THE CONNECTICUT SITING COUNCIL
DOCKET NO. 208

Cross-Sound Cable Company, LLC Application
for a Certificate of Environmental Compatibility
and Public Need for the Construction, Operation, and Maintenance
of a High Voltage Direct Current (HVDC) Submarine
Electric Transmission and Fiber Optic Cable System
from One Waterfront Street, New Haven, Connecticut
to Brookhaven, New York

Testimony and Supplemental Testimony of David A. Schlissel

On behalf of The Office of Consumer Counsel

October 2001

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Testimony of

David A. Schlissel

On behalf of

The Office of Consumer Counsel

October 19, 2001

Q. Please state your name, position and business address.

A. My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the Office of Consumer Counsel of the State of Connecticut. ("OCC")

Q. Please describe Synapse Energy Economics.

A. Synapse Energy Economics ("Synapse") is a research and consulting firm specializing in energy and environmental issues, including electric generation, transmission and distribution system reliability, market power, electricity market prices, stranded costs, efficiency, renewable energy, environmental quality, and nuclear power.

Q. Please summarize your educational background and recent work experience.

A. I graduated from the Massachusetts Institute of Technology in 1968 with a Bachelor of Science Degree in Engineering. In 1969, I received a Master of Science Degree in Engineering from Stanford University. In 1973, I received a Law Degree from Stanford University. In addition, I studied nuclear engineering at the Massachusetts Institute of Technology during the years 1983-1986.

Since 1983, I have been retained by governmental bodies, publicly-owned utilities, and private organizations in 24 states to prepare expert testimony and analyses on engineering and economic issues related to electric utilities. My clients have included the Staff of the California Public Utilities Commission, the Staff of the Arizona Corporation Commission, the Staff of the Kansas State Corporation Commission, the Arkansas Public Service Commission, municipal utility systems in Massachusetts, New York, Texas, and North Carolina, and the Attorney General of the Commonwealth of Massachusetts.

I have testified before state regulatory commissions in Arizona, New Jersey, Connecticut, Kansas, Texas, New Mexico, New York, Vermont, North Carolina, South Carolina, Maine, Illinois, Indiana, Ohio, Massachusetts, Missouri, and Wisconsin and before an Atomic Safety & Licensing Board of the U.S. Nuclear Regulatory Commission.

A copy of my current resume is attached as Exhibit DAS-1.

Q. What is the purpose of your testimony?

A. Synapse was retained by the Office of Consumer Counsel to examine whether Cross-Sound Cable Company's ("Cross-Sound" or "the Company") proposed High Voltage Direct Current submarine transmission and fiber optic cable system ("the cross-sound cable") will provide a public benefit for consumers in Connecticut. This testimony presents the results of our investigation.

Q. Please explain how you conducted your investigation.

A. We reviewed Cross-Sound's July 2001 Application for Certificate of Environmental Compatibility and Public Need ("Application") and supporting testimony. We also reviewed Cross-Sound's responses to discovery submitted by the Connecticut Siting Council ("Siting Council") Staff and the OCC. In addition, we examined the testimony, hearing transcripts, and orders from Connecticut Siting Council Docket No. 197. Finally, we reviewed documents from the Independent System Operator of New England ("ISO-New England") and the New York Independent System Operator ("NY-ISO") that we obtained as part of other work projects.

Q. Please summarize your conclusions.

A. The proposed cross-sound cable will not produce public benefits for consumers in Connecticut. For this reason, the Siting Council should reject Cross-Sound's Application for a Certificate of Environmental Compatibility and Public Need.

Q. Is the proposed cross-sound cable needed in order to assure adequate electric system reliability in Connecticut?

A. No. As shown on Table 1 below, Connecticut will have more than adequate system generating reserves without the proposed cross-sound cable:

Table 1
State of Connecticut
Generating Capacity Reserves
Without Proposed Cross-Sound Cable
Base Case Load Growth

Year	2002	2003	2004	2005	2006	2010	2015	2020
Installed Capacity (MW)	7,922	7,922	8,978	8,978	8,978	8,978	8,978	8,978
Transmission Import Capability (MW)	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Total Available Resources (MW)	10,122	10,122	11,178	11,178	11,178	11,178	11,178	11,178
Peak Demand (MW)	6,325	6,397	6,469	6,509	6,550	6,715	6,987	7,454
Reserve Capacity (MW)	3,797	3,725	4,709	4,669	4,628	4,463	4,191	3,724
Reserve Margin (%)	60	58	73	72	71	66	60	50

This Table shows that Connecticut can expect to have peak hour electric generating capacity reserve margins above 50 percent through the year 2020 without the proposed cross-sound cable. The off-peak hour reserve margins would be significantly higher.

Q. What is the source for the total capacity and peak demand figures shown on Table 1?

A. The available capacity and peak demands shown on Table 1 are based on the forecasts filed with the Siting Council by the Connecticut Light & Power Company, United Illuminating, and the Connecticut Municipal Electric Energy Cooperative in March of 2001 and published in the recently issued Draft of the Siting Council's 2001 Review of the Connecticut Electric Utilities' Twenty-Year Forecasts of Loads and Resources ("Draft 2001 Twenty-Year Forecast").

There are only two differences between Table 1 and the numbers used in Table 1a of the Siting Council's Draft 2001 Twenty-Year Forecast. First, I have not included the 562 MW of resources from "Load Shift/OP-4 Actions" that the

Siting Council includes. The reserve capacity figures and reserve margins shown on Table 1 would have been even higher if I had included these 562 MW.

I also have assumed that Dominion Nuclear Connecticut will seek and receive permission from the U.S. Nuclear Regulatory Commission to operate Millstone Unit 2 (and Millstone Unit 3 as well) for a period of approximately twenty years beyond the 2015 end of its current NRC license. This assumption is based upon the testimony filed by Dominion in Connecticut Department of Public Utility Control Docket No. 99-09-12RE01 and recent nuclear industry experience.

Q. What is generally considered to be an adequate reserve margin?

A. Power systems have generally been planned to meet a one day in ten years loss of load probability. This means that power system operators, including the New England Power Pool, have generally planned capacity additions so that they would have fifteen to twenty percent reserve margins above projected demands in order to assure adequate system reliability. As shown on Table 1 above, reserve margins in Connecticut without the proposed cross-sound cable will be significantly higher than fifteen to twenty percent.

Q. Will Connecticut still have adequate reserve margins if peak load growth is higher than currently forecast?

A. Yes. Table 2 below presents the same information as Table 1 except that I have assumed that peak load growth over the next twenty years is twice as high as is currently forecast in the Siting Council's Draft 2001 Twenty-Year Forecast:

Table 2
State of Connecticut
Generating Capacity Reserves
Without Proposed Cross-Sound Cable
High Load Growth

Year	2002	2003	2004	2005	2006	2010	2015	2020
Installed Capacity (MW)	7,922	7,922	8,978	8,978	8,978	8,978	8,978	8978
Transmission Import Capability (MW)	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Total Available Resources (MW)	10,122	10,122	11,178	11,178	11,178	11,178	11,178	11,178
Peak Demand (MW)	6,396	6,540	6,688	6,771	6,856	7,205	7,789	8,830
Reserve Capacity (MW)	3,726	3,582	4,490	4,407	4,322	3,973	3,389	2,348
Reserve Margin (%)	58	55	67	65	63	55	44	27

This Table shows that even if peak demands grow faster than currently forecast, electric reserve margins in Connecticut still would be 44 percent or higher through the year 2015 without the proposed cross-sound cable. The system would still have a 27 percent reserve margin as far into the future as 2020 even if the proposed cable is not built and the state experiences higher rates of growth in peak demands.

Q. Would Connecticut have adequate capacity reserves if the two Millstone units were shut down for extended outages as they were back in 1996 and 1997?

A. Yes. I consider it unlikely, given the new ownership and management at Millstone, that one or both of the Millstone units will have to be shut down for multi-year outages as they were in the mid-to-late 1990s. However, as shown on Table 3 below, Connecticut would still have more than adequate capacity reserves through the year 2020 even if both of the Millstone units were unavailable during summer peak seasons:

Table 3
State of Connecticut
Generating Capacity Reserves
Without Proposed Cross-Sound Cable
Millstone Units Not Available
During Summer Peak Periods

Year	2002	2003	2004	2005	2006	2010	2015	2020
Installed Capacity (MW)	5,904	5,904	6,960	6,960	6,960	6,960	6,960	6,960
Transmission Import Capability (MW)	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200
Total Available Resources (MW)	8,104	8,104	9,160	9,160	9,160	9,160	9,160	9,160
Peak Demand (MW)	6,325	6,397	6,469	6,509	6,550	6,715	6,987	7,454
Reserve Capacity (MW)	1,779	1,707	2,691	2,651	2,610	2,445	2,173	1,706
Reserve Margin (%)	28	27	42	41	40	36	31	23

Q. Will New England have adequate capacity reserves without the proposed cross-sound cable?

A. Yes. Table 4 below shows that, based on ISO-NE's recent load and capacity projections, New England's summer season capacity reserve margins without the proposed cross-sound cable would be above 16 percent through the year 2010.

Table 4
New England
Generating Capacity Reserves
Without Proposed Cross-Sound Cable
No New Capacity After 2002

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Available Resources (MW	32,044	32,037	32,031	31,999	31,907	31,856	31,717	31,589	31,491
Peak Demand (MW)	24,143	24,496	24,863	25,311	25,721	26,015	26,379	26,725	27,075
Reserve Capacity (MW)	7,901	7,541	7,168	6,688	6,186	5,841	5,338	4,864	4,416
Reserve Margin (%)	33	31	29	26	24	22	20	18	16

Q. Is there any reason to expect that New England's capacity reserves would be higher than are shown on Table 4?

A. Yes. The New England available capacity and peak demand projections and data shown on Table 4 are taken from the New England Power Pool's April 2001 Forecast Report of Capacity, Energy, Loads and Transmission 2001-2010 ("2001

CELT Report"). These projections do not reflect the addition of any new electric generating capacity in New England after the year 2002. This is a very conservative assumption given that a substantial number of other facilities have been licensed or are currently in the licensing process.

For example, the 2001 CELT Report does not include the 1,056 MW of capacity from the plants that are expected to be built in Meriden and Oxford, CT by 2004. As shown on Table 5, if ISO-New England's capacity projections are modified to reflect only the addition of the capacity from the Meriden and Oxford plants, the region's generating capacity reserves without the cross-sound cable would remain above 30 percent through 2005 and 20 percent through 2010.

Table 5
New England
Generating Capacity Reserves
Without Proposed Cross-Sound Cable
But Including New Oxford and Meriden, CT Plants

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Available Resources (MW)	32,044	32,037	33,087	33,055	32,963	32,912	32,773	32,645	32,547
Peak Demand (MW)	24,143	24,496	24,863	25,311	25,721	26,015	26,379	26,725	27,075
Reserve Capacity (MW)	7,901	7,541	8,224	7,744	7,242	6,897	6,394	5,920	5,472
Reserve Margin (%)	33	31	33	31	28	27	24	22	20

Based on our independent analysis we believe that it is reasonable to expect that at least another 3,000 MW of new generating capacity will be built in New England after 2002. Consequently, New England's capacity reserves and reserve margins can be expected to be even higher than shown on Table 5.

Q. Does Cross-Sound witness Tierney's analysis of the reliability benefits of the proposed cross-sound cable produce credible results?

A. No. Cross-Sound witness Tierney concedes that her analysis shows that there is only a low probability that the Connecticut electric system will be unable to

provide enough power to serve customers' demands during the peak demand hours in the summer of 2002 even without the proposed cross-sound cable.[1] Nevertheless, a review of Dr. Tierney's workpapers reveals that her reliability analysis for the year 2002 is seriously flawed by one or perhaps two assumptions that reduce the reliability of the Connecticut electric system and bias the results in favor of the proposed cross-sound cable. As a result, the probability that the Connecticut system will be unable to serve customer demands in the summer of 2002 without the proposed cross-sound cable should be even lower than Dr. Tierney has calculated.

Q. Please explain.

A. Dr. Tierney's workpapers reveal that she assumed in her reliability analysis that the 2002 summer peak load in Connecticut would be 6,674 MW. This is 349 MW higher than the approximate 6,325 MW peak load forecast for 2002 in the Siting Council's Draft 2001 Twenty-Year Forecast. Quite simply, the use of the higher peak load makes Connecticut's electric system look less reliable and exaggerates the loss of load probability calculated by her model.

It then appears that Dr. Tierney compounds this error by assuming that 285 MW of generating capacity at eleven existing units in Connecticut will be retired prior to the summer of 2002.[2] Although Dr. Tierney's workpapers cite the 2001 CELT Report as the source for the retirement of these units, that document does not appear to mention these retirements and I have been unable to find any other source that believes that these units will not be available to serve customer demands in 2002 and subsequent years. The unnecessary and unrealistic elimination of this capacity makes Connecticut's electric system look less reliable and exaggerates the loss of load probability calculated by Dr. Tierney's model.

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[1] Pre-Filed Testimony of Susan F. Tierney, at page 23, lines 9-11.

[2] According to Dr. Tierney's workpapers, the retired plants would include South Meadow Units 11-14, Aetna Capitol District, Bristol Refuse, Hartford Landfill CRRA, Lisbon Resource Recovery, New Milford, Shelton Landfill Pinchbeck, and Bridgeport Resco.

These two flawed assumptions cause Dr. Tierney's analysis to overstate the probability that the electric system in Connecticut will be unable to provide enough power to serve customer demands during the peak demand hours in the summer of 2002. For this reason, the results of her analysis are invalid.

Q. Is Dr. Tierney's quantification of the economic value to Connecticut of the benefits from the proposed cross-sound cable similarly invalid?

A. Yes. It appears that the same errors affect Dr. Tierney's economic analysis as affect her reliability model. For example, Dr. Tierney assumes that Connecticut will experience an annual peak load of 6,873 MWs in 2004. This is 404 MW higher than the peak load that has been forecast for the same year by Connecticut's utilities and included in the Siting Council's 2001 Twenty-Year Forecast.

Dr. Tierney's economic analysis claims to capture the cost to Connecticut's electricity customers of outages that would be experienced if the proposed cross-sound cable is not built.[3] But her flawed assumptions cause her to overstate the outages that would be experienced without the proposed cross-sound cable. As a result, her $25 million net present value quantification of the reliability benefits of the proposed cross-sound cable will provide to Connecticut and her conclusion that the proposed cross-sound cable will produce valuable reliability benefits to Connecticut consumers are not credible.

Q. Dr. Tierney's economic analysis includes several sensitivity cases. Do these sensitivity cases suffer from the same biases as her base case economic analysis?

A. Yes. The results are biased because Dr. Tierney similarly assumes unreasonably high system loads in each of these sensitivity cases and appears to have unrealistically retired 285 MW of generating capacity that actually will be available to serve load in Connecticut.

Q. Dr. Tierney performs a sensitivity case in which Millstone Units 2 and 3 are out of service during the years 2002-2004. Do you think that this is a realistic scenario?

A. No. Millstone Units 2 and 3 are now owned by Dominion Nuclear Connecticut. Dominion has an excellent reputation for operating and managing its nuclear plants in Virginia. There is absolutely no reason to expect that Millstone Units 2 or 3 will be shut down for extended outages in the foreseeable future as they were back in the mid-to-late 1990s when Northeast Utilities was responsible for their operations.

Q. Was Cross-Sound able to provide any analyses or studies other than the reliability analysis discussed in its pre-filed testimony to support the claims it has made concerning the reliability-related benefits that would be provided by the proposed cross-sound cable?

A. No. Cross-Sound was not able to provide any other analyses or studies other than Dr. Tierney's testimony or the testimony of Cross-Sound witness Mr. Disher to support the following claims it has made as to the reliability benefits that would be provided by the proposed cross-sound cable:

- That the Project is necessary to assure the reliability of the electric power supply in the state and the region.[4]
- That the Project will reduce generation resource needs and improve reliability in New England/Connecticut and New York.[5]
- That the project will reduce the likelihood of severe power emergencies in New England and/or Connecticut.[6]
- That the project will enhance competition in the Connecticut electricity market.[7]

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[3] Response to Interrogatory CSC-80.
[4] Response to Interrogatory OCC-3.
[5] Response to Interrogatory OCC-4.
[6] Response to Interrogatory OCC-6.
[7] Response to Interrogatory OCC-7.

- That the project will enhance competition in the New England electricity market.[8]
- That the project will enhance the reliability of electricity supply in Connecticut.[9]
- That the project will enhance the reliability of electricity supply in New England.[10]
- That the project is necessary for the reliability of Connecticut's electric power system.[11]

Q. Does Dr. Tierney quantify the reduction in Connecticut's required electric reserve margin that she claims would result from the addition of the cross-sound cable?[12]

A. No. Cross-Sound's responses to Interrogatories OCC-33 and CSC-87 acknowledge that Dr. Tierney has not quantified the reduction in Connecticut's required reserve margin that she claims would result from the cross-sound cable.

Q. Is it reasonable for the Siting Council to rely on the claim that Long Island will be able to provide significant amounts of emergency power to Connecticut or New England over the proposed cross-sound cable?

A. No. Long Island currently has barely enough generating capacity to meets its own peak needs. Dr. Tierney assumes that three new power plants will be built on Long Island during the next few years. However, none of these projects has received the required licenses from the New York State Board on Electric Generation Siting and the Environment. In fact, formal applications have not even been filed for two of these projects and the third project has just recently started the formal licensing process. Although some new capacity can be expected to be licensed and built on Long Island, it is not certain that any of the proposed

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[8] Response to Interrogatory OCC-8.
[9] Response to Interrogatory OCC-18.
[10] Response to Interrogatory OCC-19.
[11] Response to Interrogatory OCC-22.
[12] Pre-Filed Testimony of Susan F. Tierney, at page 24, lines 17-19.

facilities cited by Dr. Tierney, let alone all three plants, actually will be built and, if built, when they will be available to serve customer demands.

In addition, the existing transmission interconnection between Norwalk Harbor and Northport, Long Island has the capacity to bring approximately 250 MW from Long Island to Connecticut. Cross-Sound needs to show that Long Island will be able to provide more than this amount of capacity to Connecticut in an emergency. However, it has not done so.

Finally, data provided by Cross-Sound suggests that Long Island, Connecticut and New England have recently experienced their summer peak demands at approximately the same time.[13] This means that Long Island may be least able to provide emergency power when Connecticut or New England have the greatest need for that power.

Q. Have Cross-Sound or Dr. Tierney quantified the diversity in peak hours between Long Island and Connecticut or New England?

A. No. Cross-Sound and Dr. Tierney try to demonstrate that there is peak load diversity between Long Island and Connecticut and New England.[14] However, they have not quantified this diversity.[15] Consequently, while there may be some diversity in peak loads between these regions, it is impossible to determine whether that diversity is 1 MW or 1,000 MW. In reality, there is little reason to expect significant diversity between Long Island and Connecticut. They are so geographically close to one another than they experience much of the same hot weather during the summer.

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[13] Response to Interrogatory CSC-72.

[14] No peak load diversity would mean the systems experienced their peak loads at the same time. This would mean it was less likely that one of the systems could send power to the other in an emergency during peak hours. A significant amount of diversity would mean that the systems experienced their peak loads at very different times and, therefore, a region that was not experiencing its peak demand would have some capacity available to send to the other region if it experienced an emergency during peak hours.

[15] Response to Interrogatory OCC-12.

Q. Is there any evidence that there is not significant diversity in peak loads between Long Island and Connecticut?

A. Yes. Cross-Sound's response to Interrogatory CSC-72 shows that in two of the most recent four years, Long Island and CL&P experienced their peak loads on the same days but several hours apart. This suggests that there is not significant diversity in peak loads between Long Island and the portion of Connecticut served by CL&P.

The data in Cross-Sound's response to Interrogatory CSC-72 also shows that in three of the past five years, Long Island and UI experienced their peak loads on the same days. On two of these occasions, the peak loads were experienced only one hour apart. On the third occasion, Long Island and UI experienced their peak loads at the same time. This also suggests that there is not significant diversity in peak loads between Long Island and the portion of Connecticut served by UI.

Finally, Long Island and New England ISO experienced their peak loads on the same day in two of the most recent three years. The peak hours on these peak days were only two hours apart. Again, this suggests that there is not significant diversity in peak loads between Long Island and New England.

This pattern suggests that Connecticut and New England cannot rely on Long Island to provide power over the proposed cross-sound cable in an emergency. Even if Long Island is able to provide some power to Connecticut or New England in an emergency, Cross-Sound has not shown that Long Island would be able to provide more power than the approximate 250 MW that can be carried by the existing cable between Northport, Long Island and Norwalk Harbor, Connecticut.

Q. Has Long Island historically provided much power to Connecticut over the existing transmission interconnection between Norwalk Harbor and Northport?

A. No. Cross-Sound's response to Interrogatory CSC-70 and CL&P's response to Pre-Hearing Interrogatories, Set One, No. 3 reveal that since 1996 only limited amounts of power have been transmitted from Long Island to Connecticut over the existing interconnection between Norwalk Harbor and Northport.

Q. Have Cross-Sound or Dr. Tierney provided any studies or analyses to support Cross-Sound's claim that the proposed cross-sound cable will not increase the price of power to Connecticut consumers?[16]

A. No.[17]

Q. Have Cross-Sound or Dr. Tierney provided any studies or analyses to support the claim that the proposed cross-sound cable is necessary for the development of a competitive electricity market?[18]

A. No.[19] Instead, Cross Sound and Dr. Tierney have relied on general statements that competition is enhanced by interconnection.

Q. Dr. Tierney has claimed that the proposed cross-sound cable would contribute to lower prices in Connecticut through the operation of a competitive market.[20] Have Cross-Sound or Dr. Tierney quantified the amount by which the proposed cross-sound cable would lower electricity prices in Connecticut?

A. No.[21]

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16 Application, Executive Summary, at page iv.
17 Response to Interrogatory OCC-9.
18 Pre-Filed Testimony of Susan F. Tierney, at page 5, lines 8-9.
19 Response to Interrogatory OCC-24.
20 Pre-Filed Testimony of Susan F. Tierney, at page 24, lines 17-19.
21 Response to Interrogatory OCC-32.

Q. Is it possible that the proposed cross-sound cable will increase prices in Connecticut?

A. Yes. There are a number of circumstances in which the proposed cross-sound cable could be expected to increase prices.

Dr. Tierney dismisses this concern by arguing that:

> Much of New England's supply curve is, under normal circumstances, relatively flat and will become flatter with the introduction of the approximately 10,000 MW of new combined cycle generating capacity expected to enter service by 2003. This is because there are many resources that have roughly equivalent operating costs. When power demand intersects with a flat supply curve, shifting demand outward somewhat will not raise price if the shift is not outside the flat portion of the supply curve.[22]

I agree with Dr. Tierney that the shape of the supply curve--how steeply it slopes at the point where it intersects with demand--will influence whether increased demand will raise prices, and by how much.[23] That is why we need to be concerned about the impact of the proposed cross-sound cable under those circumstances when the supply curve is not flat.

Although wholesale electricity prices in New England are not as high nor as volatile as in California, there are still times during the year when energy prices rise to very high levels.[24] At such times, the New England supply curve is very steep and, as a result, the increase in demand represented by the proposed cross-sound cable could produce a substantial increase in market clearing prices. While 330 MW may not seem significant in relation to the total New England loads, if that demand comes at a time when the supply curve is steep it could have a noticeable impact on prices in New England.

In addition, Dr. Tierney's testimony appears to assume that there are no transmission constraints between Connecticut and the rest of New England when,

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[22] Pre-Filed Testimony of Susan F. Tierney, at page 40, lines 12-18.
[23] Pre-Filed Testimony of Susan F. Tierney, at page 40, lines 9-12.

in reality, there is a limit on the amount of power that can be imported into Connecticut from New England. During those hours when transmission between Connecticut and the rest of New England is constrained, costs to supply Connecticut load could be higher than they would be without the cable.

It is reasonable to anticipate, based on recent price history and the addition of significant generation resources in Connecticut and the rest of New England, that the predominant the power flows on the proposed cross-sound cable will be from Connecticut to Long Island. For the hours during which prices in Long Island are higher than those in New England, and transmission is constrained between New England and Connecticut, it is likely that higher cost resources will have to be dispatched in Connecticut than would have to be dispatched without the proposed cross-sound cable. At the present time, those higher costs ("uplift costs") are socialized across the New England Power Pool; however, once a congestion management system is in place, those higher costs will fall most heavily on Connecticut consumers.

Q. Do you have any comments on the testimony filed by Cross-Sound witness Disher?

A. Yes. Mr. Disher makes the obvious point that regional interconnections in theory can provide reliability benefits. However, Mr. Disher's discussion of the performance history of Connecticut's electric system does not offer any insights into the need for the proposed cross-sound cable because the electric system in Connecticut is likely to be very different in the future as compared to what circumstances were like during the years 1996 and 1997 that Mr. Disher discusses. In particular, at least four, and perhaps as many as six, new generation facilities will be added to the electric system in Connecticut and, as I mentioned earlier, given the new ownership of Millstone Station, it is not reasonable to

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[24] For example, prices rose to $6,000 per MWH for several hours on May 8, 2000.

expect that Millstone Units 2 and 3 will be shut-down for multi-year outages in the foreseeable future.

Q. Do you agree that in theory regional interconnections can provide benefits?

A. Yes. However, in this specific case the proposed cross-sound cable between Connecticut and Long Island will not produce public benefits for consumers of electricity in Connecticut.

Q. Does this complete your testimony?

A. Yes.

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Supplemental Testimony of
David A. Schlissel

On behalf of
The Office of Consumer Counsel

October 26, 2001

Q. Please state your name, position and business address.

A. My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy Economics, Inc., 22 Pearl Street, Cambridge, MA 02139.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the Office of Consumer Counsel of the State of Connecticut. ("OCC")

Q. Have you previously filed Testimony in this proceeding?

A. Yes. I filed Testimony on October 19, 2001.

Q. What is the purpose of this Supplemental Testimony?

A. After I filed my Testimony on October 19, 2001 I received copies of Cross-Sound's supplemented responses to certain OCC interrogatories. The purpose of this Supplemental Testimony is to address the misleading nature of some of these supplemented interrogatory responses.

Q. Please explain.

A. Cross-Sound's supplemented responses to Interrogatories OCC-34 and OCC-36 claim that Connecticut wholesale prices were higher than Long Island prices in 24 percent of the hours between July 1 and October 17, 2001 and in 43 percent of the hours between October 1 to October 17, 2001. These claims misleadingly imply that it would have been economic for buyers in Connecticut to purchase power from sellers in Long Island during these hours.

However, Cross-Sound ignores the fact that a buyer in Connecticut would have to pay not only the wholesale price of power generated on Long Island. The price that the Connecticut buyer would have to pay for power from Long Island also would include the cost of (1) having the power transmitted to the Long Island end of the proposed Cross-Sound cable, (2) transmitting the power through the Cross-Sound cable, and (3) having the power transmitted within New England from the

New Haven end of the proposed cable. By way of contrast, a Connecticut buyer purchasing power from a Connecticut or New England seller would have to pay only the wholesale price of power plus the cost of transmitting that power within New England.

Consequently, even if the wholesale cost of power was lower on Long Island in 24 percent of the hours between July 1 and October 17, 2001, the total transmission and generation cost that a Connecticut buyer would have had to pay for that power during many or all of these hours may have been higher than the total transmission and generation cost that same buyer would have had to pay for power from a New England seller. Cross-Sound's supplemental responses to Interrogatories OCC-34 and OCC-36 are misleading because they ignore the significance of the different costs of transmitting power generated on Long Island and in New England on the relative economics of a purchase by a Connecticut buyer.

Q. Are Cross-Sound's other comparisons between wholesale prices on Long Island and in New England similarly misleading because they fail to consider transmission cost differences?

A. Yes. The comparisons presented in Cross-Sound's responses to Interrogatories CSC-85 and CSC-86 are similarly misleading.

Q. Do you want to comment on any other Cross-Sound interrogatory responses?

A. Yes. Cross-Sound's supplemental response to Interrogatory OAG-6 includes the KeySpan Ravenswood Cogeneration Project on a list with planned generation projects on Long Island. This is misleading. The KeySpan Ravenswood Project technically is on Long Island because Queens, New York is situated on the western end of Long Island. But the KeySpan Ravenswood Project will not be located within the Long Island electrical control area. Instead, it will be located within the Queens load pocket in New York City. Therefore, it should not be included in a list that implies it will be electrically located on Long Island.

At the same time, Cross-Sound's response to Interrogatory OAG-7 purports to show that Long Island would have significant surplus capacity to sell to Connecticut. It does so by comparing the amount of capacity that would be available during the 2000 and 2002 peak summer periods to Long Island's load duration curves for these same years. However, this comparison is misleading because it ignores the fact that Long Island cannot merely sell all of the surplus power above its hourly loads. Instead, power plants are periodically unavailable for planned maintenance outages or for unplanned "forced" outages. For this reason, electric systems need to keep adequate capacity reserves to ensure that they will be able to serve customer demands even though some plants may be unavailable at any particular time.

Consequently, during essentially all hours of the year Long Island actually would be able to sell to Connecticut significantly less power than it appears from Cross-Sound's response to Interrogatory OAG-7. In fact, it is reasonable to expect that in many hours of the year there would be no surplus power that could be sold outside Long Island.

In addition, Cross-Sound's response to Interrogatory OAG-7 does not indicate whether Connecticut or New England would need to buy power when Long Island has surplus to sell. Given that Connecticut will have 50 percent reserve margins during peak summer hours, it is reasonable to expect that reserve margins during off-peak periods will be significantly higher than 50 percent. This suggests that Long Island will have surplus power to sell at the times when Connecticut least needs that power.

Moreover, as I have indicated above, the fact that Long Island might have surplus power to sell does not mean that it would necessarily be economic for a buyer in Connecticut or Long Island to purchase that surplus power rather than buying power from New England suppliers.

Q. Does this complete your Supplemental Testimony?

A. Yes.