

**JOINT TOWN COUNCIL/PUBLIC UTILITIES COMMISSION MEETING**

**AUGUST 25, 1998**

**7:00 P.M.**

**AGENDA**

1. Pledge of Allegiance and Roll Call
2. Presentation on a Proposal by Stone & Webster and Pennsylvania Power & Light Global on the Pierce Plant Project

JOINT TOWN COUNCIL/PUBLIC UTILITIES COMMISSION MEETING

AUGUST 25, 1998.

7:00 P.M.

A special joint meeting of the Wallingford Town Council and Public Utilities Commission was held on Tuesday, August 25, 1998 in the Robert Earley Auditorium of the Wallingford Town Hall and called to Order by Chairman Robert F. Parisi at 7:03 P.M. All Councilors answered present to the Roll called by Town Clerk Rosemary A. Rascati. Mayor William W. Dickinson, Jr. and Assistant Town Attorney Gerald Farrell, Sr. were also in attendance. Chairman David Gessert and Commissioner George Cooke were present on behalf of the Public Utilities Commission; Commissioner Michael Papale was seated in the audience. Director of Public Utilities Raymond F. Smith was also present. Also in attendance in the audience was William Cominos, General Manager of the Electric Division and Roger Dann, General Manager of the Water & Sewer Divisions. There were approximately twenty-five (25) people in the audience.

e Pledge of Allegiance was given to the Flag.

Chairman David Gessert called the meeting of the Public Utilities Commission to Order at 7:05 P.M.

Councilor Zandri stated for the record that he has been advised by his employer to inform the representatives of Stone & Webster and Pennsylvania Power & Light Global that he is an employee of Northeast Energy Corporation which is a subsidiary of Northeast Utilities. If there are any objections on the part of the representatives of Stone & Webster and Pennsylvania Power & Light Global, Mr. Zandri asked that they be made known at this time.

No objections were raised pertaining to Mr. Zandri's participation in this subject matter.

ITEM #2 Presentation on a Proposal by Stone & Webster and Pennsylvania Power & Light Global on the Pierce Plant Project

Chairman Gessert stated that the commission had requested the special meeting for the purpose of discussing this very important project in the Town of Wallingford. It is important for the Council to be involved and have full information on this project. This is the first time the P.U.C. will be hearing presentation as well. When we look at the impacts of a project such as this one, there are a number of things we are looking at; financial impact, what it will do for the community; and, environmental impacts, a number of areas were studied. There is a mock-up model of the power station on display for everyone to see which shows how this finished product will look on the Pierce

site. The financial impacts were looked at closely and the water supply issue is a very important one for a project this size. Availability of fuel impacts a project of this magnitude and was also studied carefully. Another area also addressed was access to major power lines which cross Wallingford. At the last meeting on this topic, Mr. Duncan Moodie of Stone & Webster presented their initial proposal and concept and where they wanted the project to go. Tonight, we will be presented with an update on the proposed project and will welcome questions from the Council, Commission and audience members on this subject.

Duncan Moodie, Executive Vice President, Stone & Webster Development Corp. expressed the firm's gratitude to the Town officials for gathering this evening for a special meeting on this project. He stated that the Council will be provided a detailed status report on the proposed project. Since appearing before the Council in March of this same year, the firms have reviewed technical, economical, financial and environmental matters facing the project. Having completed that, it was reported back to Raymond Smith on the seventh of July that the firms do believe that a project in Wallingford is both technically and economically feasible and will impact that environment minimally. Tonight we will provide the information to you of the things that we found and where we believe it may be beneficial to move from here. The bulk of the presentation tonight will be made by Potter of PPL Global.

James Potter, Executive Director of the Wallingford Project and Director of Business Development of Pennsylvania Power and Light Global (PPL Global) of Fairfax, Virginia introduced himself to those present. He stated, the intent of this evening's meeting is to provide a status report as to the events that have occurred to date, where we intend to take the project and some of the issues that have come to the surface during our evaluation of various issues pertaining to water, transmission and the like. This is part of our ongoing effort in making sure the community understands the direction that this project is going in.

At this time the Council was treated to a slide presentation lasting approximately forty (40) minutes in length. The transparencies from the presentation were copied and compiled in a booklet form and distributed to the Council to follow along with (Appendix I).

A brief overview was given on Phase I of the project, particularly those topics listed below:

- objectives of briefing
- background history on Stone & Webster and PP&L Global, Inc.

- project team
  - \*Stone & Webster
  - \*PP&L Global
  - \*TRC Environmental Corp.
  
- project goals
  - \*be a good neighbor
  - \*maximize Wallingford benefits
  - \*minimize Wallingford impacts
  - \*improve Wallingford power supply reliability
  - \*provide employment opportunities
  - \*design facility for clean, safe, reliable operation
  - \*build/own/operate profitable facility
  - \*provide low cost wholesale power in New England
  - \*join Wallingford business community
  
- project characteristics
  
- project revenues to Town/DPU
  - \*property taxes
  - \*lease payments
  - \*back-up power
  - \*spin-offs to other businesses
  - \*transmission infrastructure
  - \*employment opportunities
  
- project status summary
  - \*site viability
  - \*noise analysis
  - \*water supply
  - \*aesthetics
  - \*air emissions
  - \*employment/staffing plan
  - \*traffic management - construction phase
  - \*traffic management - operations phase

A brief summary was given on the steps to follow in Phase II of the project.

At this time the floor was opened to the Council for questions.

Mr. Centner asked, do you have any idea what the final sound pressure level in decibels would be?

Mr. Potter answered, the State holds us to standards for evening hours of 51 decibels (dB) and for daytime hours, 61 dB. The background noise emissions from this source are barely audible. The fan (air conditioner in Council Chambers) that you hear in the background is probably in the range of 61dB. It is barely audible.

Mr. Centner asked, what do we have now?

Mr. Potter answered, I believe the decibels are in the high 40s or low 50s in the evening hours.

Duncan Moodie, of Stone & Webster responded, the ambient measurements were taken both day and night continuously around the clock for three days and nights. The current ambients run, at nighttime, 47-48 depending on the exact locations and depending upon which way the wind is wing. If the wind happens to be blowing from the Wilbur Cross parkway, it will actually measure a couple of decibels higher than if it wasn't. The daytime measurements ran typically in the mid 50s.

Mr. Centner asked, in the frequency range, do you expect the new plant to be somewhere in the same frequency range?

Mr. Moodie responded, those are dBa so they are weighted with the range of frequencies.

Mr. Centner asked for the frequency bands that were monitored.

Mr. Moodie could not provide that information tonight but offered to obtain and forward it to Mr. Centner.

Mr. Centner stated, you project 3 million per day needed for water supply; is that a firm number for the twin turbines?

Mr. Potter answered, our water consumption is going to vary by season, by temperature and by how plant is operated. The water consumption rate is going to vary on the order of about 500,000 ons per day. There may be some time periods where we turn down the facility during off-peak hours. There may be other times when we will try to run it hard during on-peak hours.

Mr. Centner asked, do you think you can stay steady with this without a diversion of water from another water body?

Mr. Potter answered, the Quinnipiac Watershed is a very sensitive watershed. We are getting a lot of insight as to how sensitive that watershed is. The bigger issue is that it is a watershed that has not been base logged. The State has not performed significant analysis as to whether our diversion of the gray water would create a problem or not. Since they haven't baselined through this study that they have been trying to do for multiple years, it is difficult for them to issue a permit. We have to come up with some alternative supplies, perhaps some low flow augmentation or other sources elsewhere.

Mr. Centner stated, I am also concerned with, as the water is used to cool in the steam process and it evaporates, one is the plume and the other is, what is the quality of the steam droplets? Is it like an acid rain? Is there a concern with that? With gray water, it is not very pure.

Mr. Carl Stopper, Manager of Engineering Services, TRC Environmental Corp. stated, as far as the water supply is concerned with respect to the cooling and cooling use of that and within the steam bins, there will be proper controls placed on the water that is used in the cooling process to ensure that the quality of any emissions are monitored carefully within the State requirements and any O.S.H.A. requirements for those emissions. The use of the water and the water quality going into the plant, Stone & Webster will have to factor that into the design of the facility to ensure that any emissions are within the State limitations and requirements.

Mr. Potter added, there also is not an acid rain problem per say with the vapor plume from the cooling towers. There will be a vapor plume; a visual plume out of the towers which will vary in size depending on the weather conditions. There are no contaminants within that plume to speak of and no acid rain contaminants.

Mr. Centner asked, does the Siting Council see the Pierce site as favorable, seeing it is active? Will they give us a permit needed to grow?

Mr. Potter answered, yes, they do. There is legislature in the State right now that gives preferential treatment for locating new generation on what they refer to as a "brown field" site or a site that contains an existing generation facility. We have met with D.E.P. to discuss this issue and with all probability they will look favorably upon granting the necessary approvals for the project, because of that reason. That does not mean to say that they won't review the permit as rigorously as they would for other facilities, it just means that, through a legislative process, are required to give it a more expeditious review.

Centner stated, you are calling for a two to four month start up period. How many weeks of that is the power actually dumping onto the grid? Do we get paid for that or do we have to sell it off to someone? What do you do with test power?

Mr. Potter replied, test power is sold on the grid at what is referred to as the market clearing price within the NEPOOL system. The way the bidding procedures will work is, when we deliver power to the transmission system it is deemed delivered in NEPOOL. There is a reconciliation of each hour and the amount of megawatts you deliver in that hour during testing phase and during actual operation. We are compensated for that at what is referred to as the market clearing price which is the sum of the high price bid for that hour. We are compensated for it at what ever the market will bear for that hour.

Mr. Zandri asked, is there any plans on changing the size of the transmission lines which are 115kv right now; are we going to upgrade or stay at the same voltage?

Mr. Potter answered, yes there is. We are constructing a new 345kv transmission line to connect to an existing 345kv transmission line which is called the Regional network system within NEPOOL.

The reason is, we have come up with what we feel to be an effective plan to eliminate the visual impact of that line. We intend to go overhead with the line when we exit the site, go down around the landfill and then east towards Route 5. On the east side of Route 5 we will go underground and will construct a 345kv underground system all the way up to just on the other side of Route I-91. The intent is to eliminate any concerns people have with the visual impact of the system. We don't want to have an adverse visual effect on this facility so we are going underground to eliminate the issue. It is a significant expense to the project but one that we are prepared to proceed with so that we can limit the exposure.

Mr. Zandri asked, in the area where you are going to be overhead, is there enough existing right-of-way for the larger line?

Mr. Potter stated, we believe there is at this point in time. We may have to go with vertical towers on the overhead; 115kv on one side and 345kv on the other. It would be appropriate at the next presentation to provide a visual representation of that and how we would propose to lay that out from the location up to the tie point which is the 345kv system. We are still reviewing that issue but we believe there is sufficient right-of-way there now. At one time Northeast Utilities was looking at building a 345kv line over to the Wallingford site to provide for some of the power needs for a new steel mill that was coming into the region. It has been contemplated in the past very seriously and I think our coming in with this facility and constructing that transmission infrastructure is very timely.

Mr. Farrell asked, on the air emissions that you had spoken about, basically pollution credits, are there geographic limits on where those credits apply? In other words, you are saying that you are cleaning up the air someplace in return for slightly polluting the air in another place. Where is that credit going? Is it someplace that is geographically diffused or is it someplace that is geographically central to here?

Mr. Potter responded, there are two things that we have to purchase here, one is offsets and the other is allowances. The offsets is a one-time purchase and, from a geographic standpoint, those offsets have to be purchased from a region that has the same non-attainment status as this one, in the Northeast. Effectively, what happens is, we can procure offsets from parts of Massachusetts, parts of Rhode Island, New York, and the intent here is to set up a mechanism for people to purchase these offsets from the regions with the same non-attainment status because it generally has an effect on a regional basis. The various emission sources in Connecticut do not just affect Connecticut, they affect New York and the rest of the entire northeast. The intent here is to implement an offset trading program which is just getting off the ground in Connecticut that will have a net benefit effect to the northeast.

Mr. Farrell stated, even though CT. is not attaining its air quality goals, it would not necessarily be purchasing away; it could be much more geographically diffused than that?

Mr. Potter answered, that is true. The intent of the law is that it does give you flexibility in procuring those offsets elsewhere but the intent in the design of that is if you purchased them elsewhere in the northeast in a region that has a serious non-attainment status, it has the same effect.

Mr. Farrell stated, it is hard to sell that to the people in Wallingford. People are saying, the air here is being polluted more and it is not being taken away from here, necessarily.

Mr. Potter responded, the people doing the air modeling would suggest that is not the case.

Mr. Farrell asked, is it your intent that you are going to dig wells within the Quinnipiac Watershed?

James Perento, Senior Consulting Engineer, TRC Environmental Corp. explained, the groundwater sources that are being looked at include water supply wells both within the subregional basin and adjacent basins, a lot of it is dependent upon availability and access to the property, itself. It would include options that are being looked at such as well locations along the Quinnipiac River basin as well as adjacent basins within the Town of Wallingford.



Mr. Farrell asked, is this being discussed with out P.U.C. as to how it will effect those aquifers?

Mr. Potter responded, not yet. We don't know exactly how much volume we intend....we have to put together a more refined program for water supply on this project.

Mr. Farrell asked, is that something you would come back and discuss with Chairman Gessert and the P.U.C. commissioners?

Mr. Potter answered, yes.

Mr. Gessert stated, you mention that you are looking at other sources; you are not basing this whole project on the fact that you are going to be able to dig a well and get 1.6 million gallons of water per day I would hope?

Mr. Potter replied, it may be part of our supply source that we are pursuing. It has to be coordinated with all parties effected by it.

Gessert asked, you are looking at other options, are you not?

Mr. Potter answered, yes. Primarily the Quinnipiac watershed and the fact that if we use well water sources it may create a problem with the D.E.P. and the local people as well. That is one reason why we are pursuing alternatives.

Mr. Perento added, it may be multiple wells and given the effect of locating the wells in the Quinnipiac River basin, it may be a seasonable use of those wells. They would not be used during the summer months to minimize impacts to the river and basin.

Ms. Papale stated that she visited the Bridgeport Power Plant on Friday. My concern was the noise that I heard. What will be done to keep the noise to as minimal a level as possible.

Mr. Potter explained, the Bridgeport plant is what is known as a standard plant. It is a combustion turbine that is enclosed with a sound attenuated structure. It is the combustion turbine manufacturer's attempt to mitigate noise emissions; it is sort of their first defense to mitigating noise emissions from these facilities. This plant will have two of the combustion turbines enclosed in sound attenuating structures just like you saw in Bridgeport but also enclosed by a building. That building will have special acoustical tiles on the inside, insulation on the exterior walls; it will be a double walled structure. It is designed to act as a barrier for sound emissions from the facility. The Bridgeport

rgy facility is not a good representative of the type of project that will be built here from that perspective.

Ms. Papale stated, the last page of the booklet states that the draft agreement will be completed by September 30, 1998. It seems as though the issue of the water supply has not been resolved. How can we discuss a draft agreement without having that information? By September 30th we will have something to look at?

Mr. Potter responded, the agreement covers a lot of other issues other than water. The objective is to move forward with the project as quickly as possible. As part of that process the intent is to get you a draft agreement as quickly as possible to the extent that the water supply strategy is not finalized by then, it will be a component of the agreement that will be left blank for that time. There are a lot of other projects in the state that are competing for water supply. We have been purposefully vague as to what sources we are going after.

Mr. Knight stated, you are estimating twenty-two months for permitting. If this were a green site what would the permitting time be?

Potter corrected Mr. Knight, pointing out that the firm is estimating fourteen months for permitting; twenty-two for construction. The fourteen months is probably an aggressive schedule.

Mr. Knight wanted to know how much time is being saved by going with the Pierce site versus someone trying to site a plant on a virgin piece of property? What is the advantage, from a time perspective, with this site?

Mr. Potter replied, it is not significant; maybe a couple of months, three to four at the most.

Mr. Knight asked, what are the advantages?

Michael Anderson, Senior Principal Scientist, TRC Environmental Corp. responded, permitting timing. Everything is very site specific. This site is not expected to have a wetlands problem. Other areas would have to be inspected for wetlands. The gamut of issues that have been discussed, i.e., noise, air emissions, water supply, wetlands, water discharges, all these different things can be different at every site. The advantage of the Pierce site is the proximity of the infrastructure that you would be connecting to; the transmission lines, fuel supply, etc.

1411. Potter added, the perceived advantage of this site was the proximity to an existing power plant and the implications that had within the context of legislation passed in Connecticut and the

Expectation that we could use gray water or the discharge from the sewage treatment plant. Upon further review of that opportunity it was confirmed that it was probably not a viable solution to the water needs of the facility. That site advantage, which we originally came here for, has proven to be one we couldn't count on. To Mr. Anderson's point, each site has its own unique characteristics; this particular one has fairly good proximity to natural gas pipelines. More importantly, we have a good position in what I will refer to as the transmission queue. That means that the Wallingford project has submitted a request for a system impact study with the ISO New England and that establishes your position in the queue for rights to that transmission infrastructure. That, at this point in time, defines to a large extent the value of the project.

Mr. Anderson stated, it was also mentioned earlier that the Siting Council also looks favorably upon an existing site, the process allows for a declaratory ruling to go forward on an existing site. That provides us a potential timing advantage.

Mr. Potter added, declaratory ruling isn't going to resolve all of your permitting issues. That only deals with Siting Council approval. There are air, water permits along with zoning issues, wastewater discharge issues. That is only one component of the permitting process. As you saw from the last couple of pages of the presentation, there are a lot of permits, it is a very rigorous process. We think we can do it here but it is a twelve to fourteen month process and can be as long as an eighteen month process.

Mr. Knight asked, are there any alternatives to having the two stacks rise 150' in height?

Mr. Potter responded, we think at this point in time that there is a strong possibility that the stack height will be lower than that. That stack height is using what is referred to as good engineering practices. The stack height will be directly related to certain modeling procedures that are required of us, certain surrounding structures that they will impact, the plume and what not associated with the emissions from this facility. In the end, we think that the stack has a high probability of being lower than 150'. We thought 150' was appropriate at this point in time to represent.

Mr. Knight asked, significantly lower? What numbers are we talking?

Mr. Potter responded, probably 20-30' lower. The present stack is 135' high.

Knight asked, will they be the same diameter?

Mr. Potter answered, maybe slightly larger in diameter. They are moving higher volumes of air out the stack.

Mr. Zappala stated, it is kind of disappointing to hear that the Bridgeport Plant is not similar to what you are going to build. We were given the impression that it was an example more or less of what was going to be built in Wallingford. It is not going to be the same for us to compare to?

Mr. Potter answered, it is not representative from a noise emission standpoint. It is also referred to as a "two on one" configuration. There are two combustion turbines and one steam turbine. From an output standpoint it is very much representative of our facility. From an aesthetic standpoint, from a noise emission standpoint, it is not representative at all simply because the facility sits within a large complex of other power generation facilities; there is Bridgeport Harbor I, II, III and IV, power plants ranging from 20 megawatts to 400 megawatts in size, all located within a 100 acre site. The site requirements of that project do not require the investment that we are prepared to make here to make this plant compatible with the region.

Mr. Zappala stated, I don't intend to make a decision unless I know what the impact will be to the people in the area. For me to make a decision, I will have to know what kind of a noise impact it will have on the neighboring residents.

Mr. Potter stated, we have to design a structure to meet the State's regulations.

Mr. Zappala responded, the State does not tell you to put those particular plants in a specific area. You have an area that is in the center of Wallingford and the sounds you are going to hear will travel throughout the neighborhood. Will the residents of Clifton Street be able to hear the sound or just those who live on East Street?

Mr. Potter answered, we have not done that level of detail. You saw the locations of the sound monitors which were intended to give a representative polling background of the community. We have developed and designed a facility that falls within the guidelines that the State has issued and believe that the background resulting from this facility won't impact the neighborhood.

Mr. Zappala asked, are you expecting us to make a commitment by September 30th?

Mr. Potter answered, no.

Zappala asked, is there another plant similar to what will be built in Wallingford for us to visit?

Mr. Potter answered, I am not familiar with any other facility that has actually been constructed and is up and operating in New England; there is none in existence yet. There will be several, as many as a dozen, facilities of this size in New England probably within the next two to three years that you will

be able to see. At this point in time they do not exist. The competitive dynamic that will be created will have the effect of driving down costs. The model on display before everyone tonight is a 1/32 scale model. Stone & Webster's engineers provided drawings to a model maker who has produced the model exactly on the size scale before you which is very accurate. This is probably more representative of what the facility will look like than any future facility you could visit, simply because of the unique characteristics that this facility will have to implement due to its location within the Town of Wallingford.

Mr. Zappala's concerns regarding the noise impact on the neighborhood were not alleviated by Mr. Potter's comments. He reiterated that he cannot make a decision without knowing the level of impact the project would have on the neighbors.

Mr. Rys asked, during the two year construction process equipment will be moving in, out and around the plant; do you have any idea as to the times the equipment will be present so that the neighbors are not impacted on that level?

Potter explained, the construction process will be no more than a ten to twelve hour a day, forty rs per week process. There will be no activity ongoing on site during the evening hours.

Duncan Moodie, added, the twenty-two month projected construction time is a standard forty hour work week, five days a week, eight hours a day. We are not contemplating any extended shifts. We have developed preliminary estimates of the heavy equipment. The heaviest crane will be on site two months; a small crane will be on site for five months; the smaller cherry-pickers will be on site for a longer time. For cost reasons, we will want to get the equipment off site as quickly as possible since all of the equipment is rented.

Mr. Rys stated, 6:30 a.m. or 7:00 a.m. is not a favorable time to be operating equipment or to even have a tractor trailer out there with the motor running waiting to get in the plant.

Mr. Moodie stated, we can dictate times and routings for all truck traffic coming in, bringing in hauls into the site. That will be done very deliberately and intentionally to minimize or eliminate those kinds of impacts.

Mr. Rys stated, people also want to be able to sit back and enjoy a quiet supper hour as well.

Mr. Moodie stated, we will not be working through dinner hour on that site. There is no excuse for that.

Mr. Rys asked, will that be written in the contract?

Mr. Moodie stated, it will be written in the construction contract for the plant. The plant is designed and built under a fixed price contract. Under that fixed price the contractor, in this case one of my affiliated companies, works a standard work plan and we, as owners, have to approve that work plan. We don't intend to have people disturbed in the evenings or on weekends.

Mr. Rys stated, the containment site that has your water vapor emission fans, cooling equipment; twenty-six years ago I lived down in that neighborhood. Many of my relatives lived in that neighborhood before I did. When Pierce Power Plant operated, I realize they operated with coal and oil, but one of the biggest things that I noticed when I lived down there was the steam coming off of

the cooling towers and at some times, especially in early morning hours, East Street, Clifton Street and that whole area was inundated with a cloud and I am wondering what impact that may have? In addition, you talked about dB levels on your generators; what about the dB levels on your fans?

Mr. Potter stated, when we look at the project, we look at it as a whole and design the project to meet Connecticut code, 51dB off-peak and 61 dB on-peak. The study takes into account the noise emission sources from the cooling towers as well. I can't speak to the existing cooling towers at Pierce Station and how they were operated and what type they were but I know that the cooling towers nowadays have dispersion equipment within it as well as sound attenuation equipment in it; equipment that is intended to limit what they refer to as drift. Is there going to be a cooling tower plume from these facilities, yes there are. We have located the cooling towers as far back on the site as possible. Will it have the same impact as cooling towers at the Pierce Station? I don't believe it will primarily because of location. Right now the cooling towers are right on East Street within very close proximity to the houses there and as such I don't think at this point in time that the cooling towers will have any effect similar to that.

Mr. Rys stated, I am not an engineer but I believe that if you look into the RPMs that are represented by the motors that discharge this, that maybe if it had a little more horsepower it could be pushed up further because you realize you are in a valley there and everything settles into the valley. This was explained to us during the trash plant proposal back in the mid 1980s. We can see on Route 5 at points when the trash plant's cooling tower is in operation, especially in mid-winter, it plummets across Route 5. Perhaps more horsepower pushing up further can disperse it out of the valley.

Potter explained, part of the permitting process is to look at that issue and develop remediation to the extent that it is needed.

Mr. Renda asked, how old is the plant in Bridgeport?

Mr. Potter answered, the existing facility; two of the units were built in 1957 & 1958; the 400 megawatt coal unit was built in 1968 and Unit IV is pretty old vintage, I don't know the age.

Mr. Renda stated, so this new one you are going to build is a 100% change, it will be nothing like the one in Bridgeport.

Mr. Potter agreed stating, It goes back to the discussion we had earlier concerning new source performance standards versus existing sources. Existing sources can operate and emit emissions of all the priority pollutants at much higher levels than we can. The regulations were designed in such a way so that new sources could come in but not have an adverse effect on the region.

Mr. Renda asked, after this plant goes on line, will there be an increase in our electric rates?

Mr. Potter explained, this is a facility that is not selling electricity to Wallingford. This facility is used to sell power in the wholesale markets, not directly to any municipals.

Mr. Gessert stated, we have several more years to go on our contract to purchase electricity. When the contract runs out this plant may be interested in bidding on future power supply for Wallingford. Depending on their pricing, we may be interested in buying. We will look at all vendors when that contract runs out.

Mr. Parisi asked, if you fall within the regulations of the State and we determine that that noise level is still too loud, do we have the option of saying that is not acceptable or can we be overridden because of the State requirements?

Mr. Potter replied, it goes back to the bigger issue of, do we want to be a corporate citizen and neighbor. We cannot afford to have a facility that operates here that the Town does not want. The relationship between this facility and the Town of Wallingford can almost be deemed as a partnership. We will have a fairly complex agreement that deals with a lot of issues that will define our relationship as something more than just a power plant located on a field somewhere. It will be a partnership and there will have to be a lot of interaction between the community and ourselves on a lot of different issues. I am sure that after this plant is up and operating there is going to be issues that raised associated with the operation; there may be a truck that backs up and there will be certain noise associated with that; it may occur in the wrong hours, as an example. We will have to resolve that issue and come up with certain operating procedures that negate the impact on the Town. We will do it as a corporate citizen. We cannot afford to construct a facility here that is going to create problems in the future. Solving those problems in the future is going to cost more than if we had solved them up front.

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(continued)

Mr. Potter: I think what people are looking for is a guarantee that the plan will perform under certain guidelines, and we have to perform under those for water, emissions, and noise. We also have to have an interactive process after the plan is operating to take into consideration concerns of the community and neighbors, and try to mitigate those problems ASAP.

Mr. Parisi: I think that's fine a fine statement, but I also think it behooves you and us to search out something that would be comparable, as members voting to represent both the people of the East St. area and the community.

Mr. Potter: We will seek to find another operation that has similar mission characteristics. I think that's probably the best thing to do.

Mr. Parisi: That's what I'm looking for. We can count on that, right?

Mr. Potter: We will try. I recognize this is a serious issue because of the proximity of residents to the structure.

Mr. Parisi: It is a serious issue because I don't want to have to deal with it after the plant is up. I would prefer that the citizens of that area be assured that we've addressed it before, if we get that far.

Mr. Potter: In all probability the people operating this facility will live in this town.

Mr. Parisi: But they may live way up the north end. That's my concern.

Mr. Potter: In all seriousness, they have to deal with the Town's constraints, and we as a corporate citizen have to as well.

Mr. Parisi: We've made the point and I think we understand each other as to what we want to do. My second concern is: are there any odors attributed to turbines, jet engines? They certainly generate a lot of force and exhaust.

Mr. Potter: Yes they do generate force and exhaust.

Mr. Parisi: That area, as Mr. Rys alluded to, is at times very humid and doesn't allow anything to escape given the right weather conditions. That would be a serious consideration not only from a health standpoint, but also from a comfort level not to have odors.

Mr. Potter: I am not aware of any odors that emanate from a gas-fired facility. It also goes back to this corporate citizenship philosophy, and if there's feedback from the town as to what concerns are, we'll attempt to mitigate them.

Mr. Gessert: I've seen some plans come before P&Z from time to time which look really nice on paper, but then when you see it built it's disappointing. You said this was to scale, and I'm looking at trees in front that have to be 20-30' tall. You said this was accurate and I'm going to hold you to it, because I'm going to expect to see trees that large and not 3-5' tall trees. I think if you plant decent-sized evergreen trees, they have a sound-absorbing ability and also



they'll reduce the visual impact of the plant.

Mr. Parisi: On your Sept. 30 statement here, what is the next step to this if there is another one?

Mr. Potter: The next step for PPL and S&W is to continue our engineering and design activities. There will be work done on fuel procurement and putting together a plan, and additional engineering design for the transmission infrastructure. We've retained LeBoeuf & Lamb in New York, which also has offices in Hartford, to represent PPL and S&W to come up with a draft agreement.

Mr. Parisi: My question is at what point in the process is a commitment required?

Mr. Potter: At the point that we have an agreement that represents the interests of the parties, there will be a resolution request of the Town Council and an approval sought to approve the document for signature.

Mr. Parisi: When you do expect that?

Mr. Potter: The current agreement with the Town defines the period in which we have to develop this agreement as six months, after the July 7 deadline on the exclusivity period. So we formally notified the Town with a letter confirming our intent to move forward with the second phase of development, and it's up to us now to develop an agreement as soon as possible.

Mr. Parisi: I'm making a statement so there are no misunderstandings, because I'm not sure of where we are. So at this point there is no agreement?

Mr. Potter: That's correct, but there is an exclusivity agreement which doesn't obligate you. The final document that we negotiate has to be approved by you.

Mr. Parisi: Right. Mr. Centner?

Mr. Centner: On that trip to the Bridgeport plant, being a twin-turbine deal, we walked out to where the gas supply was coming in raw and had to be regulated-down. When it was being regulated it was screaming, and they said they could cure it by housing the regulators. All your talk of housing was on moving parts.

Mr. Potter: That is a huge moving part, but it's interesting that you noticed it as the regulator is the noisiest piece, so the equipment is shrouded with a building, you use special acoustical tile on the interior, and you meet the code.

Mr. Centner: That's what I was getting at earlier in that the frequency range of sounds can be more aggravating, because the fan you speak of is around 300 hertz, and people can live with that. Screaming regulators they can't live with. I agree with the Chairman on the State allowance for sound. If the plant now is operating at about 48 dB and we come in at 51, a 3 dB increase just about doubles the loudness, so the public should be aware it's not in a linear fashion.

Mr. Potter: That's correct. Again, in past experience there is background noise associated with these facilities, but I would characterize it with a 2-3 dB increase over background to be not unlike this background fan.

Mr. Zandri: Could you point out on the model the additional buildings being constructed just to suppress noise?

Mr. Potter: Okay, this building here encloses all rotating equipment. Located within this facility are two combustion turbines. These are the intake air structures here that have special filters and louvers designed to mitigate noise from pulling in large volumes of air for the turbine. This whole building, which is a significant investment to mitigate noise, surrounds the whole turbine structure. The steam turbine building located here is also designed to surround that rotating piece of equipment as well. There are some infrastructures located over here, but this isn't really the problem area. S&W also put the steam turbine building on this end to act as a barrier for the transition piece for the heat-recovery steam generator. It will deaden emission source there as well. The engineers identify numerous points in a design as emission sources, and then the receptors such as the community. The nearest building is the receptor, and then they design a facility to control the noise source to the nearest receptor.

Mr. Zandri: So under normal circumstances that building would not be there, the interior part would be exposed to the outside, so this is the extra precaution you're taking to help with the noise problem?

Mr. Potter: That's correct.

Mr. Farrell: The water intake question is serious from our perspective. In terms of intake from the Quinnipiac, there is Quinnipiac River Watershed Association, and I would feel more comfortable if you ran this by them. They are a fairly reasonable group of people, and if you had positive comment back from them on this I would feel more comfortable with it. On the well issue, again I'm a little uncertain about the magnitude of the well that's going to be sunk here and how it depletes an aquifer that would otherwise be available to the town. I assume the town owns it and we could charge you for it. Is that true?

Mr. Potter: I don't believe the last part is true. Carl, can you answer this?

Mr. Stopper: With respect to the Watershed Protection Association, we're already participating in those meetings and discussions. We have not made a formal presentation to them at this time because we haven't fully identified where all the water supply is going to finally come from. With respect to taking water from the aquifer adjacent to the Quinnipiac, the area of river we'd contemplate drawing water from would be south of the plant. That portion is not classified as a drinking water supply aquifer. It's a degraded aquifer. In terms of who owns the water, it's owned or regulated by the State of Conn., and they will dictate whether they'll allow you to withdraw water from the aquifer. Extensive studies would be required to support any withdrawal, but it's not water that's "for sale" by anyone.

Mrs. Papale: My questions as to water and noise have been answered. I think we all have the same concerns. I realize a lot of work has already gone into this project, and as time goes on we'll have more questions, but I'm set for now.

Mr. Knight: Can we get a basis of comparison on the emissions with the present plant? Do you have any numbers on that, such as when Pierce is operating?

Mr. Gessert: When it doesn't operate it's zero, which is about 360 days a year.

Mr. Smith: I'm not sure we've done any serious annual numbers since we stopped running the plant in the early '80s, but we could develop those. NOX emissions are virtually zero. SO2 emissions would be significant in an oil-burning plant.

There's a difference between oil- and gas-burning. There is nothing to stop us currently from running Pierce all year, retrofitting and refurbishing it to its present state, and that would establish a benchmark in which to prepare the new emission allowances.

Mr. Knight: I think it's valuable to compare the present environment as they started to do with regard to noise, and I would hope that would help us.

Mr. Smith: The Pierce Plant in current its condition I think wasn't measured during the noise monitoring phase. Is that correct?

Mr. Moodie: When we did the ambient noise survey, Pierce was not in operation.

Mr. Smith: The Pierce Plant is probably quieter than it was about 20 years ago when it used to burn coal, as operations for that create a lot of noise, but we thought to determine and analyze what that noise level is could be appropriate.

Mr. Zappala: Am I to understand that you are going to supply treated water, in other words, recycled water to this plant?

Mr. Gessert: One of the alternatives they've been investigating is using water that's gone to the waste water treatment facility, gray water, which would normally flow back to the Quinnipiac. There was the possibility of marketing that water to the facility to use it for cooling. They are talking to DEP about it and there are questions whether DEP would allow it.

Mr. Potter: Actually the Conn. Siting Council and DEP are huge proponents of people using gray water. This water discharged from your facility is considered a source to the Quinnipiac River, and if we utilize it we'll require a diversion permit. We're still evaluating that, but there is concern about our using gray water because of the impact it has on the Quinnipiac, as the DEP does not understand that watershed enough to issue a permit. The DEP could resolve that with development of a study, but because of timing on that we're not prepared to proceed with that right now, so we're considering alternatives.

Mr. Zappala: Is that the same water the burning plant wanted to use?

Mr. Gessert: The trash plant? I understand they explored that idea at one time, but I don't remember how it was resolved.

Mr. Zappala: If we said no to them, why should we say yes to these people?

Mr. Smith: We did have some discussions with them on this concept and did not come to any agreement. I think the last discussion was about two years ago.

Mr. Zappala: I still have concerns about the noise, because it will be 24 hours a day, right? It will be a part of those peoples' lives. They are taxpayers.

Mr. Potter: Absolutely, but I emphasize again that we're held to both the daytime and nighttime standards, and we have to comply with that. I think we need to find a representative facility so you can "kick the tires" on the noise issue.

Mr. Rys: You mentioned treated effluent. Is there waste water that comes from this plant, and how much do you anticipate?

Mr. Potter: There is facility waste water that we discharge, roughly about 90% is referred to as cooling tower blow-down, and it will be discharged to the sewer treatment facility. Depending on the quality of that discharge at the discharge side of the facility, it may fall within current discharge permit standards.

Mr. Rys: So it will flow to the water treatment plant?

Mr. Potter: It may have to be treated before it's discharged, or we may be able to operate within the guidelines of the existing discharge permit.

Mr. Rys: Can it be recycled through the tower or process of cooling the turbines?

Mr. Potter: You always try to limit the amount of discharge through cycle concentrations in the cooling tower, so we run with the highest concentration possible so we can take advantage of limited water supplies and discharge.

Mr. Rys: But what I'm asking is, if this water is good water and doesn't have to go to the plant, can it be recycled through your system again?

Mr. Potter: No. You're referring to a zero-discharge plant?

Mr. Rys: Not totally zero. It just recycles through the process again.

Mr. Potter: Effectively that's what we're doing. The cooling water circulates through the cooling towers several times before some portion of that has to be discharged back to the treatment facility.

Mr. Rys: I want to be sure we're not putting a big burden on our water treatment plant.

Mr. Potter: Mr. Dann has made us well aware of the implications of that, and said it would be unacceptable to cause problems at the treatment infrastructure.

Mr. Renda: When you build this facility, I'd like to see you build it with the residents of that area in mind. You should build like you'd build it in your own back yard, because they have to live with it, and you should work with them.

Mr. Potter: That is a good point. One of the things we want people to conclude from this meeting is that we're doing exactly that.

Mr. Parisi: About Ray's questions on the discharge of water, you appeared to be saying that it wasn't recyclable? Is that because of quality level to be reused?

Mr. Potter: We'll recycle the water through the cooling cycle several times before the constituents become concentrated. In other words if we put three million gallons a day in and discharge one-half million gallons back, the one-half million gallons has the same constituents in it that the three million had.

Mr. Parisi: Would it be of sufficient quality to be discharged directly?

Mr. Potter: We may be able to fall within the current discharge permit. That will depend on what source of water we use. If we use 100% gray water, that's probably not the case. If we use water from other sources, it may be the case.

Mr. Parisi: What bothers me is that you save money but we lose money, because you

won't be using our sewer facility. Am I right or not?

Mr. Potter: Yes, if it's a scenario where we're not using your treatment plant.

Mr. Parisi: So we'll be concerned about where you're going to blow this off. We would probably prefer that you use our facility.

Mr. Potter: It's something I'm sure will be contemplated within the agreement.

Mr. Parisi: Mr. Chairman, did you have anything? Otherwise we'll take public questions.

Mr. Gessert: We have nothing further. The questions and concerns that you expressed were similar to concerns of the PUC, and you've expressed those well.

Mr. Dickinson: I want to get something on the record. With the construction of the plant is there any way, given the last few years of shortages and forecasted shortages, that this plant could be connected to the Wallingford power needs?

Mr. Potter: We have not contemplated within our design a plant that is directly connected to the town utility. However, in the event of any shortfall in the state, the facility's location in the network could provide voltage support to this region. It would have a positive effect for this town, though not directly.

Mr. Dickinson: If there was a blackout due to lack of energy in the grid, would that plant running here mean that Wallingford would not be part of the blackout?

Mr. Potter: Yes, it would not be blacked-out if this plant was running.

Mr. Smith: So there's no misunderstanding, this plant will not directly serve our customers. It will transmit power out into a common grid. It will enhance our ability to keep the lights on here, but I disagree with Jim. If there is a total blackout in this area, I don't think that power can come directly to Wallingford without being siphoned-off somewhere else. It would restart other plants and help rebuild the system a little quicker. There is an impression that this might bring the lights back on and it won't be quite that simple.

Mr. Parisi: Well, maybe we should then make something very clear, if this plant is going to be in this town. I think the Mayor asked a reasonable and fair question. We'd be looked on as fools if we didn't provide for ourselves in a moment of need, so let that be an overriding consideration of this agreement.

Mr. Smith: That becomes technically a very tricky question, but I'm sure your message is being heard right now.

Jason Zandri (Circle Drive): Currently the fuel supply is going to be natural gas. Is that an uninterrupted fuel supply?

Mr. Stopper: Typically the fuel supply program is a combination of firm and interruptible transportation. We would secure firm transportation during peak months, and buy interruptible during the rest of the year.

Jason Zandri: During the winter natural gas is used by homes for heating, and in many situations it becomes interruptible at certain stations that run on natural gas. That won't be a factor here?

Mr. Stopper: I don't believe so.

Jason Zandri: Is the cooling of the equipment entirely water-based? Would you need air cooling?

Mr. Stopper: Primarily both an oil and a water cooling system. There would be little air cooling, maybe just the transformers, which would have fans.

Jason Zandri: Have decibel levels been taken into consideration for the fans on the transformers? What about studies on spiking noise levels for when roll-up doors are opened and closed for movement of equipment in and out of the building?

Mr. Moodie: The power transformers are air-cooled. There are fans for the air coolers themselves, but they're relatively small fans. In terms of the doors, I will have to get back to you. I don't know if a study was done on that.

Jason Zandri: Is the water cooling system, the cooling towers, a closed system?

Mr. Moodie: There is a pumphouse, the water is pumped from a large basin, and then it moves upward through the towers and falls down cooling the piping that comes through. In that sense it's closed. The towers are open in the sense that the fans discharge to the air.

Jason Zandri: Is there any ash handling associated with gas-fired equipment? Will the NOX output of the station stay within the state guideline of .25?

Mr. Moodie: There is no ash. NOX emission is probably closer to  $3\frac{1}{2}$ .

Gary Dougan (186 East St.): I've lived on East St. for 13 years. You don't show any of our houses in our neighborhood on your model.

Mr. Potter: The intent of the model was to give people a sense of size relating to the existing power facility.

Mr. Dougan: It seems beneficial for you people to make your piles of money, but it doesn't benefit any of the people in the neighborhood. Once it's up, we don't have anything to say about it anymore, and you'll do whatever you want.

Mr. Parisi: That's not true at this point. This is why we're here. If you have any concerns, I'd ask you to get them into the record.

Mr. Dougan: Okay. The waste water; you may dump that into the plant we have now? We already have a problem with that now. The place stinks so bad and it lingers in the air, and you're going to be putting more in there?

Mr. Potter: Yes, but our waste water source is not sewage treatment. It's water that has cycled through a cooling tower several times.

Mr. Parisi: I think what he's saying is this water is considerably cleaner than what the sewer plant is dealing with.

Mr. Dougan: But it puts an overload on it and there's more there, and you end up having more stink because you have more water there. We have to live with that.

Mr. Parisi: That's what we were discussing before as to water that will not be

put into the sewer system. It might just be allowed to run off. It's up to the Sewer Div. to tell us the capacity of the plant, and if there will be any major problems generated because of this project.

Mr. Dougan: If you put up this plant, our property value will go down the drain. Are there any health risks with electricity going rampant through the air?

Mr. Potter: The way we deal with the transmission line is we develop a substation on site that is surrounded appropriately with fencing to keep kids away...

Mr. Dougan: Can you put that in writing to guarantee no one gets sick or gets cancer with anything escaping from this plant?

Mr. Potter: No, of course not.

Mr. Dougan: No you can't, and it's not in your neighborhood either.

Mr. Potter: I think we've taken adequate measures to guarantee safety within the community. I don't think there have been any studies indicating there are any problems with the power facility itself. The fence will protect the community.

Mr. Dougan: The electricity escapes into the air and it can go through a fence.

Mr. Potter: Transmission issues are dealt with by stringing wires sufficiently high so that they don't become a problem for people in close proximity.

Mr. Dougan: We've lived in the area 13 years and we've seen transformers blow-up before. What do you do with us people? We've been evacuated once before. What happens if something goes wrong? When or will we be told?

Mr. Potter: I'm not aware of what's happened in the past there and it's probably something we should focus attention on, but we intend to maintain a dialogue with the community and provide a forum for grievances once the plant is running. We will become a member of this community and our employees will live here.

Mr. Dougan: How do we know that our opinions mean anything?

Mr. Parisi: That will be our job. It's why we're having this session tonight. The minutes will be taken and we'll read them, and in most cases these issues will be addressed as much as they can be with today's technology.

Albert E. Killen (150 Cedar St.): Is someone representing the town in the matter of what the value is of the contract we're seeking to enter? Will an outside expert tell us what the value should be?

Mr. Gessert: Ray Smith will be involved in negotiations. I'm sure the Town Attorney's Office and the Mayor's Office will be involved, and possibly an outside attorney. All of the costs and equations will be put together, and it will be brought to the PUC and then to the Town Council. Then it will be up to the Council to decide if there's a good return for the town based on the project.

Mr. Dickinson: The Town Attorney's Office will be interviewing some law firms on representation for the town. The firm chosen will have done this type of work, and will know who to speak with for other expertise to analyze what the agreement should be. We won't rely on in-house expertise.

Mr. Killen: What is the length of time of this contract?

Mr. Potter: The site lease is contemplated to be in excess of 30 years.

Mr. Killen: Can the town enter into a contract that long?

Mr. Potter: I don't know that there's been any legal opinion whether they can or not. We're making the assumption they can.

Mr. Killen: The PUC is especially aware as they entered into a 10-year contract for the purchase of electricity. It was limited to 10 because the charter says you can't enter into anything for more than 10 years.

Mr. Dickinson: The charter limits the PUC's authority, but I do not believe there is a limitation on the Council's authority to enter into agreements.

Mr. Killen: You read that line again, Mr. Mayor. It's very clear. It doesn't make any exceptions.

Mr. Parisi: I think the answer is to review that.

Ed Marcantonio (226 East St.): I would like to know if the Mayor, PUC, Electric Div., or this company will be notifying the people living in the area when these meetings will be taking place, so we don't have to rely on missing something this big in the newspaper. That's all there was in the newspaper about this meeting. I think we should be notified in writing about any meetings, and we should be allowed to attend project meetings and inspect the site for safety concerns.

Mr. Moodie: The gentleman's point is a good one on notification for meetings. I would like to suggest that if we, the developers, could obtain a listing of people with addresses especially on East St., we would advise them well ahead by letter of such sessions. As we progress with development activities, we will establish some focal point to which people can bring questions or concerns, and they can and will be heard certainly by us. With regard to site inspection during construction, I would probably have to say no. I think OSHA would not allow us to have unauthorized people during construction.

Mr. Parisi: Are you sure of that ruling? I'd like you to check into that.

Mr. Moodie: I'm not positive, but we will check.

Mr. Parisi: Perhaps a tour can be scheduled and periodic meetings with the residents; anything that works so that people can get together and get along.

Wes Lube (15 Montowese Trail): The gentleman from PPL described the installation as having two combustion turbines and a steam turbine fueled by natural gas. Is the natural gas as a fuel source so reliable that you would consider this to be an uninterrupted source of power?

Mr. Potter: No. A power station like any facility needs maintenance, and the typical availability of this facility will be on the order of 90-92% of the hours in the year.

Mr. Lube: I'm talking about 5-10 years down the road. Can you give us assurance in a contract that you will always be natural gas fueled?



Mr. Potter: I think so, as we're not aware of any other fuel that can be burned in a combustion turbine; not water, coal, or any other fuel of that nature.

Mr. Parisi: I think Mr. Potter means that if some alternative should present itself in the future that was more efficient and lower cost, they'd consider it.

Mr. Lube: That's my point. I wrote down a quote "no odors from gas-fired facility." Well, suppose it's not gas-fired. So some of these answers are not really definitive because they're based on something that might not prevail 10-15 years down the road. I think the people on East St. are concerned about noise during the day or night, and I don't think the Council is equipped to evaluate this. If we're going to enter into a multimillion dollar contract, we should hire someone unbiased to advise the Council. This will have environmental impact but the question is: is that impact acceptable, especially to water?

Mr. Parisi: We've made a very specific request about the water supplies.

Mr. Lube: Then once you have that, it should be given to an environmentalist for analysis of that on the community. I think someone should measure the sound and do an analysis of that too, using a similar facility.

Mr. Parisi: We said we were insisting on seeing a comparative facility.

Mr. Lube: I don't want you guys to go. I want to see an environmentalist, a person who knows personally how to advise you.

Mr. Parisi: We'll take that under advisement.

Steve Theriault: I'm here on behalf of the Quinnipiac River Water Association. We're obviously very concerned on the impacts on the low flow and water quality of the Quinnipiac. To that end our Executive Director has prepared some questions and a letter to the Council for your evaluation of some of the water issues. The Quinnipiac is over-allocated and that's a big issue. I have copies for everyone. (Appendix I)

Mr. Smith: In follow-up to this gentleman, I just received a fax of a similar letter as I was coming to the meeting tonight. I read it and intended to share it with the developers to make sure we can give responses to this inquiry. There are some very good questions and we're aware of their concerns.

Dana Hotchkiss (38 Clifton St.): What happens to the people working at Pierce now? Are they out of jobs or will they be worked into this new plan?

Mr. Potter: As we presented here, they will be given due opportunity to interview with our group and would be considered for any jobs available at the plant.

Ms Hotchkiss: What is the "lay-down" area you talk about on South Street?

Mr. Potter: That is the area required to store equipment that's necessary during construction of the facility. It's roughly a three-acre site.

Mr. Moodie: Maybe I can explain. For this kind of facility, most of that lay-down is for things like reinforcing bar or rod. It will be secured, fenced, locked, and guarded. Large equipment like the turbines are delivered in modules to the site, so they're not stored in the lay-down space.

Ms Hotchkiss: Is this lay-down space where the park is now? Where is this?

Mr. Potter: There's a road that goes down to Thermo-Spas, and on the other side of that road from the power station there is a 2-3 acre site near the Allegheny Ludlum Steel parking lot. That is owned by the town and we propose to use it.

Fred Clark (67 Carriage Dr.): On the high voltage tension wires, are they going to be in close proximity to any housing in the area?

Mr. Potter: The dashed line indicates the right-of-way and the existing 115 kv transmission line. There are no houses within close proximity whatsoever from here to this side of Rt. 5. The intent, up to this location, is to run overhead 345 kv line. From this point on where it is in close proximity to residences, we intend to run an underground system to eliminate the visual line issues.

Mr. Clark: How about for EMF field? Is there any radiation from that? How about above ground?

Mr. Potter: I don't know of EMF issues associated with underground line. I'll have to get back to you on that. Above ground is an issue if you hang lines low, but with the routing we intend to take with hanging higher and no residences in the area, we don't see that as an issue.

Mr. Clark: So you'll have separate towers and they'll be higher?

Mr. Potter: Yes.

Mr. Clark: There's another facility being constructed and they said they were going to have an oil back-up for the gas. Are you considering anything like it?

Mr. Potter: We have considered that and it may be a future consideration, but at this point no.

Mr. Parisi: One Councilor asked if that is going over the Little League Field?

Mr. Potter: It is going in the existing transmission right-of-way, and I don't believe that goes over the Little League Field. It goes around the field. It will be strung on separate towers and higher than the existing ones.

Mr. Zappala: It's still going to cross over the Little League Field. Are you going to go near Cytec?

Mr. Cooke: The high tension line comes out on So. Elm and Colony St., the cross-over line, and that's where it will be coming. If you go down and follow it out, you'll see where it comes across there. There is a high tension wire within Cytec obviously, but I don't think they impact the Little League Field either.

Reg Knight (21 Audette Dr.): During construction you said you're going to use heavy equipment. How are you going to get it across the railroad line?

Mr. Potter: We propose to use the John St. entrance.

Mr. Knight: Have you checked the load on that bridge?

Mr. Potter: No we haven't, and it's one of the things we have to do. We have

also looked at an alternative route.

Mr. Knight: How will you get the gas supply to your location?

Mr. Potter: There is about 1½ miles of lateral that will go along existing gas pipeline right-of-way to the site.

Mr. Knight: How did we get here to this point? Where you invited to come here?

Mr. Smith: Approximately a year ago, the Commission working with CMEEC solicited proposals from people who might be interested in developing this site. We had decided not to be in the generation business any longer, but felt that the site had some opportunity to be re-powered. We received a number of proposals and we evaluated them, and we selected this firm as having the best offer. Early this year a presentation was given to the Council, and they consented to pursuing this to the next step which led to this meeting. Obviously all the questions haven't been answered yet, we're not even working on a long-term agreement, but that would be the next phase if there is interest in the project. It will take at least six months to work through details.

Mr. Knight: How many millions of gallons a day did you say, sir?

Mr. Potter: It will average between 2.8 and 3.5 million gallons a day.

Mr. Knight: Would 3.5 million gallons a day deplete our water table?

Mr. Potter: We won't take that much a day out of the aquifer along the Quinnipiac River. We propose to use a combination of sources including well water, some potable supplies, and some gray water. The intent was to use that as a way to manage the issue of low-flows on the Quinnipiac River. We are looking at alternatives, such as finding a donor source. We would take water from another watershed and deliver it to the Quinnipiac to mitigate or eliminate low-flow.

Mr. Knight: Since our water flows north to south down the valley, do you think you're going to interfere with anything in North Haven?

Mr. Perento: If you're talking about locating a well between here and North Haven, you'd have to be within or adjacent to the border of North Haven to have some sort of impact. On any well that would be sited for this project, we'd have to do an aquifer study to see what the zone of influence would be. There are studies that would have to be done for locating and permitting such a source.

Mr. Knight: I ask because the only thing between you and the North Haven line is the city dump, so you're not too far away.

Mr. Perento: Actually probably a greater concern would be as you get near Cytec as they have wells, and they'd be potentially concerned with pumping. We did look at impact to their wells, and Pratt & Whitney's wells also.

Mr. Knight: We're having problems with wells in town. What temperature will your cooling water get up to? Will it kill bacteria or just warm them up a little? Bacteria loves warm water. I'd hate to think of water vapor spreading around.

Mr. Perento: No, it doesn't kill bacteria. There are biocides and a host of other operational and maintenance programs to eliminate the growth of bacteria.

The temperature would be 89-90° roughly.

Mr. Knight: Bacteria would love that.

Mr. Potter: The tower designs typically run between 8-12° Fahrenheit temperature rise above the incoming water temperature. In the winter when it's 40° then the discharge will be in the mid to high 40s. In the summer when it may be 70° then the rise will probably be 10, but as high as 12° and I've never seen it higher.

Mr. Knight: Wouldn't 45 megawatts cause quite a field flux?

Mr. Potter: The facility would be around 520 megawatts. Whether it would influence lightning storms in the area, I've never dealt with the issue before.

Mr. Moodie: Quite frankly the opposite is generally the case. If you look at power plants across the country, the biggest difficulty is strikes from lightning rather than any kind of reverse effect. Transformers, switch gears, and switch yards have very significant lightning and fire protection equipment on them.

Robert Sheehan (11 Cooper Ave.): In one of your slides you had effluent water of a little over ½ million a day, but the biggest one was Wallingford potable water for ½ million gallons a day. That impacts everybody in the town who relies on city water. Your second alternative is outside sources. My feeling is you've got it reversed. I think ½ million gallons a day of drinking water is a lot. What about future development and industry? Are you committed to the first one?

Mr. Potter: Wallingford has indicated that they have upwards of ½ million gallons a day available for this facility, so it is possibly part of the water supply program for this facility.

Mr. Sheehan: Over the years we've been water-conscious and believe in surpluses. You can stretch systems to the breaking point and sometimes it doesn't take much. I'm also concerned about air quality. You're in between Allegheny and what they discharge every day, and Cytec which is the second largest discharger in the state of a certain element. You're adding something else to the mix, and no matter how clean it is, it's got to affect that area. Have you taken in account the emissions from Cytec and Allegheny in your air quality surveys?

Mike Anderson (of TRC): There is a question of offsets and regional pollution. Everyone has a legitimate concern about ozone pollution because it's a phenomenon in the summer. Ozone is produced in the atmosphere by reactions that are termed photochemical. This is regional; in other words, emissions from New York or New Jersey would be carried on the wind during hot summer days to Conn. So emissions from this facility that are creating ozone are probably doing so 50 miles down wind, because it's a photochemical reaction that takes time to cook. While there is a local component to where the emissions come out, their effect is regional. So it's appropriate to have a regional program to control those emissions. The offsets that the developer has to obtain from somewhere in the region is the right way to deal with that problem, because you want to lower the entire amount from the region rather than focus on an individual point. The other half of the story is air quality modeling. The Conn. permitting process requires that the emissions of the proposed facility be combined with those of all the other sources in the area, and then added to all the emissions that are measured at nearby monitors and compared to health standards. In addition, to protect public health, there is a more stringent standard required. That is if the air is much

cleaner than health standards require, there is an increment of increase that is allowed and you're not allowed to go all the way up to the health standard. So the facility has to comply with this whole process.

Mr. Sheehan: Your underground transmission line, how are you getting from Rt. 5 to I-91?

Mr. Potter: The interconnection is actually on the other side of I-91, so we have to go under 91 and up to an existing 345 kv system which we'll tap.

Mr. Sheehan: So there's a transmission line already existing there?

Mr. Potter: Yes. This new line will follow existing right-of-way.

Mr. Sheehan: Other than money, what are the benefits to Wallingford? If this goes through, what is our plan for any revenue generated? Will it be used to maintain our Electric Div. or other purposes?

Mr. Parisi: I think that's a little premature. We're not even sure we're going to do this.

Mr. Dickinson: There are two components of revenue. One is lease payments and the other is potential tax payments. As Ray pointed out there are also revenues regarding utility usage. At the point we know what the amounts may be, that would certainly go toward supporting the system. It hopefully would enable us not to increase rates in whatever areas, such as tax or utility rates. Ideally we'd be able to reduce rates, but I think more logically you look at trying to maintain the status quo and not go to increases.

Mr. Sheehan: That's what I hope. In 7 years if CMEEC is gone, and it's been bandied about our rates are 20-30% lower, then it could hold our rates down.

Tom Bruneau (184 East St.): I live directly across from the Pierce Station. You say you're going to be neighborly and this kind of thing, and Cytec down the road built baseball fields and stuff like that. Our girls' softball league acquired land from Gaylord Hospital and they're supposed to get some money from somewhere that never came in. Would this be something you'd be interested in helping out with as being part of a neighborly business?

Mr. Potter: I think it's part of being a good corporate citizen in the community, such as Wallingford is, to sustain those types of programs.

Mr. Bruneau: You mean sponsorships and things of that sort?

Mr. Potter: Yes, absolutely.

Mr. Bruneau: Recently they repaved our road, and when you mess with the soil it creates a lot of dust. Over three weeks our lives were almost miserable because we couldn't eat, cook or sit outside, or keep our cars clean with the dust. Do you have plans to contend with this during construction?

Mr. Moodie: That issue is one on any major construction site. As a routine part of that there is a tank truck with water nozzles, and that truck sprays water all day around the site to minimize any dust. In terms of excavation, it's something we will consider very carefully.

Mr. Bruneau: Going through the paving process, they put down calcium chloride and water, and the dust was non-stop no matter what they did. There was machinery going up and down the road all the time, and when it's 80° the water evaporates in minutes so there was still dust. Also there will be 200 employees working during construction? When I go to work now using John St. bridge it takes me 3-4 minutes to get through in the morning. With the extra employees it will take a lot more time to get through that light at John St., and it will create a lot of traffic in the neighborhood with employees and trucks bringing shipments. I think you may want to look at that kind of impact on the neighborhood. There is also a speed issue on our road. We're just waiting for someone to get killed because it's a straightaway, and we're trying with the town to get that resolved. These are a few issues you need to look at, and being here it appears to me that there's nothing definite yet going on. If you would inform us by mail so we can attend the meetings and be advised of what's going on, I would appreciate that.

Jim Vumbaco (81 High Hill Rd.): I think if the Council is concerned about noise, you should just require a zero noise impact. They took readings and say they're in the 45 range, so just require them not to go any higher than that. If they want to be a good neighbor, they should commit to the town that our facility will have zero noise impact. I understand we're dealing with an exclusivity agreement that's going to run through Dec. No one is questioning the fact that this could be a very good, sound, fiscal project for the town as far as tax revenue, etc. is concerned. My concern is dealing with exclusivity arrangements. It means you're dealing with only one and you have no one else to play off of. So what assurances do the people of this town have that we're getting the best deal?

Mr. Dickinson: You have to understand the process that was utilized to this point. There were proposals that were analyzed, and this one was the best given the terms that were presented by 5-6 different bidders. Because they would put a lot of effort into this proposal, they asked for an exclusivity agreement as it wasn't in their interest to spend a lot of time determining feasibility, etc. I don't think that's unreasonable, and given that we analyzed different proposals and this was the best, I think there is consciousness of that. If we enter into a contract at the end at the end of this, can we know there is nothing ever better anywhere in the world? I don't think you'll ever know that.

Mr. Vumbaco: When you entered into this, you eliminated any other potentials. A lot of developers have come into town and didn't ask for exclusivity agreements. There's risk involved in any proposal, and if they felt this was such a viable project they should have taken on the risk. Now we have no one to bounce this proposal off of for best price. I guess you're saying we'll never know.

Andy Kapi (6 Deme Rd.): My recollection on the approval of the exclusivity agreement was that it took place both with a meeting of PUC and a vote of the Council on March 31. I've heard it referenced here tonight that the official notice of their intent to the town occurred on July 7, which counting from March is beyond the 90-day period. Can anybody tell me why they're not in default?

Mr. Moodie: The exclusivity agreement was actually signed on April 7. If you read it, the 90 days was from the date of execution so it expired on July 7.

Mr. Kapi: So action by the Council is not execution of an agreement?

Mr. Dickinson: I think the Council authorized the execution upon the detailed agreement being drawn up, and that's what occurred. So the actual signing

occurred at a later time, but it authorized within the parameters of what was discussed before the Council that an agreement could be signed.

Mr. Kapi: I have one question, and maybe Mr. Gessert can correct me. Is it \$600,000 or \$650,000 a year that we'll be giving up from the CMEEC agreement?

Mr. Gessert: I believe the figure is \$656,000 a year under the CMEEC agreement.

Mr. Kapi: Then the potential financial gains with this are significantly larger, so it's not a major financial downside. I happened to be speaking with someone from the DEP and I mentioned this project to him, and he mentioned "tertiary treatment" regarding the water issue. He said that treatment is generally acceptable. Earlier tonight in one of your slides, I believe I saw the words "primary or primarily treated effluent." Is that an intentional distinction?

Mr. Potter: The slides did not mention primary treatment or primary effluent. All we indicated was waste water effluent from the facility. We didn't draw a distinction; we were just saying we intended to use treated effluent.

Mr. Kapi: Mr. Lubee asked about using experts to help us evaluate this in some ways and the impact. Also following up Mr. Rys' observation about the amount of water in the air, we're talking about  $\frac{1}{2}$  million gallons/day of discharge. So from 2.8 to 3.5 range of water in and  $\frac{1}{2}$  million out, I gather we're talking 2.3 to 3 million a day that's up in smoke?

Mr. Potter: That's correct.

Mr. Kapi: I'd argue that would have some health consequences particularly for the elderly or those with heart conditions. We have the American Heart Association as a reference, so perhaps someone can come in to make an observation about that. Also with regard to odor, I submit when you have a lot of water in the air you have an air mass that's a lot harder to move, especially on summer nights when you have stagnant air. That odor will linger and it will be diffuse throughout the entire cloud that lays down in that valley. The Quinipiac was referred to as a degraded aquifer, and we're talking about possibly drilling wells. We have the contaminated well issue in this town. One of the things that came up in discussion was the theory that a low water table from a drought year allowed the growth of certain types of bacteria near the ceiling of the underground aquifer. Then when more water came up to a higher level, it brought that bacteria into the water. In the face of this, how can we contemplate any action that will impact the water table? It was said the state doesn't understand the Quinipiac watershed. Do we know where it's spring-fed? If we lower the water table, is the water level going to go down? These are huge issues including those down-river of us. We have to be responsible to those other towns, and it would open us to liability. What if somebody's well goes bad? They'll bring a suit. We'll have DEP making a judgment against us. I hope you don't wait until after the agreement is signed to make a decision on the hard stuff.

Mr. Parisi: This is only the first step. There are other steps involved in this. Let the process evolve, let us deal with it and take part in it, and let's try to work to make it work.

Mr. Kapi: What about 15 years down the road, and they decide they want to burn coal or oil to power the turbines, and the state allows this? Now maybe we have no control over the situation.

Mr. Parisi: They said all they can burn in the turbine is gas, so those are fears that can be belayed, but I'll let the expert answer it.

Mr. Potter: You burn gas in the combustion turbiné. That turbine creates hot exhaust gases from which heat is recovered in the steam generator. That produces steam which is used in the steam turbine, which is why it's called combined-cycle. It's very efficient. A combustion turbine can burn oil, but it's a question of whether the oil is needed as a back-up source in the event gas is no longer available due to interruptions on the pipeline. Most facilities have oil as a back-up and we'll probably consider using it for a back-up.

Mr. Kapi: If one day life changes and oil becomes more cost efficient than gas, you might just go to oil.

Mr. Potter: We won't have that ability because of the permit constraints.

Mr. Kapi: But at that point if you decide to do that, you'll just get a new permit that doesn't go through Wallingford.

Mr. Potter: I beg to differ. Wallingford does have a say in any permit process.

Mr. Parisi: We'll have a say, it doesn't mean that we'll win, which I think is what your point is. It's a gamble. Thank you. I think we're going to conclude this hearing. I thank everyone for participating.

Mr. Potter: Thank you very much for letting us come here to discuss this.

Motion: Mr. Rys, to adjourn the Town Council portion of the meeting.

Second: Mr. Farrell.

Votes: All ayes.

Motion: Mr. Papale, to adjourn the Public Utilities Commission portion of the meeting.

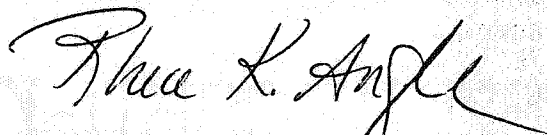
Second: Mr. Cooke.


Votes: All ayes.

The joint Town Council/Public Utilities Commission Meeting adjourned at 12:00 midnight.

Pages #15-31 transcribed by undersigned without benefit of meeting attendance.

Respectfully submitted,

  
Rhea K. Angle  
Interim Secretary

  
Kathryn F. Zandri  
Town Council Secretary

RECEIVED FOR RECORD 9-3-98  
AT 2 H. 00 M. P M AND RECORDED BY  
R. Rascati TOWN CLERK



Approved by: Robert F. Parisi  
Robert F. Parisi, Chairman R.R.

10-14-98  
Date

Rosemary A. Rascati  
Rosemary A. Rascati, Town Clerk

10-14-98  
Date



Quinnipiac River Watershed Association

August 24, 1998

Members of the Council  
Town of Wallingford  
45 South Main St.  
Wallingford, CT 06492

RE: Proposed Power Plant at Pierce Site

Dear Council members:

Because the proposed plant would involve consumptive water use of close to 2.8 million gallons per day, and would also discharge wastewater into the Wallingford Filtration Plant, it should be closely scrutinized from the standpoint of potential impacts on water resources. River flow reductions during summer drought periods are of potential concern to the QRWA. However, there could also be a potential for water quality benefits to the Quinnipiac if the plant's water source were treated filtration plant effluent with a higher pollutant load than the river upstream of the plant.

The attached memo outlines several questions and issues which should be addressed in evaluating the potential impacts of this type of facility on water resources (applicable to both the Meriden and Wallingford projects). It is intended for town officials and commissioners involved in the planning process, and also for two work groups in the Quinnipiac Watershed Partnership (Low Flow Work Group and Water Quality Work Group).

We appreciate the opportunity to provide input at this public hearing before the Wallingford Town Council.

Respectfully submitted,

Sigrun Gadwa, M.S.  
QRWA Executive Director

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99 Colony Street • Meriden, CT 06451 • (203) 237-2237

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Quinnipiac River Watershed Association

MEMO

TO: INTERESTED PERSONS  
FROM: QUINNIPIAC RIVER WATERSHED ASSOCIATION  
RE: INFORMATION NEEDED FOR REVIEW OF PERMIT APPLICATIONS FOR  
COMBINED CYCLE POWER GENERATING FACILITIES IN QUINNIPIAC BASIN  
DATE: AUGUST 24, 1998

Two combined cycle, gas-fired power plants have been proposed in the mid Quinnipiac watershed, in Meriden (544-megawatt) and in Wallingford (520 megawatt), each calling for about 2.8 mgd of consumptive water use, and another larger plant (720 megawatt) has been proposed in the upper watershed in Southington. There is much uncertainty as to which water sources will be applied for. The following list of questions is intended to help regulators, planners, and applicants to secure the information needed to assess possible impacts on water resources, and to do this early on, as alternative plans are evaluated. This list includes questions suggested by Ruth Malin of the Housatonic Valley Association, as well as Sigrun Gadwa, of the QRWA.

1. Amount water to be used & proposed sources? Given drawbacks of excessive reliance on drinking water supplies or interbasin transfer, is treated Quinnipiac basin sewage treatment plant effluent a potential source for the mid-river plants? Except for minimal water needs for the steam boilers, water for wet cooling (as much as 2.8 million gallons per day or 4.35 cfs for a 540 MW facility) does not have to be pristine and can come from many sources, including sewage treatment plant effluent, groundwater wells, or rivers. The Millenium Power Project, under construction in in Charlton, Mass (508 248 9242) will use treated sewage plant effluent for wet cooling. If clean water source options (e.g. already registered Metropolitan District Commission water, available for the Meriden Plant) are being favored due to anticipated project delays for time-consuming diversion permitting for treated sewage effluent sources, could plans be developed for a future switch to recycling of treated effluent?

2. How would water usage (either treated sewage effluent, river, or reservoir/wellfield sources) impact the daily cfs river flow under different rainfall/flow conditions? Mid-river habitat impacts from flow reduction are generally not as severe, for a

given volume of diversion, as pumping from well-fields in the upper watershed. However, diversion permitting is based on worst case scenarios like the 1966 drought (27.1 cfs at Wallingford gauging station). Are alternate water supplies (e.g. New Britain reservoirs or other sewage treatment plants) available, perhaps to be used only when river flow volumes are below a certain threshold?

A complete analysis of the local hydrology and water budget are needed, including monthly sewage treatment plant discharge volumes. The following examples give some sense of potential percent flow reductions by combined consumptive use of 8.7cfs (4.35cfs each by the proposed Meriden & Wallingford plants):

a) Close to 1/3 of total flow under severe drought conditions (27.1cfs in 1966)

b) Under more typical low flow conditions, such as August 1996, when 68cfs was the lowest flow day, 8.7cfs would comprise 12% of 74.2cfs. [This value is 68 cfs plus 6.2cfs (average Aug. '96 discharge from the Wallingford Filtration Plant), located just downriver of the gauging station].

c) About 3% of flow under typical non-summer, dry weather flow conditions (287cfs was average flow for April 1996).

*Both flow and water quality issues should be considered together in evaluating potential impacts of diversion - negative and/or positive.*

3. What would be the quantities & constituency of each type of wastewater? A MassDEP official reports that one plant discharging into the Charles River has pollutant concentrations in waste water which are no higher than concentrations in the sewage plant effluent (advanced treatment) used for its water supply.

a) What pretreatment of water supplies will be required, and for what parameters (i.e. for iron removal, clarification, organics, precipitated solids, etc)?

b) Would wastewater pretreatment be needed, and if so, for what chemical or biological parameters?

c) What types of salts would be part of cooling tower blow-down discharge?

d) Power plants elsewhere in New England address the problem of scale build-up with mobile descaling units, with off-site waste disposal. Has this approach been considered?

e) Has a 0% wastewater discharge has been considered? If so, how and where would sludge be disposed of? One plant with zero discharge and an on-site wastewater treatment plant is located in Burrillville, R.I. (Ocean State Power, 410 568 9550)

4. How effective is the treatment plant technology in dealing with power plant waste water constituents? Even advanced treatment plants from industrialized areas have a wide disparity in the effectiveness of treatment of different pollutants. Just because wastewater content is "permissible" by CTDEP, does not mean it should not be scrutinized - it could perhaps be significantly improved.

5. How would discharge to the Water Pollution Control Facility (WPCF), combined with diversion from the treatment plant waste stream, change the loading of chemical constituents in the river? How would salts impact fish and aquatic life?

a) For which pollutants, could consumptive water use by a power plant improve water quality due to reduced effluent quantities, because WPCF discharge currently increases the river's pollutant load for a particular river stretch? BOD, nutrients, and Dissolved oxygen? Heavy metals? During storm events? During base flow periods? Severe drawdowns?

b) For which pollutants/parameters would diversion for wet-cooling reduce water quality because WPCF discharge currently dilutes the river's pollutant load? Sediment during storm events?

c) If upriver pollutant sources are currently being diluted by a particular WPCF discharge, are they amenable to future reduction/ urban retrofitting, so that projected water quality "benefits" of diversion might be temporary?

d) What about downriver point discharges (e.g. formaldehyde from Cytec) which would receive less dilution if sewage Treatment Plant discharge volume is less?

6. How would these scenarios for flow and water quality impacts be changed if actually permitted point discharge volumes and concentrations were taking place, and if actually permitted diversions and grand-fathered registrations were occurring? What proportions of existing registrations/diversions are obsolete and unused? This is clearly a difficult, time-consuming, but important question, which should be answered before diversion permits are issued for a river which is over-allocated. Could applicants perhaps purchase rights to unused existing water registrations? Could provisions for alternative water sources below certain river flow thresholds be a way to address this?

7. For the proposed Meriden plant, could avoidance of future detrimental flow and water quality changes due to open space preservation (rather than ridge slope development - certain, with conservation easements) be mitigation for flow and water quality

impacts, as part of wetlands and diversion applications? Impacts analysis could include future scenarios based on water quality/quantity changes likely to result from landuse changes with and without the open space protection?

8. Is there an opportunity for removal of sediment bars and channel deepening to mitigate flow reductions?

9. If water is taken directly from a river, location, design and size of intake structure? Proposed techniques to reduce entrainment of aquatic life?

10. Where would hazardous chemicals be stored/used/contained and disposed of? (such as ammonia required for selective catalytic reduction (SCR) to reduce NOx emissions prior to release from the stack). Have floodplain boundaries and proximity to watercourses and catchbasins in the event of spills been considered.

11. Would there be any thermal impacts?

12. Will stormwater runoff impacts be minimized by state-of-the-art BMP's, helping to mitigate other water quality and flow impacts? Is there an opportunity for urban retrofitting at the Pierce Plant in Wallingford?