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September 7, 2007

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT/NOTICE OF PROJECT CHANGE

PROJECT NAME: Russell Biomass Power Plant
PROJECT LOCATION: Russell
PROJECT WATERSHED: Westfield
EEA NUMBER: 13635
PROJECT PROPONENT: Russell Biomass LLC
DATE NOTICED IN MONITOR: July 11, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (MEPA) (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). The Proponent may prepare the Final Environmental Impact Report (FEIR) for review. The Proponent has also submitted a Notice of Project Change (NPC) to the MEPA Office. The Scope for the FEIR outlined in this Certificate reflects changes to the project described in the NPC.

Project Description

As presented in the DEIR, the project involves the construction of a 50-megawatt (MW) (nominal net design output) biomass-fired power plant, on an approximately 20-acre site in Russell, MA. Approximately 510,000 tons of biomass wood fuel will be consumed annually to produce heat to drive the turbine to generate electricity. The energy generated from the facility will be transmitted to the existing electrical grid and the net annual energy production will be

approximately 400,000,000 kilowatt hours (kWh). Power will be transported from the plant to an interconnection point in Westfield at Western Massachusetts Electric Company's (WMECO's) existing 115 kilovolt (kV) transmission line via a new approximately 5.3 mile 115 kV transmission line.

The facility will consist of a complete fuel receiving and handling system, either a single fluidized bubbling bed boiler (BFB) or a stoker fired boiler, a single condensing turbine, a mechanical draft evaporative cooling tower withdrawing water from the Westfield River via an existing intake structure, air and water quality control systems, an ultra low sulfur distillate fuel oil or biodiesel boiler start up system, and auxiliaries typical of a stand alone power generating station.

Treated industrial wastewater and some stormwater will be discharged at a point on the east bank of the Westfield River approximately 500 feet downstream of the Indian River Hydro Dam. An existing municipal water main supplies potable water to the site. On site subsurface sewage disposal will be utilized to treat sanitary wastewater. A stormwater management system will be constructed on site to collect, detain and treat stormwater flows.

Transportation of wood fuel to the site will necessitate approximately 75 to 80 deliveries daily via Main Street of Russell to supply the required 2,000 tons of fuel per day. Ash, the by-product from burning wood fuel, will be trucked from the site. The Proponent has estimated that the project will generate a total of 222 new daily vehicle trips consisting of round trips of 75 to 80 wood fuel trucks, 4 ash-disposal trucks, 4 logging trucks, and the vehicles of 23 permanent employees.

The site consists of a large open area at the base of Shatterack Mountain in Russell, MA. The parcel is the site of the former Westfield River Paper Company. The mill complex has been abandoned since its shutdown in 1994. Former paper mill buildings and infrastructure occupy the central portion of the site. Areas on the north end of the site not currently covered with buildings or pavement are primarily used for the temporary storage of timber products associated with the current Hull Forest Products lease on the site. Since 2000, there have also been gravel removal operations at the site. The site is bounded by industrial uses and vacant land. To the west, CSX active railroad tracks, the Indian River Power Supply hydroelectric facility and the Westfield River bound the site. To the south, east and north the site is bounded by undeveloped forested land, portions of which are owned by the Massachusetts Division of Fisheries and Wildlife (DFW).

Jurisdiction and Permitting

The project is undergoing environmental review and is subject to the preparation of a mandatory EIR pursuant to the following sections of the MEPA regulations:

- Section 11.03(1)(a)(1): Direct alteration of 50 or more acres of land associated with the construction of the transmission line.

- Section 11.03(1)(a)(2): Creation of 10 or more acres of new impervious surface at the power plant facility.

The project also meets the following review thresholds for an Environmental Notification Form:

- Section 11.03(1)(b)(3): Conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97. This threshold may or may not be met depending on the selection of the Preferred Alternative for the transmission line corridor.
- Section 11.03(2)(b)(2): Rare species impacts in the Westfield River and associated with the transmission line corridor.
- Section 11.03(3)(b)(1)(d): Alteration of more than 5,000 square feet (sf) of Bordering Vegetated Wetlands (BVW) associated with the construction of the transmission line.
- Section 11.03(3)(b)(1)(f): Alteration of ½ acre or more of “any other wetlands”, in this case, Riverfront Area.
- Section 11.03(4)(b)(1): Expansion in withdrawal of 100,000 or more gallons per day (gpd) of water from the Westfield River for cooling.
- Section 11.03(5)(b)(4)(b)(ii): New surface water discharge of 20,000 gpd or more of industrial wastewater for cooling.
- Section 11.03(7)(b)(1): Construction of a new electrical generating facility with a capacity of 25 or more MW.
- Section 11.03(8)(b)(1): Construction of a new major stationary source with federal potential emissions, after construction and the imposition of required controls of: 100 tons per year (tpy) of particulate matter (PM) as PM₁₀, carbon monoxide (CO), lead or sulfur dioxide (SO₂); 50 tpy of volatile organic compounds (VOC) or nitrogen oxide (NO_x); 10 tpy of any hazardous air pollutant (HAP); or any 25 tpy of any combination of HAPs related to the proposed power plant emissions.
- Section 11.03(10)(b)(1): Demolition of all or any exterior parts of any historic structure listed in the Inventory of Historic Assets of the Commonwealth associated with the abandoned Mill.

The project requires the following federal permits and/or review: an Individual Permit from the U.S. Army Corps of Engineers (ACOE) pursuant to Section 404 of the Clean Water Act; a National Pollutant Discharge Elimination System (NPDES) Construction General Permit, a NPDES Individual Permit for Surface Water Discharge, and a NPDES Individual Permit for Operational Stormwater Discharges from the U.S. Environmental Protection Agency (EPA); and an Essential Fish Habitat (EFH) assessment from the National Marine Fisheries Service (NMFS).

The project requires the following state permits and/or review: a Major Comprehensive Plan Approval, a Water Management Act Permit, a 401 Water Quality Certificate, and a Beneficial Use Determination (BUD) from the Department of Environmental Protection (MassDEP); a Stack Registration Permit from the Federal Aviation Authority (FAA); a Request for Interconnection for a Large Generating Facility from the Independent System Operator – New England (ISO-NE); a Petition for Approval of Construction for the transmission line and substation from the Energy Facility Siting Board (EFSB); a Section 72 Petition from the Department of Telecommunications and Energy/Department of Public Utilities (DTE/DPU); a

possible Conservation and Management Permit from the Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP); an Authorization to Access from the Massachusetts Turnpike Authority (MTA) for transmission line construction in the Turnpike Right of Way; and a Determination of No Adverse Impact from the Massachusetts Historical Commission (MHC).

The project requires the following local permits and/or review: Orders of Conditions from the Russell, Montgomery and Westfield Conservation Commissions; Site Plan Review from the Russell Planning Board; a possible Special Permit from the Russell Zoning Board of Appeals (ZBA); and a Subsurface Sewage Disposal Works Permit from the Russell Board of Health.

While the project did receive funding for a feasibility study from the Massachusetts Technology Collaborative (MTC), the Proponent is not seeking financial assistance from the Commonwealth for the construction or operation of the project and therefore MEPA jurisdiction is limited to the subject matter of required or potentially required state permits. In this case MEPA jurisdiction applies to land alteration, Article 97 protection, stormwater, rare species, wetlands, water withdrawal, wastewater, energy, air quality, solid and hazardous waste and historic resources.

The Proponent has applied for a Petition for Zoning Exemption for the project from the DPU pursuant to M.G.L. c. 40A § 3. The Proponent's request for a Zoning Exemption in effect grants the DPU review authority over all impacts that would be addressed during the Special Permit process. If the DPU grants the zoning exemption, the Proponent will be released from the conditions outlined in the Town of Russell ZBA's Special Permit that was issued in July 2005 (note that the Special Permit issued by the Town was appealed in August 2006, and is currently not effective). As the Petition for Zoning Exemption is a possible state permit associated with the project, MEPA jurisdiction extends to those issues that the DPU is considering in its review of the Petition. Specifically, MEPA jurisdiction now also extends to potential environmental impacts related to project-generated traffic.

Review of the DEIR

The purpose of MEPA review is to ensure that a project proponent studies feasible alternatives to a proposed project; fully discloses environmental impacts of a proposed project; and incorporates all feasible means to avoid, minimize, or mitigate Damage to the Environment as defined by the MEPA statute. I have fully examined the record before me, including but not limited to the Scope issued on October 31, 2005, the DEIR filed in response; and the comments entered into the record. I find that the DEIR is sufficiently responsive to the requirements of the MEPA regulations and the Scope to meet the regulatory standard for adequacy.

While I am finding the DEIR to be adequate and while the proponent has provided a considerable amount of information on project design and impacts, there are several unresolved issues that must be addressed for the FEIR to be found adequate. In general, the Proponent should provide more information in the FEIR on the following issues:

- A more comprehensive analysis of alternative cooling technologies;
- A greater consideration of potential adverse impacts to aquatic and fishery resources and a commitment to monitoring water temperature and quality;
- A higher level of detail on stormwater management and compliance with applicable policies and regulations;
- Selection of a preferred route for the transmission line corridor, more information on existing wetland resources and potential impacts associated with the transmission line, and a demonstration of compliance with wetlands regulations;
- A more comprehensive consideration of the public health and safety impacts of project-related traffic, including an analysis of rail access to the site; and,
- A commitment to a suite of mitigation measures to ensure that environmental resources, rare species, the Westfield River and the Town of Russell are not adversely impacted during project construction and operation.

In addition, I note the receipt of many thoughtful and in depth comments on the DEIR that must be addressed in detail in the FEIR. I retain my authority to require further review in the form of a Supplemental Final Environmental Impact Report if issues outlined in this Scope and in comments are not thoroughly addressed in the FEIR. I remind reviewers that I cannot approve or deny this project through the MEPA process. MEPA is not a zoning process, nor is it a permitting action. Rather, it is a process designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings, and to ensure that potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum feasible extent.

Project Change Description

The Proponent submitted a NPC concurrent with the DEIR. MassDEP comments submitted on the EENF indicated that the Department intended to review the EENF and future permit applications with the understanding that the only wood fuel proposed for the project would be derived from clean by-products of the forest industry, as outlined in the Russell Zoning Board of Appeal (ZBA) Special Permit issued on June 28, 2005. The Secretary's Certificate on the EENF specifically required a NPC if the proposed fuel source for the power plant deviates from the fuel source specified in the Special Permit. The Special Permit states that the "Applicant will not be allowed to burn anything other than Virgin Wood", which is defined in the permit as "pre-consumer wood taken directly from its point of growth including wood resulting from logging, tree thinning, lot clearing, brush removal, bark, wood chips and shaving as fuels. Specifically excluded are all post-consumer wood and wood products including, but not limited to, painted wood, pressure treated wood, wood pallets, wood pulp or recycled paper, Construction and Demolition, Clean Recycled Waste and Paper Cubes".

The Proponent states in the NPC that it intends to use wood fuel as defined in MassDEP's Air Pollution Control Regulations at 310 CMR 7.00 as its primary fuel. 310 CMR 7.00 defines wood fuel as "all wood intended to be used as a fuel included but not limited to trees, cord wood,

logs, lumber, saw dust, and wood from: manufacturing processes (but offs, shavings, turnings, sander dust, etc.), wood pellets, slabs, bark, chips, waste pallets, boxes, etc. This definition does not include materials which are chemically treated with any preservative, paint or oil". The Proponent intends to use the following primary sources: wood chips, wood by-product, wood stove pellets, sawmill bark and sawdust, ground stumps, ground pallets, and clean municipal recycling facility wood (brush, logs and stumps). The facility will not use Construction and Demolition (C &D) materials or wood from the C & D stream. The Proponent requests in the DEIR/NPC that further MEPA review of the project proceed on the basis of using wood fuel as the primary fuel source for the plant as defined at 310 CMR 7.00 and in submissions to state permitting agencies.

The Proponent has provided a discussion of the source and supply of clean wood fuel needed for the plant in the DEIR and has provided an extensive analysis of potential impacts of plant operations to demonstrate compliance with state and federal regulations. Sections of the DEIR on fuel sources and air quality are discussed in later sections of this Certificate. Because on-going MEPA review can adequately assess the potential impacts associated with the modified fuel source, the NPC does not warrant separate or new MEPA review of the project. The Scope for the FEIR takes the project change into consideration.

SCOPE

General

The FEIR should discuss any changes to the project since the filing of the DEIR and provide an update on the local and state permits required for the project. The FEIR should contain a copy of this Certificate and a copy of each comment received. The FEIR should respond to the comments received from state and local agencies and from members of the public. The FEIR should present additional narrative and/or technical analysis as necessary to respond to the concerns raised. I note that many reviewers expressed concern about the Response to Comments matrix presented in the DEIR, and encourage the Proponent to respond to comments submitted by agencies, organizations and individuals directly in the FEIR. I acknowledge that this may result in a degree of redundancy; however, it is important that reviewers are able to easily locate the Proponent's response to questions or comments submitted to MEPA.

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to any state agencies from which the proponent will seek permits or approvals, to the list of "comments received" below, and to Westfield officials. A reasonable number of copies of the FEIR should be made available for public review at Public Libraries in Russell, Westfield, Montgomery, Northampton, Huntington and Blandford and at Russell Town Hall. The Proponent should consult with the MEPA office for specific guidance on the circulation of the FEIR.

Power Output

According to the DEIR, the proposed facility is designed to generate a nominal net design electrical power output of 50 MW. The Proponent states that this means the plant is designed to produce a minimum of 50 MW under any given set of ambient operating conditions. The ambient conditions under which the plant will produce its minimum capacity are those associated with a “design hottest day” – defined as a 90 degree summer day. At this temperature the plant will produce at least 50 MW. At lower temperatures it will produce more than 50 MW; the maximum output capacity will be slightly less than 55 MW on a cold winter day.

The electric transmission system must be able to accept the maximum output. Therefore, the ISO-NE system impact analysis assumed a 55 MW output. Permitting agencies also must assume the maximum output in their analysis of impacts and permitting decisions. The Proponent states in the DEIR that all permit applications for the project will assume maximum power output, maximum fuel input, and maximum water withdrawal and discharge.

In the FEIR the Proponent should resolve concerns submitted in comments on the DEIR regarding discrepancies about the projected power output of the proposed facility. The Proponent should clarify and define the net rating, gross rating, nominal rating and minimal rating for the plant and should discuss how ambient temperatures will affect ratings. The Proponent should clarify how much power will be produced at the plant and how much will be consumed at the plant itself. The FEIR should also specifically state the projected amounts of fuel input, water withdrawal and discharge that have been or will be submitted with state and federal permit applications and should demonstrate consistency in this regard.

Alternatives

The Proponent provided an analysis of alternatives related to power plant siting, site access, power plant size, site design/configuration, surface water withdrawal/cooling water intake siting, wastewater and stormwater discharge point siting, power plant equipment/technology, transmission line interconnection and approaches, and alternatives required for the 401 Water Quality Certificate. In the DEIR, the Proponent has not selected a Preferred Alternative for all components of the project. I strongly urge the Proponent to present a Preferred Alternative for all aspects of the project in the FEIR. For those aspects of the project for which several alternatives are still under consideration, the Proponent must provide a permit application level of detail on potential impacts and proposed mitigation in the FEIR.

Power Plant Siting

The Proponent analyzed several parcels for the potential siting of the proposed power plant. Selection criteria included zoning, available infrastructure, proximity to sensitive receptors and municipal support. Sites in Chester and Huntington, MA were eliminated from further consideration as they did not meet selection criteria. According to the DEIR, the selected parcel presents many advantages for the siting of the proposed facility because it is industrially zoned, has existing infrastructure available for use, and limited sensitive environmental receptors.

Site Access

The Proponent evaluated three alternative routes to the site:

- The existing access route via Main Street: The Proponent's preferred site access alternative is the existing access route to the site from Main Street via an existing bridge over the Westfield River, northwest of the site. The Proponent conducted a traffic study in June 2005 as part of the Special Permit and Site Plan Review application that determined that the existing road and bridge are more than adequate to meet the vehicular traffic needs of the facility. The total daily traffic to and from the facility is estimated to be 222 vehicles. In response to concerns regarding truck traffic, the Proponent committed during the Special Permit process to several conditions including required delivery hours and days, a required speed limit on Main Street, idling and engine braking restrictions, enforcement procedures, and the provision of a financial offset to the Town of Russell for repairs and maintenance to Main Street.
- Construction of a new bridge one mile south of the site across the Westfield River off of U.S. Route 20: This alternative would involve construction of a new bridge crossing the Westfield River approximately one mile south of the site. The resulting access road would provide two-lane access to the site off of Route 20 south of the Town of Russell. MassDEP has indicated to the Proponent that a new bridge over the Westfield River could not be permitted, as the existing Main Street bridge is used far below its maximum capacity.
- A new one-mile roadway extension of Frog Hollow Road to Route 20 around Turtle Bend Mountain: The Proponent considered an access route northwest of the facility around Turtle Bend Mountain that would provide an alternative route for project-related truck traffic, out-of-town sand and gravel operations and the Russell transfer station. The potential route begins at the Russell transfer station located at the end of Frog Hollow Road off Main Street, and ends at Route 20, north of the existing trailer park. Some reconstruction of Frog Hollow Road would be required. The new two-lane road would be approximately 4,000 linear feet long. The Proponent notes in the DEIR that the potential road would be owned and maintained by the Town, and would require action from the Russell Board of Selectmen and local funding. This alternative could potentially result in significant impacts to wetlands and rare species. This alternative would also require the submittal of a Notice of Project Change to MEPA, as it exceeds ENF review thresholds for roadway construction and would require numerous permits and/or approvals from state agencies.

I note many concerns with the proposed use of Main Street as the main access to the site. Specific comments related to the potential public health, noise and safety impacts of project-related traffic are addressed in later sections of this Certificate.

The Proponent should expand the analysis of alternative routes to the site to include rail. Estimates of the cost to rehabilitate the existing rail structure at the site and information on the cost of rail service compared to truck shipping costs should be included in the FEIR. The Proponent should also outline permitting requirements and potential environmental impacts

associated with use of the rail structure. The Proponent should note additional guidance from DPU in its comments on the DEIR.

Power Plant Sizing

The Preferred Alternative is a 50 MW (nominal net design output) biomass-fired power plant. The Proponent compared the Preferred Alternative to 20 MW and 40 MW facilities in the DEIR. A reduction in plant size from 50 MW to 40 MW or 20 MW would result in reduced environmental impacts. The Proponent argues however that the smaller plants are less efficient in terms of electrical generating efficiency. The projected peak net heat rate of 13,962 British thermal units (Btu) per kWh is lower (more efficient) for the 50 MW facility size alternative than the 20 or 40 MW alternatives. Net heat rate is a measurement of how efficiently a generator uses heat energy. According to the DEIR, this is a factor driven by economy of scale; as plant size increases, the electricity generating efficiency increases as well. The Proponent also asserts that concentrations of criteria air pollutants are the same regardless of plant size, emissions as measured in terms of pounds per megawatt hour (MWh) output would be 5% higher for a 20 MW plant and 2% higher for a 40 MW plant.

The Proponent concludes that although water use and total emission quantities are lower for the smaller facilities with a lower net output, the larger preferred facility meets all required MassDEP regulations and criteria for air pollutants and emissions, and results in a decrease of emissions per megawatt hour.

Site Design/Configuration

The Preferred Alternative site layout is a site configuration with fuel receiving and storage at the north end of the site, and power facilities and plant stack at the south end. In this configuration, the plant stack, which is the facility's tallest structure, is further from the access road from residential areas in the Town of Russell across the Westfield River. The cooling tower is located further away from adjoining property to the north and west, reducing any possibly nuisance fog caused by settling cooling tower vapor. Alternative site configurations in which the power facilities and plant stack are at the north end of the site and fuel receiving and storage are at the south end of the site were also considered, however these options were less efficient in terms of operations and resulted in more environmental and aesthetic impacts. In the FEIR, the Proponent should provide an update on changes to the preferred site layout that result from the selection of boiler technology.

Water Withdrawal/Intake Siting

The Preferred Alternative source for plant cooling water is the existing withdrawal intake structure and equipment located on the Westfield River. This structure supported previous water withdrawal for the on-site mill operations that ended in 1994. The construction of a new intake structure would result in additional, avoidable environmental impacts. In addition, river substrate conditions at the existing intake indicate that the existing structure location does not impede fish migration.

MassDEP has required the construction of an elver ladder by the Indian River Power Company, LLC if and when it begins generating electricity. The intake structure is located approximately 400 feet upstream of the proposed fish passage for the Indian River Hydro Dam and is not anticipated to adversely impact fish passage. The Proponent will continue to coordinate with the hydroelectric facility as project design progresses.

The Proponent also considered other sources for cooling water, including groundwater supply wells and municipal wells. According to United States Geological Survey (USGS) information about hydrology at the site, on-site wells would only be capable of supporting approximately 10% of the proposed withdrawal. In addition, the average water withdrawal volume required for the project exceeds currently permitted limits for the Town of Russell public water supply wells, and therefore these wells could not be used for the project.

Wastewater and Stormwater Discharge Point Siting

The majority of wastewater for the project is generated in the cooling tower. Other low volume sources of wastewater for the project include boiler blowdowns, laboratory, and in-plant equipment pads and floor drains. Wastewater will be treated prior to discharge in order to remove pollutants. In the Preferred Alternative, process water discharge and a portion of the stormwater from the site will be combined prior to entering the culvert beneath the CSX rail, and routed through a new pipe to the final discharge outfall, located approximately 500 feet south of the Indian River Hydro Dam. According to the DEIR, the location of the discharge outfall is at the beginning of a straight stretch of the river that has a strong riffle which will provide thermal and waste process water mixing in the receiving stream. The Proponent asserts that given the large boulder substrate in the river in this location, a bank discharge is preferable over a submerged pipe discharge. Additionally, construction and maintenance of a bank discharge is less disruptive to the receiving stream. The Proponent should note comments from the Pioneer Valley Planning Commission (PVPC) regarding the aesthetics of the proposed discharge structure.

The Proponent also considered using an existing discharge point at the site. Site plans from the Westfield Paper Company indicated an existing outfall that crosses under the CSX railroad tracks and through the tail race of the Indian River Power Supply hydroelectric plant. According to the DEIR, the hydroelectric plant is currently proposed for repair, and the location of the existing discharge is incompatible with proposed improvements. In addition, DFW has expressed concerns that fish might congregate in the general location of the existing outfall, which is at the downstream base of the dam.

The Proponent also evaluated discharging treated wastewater and stormwater to groundwater via an existing basin located on Indian River Power Supply land. MassDEP has indicated to the Proponent that this basin would need to be lined to protect water quality, thereby negating the infiltration benefits that a basin could provide. The Proponent should note comments from MassDEP regarding the potential for on-site stormwater management.

Power Plant Equipment/Technology

The Proponent considers both advanced stoker fired and bubbling fluidized bed (BFB) technologies in the DEIR. The selected boiler type will impact the fuel-burning method, the gross amount of generated steam needed to cover auxiliary loads, and the volume of fuel needed to meet output requirements. Selection of boiler type will not impact inputs and outputs of the operating system, including the steam turbine, estimated volumes of water withdrawal for cooling, estimated volumes and pollutant concentrations of wastewater discharge, and cooling tower design. For either technology, all air emission concentrations will meet the same MassDEP air permit limits. However, the total quantity of criteria pollutants from the stoker based system are expected to be slightly lower based on lower fuel usage to achieve the same net plant output. The Proponent should provide an update in the FEIR on the selected boiler technology and discuss resulting impacts.

Cooling Technique/Alternatives

The Proponent considered the following alternative cooling techniques in the DEIR:

- **Wet Evaporative Cooling:** This cooling method is the Preferred Alternative and uses cooling water pumps to circulate cooling water from a cooling tower basin, through a steam condenser heat exchanger, and back to the tower to remove waste heat from the system. This process recirculates the cooling water within the system to minimize water usage. A natural evaporation process occurs in the cooling tower to dissipate waste heat collected from the steam turbine condenser. As a result of this evaporation process, a continuous supply of replacement make-up water is required, to be supplied from the Westfield River. A small continuous blowdown flow from the cooling tower is required to flush the cooling tower basin of accumulating suspended and dissolved solids in the water. Blowdown water from the cooling tower is neutralized as required and discharged to the river via the wastewater discharge system. The cooling water treatment program will be designed for minimizing cooling tower water usage by maximizing recirculation of cooling water while minimizing the waste blowdown flow. According to the DEIR, the selected cooling method has been carefully balanced against several competing goals: reduced water use results in the need for additional chemical treatment and higher effluent concentrations in the blowdown. The current design process ensures that the system overall is balanced in meeting the competing environmental conservation objectives of minimizing water use and reducing effluent concentrations.
- **Once-Through Cooling:** In the once-through cooling process, water from a river or large body of water is drawn through the steam condenser to remove waste heat and is returned to the river or lake at a point downstream of the intake. This alternative was eliminated as it requires a far greater volume of water and because it is not feasible from a permitting perspective.
- **Direct Air Exchange Cooling:** In a direct air exchange cooling system, steam is condensed directly against ambient air in a series of fin-fan radiator modules. While water use can be reduced through the use of air cooling, air cooling can be significantly less energy efficient

compared to wet cooling and therefore require a higher fuel input. An air cooled condensing system also requires a larger area and is physically a much larger structure than a wet cooling tower.

- Combined Wet/Dry Cooling: According to the DEIR, this technology has not been used extensively in the field of power generation. The Proponent rejects this alternative due to the complexity of operational control, expense, and limited sources of supply for this type of system.

The FEIR requires a more comprehensive evaluation of alternative cooling technologies. The Proponent should provide further justification for its dismissal of air exchange cooling and combined wet/dry cooling technologies for this project. The Proponent should fully present an alternative for air exchange cooling and combined wet/dry cooling and provide fuel requirements and site layout requirements. I note that MassDEP has requested a similar analysis in the Order to Complete (OTC) issued in response to the Proponent's Water Management Act permit application (*MassDEP Order to Complete, Water Withdrawal Permit Application #9P2-1-04-256.04*, dated December 12, 2006). The Proponent should present, and expand if necessary, its response to sections of the OTC addressing potential cooling technologies in the FEIR, including an analysis of economics, water withdrawal/discharge volumes, water quality/temperature, and required wastewater treatment.

Transmission Line Alternatives

The former Westfield River Paper Company was served by a transmission line which was located within a WMECO transmission easement that traverses Shatterack Mountain through the eastern portion of the former Westfield River Paper Company property. The transmission line was taken out of service in the early 1980s, the lines and towers were abandoned, and some of the infrastructure dismantled. The Proponent and WMECO have jointly prepared a petition to the EFSB for approval of a new 115 kV transmission line and ancillary facilities necessary to interconnect the proposed Russell Biomass facility to WMECO's #1512 line in Westfield, including a new switching facility in Westfield.

The Proponent has considered two main alternative transmission line routes. The preferred approach, called the Southern Interconnection Point (Southern IP), will extend from the southern end of the Russell Biomass property, through Russell, Montgomery and into Westfield for an approximate distance of 5.3 miles before connecting with the existing #1512 115 kV transmission line. A second alternative called the Northern Interconnection Point (Northern IP) is an approximately 10-mile transmission interconnect to a substation in North Blandford. According to the DEIR, the Southern IP route is preferred over the Northern IP route because the length of the Northern IP transmission line is almost twice the length of the Preferred Alternative. The right-of-way associated with the Northern IP route is significantly more remote in terms of accessibility and terrain. In addition, the Northern IP route requires new transmission line crossings of the Main and West Branches of the Westfield River in Huntington. The Northern IP route would also require at least five crossings of tributaries to surface drinking water supplies.

Once the Southern IP was selected as the Preferred Alternative, the Proponent then evaluated different routes for the proposed transmission line and different sites for the ancillary facilities necessary to interconnect the proposed facility to WMECO's transmission system in Westfield. In response to consultation with NHESP and DFW, further effort was made to relocate the transmission line downslope from the existing easement within the limits of state-owned land to minimize impacts to endangered species identified in the existing transmission line corridor. Based on coordination with these agencies, three variations of the Preferred Southern IP Route (1a, 1b and 1c) are currently identified as viable routes along the corridor north of the Massachusetts Turnpike. These three variations are being evaluated simultaneously due to NHESP concerns, the need to secure legislative approval for an Article 97 land swap between DFW and WMECO, and negotiations with CSX who owns the right of way at the active rail corridor.

- Route Alternative 1a: Alternative 1a moves the transmission line right-of-way down the slope of the mountain from the existing WMECO easement and closer to the CSX railroad. Alternative 1a requires an easement swap between WMECO and DFW, after legislative approval of the land swap in accordance with Article 97, as well as an occupancy agreement with CSX.
- Route Alternative 1b: Alternative 1b incorporates portions of the existing WMECO easement and new easements on DFW property located down slope of the existing easement and extending between the Russell Biomass facility site and the Massachusetts Turnpike. This alternative provides DFW with more contiguous unaltered lands than is provided by the existing WMECO easement and unlike Alternative 1a, this route avoids the installation of transmission line structures and wires within the CSX right-of-way. This alternative also requires an easement swap between WMECO and DFW after Article 97 legislative approval.
- Route Alternative 1c: This route utilizes the existing WMECO transmission line easement from the Russell Biomass facility to the interconnection point in Westfield.
- Route Alternative 2: The majority of Route Alternative 2 follows Route 20. The transmission line would cross the Westfield River from the Russell Biomass facility site and pass through the residential neighborhood of Russell Center to intersect with the highway. The route would then continue south and easterly along Route 20 to the intersection of Route 20 with the active #1512 115 kV transmission line. There is currently an overhead distribution line within the Route 20 right-of-way, however the installation of transmission lines above distribution lines on the same structure is strongly discouraged. Therefore, an independent above-ground 115 kV transmission line would be proposed on separate structures from the distribution line. This roadway is designated as part of the Jacobs Ladder Trail Scenic Byway starting near its intersection with Route 23 and extending westerly to the Town of Lee.
- Route Alternative 3: Alternative 3 is the existing CSX Right-of-Way which was eliminated because it is located within an active railroad corridor, which presents significant issues, including restrictions for use and access, safety considerations for railroad and utility workers, and the potential for physical or electrical interference with rail controls.

The Administrative Board of DFW has approved the concept of an easement swap between DFW and WMECO in a March 28, 2006 decision. The Proponent has initiated discussions with CSX regarding occupancy agreements for those portions of the transmission line that will travel through CSX right-of-way.

Because Route Alternatives 1a and 1b require legislative approval for an Article 97 land swap between DFW and WMECO, the Proponent provided a discussion in the DEIR of the project's compliance with EEA's Article 97 Land Disposition Policy. This policy was developed in 1998 to ensure no net loss of Article 97 lands under the control of the Commonwealth. The Proponent asserts that the swap of the existing easement for an alternative transmission corridor lower on the mountain benefits Article 97 interests because it will provide DFW with a larger area of contiguous habitat on Tekoa Mountain. In addition, the minimum acreage necessary for the proposed transmission corridor is equivalent to the acreage within the existing easement which would be released back to the Commonwealth.

The Proponent should present the Preferred Route Alternative variation in the FEIR. The selection of the transmission line corridor will significantly affect potential impacts, and it is important that permitting agencies are provided with a necessary level of information in the FEIR.

Switching Station Alternatives

Because the proposed transmission line will be a radial configuration, a new switching station is required at the interconnection point with WMECO's existing #1512 115 kV transmission line at the southern end. Switching Station Alternative A-1 is located in Westfield adjacent to and northwest of the interconnection of the Preferred Alternative transmission line with the existing 115 kV transmission line. Access to this location would be from the east and would require the use of a private road approximately 1,800 feet from the end of Furrowtown Road, a public road. Switching Station Alternative S-2 is located approximately 700 feet west of the proposed interconnection point. Access to this location would either be from the same location as for Switching Station S-1, or from the southwest from Pochassic Road. The proposed switching station for Route Alternative 2 would be on private property located in the west of the proposed interconnection point. This property is located adjacent to residences and access to the switching station would traverse an area mapped as rare and endangered species habitat. The Proponent should provide an update on the preferred alternative for the switching station in the FEIR and provide more information on resulting impacts. The Proponent should also respond to comments from the City of Westfield regarding potential adverse impacts to City water mains.

Section 401 Water Quality Certificate Analysis

As noted above, several alternative transmission line routes are currently under evaluation as part of the Petition to Construct to the EFSB. As the design of the transmission line advances, and a variation of the Preferred Alternative is selected, the Proponent will further evaluate alternatives related to construction and permanent impacts in accordance with the Section 401 WQC regulations. The Proponent provides a detailed discussion of potential wetland impacts associated with each transmission line route in the wetlands section of the DEIR. I note

that Transmission Line Alternative 1a has significantly more impact to Riverfront Area than Alternatives 1b and 1c.

With regard to the transmission line alternatives, the FEIR should fully explain any trade-offs inherent in the alternatives analysis, such as increased impacts on some wetland resources to avoid impacts to rare species. For the selected alternative, the FEIR should also provide an alternatives analysis in response to 314 CMR 9.06(1).

Land Alteration & Stormwater

The DEIR provided an overview of existing drainage conditions at the facility site. 4.7 +/- acres of impervious area currently exist at the site. A drainage system of catch basins and piping collects runoff from an existing parking area. Storm drainage is discharged via a culvert at the southwest corner of the existing building to an existing discharge structure in the Westfield River. Stormwater also leaves the site via sheetflow on the southern property line and along the western portion of the site towards the CSX property. The proposed project will result in an increase of 5.3 +/- acres of impervious surface at the site, for a total of approximately 10 acres. The construction of the facility will include improvements to access roads, demolition of the existing paper mill, and installation of new paved surfaces associated with site car and truck traffic and the 20 to 30-day fuel stock pile area.

The DEIR outlined the proposed stormwater management system and compared pre- and post-construction flows. Drainage calculations for the project were originally undertaken during the Town of Russell Special Permit/Site Plan Review process. The drainage design in the DEIR represents new calculations for both the BFB and stoker alternatives, as the selection of boiler technology will affect site layout. The layout of the structural stormwater Best Management Practices (BMPs) will also be affected by the outcome of the DPU zoning exemption. The Proponent should provide clarification on how boiler technology and the DPU petition will affect stormwater management.

Curbing will be installed around the perimeter of all new paved surfaces, including the fuel stockpile area, directing all pavement runoff to a series of catch basins and manholes. Catch basin structures will have 4-foot sumps to remove Total Suspended Solids (TSS) and a hood on the outlet pipe to reduce solids and grease discharges. Three detention/infiltration basins are proposed to detain the 2, 10, and 100-year storms. According to the DEIR, detention basins are sized to provide stormwater treatment utilizing basin forebays and to limit off-site discharges to less than pre-existing runoff conditions through implementation of outlet control devices. The Proponent should provide clarification on the location of all basins, outfalls and other stormwater facilities on site in the FEIR.

The DEIR provided a discussion of the project's compliance with MassDEP's Stormwater Management Policy (SMP). Although the project represents redevelopment of an existing area, exclusion of a redevelopment project is not being sought and all SMP standards will be met. In addition, although the proposed site usage is not explicitly defined as a source of higher potential pollutant loads, Best Management Practices (BMPs) have been incorporated into

the design to capture and pre-treat stormwater in a manner consistent with criteria for areas with higher potential pollutant loadings. The Proponent should note that the project is subject to Standard #6 of the SMP for discharges to Critical Areas, based upon DFW's determination that this reach of the river is a cold-water fishery due to the ongoing Atlantic salmon stocking and restoration effort. This will result in the requirement to treat 1-inch of runoff in conformance with the policy rather than 1/2-inch of runoff and prior to discharge, the highest degree of treatment in Policy Standard #6 will be required.

The Proponent should respond to comments from MassDEP regarding stormwater that will be impacted by the fuel storage area. MassDEP has voiced concern that this runoff may contain pollutants not normally associated with stormwater, which may not be sufficiently treated by standard stormwater treatment methods. This discharge will also be combined with treated industrial wastewater discharge from the site. The Proponent's stormwater and wastewater treatment systems should provide proper treatment for each of these distinct stormwater and wastewater flows. The effect of stormwater runoff impacted by fuel storage areas should be a particular focus of design review. The Proponent should note MassDEP's Surface and Groundwater discharge requirements at 314 CMR 3.00-6.00 relative to the stormwater and industrial wastewater and the operations at the facility.

The Proponent should respond to MassDEP's suggestion that the stormwater not impacted by the fuel supply may be appropriate for treatment on site with a discharge outside regulated resource areas through infiltration to the ground. According to MassDEP, this approach would provide permitting efficiency, would represent a significant improvement over existing conditions in the RFA and would comply with permitting requirements for review as a Redevelopment Project under 310 CMR 10.58(5).

As part of the Notice of Intent to be submitted to the Russell Conservation Commission, the Proponent will prepare an Operations & Maintenance (O & M) Plan for the stormwater management system. The Proponent should submit a draft of the O & M Plan with the FEIR. The Plan should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

Rare Species

The 12th Edition of the Massachusetts Natural Heritage Atlas (October 1, 2006) significantly expands the limits of mapped habitat to the north of and in previously disturbed portions of the proposed facility site. According to the DEIR, the following state-listed species are identified in or near the site:

- Triangle Floater (Mussel) – Special Concern
- Creeper (Mussel) – Special Concern
- Eastern box turtle (Reptile) – Special Concern
- Zebra Clubtail (Dragonfly) – Endangered
- Arrow Clubtail (Dragonfly) – Threatened
- Spiked False-oats (Plant) – Endangered

- Smooth Rock-cress (Plant) – Threatened
- Houghton’s Flatsedge (Plant) – Endangered
- Data Sensitive Vertebrate

Plants and Terrestrial Species

The Proponent conducted plant inventories in August and September of 2005 along the existing WMECO easement currently referred to as Alternative 1c of the transmission line corridor. A second botanical inventory to investigate the other two transmission line corridor variations was conducted in mid-September 2006. The Proponent is currently undertaking a third botanical survey focusing on the presence of state-listed plants within all three transmission corridor variations. Initial findings from this survey indicate that of the state-listed plants in the vicinity of the project site, only Smooth Rock-cress is present within the power plant site and alternative transmission corridor routes. The Proponent will work to avoid direct impacts to this species to the maximum extent practicable, and will coordinate mitigation efforts with NHESP for potential impacts that may be unavoidable.

The Proponent has been coordinating closely with NHESP to address concerns related to the data sensitive vertebrate species within the proposed project area. The Proponent does not intend to conduct quantitative surveys for the Eastern Box Turtle or the Clubtail dragonflies due to the size of the survey area. The Proponent intends to work closely with NHESP to develop acceptable construction methods, protective measures and/or mitigation measures to avoid a “prohibited take” of state-listed species.

According to the DEIR, NHESP has indicated to the Proponent that it is likely that the Alternative 1a transmission line could be conditioned to avoid a “take” of state-listed species, provided that measures are taken to minimize vegetation clearing and road creation during construction, and provided that measures are implemented to manage off-road vehicles (ORVs). Should it be concluded that a “take” is unavoidable, the permitting requirements for the Conservation and Management permit will be met in accordance with 321 CMR 10.23.

The Proponent will develop a post-construction ORV Management Plan for the transmission line corridor. The ORV Plan will consist of education, outreach and enforcement measures as well as coordination with local law enforcement officials. The ORV Plan will be developed in coordination with DFW and NHESP, and is expected to significantly reduce the risk of impacts to protected species by ORVs. The Proponent should clarify in the FEIR whether it will be responsible for paying the cost associated with enforcing the ORV Management Plan.

Aquatic Species

Two aquatic state-listed species are listed in the vicinity of the project site: the Triangle Floater and the Creeper Mussel. A survey of mussels was performed up and downstream of the Westfield Paper Company dam in 2004 on behalf of Swift River Hydro Operations Company. The mussel survey revealed that the reach of the Westfield River just downstream of the Indian River Hydro Dam has a substrate unsuitable for the Creeper specifically, and also for mussels in general. A second mussel survey was undertaken in June 2007 to determine the suitability of

instream habitat for Creeper and Triangle Floater downstream and in the vicinity of the proposed water intake and discharge points.

The results of the survey indicate that most of the river downstream of the dam is unsuitable habitat for freshwater mussels. The area immediately in front and downstream of the proposed discharge is particularly poor habitat because of shallow water, rocky substrate and high flow velocities. Slightly better habitat was found about 328 feet downstream of the proposed discharge structure and seemed to extend further downstream. The only mussels found downstream of the site were a small number of live *Elliptio complanata* (a common species) inside the tailrace pool. These results match those of a 2004 freshwater mussel survey for the Swift River Hydro Operations Company. The Proponent concludes that freshwater mussels are a negligible part of the stream fauna in the survey area and that the potential for the Creeper or Triangle Floater to occur here is extremely low.

The preliminary survey upstream of the dam focused on the east side of the river from the dam to the Main Street Bridge. According to the DEIR, surveyors observed very low mussel densities throughout the study area. These results are consistent with those of the 2004 survey. The Proponent notes that areas of the impoundment do have the potential to support the Creeper and the Triangle Floater, however, the extremely low densities of *Elliptio complanata*, which is often very abundant and can be considered a habitat indicator species, suggests that the entire reach is unlikely to support viable freshwater mussel populations.

Fisheries

Although no state-listed fish species are listed in the vicinity of the project, several fish species naturally occur in the Westfield River. In addition, DFW regularly stocks the segment of the Westfield River near the project site with trout and also regularly stocks the upstream branches of and tributaries to the River with juvenile Atlantic salmon. The Westfield River in the vicinity of the project has been designated as Essential Fish Habitat (EFH) for Atlantic Salmon by the National Marine Fisheries Service (NMFS). The Magnuson-Stevens Fishery Conservation and Management Act established procedures to identify, conserve and enhance EFH for those species regulated under a federal fisheries management plan. EFH Assessment information was provided to the EPA in the NPDES Permit Application in August 2006. The Proponent states that based on the design of the intake and outfall structures, the relatively small volume of the proposed withdrawal, and the chemical and physical characteristics of the proposed discharge, potential adverse impacts to EFH will be minimal.

The existing water intake structure is located along the eastern bank of the Westfield River approximately 160-feet from the outlet of Bradley Brook on the western bank. This location provides a sufficient zone of passage for fish released into Bradley Brook to migrate downstream. According to the DEIR, river substrate conditions in the immediate vicinity of the intake structure are largely free of fine sediments, while sediments closer to Bradley Brook include fine sands. The Proponent states that this is indicative of a pattern of typically higher river velocities near the intake structure compared to the opposite side of the river near the

Bradley Brook confluence, which would tend to reduce both entrainment and impingement of organisms entering the Westfield River from Bradley Brook.

The proposed discharge will outlet into a velocity dissipation apron to be created with natural river stones in the adjacent uplands. The proposed discharge is located at the beginning of a straight stretch of the Westfield River that has a strong riffle that will provide thermal and waste process water mixing. The discharge will be designed to meet CWA standards as well as the Antidegradation Provisions of the Massachusetts Surface Water Quality Standards. The DEIR provided a summary of the project's compliance with these standards to demonstrate that anticipated thermal and chemical impacts of the proposed discharge would not adversely impact fishery resources.

Wetlands

A portion of the facility site lies within Riverfront Area, Land Under Water Bodies and wetland buffer zones. Wetlands and waterways occur adjacent to the site and along the transmission corridor and include the Westfield River, Shatterack Brook, Moose Meadow Brook and Cooley Brook (all perennial streams); multiple intermittent streams; Bordering Vegetated Wetlands (BVW); and Isolated Vegetated Wetlands (IVW). Riverfront Area occurs 200 feet into the project area from the Westfield River, and for the same distance along both sides of Shatterack Brook, Moose Meadow Brook and Cooley Brook. In addition, intermittent streams and BVW along the transmission line easement have 100-foot buffer zones established upgradient of each of their boundaries. IVWs located in Westfield have an associated 100-foot buffer zone per the City of Westfield Wetland Protection Ordinance.

The Proponent states that under the Wetlands Protection Act the site qualifies for consideration as an historic mill complex for purposes of Riverfront Area applicability. The FEIR should provide additional information to confirm that the entire site qualifies under 310 CMR 10.58(6)(k). The Proponent should state if activities related to the intake structure, outfall or stormwater management facilities are exempt from the Riverfront Area regulations. The only work proposed below the Mean Annual High Water (MAHW) line of the Westfield River will be the repair of the existing intake structure. Methods used to repair the intake structure will be designed to avoid impacts to the Westfield River. The proposed discharge outfall will be sited just above the MAHW mark and Ordinary High Water (OHW) mark of the Westfield River. Due to the overall characteristics of the discharge area, a portion of this area qualifies as jurisdictional BVW. Less than 200 sf of permanent impacts to BVW are anticipated at this area.

The Proponent outlines anticipated impacts to wetland resources along each transmission line corridor variation and at the power plant/discharge site in the DEIR. The following impacts are anticipated:

- Power Plant/Discharge Site: 200 sf of temporary and permanent impact to BVW.
- Transmission Line Corridor Alternative 1a: 83,300 sf of temporary impact and 6,000 sf of permanent impact to BVW; 10,800 sf of temporary impact and 1,000 sf of permanent impact

to IVW; 106,800 sf temporary impact and 600 sf of permanent impact to Riverfront Area; 200 linear feet of temporary impact to Bank.

- Transmission Line Corridor Alternative 1b: 89,800 sf of temporary impact and 6,000 sf of permanent impact to BVW; 10,800 sf of temporary impact and 1,000 sf of permanent impact to IVW; 31,200 sf of temporary impact and 700 sf of permanent impact to Riverfront Area; 200 linear feet of temporary impact to Bank.
- Transmission Line Corridor Alternative 1c: 85,100 sf of temporary impact and 6,000 sf of permanent impact to BVW; 10,800 sf of temporary impact and 1,000 sf of permanent impact to IVW; 56,900 sf of temporary impact and 700 sf of permanent impact to Riverfront Area; and 200 linear feet of impact to Bank.

Potential wetland impacts are based on the assumption that a 16-foot wide construction access with shoulder grading will be required to access portions of each corridor variation. Impacts and required mitigation associated with the transmission line will be refined as design advances. The Proponent should note comments from MassDEP that there is no reference to temporary disturbance for BVW at 310 CMR 10.55(4), and therefore alternatives should be evaluated from a single impact perspective.

In the FEIR, the Proponent should provide more detail on existing wetland resources and potential impacts associated with the selected transmission line route, switching station, intake and outfall and any other potential impacts. As previously discussed in this Certificate, the Proponent should demonstrate in the FEIR that the Preferred Alternatives for the transmission line corridor and switching station meet performance standards for the Water Quality Certificate at 314 CMR 9.00. The Proponent should respond to MassDEP's comments regarding the need for a wildlife habitat evaluation for the project. The Proponent should clearly outline mitigation for temporary and permanent impacts and should respond to MassDEP comments regarding long-term impacts that result from maintenance activities. I support the suggestion from the City of Westfield that local permitting in Russell, Montgomery and Westfield be coordinated to ensure consistency.

Waterways

In March of 2007 the Proponent submitted a Request for Determination of Applicability under the Public Waterfront Act (Chapter 91) to MassDEP for work below the MAHW line of the Westfield River to repair the existing intake structure and to construct a natural river stone velocity dissipation apron at the proposed discharge. MassDEP issued a Positive Determination in June 2007 confirming that this area of land and water is subject to Chapter 91 regulations at 310 CMR 9.00. The Determination was submitted with the DEIR and states that the proposed activities do not require a license under 310 CMR 9.05(3)(f). This determination must be recorded at the Registry of Deeds.

Westfield River Impacts

In response to comments submitted on the EENF regarding potential impacts to the Westfield River, the DEIR presented a discussion of existing flow, quality and temperature of the River to provide a baseline against which to measure project-related impacts. The DEIR discusses current registered and permitted withdrawals within the Watershed. The Proponent should clarify whether permitted or anticipated Interbasin Transfers were considered in this analysis.

The proposed Russell Biomass facility is located downstream of the confluences of the West, Middle and East Branches of the Westfield River. There are three USGS gauging stations upstream of the proposed Russell Biomass facility. The USGS StreamStats application provides estimates for 50% duration flow (stream flow exceeded 50 percent of the time), 7Q10 flow (the lowest mean flow for seven consecutive days to be expected once in ten years) and the median flow for the month of August. The 50% duration, 7Q10 and August median flows at the proposed withdrawal point were estimated as 354.84 cubic feet per second (cfs), 32.54 cfs and 104.7 cfs.

The Proponent should respond to comments on how the 7Q10 for the project site was established and compare the 7Q10 to that for the East, Middle and West Branches of the Westfield River combined; and to the 7Q10 flows as listed in the NPDES permits for the Russell Wastewater Treatment Plant and the Woronoco Wastewater Treatment Plant. The Proponent should clarify whether the analysis of existing flows considered the influence of evaporative loss at the Texon and Indian River Impoundments.

The stream classification of the Westfield River in the vicinity of the proposed facility as listed in the Massachusetts Surface Water Quality Standards as a Class B warm water fishery. Warm water fisheries are defined as waters in which the maximum mean monthly temperature generally exceeds 68 degrees Fahrenheit during the summer months and are not capable of sustaining a year-round population of cold water stenothermal aquatic life. Although the segment of the river adjacent to the proposed facility is designated as a Class B warm water fishery, the DFW indicated in its comments on the EENF that this portion of the river supports cold water fish. In accordance with 314 CMR 4.06(1)(d), waters that are not specifically designated as cold water fisheries may contain habitat that supports a cold water fish population and in such cases, the cold water fish population and habitat must be protected and maintained as existing uses.

The segment of the Westfield River from the confluence with the Middle Branch of the Westfield River in Huntington at the Route 20 Bridge in Westfield is listed as Category 5 (impaired and requiring one or more Total Maximum Daily Load (TMDL)) pursuant to 40 CFR 130.7 of the CWA. In the Category 5 listing, this segment is described as requiring a TMDL for taste, odor, color, noxious aquatic plants and turbidity. The cause of the impairment is unknown. The Proponent should coordinate with MassDEP to develop a TMDL in advance of the submission of the FEIR.

Water Withdrawals

Water for the cooling tower will be withdrawn from the Westfield River via an existing intake structure and will be continuously circulated through a steam condenser for cooling purposes. Make-up water is continually added to the cooling tower to replace the portion of cooling water lost by evaporation. A small percentage of the water circulating through the cooling tower must also be continuously removed to carry away particulates scrubbed from the air, and solids that remain from the water that has evaporated. Make-up water pumped from the river will be stored in an on-site storage tank. Water withdrawal from the river will be continuous when the facility is operating. There will be a storage tank level control system that will shut the withdrawal pump off when the storage tank is full. The pump will automatically turn back on when the storage tank level is at a designated minimum level, which will be approximately 30% or 40% of tank capacity.

Under a quitclaim deed that was recorded at the Hampden County Registry of Deeds in January 2000 (Book 11083, Page 22), Westfield Paper Lands, LLC was granted rights to withdraw 600,000 gpd of water from the Westfield River. The Proponent should respond to comments regarding historic withdrawals at the site and the improvements that have been made at the Westfield River since the closure of the mill.

Projected water withdrawal volumes are based on a net output of 50 MW with the facility operating 24 hours per day, 365 days per year. A total annual average of 662,000 gpd is needed for plant operations. Water withdrawal requirements are primarily determined by the cooling demand of the wet evaporative cooling tower, and to a much lesser extent, by the boiler make-up flow of approximately 13,000 gpd and miscellaneous plant uses of 500 gpd. A total maximum daily volume of 885,000 gpd is projected to be withdrawn during the hottest day of the summer. The maximum daily volume assumes that the plan will be capable of maintaining its guaranteed net output of 50 MW during periods of above average temperature.

The proposed maximum withdrawal rate of 885,000 gpd is 4.2% of the estimated 7Q10 flow and 1.3% of the August median flow based on USGS StreamStats data. The Proponent cites a MassDEP guidance document in the DEIR that states that withdrawals greater than the 7Q10 flow may result in moderate to significant environmental impact and withdrawals greater than 50% of the August median flow have the potential to significantly reduce streamflow. The Proponent demonstrates in the DEIR that the proposed maximum withdrawal rate is well below these flow values. Based on these findings, the Proponent asserts that the requested water withdrawal volume will have a negligible impact on the Westfield River streamflow and environment.

Section 316(b) of the Clean Water Act (CWA) requires that the location, design, construction and capacity of cooling water intake structures reflect the best available technology for minimizing adverse environmental impacts associated with water withdrawals. The DEIR provided an overview of how the proposed facility will meet the following guidelines for minimizing impacts:

- Limit intake structure through screen velocity to less than 0.5 feet per second: The estimated maximum through screen velocity is 0.19 feet per second.
- Limit intake flow to less than 5% of the source water annual mean flow: The proposed 885,000 gpd maximum velocity is less than 5% of the estimated 7Q10 flow, which indicates that the flow intake is significantly less than 5% of the annual mean flow for the Westfield River at its withdrawal point.
- Implement design measures to minimize impingement of species of concern and to minimize entrainment of entrainable life stages of fish and shellfish: The proposed intake structure is designed to minimize the impingement of small aquatic free swimming organisms against the intake screens. The intake structure's low through screen velocity and its location will minimize the potential for entrainment of non-motile life forms and minimize the zone of influence of the withdrawal.
- Demonstrate that water conservation and alternative sources have been evaluated: According to the DEIR, the selected facility design has been carefully balanced between a number of competing goals. Reduced water use (ie. additional "recycling" of the withdrawn water during the evaporative cooling process) results in the need for additional chemical treatment and higher effluent concentrations in blowdown. The current design process ensures that the system is balanced in meeting the competing objectives in minimizing water use and reducing effluent concentrations.

The Proponent should respond in the FEIR to comments from the Westfield River Wild & Scenic Advisory Committee regarding the Proponent's claim that the intake structure will not result in the impingement or entrainment of organisms.

Wastewater

Discharge flow from the proposed facility will be piped to a new discharge outfall, located approximately 500 feet south of the Indian River Hydro Dam. The wastewater discharge will average 101,000 gpd with a maximum daily flow of 133,000 gpd. The maximum day discharge stated in the DEIR is conservatively based on a higher plant output of 53 MW and highest expected water withdrawal requirement under summer design conditions, plus an additional 5.7% discharge flow to account for variability in cooling tower blowdown flow to control cooling water quality.

Because both process wastewater and stormwater from the site must pass under the abutting CSX rail line prior to discharge to the river, a pipeline must be constructed under the existing active rail line. In order to minimize construction impacts, the Proponent intends to construct only one pipeline from the site to the outfall. However, process wastewater and stormwater must be monitored for flow rates and chemical characteristics separately. The process wastewater and stormwater will be piped separately to a common manhole which will be located downstream of the regulatory compliance monitoring points, but will be located on the east side of the CSX rail to allow use of a common discharge pipe to the river. Pipes, the manhole and the discharge should be clearly located on plans submitted with the FEIR.

The project requires an individual NPDES Surface Water Discharge permit for the proposed discharge of process water. The required discharge permit will identify all limitations necessary to assure that the proposed discharge does not cause a violation of water quality standards. The individual permit application for both operational process wastewater and stormwater discharges was submitted to both the EPA and MassDEP in August of 2006 and is currently under review. EFH Assessment information was provided to the EPA in the August 2006 application. In Massachusetts, EPA and MassDEP issue joint NPDES permits. The issuance of an individual NPDES permit also requires that a 401 WQC be issued for the discharge. The DEIR provided a discussion of the project's compliance with the Antidegradation Provisions of the MA Water Quality Standards that require that the existing uses of the receiving water be protected.

At the time of the EENF submittal, a post-cooling retention pond with a spray aeration system was proposed to provide additional evaporative cooling. The design of the facility has subsequently been revised and the cooling tower will provide 100% of the necessary cooling.

Thermal Impacts

River temperature data available from the USGS indicate that daytime summer peak temperatures for each of the four gauging stations are typically above the cold water fisheries criterion of 68 degrees F, but are generally below the warm water fisheries criterion of 83 degrees F. The Massachusetts Water Quality Standards provide two standards for in stream water temperature for class B warm water fisheries. The first standard is not to exceed 83 degrees F and the second standard is not to cause an increase in temperature of more than 5 degrees F at the edge of the mixing zone. The DEIR provided an analysis of the discharge relative to each criterion and concluded that the effluent will have a minimal thermal impact on the Westfield River. Based on average monthly flows and typical monthly temperatures for both the river and the proposed discharge, the maximum monthly average temperature impact is expected to be less than 0.013 degrees F.

NHESP has stated that the presence of juvenile Atlantic salmon in the project area, which is the transition zone between the coldwater reaches upstream and the warm water reaches downstream, supports the use of coldwater criteria under the Water Quality Standards. The Proponent should clarify information presented in the DEIR regarding whether the thermal discharge will be held to the regulatory standards for a cold water or warm water fishery and should discuss compliance with 314 CMR 4.06(1)(d).

Water Quality

The DEIR provided a detailed overview of chemical usage for water and process wastewater treatment at the facility. The Proponent described the doses, reactions and anticipated discharge concentrations of chemicals required for water and wastewater treatment. The systems are designed to produce effluent that will meet Massachusetts water quality criteria and industrial technology requirements that will be included in the NPDES permit.

River water will receive initial physical and chemical treatment for solids removal. Clarified water will be forwarded to a 1.5 million gallon raw water storage tank. Water from the storage tank will be used as feed water for the cooling tower, boiler and various internal plant uses. Chemicals are added to water in the cooling tower to prevent algal growth, to maintain pH, and to keep solids from forming scale on the heat exchangers. Feed water for the boiler must also be treated to control pH, remove oxygen, and capture dissolved solids.

Process wastewater from the cooling tower, boiler and other small-quantity wastewater flows will be directed to wastewater collection and neutralization tanks. Prior to discharge to the river, wastewater pH is adjusted as needed and potassium sulfite is added as needed to inactivate disinfection residuals such as chlorine and bromine compounds. Final pH of the waste stream will be adjusted to a pH of 6.5 to 9.0 standard pH units, consistent with 314 CMR 4.00. The Proponent should note that water quality criteria for pH in the Westfield River is 6.5 to 8.3, not 6.5 to 9.0. Final disinfection products will be monitored in compliance with EPA Quality Criteria for Water.

The design and operation of the chemical feed systems will include the following elements to minimize the quantity of chemicals added to the system:

- Continuous on-line monitors and analyzers
- Regular sampling and laboratory analysis of process flow streams
- Chemical feed systems with automatic chemical dosing systems that are flow-paced and/or paced on the water quality characteristics of the water

Discharge Impacts

The DEIR provided a discussion of how the project would comply with the following guidelines for mixing zones in the water quality standards at 314 CMR 4.00:

- Mixing zones shall be limited to an area or volume as small as feasible.
- Mixing zones shall not interfere with the migration or free movement of fish or other aquatic life.
- Mixing zones shall not create nuisance conditions, accumulate pollutants in sediments or biota in toxic amounts.

MassDEP determines the most severe hydrologic condition at which water quality criteria must be met. For rivers and streams, the lowest flow condition at and above which criteria must be met is the 7Q10 flow. The proposed project discharge (133,000 gpd maximum or 0.206 cfs) is a small percentage of the total 7Q10 flow (approximately 0.64%).

According to the DEIR, the effluent water quality, discharge, structure and mixing zone are designed to minimize impacts on the aquatic habitat and species in the Westfield River. The design and siting of the discharge structure minimizes construction impacts and the size of the mixing zone for the discharge. The mixing zone meets the standards of the MassDEP Implementation Policy for Mixing Zones. The mixing zone is limited to one half of the waterbody's area, which promotes a safe zone of passage for aquatic species. The water quality

at the edge of the mixing zone will meet Water Quality Standards. The Proponent should respond in the FEIR to specific comments from MassDEP regarding water quality impacts. The Proponent should clarify whether the discussion of wastewater discharge considers the impact of mixing the wastewater and a portion of stormwater, as is proposed. The FEIR should clarify the impacts of the combined effluent of wastewater and stormwater on pollution concentrations, thermal conditions and the extent of mixing zones. The FEIR should also consider alternative treatment technologies that would not increase the phosphate discharge to the river.

The project will result in an estimated in-stream concentration of phosphorus of approximately 0.037 mg/L, which is less than the EPA limit of 0.1 mg/L. The Proponent should respond to comments from the City of Westfield regarding phosphorus. Aluminum is the only metal present in significant amounts in any of the process chemicals proposed to be used at the facility. The estimated maximum discharge concentration for aluminum is 1.0 mg/L and the in stream concentration would be approximately 0.006 mg/L (6.0 ug/L) which is well below EPA limits. The Proponent should address potential impacts of the Aluminum in the project effluent on Atlantic salmon.

The Proponent should discuss what monitoring is required for water quality and thermal impacts. The FEIR should clarify whether monitoring will occur at the point of discharge, in the mixing zone, or outside of the mixing zone.

Fuel Supply

The Proponent proposes to burn approximately 510,000 tons per year (tpy) of clean "Wood Fuel", as defined at 310 CMR 7.00 to generate approximately 400,000,000 kWh of net energy. The typical wood profile for the Russell Biomass plant will consist of around 90% clean wood from the existing wood residue market infrastructure, including whole tree chips from primary manufacturers, municipal sources, and logging and clearing operations. The remaining 10% of fuel will be comprised of recycled material, such as pallets. The 510,000 tpy biomass fuel supply will be obtained from a variety of resources, primarily in Massachusetts and Connecticut, within a 75 to 100-mile radius of the proposed facility.

In response to the Certificate on the EENF, the Proponent provided a discussion of the fuel source supply for the project. The Supply Subcommittee of the Massachusetts Biomass Energy Working Group coordinated by the Massachusetts Division of Energy Resources completed a study of Massachusetts woody biomass resources in 2002. The study found that of the 4.0 million tpy in total woody biomass supply estimated to be available in the state, in 2002 approximately 61% was being recovered, leaving 39% unused and underutilized. The woody biomass supply eligible for use as fuel annually in Massachusetts is approximately 3.38 million tons. Approximately 84% of the estimated annual available supply is usable as fuel for the Russell Biomass project, per the MassDEP definition of "wood fuel". Combined with available fuel from Connecticut, total available fuel is over nine times the annual supply of fuel needed for the facility.

Although the primary source of fuel for the plant will be wood residues from the existing market and not from direct forest harvesting, the Proponent conducted a sustainability analysis to assure that the project could use wood fuel while at the same time supporting sustainable harvesting techniques and forest management. The Proponent cites data from the U.S. Department of Agriculture (USDA) Forest Service that show that there are approximately 3.1 million acres of land classified as "accessible timberland" within a 50-mile radius of the proposed facility. USDA Forest Inventory and Analysis data show that forest growth within 50 miles of the facility exceeds removal by a ratio of over 3:1, and forest growth exceeds removal combined with mortality by nearly 2:1, demonstrating that the quantity available from these sources using sustainable harvesting techniques significantly exceeds the fuel requirements of the facility.

Fuel supply purchasing will be the responsibility of North Country Procurement, Inc. of Rumney, NH. Quality control of the wood fuel will be performed at the supply source, through screening for contamination/quality issues with the wood fuel, and through delivery inspections and daily ash testing at the site. MassDEP's Beneficial Use Determination (BUD) will outline a testing program to evaluate nutrient, trace metal concentrations and pH in the ash. According to the Proponent, to ensure that fuel suppliers for the project comply with the Proponent's commitment to only combust clean wood fuel, supply contracts will clearly define the wood fuel to be supplied to the facility. The DEIR outlined protocols that will be followed to ensure that fuel loads are not contaminated and to guide measures that will be implemented if a contaminated load is found.

Management of the outside wood fuel stockpile will conform with applicable regulations set forth at 527 CMR 10.00 Fire Prevention, General Provisions; 527 CMR 17.00 Lumber and other Forest Products; and National Fire Prevention Association Chapter 31 Forest Products. All fire safety issues at the site will be subject to review and approval from the Town of Russell Fire Chief. The Proponent asserts in the DEIR that it is not practical to cover the entire fuel storage pile. The Proponent has committed to managing the outside wood fuel stockpile in accordance with applicable regulations and techniques to reduce dust, odors and decomposition. The Fuel Storage Management Plan should be submitted with the FEIR. The Proponent should respond to specific comments about dust impacts from the fuel storage area.

Power Plant Air Emissions

The proposed project will use clean wood fuel in chip form as its primary fuel. An auxiliary fuel, ultra low sulfur distillate fuel oil or possibly biodiesel fuel will be used for boiler start ups and flame stabilization. When the EENF was submitted, Bubbling Fluidized Bed (BFB) technology was the only qualifying technology, and stoker fired boilers were excluded under the Renewable Energy Portfolio Standard (RPS) regulations. The Division of Energy Resources (DOER) has proposed new RPS regulations in June 2007 which would allow stoker technology to be eligible for inclusion under the RPS. Because the new regulations have not yet taken effect, both stoker fired and BFB technologies are discussed and evaluated in the DEIR. A Preferred Alternative for boiler type will not be selected until the amended regulations are finalized. In its air plan application, the Proponent has requested that MassDEP permit both technologies.

The Proponent states that the proposed highly efficient combustion system integrated with state-of-the-art pollution control equipment will minimize emissions. In accordance with DEP regulations, emissions from the proposed biomass boiler will be representative of the Best Available Control Technology (BACT) for all pollutants except for NO_x for which the Lowest Achievable Emission Rate (LAER) applies. The low emission design of the plant includes a fabric filter baghouse and Selective Catalytic Reduction (SCR) control system to control particulate and emissions. These controls represent BACT and LAER for the facility. The Proponent should respond to comments from MassDEP on the BACT analysis for particulate and NO_x control.

The Proponent provided an overview of existing air quality in the region and selected background concentrations for the air quality impact analysis. Air quality in the project area is in attainment with the National Ambient Air Quality Standards (NAAQS) for all pollutants with the exception of the 8-hour ozone standard. All air quality monitoring data used to establish background concentrations were obtained from the EPA AirData website and cover the most recent 3-year period, 2004 to 2006. For each air pollutant, the closest air monitor that had a location type most similar to Russell (rural) and a land use most similar to Russell (forest/residential) was chosen. The closest MassDEP monitors for the air pollutants were located in Chicopee (12 miles from Russell) and Springfield (15 miles from Russell). The Proponent should respond to comments from the City of Westfield regarding the use of data from the Westfield-Barnes Airport National Weather Service recording station.

Refined air quality dispersion modeling of the proposed project was performed with the EPA AERMOD dispersion model to quantify the air quality effects of the project. Predicted air quality impacts were added to background concentrations to estimate the total air quality impacts of the project. Dispersion modeling was done for the criteria air pollutants for which the proposed project and for which EPA has set an air quality standard: NO₂, SO₂, CO, lead, PM₁₀ and PM_{2.5}. In addition, all non-criteria pollutants for which there are EPA emission factors and for which MassDEP has set AAL/TEL guidelines were examined. The non-criteria pollutant analysis includes heavy metals, which will be emitted in extremely small quantities.

The AERMOD model was run in its regulatory default mode, which selects options that are compatible with the latest EPA guidance on air quality dispersion modeling. According to the DEIR, this model is recommended for all types of terrain and the specific topography of the site and surrounding areas was represented in the model. Both boiler technology alternatives were evaluated in the model at 50% and 100% boiler load. The AERMOD model was run using hourly meteorological data from Westover Air Force Base in Chicopee and Albany, NY for the years 1991-1995. The Westover station is located approximately 12 miles east of the facility site. Data from Westover is representative of the site due to similarities in topography. According to the DEIR, both locations are in north-south oriented river valleys and both have high terrain immediately to the east. The dispersion modeling predicted air pollutant impacts at 2,116 locations (receptors) surrounding the project. The receptor grid used 100-meter spacing and covered an area within approximately 2,250 meters of the project.

The analysis performed for the Russell Biomass project demonstrates that the project will produce air concentrations that are below the NAAQS for each pollutant. The projected NOx levels from the project will exceed EPA limits for New Source Review in an Ozone Non-Attainment Area. The Proponent will acquire NOx emission offsets (permanent reductions in NOx emissions elsewhere in the region) that are greater than the project's NOx emissions at a ratio of 1.26:1. This ratio is fixed by a combination of federal and state law.

MassDEP has also developed guidelines for allowable air quality levels of listed toxic compounds that are applied to projects on a case-by-case basis. The Russell Biomass project has been evaluated with regard to the MassDEP guidelines and is fully compliant with both the 24-hour Threshold Effects exposure Limits (TELS) and the annual Allowable Ambient Limits (AALs) established to protect public health and welfare with a margin of safety. In addition, the facility will have an insignificant effect on air quality as levels for PM₁₀, PM_{2.5} and CO are below Significant Impact Levels (SILs).

Contour maps of predicted maximum 24-hour PM_{2.5} concentrations indicated that the highest air concentrations will occur on high terrain to the northeast of the facility stack and not in the Town of Russell. The contour maps also illustrate that the facility's stack is downwind of the Town of Russell most of the time as prevailing winds in the region are from the southwest in the summer and northwest in the winter. The Proponent should respond in the FEIR to specific comments from MassDEP on the air quality impact assessment submitted in the DEIR.

The Proponent conducted an analysis of visible plumes from the cooling tower using plant design parameters and hourly meteorological data for a year. Plume length and height were calculated using U.S. Department of Energy modeling techniques. The visible plume modeling results show no fogging or icing impacts will occur for the Main Street Bridge or any other road in Russell, nor will fogging or icing impact the nearest homes to the cooling tower on Grove Street, Lincoln Street or River Street. The Proponent should note comments from the City of Westfield regarding potential icing on the CSX lines, Route 20 and the MTA.

The Proponent should note MassDEP and DOER proposed regulations pertaining to carbon dioxide (CO₂) emissions – 310 CMR 7.70 *Massachusetts CO₂ Budget Trading Program* and 225 CMR 13.00, respectively. These proposals are intended to fulfill the commitments of the Regional Greenhouse Gas Initiative (RGGI) Memorandum of Understanding signed by Governor Deval Patrick on January 18, 2007. These regulations would implement a cap-and-trade program aimed at stabilizing and then reducing CO₂ emissions from large fossil-fuel-fired electric generating facilities in the Commonwealth, and provide rules for the auctioning of allowances. In general, electric generating units with output greater than 25 MW will be subject to the requirements of 310 CMR 7.70 if the regulations are finalized as proposed. Although the DEIR states that EPA has established that wood combustion in electrical power generating units are "carbon neutral," the Proponent should consult with MassDEP to determine the applicability of these regulations. The Proponent should provide an update on this consultation in the FEIR.

On May 4, 2007, MassDEP adopted regulations at 310 CMR 7.32 to satisfy the requirements of the Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Regulation, 40 CFR 51, 72, 73, 74, 77, 78 and 96). In a Federal Register

notice published on August 1, 2007, the EPA announced its proposal to approve inclusion of these regulations into the Massachusetts State Implementation Plan. The Proponent will need to determine if the project is subject to these new rules.

Noise

The DEIR provided a discussion of the project's compliance with MassDEP noise regulations at 310 CMR 7.10 that prohibit "unnecessary emissions" of noise. MassDEP's Noise Policy (Division of Air Quality Control Policy No. 90-001) interprets unnecessary emissions as 1) an increase in the broadband sound pressure level of more than 10 A-weighted decibels (dBA) above ambient levels, or 2) a "pure-tone" condition. The Proponent conducted a noise analysis to determine whether the project would comply with the above regulations and policy. Ambient sound levels were measured day and night at four Noise Sensitive Areas (NSAs). The results of the analysis demonstrate that the predicted changes in sound levels resulting from operation of the facility at the closest NSAs will fully comply with the 10 dBA incremental limit in the MassDEP Noise Policy; the maximum sound level increases are expected to be 5 dBA. The model also demonstrates that mechanical equipment will not create a pure tone condition at any NSA.

Noise from the proposed facility will be minimized through site layout that places equipment at the south end of the site away from residential areas; housing the boiler, steam turbine and generator in a metal building with design features to control acoustics; and monitoring of exhaust mufflers for wood chip delivery trucks. In the FEIR, the Proponent should amend the noise analysis to include road and non-road vehicles, and back-up alarms on plant equipment. The Proponent should discuss what measures will be implemented to reduce noise associated with equipment off-loading and backing up.

The Proponent should expand the analysis in the FEIR to include noise generated from fuel-truck deliveries on Main Street. The Proponent should note comments from DPU for guidance on the analysis. The Proponent states in the DEIR that exhaust mufflers for wood chip delivery trucks will be maintained in good working order. The Proponent should clarify how it will manage equipment maintenance for delivery trucks if it intends to outsource fuel supply and delivery.

Transportation Impacts

The Proponent conducted an air quality modeling study for the expected truck trips through Russell on Main Street. A copy of the Diesel Truck Air Quality Study was submitted with the DEIR. The study indicates that maximum predicted levels of Diesel Particulate Matter (DPM) are less than 1% of the US EPA Reference Concentration set to protect the most sensitive subgroups in the population with a margin of safety. The Proponent states in the DEIR that the diesel truck modeling results demonstrate that project-related truck trips will not cause any adverse health impacts from truck emissions. The Proponent should respond to comments regarding average truck speed assumed in the analysis.

The FEIR should respond to comments from DPU regarding improvements that may need to be made to Main Street to accommodate safe vehicular traffic and support on-street parking on both sides of the street. The Proponent should clarify what improvements to Main Street are necessary and whether sufficient right-of-way exists on Main Street if widening is necessary to ensure safe passage of two maximum-size fuel-transport vehicles simultaneously, with parking on Main Street and pedestrian use of Main Street sidewalks. The Proponent should also identify the responsible party for required improvements, and should state whether it will fund part of or all of the work.

Solid and Hazardous Waste

According to the DEIR, several site assessment and subsurface investigations have occurred at the site since 1999. Areas of identified soil contamination in the vicinity of three underground storage tanks exceeding state thresholds have been remediated to levels that do not pose a risk per Massachusetts Contingency Plan (MCP) regulations. Groundwater samples collected from a total of seven monitoring wells did not contain contamination at levels that required remediation. The MassDEP "Searchable Sites List" was reviewed to identify any listed hazardous waste sites along the proposed transmission line route and on the switching station sites. All transmission line route variations bypass two solid waste disposal areas that were found in the MassDEP database.

The secondary fuel to be used at the facility will be stored in an above-ground fuel oil storage tank approximately 25 feet in diameter and 20 feet high that will be located to the east and north of the cooling tower. The tank will have a design storage capacity of about 65,000 gallons of oil. According to the DEIR, the fuel unloading and tank facilities will be properly designed for spill containment and fire protection as required by federal, state and local statutes, regulations and codes. The fuel oil storage tank secondary containment will have the capacity to contain 110% of the maximum volume contained. Additionally, the Proponent will evaluate the status of the fuel tank storage for conformance with 502 CMR 5.00 regulations that stipulate that all tanks over 10,000 gallons containing fluid other than water be inspected annually.

The project will likely be registered as a Small Quantity Generator (SQG) of hazardous waste and waste oil. The Proponent will develop a Hazardous Waste Management Plan (HWMP) in compliance with federal and state regulations at 40 CFR 260-268 and 310 CMR 30.00. The DEIR provided an outline of the HWMP that addressed the types of waste that will be generated on-site, provisions for the storage and off-site disposal of hazardous waste, and guidelines for site security and inspections. The project will also require a Spill Prevention, Control and Countermeasures Plan (SPCC) pursuant to EPA regulations on Oil Pollution Prevention.

The Proponent should provide more information in the FEIR regarding the storage of ammonia at the facility site. The Proponent should locate and describe the ammonia storage tank and outline containment and spill control measures. The FEIR should provide an analysis of the impacts of an accidental ammonia release based on guidance submitted by DPU in their comments on the DEIR.

Historic Resources

The Westfield River Paper Company is included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth. In response to comments from MHC on the EENF, the Proponent provided additional information to MHC to help determine existing conditions at the Mill site and the impacts of the proposed project on historic resources. In a letter to the Proponent dated July 1, 2006, MHC determined that the facility no longer meets the criteria of eligibility for listing in the National Register of Historic Places due to loss of integrity resulting from deferred maintenance, structural failure, and removal of portions of the complex.

The Proponent submitted additional information to MHC in March 2006 in order to determine potential historic and archaeological resources along the proposed transmission line routes. MHC has indicated to the Proponent that one archaeological site is recorded in the vicinity of Route Alternative 1c. The proposed structures for the transmission lines have not yet been determined. This information will be provided to MHC when it is available. The Proponent notes in the DEIR that due to the limited footprint of disturbance required for the transmission structures, structures can be sited to avoid disturbance of archaeological resources.

The Proponent has coordinated efforts with the Jacob's Ladder Trail Scenic Byway Committee throughout the project planning process. Minor revisions were made to transmission line Alternatives 1a and 1b based on input from this Committee. The Jacob's Ladder Committee has issued a letter to the Russell Planning Board stating its conditional support for the project based on the Proponent's willingness to coordinate. The Proponent states in the DEIR that it will continue to coordinate with the Jacob's Ladder Committee to address aesthetic concerns regarding the transmission line.

Construction Period Impacts

The DEIR provided a discussion of construction phasing for the project and outlined measures that will be implemented to minimize and mitigate construction-period impacts of dust, odor and noise. The Proponent will comply with MassDEP Solid Waste and Air Quality Control regulations during construction. The existing facility will be assessed for the presence of hazardous materials prior to demolition, including asbestos containing materials (ACM). If ACM are determined to be present on site, ACM waste material will be handled per guidelines at 310 CMR 19.061.

The Proponent also provided an extensive discussion of measures that will be implemented to minimize negative impacts to the Westfield River, other wetland resource areas and rare species habitat. The Proponent provided an outline of the Stormwater Pollution Prevention Plan (SWPPP) and the Spill Contingency Plan that will be prepared for the project.

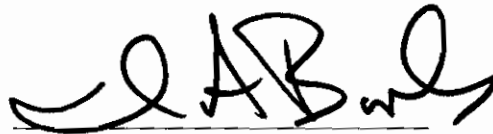
Mitigation

I strongly encourage the Proponent to work with the Town of Russell, the DPU and other state agencies to develop a comprehensive package of mitigation measures for the proposed project that are designed to offset and rectify the direct and indirect impacts of the proposed plant related to traffic, air quality, noise, wetlands, rare species and the Westfield River. The FEIR should include a separate chapter on mitigation measures. The chapter on mitigation in the DEIR referred to a Table in the project summary of anticipated impacts and mitigation. The Proponent should expand this discussion in the FEIR. For each required or potentially required state permit, the Proponent should present a summary of all mitigation to which it has committed based on the outcome of ongoing consultation and review. The FEIR should also include Draft Section 61 Findings for use by the state permitting agencies that are consistent with the outcome of the consultation process and that include clear commitments to implement mitigation measures, including costs and the schedule for implementation.

In addition to mitigation that is required in accordance with other state permits and regulations, the Proponent should address mitigation that will be required by the DPU if the zoning exemption petition is granted. The FEIR should outline the 29 conditions contained in the Town of Russell Special Permit. If the DPU rules favorably on the Proponent's request, the conditions will become void and the Proponent will not need to comply with any provisions of the Russell Zoning By-law. The Proponent should state which of the Special Permit conditions it will commit to as mitigation for project impacts if the exemption is granted. The Proponent should provide an update on any discussion of mitigation or conditions that arise during the zoning exemption petition proceedings. In particular, the Proponent should provide additional information regarding traffic impacts and appropriate mitigation to assist DPU in developing appropriate conditions and making Section 61 finding should the zoning exemption petition be granted.

September 7, 2007

Date



Ian A. Bowles

IAB/BA/ba

Comments received:

- 8/3/2007 David S. Glater
- 8/6/2007 Massachusetts Historical Commission
- 8/9/2007 Massachusetts Association of Conservation Commissions
- 8/16/2007 Pioneer Valley Planning Commission
- 8/20/2007 Henry Warchol
- 8/20/2007 Bob Myers
- 8/20/2007 Diane Droescher

8/20/2007 Janet Sinclair
8/20/2007 Joe Mal
8/20/2007 Diane C. Smith
8/20/2007 David Fritsch
8/20/2007 Nancy Hone and Greg Schmidt
8/20/2007 Raymond and Melissa Jeng
8/20/2007 Henry Euler
8/20/2007 Aline Euler
8/20/2007 Edward Ziskowski
8/20/2007 Pat Matthews
8/20/2007 John Paulman
8/20/2007 Alan Muller
8/20/2007 Carole Berkowitz
8/20/2007 Ellen G. Schneider
8/20/2007 Wayne and Gail Hartsgrove
8/20/2007 Alice Taverna
8/20/2007 Walt Baenziger
8/20/2007 Steve Breyman
8/20/2007 Ruth Muellejans
8/20/2007 Jodi Ross
8/20/2007 Steven Camp
8/20/2007 Tricia Sayre
8/20/2007 Dawn Simonsen
8/20/2007 Carl Lafreniere
8/20/2007 Nancy Cunningham
8/20/2007 Robert E. Guisti
8/20/2007 Janet L. Reid and John Greer
8/20/2007 Candy J. Barnes
8/20/2007 Deanna Ridgway
8/20/2007 Julie Muellejans
8/20/2007 Carolyn Shread
8/20/2007 Joseph and Melissa Penor
8/20/2007 Howard F. R. Mason
8/21/2007 Ellen E. Moyer
8/21/2007 Jonathan Long
8/21/2007 Michelle Leonard
8/21/2007 Krystal Fitzgerald
8/21/2007 Gregory Westcott
8/21/2007 Sandra Berestka
8/21/2007 Paula Westcott
8/21/2007 Dorothy Baker
8/21/2007 Terry Connolly
8/21/2007 Raymond P. Coach
8/21/2007 Bruce Miller
8/22/2007 Westfield River Watershed Association, Inc.
8/22/2007 American Lung Association of Massachusetts

8/22/2007 Jana Chicoine
 8/22/2007 Michael Garjian
 8/22/2007 Carolyn Taylor
 8/22/2007 Hildegard Spielmann-Bergamini
 8/22/2007 Brenda and Steven Jones
 8/22/2007 John and Linda Berry
 8/22/2007 Linda Warriner
 8/23/2007 Dorothy Baker
 8/23/2007 Alan and Debra Kochanek
 8/24/2007 Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
 8/26/2007 Richard & Mary Prince
 8/26/2007 Hildegard Spielmann-Bergamini
 8/26/2007 E. Chipman Smith
 8/27/2007 Charles and Rosa Benson
 8/27/2007 Nicholas & Jeanne Morganelli
 8/27/2007 Dawne Piers-Gamble
 8/28/2007 Mass Audubon
 8/28/2007 Henry Warchol
 8/28/2007 Donna M. Hawk
 8/28/2007 Richard Hansen
 8/29/2007 Department of Environmental Protection, Western Regional Office
 8/29/2007 The Nature Conservancy
 8/29/2007 Massachusetts Department of Public Utilities
 8/29/2007 Westfield River Wild & Scenic Advisory Committee
 8/29/2007 Brian Tarris
 8/29/2007 Alres Dinnall
 8/29/2007 Julie S. Ely
 8/30/2007 Connecticut River Watershed Coalition
 8/30/2007 City of Westfield
 8/30/2007 Deirdre and Robert Maxey
 8/31/2007 Watchdogs for an Environmentally Safe Town (WEST)
 8/31/2007 Jim and Robin Unger

Undated

Patricia Hobert

Comments submitted in the form of a petition:

8/24/2007 Donald & Donna Gogal
 8/24/2007 Ann Bessey
 8/24/2007 The Clark Family
 8/24/2007 Patricia Kellogg
 8/24/2007 Minnie Clink
 8/24/2007 Carol Heaton

8/24/2004 Mildred Billings
8/24/2007 Janice Cassedy
8/24/2007 Gladys Peck
8/24/2007 Rosemary Goody
8/24/2007 Sharon Morawic
8/24/2007 Rachel Nicholas
8/24/2007 Allan & Nancy Keier
8/24/2007 Donna Jago
8/24/2007 Carol Gilmour
8/24/2007 Lewis Parsons
8/24/2007 Melba Ayala
8/24/2007 Brent & Laura Covell
8/24/2007 Tracy Stimkle
8/24/2007 Jeff & Kathy Hunter
8/24/2007 Michael & Ian Pepek
8/24/2007 Marjorie & Jollene Skipper
8/24/2007 Lilia & Dale Guerrette
8/24/2007 Theresa Mitas
8/24/2007 Joseph Stetz
8/24/2007 Erica FitzGibbon
8/24/2007 The Cooley Family
8/24/2007 Nicole Bush
8/24/2007 Anthony Martone
8/24/2007 The Bush Family
8/24/2007 Ronald & Viola Champagne
8/24/2007 Marjorie & Richard Meczywor
8/24/2007 John Greer
8/24/2007 Janet Reid
8/24/2007 Katherine Malcouslay
8/24/2007 Marie Gould
8/24/2007 Jaime Fallon
8/24/2007 Edward Harrington
8/24/2007 Mike Deschaney
8/24/2007 Don LaJennesse
8/24/2007 Christine & Gary Renaud
8/24/2007 Catherine Bessette
8/24/2007 Bruce Sikes
8/24/2007 Rhonda & Mark Partyka
8/24/2007 Erik Dahl
8/24/2007 Richard Cray
8/24/2007 Lise Lawrence
8/24/2007 Natalie Birrell
8/24/2007 Robert Proet
8/24/2007 Ellen Boothe
8/24/2007 Marie Clifford
8/24/2007 Ralph Tovet

8/24/2007 Edward & Kyle LaPlante
8/24/2007 Heather Landry
8/24/2007 Joanne Isabella
8/24/2007 Mary & Gary Syrett
8/24/2007 Allison Macomber
8/24/2007 Marilyn Riddle
8/24/2007 Caroline Murphy
8/24/2007 Cindy Heroux
8/24/2007 Richard Cook
8/24/2007 Tracey & Grace St.Jean
8/24/2007 Carolyn Taylor
8/24/2007 Nathan & Heather Bowers
8/24/2007 Lorraine Hussey
8/24/2007 Genevieve & Walter Waryck
8/24/2007 Keith & Martha Cortis
8/24/2007 Michelle Geoff Stevens
8/24/2007 Kathleen Howe
8/24/2007 Peter Slater
8/24/2007 Nikalay, Yelena, Anna & Alex Gover
8/24/2007 Sandra Gil
8/24/2007 George Joan Deacon
8/24/2007 Patricia O'Neill
8/24/2007 Mary Gorman
8/24/2007 Marjorie & Richard Meczywov
8/24/2007 Suzie Ferris
8/24/2007 Ellis & Ortrud Hillgrove
8/24/2007 Jean Pensaben
8/24/2007 RoseMary & Alford Gladding
8/24/2007 Peter & Barbara Langmore
8/24/2007 Laurel & Ed Summers
8/24/2007 Ronald Skrocki
8/24/2007 Christian & Clarissa Sanchez
8/24/2007 Chris & Don Tweed
8/24/2007 Jean Walther
8/24/2007 Tom Armstrong
8/24/2007 Dorothy Robertson
8/24/2007 Phillip & Linda DeCoteau
8/24/2007 Tim Hurd
8/24/2007 Ken Africano
8/24/2007 Michael & Brenda NiHill
8/24/2007 Thomas & Elizabeth O'Connor
8/24/2007 Megan Marsh
8/24/2007 Carol Morin
8/24/2007 Anne & Doris Marsh
8/24/2007 Timothy Green
8/24/2007 Richard & Patricia Hathaway

8/24/2007 John & Marianne Swiatek
8/24/2007 Rosa Torres
8/24/2007 Brian Beneway
8/24/2007 Jim Fuller
8/24/2007 Gail Mooney
8/24/2007 James Burns
8/24/2007 Robert & Donna Keay
8/24/2007 Brenda Heath
8/24/2007 Peter & Vera Sychev
8/24/2007 Linda Mazzoni
8/24/2007 Marcy Kassey
8/24/2007 Benedict Mazza
8/24/2007 Lucy Garlo
8/24/2007 William & Cherry Kollar
8/24/2007 David & Patricia Lahue
8/24/2007 Peter Rapisarda
8/24/2007 The Deblois Family
8/24/2007 William & Maxine Blasenak
8/24/2007 Savannah Beach
8/24/2007 Patricia Beach
8/24/2007 The Ruelle Family
8/24/2007 Brandy & Jason Latshaw
8/24/2007 Jeannette Judge
8/24/2007 Michelle Muszynski
8/24/2007 Rebecca Miller
8/24/2007 Carolyn & John Lambert
8/24/2007 Pauline Brodie
8/24/2007 Kent Paige
8/24/2007 Deborah Brodie
8/24/2007 Steve Rettie
8/24/2007 Joseph Perrini
8/24/2007 William & Kathy Noret
8/24/2007 The Champiney Family
8/24/2007 Barbara & John Pretola
8/24/2007 Maureen & Mike Bellivera
8/24/2007 Janet & Edward Morrison
8/24/2007 Pauline Donovan
8/24/2007 Shawn & Eleanor Blanchard
8/24/2007 Kevin Canton
8/24/2007 Laurie Protono
8/24/2007 Sarah Underwood
8/24/2007 Christopher Davis
8/24/2007 Clara Snowden
8/24/2007 Raymond Coach
8/24/2007 Kelly Green
8/24/2007 Judith Hudson

8/24/2007 Phillip McEvan
8/24/2007 Trudy & Mellissa Knowles
8/24/2007 Patrick Dunn
8/24/2007 John Paulmann
8/24/2007 Mary & John Carlson
8/24/2007 Sandra & Steven Garen
8/24/2007 James Carlson
8/24/2007 The Chase Family
8/24/2007 MaryLynn & Patricia Green
8/24/2007 Chandler & Joanne Reed
8/24/2007 Deanna & Carl Ridgeway
8/24/2007 Paul & Christine Gozgit
8/24/2007 Jeffrey & Catherine Johnson
8/24/2007 Marlene Hills
8/24/2007 Catherine Fletcher
8/24/2007 Tom & Eunice Pomeroy
8/24/2007 Wendell Thomas
8/24/2007 The Gorakzyk Family
8/24/2007 Herbert DiSanto
8/24/2007 Denise Machado
8/24/2007 Robin Bassell
8/24/2007 The Genereux Family
8/24/2007 Ann-Marie & Glenn Marcil
8/24/2007 Mary Latini
8/24/2007 Eleanor & Richard Willig
8/24/2007 Susan Sullivan
8/24/2007 George Briggs
8/24/2007 Richard Sullivan
8/24/2007 The Harling Family
8/24/2007 Edward & Helen Koziol
8/24/2007 The Houston Family
8/24/2007 Jacqueline Hebert
8/24/2007 Barbara Sabadosa
8/24/2007 Chris Hirtle
8/24/2007 Budolph Hebert
8/24/2007 Anne Childs
8/24/2007 Kim Ward
8/24/2007 Athena & James Fox
8/24/2007 Angel Lempke
8/24/2007 Elaine Gamble
8/24/2007 Karen Garen
8/24/2007 Cynthia & David Janik
8/24/2007 Rene Harpin
8/24/2007 Judith Davis
8/24/2007 Eileen Stucenski
8/24/2007 Gerri Milliken

8/24/2007 Stephanie Caputo
8/24/2007 Richard Johnson
8/24/2007 Richard Arnold
8/24/2007 Frank Sorenson
8/24/2007 Deborah Haberern
8/24/2007 The Bodoh family
8/24/2007 Fred Nason
8/24/2007 Art Greary
8/24/2007 Joe Simorowicz
8/24/2007 Laurie Melvin
8/24/2007 Barbara Kochanek
8/24/2007 Brian Chamberlin
8/24/2007 Ed White
8/24/2007 Carrie Perusse
8/24/2007 Cynthia Smith
8/24/2007 Bonnie McLaughlin
8/24/2007 Raymond & Mellisa Jery
8/24/2007 Kevin Donovan
8/24/2007 Jack & Donna King
8/24/2007 Dewey Kolvek
8/24/2007 Daniel Ottani
8/24/2007 Robin Bassell
8/24/2007 Ann & William Pritchard
8/24/2007 Donald Gustafson
8/24/2007 Mark Rogers
8/24/2007 Grag & Judy Hudson
8/24/2007 June Hughes
8/24/2007 Michelle Bussiere
8/24/2007 Katherine Holland
8/24/2007 Patricia Watson
8/24/2007 Richard Hansen
8/24/2007 Rosemary Daly
8/24/2007 Mary MacDonnell
8/24/2007 Norma & Albert Woodruff
8/24/2007 Steve & Susan Popoli
8/24/2007 James Crawford
8/24/2007 Dale Rogers
8/24/2007 Faith Carpenter
8/24/2007 Lynn Coach
8/24/2007 Christine Tighe
8/24/2007 James & Robin Unger
8/24/2007 Paulette Craig
8/24/2007 Peter Rochford
8/24/2007 The Stanisewski Family
8/24/2007 Ellen Moyer
8/24/2007 Carol Rivard

8/24/2007 Marie Berry
8/24/2007 Martha Burns
8/24/2007 Kristen DeGray
8/24/2007 Jain Makepeace
8/24/2007 Kelly Cooley
8/24/2007 Wanda Kane
8/24/2007 Craig Tully
8/24/2007 The Burek Family
8/24/2007 Larry & Michelle Ward
8/24/2007 Ila Sierastki
8/24/2007 The Smith Family
8/24/2007 Denise Hills
8/24/2007 Cornie Nichols
8/24/2007 Jo Irvine
8/24/2007 John Blair
8/24/2007 Jason & Kathleen Stomski
8/24/2007 Linda & Ronald Lolli
8/24/2007 Robert Talbot
8/24/2007 Anthony & Martha Hoynoski
8/24/2007 The Megazzini Family
8/24/2007 The Dowers Family
8/24/2007 Patricia Linekin
8/24/2007 Frances & Theodore Jensen
8/24/2007 Rita Templeman
8/24/2007 Juliana Mueller
8/24/2007 Ann Southworth
8/24/2007 Catherine Smith
8/24/2007 Susan Wesolowski
8/24/2007 Jessica Slater
8/24/2007 Karen White
8/24/2007 William Carroll
8/24/2007 Eleanor Gray
8/24/2007 Carolyn Kenyon
8/24/2007 Barbara Swindell
8/24/2007 Edna Kelley
8/24/2007 Madalene Carroll
8/24/2007 Rita Bartlett
8/24/2007 Marion Parks
8/24/2007 Karen Larinski
8/24/2007 Marie Gallo
8/24/2007 Jose Pichardo
8/24/2007 Bruce Collina
8/24/2007 Anthony Pulaski
8/24/2007 Jane Tully
8/24/2007 Jen Barton
8/24/2007 Jessica Hale

8/24/2007 Cheri Labonte
8/24/2007 Peter Thompson
8/24/2007 Anne Taylor
8/24/2007 Cynthia Hurley
8/24/2007 Richard LaPanne
8/24/2007 Michele Sampson
8/24/2007 Edith Sullivan
8/24/2007 Christine Fox
8/24/2007 Patricia Woodbury
8/24/2007 Nancy Mezzner
8/24/2007 Jana Chicoine
8/24/2007 Justin Jacobs
8/24/2007 Jessica Bolduc
8/24/2007 Ellen Fenton Bash
8/24/2007 The Cruickshank Family
8/24/2007 Deborah Jones
8/24/2007 Cheryl Drexler
8/24/2007 Kristine Stack
8/24/2007 Fran Curran
8/24/2007 Craig Davis
8/24/2007 Alan Berkerwald
8/24/2007 The Brequet Family
8/24/2007 Owen Broadhurst
8/24/2007 David Mosher
8/24/2007 Andrew Wolan
8/24/2007 Lynn Cornelius
8/24/2007 Sheila Genereux
8/24/2007 MaryAnn Fox
8/24/2007 Joanne & Edward Levelle
8/24/2007 Zena & Michael Lapidus
8/24/2007 Lucy Zaslou
8/24/2007 Bob Genereux
8/24/2007 Brian Bossie
8/24/2007 Linda Mihlek
8/24/2007 Lee & John Fuller
8/24/2007 Brittany Scott-Smith
8/24/2007 Marie Fisk
8/24/2007 Melissa Decas
8/24/2007 Kate Johnson
8/24/2007 Frances Kelly
8/24/2007 Joanne Miller
8/24/2007 Sarah Popli
8/24/2007 Robin Mullett
8/24/2007 Debra Kozik
8/24/2007 Deborah Poremby
8/24/2007 Carol Burke

8/24/2007 Nicolle deBidart
8/24/2007 Sheila Lambert
8/24/2007 Richard Osienski
8/24/2007 Julie Ruzsala-Tester
8/24/2007 David Tester
8/24/2007 Beverly Ruzsala
8/24/2007 The Avery Family
8/24/2007 Sasha Gooden
8/24/2007 Kevin Blake
8/24/2007 The Vargo Family
8/24/2007 Geraldine Gross
8/24/2007 Mike Veino
8/24/2007 Peter & Joyce Chouinard
8/24/2007 Rita Hague
8/24/2007 Bonnie Hague
8/24/2007 Candace Collins
8/24/2007 Peter & Brenda Allan
8/24/2007 The Trugillo Family
8/24/2007 Michelle Leonard
8/24/2007 Carl LaFeniere
8/24/2007 Linda Hamlin
8/24/2007 Nancy Cunningham
8/24/2007 The Stevens Family
8/24/2007 Tammy Mullens
8/24/2007 Pamela Darrow
8/24/2007 Gale LaScala
8/24/2007 Gary Fitzgerald
8/24/2007 Mary Mangini
8/24/2007 Laurie Webster
8/24/2007 Alaina Mango
8/24/2007 Lori Lees
8/24/2007 Nicole Cannady
8/24/2007 Rebecca Cuba
8/24/2007 Michael Bash
8/24/2007 Frances Friguglietti
8/24/2007 Carla Kane
8/24/2007 Mary Osowski
8/24/2007 Elaine Kelly
8/24/2007 Stacey Osowski
8/24/2007 Carol Adams
8/24/2007 Brian & Anne Gannon
8/24/2007 Ernest Lederman
8/24/2007 Burton Whipple
8/24/2007 Michael & Sharon Pepek
8/24/2007 Frank Wrorski
8/24/2007 Dawn Schile

8/24/2007 The Green Family
8/24/2007 The Motherway Family
8/24/2007 Roger Hubbard
8/24/2007 Cheryl Guiel
8/24/2007 Susan Chaffee
8/24/2007 The Hooper Family
8/24/2007 Melanie Curran
8/24/2007 Fran Hall
8/24/2007 Janet Mackey
8/24/2007 Suzanne Murray
8/24/2007 Helen Mason
8/24/2007 The Plumado's Family
8/24/2007 The Hamel Family
8/24/2007 Eileen Barnes
8/24/2007 Richard Gates
8/24/2007 Evelyn Snyder
8/24/2007 Francine Ozereko
8/24/2007 Angela Fina
8/24/2007 Robert Woo
8/24/2007 David Powers
8/24/2007 Michael Cohen
8/24/2007 Melissa Scott
8/24/2007 Roger Butler
8/24/2007 Amy Whalen
8/24/2007 Samantha Toomey
8/24/2007 The Loomis Family
8/24/2007 Patrick & Ana Jay
8/24/2007 Robert & Nancy Shepard
8/24/2007 Mary Powers
8/24/2007 Mark Johnston
8/24/2007 Jason & James Kras
8/24/2007 Ric Devine
8/24/2007 Nancy Wilson
8/24/2007 Ronald Masaitis
8/24/2007 Joan & Rudolph Kana
8/24/2007 Kathy Thompson
8/24/2007 Maurice DeMers
8/24/2007 Steve Davis
8/24/2007 Sam VonDeck
8/24/2007 BettyLou Shepard
8/24/2007 Peter Mason
8/24/2007 Theresa Picene
8/24/2007 Jordan Davis
8/24/2007 Patty Liptak
8/24/2007 Julieanne Sponberg
8/24/2007 David Leeds

8/24/2007 Mary Huntington
8/24/2007 Amanda Chapin
8/24/2007 Traci Williams
8/24/2007 Lois Baily
8/24/2007 Bonnie Germain
8/24/2007 Brian Bossie
8/24/2007 Ellen Healy
8/24/2007 Charles & Nancy Peckham
8/24/2007 Johnathan Long
8/24/2007 Sonia Valentine
8/24/2007 Beverly Crawford
8/24/2007 Jason Russell
8/24/2007 Carla Ford
8/24/2007 Gail & James Fournier
8/24/2007 Dane Graves
8/24/2007 Linda & Chester Broughton
8/24/2007 Neva Kaufman
8/24/2007 Joe Rohan
8/24/2007 Henry & Aline Euler
8/24/2007 David & Carolyn Fuller
8/24/2007 Katheen Griffen
8/24/2007 Wayne Brown
8/24/2007 Joan Baush
8/24/2007 Joan Goodenough
8/24/2007 Joanne Parker
8/24/2007 Karen Hubbard
8/24/2007 Susan Falcetti
8/24/2007 Jennifer Malvaney
8/24/2007 Tina Keesee
8/24/2007 Donna Cortis
8/24/2007 Pam Fitzgerald
8/24/2007 Darlene Cardinal
8/24/2007 Stephanie Welch
8/24/2007 Susan & Mike Ziff
8/24/2007 Diana Barbaro
8/24/2007 Suzette Forte
8/24/2007 Stephanie Brown
8/24/2007 Nate Johnson
8/24/2007 Jennifer Battles
8/24/2007 Fred Schempp
8/24/2007 Vanessa Ghidoni
8/24/2007 Robert Williams
8/24/2007 Carol Drake
8/24/2007 Dianne Legalos
8/24/2007 Sarah Nuttall
8/24/2007 Ed Bentlem

8/24/2007 Daniel DiSanti
8/24/2007 Jasmine Kaempfer
8/24/2007 Chris Graham
8/24/2007 Judy Weaver
8/24/2007 Heather Ramsey
8/24/2007 Jessica Egglester
8/24/2007 Carol Vella
8/24/2007 Robert Griffin
8/24/2007 Samuel Peters
8/24/2007 Jean Golman
8/24/2007 Marylou Rice
8/24/2007 Michael & Cynthia Machler
8/24/2007 Patricia & Forest Wright
8/24/2007 Kathy Singer
8/24/2007 Joseph Szenda
8/24/2007 Leon Parsons
8/24/2007 Howell & Janet Craver
8/24/2007 Lucia Sullivan
8/24/2007 Carol Sullivan
8/24/2007 Mark & Gwen Slonka
8/24/2007 Lisa DeNardo
8/24/2007 Ed Potter
8/24/2007 Megan O'Brien
8/24/2007 Linda Kahlstran
8/24/2007 Lou Beaudoin
8/24/2007 Sarah Albitz
8/24/2007 The Small Family
8/24/2007 Ian Fisher
8/24/2007 Gail Cavannah
8/24/2007 Carol Balise
8/24/2007 James Woodruff
8/24/2007 Gina Artruc
8/24/2007 Christine Ferst
8/24/2007 Jane Mack
8/24/2007 Donald Steele
8/24/2007 Sheryl Becker
8/24/2007 Gail Bean
8/24/2007 Glendon Piatt
8/24/2007 Charles Lee
8/24/2007 Linda & Bob Hyjek
8/24/2007 Ruth & Paul LaPrise
8/24/2007 The Baillargeon Family
8/24/2007 Kellie Burke
8/24/2007 Michael Calvini
8/24/2007 Claudia Hurley
8/24/2007 Rob Giusti

8/24/2007	Alice Taverna
8/24/2007	Peggiann Johnson
8/24/2007	Janet Hartley
8/24/2007	Anne Smidt
8/24/2007	John Stelle
8/24/2007	Patrick McGinn
8/24/2007	Barbara Swords
8/24/2007	Tracey Ryan
8/24/2007	Grace Ferrante
8/24/2007	Patty Simonowicz
8/24/2007	Arlene Paton
8/24/2007	Sarah Webster
8/24/2007	Kimberly Kolvek
8/24/2007	Susan Neal
8/24/2007	Cathy Powell
8/24/2007	Melissa Curry
8/24/2007	Steve Marcus
8/24/2007	Penelope & Nicoll Vincent
8/24/2007	Mathew Neddeau
8/24/2007	Sarar DiRoma
8/24/2007	Alberta Rogers
8/24/2007	Susan & Olivia Vurovecz
8/24/2007	Donald Carpenter
8/24/2007	Laura Ross
8/24/2007	Denise Gould
8/24/2007	John Bannish

Please note that some names on submitted petitions were illegible.