

Elliott, Amy H NAB

From: B. J. DeRonde [psychndesign@verizon.net]
Sent: Wednesday, February 22, 2012 12:16 AM
To: Elliott, Amy H NAB
Cc: B. J. DeRonde; derddafdl@verizon.net; PATRICIA PERLUKE
Subject: Fw: From Barbara DeRonde - Requesting Extension to Submit Additional Concerns about Bell Bend Pond Project

Attempting to resend again due to error in Amy Elliott's e-mail address.

----- Original Message -----

From: B. J. DeRonde <mailto:psychndesign@verizon.net>
To: amy.h.elliott@usacearmy.mil
Cc: B. J. DeRonde <mailto:psychndesign@verizon.net> ; derddafdl@verizon.net ; PATRICIA PERLUKE <mailto:ajlaquin@verizon.net>
Sent: Wednesday, February 22, 2012 12:07 AM
Subject: From Barbara DeRonde - Requesting Extension to Submit Additional Concerns about Bell Bend Pond Project

Dear Ms. Elliott,

Per our telephone discussion this morning and per your suggestion, I am hereby formally requesting a time extension, at least one more month, to submit additional concerns which we the owners of the property (the parcel which I and four other members of my family own, consisting of some 83 acres, plus or minus, having natural and man-made ponds (wetlands) on it with natural streams, and a large, man-made lake, stocked with fish, that is constantly fed and refreshed by these ponds, streams, and natural springs located at the bottom of the lake. Our parcel's boundaries are immediately adjacent to and contiguous with PP&L's boundaries on Confers Lane, Beach Haven, Salem Township, Luzerne County, PA. You and PP&L have informed us that PP&L (PA Power and Light) plan on constructing a huge pond by withdrawing millions of gallons of water from the ground on a daily basis in order to get to bedrock - solid ground on which they plan to pour their concrete foundation for their new nuclear reactor, called Bell Bend.

Though I am submitting some of our concerns here, we are still awaiting a final review by expert (Ph.D. level) environmentalists, whom I have contacted for assistance on this matter. This the reason for my request for an extension. Per my discussion with my environmental consultants, we have agreed to meet next week. I expect that we will be better informed to meet with them as a result of our forthcoming meeting this coming Thursday, 2/23/12 at 1:00 PM in your office, in State College, PA.

The following is a list of concerns I have thus far, which I have formulated for your review and submission to the State and Federal governments, including PP&L representatives to which, I hope, they will answer and comply. I am expecting that they will answer each of my concerns and those of the our experts both at public meetings and writing to you and me, so that the community may be made aware of these concerns as well.

(1) We are concerned that the pumping out of so much water (millions of gallons on a daily basis) will cause the level of water in our ponds, and the streams and the springs that feed our lake and wells to diminish in volume, even possibly become totally depleted by this man-made draught condition - the construction of this pond from local groundwater.

(2) We are concerned that the springs and pond that feed our lake may diminish to such a degree that they will no longer be able to feed, refresh our lake water, and keep it at the same level and quality it usually is to keep the fish, that we have stocked in the lake, alive and thriving.

(3) We are concerned that the quality of the water in our lake and wells will change in such a way that the water will no longer be safe, taste well, or be potable due to a higher concentration of salts and minerals.

(4) We are concerned that the quality of the water will change to such a degree due to a higher concentrations of salts and other minerals that the water will not be able to support human, animal, and marine life. We do not want to see our fish become stressed, diseased, and die as a result. (Our lake has been fully stocked since the 1970's and a balanced ecosystem currently exists. We do not want to see this ecosystem disturbed.) We do not want to see the blood pressure levels of the human beings and animals who live in the area increase due to an increase of salt in the water they drink. High levels of iron in water can also seriously impact the hearts of human beings, particularly those who have a pre-existing heart condition.

(5) A reduction in the water table in our land may cause our forest to become stressed, thus vulnerable to insects and diseases. We do not want to see our trees become diseased or die due to such a man-made draught condition. Our forest contains many conifers and hardwoods, some of our trees still need time to grow before being ready for harvesting and sale.

(6) We are concerned that our and our neighbors' water wells will become overly concentrated with salts and depleted, irreversibly negatively impacted, if millions of gallons of water are taken out of the local aquifers that supply our pond and springs, that feed our lake and our surrounding forest and that of our neighbors.

(7) We have not been told how long these millions of gallons of water will be held in the pond PP& L wants to construct. We would like to know how long PP&L plans on holding this ground water in their proposed pond?

(8) PP&L does not address how the environment and the water quality of our lake, ponds, and streams, and homeowners wells will be affected or impacted when this water from their pond will be released into surrounding streams? Relating to the discharge of this water, the following questions also need to be answered:

Into which streams will this collected groundwater be discharged ?

At what rate will it be discharged?

What will be the quality of this water when it is released back into the local streams and environment?

With what will this discharging pond water be contaminated?

Will the collected groundwater from the PP&L pond be treated in some way before it is discharged?

If it is to be chemically treated or filtered, how is this to be done?

Will our lake and wells be impacted so that the water is no longer safe to drink or safe for marine and animal life?

Could flooding to adjacent land occur, specifically our property? What would PP&L do to prevent and control such flooding on our land? On our neighbors' lands?

(9) How will the Susquehanna River be impacted by the withdrawal of so much ground water and how will it be impacted by the discharging into local streams of so much stored pond water by PP&L?

(10) Does PP&L plan on constructing any pipeline down Confers Lane to carry any of this water to the Susquehanna River?

(11) If they plan on constructing such a pipeline, where is this to be located and would it impinge or impact our land in any way?

(12) What kinds of pumps would PP&L be using Diesel or Electric? What effect would the noise of these pumps have on the local citizens?

(12) What does PP&L plan on doing to prevent any of the above mentioned possible adverse occurrences from happening?

(13) Is PP&L willing to pay beforehand for the testing of each and every landowners' wells, lakes, ponds, streams, and fish in the bodies of water owned by PP&L's neighbors so that baseline readings and reports can be established prior to construction of this huge pond?

(14) What kind of insurance policy has PP&L put in place to compensate each and every landowner for their land and property should PP&L contaminate the lakes, ponds, streams, springs, wells of neighbors or should PP&L cause to be diminished or depleted the level of water in their neighbors lakes, ponds, streams and springs? What size insurance policy and with whom does PP&L have in place such an insurance policy to pay for any damage caused by PP&L to the waters, ponds, springs, and streams located on the lands owned by Bob and Barbara DeRonde, et al. in the event that any aspect of our land, water features (man-made lake), and other sources of water, (such as ponds, springs, aquifers and streams), our fish, trees, soil, become harmed, polluted, or lessened in volume and quality by this aspect and any other aspect of the Bell Bend project?

(15) In the event of a disaster, what is PP&L willing to do that is better than what British Petroleum did for the people of the Gulf Coast when they polluted the waters and soil, thereby killing wildlife and breeding grounds for fish and other wildlife off the coast of Louisiana, in the Gulf of Mexico? The excuse that PP&L would provide the landowners the market value of their land and homes is not enough, particularly, in light of the fact that PP&L stands to make billions of dollars on the resources which their neighbors currently own.

In summary, the descriptions contained in PP&L's letter to me, the one which has the Susquehanna River Basin Commission's logo on it (in the upper right hand corner) and the Army Core of Engineers package (somewhat more descriptive) are rather vague in their description as to how and from where this water will be gotten and to where it will be discharged. They do not address how and from where this huge amount of water will be pumped out of the ground and sent to PP&L's pond. Their letters do not address the issue of possible depletion, resultant quality, and any possible contamination of the water in our lakes, water, springs, and ponds once this huge volume of groundwater will be pumped out of the ground. Nor do they address what will happen to the quality of the water in these resources when the pond is discharged into local streams and soil. How will our lake and fish be kept alive if there is no longer a sufficient amount of water to keep them alive. Currently our lake and ponds are refreshed by a continual flow of ground water from springs and streams. Ponds and lakes are living ecological systems that can be easily turned off (killed) but not turned on (brought back to life) easily again. What will happen to the natural and man-made ponds that have become wetlands, breeding grounds for birds and other fowl, on our land when PP&L causes them to become dried up?

How will the volume, availability, and quality of water for the community be affected, especially for those that rely on wells for their drinking, cooking, and bathing water? How will the wells of property owners whose boundaries are not adjacent to or contiguous with PP&L's boundaries be affected? What will happen to level of water available for everyone else to use in the community? Will the community be required to consume less water and buy more? From whom? Could the water and wells of nearby communities become polluted by the creation of this pond and the subsequent discharge of the water into local streams? What will be the quality of the water left for drinking, cooking, and bathing be in these places? What effect will the loss of the great volume of water have on the volume of water contained in DeRonde and others lake and in the springs and pond which feed their lake and the many fish that currently thrive in it? What will PP&L do to make sure that no harm comes to the ecology of DeRonde and other's lake, fish, trees & shrubs, and other living creatures on the

DeRonde and other's land? Will the blood pressure levels of our neighbors increase as a result of increased salt levels in their water? Could the quality of the water that supplies our lake, our wells, and the wells of our neighbors ever return to its existing quality level and when? Will the level of water in our lake be lowered? What insurance policies will PP&L purchase before commencing work in order to compensate its neighbors and the community in the event that harm comes to the natural and man-made features and resources (soil, water, fish, water level and quality, etc.) when it withdraws water from the ground, when it constructs its pond, when it discharges this pond water back into the surrounding environment, when it constructs its new nuclear power plant, and when it operates it? PP&L must be ordered to compensate its neighbors substantially for any injuries and losses to the natural life and natural resources and operations present or presently owned on the lands of PP&L's neighbors. PP&L must not be allowed to not simply pay the injured party or plaintiff, the simple market value of their land, for PP&L stands to make billions and billions of dollars on the operation of this new plant. PP&L must pay in excess of the simple assessed value as the value of this land to PP&L is far greater than it is to any other developer by the mere fact that PP&L and its very presence (close proximity) has made the land of their neighbors less valuable to anyone else other than to PP&L.

Please e-mail and send via U.S. mail your response relative to my request for an extension.

Thank you for your time. I look forward to meeting you on Thursday, Ms. Elliott.

Sincerely,

Barbara J. DeRonde

B. J. DeRonde

From: "B. J. DeRonde" <psychndesign@verizon.net>
To: "Elliott, Amy H NAB" <Amy.H.Elliott@usace.army.mil>
Cc: "B. J. DeRonde" <psychndesign@verizon.net>; <derddafd@verizon.net>; "PATRICIA PERLUKE" <ajlaquin@verizon.net>; "John Conrad" <jconrad@pvesheffler.com>
Sent: Friday, March 23, 2012 11:59 PM
Subject: Additional Questions on Bell Bend from Bob and Barb DeRonde

March 23, 2012 11:26 PM

Hi, Amy,

What follows here is more a less a list of additional concerns and questions we have about the siting of the proposed Bell Bend reactor and the proposed groundwater draw down issue.

You have received a letter from John Conrad, who represents us; however, John also wanted us to send you more questions and concerns, which he thinks need to be answered.

Sorry that we missed your calls yesterday. After leaving Berwick, PA, Wednesday night after (NRC Susquehanna's Performance Assessment Meeting), Bob and I drove to a day and evening long event near Rome, NY, a series of classes on sustainable architecture and construction, followed by dinner and a trade show at this fabulous resort. While in class, we turned off our phones, and subsequently forgot to turn them back on again until later in the evening. I suppose you were wondering where our addendum of questions and concerns about the Bell Bend project and the proposed groundwater withdrawal are. Could we ever forget this project? Could a mother ever forget her child? Never! Based upon Bob's calculation of 30 days from the cutoff date of midnight 2/22/12, our second cutoff date for this extension is midnight 3/23/12, which is tonight. We'll fax this to you tonight, in addition to emailing you.

Again, thanks again for giving us the opportunity to append a few more questions and concerns to those we gave you last month, when we visited you in State College at your office on 2/23/12. In addition to the remarks, questions, suggestions, and ideas posed by our hydrogeologist, John Conrad, of PVE Sheffler, which his office faxed to you yesterday, 3/22/12, we would like to supplement everything you have thus far.

Concern & Suggestion:

We learned Wednesday night at the NRC meeting that Steve Sorce, an active, concerned, and vocal advocate for the community never received a Public Notice package from you. When we told him that we had received a package because our property was adjacent to the project area, Steve said that his 60+/- acres were also adjacent to the project area. Amy, were you ever given Steve Sorce's name and address by PPL? If not, you should find out

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why. Steve is an experienced businessman and intelligent real estate appraiser. I think you should speak with Steve and his wife.

Concern:

We are concerned that the additional draw down of water from the Susquehanna will permanently impact the river and its ecology. The amount of water that is currently being taken out of the river plus what ever more

is needed by Bell Bend's reactor appears to be a serious issue. The demand that is created by fracking and now the additional demand due to Bell Bend, I suspect something is going to have to give. There is just so much blood that one can get out of a dying horse, the Susquehanna. With the huge volumes of water needed to do fracking, we suspect that fracking will take precedence over nuclear it appears removal of allot more water only seems to make a bad situation worse.

Question:

Because it was found that PPL is lax in a number of ways, (NRC's 2010-2011 Assessment), most importantly - correct and timely maintenance of their equipment, living next to an operation that is lax about such critical and vitally important things as equipment maintenance and applying and following correct procedures, makes everyone a bit nervous. If PPL wants to be a good neighbor, be perceived as having a social conscience, how could PPL management approve a site plan that would position its nuclear reactor within 1800 feet of our rear property line? Within in 2100 linear feet from our rear property line to the centerline of the reactor? The risk of having a nuclear accident in our community is very real, especially if PPL does not clean up its act when it comes to maintaining its nuclear equipment properly. PPL's image is changing. In short, we need to find another location for this new PPL nuclear power plant, especially its reactor. For PPL to site their reactor within 1800 lin. ft. of our rear property line is just far too darn close for the comfort level of any, reasonable and rationale human being, who values his life, his safety, and the value of his property.

Concern:

The Susquehanna River has the SRBC as its River keeper; PPL has you looking out for their land's interests, but we the people and property owners in Salem Township appear to have no one looking out for our interests and safety. The people and property owners on Confers Lane and in the area surrounding the proposed Bell Bend project area need to be protected from those who would make money off nuclear power, for it may be these very same people who might abandon them if a nuclear accident ever occurred or if PPL were to go bankrupt as a result of an accident.

Question:

Who's looking out of the interests of the people and their property in Salem Township and

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Luzerne and Columbia Counties? Is there no setback requirement from adjacent property owners' lines when a corporation decides to position a nuclear reactor on a proposed nuclear plant site? No one has been able to tell me what that setback requirement is. Why not? Is it a secret or are there no limits on how close a reactor can be from a person's home? Do reactors matter more than people? Can you find out this answer for us, Amy, and can you provide us with a hard copy of the regulation?

Comment:

If it were not for PPL, we and a few others would not have to spend so much of our time working diligently and so hard to make sure that the people on Confers Land and the surrounding area are not harmed by this project. To protect the people and average property owners in Salem Township, assistance is needed in the way of funding to hire lawyers, engineers, and scientists to be the people's eyes and ears in the project area and in their dealings with PPL. There are bound to be problems and cost over runs in a project this large. With cost over-runs, this projected cost of Bell Bend is expected to be around \$13-\$15 billion. Because it is PPL, who is causing all of us this grief by choosing to construct a nuclear plant in our backyard, it is incumbent upon PPL to pay for the needed consultants and lawyers to look out for and protect the people and property of owners while this project is underway. The work of the consultants would commence right now and continue throughout the entire plant construction time period, that is, unless this project is canceled. PPL needs to come to an agreement with us and the citizens of Salem Township now.

Concern & Request:

One of our neighbors on Confers Lane reported to us last Sunday that their water turned rusty red for quite a few days after PPL had done some drilling last year on the proposed site last year. Also one little baby, who lives on Confers Lane, the grandchild of my next door neighbor, was born without a thyroid. The odds are about 1:4000. Radioactive iodine is one possible cause according to the texts. Given there is no prior history of hypothyroidism in the family, could there be any connection between this child living there and the Susquehanna plant? If there is a connection, the people of Luzerne and Columbia Counties do not need to be endangered and exploited.

Given this recent information, a large scale environmental impact study needs to be conducted on the lands of all adjacent owners and on at least one tier further out from PPL's project area. Though it may be hard to know how far and deep aquifers travel, the effect the groundwater drawdown on PPL neighbors' lands needs to modeled and understood now because PPL might be given their permit to pump million of gallons of groundwater out on a daily basis for more than 2, possibly 3 years, soon.

We (and our hydrogeological engineer) would like PPL to produce all of the detail studies, surveys, tests, analysis, reports that they have received from their contractors so that we can review them in depth. We need to understand why they find it necessary to locate their plant

structures so close to the property lines of people who own property on Confers Lane. No intelligent person, if they thought for one second about it, would want a nuclear reactor in their backyard. We do not want to see PPL or their equipment, especially their reactors anywhere near us. We would prefer it if another business were to move in, like the entire billing operation of PPL.

We need a business that provides a large number of permanent jobs, a business that would put the community on the map in a big way by bringing money and tourists into the community.

Question:

Also, because we want to be sure that PPL is not just cutting corners to save themselves few bucks at the expense of us and our property and our neighbors and their property in Salem Township, the surrounding borough, and Luzerne County, we need to verify all data for ourselves with the cooperation of PPL. And all of this work for our experts should be paid for by PPL. If PPL's project area consists of 2,055 acres, we need to understand why no other possible site could be found for their reactor; we need to see the hard data. Hopefully, another site can be found.

Question:

We still would like to know where all of the detailed data on this project exists. The members of the NRC stated this past Wednesday that PPL is the keeper of the detail on this project (the Central Repository) and that PPL only submits what it needs to submit when asked. We would like to review PPL's, the NRC's, and the EPA's hired hydrogeological engineers and technicians, who may have done studies, surveys, analyses for the Bell Bend project. We do not want summary studies of their consultants findings; we need the actual hard data from PPL's contractors and engineers; we want to review every piece of data from PPL to verify if all of their work, methods, and measurements and devices met or exceeded, the highest standards of their professional or industry. We want to make sure that the citizens and the governments of PA and the USA are not having the wool pulled over their eyes again. It's imperative to try and protect the unknowing, and naive citizens in Salem Township.

Thus, we are asking you to obtain from PPL, not merely summaries of data or previously submitted letters to the NRC, like those that can be found (possibly) in ADAMS online. We are asking you to obtain the actual detailed data that was collected, compiled, and analyzed by PPL's consultants and technicians prior to putting pen to paper to design Bell Bend's site plan .

We would like to see if the data pertaining to the terrain, the geology, and the hydrology of the Bell Bend reactor site is the best place for it on PPL's 2,055 acres. Could this reactor be relocated easily on the site plan? We would appreciate being given copies to read of all of the aforementioned and summary reports or letters sent to the NRC, EPA, USACE, and PA DEP, et al concerning site assessment and selection activity to determine if a better solution, a better site, could be found, especially one far away from people.

We also need to see hardcopy of all business case analyses comparing nuclear to oil, to coal, to solar, to wind, and to natural gas. We want to thoroughly understand their rationale for going with nuclear when 3 gas plants may be the most economical way to deliver the same amount of mega watts (1600) daily. A complete analysis would take into consideration the costs to the stakeholders, the American taxpayers, the residents of Columbia and Luzerne Counties, the rate payers in PA, and stockholders of PPL.

Thank you for your time,

Barbara and Bob DeRonde

3/23/2012



Civil Engineering
Surveying
Land Planning
Environmental
Municipal Services

March 22, 2012

Mrs. Amy Elliott
U.S. Army Corp. of Engineers
State College Field Office
1631 South Atherton Street, Suite 101
State College, Pennsylvania 16801

Re: PPL Bell Bend Nuclear Power Plant Application Number NAB 20008-01401-P13; Potential Impacts to Adjoining DeRonde/Perluke Property on Confers Lane, Beach Haven, PA

Dear Mrs. Elliott:

PVE Sheffler, LLC has been retained by Robert DeRonde, Barbara DeRonde and Patricia Perluke to provide engineering and environmental consultation relating to the proposed construction of a new nuclear power plant on land adjacent to the existing Pennsylvania Power & Light (PPL) electric generating plant. Mr. and Mrs. DeRonde and Ms. Perluke are co-owners of the former Berwick-Beach Haven Speedway located on Confers Lane, Beach Haven, Salem Township, Luzerne County, Pennsylvania. The northern border of the DeRonde/Perluke property adjoins the 2,055-acre Bell Bend site and is surrounded on three sides by the Bell Bend project boundary.

PVE Sheffler, LLC is an engineering firm with offices in Sewickley, Pennsylvania and Poughkeepsie, New York. We are staffed by professional engineers, surveyors, geologists and hydrogeologists with expertise in land development and associated impacts. I am a hydrogeologist with more than 25 years of experience as an environmental consultant, and am one of the principals of PVE Sheffler, LLC.

This comment letter is in response to Public Notice PN-12-07 issued by the U.S. Army Corp. of Engineers (USACE), which established a public comment period from January 23, 2012 through February 22, 2012. Because my clients did not receive timely notice of the comment period, they were granted an extension for comment through March 22, 2012. At this time, PVE Sheffler has had only a few days to review project documentation and prepare this comment letter. Our comments are based on review of only a small fraction of the Bell Bend documents known to exist, and we intend to supplement these preliminary comments as more documents become available to us for review.

Deronde/Perluke Property

As adjacent landowners, Mr. and Mrs. DeRonde and Ms. Perluke have a unique and vital interest in protecting and preserving the environmental condition of their property, and its value. The DeRonde/Perluke property is a rectangular tract of approximately 83 acres, which is bounded by the Bell Bend project boundary to the north and west, and by Confers Lane to the east. It has wetlands,

a man-made lake, two ponds stocked with fish, and a dirt racetrack, approximately 0.5 mile in circumference, surrounding the lake. The ponds and lake are hydraulically interconnected, and the lake also apparently receives water from base groundwater flow. The property is mostly wooded, and the dirt track and unpaved access road are maintained by mowing.

Water Resource Impacts

Upon receipt of the *Notice of Application for Groundwater Withdrawal* dated January 16, 2012 (BNP-2012-006, Docket No. 52-039), the DeRondes and Ms. Perluke became aware of the PPL application to the Susquehanna River Basin Commission (SRBC) for anticipated groundwater withdrawal (SRBC Pending No. 2012-007). This impact is also acknowledged in Public Notice PN-12-07, Impact L. PPL proposes to withdraw up to 1.0 million gallons of groundwater per day as a maximum 30-day average. This water will be withdrawn from extraction wells completed in the shallow glacial outwash aquifer. Drawdown impacts to adjacent wetlands are anticipated based on groundwater flow models.

The purpose of this withdrawal is to dewater the soils to create dry conditions for emplacement of structural fill during construction of the Bell Bend foundation for the Essential Service Water Emergency Make-Up System (ESWEMS) pond. The period of excavation and construction may last up to two years. PPL proposes to return extracted water via overflow or spray irrigation to an adjacent stream and wetlands per a mitigation plan that will be evaluated as part of the PADEP 105 permit and USACE Section 404 permit reviews.

PVE Sheffler has not had an opportunity to review the plans, reports and data associated with the proposed groundwater withdrawal, but will do so as soon as we have access to those documents. We understand that the applicant is proposing to collect baseline monitoring data to establish hydrologic conditions within the zone of influence prior to construction, and that monitoring of wetland impact will continue during and after the construction period to maintain baseline conditions. Given the proximity of the proposed groundwater withdrawal to the wetlands, ponds and lake on the DeRonde/Perluke property, we anticipate a potential drawdown impact to those water bodies. Consequently, we request that any groundwater withdrawal studies include an impact analysis for the DeRonde/Perluke property. This analysis should address temporary and long-term impacts to surface water, groundwater and biota. We further request that surface water and groundwater impacts be included in baseline monitoring, as well as during and after ESWEMS construction.

Other impacts summarized in Public Notice PN-12-07 include wetland disturbance, forest disturbance, and regrading (Impacts A-F and J, P, Q, R); Stream impacts (Impact G); creation of a dredge spoil fill area (Impact N). Dredge spoil landfilling would continue long-term, and certain surface water and stormwater impacts would be permanent.

One compensatory mitigation plan would entail removal of Confers Lane, which forms the eastern border of the DeRonde-Perluke property. Because Confers Lane is a hydrological barrier separating wetlands on either side of the road, removal of the roadbed would alter hydrological conditions on the DeRonde-Perluke property.

Baseline Contamination Impacts

Because construction and operation of the proposed reactor could potentially affect the quality of soil, groundwater, surface water and biota on the adjoining DeRonde/Perluke property, we request that the Bell Bend impact analysis include sampling, surveying and mapping to establish baseline environmental conditions for this property. This analysis should include wetland, pond and lake boundary surveying and mapping; collection and analysis of soil, surface water and groundwater samples (test parameters to be determined); and viewshed, noise and air impact studies.

Alternative Fuel, Natural Gas

PVE Sheffler has not had an opportunity to review the analysis of alternatives that was completed pursuant to federal siting requirements under the Clean Water Act 404(b)(1) and 33 CFR 320-332. Public Notice PN-12-07 indicates that off-site alternatives will be addressed in the final EIS, along with alternate energy sources, which included wind, hydropower and solar. The applicant's stated position is that only nuclear power can provide the baseload capacity of 1,600 MWe.

It is not clear to us whether natural gas was considered as an alternative energy source for this project, and we hereby request that natural gas be evaluated as an alternative to nuclear power generation. There are several reasons that natural gas may be preferable to nuclear energy for this project:

- The applicant's Region of Interest (ROI) overlaps with the Marcellus Shale, now known to be the world's second largest natural gas field. The Bell Bend plant is situated close to the Marcellus fairway, which is now being intensively developed for natural gas.
- The Bell Bend property is situated close to two natural gas pipelines. These pipelines, which are each within 3 miles of the currently proposed Bell Bend site, could potentially provide a sufficient supply of natural gas to power the proposed 1,600 MWe plant. If pipeline connection costs are prohibitive, PPL could consider other sites in closer proximity to the existing natural gas pipelines.
- In recent years it has been established that the abundance of natural gas to be extracted from the Marcellus Shale and similar unconventional natural gas plays in the U.S. will result in natural gas stabilizing at low prices for many decades.
- The capital cost of constructing a natural gas fired power plant is considerably less than the cost of constructing a new nuclear power facility, especially considering the post-Fukushima design and operating requirements expected to be issued by the Nuclear Regulatory Commission.
- The permitting process for a natural gas plant would presumably be far less costly than the process for the proposed nuclear-powered facility, and the timeline for permitting and construction would also be considerably reduced.
- Natural gas-fired plants are considerably more efficient than nuclear-powered electricity generation. Natural gas can achieve higher core temperatures and emit considerably less waste heat. Unlike nuclear facilities, natural gas power plants can respond to changes in electricity demand by increasing or decreasing power output over short time intervals.

- Carbon dioxide emitted from a natural gas plant could potentially be captured and sequestered using carbon capture and storage (CCS) technology to reduce greenhouse gas emissions.
- Nuclear power plants produce nuclear waste material, which must be managed on-site at considerable cost and with associated risks. Waste generation and storage at nuclear plants represent potential long-term environmental impacts that can be avoided by the use of natural gas. Decommissioning periods for nuclear power plants can often approach 25 years or longer.

Extension of Comment Period

Because my clients were not informed of the opportunity to review project plans or to submit comments on those plans until late February, 2012, they have had insufficient time to obtain, review and understand available records pertaining to this project. Because their property adjoins the proposed reactor site, and because their property will most definitely experience significant environmental impacts, both temporary and permanent, the owners are in the process of retaining qualified professionals to help them understand the complex and changing design, construction and operating plans that will affect their property. The same opportunity should be afforded to the neighbors of the DeRondes and Perlukes; impacts to these adjacent and nearby properties should also be evaluated. Again, because the DeRondes and Ms. Perluke were not made aware of the Bell Bend project and environmental impact study until January 2012, they have had insufficient time to retain qualified technical and legal representatives, and their representatives have had insufficient time to review more than a small fraction of the project documentation that exists. Consequently, I hereby request that the owners of the DeRonde/Perluka property be granted an extension of at least 60 days, through May 2012, to submit additional comments in response to Public Notice PN-12-07.

In conclusion, probable impacts on the DeRonde-Perluka property are likely to be significant if the project is permitted substantially as proposed. Likely impacts include alteration of hydrologic conditions, biota, general aesthetics, stormwater flow, water quality, and soil quality. Consequently the future use of the property could be impaired and its value reduced significantly.

Thank you for consideration of these comments. PVE Sheffler will continue its review of the Bell Bend project and associated impacts, and will provide additional and supplementary comments to your office and other appropriate agencies.

Sincerely,

PVE Sheffler, LLC

A handwritten signature in black ink, appearing to read "John A. Conrad".

John A. Conrad
Sr. Hydrogeologist

cc: Barbara & Robert DeRonde