DOCKET NO. 96 - An application of Killingly Energy Limited Partnership for a Certificate of Environmental Compatibility and Public Need for the construction of a 32.2 MW (net) wood burning electric generating facility in the Town of Killingly, Connecticut. : Connecticut Siting Council May 11, 1989

D I S S E N T I N G O P I N I O N

I respectfully dissent from the Council's decision to grant a Certificate of Environmental Compatibility and Public Need in Docket #96 for the 32.2 megawatt wood and non-wood burning electric power facility proposed by Killingly Energy Limited Partnership ("KELP"). The Applicant has artfully dressed its homely proposal up as an economically attractive supply of needed electricity and parades it as a "renewable energy resource" facility favored by wise state energy and solid waste disposal policies. With all due respect to my colleagues' eyesight, this Council ought to be able by now to recognize "The Emperor's Clothes" when we see them. We should see the KELP facility for what it is, as the public does, a misnamed natural resource "loser".

With the world price of oil indefinitely (albeit uncertainly) depressed well below levels forecast by KELP's owners, the long term economic savings cited by the Council Finding of Fact #12 for ratepayers from KELP's fixed rates have vanished like a "will-o'-the-wisp". With a conservatively estimated 27 percent excess capacity on Connecticut Light & Power's ("CL&P") system in 1994, the first year the Council (wrongly) detects a need for new CL&P capacity, KELP is an unnecessary, grossly wasteful addition to the utility's generating assets. Nor, contrary to Council's suggestion in Finding of Fact #17 is it this Connecticut Siting Council's responsibility to assure New Hampshire, Massachusetts and New York of electric power from facilities which those states have refused to timely construct or operate themselves. Their "public need for electric service" is not the "public need" this Council is authorized to address.

Approving KELP's construction today flouts this State's paramount energy policy to promote investment in energy conservation measures instead of in new generating capacity, to substitute true "renewable energy resources," especially solar and wind power, not carbon dioxide-spewing monsters like

KELP, for fossil burning plants.[1] Indeed, so uneconomic and inappropriate is this plant to CL&P's and this State's public need for economical electric energy that it must be shut down for over 500 hours each year just to avoid displacing CL&P's cheap nuclear base load energy and to avoid unduly accelerating transmission line reinforcement in the northeast part of the State![2]

What's more, there is nothing "renewable" about a major part of KELP's fuel supply, the discarded demolition debris and industrial or manufactured waste wood that KELP wants to burn, for up to 80 percent of its fuel, unless one means by "renewable" that generators of the demolition and industrial waste will keep right on producing it ("renewing" it) because plants like KELP will be around to help them get rid of it. Plugging in KELP at this juncture just when landfills are denying access to demolition and bulky waste generators is a giant strategic blunder for resource management policy. It drastically undermines the new and powerful incentives to

---

[1] The Council's very regrettable statement in its Opinion, p.2, that solar and wind generators "have not been shown to be practical to realistically meet Connecticut's public need for electricity" is highly misleading. The very same sharp decline in the price of oil which makes KELP's contract with CL&P look like such a lousy deal for ratepayers today compared with forecasts in 1985 has also undermined the competitiveness of solar power. Let oil prices rise again and then watch the solar fortunes shine! Fortunately, the Council's unduly discouraging words are not the last on this vital issue, certainly not for solar hot water heating systems. Even the more sophisticated direct sunlight-to-electricity "photovoltaic" systems are now expected to be commercially competitive for central station peak hour power by the late 1990s. See, "Photovoltaics Today and Tomorrow," H.M. Hubbard, Science, 21 April 1989, pp. 297-303.

[2] See, DPUC Decision, "Petition filed by ARS Group, Inc. [KELP] for Declaratory Ruling re: Sale of Electricity to Connecticut Light and Power Company" Docket 86-04-31, September 10, 1987.

reduce the waste stream itself, to remove toxics from it, and to recycle rather than combust waste, incentives which are just beginning to take hold!

The public sees through KELP's "trees" and spies an ugly private solid waste, possibly hazardous waste, disposal plant hiding there; and so should we. In burning demolition debris and other "manufactured waste wood", KELP may well burn hazardous wastes and generate dioxins without having been subject to the more rigorous regulatory review required by our state law for just such a potentially dangerous facility.[3] Further, the wastes to be burned will come substantially from out-of-state, not just from overburdened Connecticut landfill sites as the Council's Opinion misleadingly implies.[4] As a private facility, KELP will not be able to exclude the demolition and industrial wood waste which the record indicates Rhode Island explicitly plans to dump in Killingly. Moreover, it will inevitably burn non-wood wastes amounting to at least 4500 tons per year, by Applicant's own completely arbitrary, probably very understated admission. Even this estimate is higher by an order of magnitude than the Council's bafflingly complacent and arbitrary finding that only .001 (still 450 tons!) of the fuel stream will be non-wood, demonstrably toxic "contaminants." Indeed, the Council's Decision and Order implicitly concedes a much higher expected component of contaminated non-wood elements in the fuel stream by prescribing test protocols for various combustion mixes of "green wood" and demolition debris, and of ash wastes and imposing a 40 percent annual cap, by weight, on "demolition debris" and "manufactured wood waste" as fuel.

Approving KELP guarantees that each year 400,000 more tons of a principal "greenhouse effect" gas, namely carbon dioxide, will enter the earth's atmosphere. These enormous quantities belie the Council's eerily understated admission that it will "emit

---

[3] See, Section 22a-118(c). Under that legislation, the Department of Environmental Protection has to have completed its review and public hearings on the hazardous waste application before application to construct it could even be entertained by this Council.

[4] See, Council Opinion, p.3.

some greenhouse gases of concern".[5] (emphasis supplied) These are in addition to its admitted emission of over 3000 tons per year of regulated pollutants, including "acid rain" contributors, assuming, of course, that KELP's pollution control technology is properly operated continuously and never fails. Regrettably, assurances by KELP that "all will be well" ring hollowly in the ears of a public all too painfully educated by recent catastrophic "unthinkable" failures of human and technological systems in this country's space exploration and oil transport fields. Remember The Challenger. Remember the "Exxon Valdez".

1. THE DECISION IS LEGALLY DEFICIENT IN FAILING TO PERFORM AND EXERCISE SPECIFIC SITING DUTIES AND RESPONSIBILITIES OF THIS COUNCIL.

Regrettably, the decision of the Siting Council opens this pristine northeast Connecticut recreational area to the risk of environmental and public health burdens without ensuring enforcement of the site specific safeguards required by law and the Council's past practice. I respectfully suggest that the default makes the decision vulnerable as a matter of law and certainly represents a default of one of our two principal functions, scrutinizing alternative sites and balancing public need for electric service in Connecticut against adverse environmental impacts and mitigating measures or benefits. First, Applicant has not complied with the site selection process required by statute, as previously interpreted by this Council. See, the Proposed Findings of Fact and Brief submitted by the Killingly Association for the Preservation of the Environment.

Second, the Council's decision to countenance Applicant's refusal to comply with the normal application process of the Killingly Planning and Zoning Commission and Inland Wetlands Commission is inconsistent with the statutory scheme established by Section 16-50x(d) of the Connecticut General Statutes, which specifically applies to electric generating facilities such as this one. Clearly, the statute authorizes the Council to affirm, modify or revoke regulatory orders of municipal bodies such as the Killingly commissions, but just as

---

[5] See, Council Opinion, p.3.

clearly, and for this very reason, the statute implicitly requires that applicants comply with the normal local regulatory procedures, which Applicant refused to do. I respectfully suggest that it was an error of law to affirm Applicant's appeal from the Inland Wetland Commission order issued in furtherance simply of exercising its regulatory authority expressly contemplated by Section 16-50x(d). See also the Findings of Fact and Brief of the Town of Killingly and Providence Water Supply Board.

Third, the express siting function of this Council, embodied in its very name, surely requires us to ensure application of the special protections required by law for our citizens located near "resource recovery facilities", as the Department of Environmental Protection ("DEP") has designated the KELP project. For reasons of its own, DEP has determined that this facility will not be burning "municipal solid waste" while, nevertheless, requiring KELP's owners to apply for a solid waste disposal permit. As a result, it is at least conceivable that the statutory protections specified for "resource recovery facilities" by Section 22a-236 will not automatically come into play for the KELP facility. Among such important local protections are the requirements of: (1) Section 22a-237, making the DEP Commissioner responsible for inspecting all aspects of the operation of a "resource recovery facility" to protect the public health, including detection of hazardous waste in the fuel stream; (2) Section 22a-238(a), authorizing the local municipality to appoint a qualified facility inspector; and (3) Section 22a-239, providing an absolute right in the chief elected officer and the director of health for the local municipality, in this case, Killingly, to inspect the premises and review records of the "resource recovery facility" and, upon making a complaint to the DEP, and absolute right to a response from the DEP Commissioner within 14 days, or 24 hours in the case of an immediate threat to public health and safety.

These statutorily required protections for an expressly designated "resource recovery facility" like KELP are crucial for prudent exercise of public authority such as ours, given the clear potential for the proposed fuel stream to include hazardous waste materials. It was arbitrary and, in my view, an error of law for the Council not to incorporate them into the Certificate as requested by parties and at least one Council member.

Finally, the Council has the duty and authority to protect high quality water resources affected by its siting decisions. It does not require a special rule making procedure to apply well established resource management principles to particular cases. The Council's decision to require a dry cooling system for KELP is prudent in principle, blocking the industrial use and loss to the atmosphere of almost 500,000 gallons per day of Class A Connecticut water. It is also, in my view, mandated by a proper balancing of the considerations of this specific facility and site, in particular the lack of public need for the electric power from this project versus the enormous resource impact. It would be folly to authorize such a squandering of a vulnerable primary resource for no lawful public benefit.

2. THERE IS NO PUBLIC NEED FOR THIS FACILITY UNDER SECTION 16-50p(a)(1) OF THE CONNECTICUT GENERAL STATUTES; THE CERTIFICATE MUST BE DENIED

In order to grant this or any certificate under Section 16-50p of the Connecticut General Statutes, the Council must first, find and determine a lawful public need for the proposed electric public utility services; second, identify each significant adverse environmental, ecological, recreational and other specified adverse impact it will occasion, while taking into account state policies that are consistent with or in conflict with the specific facility; and third, determine that the adverse effects or policy conflicts "are not sufficient reason to deny the application." The Council is prohibited from awarding a certificate unless <u>all three</u> findings and determinations are made. Nevertheless, because the Legislature has already found and determined in Section 16-50g of our enabling statute, the Public Utility Environmental Standards Act of 1972, that construction of electric generating facilities visits significant impacts on the environment and ecology of the State, there must be clear and convincing evidence of a public need for the proposed electric public utility services before the Council even reaches the second and third required determinations under Section 16-50p(a)(2) and (3).

The relevant "public need" is for electric utility services or power from qualifying cogeneration or renewable energy sources at or below the lawful "avoided costs" of the public utility. Public need under Section 16-50p(a)(1) does not include "public need" for private or public waste disposal services, diversion of waste from landfills, forest management benefits, fuel diversity for power generation, or economic development of depressed areas. These considerations, which are important to be sure, are relevant only under Section 16-50p(a)(2), and then only after sufficient evidence has been received to find and determine a "public need" for electric public utility services.

As KELP's own evidence establishes[6] and the Council's Opinion implicitly acknowledges[7], there is no present or foreseeable need by Connecticut customers for the electric power to be generated by this facility. Accordingly, the Council is prevented from issuing this certificate pursuant to the prohibition of Section 16-50p(a)(1); Section 16-50g; and Section 16-501(a)(2)(B). The Council's Opinion can only cite the "near future" and various uncertainties that may, but then again, may not make the date when "public need" arrives more certain. The Council apparently seeks to avoid this disqualifying fact by characterizing the plant as a "Block One project" and incorrectly adopting Finding of Fact #13, to wit:

> "Electricity from Block One projects is necessary to prevent an electricity shortfall in the years 1994 to 1995".

---

[6] See, KELP's Application, Section 4.0, Statement of Need, page 36; see submission by Mr. Alan DiCara, including KELP answers to Question 6, page 5 of pre-filed joint testimony of Mr. Bos and Mr. Mioio, dated August 25, 1988; KELP answers to Interrogatory #4, page 4, of "Answers to Pre-Hearing Interrogatories," dated July 5, 1988; KELP Answers to Interrogatory #102, page 7 and page 8, and Attachments 3 and 4 to this "Answers to Pre-Hearing Interrogatories," dated August 19, 1988. See also KELP's own reference in its Brief to DPUC's decision in Docket 88-04-02, December 29, 1988, "Third Annual Filing of the Status of Cogeneration and Small Power Production Projects, Projected Avoided Costs and Related Matters," especially pp. 12-13.

[7] Siting Council Opinion, p.1.

This postulated "shortfall" will come as a big surprise to CL&P which, with all Block One projects installed in 1994, will have 27.3 percent "Total Reserve Megawatts" for Summer, 1994". Elimination of the KELP project would barely nip that excess capacity to 26.7 percent. Even if NO Block One projects were completed by 1994, and NO further energy conservation occurred between now and 1994[8], CL&P would still have a 16 percent reserve margin, more than acceptable for Connecticut's requirements. In actual fact, over 40.52 percent or 259.7 MW of Block One projects are already operating or under construction in mid-1989 so that the actual overcapacity in 1994 will certainly be much closer to 27 percent than 16 percent. Moreover, the DPUC has recently emphasized that CL&P has understated both its loss of customer load and potential demand reductions from energy conservation measures currently and during the 1990's, which further suggests the overcapacity figures, high as they are, are understated.[9]

This 27 percent overcapacity, whether understated or not, is an enormous reserve margin for an electric utility to maintain. It clearly contradicts the Council's Finding of Fact #13 which predicts an "electricity shortfall in 1994-1995". It should shock the public conscience of this Siting Council, charged as it is with a stewardship of energy and environmental resources of unparalleled historic importance.

The unjustified 32.2 MW addition to CL&P's overcapacity is not cured by the approval in September 1987 of the long term electric purchase agreement between KELP and CL&P by the Department of Public Utility Control ("DPUC"). Acting under the federal Public Utility Regulatory Policies Act ("PURPA") and state legislation aimed at promoting cogeneration and electricity from small power producers, the DPUC approved this agreement and expressly cited Section 16-243a of the Connecticut General Statutes. That Section requires each electric public service company like CL&P to purchase electricity from any qualified "private power production facility", as defined by Section 16-243b, at or below the

---

[8] This is tantamount to saying there will be no oil price increase during the interval between 1989 and 1994, an unlikely development that would make KELP's purchase agreement with CL&P completely untenable for its ratepayers.

[9] DPUC Docket 88-04-02, December 29, 1988, supra, pp.12-13.

utility's "full avoided costs". As DPUC noted in its opinion[10], CL&P did not enter negotiations with KELP willingly, but was subjected to the coercive provisions of Section 16-243a. As stated more fully below, this application of Section 16-243a to the KELP facility is an error of law, which the Council perpetuates by its approval of the certificate in this case.

Specifically, the KELP facility is not a "private power production facility" within the meaning of either Section 16-243b(a)(1), subdivision(A),(B) or (C) because it will burn at least 450 tons, more likely many thousands of tons of non-renewable energy fuel-namely non-wood solid waste material - for expressly prohibited purposes. Accordingly, the approval of the contract under Section 16-243a is invalid. To qualify under subdivision (A) the KELP project must produce at least 20 percent of its total energy output through cogeneration technology, whereas it does not intend to provide any by this means. Nor will it generate electricity "solely through the use of renewable energy resources" (emphasis supplied), as required for qualification under subdivision (B), since, as KELP's witness Donovan admits, the facility will annually combust at least 1 percent or 4500 tons of non-wood fuel. For reasons best known to the Council, it has adopted only KELP's lowest estimate of non-wood uses, .001.[11]

In fact, this is an extremely conservative estimate more likely to understate than overstate the likely proportion of non-wood materials in the fuel supply. The record evidence indicates that existing demolition debris suppliers only segregate asbestos materials from the other bulky demolition waste, which includes plastic, shingles, vinyl flooring, among other non-wood wastes. Testimony concerning their gross sorting methods did not inspire confidence that fine distinctions will be made, e.g. between "look alike" plastic building and furniture materials and the real (i.e. wood) thing. Indeed, it

---

[10] DPUC Docket 86-04-31, September 10, 1987, Decision, p.1; 16, noting that KELP initiated this approval by petitioning the DPUC for an order directing CL&P to negotiate in good faith for an electricity purchase agreement under Section 16-243a. DPUC issued that interim order and the agreement in question resulted.

[11] See, Finding of Fact #116, which is arbitrary as a matter of law and in light of other record evidence.

is not hard to imagine that hazardous as well as simply non-wood materials could enter the fuel stream via this route. The totally unknown performance record of the nascent reprocessing "recycled" wood waste industry is additional cause for assuming that KELP, which will take its supplies from such reprocessors, as well as demolition debris sorters, will combust well over the .001 non-wood component which the Council cites in its Opinion. Any suggestion that these so-called "recycled" non-wood waste materials, whatever that might be, could qualify as "renewable energy sources" must fail since the statute defines this latter, depositive term to mean: "energy from direct solar radiation, wind, water, geothermal sources, wood and other forms of biomass."[12]

Since the facility fails to qualify as a "private power production facility" under paragraph (A) and (B), it also fails under paragraph (C) of Section 16-243b, which provides: "through both [(A) or (B)] only".

In approving the KELP project as a qualifying facility under Section 16-243b, the DPUC never once addressed the issue of the presence of non-wood elements in the wood waste fuel stream. DPUC did recognize that the facility would burn non-renewable energy fuels, namely No. 2 fuel oil or gas for "start up and flame stabilization purposes." The DPUC noted that this would amount to less than 1 percent of the BTU value of fuel burned and approved the use of No. 2 oil or gas only for those purposes. In the DPUC's own words:

> "[I]t is the opinion of the Authority that the Project should qualify as a private power producer under the General Statutes of Connecticut Section 16-243b, provided that the use of non-renewable fuels, such as No. 2 oil is limited to start-up, testing, and control activities." (DPUC Opinion, Docket No. 86-04-31, p.15)

Moreover, the DPUC's Order specifically limited the use of non-renewable energy fuel to these purposes, as follows:

> "16. The Project must limit its use of non-renewable fuels to startup, testing, and control activities." (DPUC Order, supra, p.18)

In violation of these limitations, the KELP facility will combust, for regular electricity-producing purposes, thousands of tons of non-wood (non-oil/gas) wastes. The Council has inadequately addressed this objection in its Opinion at p.1, stating:

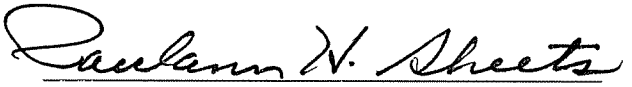
---

[12] Section 16a-38. Cf. the other statutory definition of "renewable fuel resources": "energy derived from wind, hydro power, biomass or other solar resources." Section 16-1(a)(22).

> "[T]he facility would be, at a minimum, 94.9 percent reliant on "renewable energy sources" with, at most, five percent annual heat input from the oil/gas on which such biomass generators rely for start up and flame stabilization, and unintended, non-wood impurities held to 0.1 percent or less. All fuels contain some impurities, and we do not believe that the legislature intended that qualifying renewable energy source generators would be excluded from using non-renewable fuels for startup, shutdown, and flame stabilization purposes. The Department of Public Utility Control (DPUC) has made a similar conclusion." (Opinion, p.2)

In fact, the DPUC did not authorize consumption of non-renewable energy fuel for regular combustion purposes; it expressly prohibited this. Moreover, the presence of those non-wood materials in the fuel stream is <u>not</u> the equivalent of "impurities" in oil, gas, or coal. Although KELP would like the public and Council to believe that the only non-wood materials to be burned will consist of paint or turpentine impregnated in the wood processed into wood chips, the record does not support this beyond KELP's own assertions. There is too much contrary record information and public knowledge of which we can take notice that an entire 20 ton load of chips may be 100 percent composed of non-wood chips, e.g. chips made up of wood "look-alike" plastic, shingles, furniture, and other non-wood demolition debris materials.

But for the constraints of Section 16-243a, it is highly unlikely that this project would have ever reached the Siting Council. CL&P's plans did not include construction of comparable wood-fired or any other type of capacity of this size in northeastern Connecticut. This is to be expected in view of CL&P's more than adequate capacity supply situation at the time, as well as now, when the excess has grown. Similarly, CL&P does not welcome projects the relatively large size of KELP in the northeast part of the state since they accelerate CL&P's need to reinforce its transmission system there. The DPUC acknowledged these concerns of size and location but was constrained by its interpretation of Section 16-243b(a) that KELP was a qualifying facility. In short, there is no reasonable basis for determining a public need for KELP under applicable law. Accordingly, the strictures of Section 16-50p of the General Statutes prevent the Council from granting the certificate of environmental compatibility and need applied for by KELP.



Paulann H. Sheets
May 11, 1989

cp/JAW

3132E