STATE OF CONNECTICUT

BEFORE THE DEPARTMENT OF PUBLIC UTILITY CONTROL

Application of Connecticut Light & Power and	)	
United Illuminating for Approval of Nuclear	)	**Docket No. 99-09-12RE01**
Generation Assets Divestiture Plan: Sale of	)	
Millstone Station to Dominion Resources, Inc.	)	

DIRECT TESTIMONY OF

PAUL L. CHERNICK

ON BEHALF OF

THE OFFICE OF CONSUMER COUNSEL

Resource Insight, Inc.

NOVEMBER 15, 2000

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I. Identification and Qualifications

Q: State your name, occupation and business address.

A: I am Paul L. Chernick. I am President of Resource Insight, Inc., 347 Broadway, Cambridge, Massachusetts.

Q: Did you testify in the initial phase of this proceeding?

A: Yes. I prefiled testimony in Docket No. 99-09-12 on January 18, 2000.

Q: Summarize your professional education and experience.

A: I received an SB degree from the Massachusetts Institute of Technology in June, 1974, from the Civil Engineering Department, and an SM degree from the Massachusetts Institute of Technology in February, 1978, in technology and policy. I have been elected to membership in the civil engineering honorary society Chi Epsilon, and the engineering honor society Tau Beta Pi, and to associate membership in the research honorary society Sigma Xi.

I was a utility analyst for the Massachusetts Attorney General for more than three years, and was involved in numerous aspects of utility rate design, costing, load forecasting, and the evaluation of power supply options. Since 1981, I have been a consultant in utility regulation and planning, first as a research associate at Analysis and Inference, after 1986 as president of PLC, Inc., and in my current position at Resource Insight. In these capacities, I have advised a variety of clients on utility matters. My work has considered, among other things, the cost-effectiveness of prospective new generation plants and transmission lines; retrospective review of generation planning decisions; and the valuation of power plants. My resume is appended to my direct prefiled testimony in Docket No. 99-09-12.

Q: Have you testified previously in utility proceedings?

A: Yes. I have testified approximately one hundred and sixty times on utility issues before various regulatory, legislative, and judicial bodies. A detailed list of my previous testimony is contained in my resume.

II. Introduction

▪ **Q: What topics do you cover in this testimony?**

▪ A: I discuss

- The inadequacy of information on the auction process and on the selection of Dominion as the purchaser.
- Projections of Millstone operating characteristics.
- Comparison of projected and actual market values of the Millstone units.
- The relative values of Millstone 2 and Millstone 3, including a comparison of sales prices for Millstone and other recent nuclear sales.
- The treatment of CL&P's member account balance in the NEIL insurance program.

Q: What are your recommendations?

A: I recommend that the Department:

- Delay its decision in this proceeding until the parties and Staff have the opportunity to review the auction process, the losing bids, and the basis for JP Morgan's recommendation.
- Unless the allocation between the units is confirmed by review of bids for the units individually, the Department should defer any approval of the allocation of the sales price between the units.

- If and when the Department does approve the sale, it should clarify that the distributions from the NEIL Member Account will flow to CL&P (and UI, if it has a similar account) and hence to ratepayers.

III. Inadequacy of Responses on the Sale Process

Q: Have you been able to determine whether the sales process was adequately managed?

A: No. Other than the Offering Memorandum and some similar introductory materials, JP Morgan has refused to provide any information on how it managed the sale. OCC has attempted to obtain this information, without success. (For example, see Request OCC-83 and JP Morgan's response.)

Q: What sort of additional information must be reviewed for the Department to determine that the auction was conducted appropriately?

A: There are two types of information that have not been provided. First, JP Morgan has not provided any detail on the types of information that were requested by bidders, and what was provided in response to those requests. These materials are generally voluminous, and need not always be reviewed in detail. It is essential, however, for regulators and consumer representatives to be allowed to review the breadth and depth of material provided to bidders, and to ascertain that the bidders' requests for information appeared to have been satisfied.

Second, JP Morgan has not provided any documentation of the bids received, other than Dominion's winning bid. We do not know

- how many potential bidders responded to the Offering Memorandum,
- how many bidders JP Morgan qualified,

- how many final bids were received,[1]
- the cash value of those bids,
- how many of the bids included power-purchase agreements,
- the prices of the power-purchase agreements, or
- the decommissioning top-off payments, if any, requested by other bidders.

JP Morgan has not explained how it analyzed proposals to qualify and select bidders, or how it traded off cash, deferred payments, decommissioning top-offs, power-purchase agreements, extent of assets transferred, probability of a timely closing, and other considerations to select the bid with the greatest total value to ratepayers.[2] Indeed, we do not know how JP Morgan considered the varied interests of NU shareholders, CL&P ratepayers, and ratepayers of UI and the other owners of Millstone 3. We do not have any analyses, comparisons, summaries, or other documents prepared by JP Morgan staff in reaching their decision or in presenting their recommendation to UOMA.

Perhaps most importantly, Mr. Dabbar's list of JP Morgan's objectives for the auction (p. 9 of his testimony) does not include maximizing the value of the auction for ratepayers. He does state that "the Auction process was structured to obtain the best possible results by identifying…the highest price for the assets" (p. 12), but does not even represent that JP Morgan accepted the highest bid.

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[1]Mr. Dabbar was willing to hint that at least four bids were received, but was not willing to state that the four bids were actually binding (Tr. 11/06/00 at 680, 700, 701).

[2]See p. 9 of Mr. Dabbar's testimony for a list of JP Morgan's concerns.

Q: Would you expect those documents to exist, and for them to be provided in this process?

A: Yes. On behalf of various state consumer advocates, I was involved in the review of

- The sale by Conectiv of Atlantic Electric's fossil generation (Docket No. EM00020106), which Mr. Schlissel discusses. Conectiv provided
  - a large amount of information on the data provided to bidders.
  - both indicative and final bids by all bidders, including disaggregation of the bids by unit and alternative bids with various arrangements for power sales.
  - analyses of the value of plants and of the bids conducted internally by Conectiv staff and consultants.
  - presentations to the Conectiv Board of Directors on the bids and plant valuation.
- The sale of Millstone and Seabrook output in Docket No. 99-03-36, discussed by Mr. Schlissel.
- The sale of the Centralia plant by PacifiCorp and its co-owners to TransAlta. PacifiCorp provided, either directly or through a document room:
  - the communications between the sellers, their agent, and bidders,
  - management presentations to the PacifiCorp Board of Directors,
  - the indicative bid documents for all bidders in the initial round,
  - the final bid documents for the final bidders.[3]

[3]PacifiCorp was very concerned with the confidentiality of some of these materials, and allowed the parties to examine the bid documents only in the document room. PacifiCorp made an exception for me, since I was located a couple thousand miles from the document room. I

- The sale of Central Maine Power's fossil and hydro capacity to FPL (Docket No. 98-058). In the materials I examined, CMP provided
    - the initial and clarified bids by FPL and the two highest other bids for each generation bundle, and
    - the rationale for selecting the FPL bid, including adjustments CMP made to the bids to reflect differences in power-supply agreements, transmission arrangements, scope of assets purchased, and treatment of inventories and capital expenditures.

Similarly, Resource Insight, Inc. has been involved in the review of PEPCo's sale of one of its generation entitlements to Allegheny Power and PPL, and bulk of its plants and contracts to NRG. In that case, PEPCo provided parties with a CD-ROM containing much of the material provided to bidders, as well as links to web sites with additional information. PEPCo also provided the bid documents from losing bidders.

In addition, the bidding between Entergy and Dominion for the New York Power Authority nuclear plants (Fitzpatrick and Indian Point 3) was conducted largely in public.

Q: Were the bids in the cases you describe above, other than the bids for the NYPA nuclear plants, submitted confidentially?

A: Yes. With the exception of the runner-up in the Conectiv auction, the identity of all the bidders remained confidential, through the use of redactions and code names (e.g., names of states, numbers, or letters).

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received the documents by express mail, reviewed them over a 48-hour period, and returned them to PacifiCorp.

Q: Are you aware of any diminution of bidder interest in participating in power-plant auctions due to the release of redacted versions of their bids in earlier auctions?

A: No. I review a number of industry publications and have not seen any such complaint by bidders. If anything, interest in generation auctions appears to have increased over time, despite the release of redacted bids.

Q: What problems arise as a result of the lack of information, compared to the normal practice in review of utility asset sales?

A: The Department cannot find that the auction was carried out according the Act or the Order in the first phase of this proceeding, was implemented efficiently, or resulted in the best outcome for ratepayers. In addition, as I discuss below, the Department does not have the information necessary to verify the reasonableness of the allocation of proceeds between the units.

Q: Should the Department rely on the judgement of JP Morgan in this matter?

A: Once the relevant information is made available for review by Staff and the parties, and any differences of opinion about JP Morgan's handling of the auction have been aired, the Department can decide for itself whether it agrees with JP Morgan on specific judgement calls.[4]

Accepting JP Morgan's assertion that it handled the auction properly, without any review by the parties or Staff, is not appropriate. Even if Connecticut law gives the Department discretion to delegate its authority in this manner (a legal issue, on which I take no position), some of JP Morgan's

[4] At this point, we do not know what judgements JP Morgan needed to make. It is possible that there will be no dispute about the management of the auction process or the selection of Dominion as the winner of the auction.

decisions about other nuclear sales have been questionable. For example, JP Morgan was the advisor to Niagara Mohawk in the sale of Nine Mile Point. JP Morgan supported (and may have recommended) the exclusive negotiation with AmerGen that resulted in the agreement to sell those units for about $120/kW. Similarly, JP Morgan assisted NYPA in the more successful sale of its nuclear units, but again supported an exclusive negotiation and a price that was clearly lower than market value, since both Dominion and Entergy offered more than the initial bid in the subsequent mini-competition.

With respect to the Millstone sale, JP Morgan may have performed the best possible auction, and achieved the best possible outcome for ratepayers. Alternatively, JP Morgan may have made poor decisions that would deny the ratepayers significant potential benefits. Based on the information in the record, the Department presently has no way to determine which is the case.

IV. Projections of Millstone Operating Characteristics

Q: How do the operating characteristics projected for Millstone in the compare to the estimates presented to the Department in Docket No. 99-02-05, and the characteristics the Department specified in its order in that docket?

A: I have compiled the projections for O&M, capital additions, A&G expense, and capacity factor offered by CL&P, as well as the two sets of projections I made (based on average and superior peer performance) and the values implied by the Order in CL&P's stranded-cost proceeding, Docket No. 99-02-05.[5]

I restated these values in year-2000 dollars, and compared them to the average costs projected for 2001–2003 in the (pp. 66–68), also restated to year-2000 dollars, and to average capacity factors projected in the for 2002-03.[6] To make the comparison of these factors easier, I computed $/MWh for the total of these non-fuel operating costs.

The results for Millstone 2 are as follows:

	$/kW (2000$)				**Capacity**	
	O&M	*Cap Adds*	*A&G*	*Total*	**Factor**	**$/MWh**
NU Projection	119	39	29	187	77%	27.6
Peer Average	108	30	26	164	81%	23.0
Peer Efficient	111	23	27	161	82%	22.3
DPUC Implied	110	32	26	169	80.4%	24.0

The projections include

the estimates in the stranded-cost proceeding.

The results for Millstone 3 are as follows:

[5]Since the Order specified the rules for computing the various parameters, but not the values, I computed those values. My computations are laid out in great detail in my affidavit in the OCC's appeal of that case, State of Connecticut Superior Court Judicial District of New Britain Docket No. CV 99-49-7239.

[6]I used two years for the capacity factors to balance refueling and non-refueling years. The capacity factors would be with a three-year average. After 2000, the cost projections show

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	$/kW (2000$)				Capacity	
	O&M	*Cap Adds*	*A&G*	*Total*	**Factor**	**$/MWh**
NU Projection	94	26	23	143	79%	20.54
Peer Average	83	22	20	125	79%	18.00
Peer Efficient	75	12	18	105	83%	14.40
DPUC Implied	87	19	21	128	80.9%	18.02

For Millstone 3, the costs are

Q: What is the significance of these comparisons?

A: The describes its projections as originating with the

In addition, the Department should when the time comes to reconcile the interim nuclear stranded costs for CL&P and UI.

V. The Relative Values of Millstone 2 and Millstone 3

Q: How were the sale proceeds allocated between Millstone 2 and Millstone 3?

A: That is not at all clear. It appears that Dominion allocated its bid among the assets (including $1 million to Unit 1), and that JP Morgan simply accepted that allocation.

Q: What incentive did Dominion have to allocate the bid price in a manner that reflects the relative value of the units?

A: Not much. From Dominion's point of view, bidding on the plant as a package, only the total price matters. The only way that the valuation of the individual units might matter to Dominion is to the extent that the unit valuations might have tax implications. Any correspondence between Dominion's interest as a taxpayer and the ratepayers' interests of equity between utilities would be largely coincidental.

Q: What relative values did other bidders place on the two units?

A: We do not know, because JP Morgan refused to provide the information. We do not know whether any bidders offered a bid for just one unit, which would provide a real market valuation of that unit. Nor do we know whether the other bidders for the entire plant specified a split between the units that was similar to Dominion's, or radically different.

Q: For what prices have similar plants sold?

A: Unfortunately, there are few parallels to this sale. The price for Nine Mile Point 1 and 2 would have been an interesting model for Millstone (although there are differences between the plants, especially in the age and size of the older units), but the initial agreement to sell Nine Mile was not competitive, and the sale has been canceled. So any comparison must be based on sales of units similar to either Millstone 2 or Millstone 3.

The data problem is more severe for Millstone 3. The only nuclear unit to have been sold that is remotely comparable to Millstone 3 in terms of size and age was the single-unit Clinton plant owned by Illinois Power. Unlike Millstone 3,

- Clinton had never run well.

- Clinton was still in a three-year shutdown at the time the sale was announced.
- Clinton was sold to AmerGen, which had been in charge of getting the plant restarted.
- Illinois Power sold the plant through non-competitive negotiation with a single potential buyer.
- The sale agreement was reached (in April 1999) prior to market opening and the high market prices that have been observed in the summers of 1999 and 2000.

The situation is somewhat better in terms of sales of plants comparable to Millstone 2. Two recent sales in New York involve units of roughly the same age and size:

- The sale by the New York Power Authority of its Fitzpatrick and Indian Point 3 nuclear units to Entergy.
- The sale by ConEd of its Indian Point 2 nuclear unit, also to Entergy.

The NYPA sale is complicated by deferred cash payments, provision of a block of power at rates below the market prices negotiated for an initial block, and revenue sharing above a threshold of market prices. The following table summarizes the two New York sales, discounting the deferred payments for the NYPA plants at 10% (a rate typical of those used by the Department for evaluating effects on ratepayers) and excluding the uncertain revenue sharing. The prices include fuel; the in-service dates and capacities of the New York units are from the Energy Information Administration's *Inventory of Power Plants 1998.*

	ISD	MW	Cash (millions)	Discounted Power	Total Cost (millions)	Total Cost (per kW)
Fitzpatrick	1975	820	$681	$33 million	$714	$399/kW
Indian Point 3	1976	970				
Indian Point 2	1973	931	$602		$602	$647/kW
Joint incentive					$61	$22/kW
Millstone Point 2	1975	875				

Entergy will pay the joint incentive to NYPA when it purchases Indian Point 2 from ConEd; this value can be attributed to either sale, so I divided its present value by the total capacity of the three units.

The NYPA sale was not fully competitive, since NYPA selected Entergy in an exclusive negotiation. After NYPA announced the sale to Entergy, Dominion offered an unsolicited bid, without opportunity for full due-diligence. NYPA then allowed each bidder to submit improved offers, and selected an improved Entergy bid. While the offer by Dominion forced Entergy to increase its bid, the price may not have been as high as it would have been with full competition among bidders.

One of the NYPA units (FitzPatrick) is located in the northern part of the state, where transmission constraints frequently prevent generators from selling power into the higher-priced markets in downstate New York (where Indian Point is located) and New England. FitzPatrick is also a single-unit site, which would lack some of the economies of the Millstone or combined Indian Point plants.[7]

Q: What do you conclude from these comparisons?

A: The prices for the New York sales suggest that the allocation proposed in this proceeding may understate the value of Millstone 2. The value that Dominion

[7]If Entergy gains control over the neighboring Nine Mile plant, it would pay NYPA an additional $100 million over 10 years, or about $61 million in present value.

and hence JP Morgan allocated to Millstone 2—$443 million or $507/kW—is about $140/kW lower than the price of the recent Indian Point 2 sale. If Millstone 2 is actually worth $647/kW, its share of the Millstone proceeds would be $566 million, or $524 million net of the price allocated to the fuel. That price for Unit 2 would leave $669 million, or $681/kW, for Millstone 3.

This comparison is hardly definitive, since it does not consider such differences as

- The relative benefit, cost or risk of the decommissioning liabilities the purchasers are taking on at Indian Point 2 and Millstone.
- The Indian Point 2 share of the synergy payment to NYPA.
- The net cost to Entergy of the power-sales commitment at Indian Point 2, which ConEd represents to be "below anticipated market prices."[8]

One factor that is not likely to vary significantly between the Indian Point and Millstone is market prices. Indian Point lies outside the New York City load pocket, which is the one area in which prices are most likely to remain higher than average for the Northeast, due to persistent constraints on transmission and the high costs and difficulty in building new generation in the City. In the zone immediately north of Indian Point, developers have filed siting applications (a major commitment in New York) for 2,677 MW of new combined-cycle generation, and pre-applications for another 550 MW, so that area is unlikely to have market prices significantly different from those in New England for long.

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[8]"Con Edison Announces Agreement to Sell Indian Point Nuclear Units to Entergy," Con Edison Press Release, 11/9/00. Entergy claims, perhaps for property- and income-tax purposes, that it is paying an unspecified amount for the right to make this sale ("Entergy's Purchase of Indian Point 2 Contributes to Earnings Growth," Entergy Press Release, 11/9/00).

While I would expect Unit 2 to be worth somewhat less than Unit 3, in dollars per kW, the difference could be significantly less than the difference indicated in the PSA. As much as $100 million more might reasonably be allocated to Unit 2.[9]

Q: Why does the allocation of the proceeds between the units matter?

A: The allocation of proceeds between the units affects the allocation of proceeds between CL&P ratepayers, UI ratepayers, WMECo and PSNH ratepayers, and NU shareholders. For each dollar allocated to Millstone 2, 81¢ goes to CL&P ratepayers and the other 19¢ goes to WMECo ratepayers. But for each dollar allocated to Millstone 3, 56.6% goes to CL&P ratepayers, 3.9% to UI ratepayers, 16.1% to WMECo and PSNH ratepayers, and the other 23.3% to other owners. Most of the latter category appears to

although CL&P has not directly addressed that issue in this proceeding.[10] Mr. Soderman indicates that all

with the non-NU joint owners will be below the line (Tr. 11/6/00, pp. 836-839).[11]

As a result, Connecticut ratepayers get 81¢ of each dollar that is attributed to Unit 2, but only 60.5¢ of each dollar that is attributed to Unit 3.

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[9]This estimate assumes the total valuation in the Application. If another bidder has offered a higher price, the increase in value for Unit 2 might be greater than $100 million.

[10]The allocation of these proceeds may be subject to the Department's discretion. I have not seen any contractual language or other documents that explain why these proceeds would

[11]The line of questioning focussed on , but the answer appears to apply to .

On the other hand,

Q: How should the Department deal with the lack of basis for the allocation?

A: If the Department decides to approve the sale, it should reserve judgement on the allocation of proceeds between units, as well as on the allocation between ratepayers and shareholders, until it can deal with these issues substantively, either in a later phase of this proceeding or in a subsequent proceeding.

VI. Allocation of Insurance Funds

Q: What is the open issue regarding the fate of insurance funds for Millstone?

A: The NEIL insurance program, a mutual insurance program that provides coverage for replacement power during outages, collects funds from members to establish a capital pool to pay future claims. CL&P and WMECo currently have a Member Account balance of of which approximately 10% is distributed to members annually (, p. 42).[12] NEIL does not allow transfer of Member Accounts, and the PSA indicates that no insurance balances are to be transferred to Dominion. This suggests that CL&P will be receiving distributions from its Member Account. Mr. Soderman appears to confirm that the Member Account will flow back to CL&P over time, and that the distributions, as received, will be credited to ratepayers (Tr. 11/7/00, p. 965).

[12] I have not found a corresponding value for UI in the record.

However, Mr. Soderman's response is not completely clear, and may be read simply as stating that whatever distributions are received go to ratepayers.

Q: What action should the Department take with regard to the NEIL balance?

A: If and when the Department approves the sale of Millstone, it should clarify that at least CL&P's share of the NEIL Member Account is to be returned to the utility, and hence to ratepayers.

Q: Does this conclude your testimony at this time?

A: Yes. However, I reserve the right to supplement this testimony.