# Stephanie Sloman 387 Courthouse Lane Pascoag, RI 02859

Submitted at the Public Hearing on May 23, 2016

Rhode Island Energy Facility Siting Board 89 Jefferson Boulevard Warwick, RI 02888

RE: Invenergy Thermal Development LLC – Clear River Energy Center Docket No. SB-2015-06

Dear Siting Board Members,

For the record, I want to make it absolutely clear that I am not, in any way, accusing Invenergy of any illegal actions—past, present, or future—and I am not accusing Invenergy of lying.

I am a retired environmental engineer who worked in a large electroplating plant in Massachusetts. Let me tell you a bit about what I observed and learned while working there. Upper management was concerned about one thing and one thing only. Money. Period. They were NOT concerned about the environment nor where they concerned with the safety of their employees or the safety of the residents surrounding the plant, of course unless there was a problem which would cause the plant to shut down. It was my job to protect the environment, the employees, and the residents. We had an Industrial pretreatment permit for our wastewater discharge to empty into the municipal wastewater treatment system. We had hazardous waste and we had hazardous chemicals. During my employment, I soon realized that the regulations (both state and federal) were adequate, but I knew that my systems could do better. So I tweaked the processes do better. If the discharge limit for Nickel for example was 5 ppm, the system was adjusted so the discharge was .05 ppm. If the regulations said that the minimum that was required was "x", I would do better. In other words, my employees and I went over and above the regulations set by the MA DEP and EPA. Was my boss happy about this? Hell, no. I was using too many treatment chemicals. I was spending too much money. I did not care. My job was to protect the environment and people. My boss's job was to make money. We butted heads often. I am telling you this for a reason. I know how big companies (which have the potential to negatively affect the environment) work.

My husband and I moved 30 years ago to Burrillville for one reason—it was a small rural town with forests, wetlands, and tons of unique wildlife. We raised our two children here. We taught them to respect the environment... to love Nature. They are both adults now. One majored in Mechanical Engineering in order to help the planet. The other one majored in Biology with a concentration in environmental science to help the planet. They will be part of the solution of cleaning up this planet and NOT part of the problem.

I, too, was asleep for a long while when I heard about the proposed fossil fuel plant coming into Burrillville. Frankly, I did not believe that it had a chance. Then I went to the first Public Hearing and I quickly realized that the possibility and probability was enormous. I had not understood the regulations concerning power plant siting. So, I wish to discuss my concerns about Invenergy's proposed Project. (I refuse to call it "Clear River Energy Center" for obvious reasons—the name is an oxymoron.)

I read and digested the 471 pages of Invenergy's application in detail. I have read all the questions that Burrillville asked Invenergy and Invenergy's responses. I have read every single document/report that was referenced in Invenergy's application. I have found mistakes, bad assumptions, contradictions, vagueness, and omitted information. I have read the RI DEM and EPA

regulations about all subjects concerning this proposed project. I have read other proposed power plant applications—other Invenergy applications as well as other energy companies' applications. I have read and read. I have been working on this research for 7 weeks straight, every day, 8-10 hours a day. I can't sleep and I can't eat. I dream about it.

# First of all, this is NOT a "not in my backyard" situation. This is a "NOT in ANYONE'S backyard" situation.

I found a great quote from Senator Bernie Sanders and he states: "We must have the guts to stand up to the fossil fuel industry and tell them their short-term profits are not more important than the planet." I believe that with all my heart and soul. Shall we risk the future of our children's children's health for money???? Is the money worth the demise of the planet? I say "no".

Invenergy states that if their Project is built, it will force older, less efficient power plants to shut down. Not true. These older, less efficient power plants <a href="mailto:are already">are already</a> shutting down. Invenergy states: "This plant will help facilitate the integration of more renewables into New England's grid by providing readily available power when the sun doesn't shine and the wind doesn't blow." Not true!!!! <a href="mailto:IF">IF</a> it is true (and I <a href="mailto:KNOW">KNOW</a> that it is <a href="mailto:NOT">NOT</a> true through my intense research) that New England needs more electricity (because of older plants shutting down or others "at risk" shutting down), Invenergy's proposed Project producing 900 -1000 MW will <a href="mailto:DETER">DETER</a> renewables from coming into New England. If the proposed Project provides the necessary amount of electricity to satisfy ISO-NE, then the siting boards will say "no" to the renewable companies' applications (if the MW's are high enough for the siting boards to have jurisdiction over). And even if ISO-NE and the PUC's say "yes" to the renewables, they will <a href="mailto:never">never</a> tell Invenergy to lower their MW's. In fact, ISO-NE will probably happily sell the surplus electricity to other regions. (Interesting that during the 2016 ISO-NE auction, Invenergy only received less than half of the Project's MW capacity.)

Another MAJOR issue is this: IF THIS POWER PLANT IS BUILT, THERE WILL BE NO WAY FOR ANY REGULATORY AGENCY TO SHUT IT DOWN. If the Project violates air emissions or any other regulation, the RI DEM and/or the EPA will fine them. That is all that they can do. And Invenergy will happily pay the fines and keep chugging along. If they use so much groundwater that the area wells (public and private) start to dwindle (or if there is a drought), do you think that the proposed Project will use less water? NO! If their discharges to the Burrillville Wastewater Treatment plant cause the plant to violate their NPDES permit, do you think that Invenergy will do anything?

NO! If they are forced (somehow via legal action I imagine) to make a change, they will just go to the RI DEM to get a change on their existing permit. THIS PLANT (if built) WILL BE A MONSTER THAT NO ONE WILL BE ABLE TO CONTROL. (Remember who is going to take the air emission readings and send them to the regulatory agencies—the proposed Project. Remember who is going to take the water samples/analysis and send them to the regulatory agencies—the proposed Project.) And the RI DEM and/or the EPA do not have enough money in their respective budgets to make inspections often.

I do not trust this company (as I believes it lacks integrity) and nor do I believe many things in their application for the proposed "state of the art" power plant. Google "Lackawanna Energy Center, Jessup, PA" and you will see exactly what Invenergy did to that community. This Lackawanna Energy Center will have exactly the same emission controls that this proposed Project may have. The Lackawanna Energy Center broke ground at the beginning of May 2016 and it will produce 1500 MW! Prior to this PA energy center, Invenergy's biggest Project was 620 MW in Grays Harbor, WA. To date, Invenergy has only built 6 natural gas power plants in the USA which are still operating today. They have one being proposed now in PA (Allegheny Energy Center) and, of course, this one

in Burrillville. The one that has been operating the longest is in Hardee, FL. They have even started to sell their wind farms in order to build natural gas power plants because the natural gas power plants make more money than renewables. They do not care about the environment or the people! Even Ocean State Power looked at the site (called "Buck Hill Site" at the time) where Invenergy's proposed Project is located, and OSP determined that there were too many management, conservation, and wetland areas. OSP was also deeply concerned about the impact the plant would have on Zambarano Hospital.

Invenergy does not care!!!!

#### **SPECIFIC CONCERNS:**

#### **NATURAL GAS AVAILABILITY:**

THIS IS VERY IMPORTANT!!!!! When the application discusses natural gas usage, it states that the Project will use natural gas as long as "natural gas is unavailable" or "as long as the natural gas is economically feasible"---throughout the **ENTIRE** application. They are covering themselves, and perhaps making it possible for the proposed Project to use ultra-low-sulfur diesel fuel when/if the natural gas is too expensive or it is not available! And, if they use the diesel 24/7, it will increase the Greenhouse gas emissions by 90% (45% per "unit") compared to running natural gas--which is bad enough!

# **NATURAL GAS POWER PLANTS ARE DANGEROUS:**

According to a report I read ("Fire Hazards and Fire Protection – Gas-fired Power Plants") (<a href="www.femoranshs.com/gas-fired-power-plant-fire-hazards-article/">www.femoranshs.com/gas-fired-power-plant-fire-hazards-article/</a>), I was blown away (pardon the pun). This article puts everything in perspective. Not only is natural gas a fire hazard, so are chemicals that the power plants use. For example, the lubricant oil that they use is "the most common cause of turbine fires". Then, of course, not listed in this article, but listed in Invenergy's application is hydrogen gas, which is very, very flammable.

# **ULTRA-LOW SULFUR DIESEL AND TANK(S):**

I am very concerned about the fact that everywhere in that application concerning the use of ultra-low sulfur diesel that it states that Invenergy will use natural gas as long as it is "economically feasible" or "as long as it is available". These phrases are not stated in the application once or twice; they are everywhere. So what does that mean to me? It means that as long as natural gas's price is lower than the diesel, they will use it. As long as the natural gas in available, they will use it. If these conditions are not met, they will power their plant with <u>only</u> diesel. (And, by the way, they speak of ultra-low sulfur diesel like they are the only ones using it. No so. It is in the regulations that every new power plant must use this. Invenergy is not unique.) When Invenergy uses diesel, the amount of greenhouse gases increases by 45%/per unit and the particulate matter (which is solid particles falling to the earth) increases by 283%/per unit.

Now I want to talk about the tank or tanks holding this ultra-low sulfur diesel. First of all, the application states that there will be two 1 million gallon tanks and then later it states that there will be one 2 million gallon tank. Well, which is it? Regardless of this contradiction, the tank or tanks containing the diesel (according to the table in the application) will emit 0.44 tons of VOC's (volatile organic compounds) per year to the atmosphere per tank. The regulations say that the minimum emission level VOC's is 6 or 9 tons of VOC's per year. This is my point: Invenergy could reduce that

0.44 tons/year by sealing the tank or tanks, but because the regulations state that the level of VOC emissions allowed for the diesel is more, Invenergy does not care.

Also, if and when Invenergy uses the diesel, it will take 3 days to use up that 2 million gallons of diesel. If the tankers supplying the project hold 10,000 gallons, it would take 200 tankers to fill up that one 2-million gallon tank (or the two 1-million gallon tanks). Can you imagine the traffic through Chepachet and downtown Pascaog? And if natural gas is not "economically feasible" or if it is not available and the Project runs 60 days (stated confusingly in the application) or longer, there will be even more trucks.

#### MTBE CONTAMINATION / WELLHEAD:

Now I wish to talk about the MTBE contaminated well. First of all, there was a study done about the wellhead and the aguifer. In 2005, the DEM found that the MTBE contaminated water in the aguifer formed a plume that was moving N-N-W. They did not calculate the volume of the plume, but I did. The volume of the contaminated plume was approximately 450,000 gallons in 2005. That was 11 years ago. Since then, there has been no study concerning the concentration of the MTBE nor the direction/size of the contaminated water plume which, by the way, changes with seasons due to river volume and precipitation. And as we all know, the court ordered that that well be closed. So Invenergy, without any other studies done on this aquifer, plans on using an activated carbon filter system to remove the MTBE at approximately (depending on which fuel it uses) 138 gpm - 700 gpm. The DEM study found (during its pump tests in 2004), the MTBE concentration increased with the increase in gallons per minute. They did not even come close to 700 gallons per minute (which Invenergy says they will draw). They also decided that the higher the pump rate, the more MTBE contaminated water was drawn back to the wellhead. That said, it has been 11 years since any study concerning that well has been completed. The concentration of MTBE is reduced by dilution and by bacteria which metabolizes the MTBE. It does take 20 years or so, but we have already gone through 11 years of that time. My opinion? That well and aquifer should be tested again. I believe that this well could be again used for Pascoag's drinking water. A biomass system (thanks to the input of URI) like the DEM eventually used in their study (which by the way was more efficient and cost-efficient in removing the MTBE at higher withdrawal levels) could be used by the PUD. I know that Invenergy will pay for the use of this well water, but perhaps if the PUD could get a grant and thereby utilizing that water using a biomass system, the wells could be used again and the PUD could stop paying for the Harrisville Fire District well water. If Invenergy utilizes that well water, using the activated carbon filter system, who will be responsible for testing that water before it gets to the Project? As the MTBE will not affect the Project's systems, Invenergy really does not have a costeffective reason to test it often enough. The piping will go from the wellhead down Grove Street and down Laurel Hill Rd., down Wallum Lake Road to the Project. This is another opportunity for MTBE contamination if those pipes leak. Nowhere in the application does it state that the 1 million gallon MTBE contaminated water storage tank on the site will be covered (as MTBE is a VOC and will emit to the atmosphere); nor does the application state that this tank will have secondary containment in case of leaks to the wetlands. Invenergy states that 75% or so of the water used will evaporate into the atmosphere....more MTBE emitted to the air. Can you see how important it is for that activated carbon filter system to be tested often?

Invenergy claims that the activated carbon filter will take the MTBE levels down to or below the EPA Drinking Water Standard of 40 ppb. Again, will it? And what if their system does not bring the levels (which we don't know the present levels) down to this level?

And, by the way, after the Pascoag wells were found to be contaminated with MTBE, the Harrisville Fire District installed three new wells (#4, #5, and #6) in the fall of 2001 and put into service January

1, 2002. Per regulation, the groundwater from these wells had to be tested. It seems, according to "2008 Source Water Assessment – Harrisville Fire District Wells 1, 2, & 3 Wellhead Protection Area" report by WHPA, that the wells did not show any levels of MTBE. However, the levels beginning in 2003 are interesting (although well below the EPA Drinking Water Standard level of 40 ppb): Well #4: 3.4 ppb (April 2003), 2.3 ppb (Feb. 2004), 1.5 ppb (April 2005), 2.8 ppb (March 2007), 1.0 ppb (April 2007); Well #5: 4.9 ppb (April 2003), 1.0 ppb (August 2003), 1.1 ppb (February 2004), 1.8 ppb (April 2004), 1.0 ppb (April 2006); Well #6: 4.1 ppb (March 2002), 3.6 ppb (April 2003), 1.4 ppb (August 2003), 1.4 ppb (April 2004), 1.0 ppb (April 2005). (I could not find any recent levels of MTBE in these wells.) These changes in ppb's may be partly due to seasonal fluctuations, but perhaps it also has to do with the MTBE dilution of the Clear River subbasin. (All of these new wells, as are all the public wells in Burrillville, are located in the same subbasin.) Also, as I stated above, the DEM and URI did the study of the Pasocoag contaminated MTBE plume in the groundwater and found that the plume was traveling in the N-N-W direction which is approximately in the direction of the Harrisville wells.

#### RI DEM'S POSITION ON GROUNDWATER:

According to the "DEM Groundwater Protection Program – Local Comprehensive Plan Review Criteria", published April 2005, the RI DEM states: "Rhode Island's groundwater resources are one of the state's most valuable natural resources supplying drinking water to approximately 25% of the state's population. It is especially valuable in the rapidly developing rural areas of the state. The Rhode Island Groundwater Protection Act of 1985 (Rhode Island General Laws 46-13.1) set forth vigorous policies for the protection of this resource that have guided DEM in implementing its Groundwater Protection Program." Further along in this report it states: "The groundwaters of this state are a critical renewable resource which must be protected to insure the availability of safe and potable drinking water for present and <u>future needs</u>." I imagine that the DEM is concerned about the withdrawal limits of groundwater subbasins…..

#### **CLEAR RIVER SUB BASIN:**

In Invenergy's application concerning how much water can be withdrawn from the aquifer, they used a study ("Estimated Water Use and Availability in the Lower Blackstone River Basin, Northern Rhode Island and South-Central Massachusetts, 1995-1999") that used a 1995-1999 average population of towns using the Clear river aquifer subbasin. On page 19 of this report, the total withdrawals of this subbasin is 1.093 MGD ("5-year average estimates") which includes not only portions of Burrillville, but Douglas, Uxbridge and Glocester. Invenergy uses another report, "Rhode Island Population Projections 2010 – 2040, April 2013". On page 53, Invenergy's Table 6.2-5 ("Population Projections") only includes Burrillville's population projections. They do not include the other towns' population projections (Uxbridge, Glocester, Douglas). They should have used these (since portions of these towns are also part of the Clear River Subbasin). For example, Glocester is projected to increase its population throughout the applicable years. One problem with the report, "Estimated Water Use and Availability..... 1995-1999" is that it uses an "estimate" of 45.46 square miles of "Land Area" which is used in another report, "Streamflow Depletion Methodology, Draft, May 13, 2010", which the DEM uses to determine the classes of the sub basins and how much can be withdrawn from them without damage to the environment, specifically "while still leaving sufficient flow to maintain habitat conditions essential to a healthy aquatic ecosystem" (p. 5). On page 37 of this report, 45.46 (averaged to 45.5) square miles is used for the Clear River Subbasin "drainage area". Okay, the first report says that the 45.46 square miles is the "estimated" land area of the sub basin and then the other report assumes that this "estimated" land area is 100% a "drainage area". How can this be? Since the first report was written and released to the public in 2003 (but used average numbers of 1995-1999), there has been many changes to the sub basin as far as drainage areas. As can be seen on page 21 of this report ("Estimated Water Use and Availability.....1995-1999"), there are percentages of land-use categories for each town in the Clear River Subbasin, BUT these were

collected in 1995-1999 and are 5-year averages. There has been an increase in commercial and industrial businesses which take away the drainage areas since 1995-1999. (Just ask the Zoning Board and Planning Board of Burrillville to see how many businesses are now located in Burrillville since 1995-1999 and how many are coming to town in the future. You should probably ask the same of Uxbridge, Douglas, and Glocester as, once again, portions of these towns are in the Clear River subbasin). Another assumption which is wrong is that Ocean State Power is included in this report as a commercial water user. Ocean State Power uses water directly from the Blackstone River so why is OSP on the water-use from the Clear River subbasin? And there is essentially no water recharge to the subbasin as OSP is a "zero-liquid-discharge facility" (p. 27 of report). Also, this report does not take into consideration the two dams (Pascoag Reservoir and Wilson Reservoir) that are shut in March (so that the reservoirs can increase volume for public use) and open again Columbus Day (October) of every year. (Yes, it is true that both reservoirs are located in the Clear River Subbasin, but how much water is actually recharged from these reservoirs?) This fact must also change (according to the report "Streamflow Depletion Methodology") the ecological impact of the Pascoag River and Clear River. Another problem with this report is that it assumes that the effluent (listed as 0.812 MGD) from the Burrillville Wastewater Treatment Facility recharges the Clear River subbasin. Even though this effluent does discharge into the Clear River, it discharges less than a mile from where the Clear River enters the Branch River Subbasin. (If you don't believe me, look at a map showing where the treatment plant is located.) Invenergy's application did not use the most recent populations. I did some research and found that in the most recent census, those towns (all 4) drawing water from that subbasin have increased approximately 5%. At that level of increased water usage, not even taking into consideration the use of water for businesses, for hydrant flushing, for fire-fighting, possible droughts or further population growth, I found that this subbasin is already close to its maximum withdrawal capacity WITHOUT INVENERGY'S usage. Invenergy used the report, "Statewide Supplemental Water Supply Feasibility Assessment Phase II: Executive Summary", specifically page 12, Table 2. On its application, page 52, Invenergy got their Table 6.2-4 wrong. The values for the "Build-Out" - "Maximum Daily Demand for Harrisville" should be 1.43 MGD not 0.43 MGD and the total for Harrisville and Pascoag should be 2.48 MGD not 1.48 MGD. (I guess they cannot do simple math.) This is another mistake that makes me wonder about the integrity of Invenergy. (Of course, they will blame their environmental consultant.) One more thing concerning this "Statewide Supplemental Water Supply Feasibility Assessment.... Summary". It states on page 22 (concerning "Local Supplemental Emergency Water Supply Sources" and the potential loss of the new wellfields that supply Pascoag): "If Harrsiville continues to supply Pascoag as a whole sale customer, it has the capacity of meeting the average day demands on its own; however the potential loss of this water source [Eccleston Well Field] would put a tremendous strain on Harrisville's system during summer months when demands are at their highest." Also, on page 22: "Harrisville will be able to meet emergency demands at 2025, but build-out emergency demand conditions cannot be met while supplying Pascoag."

So, Invenergy used the report, "Estimated Water Use and Availability in the Lower Blackstone River Basin, Northern Rhode Island, and South-Central Massachusetts, 1995-1999" to get the total water withdrawals from the Clear Water Subbasin – 1.093 MGD. They used the "Rhode Island Population Projection 2010-2040" report for their statement that Burrillville's projected population remains stable (and does <u>not</u> include the projection populations for Glocester, Uxbridge, and Douglas—portions of which are also located in the Clear River subbasin). (Plus, the projected populations in this report are not accurate for even Burrillville.) The land area of the Clear River Subbasin value located in the "Estimated Water Use and Availability.... 1995-1999" report is 45.46 square miles which is used in the "Streamflow Depletion Methodology" report (which assumes that the "estimated" value from the "Estimated Water Use...." report is the "drainage area" of the subbasin <u>today</u>). And using this SDM, the value of the Natural 7Q10 is 5.1 MGD and the corresponding "Allowable Depletion is 1.5 MGD.

Invenergy's conclusion is that their withdrawal of water from the Clear River Subbasin (summer value of "approximately" 0.22 MGD) is fine. (But the "drainage area" of the subbasin today is not what it was from 1995-1999 as businesses have come into the subbasin area.) Most rain water is collected by the wastewater treatment systems as they are all combined systems. And then you add the correct projected population increases including not only Burrillville, but also Glocester, Uxbridge, and Douglas. Burrillville WWTF does NOT recharge the subbasin. If the "drainage area" is less than 45.5 square miles, then the "Natural 7Q10 MDG" reduces. When the "Natural 7Q10 MGD" reduces then the seasonal "Allowable Depletion (MGD)" values reduce. Do you understand the problem?

The math in Invenergy's application is sound except for their assumptions and the reports' assumptions. Say the "drainage area" for the Clear River subbasin is 10% less due to the increased commercial businesses. That means that the drainage area is 41 square miles. This makes the Natural 7Q10 MGD at 4.6 MGD which in turn makes the Allowable depletion at 1.38 MGD (30% Natural 7Q10). According to Invenergy, the current water withdrawals (not using the correct populations) is 1.093 MGD and Invenergy's Project will use "approximately" 0.22 MGD. So: 1.38 – 1.093 – 0.22 = 0.067 MGD as Invenergy puts it "to cover growth in water supply of the community in the future". (But keep in mind the importance of recharge, right? Burrillville WWTF is NOT recharging the Clear River Subbasin.)

And then, if you do the math another way: Let's say that the "drainage area" is the same which means that the Natural 7Q10 is the same (5.1 MGD) and the allowable depletion stays at 1.5 MGD. But the population rises 3% (lower value than current increase). The water withdrawal number that Invenergy uses (1.093 MGD) will go up to 1.126 MGD. So: 1.5 - 1.126 - 0.22 = 0.154 MGD water available for future growth.

And what if Invenergy's estimate of their water withdrawal from the subbasin during the summer months is off by 20% increase? Here's the math: 1.5 - 1.093 - 0.264 = 0.143 MGD water available for future growth.

And what if the drainage area is 10% less, the population increases by 3%, and Invenergy's estimate of their water withdrawal from the subbasin increases by 20%. Here's the math: 1.38 - 1.126 - 0.264 = - (negative) 0.01 MGD. No water available for future growth now.

It does not matter how I look at it, there is not enough water in the subbasin for future growth in Burrillville or the other towns who withdraw from it.

Also, keep in mind that that number of 1.093 MGD that is withdrawn from the subbasin was an average between 1995 through 1999. This MGD value does not include "non-account" water use such as firefighting, water hydrant flushing, inaccurate meters, leakage, and any emergency situations including water line breaks or wellhead pump failures.

One other point: In Invenergy's application (p.40 - 6.2-1 "Existing Conditions" [Groundwater]) it states: "Within the bounds of the proposed Project area, there are no mapped groundwater reservoirs, or sole source aquifers." The fact is that the proposed Project sits right on top of the Clear River subbasin. Any illegal discharges or chemical spills, if not remediated immediately, will eventually get into that groundwater subbasin. Isn't that a concern for the DEM? It is for me.

#### **HYDROGEN TUBE TRAILERS:**

My next concern is that in Invenergy's application, there are only 3 sentences concerning the hydrogen gas tube trailers. Yes, hydrogen gas. The application also states that this hydrogen gas will be used for cooling and heat rejection. It will be mounted on a truck trailer. Nowhere does it state the total volume of the hydrogen gas, how long it will last and when it will have to be replaced, obviously, via trucks through town, nor why they chose hydrogen gas instead of nitrogen gas which can also be used. Well, I know the answer to the last part: hydrogen gas is cheaper than nitrogen gas; however, hydrogen gas is much more dangerous. Nowhere else do they mention "hydrogen gas" in their application.

## PROJECT'S INDUSTRIAL DISCHARGE TO SEWER:

My next concern concerns their wastewater discharge. In the application, Invenergy states that there will a pH pretreatment system, but do not mention the chemicals or equipment or system they will use. Then in one of Burrillville's questions to Invenergy through the Siting Board process, it was asked about pretreatment. Invenergy stated that no pH pretreatment would be necessary. Then why was it in the application? (Invenergy had a meeting with the Burrillville Sewer Commission on September 8, 2015 and I imagine they "hashed" things out. Also, in the application it states that the wastewater from the Facility will be discharged to the Burrillville Wastewater Treatment Plant through a dedicated sewer line that will be connected to the local sewer system. Vague. Some members of the town council took that to mean that it was going to be a dedicated sewer line directly to the WWTF. Not so. Invenergy intends to hook up to the Wallum Lake Road sewer system. I found out through Councilman Stephen Rawson that the sewer lines where built in 1970. Invenergy will discharge their wastewater periodically and pumped via a force main to that Wallum Lake Road sewer system. There is no mention of what "periodically" means, nor do they mention how many gallons per minutes, nor do they state the actual force of the water to that sewer system. In Invenergy's application concerning this force main system, it states that the Wallum Lake Rd. sewer has a diameter of 8 inches. Shouldn't there be a study to see if the old sewer pipes can handle the volume and the force of the water?? Invenergy will say that this is between the Sewer Commission and Invenergy.

Then what about the 1 million gallon wastewater storage tank that was supposed to have a pH pretreatment system? Shouldn't that tank have secondary containment? Invenergy states that their wastewater will contain chemicals but don't believe that they will impact the pH of the water. What if there is a problem with their system? Shouldn't they have secondary containment for that huge tank and a contingency plan like a pH treatment system stand-by?

# BURRILLVILLE WASTEWATER TREATMENT FACILITY'S POTENTIAL IMPACT BY INVENERGY:

Invenergy states in its application that they "anticipate" in their discharge to the sewer (Table 6.2-2 on page 49 of their application) that ammonia will be 0.4 ppm, phosphorus will be 4 ppm, copper will be <0.1 ppm and the BOD will be 220 mg/liter (ppm). (First, the Burrillville WWTF's NPDES will expire on July 1, 2017. The following information concerning the WWTF's limits are for the present permit.) The Burrillville WWTF's maximum daily limit for total ammonia is 147 mg/liter (ppm) from November through April and 42 mg/liter (ppm) from May through October. The Burrillville WWTF's limit for total phosphorus is 0.1 ppm from April through October and 1.0 ppm from November through March. Burrillville's maximum daily limit for total copper is 10.6 parts per billion (ppb NOT ppm) during all months. Burrillville's daily maximum limit for BOD (Biological Oxygen Demand) is 17 mg/liter from May through October and 50 mg/liter from November through April. NOW, here's the glitch. Invenergy's discharge limits are regulated by the Industrial Pretreatment standards and the Burrillville WWTF's discharge limits are regulated by the Municipal standards. Invenergy's

"ESTIMATES/ANTICIPATED DISCHARGE LIMITS" are not in violation of their pretreatment regulations. HOWEVER, Burrillville Wastewater Treatment Facility is under a consent order from the RI DEM because they have not been able to meet their NPDES permit limits for Phosphorus and Copper. As a matter of fact, the Town of Burrillville just had to pay millions of dollars to up-grade the WWT facility in order to comply with the limits of phosphorus and copper. THIS IS MY POINT HERE: If Invenergy's proposed project is approved, the Burrillville Wastewater Treatment system MAY be negatively impacted by the new industrial discharge (the Project's). The WWTF may not meet their consent order and permit limits. The Town of Burrillville may have to spend even more money to re-up-grade their wastewater treatment facility. And, if the MTBE in Invenergy's discharge is higher than "anticipated", that will also be a huge problem for the WWTF. And will Invenergy change their systems to help the town when they are already meeting their industrial pretreatment permit???? NO! Also, at the Town Council meeting on October 28.2015, it was stated that the phosphorus and copper limits will be reduced when the new NPDES is issued.

Also, the Burrillville WWTF has a NPDDES permit for an average flow of 1.5 MGD. To date, the average ranges from 0.7 to 0.9 MGD. That leaves between 0.8 to 0.6 MGD available. If Invenergy's "estimate" of 0.2 MGD is wrong (due to their estimates of "consumption evaporation loss" being too low), there may be a massive problem for the WWTF to meet their permit maximum, especially if there is a lot of precipitation (as the sewers are combined sewers).

## **AIR EMISSIONS:**

Now about air emissions. My first concern is that everywhere in the application Invenergy states that the air emission values are "based on preliminary equipment specifications and emission estimates based on equipment venders.... subject to change as the project design advances". Really? Isn't this THE application to the Air Resources Office? Shouldn't these air emissions be definite? The Energy Facility Siting Board will approve or disapprove the project by the values contained in the application! My second concern about air emissions is the ambient air emissions. It is true that the DEM Air regulations say that the DEM recommends that power facilities use certain areas that have air emission stations throughout the state. Invenergy saved money by doing just that. They did not do any ambient air analysis around the project site. DEM RECOMMENDS. Burrillville is surrounded by other natural gas power plants—2 in Bellingham, 1 in Blackstone, Ocean State Power, and 1 in Dayville, Connecticut. All these power plants could be affecting the ambient air quality of the project site. It seems to me that the actual ambient air emissions should be tested around the project site. I believe that Invenergy should be asked to do just that. My opinion is that if they were concerned about exact numbers and impacts of air emissions, they would have already done this.

<u>All</u> the air emission levels stated in the application are and I quote: "based on preliminary project equipment specification and emission estimates" and it also states: "Equipment vendor selection, equipment, specifications, and emission rates are subject to change as the project design advances." What? Isn't this an application? This is not a <u>DRAFT</u> application! Invenergy should know <u>exactly</u> what they are going to use. (They have used this equipment before in other natural gas power plants.... I know because I researched it.) Also, remember that manufacturers use "best scenario" numbers to make their products look great!

Invenergy does not have any air emissions listed for MTBE. They state in the application that "approximately" 75% of the water drawn from the well will evaporate into the atmosphere via processes at the Project. Well, what will also be in that water? MTBE! Also, the Burrillville WWTF has MTBE on their NPDES permit (effluent discharge to the Clear River) listed on page 18 of their discharge permit (Burrillville's). (The MTBE limit is 1 ppb for Burrillville WWTF and MTBE is on the "List of Toxic Pollutants" from Section 307(a)(1) of the "Clean Water Act" of 3000 lbs/yr.) Invenergy is

assuming (and I state <u>ASSUMING</u>) that the MTBE from the pretreatment system at the wellhead will meet the EPA's Drinking Water Standard of 40 ppb. I do not know and neither do they. Also, what about the emissions of MTBE? Rain and snow will attach to the chemical and down it will go, right back into the environment and eventually into the groundwater/subbasin. (I have read information that the MTBE has a half-life of a few days due to chemical reactions, but if it is air-born and it rains or snows, it will impact the ground/water environments.) And even though (as I stated above) that the EPA's maximum air emissions for MTBE is 3,000 lbs/yr, I still did the math. I assumed (via Invenergy's "estimates" 1) 40 ppb for water levels of MTBE, 2) 900,000 gpd of water usage, and 3) the estimate of 75% evaporation of the water. I came up with 5.7 lbs/yr. This may be okay with the EPA and other regulatory agencies, but it is not okay with me. Eventually, some (if not all) of the 5.7 lbs/yr will end up in the groundwater and contaminating it. And, if Invenergy's "estimates" are low, the MTBE lbs/yr will increase.

Because Invenergy is not required to do so, they have not provided a plume study. I think they should be asked to do one. (As you know, they did their required dispersion modeling.)

# OCEAN STATE POWER'S "EIS" VS INVENERGY'S APPLICATION:

I read the 1988 Environmental Impact Study for Ocean State Power and its application a couple of weeks ago. The difference between that and Invenergy's application is astounding. Ocean State Power stated that the property values would indeed go down and that they would help the residents surrounding the facility financially. There was no mention of abutters as does Invenergy's application and they state in the application that they do not anticipate any decrease in any property values. OSP stated that there would be a significant negative impact on wetlands, wildlife, and plants. They were completely open about this. They also stated that they would do their best to improve their systems to decrease these negative issues. OSP stated that they did not consider using the "Buck Hill Site" because of the close proximity of management areas, conservation areas, wetlands, lakes and Zambarano Hospital. Invenergy does not.

## **BLASTING FOR FOUNDATIONS:**

One other thing that I read in the OSP EIS was that they drilled bore holes around the project location. They found that the bedrock was close enough to the surface of the land that they anticipated blasting the bedrock out with TNT for their foundations. Nowhere in Invenergy's application does it state (that I could find) that they drilled bore holes to see if or where the bedrock is located and that they may have to blast the rock out for their foundations. I looked at the most recent geological surveys and maps, and I found that the project area sits on bedrock containing "granitic gneiss" and "augen granite gneiss" which is basically granite and extremely hard. As nowhere in Invenergy's application does it state the depth at which their projects foundations will go (but I suspect very deep), I, not a contractor, cannot say whether or not there is a chance for Invenergy to have to blast the bedrock out. What I do know is this: If the Siting Board approves this project, Invenergy will be able to get a permit to do just that—blast the rock out, if needed.

#### **RHODE ISLAND RESILIENT ACT:**

Also, according to the Resilient RI Act, Rhode Island is supposed to reduce the Greenhouse Gas (GHG) emissions by 10% below the 1990 levels by 2020 (4 years from now), 45% below the 1990 levels by 2035, and 80% below the 1990 levels by 2050. This will never happen if Invenergy is approved by the RI EFSB. I did the calculations using both models: "Electricity Generation Based" and "Electricity Consumption Based". (Most, if not all, of the electricity generated by the Project to the grid will **NOT** go to Rhode Island.) Of course, there is that Carbon Dioxide Budget Trading Program....sigh.

# **EMPLOYEES AT PROJECT:**

I am concerned that <u>nowhere</u> in the application does Invenergy state that there will be an environmental engineer on staff at the Project during operations. And even if there was an environmental engineer on site, she or he will want to keep her/his job so she or he will do the job conscientiously until the systems do not run as specifications state. And once the air emissions or water discharges violate permits, she or he will not be on the environment's side. The RI DEM and the US EPA do not have enough money in their budgets to inspect the project, if approved and operating, to check the emissions, discharges, or hazardous chemicals/wastes as often as I believe is necessary, but, then again, there are those pesky regulations with holes in them....sigh.

Also, Invenergy produced on line a job availability form on line dated September 4, 2015. This is how sure they are that this project will be approved by the RI EFSB. I found it on their web site in April 2016.

#### **HAZARDOUS CHEMICALS:**

Invenergy when asked about Hazardous chemicals that they will use in their proposed Project by Burrillville through the RI EFSB process, Invenergy's response was vague and did not list them all. They were asked about any chemicals used period. They said that they did not have to list them as they were not considered hazardous by the regulatory agencies. (They should have answered that question.)

#### **HAZARDOUS WASTE:**

Nowhere in the application does Invenergy state anything about solid waste coming from the stacks, and there will be ... especially from diesel running units. (Again, I researched this.) Regardless of whether or not the solid waste contains toxic hazardous metals or whether or not these have to be reported to a regulatory agency, this information should be in the application. Nowhere in the application does Invenergy mention <u>any</u> specific potential solid hazardous wastes. (Even OSP, in its EIS of 1988, stated information concerning the solid hazardous wastes.)

#### **AQUEOUS AMMONIA:**

Another concern that I have is the fact that Invenergy will use 19% aqueous ammonia. Invenergy avoids their need to comply with EPA regulation 40 CFR Part 68 by using <20%, but they still have to comply with OSHA, SARA Title III, RCRA, and other regulations. Invenergy (through ESS Group, Inc.) states that the EPA does not require a Risk Management Plan for 19% aqueous ammonia because it [EPA] does not consider it to be a "public risk" if it is released. They do not need a Risk Management Plan but a release of the 19% aqueous ammonia is INDEED a "public risk"! Frankly, though the EPA does not mandate any company using 19% aqueous ammonia to comply with 40 CFR Part 68, I am sure that the EPA does know that ammonia is very dangerous. Just look up a material safety data sheet to see. Not only is 19% aqueous ammonia dangerous for humans, it is dangerous for the environment (wetland creatures, groundwater contamination, gaseous release to the atmosphere, and more)! Although ammonia is not listed on the EPA's "Non-Criteria Pollutants", the fact remains (in Invenergy's application, Table 2 of the Air Emissions section) that they anticipate an estimate of 81,240 lbs/year of ammonia emissions...and this is for normal operations and NOT an accidental release! This does not include any "normal" releases from the 40,000 gallon storage tank! There is no mention of any monitoring devises for the storage tanks or anywhere in the Project site buildings.

#### **LOCAL PROPERTY VALUES:**

Local property values in Burrillville have already started to go down. Invenergy says that this will not happen. At least when Ocean State Power applied for siting, they were honest (saying that they anticipated that property values would go down – in the EIS 1988) and made provisions on their own. They did not wait for the town to wrangle them down into submission. Ocean State Power did over and above what the regulations stated. Sure, they wanted to be sited in Burrillville, but they did not have to be honest. It is obvious to me and should be to anyone who reads and understands the proposed Project's application that Invenergy is only using estimates and not being honest through omission and hiding important things. How can this company be trusted with our health and our environment's health?

#### NOISE:

Burrillville has its own noise maximum level of 43 dBA (listed in its noise ordinances). Anything to do with Burrillville's ordinances is out the window. I get it. On page 1 of Appendix E ("Noise Assessment Report"), it states that "a review of approvals for combustion turbine merchant power projects similar to the CREC was conducted to determine noise limits imposed on other power generating facilities." It goes on: "Those limits ranged from 40 to 49 at the nearest residences." And on page 10, Table 4 – "Summary of Residential Noise Level Limits from EFSB Approvals", it shows Ocean State Power, RI Hope Energy and Tiverton power plants, their dBA levels at the nearest residences, and the distance to nearest residence. The power plants listed are not "similar" to Invenergy's proposed plant by any stretch of the imagination. Invenergy's proposed project will have the capacity to produce over 50% more the MW's that the other listed plants have. Then on page 12, Table 6 – "Octave-Band Noise Level Limits by Other Regulating Bodies (dB)", Invenergy lists the levels of 2 large cities, 2 urban counties, and 2 states! I could not believe my eyes!!!! In the first place, there is a difference between 50 dBA of nature noise and 50 dBA of city noise! Burrillville is a rural town!

Invenergy did ambient noise testing as required for siting. On page 16, Invenergy states that the ambient noise level study was "conducted from April 21<sup>st</sup> through April 24<sup>th</sup>, 2015. So, initially, one thinks that it was done for 4 consecutive days; however, on page 18, it states: "No manual measurements were collected during the day on April 22 due to rainfall." Also, there were no times listed for when these measurements were taken.

Okay, they seem to have done their due diligence with the noise testing. The closest residence was 2,300 feet from the site. However, what is the distance from Invenergy's proposed Project from the closest management area? They did not do any noise testing there. I suppose they don't think that anyone will be in that Management area.

On page 20 of Invenergy's Noise portion of its application on Table 20, they list a "summary of audible sources". At location M1, M2, and M4, they list "Compressor station". They list the nighttime and daytime levels. Are you kidding me? I can hear that compressor station from my house and I live 3 miles ("as the crow flies") from the compressor station and there are multitudes of trees, hills, and houses between the compressor station and my house!!!! I do not believe those levels at all. Perhaps these levels were taken when the compressor station was just running at a low level, but I do know that it often blows off a huge amount of natural gas! And it is loud!!!!

Also, on page 36, the application discusses the World Health Organization's report which, apparently states that the difference between having windows closed reduces the dBA by 15dBA. So I guess all the abutters and close residents will have to sleep with their windows closed all summer? Again, I cannot believe this company!

OSHA's Daily Permissible Noise Level Exposure chart is very interesting. It lists the sound level in dB's and corresponding hours per day in order to protect the public. This is my concern. I have learned through my intense research and verified by reading page 35 of Invenergy's application that the Auxiliary Boiler is important when it comes to noise. On page 35, it states: "The auxiliary boiler will only operate prior to and during gas turbine startup periods and will not operate during normal, stead-state gas turbine operating periods. Invenergy is proposing to permit the auxiliary boiler to operate up to 4,576 hours per year, the equivalent of up to 8 hours per day during weekdays (at night) and through the weekends." If you go back to the Noise portion of Invenergy's application on page 32, it states that the "Auxiliary Boiler Building - at the Interior Wall" will produce a noise level of 95 dBA. However, as stated on page 13 of the EFSB application (beginning), there is only one listed auxiliary boiler which (I learned by reading up on the "new" natural gas power plants like Invenergy) fires up one turbine at a time. (John Niland, himself, stated that the start-up of the turbine would produce between 95 and 100 dB.) On Table 5 "Cavity Analysis" it states that the Auxiliary Boiler will be located 328 feet from the property line but it does not say the direction (north, south, east or west). Okay, Invenergy states that the auxiliary boiler will run 4,576 hours/yr, but it does not say (that I could find) in its application how long it will take to start one turbine. (The application does state, however, that it would take minutes/hours compared to older natural gas power plants that take up to 24 hours to start up.)

So I want to go back to the OSHA standards. They state that a person can be exposed to 90 dB for 8 hours before hearing loss would occur; 92 dB for 6 hours; 95 dB for 4 hours; 97 dB for 3 hours; 100 dB for 2 hours; 102 dB for 1.5 hours; 105 dB for 1 hour; 110dB for ½ hour; and 115 dB for ¼ hour or less. The NIOSH daily permissible noise level exposures are even more stringent and their levels are in dBA's. So if the start-ups of this proposed plant are so loud on site and there is wind blowing towards the residences, these residents could be at risk for hearing loss. Invenergy falls back on reduction of noise levels due to air absorption, meteorology, ground absorption, and distance. AND, ONCE AGAIN, THE NOISE FROM THE PROPOSED PROJECT ARE **ESTIMATES**. THEY DO NOT KNOW FOR SURE! Plus add the noise from the compressor....sigh.

#### WETLANDS:

This is what the RI DEM states about the importance of wetlands as quoted from "Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act": "Freshwater wetlands are ecological systems performing functions that directly benefit the health, welfare and general well-being of people and the environment." Further it states that they "perform specific functions and support specific values, including but not limited to the following": 1) wildlife and wildlife habitat; 2) recreation and aesthetics; 3) flood protection; 4) surface water and groundwater protection; 5) water quality protection. It also continues and I quote: "Consistent with the purposes of the Act, it is the public policy of the State to preserve the purity and integrity of all freshwater wetlands in Rhode Island. Random, unnecessary or undesirable alteration of any freshwater wetland is contrary to the Act and not in the best public interest because of the adverse impacts of such alterations on wetland functions and values. The Department will deny any application for a project that will so alter any wetland."

Nowhere in the above state regulations did I see an exemption for electrical power facilities, but all these regulations are interconnected and I did see that there are permits to alter wetlands. And this, of course, is a power plant.....sigh....

But my point is that the RI DEM is dedicated to protect all wetlands in Rhode Island. If this proposed power plant is approved by the RI EFSB and the director of the RI DEM is part of this siting board, I hope that she remembers the regulation's main point—protect the wetlands at all costs.

There are regulations about lighting directed into wetland areas. There is no mention of this in Invenergy's application.

One thing that is annoying to me concerns the replacement of trees and shrubs, etc. once the construction laydown area is removed. The RI DEM regulations do not state that if the first set of replacement plant-life die that Invenergy will have to replant them again.

The wetland areas that will be destroyed in the "construction laydown" area can never truly be replaced. As a matter of fact, in Invenergy's application, the number of wetland area acres negatively impacted due to this "construction laydown" area is not listed. However, on page 12 of the application, the wetlands are shown along with the Project boundaries (Figure 3.4-3 "Site Plan") and you can see the laydown areas and the wetlands that will be negatively impacted; however, no acres are listed except for the total 57 acres of the Project site. But in a "preliminary—not for construction or recording" figure (labeled "Construction Facilities Plan") that was found on the Burrillville town website at www.ripuc.ri.gov/efsb/efsb/SB2015 06 Drawing%20Package.pdf, and it identified the first laydown area as being 20.50 acres and the second laydown area to be 4.78 acres. You can plainly see the wetlands under these laydown areas. It can be plainly seen that the wetlands under the first laydown area (total of 20.5 acres) are approximately 50% of that total area which comes to approximately 10.25 acres and the wetlands in the second laydown area look like approximately 40% of the 4.78 acres which is 1.9 acres. This brings the total negatively impacted wetlands in both the "construction laydown" areas to 12.15 acres. What really disturbs me is that this "preliminary" map/figure was not included in the application. Another interesting thing is that Invenergy uses a "National Wetlands Inventory (NWI) Map" (Figure 6.3-1 on page 57 that was done in 1979. Then they include on page 59, Figure 6.3-2, a "RI DEM Wetlands" collected in 1988. It looks to me that Invenergy does not want anyone to know exactly how many acres of wetlands are going to be negatively impacted by their "construction laydown". I know that Invenergy states that they will try to restore these wetlands (after construction is completed) as much as possible; however, on page 65 of the application it states: "Despite these measures, permanent and temporary wetlands impacts will occur because of the proposed project." Okay, so they are admitting that some of these wetlands will be permanently destroyed? But they do not state the acres of permanent impact.

#### TRAFFIC:

I have no comment about the traffic except that during construction it will be horrible for downtown Pascoag as well as Chepachet! I am not even sure if those tankers and 18 wheelers will be able to make the left turn downtown Pascoag. One point: On page 17, the application (3.9-1) states: "The access road connects the Facility to the Wallum Lake Road (Route 100). This road is designated as a Class A road to handle equipment loads during and after plant construction." I needed to find out what a Class A road was so I emailed the RI DOT. This is what Ms. Lindsey M. Sasso stated: "The term Class A road may be somewhat archaic; my understanding of Class A road is that it is a road with a durable hard improved surface such as concrete or asphalt, drainage considerations and receives regular maintenance. The Class A road may cross a state or connect major cities or regions. The federal-aid primary or "A" system was established by the Federal-Aid Highway Act of 1921." She could not find any information about the weight capacity limits on Class A roads. I know Wallum Lake Road and it does need maintenance. Route 100 starts in Chepachet and it is in terrible shape. And speaking of weight limits, the bridge in downtown Pascoag (across from CVS) does not have a weight limit sign on it anymore. However, on page 83, the application states: "Pascoag Main Street, located in Pascoag, RI, makes up a portion of Route 100. This portion of Route 100 includes a bridge with a posted 15 ton weight limit." I looked up the weights of cement trucks and they can weigh, fully loaded, over 40,000 pounds (20 tons) and the weight of a tanker hauling 10,000 gallons of ultra-low sulfur diesel will weigh 70,000 lbs (35 tons) (NOT including the weight of the tanker itself). I do not know the weight limit on the bridge downtown Chepachet as it is not posted and there is no mention of this bridge in the application. (I did email the Glocester's DPW about this and they never replied.) One more point about traffic: On page 90, the application states that concerning "Concrete Work Deliveries" the majority of deliveries will be from 7:30 AM to 4 PM, but it further states: "The exceptions would be for the delivery of major foundations shown in Table 6.8-3. These major placements with the Ready Mix suppliers may need to be made in the early hours of the day, starting at 2 or 3 AM and possibly only on Saturdays to reach the required productions." Wow! This will certainly wake up everyone who lives on the route of these trucks. Oh, but this has nothing to do with regulations?

# **LOCATION OF MANAGEMENT & CONSERVATION AREAS:**

All that I can say about this item is that there are thousands of acres of management and conservation areas very close to the proposed project. George Washington Management Area/Pulaski Park is the closest and the largest (~4,000 acres) and its boundary is 882 feet from the proposed Project's property boundary. It is so close that a football player could throw a football from the property boundary of the proposed project and someone on the boundary of that management area could easily catch it. The Black Hut Management Area is 1,853 acres and sits less than 4.5 miles from the Project. The Black Hill Management Area is 2,049 acres and sits 1.6 miles from the proposed Project. Even the Quaddick State Park in Connecticut is 466 acres and sits 2.2 miles from the proposed Project. The Feinstein Youth Camp is 880 acres and is less than 1.5 miles from the project. I still cannot believe that the site is being considered for siting...just because of this.

## **ENDANGERED WILDLIFE AND PLANTS:**

On page 73 there is a list (Table 6.6-1) of "Wildlife Species Observed at the Proposed Project Site" which continues on page 74. On page 74, the Silver-haired Bat is listed as being heard. But then at the bottom of the list it states: "Silver-haired bat call signature could not be confidently differentiated from the Big Brown Bat calls and therefore the presence of the silver haired bat is potential." What? On that list is the Black-throated Blue Warbler which as you know is on the RI "threatened list". It is also on the CT "priority list". Also, just so you know (and maybe you do), the Canada Warbler is on the CT "priority list". The Eastern Box Turtle is on the Maine "special concern list" as well as the MA "special concern list". On page 75 is a list of "Wildlife Species Expected to Occur at the Proposed Site". First of all, I looked up the reference "New England Wildlife: Habitat, Natural History, and Distribution" and this list is not complete. The Brown Thrasher should be on this list which, by the way, is of "special concern" to CT as well as the Eastern Meadowlark The Red-headed Woodpecker is should be on this list. I have seen all three of these birds in my backyard. The Red-headed Woodpecker is "threatened" in the states of RI and CT. And there are countless birds that should be on this list that are not concerned "threatened" or of "priority".

On page 77, the application states: "Multiple pairs of black-throated blue warblers, which are listed by RIDEM as a threatened species in the state, were observed displaying territorial breeding behavior in the general footprint of the generation facility during the 2015 breeding season. The application continues and gives reasons why the destruction of this ecosystem would be good for other species.... Come on. Then why do the survey in the first place???????

And even though the Bald Eagle was not seen flying over the proposed Project site, the species has been seen multiple times by myself over Pascoag Reservoir. Other people have seen it flying over Wilson Reservoir. The Bald Eagle, as you know, is listed as a species on Rhode Island's "greatest conservation need" list. Also, on page 74 (species observed) is listed the Black and White Warbler, and Canada Warbler, which are also on Rhode Island's Fish and Game's "greatest conservation need" list. Upon looking carefully at the RI Fish and Game "greatest conservation need" list, I found

many birds that were not observed at the proposed Project site, but I have seen them in my backyard. (I am an avid birdwatcher.)

As far as mammals observed, the Big Brown Bat and Hoary Bat were heard, and these species are also listed on the RI Fish and Game "greatest conservation need" list.

The Eastern Box Turtle was observed at the site and it, too, is listed on the RI Fish and Game "greatest conservation need" list.

There is no mention of how many days the observer(s) were at the proposed Project site. So I must assume that they/he/she were/was there for one day.

All I can say about the "Primary Plant Species Found at the Proposed Project Site" is that six of the plant species are on the RI DEM list for wetland species and ten of the plant species are on the University of RI wetland list. The fact that the Red Maple is found "site-wide" is enough. The whole proposed site is sitting on wetlands.

# ISO-NE & INVENERGY'S CLAIM THAT NEW ENGLAND NEEDS MORE MW's:

The RI PUC would know better/more than me. But I have done extensive research for weeks online about this subject. Let me begin with this point. Invenergy states that there will be "4200 MW coming off the grid by 2019". Well, by the time the application was submitted to the RI EFSB, 1922 MWs (5 power plants) were already shut down (2014—a whole year before Invenergy submitted their application). One power plant (674 MW) was shutting down but now it is converting to natural gas and will be operational by 2017. That leaves 2215 MW's (2 power plants) retiring by 2019. As far as "at risk" power plants go, I found that only 3 were really at risk totaling 1256 MW's. The other "at risk" power plants that are shown on the map provided by Invenergy (ISO-NE as well) are not because 3 are converting to natural gas and the others were not "at risk" (at least that I could find). I found a report, "Power System Reliability in New England" which listed 7 newly approved natural gas power plants and 1 solar farm that will provide 2462 MW's to the grid between 2018 and 2020. I also found potential (in the process of approval) solar & wind farms totaling approximately 40 MW's. My opinion is that the MW need number from Invenergy (and perhaps ISO-NE) is elevated. (Of course, I do not have access to documents/reports that the RI PUC does.

#### **SMOKE AND MIRRORS BY INVENERGY'S PR:**

Invenergy's PR person is doing a great job! She or he has worded propaganda in such a way that the layman will believe it. For example, Invenergy stated that one of the environmental benefits of the proposed Project was that they would remediate the contaminated well. Sounds great, right? But the well is attached to the aquifer which is huge and that there are thousands of people who are drawing from that subbasin (portions of Burrillville, Glocester, Douglas, & Uxbridge) via private or public wells. I have spoken to many people who quote that NON-fact, and after I explained why Invenergy's statement was wrong, these people were very angry. There are so many other examples of this nonsense. The fact that they stated: "This plant will help facilitate the integration of more renewables into New England's grid by providing readily available power when the sun doesn't shine and the wind doesn't blow." It will NOT facilitate the integration of more renewables! Invenergy has three times put in the <u>Bargain Buyer</u> the wrong days, dates, and locations of meetings concerning the proposed project. If a company is so incompetent as to get dates, days and locations wrong, how can anyone trust it? If a company is so sly as to publish the dates, days, and locations wrong in order to stop the opposition of their project, how can anyone trust anything that it says or writes in the application?

#### \*\*\*\* No more science \*\*\*\*\*

I know that this is a very long letter, but I have been doing research on this whole thing for about 7 weeks. I put my "real" life on hold. I am tired...... so tired...... I hope that I have not offended anyone on the RI EFSB. That was not my intent. If I did, I apologize. You must understand how passionate I am about protecting Earth. I also know that much of what I have written above, some (if not all) of you already know. I do appreciate all that you folks do...on the Siting Board and also in your "real" jobs.

I get it. It's all about money....and electricity. But it is mostly about the money. Not for you folks (although I sincerely hope you are getting extra pay for being on the Siting Board). Invenergy wants to make money, Rhode Island will get tax money, and Burrillville will get tax money if this proposed power plant is approved. The Unions make money. Money, money, money.... But regardless, I hope that you folks do the right thing for the future of Earth. It does not matter how I look at this proposed Project. The fact remains that if this application is approved the Environment will suffer. The residents of Burrillville will suffer via health problems and noise. Other towns surrounding the Project will suffer. The property values will decrease, regardless of what Invenergy promises Burrillville in their tax treaty. The Clear River subbasin will suffer. I cannot find one single thing that is good environmentally about this. We all want electricity. But if this project is approved, it will deter renewables from coming into New England.

From what I have read in the application and the questions and responses via the RI EFSB process, Invenergy has no integrity. I am sorry. I had to say it. The non-facts being sent out to the residents of Burrillville on a continuous basis, the "odd" responses and non-responses to Burrillville's questions, and the wrong dates, days and places for meetings say it all. Also, if this company was truly on the up-and-up, it would go "above and beyond" the regulations. It would not fill up their application with words/phrases like "approximately", "potentially", "possible", "is expected to", "are projected to be", "anticipated", "are forecasted to be", "eventually", "predominantly", and "will tend to be". Invenergy has built very similar natural gas power plants. They broke ground for one in Jessup, PA which has the exact same processes and equipment. This is not their first rodeo. Yet, they fall back on the statements, "based on preliminary project equipment specification and emission estimates" and "subject to change as the project design advances". This really bothers me on an ethical level. When I was working as an environmental engineer I put everything I had (my heart and soul) to protect the environment, the employees, and the residents that surrounded the electroplating plant. If there was a problem, I stayed at the plant until the problem was solved.

So, members of the Siting Board, you have a decision to make. And I hope you take into consideration my opinion about the importance of integrity. I hope that you look beyond the regulations. This is an important decision not only for the town of Burrillville or Rhode Island. Your decision could change the course of history. You may not think so, but I believe it. Only the courageous are willing to do the RIGHT thing. How many brave soldiers have died to save our country during its history?

We all have a finite amount of time on this planet. When our time comes, we will be judged **NOT** by the amount of money we had, but what we did to improve the lives of future generations. And in order to do that, we must protect the environment, especially by those special people in the highest position of power. You folks are in just that position. Each of you have a choice.....a decision to be made. I know what decision I would make.

Rhode Island is a state of firsts, one of which was being the first to officially declare their independence from England. Wouldn't it be great if Rhode Island was the first to officially and legally declare its independence from fossil fuel?

It is the smallest state, but it has a big heart. We all have big hearts and we all do the best that we can. I believe that. But when a monster comes into my house, I must do everything in my power to slay it. My house is not just Burrillville, or just Rhode Island, or just New England, or just the United States. My house is Earth.

Respectfully submitted,

Stephanie L Sloman

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