



September 14, 2005

Kathy Tarbuck
Bureau of Air Quality
Maine Department of Environmental Protection
State House Station #17
Augusta, ME 04333

Re: Comments on FPL Energy (FPLE) Wyman Station Amendment Request for alternative NOx emission limits to the Title V Air Emission License

Dear Ms Tarbuck:

The Natural Resources Council of Maine submits these comments on the above-mentioned issue that currently is before the Maine Board of Environmental Protection (BEP).

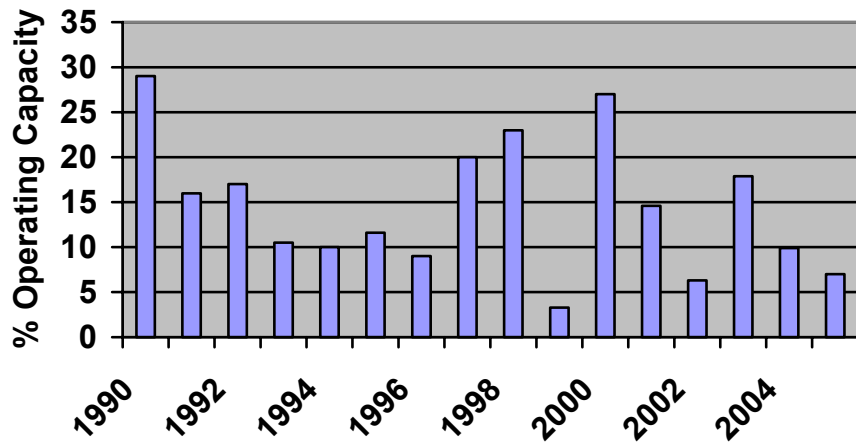
The Natural Resources Council of Maine opposes the request made by FPLE for a weaker nitrogen oxide (NOx) emission rate of 0.18 lb/MMBtu for units 3 and 4 at the Wyman Station power plant in Yarmouth. We oppose this request on the grounds that: 1) it could result in a significant increase of NOx pollution, 2) FPLE has not met the burden of proof of demonstrating that the 0.15 lb/MMBtu is “technically infeasible with the NOx control technology installed,” 3) the Board of Environmental Protection was given strong assurances by FPLE and DEP staff that a relaxation of the standard would not be necessary, and 4) relieving FPLE of this emission control obligation would shift the burden to other sources.

We urge the Board to disapprove the draft Board Order. Although the control technologies installed at Wyman Station have reduced total NOx emissions, the Chapter 145 emissions rate standard has not been achieved. NRCM is open to the idea of exploring with DEP and FPLE a range of creative approaches that could ensure continued progress in reducing air pollution along coastal Maine, but we are not prepared to accept a relaxation of this important air control standard at one of Maine’s largest sources of pollution.

- 1. Relaxation of the emissions rate standard to 0.18 lb/MMBtu for units 3 and 4 could result in a significant increase in NOx emissions from Wyman Station, in comparison to the 0.15 lb/MMBtu requirement in Chapter 145.** The amount of additional annual NOx pollution that would be allowed through a weakened emission rate standard for Wyman Station depends on how much the plant is operating. The Draft DEP order estimates that the difference in NOx

emissions could range from 49 tons/year if the plant were operating at 5% capacity, to 246 tons/year if the plant were operating at 25% capacity. According to FPLE, Wyman Station currently is operating at approximately a 7% capacity factor, and representatives of the company suggest that future operations will be at this level.¹ There is no way to predict, however, what the level of future operations will be for Wyman Station. As the chart below indicates, plant operations over the past 15 years have ranged from 29% to 4%. Although operations of this “peaking plant” facility currently are at a low level, BEP should

Wyman Station Capacity Factor



not make any assumptions about future operations. From 1999 to 2000, Wyman Station (units 3&4 combined) jumped from 3.7% to 27%. The level of future operations for Wyman Station depend on a wide range of variables, including the volatility of fuel prices, increased cost of natural gas, generation constraints in the region, possibility of other plants being down for servicing or decommissioning, and electrical demand growth. In evaluating FPLE’s request for a weakened NOx emissions rate, the BEP needs to consider the possibility of the plant running at a much higher capacity factor – and the implications this would have on total NOx emissions.

FPLE contends that the difference in NOx emissions that would be allowed with a relaxed standard would not be significant. To provide perspective, FPLE estimates that the difference would be the same amount of NOx emitted by the University of Maine at Orono or McCain Foods in Aroostook County in a given year.² Yet the University of Maine at Orono has 2,222 employees and 11,400 students, and McCain Foods employs 600 employees. Shutting down either of

¹ Comments by Allen Wiley, FPLE Director for Business and Regulatory Affairs, DEP Public Meeting, Yarmouth, Maine, August 30, 2005.

² Cover letter from Al Wiley to Richard Wardwell, attached to FPLE Application for establishment of an alternative NOx emission limit for Wyman Station Units 3 & 4, December 28, 2004, p 5.

these operations would be a very serious economic impact in the State of Maine. Yet these examples serve well to illustrate how substantial an additional effort would need to be made in order to make up for the increased NOx emissions that Wyman Station would be allowed to generate, were FPLE's request granted.

Put in other terms, the difference between the 0.15 standard and the 0.18 standard could be the equivalent of taking more than 15,000 cars off the road.³ This is not an insignificant level of pollution reduction. Indeed, were the DEP, State Legislature, and/or Board of Environmental Protection to have before it a policy proposal that would provide the equivalent air pollution benefits of removing 15,000 cars from Maine's roads, NRCM believes that such a policy likely would receive very strong support.

Another perspective on the significance of the additional NOx emissions that would be allowed through a granting of FPLE's request can be seen by looking at the results of Maine's energy efficiency programs. *Efficiency Maine* has implemented a broad range of cost-effective energy efficiency programs across all sectors of Maine. These programs have resulted in substantial energy savings for consumers (\$12.5 million in estimated lifetime benefits), and reduced energy use, with total emission offset benefits of 13.7 tons of CO₂, 48 tons of SO₂ and 16.7 tons of NOx.⁴ However, this broad array of energy efficiency measures provides only 6% of the same NOx emissions reductions, as compared with the 246 tons of additional NOx that would be controlled by keeping Wyman at the 0.15 standard (assuming a 25% capacity factor).

- 2) **FPLE has not met the burden of proof necessary to receive a weaker NOx emissions rate.** Chapter 145, Section 3(D) places a clear and demanding burden of proof with any applicant seeking an alternative emission limitation. Specifically, the rule states that "The affected source shall have the burden of proof in making a demonstration that achieving the final emission limitation in Subsection 3(B)(2) of this Chapter is technically infeasible with the NOx control technology installed pursuant to Section 3 (A) of this Chapter."

FPLE endeavors to meet this requirement by asserting that the NOx control technology approved by the Board on June 6, 2002, "has been installed on these units and it is technically infeasible to garner additional reductions."⁵ As backup to this assertion, FPLE cites a simple assertion by the installation contractor CCA, which states: "We believe that the NOx performance of the CCA installations on Units #3 and #4 have been fully optimized and we are not aware of any additional

³ Comparison depends on capacity factor, and assumptions about vehicle emission rates. A 1999 Ford Taurus driven 12,500 miles/year releases an estimated 31 lbs NOx/year. The difference in Wyman's NOx emissions at 5% capacity would equal 3,161 vehicles; at 25% capacity, the difference would amount to 15,871 vehicles.

⁴ Efficiency Maine, 2004 Annual Report, Saving Energy for Maine, <http://www.energymaine.com/Eff-Report%2004%20Final.pdf#search='efficiency%20maine%20annual%20report'>

⁵ Wiley, December 28, 2004, p 5.

efforts that could be undertaken to further minimize NOx emissions from Units #3 and #4 with the existing equipment installed on the boilers.”⁶

The Board intentionally established a very rigorous standard, and placed a substantial burden of proof with FPLE. We believe this standard and burden can only be met through an independent technical analysis of the performance of CCA’s installed emission controls. Of course the contractor has affirmed that the controls are performing as expected, and of course the company is not interested in spending additional funds for further controls, but DEP and the Board must ensure that the public’s interest is met through a impartial analysis.

We are aware of more than 70 other power generation facilities that are exceeding a 0.15 lb/MMBtu NOx emission rate (Appendix A). Many of these have used combustion controls not unlike what was installed by CCA. When the Board approved the CCA alternative control technology in 2002, Marc Cone of the DEP staff told the Board that it would be very unlikely that FPLE would return for a relaxed limit (see below). He also stated that, were a relaxation to be requested, then DEP would provide “a very hard look.”⁷ NRCM is not convinced that a rigorous analysis has been conducted at all. During a public meeting in Yarmouth, Marc Cone said that he has not visited Wyman Station in more than a year. It is not clear that DEP has interacted with CCA directly, nor is there any evidence of independent technical analysis having been done – by FPLE or DEP.

Simply taking the applicant’s statement on face value cannot possibly meet the burden of proof intended by the Board. Proving that something is technically infeasible must be treated as a very substantial requirement.

- 3) **The BEP was given strong assurances by FPLE and DEP staff that a relaxation of the standard would not be necessary.** Our analysis of recorded tapes of the July 6, 2002, BEP meeting reveal that DEP staff and FPLE provided the Board with overwhelming assurances that FPLE would meet the 0.15 standard and that FPLE would not return to the Board. For example, DEP staff member Marc Cone was asked by a Board Member: “How confident is DEP with the proposal?” Marc Cone stated: “It will get us to the emission level required in the rule.” Mr. Cone also stated: “In conclusion, we feel the Board should feel very confident in approving the order that has been drafted and is before you today.” FPLE’s attorney, Dixon Pike, similarly stated: “They [FPLE] certainly don’t want to be back here in a few years saying it doesn’t works as well as it was predicted to work.”

Marc Cone also said the following about how the DEP would treat a relaxation request were FPLE to return with such a request:

⁶ Wiley, December 28, 2004, Attachment C.

“When people come in to reduce or relax their limits they essentially get put through a very vigorous process, of what has occurred, what has been done, what they’re going to do, what could be done. I think it’s going to be very difficult for them to justify a higher limit. In my opinion, it would be very unlikely we would come before the Board and seek some kind of relaxation.”⁸

Board members voted to approve the CCA technology with a clear expectation that the standard would be achieved. As stated by Katherine Littlefield, a BEP member at the time: “If I’m still on the board and it ever comes back, I would never vote for any extension either on time or (pollution) limits.”⁹ (see attached)

NRCM opposed FPLE’s request to install CCA’s control technologies instead of Selective Non-Catalytic Reduction technology, in part, because we did not believe that DEP had provided sufficient due diligence to determine whether CCA was presenting the best bid. DEP staff did not look at any of the multiple vendor proposals submitted to FPLE. DEP staff only looked at the one proposal, from CCA, which FPLE allowed them to review.

It should be recalled that the final Chapter 145 rules were the result of major compromises on behalf of FPLE. The final rules were developed only after FPLE successfully argued against an estimated \$50 million investment in Selective Catalytic Reduction (SCR) – which NRCM concluded would have easily met the 0.15 lb/MMBtu standard. FPLE in December 2000 proposed, instead, spending \$10 million on control technologies that would meet 83% of its NOx reductions on-site, with the balance of necessary reductions purchased through a cap-and-trade program.¹⁰ The final BEP rule required that Wyman meet its full reductions to a 0.15 lb/MMBtu emission rate through on-site controls, and it was generally assumed that this would require on the order of a \$10 million investment. FPLE reports that it spent \$4.2 million for the CCA NOx control technologies, a fraction of what it had agreed to spend in its own proposal to BEP in February 2000.

Now the Board is in the difficult situation of facing a request that DEP staff said would not be made, from a company that spent far less than was expected, and no independent analysis demonstrating that it is technically infeasible to achieve the 0.15 lbs/MMBtu emissions rate. Given the representations made by DEP staff to the Board in July 2002, we do not believe the Board should approve a relaxation of the emissions rate today.

- 4) **Relieving FPLE of this emission control obligation would shift the burden to other sources.** Maine’s coastal remain in non-attainment of federal ozone standards. A significant portion of ozone in Maine is the result of up-wind pollution sources, but Maine’s contributions must also be factored in. For the past decade, the State has pursued a “clean hands” policy of working hard to reduce

⁸ Transcribed statements from July 6, 2002, meeting of the Board of Environmental Protection.

⁹ John Richardson, “Wyman requesting looser air standard,” Portland Press Herald, 1 September 2005.

¹⁰ Comments on Proposed Chapter 145 NOx Control Program, Al Wiley, December 1, 2000.

in-state sources of emissions, in order to strengthen our leverage with upwind sources. The Chapter 145 NO_x controls are an important part of this strategy, and the reductions that were expected from Wyman are included in our State Implementation Plan (SIP). If FPLE's request were granted, then other NO_x dischargers in the state would need to be controlled if we hoped to make up the difference in lost pollution controls. As mentioned above, this would not be an insignificant undertaking – and could be likened to shutting down University of Maine, Orono or shuttering McCain Foods in Aroostook County, or removing 15,000 cars from the road.

Conclusion: As described in these comments, NRCM does not believe that the Title V license governing Wyman Station should be amended to include a weaker emissions rate for NO_x discharges. We recognize that the CCA controls have resulted in a significant level of emission reductions, but we are not convinced that FPLE has met the burden of proof specified in Chapter 145, nor do we believe that FPLE should be relieved of its obligation to deliver further air pollution controls. NRCM was instrumental in negotiating a settlement agreement with FPLE in 2001 that led to the Chapter 145 rules, and we would be willing to engage in discussions about alternative compliance strategies. We strongly urge the BEP to reject the FPLE's request, and vote instead to retain the 0.15 lb/MMBtu emission rate.

Sincerely,

Pete Didisheim
Advocacy Director
Natural Resources Council of Maine