



Burrillville Land Trust

Protecting our open space and rural character
PO Box 506, Harrisville, Rhode Island 02830
(401) 447-1560 • e-mail: proselli@cox.net

March 7, 2016

BURRILLVILLE LAND TRUST Board of Directors

Doris Alberg
(401) 365-7273
dorisj1@cox.net

Robert Charpentier
(401) 568-8538
Robert_Charpentier@yahoo.com

Laurie Espinosa
(401) 441-3385
lgespinosa7@yahoo.com

Betty & Carlo Mencucci
(401) 568-8449
bmencucci@verizon.net

Paul A. Roselli
(401) 447-1560
proselli@cox.net

Donald Waterman
(401) 568-2077
dewaterman@live.com

Administrator Curt Spalding
US EPA Region 1 - New England
5 Post Office Square
Mail Code: ORA
Boston, MA 02109-3912

RE: the Burrillville Land Trust petitions US EPA Region 1 to conduct an Environmental Impact Statement for the Clear River Energy Center

Dear Administrator Spalding:


The Burrillville Land Trust petitions the US EPA Region 1 to conduct an Environmental Impact Statement of the proposed gas-fired power plant known as the Clear River Energy Center (CREC). The current application before the RI Energy Facility Siting Board and environmental assessment prepared by the ESS Group, East Providence, RI, lacks significant environmental information for administrators and regulators to make informed decisions on the impacts of the CREC. The BLT believes that without knowing the full range of biodiversity, water and air impacts that significantly affect the quality of the human environment, long term and long lasting socio and environmental harmful impacts will result. We are looking for the EIS to help decision makers learn about the positive and negative environmental effects of a proposed action, and propose one or more alternative actions that may be chosen instead of the actions described in the current environmental assessment report.

The Burrillville Land Trust bases its petition on the following:

- federal funds (Army Corps of Engineers) will be used to assess wetlands impact;
- federal funds (Federal Aviation Administration) will be used to assess smoke emissions towers height for aviation beacons;
- the current environmental assessment (performed by Invenergy) is wholly lacking in scope of biodiversity making conclusions inconsistent with current scientific findings;
- with the demise of the Rhode Island Department of Environmental Management Natural Heritage Program there is no state or federal agency to assess impacts to biodiversity and to give guidance to administrators in state and local agencies;
- the proposed power plant will occupy nearly 61 acres of contiguous forest in Northwest RI bordering Connecticut and Massachusetts for a total of nearly 200 impacted acres that includes transmission lines, staging areas, gas line and sewer line extensions and more;
- Invenergy is attempting to segment many of the components of the power plant to avoid a potential Environmental Impact Statement. The impact of the power plant, the additional power line, the withdrawal of water from the contaminated well, the use of the Burrillville Waste Water Treatment Plant must be considered cumulatively. To do otherwise would be to impermissibly segment the impacts of these projects. Federal court rulings and federal law are clear on this issue;
- the Blackstone River, a federally protected waterway, will be impacted from Clear River and Branch River tributaries from increased effluent from the Burrillville Waste Water Treatment Plant;
- MTBE - Methyl tert-butyl ether will be taken out of a contaminated well, filtered through activated charcoal with the contaminated charcoal transported by truck from the CREC to a toxic waste dump; and,
- the proposed CREC will be the largest gas fired power plant in all of New England. This alone warrants an Environmental Impact Statement

To date, no Environmental Impact Statement has been performed or suggested. The BLT believes that there is no state or federal agency charged with this type of scrutiny for this large a construction project. Impacts of the above issues have not been fully addressed to date. An analysis of these issues is attached to this letter for your review.

The BLT is looking for you, Administrator Spalding, to recommend that an Environmental Impact Statement be conducted for the Clear River Energy Center.

Sincerely,

Paul A. Roselli
President - Burrillville Land Trust

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
PETITION FOR AN ENVIRONMENTAL IMPACT STATEMENT ON THE
PROPOSED CLEAR RIVER ENERGY CENTER

March 7, 2016

Prepared by
The Burrillville Land Trust
board of directors and consultants

**PETITION TO US EPA REGION 1 TO CONDUCT AN ENVIRONMENTAL IMPACT
STATEMENT ON THE PROPOSED CLEAR RIVER ENERGY CENTER**

I. Introduction

The Burrillville Land Trust (BLT), a non-profit private land trust in the Town of Burrillville respectively files its petition to the US EPA Region 1 Administrator to open an Environmental Impact Statement file and conduct an Environmental Impact Statement on the proposed construction of the Clear River Energy Center, in Burrillville, Rhode Island.

On November 17, 2015, the Rhode Island Energy Facility Siting Board (EFSB) opened Docket No. SB 2015-06 Clear River Energy Center (CREC), regarding the application by Invenergy Thermal Development LLC (known here as Invenergy) to site a 900 megawatt (MW) gas-fired combined-cycle electricity generating facility (known here as the Project) just off of Wallum Lake Road, near the northwest corner of the Town of Burrillville, Rhode Island. Before the first EFSB public hearing on the application by Invenergy for the project, The Burrillville Land Trust filed a Motion to Close Docket SB 2015-06. The Motion to Close was found mute by the EFSB when the BLT's motion to intervene was denied.

Many of the items in the Invenergy application before the EFSB were wholly lacking in detail, clarity and scientific findings regarding biodiversity, socio and economic impact to the region, as well as jurisdiction over the Clear River, the determination of the use of Federal Funds for wetlands impact and smoke stack beacons, and the amount of offset necessary under the Section 404 of the Clean Water Act. The land trust believes that the lack of information from the environmental assessment leads the public and decision makers to conclusions that are inconsistent with current socio, economic and environmental research and scientific findings. This petition asks Region 1 to recommend the construction of an Environmental Impact Statement to clarify findings in the Environmental Assessment and to forward those findings and alternatives to all the appropriate

regulatory local, state and federal agencies. The BLT believes that the following areas should be studied in detail with the help of the Environmental Impact Statement:

1. There is no mention of Section 404 of the Clean Water Act revised in 2008 for mitigation of wetlands¹ in the over 450 page² Clear River Energy Center, Invenergy Thermal Development application or supplementary materials filed with the EFSB under Docket No. SB 2015-06.

Discussion of this subject is not abbreviated or incomplete. The information is entirely omitted.

2. There seems to be a confusing or an inaccurate calculation of the number of impacted acres for construction of a new 150-foot wide, 0.8 mile 345 kV overhead transmission line ROW.³

3. There is inadequate and missing information and data cited in the application (Docket No. SB 2015-06) as to the impact on biodiversity during construction and operation phases. This lack of information on impacts on biodiversity include: the continuous noise level exceeding background levels; impacts on biodiversity of two two-hundred foot CO₂ and ash emitting towers; impacts from two - one-million gallon ultra low-sulfur diesel fuel tanks; impacts from the air cooled condensers that are 150 feet wide by 120 feet tall; impacts from the affected areas including the construction site (67 acres)⁴, the surrounding impacted areas (83 acres)⁵, the new overhead transmission line ROW to the Sherman Road Substation in Burrillville, Rhode Island; impacts from a connection from the

¹ Section 404(b)(1) Guidelines. In 1980, EPA finalized regulations that constitute the substantive environmental criteria used in evaluating activities regulated under Section 404 of the Clean Water Act.

Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. In 2008, EPA and the U.S. Army Corps of Engineers, through a joint rulemaking, expanded the Section 404(b)(1) Guidelines to include comprehensive standards for all three mechanisms for providing compensatory mitigation.

1990 Memorandum Of Agreement (MOA) Between The Department of the Army and The Environmental Protection Agency. This MOA contains the policy and procedures to be used in determining the type and level of mitigation necessary to demonstrate compliance with the Section 404(b)(1) Guidelines. (Portions of this MOA that concern the type and location of compensatory mitigation are superseded by the above 2008 rule.)

² The page number associate with the narrative reference can be found on the application page itself and not part of the pdf application document.

³ If the new overhead transmission line is 0.8 miles long, as stated in the CREC application, that amounts to 4224 linear feet. If the corridor for the new transmission line is 150 feet wide, the product of 4224 x 150 amounts to 633,600 sq.ft. There are 43560 sq.ft. in one acre. This line would take up an area of approximately 14.55 acres. Not the 1.53 as stated in the application.

⁴ Clear River Energy Center application section 6.6.2.2 Impacts to Wildlife and Ecology p.76 paragraph 6

⁵ CREC application section 6.6.2.2 Impacts to Wildlife and Ecology p.77 paragraph 1 Invenergy states in this section that their own analysis indicates that "The existing forest interior habitat indirectly affected by the proposed limits of work includes an additional 83 acres." yet they do not provide any indication of the biodiversity impacts for this or for any of the proposed wetlands and forest disturbances.

CREC to the existing NationalGrid 345 kV line⁶, the construction of the switchyard, the new gas line connection to the newly re-constructed compressor station, the new facility access road, the construction of an underground pipe to a sewer main to the Burrillville Sewage Treatment Plant; and impacts from the construction of a 6.8 mile new 345 kV line along an existing 17.7 mile ROW constructed by NationalGrid as part of the Interstate Reliability Project.

4. Confusion over which State of Rhode Island RIDEM delineation of wetland resource areas should be used: the RIDEM's 50 foot perimeter or the new Wetland Setback Jurisdictional areas or current Town of Burrillville setback distances;

5. Notification and jurisdiction over the Clear River - a protected tributary to the Blackstone River - is under the Blackstone River Valley National Heritage Corridor⁷ and all appropriate permitting should be sent to the BRVNH; and,

4) During construction and operation phase, the Project would severely impact the mission of the Burrillville Land Trust in its quest to preserve and protect the rural characteristics of the Town of Burrillville⁸.

II. Section 404 of the Clean Water Act is missing from the application

Other Dockets before the EFSB⁹ have cited mitigation policies, licensing authority and permitting by the U.S. Army Corps of Engineers. Docket SB 2015-06 does not mention an offsetting mitigation process as a means to compensate for wetland disturbances during construction and operation of the Project. The BLT (a land abutter to the additional 6.8 mile new 345 kV line along an existing 17.7 mile ROW constructed by NationalGrid) also has a responsibility and vested interest concerning the Invenergy's construction, building and operation of the Project within the watershed and surrounding wetlands within and adjacent to the BLT properties and how our properties are impacted during all phases of the Project. The Environmental Impact Statement would help clarify

⁶ CREC application section 6.3.3.1 Permanent Impacts to Wetlands / Forested Wetland Conversion p.66 paragraph 1

⁷ SEC. 3031. BLACKSTONE RIVER VALLEY NATIONAL HISTORICAL PARK and specifically Sec. 3031(c)(2)(vi) from the 113th Congress, dated January 3, 2014.

⁸ Burrillville Land Trust web site, <http://www.burrillvillelandtrust.org/our-mission-history/>

⁹ Most recently the Interstate Reliability Project: a three state project, including Massachusetts, Rhode Island and Connecticut. Docket SB-2012-01 - Interstate Reliability Project - National Grid

impacts and suggest alternatives to each of the impacts to the construction and maintenance of the CREC. As in other construction projects where wetland disturbances take place, this Project *may* include what the EPA and the U.S. Army Corps of Engineers term an “unavoidable impact” to or near the surrounding existing wetlands. According to Section 404 of the Clean Water Act revised in 2008, the EPA and the U.S. Army Corps of Engineers jointly promulgated regulations that clarified requirements regarding compensatory mitigation... “*be required to replace the loss of wetland and aquatic resource functions in the watershed.*” According to these regulations, “compensatory mitigation means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of wetlands, streams and other aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved¹⁰.”

It is this expenditure of federal funds for the hiring, advice and reports by the U.S. Army Corps of Engineers that warrants a recommendation and construction of an Environmental Impact Statement.

Also, during the construction of a new transmission line connection, staging areas, road construction and more, existing wetland disturbances *may* also fall within Section 404 of the Clean Water Act as described above.

During NationalGrid’s construction of the Interstate Reliability Project in the Town of Burrillville, the BLT worked with NationalGrid in finding properties as part of Section 404 of the Clean Water Act.

This missing information in Invenergy’s application may be an oversight within the application or an effort to ignore part of the requirements for mitigation as required under Section 404 of the Clean Water Act.

¹⁰ Section 404(b)(1) Guidelines. In 1980, EPA finalized regulations that constitute the substantive environmental criteria used in evaluating activities regulated under Section 404 of the Clean Water Act.

Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. In 2008, EPA and the U.S. Army Corps of Engineers, through a joint rulemaking, expanded the Section 404(b)(1) Guidelines to include comprehensive standards for all three mechanisms for providing compensatory mitigation.

1990 Memorandum Of Agreement (MOA) Between The Department of the Army and The Environmental Protection Agency. This MOA contains the policy and procedures to be used in determining the type and level of mitigation necessary to demonstrate compliance with the Section 404(b)(1) Guidelines. (Portions of this MOA that concern the type and location of compensatory mitigation are superseded by the above 2008 rule.)

According to Invenergy's application, nearly 200 acres may be impacted with wetlands and forested wetlands accounting for nearly half of these 200 impacted acres. In their review of mitigation and wetlands offset projects, the U.S. Army Corps and EPA reviews each project on a case by case basis¹¹. In section 3.g. - Amount of Compensatory Mitigation from the document NEW ENGLAND DISTRICT COMPENSATORY MITIGATION GUIDANCE, the offset disturbances may be in the range of 2:1 to 15:1. For Forested Wetlands, for example, the offset ratios determined by the U.S. Army Corps of Engineers could amount to the preservation of a 15 to 1 ratio¹². For Invenergy's CREC, if the 100 acres amount of impacted forest wetlands is used, the result of the offset could be well over 1500 acres.

The Burrillville Land Trust respectfully asks the US EPA Region 1 Administrator to recommend and produce an Environmental Impact Statement based on the size of the wetlands disturbance and the amount of potential offset.

III. Biodiversity inventory is woefully under-reported and impacts to species missing

Sections 6.5 and 6.6 of the CREC application on Vegetation and Terrestrial Ecology provide inventory data concerning the flora and fauna at, and within the vicinity of, the project site as determined by ESS Group, the environmental consultants for this Project. In addition, these sections provide interpretation concerning the impacts to flora and fauna that will result from the construction of this facility as well as the construction of the facility access road, the new gas and sewage pipelines, the new 345 kV transmission line, the construction and maintenance of 2 one-million gallon ULSD tanks, two two-hundred foot particulate emission stacks, the 345kV access line to NationalGrids ROW and the staging area used during construction.

¹¹ The U.S. Army Corps of Engineers, NEW ENGLAND DISTRICT COMPENSATORY MITIGATION GUIDANCE, March 3, 2015 <http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Mitigation/CompensatoryMitigationGuidance.pdf>

¹² ¹² The U.S. Army Corps of Engineers, NEW ENGLAND DISTRICT COMPENSATORY MITIGATION GUIDANCE, March 3, 2015, p 16. TABLE 1 - RECOMMENDED COMPENSATORY MITIGATION RATIOS FOR DIRECT PERMANENT IMPACTS <http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Mitigation/CompensatoryMitigationGuidance.pdf>

At the onset, it should be understood that the inventory effort¹³ is well below the standards¹⁴ that would be expected when considering the potential impacts to biological resources¹⁵ from the construction and operation of a facility of this magnitude¹⁶. Moreover, the construction of this facility will disturb nearly 200 acres in one of Rhode Island's most rural areas with notably high biodiversity values. This disturbance demands that considerably more scrutiny of the impacts to biological resources is warranted. The application is inadequate as written. As a result the BLT is petitioning the US EPA for further study with an Environmental Impact Statement.

The poor quality of the inventory effort is reflected in the numbers provided within the Invenenergy application for the construction of the CREC. For example, in Table 6.6-1, a total of 25 species of birds were observed at the "proposed project site". In addition, according to Table 6.6-2 an additional 16 birds could be expected at the site, based on a single literature source, combining for a total potential avifauna of 41 species. However, based on data collected during the construction of the Rhode Island Breeding Bird Atlas¹⁷, as well as long term breeding bird surveys conducted in similar habitats on nearby state wildlife management areas, the number of bird species that should be expected to be utilizing this site is approximately 93. This discrepancy (only 27% actually recorded) is clear evidence that the ESS report on biodiversity is inadequate to make informed decisions on the merits of this application.

As shown in Table 1 (below) inventory inadequacies are apparent across all faunal groups, with only 45% of the expected number of vertebrate animals reported by ESS (only 22% when considering species actually observed on site by the consultants). Moreover, it is clear that no inventory effort was expended in determining the invertebrate fauna. Within this group only three insects are reported by the consultant based on casual observations, and no additional information is provided concerning other insects or any other invertebrate taxa. In a mature forest ecosystem of this

¹³ Biodiversity Inventory of Natural Lands: A How-To Manual for Foresters and Biologists, NatureServe Technical Report, July 2009
This reference provides a good example of what a Biodiversity Inventory should look like.

¹⁴ Rhode Island Natural History Survey, <http://rinhs.org>
This reference provides a good example of what a Biodiversity Inventory should take into account.

¹⁵ Alvarez, R.A., S.W. Pacala, J.J. Winebrake, W.L. Chameides, and S.P. Hamburg. 2012. Greater focus needed on methane leakage from natural gas infrastructure. *Proceedings of the National Academy of Sciences* 109:6435–6440.

¹⁶ Union of Concerned Scientists, Environmental Impacts of Natural Gas http://www.ucsusa.org/clean_energy/our-energy-choices/coal-and-other-fossil-fuels/environmental-impacts-of-natural-gas.html#.Vo8EXTaxHzI

¹⁷ Rhode Island Bird Atlas 2.0

dimension the potential number of invertebrate species expected would be more than one thousand.

The significance of deciduous forests especially is reflected in the number of insects identified as Species of Greatest Conservation Need (RI Wildlife Action Plan 2015) that inhabit the community types present on this site¹⁸.

Table 1. Index of inventory effort of primary faunal groups at the Invenergy project site, Burrillville, RI.

Group	Expected No. Species*	ESS Reported+	% Reported	SGCN**
Mammals	40	19	48%	13 (3)
Birds	93	41	45%	40 (9)
Reptiles	17	7	41%	6 (1)
Amphibians	15	7	47%	7 (1)
Total				
Vertebrates	165	74	45%	66 (14)
Invertebrates	?	3	?	65++

* Expected number of species based on inventories conducted by RI Natural Heritage Program, RI Natural History Survey, and other groups and individuals.

+ Number reported by ESS consultants (observed and predicted)

** Species of Greatest Conservation Need as identified in RI Wildlife Action Plan (2015). Numbers in () are SGCN species reported by ESS

++ SGCN invertebrates include those identified for the following habitat types: Beetles, moths, and butterflies of deciduous forests and shrub swamps/open wetlands; odonates of upper perennial rivers; stream organisms; sphinx moths; other beetles.

¹⁸ Rhode Island 2015 Wildlife Action Plan Revision, Rhode Island State Wildlife Action Plan (WAP) 2015. The WAP provides an assessment of a state's wildlife resources and the actions needed to conserve those resources. Preparation of a WAP is required of each state in order to be eligible for funding through the State Wildlife Grant Program, administered by the US Fish and Wildlife Service. A primary consideration of each state plan is the identification of *Species of Greatest Conservation Need*, which are those species rare and/or declining in the state. The original Rhode Island WAP was prepared in 2005, and recently revised in 2015. <http://www.dem.ri.gov/programs/bnatres/fishwild/swap15.htm>

Poor inventory effort is also reflected in the reported flora at the site. A total of 31 vascular plants are reported, which is at least 75% less than what the expected number would be. Based on plant inventory data collected in similar habitats by the RI Natural Heritage Program to classify natural communities in Rhode Island (Enser and Lundgren 2005), the expected number of plant species at the project site should be at least 300. A thorough plant inventory is especially necessary at this site because of the number of rare plant occurrences known to exist on surrounding properties where similar habitats are supported¹⁹. The northwestern part of Rhode Island is particularly significant to the preservation of the state's biodiversity because of its geographic position in New England where the relatively un-fragmented forest supports many species of plants and animals at the southern limit of their range. Many of these species will be undergoing additional stress in the coming years due to a warming climate and maintaining the current extent of forest in this area will be crucial to the continued survival of these species in Rhode Island. In short, the fragmentation limit has been reached in this corner of the state. The conversion of 67 acres of forest as anticipated by this project as well as the additional 83 acres of impacted forest, wetlands and forested wetlands and other acres impacted from road construction, staging, digging and clear cutting - according to ESS's review and by reference Invenenergy's application²⁰ - will be a significant impact alone. However, based on research widely available in the literature the construction and operation of this facility is likely to be a significant impact to an unknown extent into the surrounding ecosystems and to state and region biodiversity for decades to come²¹. Invenenergy's application suggests that the CREC may have a "life expectancy" greater "than 20 years and if market conditions are favorable the units could continue to operate for 30 or perhaps 40 years." This means that the impacts to biodiversity will continue during the life of the CREC. One has to look no further then other areas within the Town of Burrillville to see how long term industrial facilities impact rivers, streams, forests and the biodiversity within each of these areas²². The CREC will impact an area flowing into Massachusetts

¹⁹ *Rare Native Plants of Rhode Island*. Enser, R.W. 2007. Rhode Island Natural Heritage Program. Rhode Island Department of Environmental Management. Providence, RI.

²⁰ Invenenergy CREC application pages 76 and 77. Total impacted acreage of just these two sites amounts to 150 acres according to the CREC application.

²¹ Invenenergy application p. 123 9.4 De-Commissioning

²² MeTech Main Street, Mapleville, RI <http://www.epa.gov/sites/production/files/2015-11/documents/2015-ri-brownfields-fact-sheet.pdf>

and Connecticut. The necessity of an Environmental Impact Statement is warranted from a regional point of view.

Because of the poor inventory effort, it is difficult to thoroughly examine the impacts of this project on biodiversity both at the site, and more importantly off the site. In order to better assess potential impacts we need consultants who are knowledgeable enough to ask the appropriate questions, but it is clear from this application that ESS did not believe a thorough assessment of biodiversity (species, populations, communities) was needed. Rather, it appears ESS budgeted just enough time to prepare tables that are based on casual observations made by field people while conducting unrelated work on site.

Many of the questions that need to be asked (and answered) reflect the overall impact of shrinking a significantly-sized tract of forest and the resulting on-site impacts, but more importantly the extent of those impacts off-site into the surrounding landscape. As a guide for the EFSB, see Figure 1 which shows the landscape context within which the project site is located, along with identification of conservation lands within a several mile radius, and Natural Heritage areas (identified habitats for Rhode Island rare species). Its important to note here that the Burrillville Land Trust owns properties in the following tracts (some of these properties are shaded in dark greenish yellow and brown on the map shown below). The properties include the following:

Slone Preserve

Tax Assessor's Plat & Lot ID - 172/002

Acreage – 34.5

Interior property along Jackson Schoolhouse Road, Pascoag, RI.

Property on South Shore Road near Wallum Lake

Tax Assessor's Plat & Lot ID - 034/028

Acreage – 18.26

Property on South Shore Road opposite Wallum Lake

Grace Note Farm

Conservation Easement owned by the Burrillville Land Trust

Tax Assessor's Plat & Lot ID - 206/010

Acreage – 11

Book & Page – 619/42

Property on Jackson Schoolhouse Road, Pascoag, RI

Edward D. Vock Conservation Area

Tax Assessor's Plat & Lot ID - 188/003, 188/007, 188/010

Acreage – 86.0206

Property on Jackson Schoolhouse Road, Pascoag, RI

The State of Rhode Island has a conservation easement on this property. That is why it is listed as state conservation land on the map below but this property is indeed owned in fee simple by the Burrillville Land Trust.

Saletnik parcel

Tax Assessor's Plat & Lot ID - 188/002

Acreage – .51

Property on Jackson Schoolhouse Road, Pascoag, RI

Former Brown University Property

Tax assessor's Plat and Lot ID – 189/001

Acreage: 54.70708

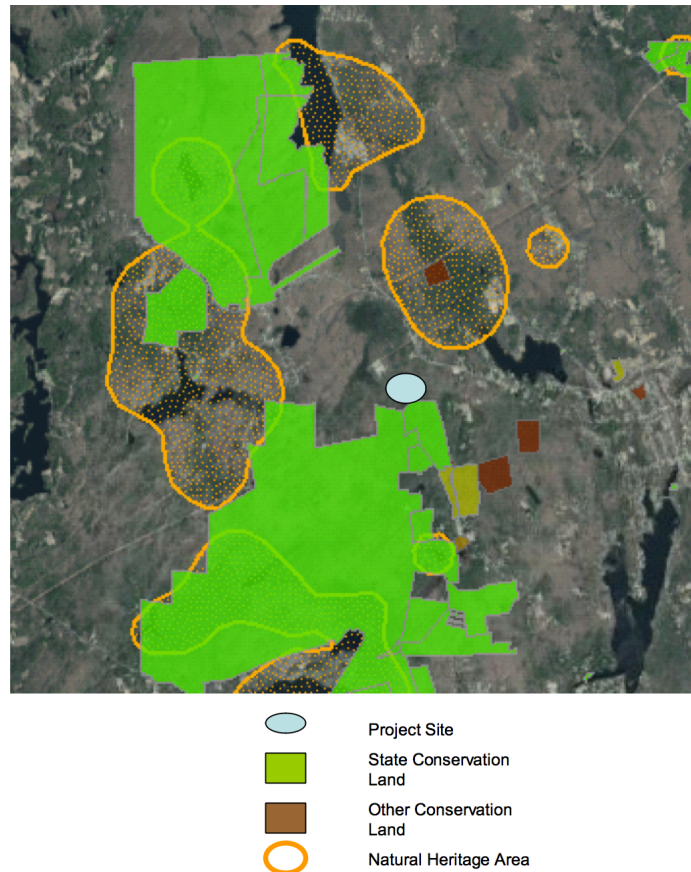
Clear River Property - this parcel abuts land used for the proposed

345 kV overhead transmission line ROW

Tax assessor's Plat and Lot ID – 103/001

Acreage: 20.51889

Property on Wallum Lake Road, Pascoag, RI



Natural Heritage Areas include known occurrences of state and federal rare, threatened and endangered species. The polygons in Figure 1 depict the estimated extent of rare species populations, although in most cases inventory and habitat assessments are needed to accurately determine the current status of individual populations.

Please note that there is no indication that the consultant requested information regarding the presence of rare species on site or within a reasonable distance of the project by consulting the Natural Heritage database²³, or any other reference. If they did request the information, they did not include the information in their report or in the application.

This information has been available for more than 30 years and is commonly accessed by many users. Since the demise of the Natural Heritage Program within the Rhode Island Department of Environmental Management there is no other entity within RIDEM available for providing expert opinion on the impact of projects to rare species and biodiversity. The department of Fish & Wildlife

²³ Rhode Island Natural Heritage Program <http://www.dem.ri.gov/programs/bpoladm/plandev/heritage/>

can address those fish and wildlife species that most concern them as a management agency, but do not have the expertise to address the full sphere of biodiversity. Zoologists, botanists, and community ecologists, not managers, are necessary and there is no one at DEM or any other state agency capable of addressing biodiversity. However, despite the unavailability of interpretation, information on the presence of rare species on or near sites is readily accessible, as shown in Figure 1 which was prepared from information currently found on the environmental resource maps available on the RIDEM web page.

The Burrillville Land Trust is asking that this glaring oversight and lack of due diligence on the part of Invenergy to list the impact over such a wide area be part of the Environmental Impact Statement. Remember, the impact for construction of the CREC, staging area and all the other disturbances to forests and wetlands amounts to nearly 200 acres. To put this in perspective, the Burrillville Land Trust owns a little more than 212 acres. That means that nearly all of the 16 years of efforts in working towards saving land for conservation, building large tracts of contiguous forest and wetlands, species habitat protection, maintaining the rural character of the Town of Burrillville, will be wiped out with the construction and biodiversity degradation of the CREC

In constructing our petition to the US EPA Region 1, the BLT asked our consultants, biologists, foresters and board members skilled in local plant and animal species to make recommendations to our board in other areas of concern NOT addressed by the Invenergy's application before the EFSB.

Here is what they have come up with:

1. What will be the effects of noise on fauna in the surrounding landscape? We should remember that although 47 decibels may be acceptable for the purpose of permitting, this relatively rural part of the state has not been previously subjected to this level of noise on a continual basis. A review of the literature will easily locate research concerning noise and disturbance to wildlife. There is no mention in Invenergy's application of what the impact would be of a constant noise level of 47 decibels.

2. What will be the impact to migrating birds and bats caused by two 200' stacks emitting nearly 814 lbs/MW-hr (net) (pounds per mega watt hour)²⁴ average CO₂ emissions rates?

²⁴ Invenergy CREC application p.34 Gas Turbines/HRSGs paragraph 5

The U.S. Fish and Wildlife Service has determined that collisions with manmade structures is a leading cause of bird and bat mortality²⁵, and there is considerable research on this topic²⁶. There is no mention in Invenergy's application of the impact to both diurnal and nocturnal species from the construction and operation of two GT/HRSG stacks, 200 feet above grade. In their application, Invenergy admits that the stack "must" be subject to rules from the Federal Aviation Administration and may require lights on top of each stack²⁷. The Invenergy application lacks this impact information. The required involvement of the FAA necessitates an Environmental Impact Statement for bird and bat mortality and resulting alternatives to the use of 200' smoke stacks.

In regard to bats, there is considerable concern throughout the Northeast concerning the decline of many species due to White-nosed syndrome. The consultants did conduct acoustic surveys to determine the presence of Northern Long-eared Bat (*Myotis septentrionalis*), a Federally Threatened species, during the summer breeding season (July 31-August 9, 2015); however, these dates are well out of the range for determining the presence of several additional species of bats that migrate through Rhode Island during spring and fall migratory periods, when they would be most susceptible to mortality from colliding with obstructions. Acoustic surveys during the appropriate seasons are needed to determine the potential impacts to both resident and migratory bat populations from both noise and obstructions. None of this information is in the application and no attempt was made to obtain the information. Federally protected species are regulated by state agencies. But when the state agency has no personnel to analyze the impacts, a federal agency must step in.

3. What will be the impact to populations of rare species? The application cites the presence of the Black-throated Blue Warbler at the project site. The breeding range of this threatened species is limited to the northwest corner of the state, and the success of this population is directly related to the amount of un-fragmented forest remaining in this part of the state²⁸. The project

²⁵ Erickson, W.P., G.D. Johnson, and D.P. Young. 2005. A summary and comparison of bird mortality from anthropogenic causes with an emphasis on collisions. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191.

²⁶ There are too many references to list here. Studies by U.S. Fish and Wildlife go back to 1978 and as recent as May 2015, <https://www.federalregister.gov/articles/2015/05/26/2015-12666/migratory-bird-permits-programmatic-environmental-impact-statement>

²⁷ Invenergy application p.113 6.12.7 bottom of page, However, since the stack is 200 feet tall, the Federal Aviation Administration (FAA) must be consulted to determine lighting needs. If nighttime lighting is required, additional analysis should be completed to determine the potential for nighttime visual impacts.

²⁸ Enser, R.W. and J.A. Lundgren. 2006. Natural Communities of Rhode Island. Rhode Island Natural History Survey. Web published at: <http://rinhs.org/partners-resources/download-pubs/>

consultants do recognize the potential impacts to this species, and other forest interior breeding birds, stating that: *“The reduction in the amount of interior forest habitat at the proposed Project site will negatively impact species that require interior forest habitat, such as breeding birds”* (page 78 of Invenergy application). However, the consultants also suggest that loss of forest interior birds will be mitigated, stating that, *“.....the net increase of non-interior (sic) forest habitat within the proposed limits of work may benefit other species that require early successional or edge habitats.”* It must be noted that this conclusion conflicts with the basic tenets of biodiversity conservation and decades of research in successional habitats and biodiversity by suggesting that the loss of some species will be offset by their replacement with other species. However, in this case that conclusion is based on the loss of specialized, habitat-dependent rare species and replacement by relatively common, generalist, opportunistic species. The result is reduced biodiversity. The Invenergy application makes no mention of this basic tenet of biodiversity conservation.

In its site selection criteria for new potentially acquired lands, the Burrillville Land Trust favors those lands that are already connected to existing conserved or preserved properties. Our goal is to make sure our properties are connected to other conserved parcels so that the end result is a conserved area that is bigger and contiguous, increasing in size as we acquire new lands. The loss of 61 acres in a rural contiguous forest area and the impact to an additional 140 acres is unprecedented and needs further study.

4. Another species of conservation concern that is likely present on this site is the wood turtle, a species also dependent on large tracts of forest as well as access to streams and rivers²⁹. The Clear River population has been consistently documented by observations over several decades – it may be one of only a few viable populations remaining in southern New England. In recognition of the well-documented regional decline of this species, a Conservation Plan for the wood turtle was recently published (Jones and Willey 2015). This document provides protocols for research, and management actions for conserving wood turtle populations throughout the region, and

²⁹ Jones, M.T. and L.L. Willey. 2015. Status and conservation of the wood turtle in the Northeastern United States. US Regional Conservation Needs Program, US Fish and Wildlife Service. The executive summary of this document states: “Abundant evidence strongly indicates that the wood turtle has undergone widespread population declines, and that it now occurs primarily in small, isolated, declining populations. This appears to be due in part to the fragmentation and degradation of its preferred riverine, in-stream, riparian, and upland habitats, but is exacerbated by heavy adult mortality from agricultural machinery, cars, and collection for pet markets. This (decline) is compounded by the wood turtle’s late maturity (15–18 years), low reproductive potential (one clutch of approximately eight eggs every one to two years), and high nest and hatchling depredation rates.”

should be referenced to guide assessment of the Clear River population. At a minimum, a concerted inventory effort should be made to determine the full extent of the wood turtle population, and especially how the wetland, upland, and riparian habitats at and adjacent to the project site contribute to the survival of this population. Along with a concerted inventory, the BLT recommends a relocation program for any and all species that are impacted by the extent of the proposed project. The BLT owns one property that may be impacted directly by the CREC: the Clear River property. In 2015, the BLT conducted a biodiversity survey of this property finding evidence of wood turtle population. The property and wood turtle populations could be impacted by runoff from the construction site, noise and air pollution and transfer of materials during operation of the CREC.

Other questions will undoubtedly arise when professional inventories are conducted and an Environmental Impact Statement is conducted.

IV. Conclusion

Since the application is so inadequate and missing so much information, it is difficult for the Burrillville Land Trust to examine and assess the impacts of the CREC. While the BLT has not taken a stand either way in favor of or opposition to the CREC, we are being denied an opportunity to respond in a meaningful way because of mis-information, inadequate information and the outright absence of information. We are also concerned that the EFSB does not have accurate or fully vetted information about the impacts of CREC to make an informed decision as to the permitting of CREC. Our concern is that the impacts to biodiversity, rules governing permitting and authority over the Clear River, the amount of buffer setback, the amount of offset and mitigation regarding Section 404 of the Clean Water Act, the impacts to the mission of the Burrillville Land Trust, the confusing impact acreage amounts, and more will never be known. There is no-one in local or state government authorized to make these connections and analyze the impacts of the CREC. What does remain in the application could be misleading and damaging to the environment for decades to come.

Finally, the Burrillville Land Trust petitions the US EPA Region Administrator to recommend and conduct an EIS soon. Both the EFSB, RIDEM and State leaders are pushing for and in favor of permitting with no one at the local or state level who is acting on behalf of the birds, the trees, and

all the life in this area. We are asking that the Environmental Impact Statement help give the natural world legal, ethical and moral standing.

Respectfully,

A handwritten signature in cursive script, reading "Paul A. Roselli". The signature is written in dark ink and is positioned to the left of the typed name.

Paul A. Roselli

President - Burrillville Land Trust

PO Box 506

Harrisville, Rhode Island 02830

proselli@cox.net

(401) 447-1560

cc. Burrillville Land Trust Board members