

I attempted from 7:30 pm on Wednesday 3-3-2021 until past midnight for roughly a 5-hour period in which technical problems, occurring on the NRC website, prevented me from filing this particular comment during that entire period. I can only suspect that perhaps an inordinate number of comments were being filed simultaneously during the last 5 hours, preventing others from reaching the site to file comments. I had previously used the same link and the same computer and the same internet provider to file 3 earlier comments, and all my other links to other internet sites were working. Only the NRC site was inaccessible to me. As a result of this problem, the NRC should extend the comment deadline for everybody, as I assume that I was not the only person impacted with this inadequacy of the NRC website to handle the demand.

Areas of concern that should be investigated re Point Beach.

1. **Air quality** cumulative impacts by pollutant, actual amount of permitted radioactive leakage into the air daily compared to actual annual amount, impact upon the various bird species, especially any threatened or endangered birds or fowl, including cumulative impacts, and fallout mapping daily date stamped and cumulative by alpha, beta, and gamma, by specific isotopes.
2. Impacts to **threatened/endangered species** (land, air, aquatic) and environmental mitigation plans, including cumulative, and fallout or groundwater or surface water exposures daily and cumulative by alpha, beta, and gamma, by specific isotopes.
3. Impacts to **water resources**, including ground water contamination from leaking reactor pipes, any leaks from radioactive waste storage "containment," including any and all adverse impacts upon Lake Michigan from leakage and fallout and discharge with contamination and thermal increases, including impacts of erosion and shifting coastline issues and water level rising. What are the cumulative effects of cooling water releases to Lake Michigan, including to temperature dependent limnological characteristics of Lake Michigan, including any partial degree Fahrenheit change upward in water temperature enough to reduce oxygen levels to a point that a valuable species could die off, starving off multiple fish species, or cause other adverse impacts that alter natural aquatic ecosystems and its adjoining shoreline?
4. How far has **tritium contamination plume** in the ground water and in the local drinking water spread? How much tritium is discharged by permit into Lake Michigan? How much leaks into Lake Michigan in other ways? How extensive has the plume of tritium contamination in the groundwater moved and how many homes are using tritium contaminated drinking water? How fast are the plumes moving per month? Per year? Per decade?
5. Any and all concerns that threaten **health and safety of residents, employees, and wildlife**, including but not limited to radioactive leaks, but any and all factors leading up to such leakages. What historic data exists of employee exposures at Point Beach? What historic data exists re air releases and water leaks from Point Beach?
6. Does the plant have a **functioning seismograph** in its control room to warn of building shaking problems from the **New Madrid Fault**, which has been felt in Wisconsin, including by me as a child and as a young adult, and which I recall has broken windows in Milwaukee? How would an earthquake impact the reactor brittleness? Would the reactor be able to shut down timely? What does the seismograph data collection indicate from its startup at Point Beach? The EIS should address the top 10% highest seismic shockwaves felt at Point Beach in terms of potential impact upon increasing brittleness and degraded systems at Point Beach.
7. How has Point Beach changed its risk assessments and its untrustworthy culture? Where is the **transparency commitment and proactive inspection schedule** for aging parts? Where can the public read such a plan? Coverups and delays of disclosures involving problems at Point Beach are unacceptable, but have happened far more than I can feel safe or trustworthy.
8. **Geological formations and sites**, such as sand dunes, wilderness reserves, and other important formations.
9. **Historical and cultural sites important to early Wisconsin migration of humans** and indigenous tribes, including the Oneida, the Stockbridge-Munsee, and the Menomonee as well as Mole Lake Sawagon and

any others. The most qualified individuals to identify indigenous cultural concerns of importance can only be indigenous persons who should have the final word about their own expertise identifying what is important to their culture, history, and lifestyles, rather than anybody else attempting to superimpose authority where it does not have primary source existence, but rather a secondary source removed that original primary claim of special knowledge inherited.

10. **All NEPA considerations of indirect and secondary impacts**, including threats to environment and wildlife and water resources.
11. **Social and economical impacts** to surrounding local communities in terms of housing, gardening and agriculture, drinking water, business, property values, aesthetics, noise, and other disadvantages and inconveniences.
12. All actions and all alternatives, including repairs, to be costed-out and placed into a calendar schedule showing the Point Beach budgets historically and **estimated budgets**, particularly including the cost of pro-active preventive inspections and maintenance repairs.
13. **Financial bonding and guarantees and assurances, including insurance** to cover the potential costs of a major catastrophe for which the potential increases every day Point Beach continues to operate its very aged, brittle, and unsafe parts and components, particularly as it gambles by continuously pushing the limits of electricity production increasing the danger off a catastrophe. **Price Anderson Act** does not cover the full costs, even half of the costs, of a catastrophe. The EIS needs to address the difference the taxpayers would pay via federal taxation to cover the Price Anderson Act guarantees and the actual catastrophic losses. In addition, the federal government has entered into questionable practices that have excessively ran the money printing while a huge amount of small businesses are filing for bankruptcy or going out of business in the USA, and there are serious questions if the federal government would use some of the billions granted to FEMA for catastrophic loss of Lake Michigan and other losses from a catastrophe, or be able to actually cover reimbursements for such catastrophic loss, considering the economic instability introduced in 2020 and expanded in 2021 by the Presidential administrations and Congress. Many legal scholars believe that it is unfair and likely unconstitutional for private business to be indemnified from financial liability, as opposed to 100% government owned and operated utilities. What would be the financial guarantees by Point Beach if federal indemnification from liability was determined to be invalid in a future court challenge by the harmed public if the federal government were unable to fully compensate their major losses? What would be the financial guarantees by Point Beach in exchange for its choices involved in gambling with operating the oldest and most embrittled nuclear plant in this nation that is far beyond its safe lifetime? Worse yet, Point Beach has the worst operating experience of all the nuclear plants in the US. Even worse yet, Point Beach has gradually but persistently gambling further by pushing the limits of production of electricity. This is the perfect storm for a catastrophe. All the worst indicators are already in place. This is unacceptable by any rational standards. Where will all the financial reimbursement come from to just pay for the drinking water of millions of people along the shores of Lake Michigan in 4 States to be delivered to them into perpetuity forever? I highly doubt that they would be supplied with water to run their showers and bathtubs, and this would cause a severe degradation of the quality of life, which needs a huge financial value placed upon that pleasure, convenience, and hygiene. Where will all the money come from to cover the costs of permanently removing large land masses and water resources from use by humanity into perpetuity, as has happened around Chernobyl? Point Beach is already a disaster waiting to happen, given its extraordinary failing record of NRC “red warnings,” its status as the worst plant in terms of age, its status as the worst embrittled and degraded plant, its status of the worst operating experience in the US, its status of serious indicators of non-transparency, cover-up, and inaccurate information, its status of criminal penalties, and its status of having the impetus of personal financial liability to repay the full costs of a catastrophe.
14. Why is this dangerous private operation being allowed when its impacts upon the population inside the 10-mile radius closest to two reactors has already resulted in a **measurable population flight away from the Point Beach reactors** in the short period after the first 20-year operational license was extended?

Waste and storage concerns:

The EIS needs to clearly explain the methods in which nuclear fuel is used during the fuel cycle and Point Beach's process for removing spent fuel and storing this waste material on site. The storage casks have a faulty thin-wall design which increases unsafety in short-term storage and moving the spent fuel casks. The EIS needs to address in depth with careful best and highest scientific recommendations pertaining to the dangers that these casks pose during filling them, storing them, protecting them from water and flooding while Lake Michigan levels rise, and moving them.

The EIS needs to address the reasonably foreseeable and perpetual impacts from storage of nuclear waste materials including spent reactor rods. The EIS needs to physically inspect the canisters for integrity and address the potential for cracked or corroded canisters to leak radiation in a sufficiently planned calendar of inspections and repairs. The EIS needs to mitigate all foreseeable impacts from storage casks breakage and leaking in storage, contact with water in storage with potential explosion danger, and from moving these casks in the most protective way possible.

The EIS needs to address the justification for continuing to gradually increase nuclear waste daily through operations, which increases the risk factors. The scientific methods have been unable to identify any permanent way to render this most lethal and toxic waste to be fully contained for the thousands and thousands of years required until all the half-lives have disappeared, which is a minimum of at least 10 half-lives. If the safest place on earth generally is to leave it on site where it poses contamination problems and other catastrophic concerns, such as terrorism or rising flood waters entering its storage site, considering that anywhere or everywhere this unacceptable material is stored, that this area will become polluted, the EIS needs to address the fact that this makes it irrational to continue to approve generating this waste? The EIS must examine why NRC allows this waste to be generated when it is irrational to generate the most toxic substances on earth that will last into perpetuity of tens of thousands of years causing an unacceptable burden lowering the quality of life on this planet for humans in the future. This conundrum would be unacceptable to the majority if the full scientific process was being used among independent peer reviewers of the highly radioactive waste from civilian nuclear power generation.

How will the EIS address existing storage capabilities on site and the additional waste material that will be created over an extra 20 years, if the license renewal is granted?

The EIS must address the specific energy requirements (electricity) required to safely maintain cooling of spent nuclear fuels for its future lifetimes. It is insufficient to make a determination that unnamed others in the future will assume responsibility for this, or even be able to assume responsibility for this nightmare poison. What will happen if we have a major grid failure? What is the plan to maintain this requirement beyond the time frame that generators are now scheduled to work, if the grid goes down?

The EIS must address the changes to fluctuating lake levels and their adverse impacts (through erosion, flooding, shifting shoreline, rising lake levels) the integrity of the concrete pads that support dry cask fuel storage units as well as the air-cooled fuel casks.

The EIS must address the methods in which Point Beach will safely manage the risks to the Great Lakes watershed if spent fuel eventually might be transported to a federally designated nuclear fuel storage site by barges to the port of Milwaukee. What is the full status of the plan to barge the spent waste to Milwaukee? Might that plan be prone to severe exposure to very high-foot waves in a sudden storm?

Even transport casks with canisters that are not damaged will release radiation as they are transported from nuclear power plants to the storage facility, exposing Lake Michigan and the populations along the transport route to repeated doses of radiation.

The EIS needs to address the specific methods that might be used to move the canisters which are so heavy without damaging the thin-wall casks. The EIS needs to address the methods that will be used to reposition canisters and transport casks to get them positioned upon whatever transport may be selected to move them. The EIS needs to address the full details of any plans to move these canisters and/or transport casks in terms of safety precautions and safety assurances. What buffering and shock-absorbing materials might be spread out or wrapped around the casks to best soften an abrupt impact or fall to maximize safety, and yet not weaken to slip the grip on the casks? What other methods might be considered, as we need a lot of brainstorming to figure the best way to move these precarious, dangerous, poorly conceived thin-wall-casks full

of highly radioactive spent fuel? This is a major danger at every nuclear power plant across America, but Point Beach spent fuel storage appears to be endangered by rising Lake Michigan levels that may need to be addressed quickly in the near future.

The EIS needs to address the design life of the canisters encasing the nuclear fuel rods. These are poorly designed thin-wall canisters. How can they be inspected safely for cracks and leaks? Is there even a way to do this safety inspection safely? Surely the thin walls would be becoming embrittled over time from such nearby proximity. Fuel rods inside are not retrievable for inspection or monitoring without destroying a thin-wall canister. Is anybody working on designing a safer spent fuel canister? This is another huge reason why it is insane to continue to generate the highly radioactive waste when nobody has been able to even technologically address a safe storage canister that can be safely inspected externally first and with a method to monitor or inspect the spent rods. This is another huge vulnerability beyond the impossibility of locating a safe storage place into perpetuity.

The EIS needs to address the ways that continuous monitoring of the storage canisters for pressure changes or radiation leaks will be safely done. The EIS needs to address the issues surrounding if the fuel rods inside the canisters could go critical, if the fuel rods could result in an uncontrolled nuclear chain reaction, if water enters the canisters through cracks, if water floods the storage location perhaps from rising lake levels.

Safety issues surrounding fuel rod storage in general are very serious. Specifically, if any canister filled with fuel rods goes critical, nobody will be safe, per admissions of both Holtec and the NRC in general, per concerns and questions about these issues written and expressed as of huge concern to Laura Watchempino from the Multicultural Alliance for a Safe Environment/Pueblo of Acoma.

Point Beach's site-specific storage should be addressed in the EIS in terms of leak testing and monitoring, and in terms of identification of the quantity and types of material stored at the on-site storage.

Irradiated nuclear fuel is generally rationally considered to be safer stored (but not safe) at the reactor site, rather than risking all the possible damage and leaks involved in transport, but we are dealing in this case with Point Beach which is experiencing rising lake levels from Lake Michigan. A reasonable alternative has been generally believed to leave this dangerous radioactive nuclear waste at Point Beach where it was produced and to put it into dry cask storage rather than to attempt to move it to interim storage. At Point Beach that past assessment may not continue to be reasonable storage, given that all options are exceedingly dangerous, specifically in the situation that climate change may result in rising lake levels that possibly could flood into the on-site waste storage area and cause a catastrophe. The EIS needs to thoroughly reassess and address this issue rigorously, especially in terms of the possibility of lake water reaching the spent fuel rod storage area, and the options that must be put into place prior to that occurring.

Interim storage of spent nuclear fuel at Point Beach uses dry cask storage. This storage is done with poorly-designed thin-wall canisters, in which the fuel rods are dangerously stored due to the thin-walls complicated by their extremely heavy load, as I interpret the concern of Laura Watchempino. In this way, the thin-wall canisters would be at considerable risk for major radioactive releases and would be an unsafe technology that was flawed from its inception. Thin-wall canisters should be replaced with thick-walled containers that can be inspected, monitored, and maintained externally and internally. The EIS must address the specific type of canisters used at Point Beach and its risks as well as risk monitoring and methods and technologies to decrease the risk.

At the very least, the storage containers should be stored away from any potential location where lake water might flood. Storage containers should be in hardened buildings. The EIS must address these concerns. The EIS must thoroughly and rigorously address all aspects of the flooding dangers, identification of seasonal cycles and annual creep, methods to harden the storage location on site, and the possible necessity of moving these storage casks to a safer temporary storage location where they will not have to be moved again. Temporary storage may become semi-permanent, due to the insanity of humanity's boondoggle with civilian nuclear electricity chasing the fake lure that it would be too cheap to meter.

Trying to move nuclear waste raises liability issues. If this waste is moved, who will oversee the spent nuclear fuel into perpetuity? Who will be financially liable for the gradual deterioration of these storage

materials and their replacement? Who will be financially liable for a catastrophe? I am repeating the unanswered questions of Laura Watchempino.

The NRC needs to prioritize its slow recognition that there is no safe solution for the highly radioactive waste and that every approval to any nuclear plant to generate more waste is intensifying and aggravating the extent of an impossible nightmare that mankind must face to deal with waste that should never have been generated.

Water Concerns:

The EIS needs to address the effects of the Point Beach's release of water into Lake Michigan, the higher temperature at which that water is released, any contamination that might be present in that cooling water, and the way that warmer water impacts the natural ecosystem in the surrounding lake area.

At present, Green Bay and Lake Michigan are experiencing increased episodes of harmful algae and bacteria (cyanobacteria) blooms that affect both the aquatic environment and recreation.

The EIS must address the interrelationships between the gradual increase of power generation at Point Beach and the increase of these algae and bacteria blooms in terms of any changes in temperature. The EIS needs to address if any types of zooplankton are being harmed by this increased temperature that might represent a food source to any higher order species and all other harms.

The EIS needs to address any changes in the level of phytoplankton since original baseline limnological conditions. How will extended licensure perpetuate and/or worsen those impacts?

The EIS needs to address if any threatened or endangered aquatic species are at risk from this release and its higher temperature impacts.

The EIS needs to address if any aquatic species are at risk, including those we depend upon for our food supply.

The EIS needs to address the impacts to the soil, shoreline, and lake bottom from the discharge of water. Will there be any erosion? Will there be decreases or death of living organisms or species? Will there be increases of specific life forms? What are the secondary impacts of such unnatural alterations? How do these impacts effect the operations at Point Beach? How do they effect the surrounding aquatic environment?

The EIS must address the methods in which the discharge is monitored for temperature variations, flow rate, and volume.

Point Beach Nuclear Power Plant uniquely waived installing Cooling Towers as part of the normal fuel cycle during its original design conception. The EIS must address the complete cooling process for the discharged water used during the fuel cycle at present and its discharge. I assume that the cooling process is largely contained in pipes underneath the building that are likely encased in cement, but these pipes actually should be physically inspected for safety from what otherwise could become a catastrophe. The tritium in nearby residential drinking water is an indicator that these pipes are already leaking.

In addition to increased temperature impacts, the EIS needs to address both "normal/acceptable low level discharge" and accidental radiative releases into Lake Michigan and into groundwater vital for communities and farms surrounding Point Beach Nuclear Power Plant.

The EIS needs to address the threat of water level fluctuations on Lake Michigan.

The EIS needs to address the specific measures and any options that would need to be in place to ensure high water levels do not affect the reactors or storage units.

The EIS needs to address identifications and considerations from climate change models and reasonably foreseeable impacts in terms of water levels and climate conditions (including higher frequency of significant disasters like the Derecho that impacted the nearby Palo, Iowa nuclear plant).

How will the EIS address the transportation of nuclear fuel and waste depending if the method uses barges on Lake Michigan, truck transportation on land, or a combination of these, especially to assess risks to the environment? The EIS must address the current accident rate of all shipping vessels on Lake Michigan and the possibility of sudden severe weather development that makes all watercraft vulnerable to water exposure and potentially capsizing without involving another watercraft. Using barges introduces much more potential to exposure to 5-to-20-foot waves or higher, which could introduce concerns of sudden and excessive water hitting the casks “at sea.”

Concerns about Accidents and Releases:

The EIS needs to address the consequences of a nuclear reactor accident (on the continuum from excess radiation leaks to meltdowns) for each Point Beach Unit and as well as for an accident that effects the surrounding communities, agriculture, and other land use within a 50-mile radius and for Lake Michigan and Great Lakes watershed. Scenarios should include one unit and both units as well as impacts on spent fuel storage.

The Wisconsin Division of Health Services (WI DHS)
<https://www.dhs.wisconsin.gov/library/P-00442.htm> needs to make radiation monitoring available to the public for the past 3 years (2018-2020). Currently there is only monitoring data available up to 2017.

Point Beach in conjunction with the WI DHHS needs to monitor of air, soil and water during refueling cycles for Point Beach’s 2 units (this occurs every 18 months for each unit) and make this monitoring available to the public at the designated library and on-line at their web site. The refueling cycles are generally a vulnerable time period in which excess radiation releases occur. This data would be particularly important to vulnerable populations (such as pregnant women, infants and small children), particularly those living and working within the 10-mile radius of Point Beach Nuclear Power Plant.

Concerns about Evacuation Plans:

Updated Evacuation plans from Point Beach (now out of date from 2018 on the Manitowoc County website and link broken for Kewaunee County) need addressed in the EIS. Evacuation plans need to be provided to those who live, work and go to school/daycare within the 50-mile radius of Point Beach Nuclear Power Plant.

In the case of a catastrophe, will all the residents be able to evacuate, given that half of potential evacuation routes do not exist due to the presence of Lake Michigan blocking 50% of the normally potential evacuation route directions.

Has anybody seriously considered the possibility that evacuation could be ill-advised southward if winds were blowing southward or that it could be ill-advised northward if winds were blowing northward? Then we have Lake Winnebago complicating this by blocking westward travel.

Has any county even tested the evacuation plan beyond the limited periodic physical simulation involving just the State Patrol, Emergency Responders, and the Point Beach nuclear plant in terms of the basic simulated functions and actions each would do in a real situation? The EIS should address county involvement in the evacuation to be more than just notifications on paper and rubberstamp approvals without actual alert mechanisms and trial runs. I expect chaos without physical simulations as done with the State Patrol.

This is an extremely old and brittle reactor that is beyond its lifetime that is being pushed beyond its originally designed electrical production increasingly, but actual real time evacuation could become chaotic with a shortage of major roads out of that area, given the likelihood that the prevailing winds and the unique vastness of Lake Michigan would likely result in the only practical evacuation occurring within a 90-degree vector instead of 360 degrees.

Is there a plan for evacuation of specific events in the 50-mile radius, such as an accident during a Packer game (81,441 people) at Lambeau Field in Green Bay? Or during the annual Experimental Airplane Fly-In in Oshkosh with perhaps even more people?

How will campers and swimmers utilizing recreation at Point Beach State Forest Beach and Campground be notified and evacuated if there is excess release of radiation or an accident? Should these people (staff, swimmers, and visitors) also be notified when fuel rods are exchanged and there may be excess radiation release into air and water?

Is there a plan to track, monitor and treat anyone who has been exposed to excess radiation during an accident? This would also include information on who will bear responsibility for the cost of this monitoring and treatment over the exposed population's lifespan.

Have families and workers (who could be exposed during an accident) been given information about safe use of Potassium Iodide, which must include full informed consent with all the advantages and disadvantages, and any complications from comorbidities or other medications? Will potassium iodide supplementation be provided?

The analysis of a reactor meltdown effect on the human environment must be addressed in the EIS. Credible scientific evidence relative to assessing the impact of this potential catastrophic scenario reasonably available from the data available from the reactor meltdown incidents at Chernobyl and Fukushima Daiichi nuclear facilities.

NEPA requires this reactor meltdown analysis per 40 CFR 1502.22. (<https://casetext.com/regulation/code-of-federal-regulations/title-40-protection-of-environment/chapter-v-council-on-environmental-quality/part-1502-environmental-impact-statement/150222-incomplete-or-unavailable-information>) and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

Unfortunately, the probability of occurrence for Point Beach when extended out to an 80-year lifetime is reasonably determined to be extremely high, given this plant being the oldest facility on-line, given this plant's horrendous operations experience involving the most red flag warnings in the nation also with criminal fines, non-transparency, negligence towards pro-active inspections and maintenance, intentional misrepresentation to regulators, and failure to inform the public about exposures, coupled with Point Beach having the most embrittled reaction in the nation (Unit 2), having had explosions inside the spent fuel storage area, and multiple close calls during emergency shutdowns with primary failures exposing failures in critical backup systems. Worse yet, this plant consistently is increasing the power generation, pushing that aging plant harder and harder. This is a nuclear plant that should have been shut down when it applied for its first 20-year extension.

Socio-Economic Concerns:

The EIS needs to address socio-economic impacts to the community in the case of an accident.

What would happen to the fishing and agricultural industry?

What would happen to people's livelihoods, particularly farmers whose land and livestock will be contaminated?

What would happen to property values?

The EIS needs to identify socio-economic losses by businesses that rely on recreational use of Lake Michigan during summer and winter.

The EIS needs to identify the economic consequences for impacted counties, townships, and other local government structures as well as the indirect socioeconomic consequences on property tax revenues, parks and wilderness lands, and the State of Wisconsin.

Would Point Beach's owners compensate the counties, the State, and people into perpetuity if their negligence created a catastrophic event?

The EIS needs to quantify these values and identify where the financial compensation would come from.

The EIS must address the full impacts to the socioeconomic environment from the no-action alternative. So, if licensure is denied, what is the impact to the wholesale power grid at the end of existing licensure? How does the reduced power to the grid impact consumers of that electricity? Does the no-action alternative have "significant" socioeconomic impacts? Will retraining of nuclear industry workers into jobs in renewable energy be the responsibility of the State or Point Beach's owners?

Ensuring Access to the Public and other Agencies:

Due to the challenges of internet access in rural areas as well as COVID-19 related precautions and the extreme lack of communication along what normally had been routine channels of dispersion of important information, comment cards for scoping and for the draft EIS should be mailed to every resident and business within 50 miles of the reactors.

The NRC website encourages the public to submit comments online and provides a mailing address. However, due to concerns over internet access and postal mail delays in this country, comments should be accepted if they were postmarked on March 3rd but received whenever the USPS delivered our comments through a federal government mail system that no longer prioritizes timeliness for its citizens in its mail distribution.

Information about radiation releases by Point Beach Nuclear Power Plant into soil, water and air by Wisconsin Department of Health Services is not available on their website for the 3 years after 2017. See <https://www.dhs.wisconsin.gov/library/P-00442.htm> The EIS needs to include this data, which should be collected into a daily data record, which in turn should cumulate into a weekly, monthly, quarterly, and annual data record with mapping distinguishing alpha, beta, and gamma and also distinguishing other isotopes, especially tritium. The EIS needs to make this data available to the people who may need access to transparent data about their potential exposures from Point Beach. The current non-transparency is unacceptable. Local residents and academics should be able to readily find release information online, particularly at the Point Beach website, and also at the designated local library. Why is Point Beach not timely reporting this information to WDHS? Or is WDHS receiving the information and not properly sharing it with the public for a reason that would need to be identified. The EIS needs to identify where the breakdown in transparent information to the public has occurred (WDHS or Point Beach staff) that is preventing the public from knowing critical data upon which to base its best interests. In effect, this has resulted in public non-transparency about radioactive releases and exposures to the public, and that is unacceptable.

I request an extension of the EIS scoping comment period due to the challenges presented by COVID-19 and lack of internet access for both rural and aging populations and economically struggling families.

The NRC at the Public Hearing was asked if they had contacted all stakeholders that could be harmed by an accident at Point Beach that contaminated Lake Michigan or other areas, but the NRC responded that it “could not respond.” I would like to know why the NRC was not able to respond to such an important question seeking to discover if government entities had been alerted to check on their best interests.

The results of early coordination and the scoping process, which includes the definition of project scope (actions, alternatives, and impacts), decisions on appropriate assessment methodologies, the extent or depth of analysis necessary, the timing of agency reviews, the project schedule, as well as other agreements and expectations, must be communicated to all involved agencies and the public as early as possible. This information should be included in the environmental document and administrative record. As lead federal agency, NRC should take special efforts to ensure, before indirect and cumulative impact studies are conducted, that cooperating agencies and key review agencies do not object to the scope of review, including the specific methodology to be employed. The NRC should also take special efforts to directly ensure that NRC communicates directly with the tribal nations that are stakeholders, as the tribes are to a large extent very small nations within the USA and are owed the type of deep respect involved in diplomatic relations with other nations.

Concerns pertaining to Alternative Options:

The EIS should reset the media-popularized conception of the centralized power grid. In 2012, DARPA and the Pentagon reported that the USA’s greatest national security vulnerability was its extreme centralization of its power grid, not only in terms of terrorism, but also in terms of an EMP or a HEMP that could potentially destroy all the electrical and electronic parts and devices across the USA simultaneously. DARPA and Pentagon had released the same type of warnings years earlier. Forbes reported on it.

The American Transmission Line’s expansion has occurred with corruption that has not been reversed. Both Democrat and Republican legislative leaders were involved in negotiating a hidden back-door legislative deal with American Transmission Line, which resulted in centralizing the Wisconsin power grid to an unprecedented extent. This deal is currently in Court.

Wisconsin would have better off keeping its small locally owned electrical generating stations and lines, but these have been coerced into the private ATC monstrous electrical transmission lines. With a decentralized grid, small local communities experience far less electrical shortages, as increased electrical outages have already been observed as ATC has taken over the State’s electricity delivery. If another Carrington event occurs where the telegraph wires went down and fires started in the mid-1800s on American’s East Coast and in Europe from a corona ejection from the sun, it would likely damage much more extensive electrical and electronic wiring and devices. A large swatch of the US and Canadian electrical systems went down together a few decades back. Today, the grid is much more centralized. The damage would be much more extensive.

How did the grid become so centralized in the USA considering that DARPA and the Pentagon made it sufficiently known that its centralization was the most serious American national security problem?

Western families have only used electricity for about 150 years. Humanity did not use electricity before that. Humans do not need electricity to survive. The nomads in Siberia live in teepees during severe winter seasons that they move every 4 days with sled dogs. Two families live together in one teepee covered with a tarp made of animal skins and a wood stove inside of the teepee. The people living in the forests of Sweden live in homes without electricity with the Inuit nearby with their reindeer. Electricity provides convenience and the ability to have spare time.

The concept that we have a centralized grid as a starting point is an inaccurate frame of reference for future planning because people are increasingly believing that a centralized grid is unwise. We do not have to be locked into a centralized grid. However, the grid’s centralization is increasingly occurring, and much of it occurred during the COVID lockdowns.

Instead of centralization of the grid, we have personal options. While it is cheaper to hook private solar panels together and share their excess electrical generation with the power company, if that more centralized grid goes down, it takes down the private solar generation with it, mostly as a built-in protection for

the linemen making repairs on a high powered live system capable of electrocuting the workers, which often causes a heart attack death.

Humanity does not require electricity, but it sure seems to raise the quality of life. Individuals should be able to decide if they wish to live off the grid, with or without electricity.

The point is that the assumption that a centralized grid should be served may be a flawed assumption, given the way that many people are reacting to the current COVID lockdowns with their own privately determined Reset, given the extraordinary censorship, coercion, and disrespect coming from a massive echo chamber obviously doing coercive social engineering by pumping fear. Wisconsin has a very large Amish community spread across the southwestern part of the State and they have a religious ban on using electricity.

We must respect all diversity, all ethnicities, and all lifestyles. We must protect those people from coercion and other decisions that imply superiority over them, because in the end, we come from a Creator-given freedom until it adversely interferes with choices of another who has equality of choices. One person's freedom ends when it interferes with another person's freedom in the public arena, and each man's home is his castle.

With that background freedom clarified, we can now return to the alternatives.

The purpose and need for the proposed action will be based on electric demand on the wholesale power grid and the ability to meet that demand reliably and cost-effectively.

For required National Environmental Policy Act (NEPA) proposed action alternative analysis, the EIS should adequately address meeting the purpose and need with alternatives that include alternative energy production scenarios, including photovoltaic plus storage, wind, and solar, and use of natural gas power plants to help control intermittency of non-hydroelectric renewable electric generation.

The Pentagon's and DARPA's strong recommendation in 2012 that the power grid needed to be decentralized as quickly as possible as its centralization posed the greatest vulnerability of the USA's national security.

The nuclear plants are a major part of that vulnerability, as well as the likely inability to repair the grid for likely years due to lack of repair parts. We have to send to China for parts to be made.

An EMP is also a major threat of vulnerability to nuclear plants that has not been addressed. If the grid goes down from an EMP, the backup generator for the nuclear power reactor will likely be destroyed. It may be likely that electrically wiring within the plant would be destroyed if it is not shielded wire that is further shielded a couple more times. It starts getting costly.

If the entire US grid goes down, all of the nuclear plants online would likely turn into Chernobyl's and Fukushima's. This vulnerability of a major catastrophe where one event could bring down our entire civilization must be addressed. Now, you understand why I preceded with by reminding everybody that humans do not need the grid to survive, but we do need an absence of radioactive exposure to survive.

All electrical power and electronics would be destroyed from an EMP. If Americans experience nearly complete supply chain breakdowns and widespread chaos, we certainly do not invisible disabling and potentially lethal radiation from power plants including Point Beach to further harm us and perhaps kill us. During 2020, the talk of China, Russia, Iran, Syria, or North Korea doing an EMP to the USA accelerated, and now our President has dropped 7- 500 pound bombs against Iran and Syria that have an alliance with Russia. Costly nuclear power is the most dangerous and unsafe way to generate electricity on another level beyond the waste nightmare.

When Point Beach was built, alternative energy was not as common, therefore this EIS needs to take a "hard look" at the alternative options of differing energy sources in comparison to the proposed action of extending the license of the reactors. The analysis should include comparative analysis of the proposed action to alternatives with respect to jobs and tax base and should include indirect effects of alternative energy scenarios in the burgeoning clean energy economy.

The EIS must provide analysis of potential “significant” positive impacts on the human environment from the proposed action **AND** alternatives.

The EIS must full address impacts from the no action alternative. If the no action alternative is denial or relicensing both reactor units, this alternative must fully address the impacts of decommissioning the plant and returning the property and land use to its former state. The EIS must provide data to the public that shows adequate funding has been set aside or escrowed for decommissioning and maintaining the spent fuel storage facilities into perpetuity under the no-action alternative.

The EIS needs to address reasonable and prudent alternatives to re-licensing the reactors. This needs to be sufficiently analyzed. This alternative analysis should not only be limited to equivalent power production methods but also power demand reduction measure including broad-based energy efficiency and distributed generation incentives and measures by those power companies purchasing the existing and proposed nuclear-derived power.

Could one of the alternatives to the proposed action be that only one of the two reactors is re-licensed? If so, what are the following effects?

What are the impacts to grid reliability and the resultant indirect socioeconomic impacts (e.g., see impacts from California utility-imposed blackouts during wildfire season)?

How does the impact of licensure of only one unit impact the cost of power from the nuclear plant as compared to the cost of power from other sources (i.e., does the financial operational efficiency of the plant decrease with only one unit available resulting in a higher cost per kWh or mWh to the wholesale power grid)?

Other Concerns:

- The EIS needs to address the baseline scientific studies used or the lack of baseline studies to adequately monitor the effects on the environment from the proposed action

Carbon is involved cradle to grave, and radioactive carbon waste comes from operations into spent fuel storage.

I ask the NRC to prepare a complete record of the amount of carbon used from cradle to grave for nuclear operations, such as mining, transportation, construction, waste storage, and all other factors that involve carbon emissions and/or carbon waste. This should include carbon equivalents in terms of global climate warming.

I ask for NRC to document all radioactive nucleotides of carbon involved with Point Beach nuclear plant.

The actual amount of carbon used at Point Beach is data that the facility should be able to provide NRC in terms of its carbon and carbon equivalent footprint in terms of global climate change.

I agree with Don Ferber who wrote to me, saying: “You’ll be glad to hear that the Sierra Club is opposing the license renewal [of Point Beach]. We looked at the balance of issues and given the long added time that would then be allowed, that nuclear is far from carbon free, and that even without a permit renewal, it can run another decade or so, that the license should not be renewed. By the time it is shut down under current allowances, solar, wind and storage will continue to drop in price and provide much more cost effective and clean energy.”

I agree with Don Ferber, the current State Chairperson of The Wisconsin Sierra Club, that the Sierra Club “has always recognized that nuclear is not carbon neutral and has its risks, and a good part of our opposition to new nuclear has been the cost issue. In this case [Point Beach], we looked at the balance of issues, and that such a long term extension for an old plant was not warranted. Any further funds are much better spent on renewable energy.” He emailed me his position on February 17, 2021.

The Wisconsin Sierra Club’s primary position is that Wisconsin’s energy investments must prioritize affordable energy solutions and eliminate those with exorbitant costs associated with their cradle to grave

energy profile. This excludes Point Beach which does not provide affordable energy solutions and which has exorbitant costs cradle to grave, compared to alternative options of generating electricity.

This followed my concern that too many energy analyses inappropriately overlook the fact that very long term radioactive carbon-14 and other isotopes that last thousands of years are formed from operating nuclear plants. The people that have inaccurately promoted nuclear as carbon neutral have omitted operational facts that were inconvenient to them. This also occurs with the silence about excessive carbon emissions that apply to the mining and construction cradle all the way to the grave, from mining, to construction, to transportation, to operations, to waste generation of radioactive carbon, and to transportation and storage of waste and decommissioning.

As the waste storage nightmare may never be safely solved, I believe that the actual costs of storing all this waste into perpetuity will be multitudes of factors higher than estimated.

Science for safe waste storage was omitted at the front end. This was a huge error that has unlimited future adverse consequences. I hope that we have learned that we must identify the solutions at the front-end before we create a problem that cannot be safely solved.

Those who ignored science and replaced it with pseudo-science and fantasy thinking (that a safe waste solution would be found after the nuclear plants were built) have created a disaster where the NRC is faced with all this most toxic waste without a safe waste disposal solution for the rest of time on the earth. Those costs have not begun to be realistically calculated in terms of billions, trillions, quadrillions, and more money until forever, or until the isotopes stop emitting half-lives, and half-lives, and more and more half-lives.

The NRC needs to attempt its most accurate, systematic way to begin to be all-inclusive about the complete costs of safely handling waste into perpetuity forever.

Geopolitical threat exists.

Terrorist concerns are growing—foreign and possibly domestic.

The Russians, and increasingly the Chinese, have the capacity to rapidly impact US nuclear capabilities with the ability to push US satellites out of orbit within ½ hour with “space stalkers” developed by the Russians within the last 5 years.

Every nuclear plant in the US, including Point Beach, is a potential target of vulnerability by terrorists and by foreign power seekers.

The only areas where full transparency may be redacted from the public involve the most limited areas of scope involving safety threats from terrorism, bad actors, and national security concerns. I believe this includes security personnel and camera surveillance and related programs.

The facts show that the Biden Administration’s collaborative attitude toward space is dismantling common-sense protections put into place negotiated by the Trump Administration which was concerned about nationalistic protections from competitiveness being displayed by actions of these foreign nations in terms of high tech and space. It is unfortunate that the political childish behavior within the US has been allowed to foment such hatred to the point of the blanket irrationality that is being applied to anything considered Trump’s legacy. This is unfortunate to the extent that it jeopardizes national security and endangers innocent people living downwind and downstream of potential nuclear exposures.

The facts identify that China and Russia do not have a cooperative view of space with the US, and it is possible that they seem to be fusing together now in space and high tech competition against the US. Given the unreliability of the new media today, it is difficult for me to rate the integrity and accuracy of that fear. Donald Rumsfeld spoke of these matters in his 2001 inauguration. We must not lose sight that the nuclear command is involved. This information came from Brandon Weichert, geopolitical analyst in “The Nation Speaks” on 2-20-2021. Ultimately, this national threat impacts both civilian and military.

Elon Musk is countering Chinese advancements by developing efficiencies. It has been reported in mid-February 2021 that Elon Musk has deleted President Biden from his email list, which is an indicator of ineffectiveness on the part of the current President to properly deal with the nuclear command issues. Some of this ineffectiveness stems from overemphasis on destroying the Trump “legacy,” which I view as driven by hatred. It is what it is. It increases threats.

The NRC should strongly consider that previous assumptions of relative safety within the US from geopolitical threat have greatly deteriorated from ongoing political polarization. Every nuclear power plant may now be a target to harm Americans.

Concerns of Supersonic Shockwave Explosion become better articulated:

TEPCO blames “supersonic” as implicated in an explosion at Fukushima on 3-11-2011, per a 3-1-2021 posting by Christina MacPherson at Fairewinds Energy Education. Fairewinds congratulate “Nippon for the excellent work they did to create the original initial explosion footage in 2011 and on this essential remastered copy just completed in 2021. Nippon’s newly released digital footage is important historically and technically.”

“That said, the new video footage and Nippon’s ensuing interview with Tokyo Electric Company (TEPCO), the atomic power corporation that owns all six Fukushima Daiichi nuclear power plants, contain three glaring technical errors.

“First, Fairewinds continues to have significant concerns about TEPCO’s technical interpretations of these explosions’ cause.

“Second, TEPCO is blaming newly uncovered lethal radioactivity sitting at the top of the containment structure on the supersonic shockwave.

“Third, TEPCO does not discuss that there likely was a second explosion that occurred 3 seconds after the first.

“Understanding the mechanics behind explosions is critical to understanding what happened at Fukushima and what such a danger means to nuclear power anywhere in the world. There are two explosion methods: a deflagration shock wave, which happened at Fukushima Unit One and Three Mile Island in Middletown, Pennsylvania, in the United States. While still destructive, a deflagration shockwave travels at subsonic speeds (less than 760 miles an hour, the speed of sound).

1. The second type of explosion is called a detonation shockwave. It is much more destructive because it travels at supersonic speeds. In 2011, with Geoff Sutton’s assistance from the United Kingdom, Fairewinds clearly showed that the [Unit Three explosion was the more destructive detonation shockwave](#) while Unit One’s was a deflagration.
2. Does it matter whether or not an explosion at Fukushima was a detonation or a deflagration? *Absolutely!* Hydrogen gas at room (atmospheric) pressure **cannot** create a supersonic shockwave. Fairewinds’s 2011 findings that a detonation shockwave occurred should have changed the scientific and nuclear engineering analyses of such events worldwide.
3. **No nuclear power radioactive release containment system built anywhere in the world will withstand a detonation shockwave!**
4. The fact that a detonation shockwave did occur is something the nuclear industry has ignored since [Fairewinds’ Arnie Gundersen and Geoff Sutton identified it did happen](#) at Fukushima Unit Three in 2011.
5. *The nuke industry and its regulatory handlers do not believe that a supersonic shockwave explosion will ever happen in a nuclear power plant. If they admitted that an atomic reactor containment system would fail by detonation, the nuke industry would also have to acknowledge that nuke plants’ containment systems are not failsafe. Nuclear power containment systems will fail when there is a supersonic shockwave explosion.*
6. ***The supposedly failsafe containment system at Fukushima Dai-ichi Unit Three failed and released massive amounts of radioactivity into the local environment and the worldwide atmosphere. Such an enormous human tragedy will happen again at an atomic power reactor somewhere in the world.***
7. ***Think about that. No nuke in the world can withstand a supersonic shockwave, and here is the evidence on international TV and across the Internet that it occurred in 2011, as Fairewinds said.***
8. ***Fairewinds second area of concern about TEPCO’s analysis on this latest NIPPON video is the linkage of recently discovered lethal radiation levels at the top of the containment to the supersonic detonation. Ten years ago, immediately following the three meltdowns at Fukushima in 2011, [Fairewinds identified superheated highly radioactive gases escaping from this same area that TEPCO suddenly claims it has just uncovered in 2021.](#) The containment***

was leaking before the explosion and continued to spread radioactivity after the blast. Still, no nuclear engineer or scientist is surprised that significant contamination continues to leak from the damaged containment system. The containment was breached, which allowed this radiation to leak! However, there is no evidence to suggest that the explosion is the cause of that leak since the containment was leaking before the supersonic shockwave.

9. *Finally, Nippon's [remastered video vividly shows Fairewinds' third concern](#). The eye is drawn to the detonation's sudden flash and the ensuing upward-moving black cloud of rubble. Now, look again. About three seconds after the initial vertical blast, a white cloud suddenly moves horizontally at ground level to the north. (see picture on original -comparing the first and second plumes)*
10. *Community-volunteer citizen-scientists Arnie met while collecting radioactive samples in Fukushima prefecture say they heard more than one explosion. They said it sounded like the snapping of bamboo burning in a fire. This new video shows that there were at least two explosions, one vertically and one horizontally. As more data becomes available, Fairewinds Energy Education will put forward the reasons why, but as of now, the entire explosion sequence at Fukushima Unit Three is something the nuclear industry zealots want to ignore. They continue to hope that history will not repeat itself while they continue to build and operate more lethally radioactive and highly risky atomic reactors.*
11. Throughout the [Nippon video](#), the announcer reverentially refers to TEPCO and the Japanese Regulators as "the authorities" and "officials". ...
12. What was called for in 2011 and is still desperately required in 2021 are independent experts. These would be people from outside TEPCO, its captive regulators, or its allies embedded in the nuclear industry. Once again, Fairewinds calls for an independent consortium of experts who would be able to give a frank assessment of the magnitude and extent of the problems that lie ahead for the failed Fukushima cleanup.

Transparency needs should not be cloaked as proprietary or a national security issue:

I am concerned that it appears that the vulnerabilities of the aging system itself at Point Beach have been not shared under the over-reach of the term "proprietary."

I have been concerned for decades about the over-reach to declare far too much "proprietary" information, as a general private business practice. I do not find that language attempting to justify such practices that generally attain the status of "proprietary" to be authentic, sincere, or legitimate. Across the many years of my life, I have repeatedly observed, in general, abuse and non-transparency associated with the private status of "proprietary." Non-transparency, in general, should not qualify to be included as "proprietary" nor as "national security" issues.

I am concerned that too many issues involving Point Beach have acquired the term "proprietary," including the reactor brittleness, which requires transparent, open discussion and peer review prior to extending this operating license at Point Beach, which I do not view as falling legitimately under either "proprietary," or under "national security classified redaction." Without peer review from the public, without suggestions from the public, one of the most important issues of aging appears to me as being derailed away the peer reviews. To the extent that this appears to be occurring, that is the extent that the scoping is seriously deficient and does not meet the rigor of the scientific process.

I believe in general the competition already knows the details that are being claimed to be "proprietary." These details are passed in bar conversations, at industry conferences, in books, and by employee migration within the industry. I assume that those details should be protected by patent first and foremost. I assume that very little is hidden from competitors who have much more access to the information than does the public.

Across the many years of my life, I have observed that the term "proprietary" almost always has been used to hide unfavorable information from the consumer, not the competitor, such as the presence of toxic ingredients or other important safety facts that have been withheld under the abuse of the justification,

“proprietary.” I have watched the exposure of information hidden under the excuse of being “proprietary” information usually after discovery in law suits. I have watched the repetitive pattern where “proprietary” information is abused in order to hide the harm of the product from the consumer’s awareness. As a result, the term “proprietary” seems to mostly be used for non-transparency, rather than protecting competitive advantage, in general. I find this to be over-reach of a claim that then becomes untrustworthy due to the presence of over-reach under a false pretense.

I do not accept that such large chunks of the Point Beach documents are being hidden under a claim of being “proprietary,” due to my previous experience with eventually discovering that “proprietary” information is simply a mechanism to cover-up the awful truth of potential harm from the potential victims of that harm. My observations do not find rigged industries that non-transparently hide the full details of their operations to be contributing to American capitalism in a healthy economic way, without in some hidden way taking excessive advantage of the American public trusting.

Point Beach nuclear plant should not be hiding information behind the term of “proprietary.”

I have no issue with a few vital areas being classified as “national security,” such as location of sentinels, location of surveillance cameras, and other surveillance protective plans.

NRC must return to the scientific method as its highest priority:

The NRC, among all the federal protection agencies, deals with extremely complicated complex scientific factors given the invisible but dangerous nature of ionizing radioactive materials and waste that necessitate stringently following science, if the public is to be safe. The NRC, if it is to remain credible and viable, must return to a strict process of scientific methods, transparency, and peer review, as its highest priority, where proper time is taken to scientifically exhaust the conversation, which must be rigorous and complete, by definition.

The scientific method must become the highest priority of the NRC.

Anything less the complete and rigorous scientific discussion process is pseudo-science by definition. Pseudo-science promotes unscientific dangers. Anything less compromises the very purpose of the NRC as a safety oversight authority which is expected to protect the public using a trustworthy scientific process with sufficient enforcement to ensure that safety protection.

Artificial deadlines for rubberstamping the extensions requested by nuclear plant owners should not be treated as blanket acceptable, just because such applications were determined in the past to be acceptable and somehow added into the rules. Perhaps not all peer reviewers had time to pay attention. The largest oversight of all details misses its required sufficient peer review, apparently when this is circumvented by assumptions for the operating license extension’s application process.

I find it unacceptable to assume that matters dealt with during operations do not need to be revisited during operating license extension’s application process. My primary objection is that this assumption eliminates much of the peer review that otherwise would be looking at the entire plant as a whole, including the operating concerns that form the day-to-day staff work of the NRC. My primary objection is that this assumption does not seem to involve peer reviewers formally weighing in on these vulnerabilities taking another good look at the plant as a complete whole before rubberstamping an extended operating license without doing a full inspection of all the missing parts not being discussed in detail. The public scoping process with a public hearing and with public comments that are all formally recorded as part of the record, which include peer review concerns by other scientists and medical professionals, should include the unexamined assumptions of the entire operations and the way that these unexamined assumptions might interact with each other in vulnerable ways that otherwise would not be articulated and properly addressed.

To the extent that peer reviewers are curtailed from discussing the full context with its entire set of specific issues—site specific and generally applicable to every nuclear plant, and the full context of interrelationships among various parts of the entire set of specific issues and larger issues, this is the extent to which the scientific process has been short-shifted, curtailed, and incomplete. This is the extent to which pseudo-science is being allowed to infiltrate unsafely into the management and operations of nuclear plants.

This is the extent to which operations become vulnerable and unsafe in an unacceptable way. Weakening the scientific process is unacceptable because it violates the scientific process, by definition, by destroying thoroughness and vigor.

When a nuclear plant receives a given number of unexpected events, a “Yellow Warning,” or a “Red Warning,” these should disqualify future extension applications, or at the very least trigger a full review of the entire nuclear plant where the entire package of concerns should be on the table and able to be fully discussed in all their details by everyone for any extended license extension. To do less than that is to not get all peer-review voices into the process; and this must not be allowed to continue and this must not be allowed to be misidentified as the scientific process. When the process excludes sections of pertinent considerations that are required for all information to be on the table in terms of the large overview required by the full and rigorous scientific process, such a weakened process, by definition, becomes pseudo-science.

I understand that NRC in these license extensions does not put the full history of the plant up for scientific inspection and full re-analysis, but excludes “operations” from this full rigorous analysis. By definition, this would be much less than the full scientific process required for identification as the scientific process. By definition, a process similar to scientific but incomplete in some way becomes pseudo-science.

Nuclear plant operating license extensions must be subjected to the full rigorous scientific process without being weakened and undermined by rules, including rules perhaps made to shorten staff work load. It is irrational to fail to conduct a full rigorous scientific review process during an operating extension application for a nuclear plant known to be behaving in any way that proves that it is not adhering properly to best scientific guidelines.

Since scientific process and scientific methods require honesty and trustworthiness, any sign of untrustworthiness may become evidence of violation of scientific methods.

It is unacceptable that Point Beach is being allowed to even make application for a license extension, given the extensive evidence of Point Beach’s history of untrustworthiness by the public and of unsafe practices that are proven in the form of “Red Warnings.”

I find this to be an unacceptable that the NRC is no longer prioritizing safety.

The gradual erosion of public safety as NRC’s highest priority has resulted in egregious processes that allow nuclear plants to apply for operating extensions beyond the original time that was determined originally to be the safe time limits before components aged and deteriorated into potential unsafety. This is particularly insidious, irrational, and unscientific, to the extent that the NRC does not have any rules to exclude unsafe or aging plants from applying for operating license extensions.

I found it extremely concerning that the NRC, when asked during the Point Beach public hearing, could not site any examples where the NRC did not approve a license extension for ANY nuclear power plant. This was concerning because Point Beach is the oldest nuclear reactor in the US (as Palisades is scheduled for decommissioning), and Point Beach has the worst record operating in the entire US for violating rules, being untrustworthy, and operating an unsafe and dangerous plant.

If the NRC does not have rules to refuse license extension application as unreasonable, the NRC is ignoring scientific decision-making by thereby approving license extensions for aging and unsafe nuclear power plants. The NRC is ignoring that owners may be prioritizing profits for a small group of owners while being reckless with public safety on a large scale for eons into the future.

Indemnification from Financial Liability Encourages Gambling Increased Risk into Recklessness:

I believe that indemnification from financial liability for their actions is unacceptable, and it encourages abuse and increases risk to the public of catastrophe. When an industry is legally responsible for the harm and damage it might create, this encourages those responsible to be careful to not end up liable for any reckless act or omission. Unfortunately, the nuclear industry has had its responsibility for liability for harm

waived, encouraging increased risk-taking that likely would not occur if the owners were fully legally liable for any and all potential harm.

Some legal experts are suggesting that such indemnification is Un-Constitutional, given the fact that other alternatives of generating energy are much, much, more affordable, less risk adverse, do not pose catastrophic risk that no insurance company will insure, and do not have a nuclear waste problem with an unknown price tag that is already excessively “sky-high.”

I fear that our electric grid has been selfishly and negligently centralized by the transmission lines, such as American Transmission Line and its subsidiaries in Wisconsin. If we have a power grid failure where power does not reach Point Beach nuclear plants timely after their generating capacity has been depleted, then it is possible that we could have these nuclear plants along with other nuclear plants also served by the same power grid failure that would be posing multiple threats to public safety simultaneously. We know this grid failure is a confirmed vulnerability. We know we do not have sufficient repair and replacement supplies, and that orders would have to be placed to China. We know that intel has concerns about foreign geopolitics that could attack our grid to establish control over the world and subjugate the USA. This concern is a unique and very valid reason to not renew nuclear power plants, in general, beyond their original agreed-upon lifetimes, but especially the most dangerous and most aged plant in the nation, that would pose the maximum unsafe complications in terms of responding to a long-term grid failure. The power grid failure could result in catastrophic loss of most of America, potentially that could be far worse than Chernobyl or Fukushima, given the number of potential failures that could occur simultaneously.

How would Point Beach be able to provide backup generator power to shut itself completely down in the case of major power grid failure that would not be able to be repaired short term?

What damage could be expected from a 4-hour or 8-hour generator backup system during a long term grid failure?

What type of indemnification can victims expect if multiple plants at the same time didn't shut down properly under stress of a grid failure?

It seems to me that the Price Anderson Act could become a worthless piece of paper guaranteeing nothing at all if multiple leaks occurred simultaneously from the same grid failure.

Any time an industry is operating with technology that the entire insurance industry refuses to insure, I know that decision was made at carefully looking at all the risks and impartially determining that the financial risk was unacceptable. If the financial risk is unacceptable for the insurance industry, then it should be twice as unacceptable for the American public—for actual loss of quality of life, lifestyle, and economics and for the taxpayers having to pay for this loss, with some of the taxpayers paying for it also being harmed. This is irrational and unacceptable.

This abuse warrants Congress should revisit the Price Anderson Act and repeal it as irrational and counterproductive to public safety and to national security interests, particularly where it is the public who gets stuck paying the bill in the case of catastrophe. All insurance policies of every type exclude coverage for radiological damage. Meanwhile, this gift of indemnity seems to encourage recklessness in the case of Point Beach based upon the enforcement records.

When nuclear plant operators show signs of dishonesty, of discrimination against truthfulness/whistleblowing, of reckless operations that lead to unexpected shutdowns, this is strong evidence that scientific practices are not being followed sufficiently.

Plant operators who deviate from scientifically determined standards should not be rewarded by the NRC extending their operating license for a dangerous plant to become even more dangerous. Danger is danger whether from aging plant or from failure to implement the best scientific practices for safety.

It is unfair betrayal when the NRC does not properly protect the public from unsafe conditions that could rapidly deteriorate without warning and develop into a catastrophe due to an extremely old plant that was never anticipated to have operating extensions granted to it when it was originally designed for a 40-year lifetime, not an 80-year lifetime.

The history of the Point Beach operations show evidence that the lack of applying the best scientific methods for safely in all the thousands of deteriorating components being used far beyond their lifetimes is so

serious that this malpractice could effectively destroy major planet real estate and resources, especially the non-replaceable precious and vital resources of Lake Michigan.

As a Wisconsinite interested in the best interests of the majority of the people in the State of Wisconsin, I ask:

Where is the financial guarantee that a catastrophe at Point Beach will fully financially compensate its public victims in terms of loss of health, reproductive quality, property value, loss of irreplaceable world class water resource of Lake Michigan, and precious agricultural land for thousands of years into the future of humanity of earth?

It is time to revisit this very outdated assumption that a financial guarantee somehow exists on the backs of the American taxpayers. As I scan the US economy controlled by the federal government that enacted the Price Anderson Act and which would be responsible for relief under it, I observe most taxpayers appear to be in debt beyond their ability to repay, and this was greatly accelerated due to the economic damages of COVID19 upon perhaps 50% to 75% of the small businesses across America seem to be on the verge of unprecedented bankruptcies.

The economic situation has radically changed away from the past assumption that American taxpayers would be able to pay for a catastrophic accident to the extent that it has become unacceptable nonsense to continue on that faulty premise. The fact that Price Anderson Act has unrealistic limits that would leave most financially injured and harmed persons considering the aggregate types of collective injuries from cumulative injuries without proper compensation. From this viewpoint, the owners of Point Beach are not only gambling with the lives and resources of all those who might be injured but that this appears to be the perfect storm for massive takings without chance of financial compensation. This is unacceptable.

It is time for NRC to identify and prove where the damage reimbursement will come from in the case of a catastrophic accident at Point Beach, which I find to be highly probable given the full liabilities of the owners who already have been granted a 20-year extension beyond the original scientifically calculated safe operating period—after which the probability of a catastrophe from degrading and deteriorating and embrittled components keeps increasing and increasing. It is sheer folly to extend the operations of this deteriorating extremely aged plant into the gambling risk of double its safe lifetime from the reliable lifetime originally calculated by safety scientists for putting Point Beach into operations. That sheer folly becomes total insanity when this type of unacceptable gambling by the owners of Point Beach does not have a financial compensation plan to mitigate and restore the entire Lake Michigan, all other waters, and all the precious agricultural and natural resources in potentially damaged land formations that could become radioactive for thousands and thousands of years.

It is irrational to even be considering a short-lived 20-year operating extension for Point Beach when such an application violates far too much of very basic scientific rationale. First and foremost, the entire civilian nuclear power industry has been built from its start upon faulty science that a safe waste solution could be found. This was false. We have known for decades now that a safe radioactive waste solution for thousands and thousands of years of radioactive waste decay half-lives consisted of faulty wishful thinking that never will materialize. We can mathematically visualize the thousands and thousands of radioactive waste decay period. We can rationally recognize that nuclear energy for 40 years of operations, extended dangerously for 20 years more of operations, and extended with ever increasing higher and higher gambling risk for another 20 years more at the oldest and most dangerous nuclear plant (based upon history of the most “Red Warnings”). Given these facts, a rational person should find this relative brief short-term energy generation to be unacceptable, unreasonable, and unscientific, given its long-term harm will cause humanity to be permanently burdened and injured into perpetuity from this invisible poison that is not recognizable to the 5 human senses. We require a wide assortment of different types of meters, most of which are extremely expensive, in order to detect alpha from beta from gamma radiation for starters, and to identify the isotopes becomes more complicated.

Point Beach Management does not show focus on scientific integrity of the plant:

The testimony at the public hearing by a recently hired manager at Point Beach failed to convince me that the past unscientific and untrustworthy behavior was being rectified.

I'm concerned that I heard only bragging with the highest praises as if this manager actually thought that Point Beach was being run in the most exemplary way with only the highest of standards, when the opposite is the actual reality, based on the documented enforcement history, for which I commend the NRC staff for doing their job.

I am concerned that the testimony I heard from this Point Beach administrator was biased, one-sided, and devoid of scientific thinking. In fact, he did not make a single admission that any serious problems existed. He didn't make a public acknowledgment of remorse or regret for the plant's egregious history. He didn't make a promise that management would be returning to best scientific methods. He didn't provide a description of any plan to ensure that the plant would not continue being shut down unexpectedly and receiving more "red flags." He didn't give a description of the aging components that he should be planning to replace before they stop working within a given timeframe. He provided only glowing testimony that Point Beach was only an asset. That propaganda may be acceptable in a commercial, but not appropriate as public testimony to continue running a nuclear plant with the worst operations history in the nation that also is the oldest plant in the nation.

After I heard his testimony, I can assure you that he did not give me, as part of the Wisconsin public, any reassurance that he would treat safety as his top priority. I strongly believe that an individual who manages with one-sided hope and wishful positive thinking, instead of detailing actual advantages and disadvantages, should not be running a nuclear plant or any other highly technical system that absolutely requires viewing management of the whole system from a balanced, realistic viewpoint that considers all aspects of each entire system within the largest system. After listening carefully to him, I did not get the impression that he is concerned about prioritized public safety under his management, but rather I felt that he is the type of manager who would punish a whistleblower. I found his silence on the concrete factual science untrustworthy.

My concerns that the Point Beach operating managers/owners are more concerned about profits than public safety is further supported beyond this single manager's public testimony.

The Point Beach website does not attempt to inform the public about best practices in case of external leaks or an emergency, but this should be mandated for transparency of critical public information.

The Point Beach website should be mandated to publicly list its entire history of unexpected events, but such transparency does not exist. To the extent that scientific methods have failed to identify each and every safety concern in advance, those are indicators of insufficient rigor and analysis applied in the process of scientific analysis that are unacceptable given the catastrophe potential.

If the NRC does not have a mechanism to block faulty approval of the most aging unsafe nuclear plant in the nation with a dangerous history of untrustworthy and unsafe operations, then the NRC somehow has created rules and loopholes that have rendered its protection oversight to be unscientific and meaningless in terms of ultimate national security and ultimate protection of the American people from potentially extremely harmful radiological threats.

Scoping the economic and financial costs:

What are the numbers in terms of the costs and affordability and potential economic catastrophic events for the public?

What are the most cost effective investments for electric generation of a public utility in Wisconsin, given all the options?

Electric nuclear power is outrageously the costliest of all electric generation to such an extent that it should be recognized as unviable from cost effectiveness of electric units generated, and these costs must include all cradle to grave costs.

The generation of radioactive waste annually is irrational, given the blatant fact that no safe waste storage solution exists. It is apparent to me that it will take trillions of dollars in repeated and unsuccessful efforts to contain this irrationally generated dangerously lethal waste to humanity and our ability to reproduce

into the future. Steel containers only last a few decades at best. The radioactive waste isolation pilot project has been plagued with leaks and explosions with external contamination. There is no known safe solution.

It is irrational for NRC to continue to approve license extensions not only for dangerous aging plants but it is unscientific for NRC to approve any license extensions when no safe solution exists to deal with the constantly accumulating nuclear waste. All the pseudo-science solutions have serious flaws. Any solution boomerangs severe suffering and misery upon humanity in the future. It is irrational that NRC has approved nuclear plants in the first place without the science for a safe solution to deal with that waste. It is long past time that NRC stop approving unscientific enterprises and stop approving extensions for their operating time that increases the unsolvable waste problem. This is a relevant problem to Point Beach.

Wisconsin ratepayers should not be held financially hostage to having their economic wherewithal for investment choices depleted by private choices to “push the envelope” on the oldest and most dangerous nuclear reactor in the USA (not scheduled for decommission).

Point Beach is a producer of extremely expensive electric power that is not competitive with any other form of electric generation financially.

Worse yet, the operation of Point Beach presents an ever-present danger of a nuclear catastrophe which could never be properly reimbursed economically and which could remove precious agricultural land and well as the non-replaceable world-class water resource of Lake Michigan upon which millions depend for drinking water in the States of Wisconsin, Michigan, Illinois, and Indiana.

Will the owners of Point Beach be able to bring drinkable water forever to the homes of each of these millions of people for the future of their lifetimes and those of their descendants?

If it can't do this into perpetuity, it should not be allowed to endanger the lifestyles, quality of life, and the health of millions of people that could be adversely harmed by a likely catastrophic accident.

The Point Beach nuclear plant's best safety margins have been passed, and for the last decade Point Beach has become increasingly more and more aged and treacherous.

The excessive “Red Warnings” show that Point Beach is operating with insufficient concern for the potential severe harm and suffering that would occur from an accident, particularly as Point Beach at the same time keeps increasing the annual output of electric generation as the components increasingly age beyond their safe lifetimes.

The scientists that designed Point Beach determined that it could be operated safely for 40 years, not 60 years, and certainly not 80 years. Aggressively pushing Point Beach beyond 40 years without replacing the reactor itself and without replacing all of the miles and miles of cooling pipes predictably is courting disaster recklessly and negligently.

Plenty of evidence for recklessness and negligence exists in the form of “Red Warnings” given by the NRC.

It will be reckless and negligent for the NRC to not shut down Point Beach given this history of neglect and disrespect for its neighbors in this way.

Worse yet, liability waivers exist on the federal level in the form of the Price Anderson Act that have emboldened the owners of Point Beach to operate these units in such a way that carelessly have caused situations that have resulted in NRC appropriately citing these violations.

There are other aging components in other important systems that could malfunction in a seriously aged nuclear plant, and Point Beach is extremely aged with a brittle reactor and with apparently leaks in its cooling pipes, which are extremely serious concerns of safety.

How much will it cost to replace all the aging components of this plant?

Reactor embrittlement is usually considered too expensive to replace, but yet that embrittlement is a function of Point Beach already being beyond its lifetime, per the original scientific data which was when safety was fully considered. What would this cost, as it likely needs replacement for safety purposes right now?

Another major catastrophe risk is in replacement of the underground miles of piping that obviously has begun leaking or else we wouldn't have had people testifying at the last 20-year extension that their families were sickened by radioactive tritium in their private well drinking water. It appears that this health endangerment has caused the population living within the ten-mile reactor radius to flee and to move elsewhere, after they complained to the NRC and the NRC extended the Point Beach operating license anyway. This is disrespect of NRC for the citizens of Wisconsin who were first harmed by tritium and then harmed by being pushed out of their own homes and farms in this way for a nuclear power plant that is not cost-effective.

What would it cost to replace all those pipes? What are the costs to property owners who were unfortunate to have Point Beach as a neighbor within a 10-mile radius?

Tritium contamination in private wells around any nuclear reaction almost always means leaking pipes under the reactor. When the cooling pipes under a reactor leak due to being considered too expensive to replace to guarantee the type of safety Wisconsinites deserve, this is an indicator that in the case of a reactor accident that these pipes could become faulty and not properly cool the reactor in an emergency and lead to catastrophe. These full realistic costs must be factored into various cost analyses.

Sincerely,

Susan Michetti
A Lifetime Wisconsinite