected in answer to #61 above,

- What is the impact on need for these facilities?
- What is threshold at which the need is pushed far enough into the future to postpone Susquehanna-Roseland?
- What is threshold at which the need is such that the current voltage and/or capacity is not needed and a lower voltage or capacity line would suffice?

ANSWER:

The analysis that initially identified the need for the Susquehanna – Roseland line was based on the PJM 2007 Load Report. Since that time, the analysis has been updated to include information from the PJM 2008 Load Report. The results of the 2008 report are included in the direct testimony of Paul F. McGlynn. Since that time the analysis was updated again to include the information from the PJM 2009 Load Report. The result of that analysis were presented to the PJM Transmission Expansion Advisory Committee (TEAC) at the March 2009 meeting. The results of that analysis can be found at the following link:

<http://www.pjm.com/Media/committees-groups/committees/teac/20090313/20090313-reliability-analysis-update.pdf>

Based on all of this analysis, the required in-service date for the project remains June 1, 2012.

- PJM has not performed this analysis.
- PJM has not performed this analysis.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-68
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RECONDUCTORING; OVERLOADS

QUESTION:

Direct, p. 21, l. 16-17, claims to identify a 230kV system deficiency. What difference would reconductoring this 230kV system make in the overload prediction? If ACSS were used (and associated equipment upgraded as necessary), what impact would that have on system capacity.

ANSWER:

Consideration was given to installing new conductors on the overloaded facilities. However this alternative was dismissed given the number of facilities that would need to be upgraded. Installing new conductors on the overloaded facilities would not provide a long term solution to the reliability problems that were identified.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-69
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
NEED

QUESTION:

Direct, p. 21, l. 16-17, identify lines in PJM with ACSS conductor. If ACSS were used (and associated equipment upgraded as necessary) throughout PJM, what impact would that have on system capacity?

ANSWER:

PJM does not have this information. A study has not been done to determine the impact of replacing all overhead transmission conductors with ACSS conductors.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-70
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
ALTERNATIVES

QUESTION:

Direct, p. 21, l. 19, states alternatives were evaluated and reviewed with stakeholders. Identify the alternatives referenced here. Identify the stakeholders referenced here. Were landowners invited to review the alternatives? What state agencies were invited to review the alternatives?

ANSWER:

The alternatives that were reviewed with stakeholders are noted in the direct testimony of Paul F. McGlynn at page 24. These alternatives were reviewed with stakeholders at the TEAC. These stakeholders include PJM members and various state agencies such as the Staff of the New Jersey Board of Public Utilities. All TEAC meetings are open to all interested parties.

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DEMAND RESPONSE

QUESTION:

Direct, p. 22-23, the changes referred to seem to be generator or supply side related.

- How was demand side information updated?
- Was the 2008 RTEP developed with 2007 or 2008 information?
- What assumptions were updated -- identify them and provide the "before" and "after."
- Was the demand information identified above in #61 above included in the updated assumptions?

ANSWER:

- Updated demand side information is incorporated into the PJM Load Forecast Report.
- The 2008 RTEP utilized the PJM 2008 Load Forecast as well as updated generation information as of 2008
 - Load, generation and transmission topology assumptions were all updates as part of the 2008 RTEP. The 2007 RTEP utilized the PJM 2007 Load Forecast. The 2008 RTEP utilized the PJM 2008 Load Forecast. These reports can be found at the following link: <http://www.pjm.com/planning/resource-adequacy-planning/load-forecast-dev-process/prev-load-reports.aspx>
- STI-McGlynn 61 above does not refer to demand information.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-72
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY

QUESTION:

Direct, p. 23, l. 15, states that the "analysis showed multiple violations on many of the same lines identified in PJM's earlier assessments." "Many" of the same lines is not all. List lines that were not identified in this update.

ANSWER:

The following lines were identified as violations and listed on page 60 of the 2007 RTEP and were not identified in the 2008 retool.

Atlantic-Larrabee 230 kV
Alburtis-Branchburg 500 kV
Branchburg-Flagtown 230 kV
Cedar Grove B-Roseland 230 kV
Cedar Grove F-Roseland 230 kV
Cedar Grove F-Clifton 230 kV
Flagtown-Somerville 230 kV
Gilbert-Morristown 230 kV
Gilbert-Glen Gardner 230 kV

Pleasant Valley-Lawrence 230 kV
Smithburg-New Prospect 230 kV
Somerville-Bridgewater 230 kV

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-73
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; RECONDUCTORING; NEED

QUESTION:

Direct, p. 24, l. 17-23, states that "consideration was given to installing new conductors so that the overloaded facilities were capable of transporting more power." If transporting more power was not a driver to this lines, would reconductoring be viable?

ANSWER:

Transporting more power is a driver for the Project. Reconductoring did not provide sufficient incremental capability to be a viable solution to the identified reliability criteria violations.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-74
WITNESS(S): MCGLYNN / CROUCH
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RECONDUCTORING; NEED

QUESTION:

Direct, p. 24, l. 17-23, reconductoring as an alternative “was dismissed given the number of facilities that would need to be upgraded.” How long has it been since the 230kV system was reconducted? Identify 230kV system reconductoring efforts over last 20 years.

ANSWER:

The existing 230kV overhead transmission line in New Jersey is currently segmented into four separate circuits. (E-2205, N-2214, T-2298 and K-1019). A review of existing records indicates that the E-2205 conductor was replaced in-kind in the mid – 1960’s. The remaining sections were re-conducted between 1968 and 1976 with 1590 ACSR conductors.

RESPONSE TO STOP THE LINES
REQUEST: STL-MCGLYNN-75
WITNESS(S): MCGLYNN
PAGE 1 OF 1
SUSQUEHANNA-ROSELAND

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
RELIABILITY; RECONDUCTORING

QUESTION:

Direct, p. 24, l. 22-23, identify with specificity the long-term solutions to the reliability issues that had been identified that would not be relieved with reconductoring.

ANSWER:

Please see response to STL-McGlynn-73.