

Thank you for the opportunity to make recommendations on areas the Office of the Inspector General should examine to when auditing the NRC's FY2022 annual plan. Here is a short list of critical areas where the NRC is violating its own regulations or internal rules. We believe the OIG should pay special attention to them in the audit:

1. REACTOR PRESSURE VESSEL EMBRITTLEMENT

Reactor pressure vessel neutron embrittlement creates a risk of through-wall failure of the primary containment boundary, which would lead to reactor core meltdown, and potential catastrophic releases of hazardous radioactivity into the environment, harming human health and safety.

NRC has weakened its reactor pressure vessel embrittlement safety standards repeatedly, not just over years, but over decades. It did so in order to accommodate dangerously embrittled nuclear reactors, allowing them to continue operating for far longer than originally envisioned under their initial 40-year operating licenses. In fact, the nearly 50-year old Point Beach Unit 2 in Wisconsin, which has been [acknowledged](#) by NRC staff in April 2013 as the worst embrittled pressurized water reactor in the U.S., is now seeking a supplemental license extension, on top of the previous extension NRC already approved 15 years ago. If approved, this supplemental license extension would authorize Point Beach Unit 2 to operate for a grand total of 80 years, despite its embrittlement and well-founded concerns about its safety.

NRC has already approved such "[subsequent license extensions](#)" to operate for a total 80 years for six reactors. Besides Point Beach Units 1 and 2, two more reactors are currently under NRC review for license extensions that would lengthen their operating lives to 80 years. In addition, three more reactors have applied for such extensions. Those applications have been received by NRC and are currently under acceptance review. Two more reactors are expected to submit such applications in the near future.

Granting 80-year licenses to nuclear plants designed to operate for 40 years is extremely controversial. In granting them, the NRC appears to be repeating the same pattern it followed in granting initial license extensions, which lengthened operating lives to 60 years. Almost every single operating reactor in the U.S. applied to the NRC for initial license extension to 60 years of operations. And of those that did submit applications, [every single one was ultimately approved](#) by NRC. In some cases citizens groups mounted determined opposition, for example pointing out embrittlement at Palisades.

Intervenors PSR WI (Physicians for Social Responsibility Wisconsin; legal counsel Terry Lodge of Toledo, Ohio; expert witness nuclear engineer Arnie Gunderson of Fairewinds Associates) have raised reactor pressure vessel embrittlement contentions in their challenge against the 80-year license at Point Beach Unit 2. Here is some documentation related to that:

<<http://www.beyondnuclear.org/relicensing/>>. See especially:
<<http://www.beyondnuclear.org/relicensing/2021/3/23/psr-wi-petitions-to-intervene-and-requests-hearing-in-opposi.html>> and
<<http://www.beyondnuclear.org/relicensing/2021/4/27/psr-wi-defends-its-intervention-contentions-as-it-opposes-an.html>>.

The latter filings document how the Electric Power Research Institute, an industry group, had recently admitted non-conservative errors and flaws in its Boiling Water Reactor embrittlement modeling. As PSR WI pointed out to the Atomic Safety and Licensing Boards (ASLB), this begs the question, are there also non-conservative errors and flaws in industry's PWR embrittlement modeling?

This is a safety-significant line of questioning. But NRC staff has opposed including it in the Point Beach, WI 80-year subsequent license extension proceeding. This reprises the NRC's refusal to seriously consider embrittlement when granting initial license extensions to 60 years.

Palisades in Michigan, just across Lake Michigan from Point Beach Unit 2, is tied with it for the distinction of the worst embrittled nuclear reactor in the U.S. Palisades first violated NRC embrittlement safety standards in 1981, just ten short years into its operations. Citizens' groups have [raised embrittlement concerns](#) at Palisades since the early 1990s. It has announced it will permanently shut down by May 22, 2022, after 51 years of operations. Yet Point Beach Unit 2 is seeking, and judging from NRC's history will certainly be granted, license extension to 80 years.

The NRC seems to prefer to leave the decision of whether to shut embrittled reactors down to the licensees. Diablo Canyon Unit 1 is listed in NRC's April 2013 list of the five worst-embrittled reactor pressure vessels in the U.S. It plans to close for good by 2024. Indian Point Unit 3 is also listed, and closed permanently on April 30, 2021. Beaver Valley Unit 1 in PA is also listed. Its owner FirstEnergy (recently renamed Energy Harbor) previously indicated its intention to shut the reactor down permanently unless it secures a state bailout for continued operations. This is unlikely to happen given the scandals and controversies raging nuclear bailouts Ohio and Pennsylvania. (Energy Harbor is headquartered in Akron, OH, but owns and operates the Beaver Valley nuclear power plant, located just several miles into PA from the OH border).

Yet while the other four of the five worst-embrittled reactors in the U.S. have already shut down or plan to close in just the next few years, Point Beach Unit 2 has decided to continue operating for three more decades, despite dangerous embrittlement of its reactor pressure vessel.

Rather than enforce its reactor pressure vessel embrittlement standards, the NRC has chosen time and time again to weaken them in order to accommodate owners of embrittled reactors so they can continue operating, now with operating lives extended up to 80 years.

Citizens' groups have resisted this NRC regulatory retreat, and repeatedly asked the NRC to enforce rather than relax embrittlement safety standards. For example, in the case Palisades, they requested hearings and filed petitions to intervene with NRC Atomic Safety and Licensing Boards in the initial 20-year license extension proceeding (2005-2007), and again in the License Amendment Request proceedings (2014-2015). But the intervenors were often rejected by ASLB outright, and those decisions were sustained by the NRC Commission. In one exceptional case, the ASLB voted to grant a hearing on the merits of an intervention contention. But on appeal by Palisades' owner/operator, Entergy, their decision was overruled, and the hearing was disallowed by the NRC Commission.

Apart from the actions of the ASLB and NRC Commission, the NRC staff in its own right consistently rejects public intervenors' concerns. It also ignored public watchdogs' embrittlement concerns at Palisades, raised at every turn, dating back to at least 1993. It consistently weakened reactor pressure vessel embrittlement safety regulations, often in with NRC actors such as the ASLB, the Advisory Committee on Reactor Safeguards, and the NRC Commission itself.

Such dangerously embrittled PWRs as Palisades and Point Beach Unit 2 have posed threats of meltdown and catastrophic ionizing radioactivity releases for decades. Citizens living downwind and downstream of embrittled reactors, and those who are linked to them along the food chain and down the generations, have been imperiled by the NRC's failure to enforce safety standards. In the case of embrittled reactors like Point Beach Unit 2 whose licenses are further extended, these threats will continue and deepen over decades.

While NRC staff, the NRC Commission, the ASLB, the ACRS, etc. may have convinced themselves that weakening reactor pressure vessel neutron embrittlement safety standard is justified, public watchdogs have warned repeatedly that it severely undermined the NRC's performance of its obligation to provide "reasonable assurance of adequate protection."

The NRC has enabled and been complicit in the nuclear industry's refusal to collect and analyze real-world physical data on embrittlement, i.e. by examining actual reactor pressure vessel metallurgical coupons or capsules, relying on theoretical models instead of actual evidence. At Palisades, watchdog groups were long told that the final remaining test capsule cannot be pulled for examination, because then there would be no capsules left to pull. Similar rationalizations for not Point Beach Unit 2. Meanwhile, the NRC makes safety-significant decisions regarding embrittlement on the basis of hypothesis and computer modeling, rejecting available real-world data. That data may well show that NRC's assumptions, hypotheses, and computing models are wildly, and dangerously, optimistic.

An actual example of this comes from Genkai Unit 1 in Japan, where industry and government regulator predictions of embrittlement based on hypotheses and computer models insisted that all was well. But when physical data in the form of a test coupon was pulled and analyzed, it showed Genkai Unit 1 was dangerously, unacceptably embrittled. Genkai Unit 1's permanent shutdown was then quickly announced. Here is some documentation of this:

May-June, 2012: [Nuke Info Tokyo](#) (the newsletter of Citizens' Nuclear Information Center), No. 148, May/June 2012, including the Part I of the article "Aging Nuclear Power Plants focusing in particular on irradiation embrittlement of pressure vessels," by Hiromitsu Ino (pages 10 to 12, and continued in newsletter No. 149, below; the article in No. 148 also includes [Figure: Genkai-1 Monitoring Test Sample Data and JEAC and 4201-2004 Prediction Curve](#)).*

July-August, 2012: [Nuke Info Tokyo](#), the newsletter of Citizens' Nuclear Information Center, No. 149, July/August 2012, including Part II of the article "Aging Nuclear Power Plants focusing in particular on irradiation embrittlement of pressure vessels," by Hiromitsu Ino (continued from the article in newsletter No. 148, above; pages 10 to 14, and concluded on page 5). [Additional Tables and Figures](#) were included in Hiromitsu Ino's articles.* (A [July 2011 article by Ino](#), also translated by Phillip White, was submitted to NRC in Beyond Nuclear's October 30, 2014 comments.*)

In early 2012 the Japanese Parliament published its report on what caused the Fukushima Daiichi nuclear catastrophe. Its conclusion was that collusion between the industry (Tokyo Electric Power Company), the government safety regulatory agency, and elected officials, was the root cause of the disaster. Because of the collusion, the three reactors that melted down were already extremely vulnerable when they were hit by the one-two punch natural disaster of a 9.0 earthquake, 45-foot tall tsunami on March 11, 2011.

In the immediate aftermath, the Associated Press reported that such collusion also exists in the U.S.. This is a recipe for disaster, and the warning of Fukushima should be heeded. The NRC collusion with the nuclear industry has gone on decades. The risks grow worse with time.

The weakening of embrittlement safety standards for aging U.S. reactors is a prime example of this. Associated Press investigative reporter Jeff Donn, in a June, 2011 four-part series entitled "[Aging Nukes](#)," cited reactor pressure vessel embrittlement safety standard weakening as the leading example of NRC regulatory retreat and rollback in the U.S. over decades.

Beyond Nuclear, during its intervention at Palisades in October 2014, created an annotated [bibliography](#) on embrittlement. It includes entries from 1948 (U.S. Atomic Energy Commission era) to 2019. They come from US AEC, US NRC, the news media, environmental watchdog groups, academia, etc. The NRC's progressive weakening of embrittlement regulations is documented there.

2. CONCRETE DETERIORATION

The recent deadly condominium collapse in Surfside, Florida is a cautionary tale for the nuclear power industry. As with reactor pressure vessel embrittlement risks, NRC has repeatedly rejected warnings by public environmental and safety watchdogs about safety-significant concrete degradation at atomic reactors, and failed to do its job to provide "reasonable

assurance of adequate protection.” Cases in point include Seabrook in New Hampshire and Davis-Besse in Ohio.

C-10 (Citizens within the Ten-Mile Zone) near Seabrook has long warned about alkali-silica reactions (ASR) degrading safety significant concrete at the atomic reactor. These warnings, even in the form of legal interventions and petitions, have been ignored by NRC staff, the ACRS, the ASLB, and the NRC Commission itself. Seabrook obtained a 60-year license from NRC, despite such risks, and despite concerted opposition from watchdog groups including Beyond Nuclear.

Beginning in late 2011, Beyond Nuclear and coalition partners (legal counsel Terry Lodge of Toledo, Ohio, and allied groups such as Don't Waste Michigan and the Green Party of Ohio) challenged the 20-year license extension at Davis-Besse (for a total 60-year operational license), citing, among other factors, severe cracking of the steel rebar reinforced concrete containment Shield Building. The coalition pursued the legal challenge for several years, until NRC ultimately approved the 20-year license extension. Instead of shutting down at the end of its initial 40-year license period (which ended Earth Day, 2017) NRC approved FirstEnergy to continue operating Davis-Besse until Earth Day, 2037. This, despite a severely cracked Shield Building, with cracking worsening significantly over time.

The safety significance of the cracking cannot be overstated. Beginning in late 2011, FirstEnergy and NRC acknowledged the widespread nature of the cracking. However, FirstEnergy denied that it was related to the plant aging. This was an attempt by FirstEnergy to block intervenors from raising the issue in the license extension ASLB proceeding, since the NRC requires contentions must be aging-related. FirstEnergy asserted that the cracking was caused by the Blizzard of 1978, and had not gotten worse since. Intervenors dubbed this the “Snow Job of 2012.” They pointed out that according to FirstEnergy's own analysis the Blizzard of 1978 was just one of dozens of root-cause explanations for the cracking, some of which were aging-related. Although NRC staff asked questioned FirstEnergy as to why the Blizzard of 1978 root cause explanation should prevail over all the others, it did not demand any strong answers in return. In the end, it simply accepted FirstEnergy's weak explanation, took FirstEnergy's side, and opposed intervenors bringing contentions against license extension related cracking.

In mid-2014, it was revealed that FirstEnergy and its legal counsel Morgan Lewis had hidden from legal intervenors' knowledge evidence that the cracking was in fact aging-related. FirstEnergy in a lengthy document admitted that the cracking was worsening over time, by about a half-inch in circumferential orientation around the cylindrical Shield Building, with each freeze-thaw cycle at the Davis-Besse site.

Located on the Lake Erie shore, the Davis-Besse site can experience many freeze-thaw cycles during the year, in every season except summer. Over time, the resulting growth of in cracking could certainly prove safety-significant.

FirstEnergy had known about the crack growth since early 2012. Yet it was not revealed till mid-2014, two and a half years later. During these 30 months, Beyond Nuclear et al. fought fiercely for the ASLB to admit cracking contentions, and for hearings on their merits. NRC staff rejected such arguments at every turn, as did the ASLB. They rejected intervenors' arguments on the specious grounds aging-relatedness could not be proven. Meanwhile, FirstEnergy already knew the cracking was aging related, and withheld the information. How the NRC could allow such an injustice to stand has baffled intervenors all the years since.

The "Snow Job of 2012" was soon followed by the "Whitewash of 2012." Despite warnings from watchdog groups that weather-sealing the exterior of the Shield Building (which should have been done four decades earlier) would lock damaging water penetration into the walls and accelerate concrete deterioration, the NRC allowed this, and FirstEnergy went ahead with it. The gleaming white weatherseal applied to the exterior locked water in the cracked walls. Since then, with each new freeze-thaw cycle, the water trapped in the walls has been freezing and melting, aggravating the cracking, widening it by a half-inch or more.

In August 2012, Beyond Nuclear published an [exposé on the cracking](#), based on documents obtained via FOIA requests. NRC was taking so long to respond to the FOIA requests, even as the clock was ticking on deadlines in the Davis-Besse case, that Beyond Nuclear's legal counsel, Terry Lodge, was forced to threaten legal action against the agency, if the FOIA requests were not promptly fulfilled. The revelations from the documents obtained supplemented and updated a large number of cracking contentions, filed with the ASLB in opposition to Davis-Besse's license extension. Astoundingly, not one of these contentions was admitted for a hearing on the merits. The ASLB rejected every single one, with the NRC staff urging it to do so at almost every turn. Here is some documentation of the rejected cracking contentions:

<<http://www.beyondnuclear.org/home/2012/1/25/just-trust-us-wears-thin-at-davis-besse.html>> A (Jan. 10, 2012 press release, including info. about a Jan. 5, 2012 NRC public meeting at which the environmental coalition testified)
<<http://www.beyondnuclear.org/home/2012/1/10/environmental-coalition-challenges-davis-besse-license-exten.html>> (Jan. 10, 2012 contention filing)
<<http://www.beyondnuclear.org/safety/2012/2/27/environmental-coalition-supplements-davis-besse-cracked-cont.html>> (Feb. 27, 2012, contention supplementation, based on information and documentation brought to light by U.S. Rep. Dennis Kucinich)

In the end, the NRC Commission itself rubber-stamped Davis-Besse's 20-year license extension. It did so despite the revelation that the severe cracking at was growing a half-inch or more with every freeze-thaw cycle, and even after FirstEnergy admitted to the Advisory Committee on Reactor Safeguards that concrete spalling on the exterior surface of the Shield Building could damage or destroy safety-significant systems, structures, and/or components located below. If that were to occur, Shield Building degradation could cause a reactor core meltdown, and then fail to contain hazardous radioactivity, releasing it into the environment.

During the ASLB license extension proceedings, FirstEnergy vociferously denied that any repair on the cracking was required, arguing it was not aging-related and would not grow worse, when it knew otherwise. Yet after it had secured the 20-year license extension, FirstEnergy did make repairs to the Shield Building to address the cracking.

The NRC has never accounted for these alarming irregularities, nor re-evaluated its approval of Davis-Besse's 20-year license extension, despite all the significant-safety related information and documentation provided by public watchdog groups.

Similar warnings about dangerous concrete deterioration preceded the deadly condo collapse in Surfside, FL. NRC ignoring warnings safety-significant concrete degradation could have similar disastrous consequences, and is all the more unacceptable in light of Surfside.

3. CONSOLIDATED INTERIM STORAGE FACILITIES

a. Environmental Justice Violations

NRC regularly violates environmental justice (EJ) principles it is supposed to uphold, notably with respect to Consolidated Interim Storage Facilities (CISFs).

For example, the NRC approved the license for the Private Fuel Storage, LLC ISFSI (Independent Spent Fuel Storage Installation, also sometimes called MRS, Monitored Retrieval Storage). Given the racial, socioeconomic, and historical injustices suffered by Native Americans, the PFS ISFSI targeted at Skull Valley Goshutes Indian Reservation in Utah is an EJ violation on its face. The Mescalero Apache Indian Reservation in southern NM was also targeted for an ISFSI, although it was not licensed. Dozens of other reservations been similarly targeted, although none of those ISFIs were licensed.

Each of these instances represents an EJ violation that adds to an untenable burden on tribal members, community organizers, and watchdog groups, which had to fend off these schemes at great personal cost. Often, they also had to fight their own pro-dump tribal chairman and tribal councils, some of whom were corrupt, and were later convicted of legal transgressions. This was the case at Skull Valley.

The current NRC licensing proceedings for the CISFs targeted at southeastern NM and western TX have continued this pattern of the NRC violating EJ principles. For example, the Holtec International/Eddy Lea Energy Alliance scheme to "temporarily" store up to 173,600 metric tons of irradiated nuclear fuel in southeastern NM violates environmental justice in many respects. A local grassroots EJ group, Alliance for Environmental Strategies (AFES), petitioned to intervene, and requested hearings. AFES filed several proposed EJ contentions. Not only did the ASLB reject all of AFES's contentions in rapid fire rulings, the ASLB never even recognized AFES's legal standing to bring such contentions. AFES is predominantly Latinx, and Latinx-led and comprised of local area residents. The NRC Commission sustained the ASLB's rulings.

AFES has extremely limited resources, and given these rulings, it decided it could not intervene in the ISP CISF ASLB licensing proceeding, even though AFES members and leaders reside in Eunice, NM just a few miles away from the ISP CISF – closer in fact than they are to the Holtec CISF. Every single shipment of lethal, highly radioactive waste bound for ISP would pass through Eunice. Having been rejected and invalidated in the earlier Holtec proceeding may have dissuaded AFES from intervening in the ISP ASLB proceeding.

Yet it is vital that local watchdog groups stay engaged, challenge CISF licensing and assert local rights and interests. Eunice and the surrounding southeastern NM and western TX region already bear a [very heavy environmental justice burden](#). This includes polluting NRC-licensed facilities such as the URENCO uranium enrichment facility in Eunice, and the Waste Control Specialists, LLC national “low” level radioactive waste dump in western Andrews County, TX, on the border with and upstream from NM. Other nuclear sites, such as the U.S. Department of Energy’s Waste Isolation Pilot Plant (WIPP) for military plutonium contaminated waste disposal, located just 16 miles from Holtec’s CISF, create additional burdens. In addition, the Permian Basin of NM and TX is also heavily polluted by oil and gas industries, where extraction activity is the most concentrated of any place on Earth.

Other regions of the majority-minority (Latinx, Indigenous) State of New Mexico have also suffered a disproportionate burden from nuclear activities, for example from radioactive and toxic waste dumping and as nuclear weapons storage from Los Alamos National Lab (dating back to 1943), Sandia National Lab, and Kirtland Airforce Base. The legacy of nuclear detonations, including history’s first nuclear test at “Trinity” in 1945, and other nuclear blasts in NM’s southeast have caused additional adverse impacts. In NM’s northwest, uranium mining and milling has left widespread radioactive and toxic contamination. One example is the 1979 uranium mill tailings pond spill into the Puerco River. Just over the NM border, at White Mesa Mill in CO, near Ute Mountain Ute communities, uranium milling and radioactive and toxic waste disposal continues to the present day. Navajo/Diné, Pueblo, Apache, Ute, and other Indigenous Peoples bear the very worst of these burdens.

Nationally, NM has one of the lowest socio-economic ranking across many categories. These EJ violations add to and exacerbate state residents’ socioeconomic disadvantages. On top of this, targeting disadvantaged communities with CISFs to store the entire nation’s inventory of commercial highly radioactive waste adds insult to injury. The impacts will be open-ended, since so-called “interim storage” is likely to be de facto permanent storage, or surface disposal.

NRC’s CISF licensing process, including environmental scoping and Draft Environmental Impact Statement public comment proceedings, have themselves violated the principles of environmental justice and consent-based siting.

The ISP (previously known as the WCS) CISF environmental scoping public comment period was announced on very short notice. Only two public comment meetings were held, one in Andrews, TX, and one in Hobbs, NM. NRC did not inform Latinx residents of about the public

comment opportunity, or about the railways that would be used to haul highly radioactive waste through their communities to ISP's CISF at WCS. The burden of spreading the word was left to already overburdened EJ groups like AFES. Despite this, many tens of thousands of public comments — almost all of them against the project — were filed with the NRC and made it clear the community did not consent. NRC ignored this, and proceeded rapidly to the ASLB licensing stage.

At the time, WCS was on the brink of bankruptcy, and asked NRC to suspend the ASLB licensing proceeding. NRC left the public in the dark as to whether or not the licensing proceeding would continue. ISP/WCS CISF opponents repeatedly requested clarification as to whether the deadline would be suspended. Not until the night before the intervention petition and hearing request deadline did NRC finally issue an impromptu, very short statement. The delay left intervenors scrambling to prepare filings to meet the daunting deadline in case NRC decided to enforce it — needlessly as it turned out. But if the deadline had been enforced and the intervenors missed it, they would never have been able to re-enter the proceeding. So they had no choice but to spend the time and money needed to prepare the filings. Such callous NRC procedures and behaviors are EJ violations in themselves.

Other CISFs opponents intervened in the ASLB proceedings. Altogether, more than a hundred contentions were raised by intervenors such as Beyond Nuclear, Sierra Club, Don't Waste Michigan et al. (a seven-group, national, grassroots environmental coalition, including local grassroots NM and TX groups), and Fasken Land and Minerals, a family-owned oil and ranching company. Some of their contentions were also EJ-related, such as the impact of the storage on local residents, and the impact of the high-risk transportation of irradiated nuclear fuel through low-income communities and/or communities of color.

Every last one of these 100+ contentions, including the EJ-related ones, was opposed by NRC staff, and rejected by the ASLB, and the by the NRC Commission, in rapid succession. Often, they refused to recognize clearly established legal standing, let alone the merits of clearly meritorious contentions which were worthy of hearings.

In the Holtec CISF environmental scoping process, several Latinx opponents to the Holtec CISF had expressed that they felt discriminated against at earlier public comment meetings, including in one held in Hobbs. At a subsequent public meeting in Roswell, certain Latinx opponents of the Holtec CISF expressed dismay at the presence of armed law enforcement officers.

This was reminiscent of the PFS ISFSI environmental public comment meeting held in Salt Lake City in the early 2000s. A heavy presence of venue security and law enforcement left many members of the public feeling intimidated. In fact, they felt it was a deliberate attempt at intimidation. An armed law enforcement officer conducted full body and bag searches as members of the public entered the venue. An opponent of the PFS ISFSI was manhandled and physically ejected, on the grounds his sign was too big, and therefore out of compliance with obscure NRC rules few had ever heard of. A leading Skull Valley Goshute opponent of the dump

was forced to relinquish her sacred staff to an NRC staffer, on the preposterous grounds it could be used as a weapon. This may have violated the Native American Freedom of Religion Act, as well as First Amendment free speech rights, freedom of religion rights, and the right of the public to petition the government for redress of grievances.

The Holtec CISF environmental scoping public comment meeting in Carlsbad was another obvious example of EJ violations in the licensing procedure. With the air conditioning at full blast, elders were shivering from the cold. A founder and leader of AFES, Noel Marquez of Artesia, took his place at the microphone to deliver his oral public comment. He began in Spanish, then switched to English. His comments included telling the story of his mother, who was born in NM, but forced to attend public school segregated from the white students, in a shack-like building behind the main school building. He was describing the discrimination that Latinx residents in NM have historically suffered, which is relevant to their communities now being targeted for surface storage of highly radioactive waste from around the country. The NRC facilitator of the meeting, Xavier Francis “Chip” Cameron, cut Marquez off mid-stream, though his allotted time had not expired — he was little more than halfway through it. While Marquez waited to be allowed to continue, Cameron physically approached the podium, adding an element of physical intimidation. The exchange was recorded on video.

The episode was a one example among others of NRC abrogating its EJ responsibilities and violating its own processes and proceedings. At the same time, the NRC is expediting licensing of CISFs which violate EJ principles.

New Mexico’s governor and the All Pueblo Council of Governors have complained of these violations of EJ principles to the NRC staff and the NRC’s chair, making many of the above points. But the NRC ignored their complaints, and continues to advance CISF licensing and stonewall public opposition. This prompted New Mexico’s Attorney General to file a lawsuit against NRC in federal district court, which contains allegations of EJ violations.

b. Nuclear Waste Policy Act Violation

Since October 2016, public watchdog groups have [warned](#) that the Holtec, NM and ISP, TX CISF schemes clearly violate current federal law, namely, the Nuclear Waste Policy Act of 1982, as Amended (NWPAA). In light of this, the NRC should never have processed CISF applications to begin with. Yet it has done so, and aggressively pursued CISF licensing.

In ASLB proceedings, CISF opponents (Beyond Nuclear; Sierra Club; Don’t Waste Michigan et al.; Fasken Land and Minerals) continued to object to the NWPAA violations, which also amount to Administrative Procedure Act (APA) violations.

The license applicants, NRC staff, and even the ASLB itself ultimately acknowledged the current CISF schemes violate the NWPAA. But they advocated for and approved the license applications

anyway. When CISF opponents appealed to the NRC Commission regarding these violations of law, the NRC Commission sustained the ASLB rulings.

CISF opponents have appealed the final NRC decisions, on the grounds they violate the NWPA and thereby also the APA, to the second highest court in the land, the U.S. Court of Appeals for the District of Columbia Circuit.

c. Impermissible NRC Promotion

NRC's promotion of the CISF schemes violates the NRC's mandate to regulate safety, and not set policy, collude with the nuclear industry or promote its agendas.

[Public comments](#) to the NRC in the Holtec DEIS proceeding document how in late 2015, an acting director of NRC's Division of Spent Fuel Project Management, at the end of a multi-day NRC-industry summit at a hotel across the street from NRC's HQ in Rockville, MD, led a kind of CISF pep rally, including a chant calling all present to "make it happen" by working together.

This violates NRC's mandate to protect public health, safety, and the environment. It harkens back to the U.S. Atomic Energy Commission's contradictory promotion/regulation mandate, which led to Congress and the President splitting up AEC's mutually exclusive roles into DOE (promotion) and NRC (regulation). NRC's behavior in the context of the CISF license applications shows that the agency has inappropriately relapsed into promoting the nuclear power industry agenda, violating its mandate to regulate safety exclusively.

d. Ignoring the requirement to conduct a cost-benefit analysis of alternatives to CISFs

The NRC is proceeding with licensing consolidated interim storage facilities (CISFs) in New Mexico and Texas designed to store highly radioactive irradiated "spent" nuclear fuel (SNF) from civilian nuclear power plants around the country. This would entail DOE taking title to the SNF, and shipping it from reactor sites through 75% of Congressional districts to the proposed CISFs. The ASLB has admitted that this violates the Nuclear Waste Policy Act as it currently stands, but has proceeded with licensing CISFs anyway, arguing that the law will change (amendments to the NWPA that would permit CISFs have been proposed but not enacted). This is the subject of lawsuits pending in federal court as mentioned above.

But meanwhile, the NRC has also failed to collect key data, as required by executive order, to enable informed decisions on CISFs and SNF transport. To date, there has been no comprehensive study comparing the costs, benefits and risks of transporting SNF to CISFs to any alternative approach, such as safeguarding it at the reactor sites until one or more geologic repositories is/are ready to receive it. Indeed, onsite storage until a geological repository opens is what the Nuclear Waste Policy Act currently requires.

While the costs and risks of transporting SNF to CISFs vs. [robust onsite storage](#) have yet to be studied, it's clear that the national economic impacts of this choice will very likely exceed \$100 million a year. That means the regulatory decision of whether or not to permit CISFs and

shipment of SNF across the country meets the definition of a "significant" regulatory action under Section 6 of Executive Order 12866, and that therefore a cost benefit analysis is required.

Section 6(a)(3)(B) of Executive Order 12866 states that, for each "significant" regulatory action, covered agencies are to provide to the Office of Information and Regulatory Affairs (OIRA) within the Office of Management and Budget (OMB) a general "assessment of the potential costs and benefits of the regulatory action." Section 6(a)(3)(C) of the executive order also states that, for each "economically significant" regulatory action, agencies are to also provide to OIRA (unless prohibited by law):

- (i) An assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient functioning of the economy and private markets, the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias) together with, to the extent feasible, a quantification of those benefits;
- (ii) An assessment, including the underlying analysis, of costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets (including productivity, employment, and competitiveness), health, safety, and the natural environment), together with, to the extent feasible, a quantification of those costs; and
- (iii) An assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives.

A "potentially effective and reasonably feasible alternative" to transporting SNF to CISFs must therefore be assessed with a cost-benefit analysis before the NRC decides to move ahead with CISFs. The fact it has promoted CISFs without commissioning and submitting such analysis to OIRA means it is out of compliance with Executive Order 12866.

The Government Accountability Office or the Congressional Research Service could conduct such an analysis, which should compare robust storage of SNF at reactor sites to transporting it to CISFs. Principles for Safeguarding Nuclear Waste at Reactor Sites, widely accepted by reactor community groups in all 50 states, include minimizing vulnerable dense pool storage of SNF, and establishing [hardened on-site storage \(HOSS\)](#) where SNF is held in dry storage as safely and securely as possible as close to the site of generation as possible. To be comprehensive and realistic, so as to enable informed decisions, such analysis should compare the respective risks

of onsite storage vs. transport to CISFs as well as their respective costs and benefits, which can't be adequately quantified without risk analysis. It should establish lifecycle costs and risks of spent fuel surface storage, thoroughly assess transportation costs and risks, and take into account external hazards and risk multipliers such as terrorism, cyberattacks, loss of backup power, earthquakes, and more severe storms and flooding due to climate change. It should study both boiling water reactors (BWRs) and pressurized water reactors (PWRs), since the two types of reactors have distinct cost and risk profiles.

4. THE 2.206 EMERGENCY ENFORCEMENT PETITION PROCESS AND OTHER NRC INTERNAL RULES ON PUBLIC PARTICIPATION AND DOCUMENTATION

Frank von Hippel, former assistant director for national security in the White House Office of Science and Technology, recently [wrote](#), "Over the past two decades, the US Nuclear Regulatory Commission (NRC) has been captured by the nuclear power companies it is supposed to regulate. The process of capture and resulting erosion of regulation has been driven in part by the increasingly poor economics of nuclear energy as companies struggle to avoid large costs due to additional safety measures. However, the path has been laid to a potential disaster."

The NRC has adopted a "risk-informed" regulatory approach which assesses any proposed safety regulation or proposed regulatory relief according to the likelihood of something going wrong vs. the cost of preventing it. The NRC website [states](#), "we examine both the probability of an event and its possible consequences to understand its importance (risk). In other words, we ask our questions of what can go wrong, how likely it is, and what its consequences might be...The NRC uses a risk-informed regulatory approach to identify and support additional requirements or regulatory actions, when needed. Risk information can also be used to reduce unnecessary requirements in purely deterministic approaches."

But according to von Hippel, the NRC primarily uses "risk-informed regulation" to justify avoiding imposing costly upgrades on nuclear licensees, by defining the costs and risks very narrowly. The costs considered are mainly the compliance costs that would be incurred by nuclear owners. "One problem with risk-informed regulation is that probability calculations for major accidents are very uncertain and subject to arbitrary assumptions," von Hippel argues. "An example is the commission's decision to [assume](#) that there is zero probability that terrorists could cause a large release [of radioactivity]."

The denial of the possibility of mishaps or failures resulting in radiological releases is part of a systemic pattern at the NRC. Whenever experts and advocates have assembled evidence and formally raised concerns about such risks, the NRC has almost universally dismissed or rejected them, and assumed there was no probability worth considering that anything serious can go wrong.

From 1975 to 2012, an estimated 1,000 petitions for the NRC to take emergency enforcement actions were filed under [section 2.206](#) of NRC's regulations. The NRC summarily dismissed

about two-thirds of them without reviewing them. Of the 387 the NRC's Petition Review Board (PRB) agreed to consider, only *two* were granted substantive relief -- one of which was brought by the nuclear industry itself.

By contrast, each year the NRC grants over 800 exemption requests from the nuclear industry for regulatory relief (i.e., to be exempted from existing NRC regulations). These industry requests are rarely if ever questioned, and have been granted on the basis of a phone call in as little as an hour.

For example, in November, 2001, the Kewaunee nuclear power plant in Wisconsin requested immediate NRC permission to ship radioactive steam generators by barge on Lake Michigan, on which 40 million people in eight U.S. states, two Canadian provinces, and a very large number of Native American First Nations rely on for drinking water. The barge route went through Chicago waterways and down the Mississippi River, to Memphis, TN.

NRC rapidly approved the request. The public was given no chance to comment, in fact it would have to wait a decade to even find out that the shipment had occurred. It came to light only thanks to the efforts of Democratic U.S. Senators from Great Lakes states, led by Russ Feingold of Wisconsin, concerned about other radioactive steam generator shipment plans on the Great Lakes. These Senators demanded NRC divulge any information or documentation it had regarding such risks, and the truth was finally revealed. The NRC had not only approved the secret barge shipment on very short notice, it had also been complicit in covering it up for a decade.

One independent expert who has had more success than most challenging the NRC on behalf of the public is Paul Blanch, a nuclear consultant with over four decades of experience whose credibility with the NRC is well established. Over the past five years, he brought six 2.206 petitions to the NRC. Four were dismissed. One was initially accepted by the PRB, only to be denied by a formal Director's decision. Another was rejected by the PRB but investigated by the NRC's Office of the Inspector General, which found NRC staff had "misrepresented" its information, but no corrective action was taken.

On March 9, 2021, Blanch gave a [presentation](#) before the NRC on the pattern of consistently dismissing 2.206 petitions and citizen concerns as "not credible." For example, Blanch described a [2.206 petition](#) he helped file, working with the NGO Public Watchdogs. It asked the NRC to revoke Southern California Edison's permit to bury highly radioactive irradiated nuclear fuel at the shuttered San Onofre nuclear plant. Southern California Edison is currently permitted to bury Holtec's UMAX irradiated nuclear fuel canisters on the beach, just 108 feet from the Pacific Ocean, where they are very vulnerable to flooding risks, as from a tsunami, or rising sea levels. The burial site is located in an inundation zone on tsunami maps. UMAX canisters are convection cooled, with 4-inch holes at the bottom. There is no drainage, and no provision for getting water out of canisters. A king tide or storm or other severe weather event could cause sufficient coastal flooding to inundate the buried canisters. Flood risks in the San Diego area and elsewhere along California's coast are rising dramatically due to climate

change. Contact with salt water would not only accelerate degradation of the canisters, it could also trigger a “geyser” effect where sudden heat and pressure causes a sudden release of radioactive steam. “If the site is flooded, the integrity of the 5/8” thick stainless-steel canisters may be compromised by pressure and thermal shock,” said Blanch. “We expect the phenomenon to occur whenever water floods the silos.”

The petition assembled evidence for this, including expert statements and statements from So. Cal. Edison and Holtec themselves. Holtec’s own Final Safety Analysis Report admits the UMAX canister must be kept pressurized with helium gas to stay within design limits. But it never analyzed how moist salt air or salt water might cause helium to escape from the canisters. If that happened, there would be no possible way to repressurize them.

Nonetheless, the NRC called the petition “not credible” and declined to even consider it. In this, it followed the representations of Holtec and So. Cal. Edison that the UMAX canisters are safe, and that its analysis showed failure or leakage is “not credible.” When Public Watchdog asked Holtec for the details and documentation of its analysis, Holtec said it was proprietary and refused. The NRC’s own Management Directive MD 8.11 requires it to provide supporting documentation for its decisions, but this is routinely ignored by NRC staff.

The SONGS 2.206 petition is just one example of numerous such petitions for regulatory emergency enforcement that the NRC has treated the same way, dismissing safety concerns as “not credible,” and declining to provide documentation for its decision. The pattern is ongoing. As recently as February 23, 2021, Holtec requested a license amendment from the NRC to exempt if from any offsite emergency planning requirements against possible radiological release from irradiated nuclear fuel canisters stored at Oyster Creek in New Jersey. Holtec’s request simply asserted that “leakage of fission products from a canister is not considered to be a credible event...After removal of the spent fuel from the spent fuel pool, there are no credible fuel-related accidents for which actions are required to prevent occurrence or to mitigate the consequences. There is no credible accident resulting in radioactive releases requiring offsite protective measures.”

But if that’s so, then why are there NRC inspection and repair provisions for canisters at all? “Credible” and “not credible” have evolved into catch-all terms of art without a clear definition. They are not defined by law or by regulatory statute, only by the usage of NRC staff according to its own internal interests. Well in advance of the March 9 NRC presentation, Blanch submitted questions to NRC staff, asking them to define what it meant by “not credible.” In the meeting, NRC staff repeatedly declined to answer the question, saying only that the purpose of the session was to hear any additional information related to the petition (which it had summarily dismissed). In this instance and in general, when asked by the public to account for its decisions, the NRC staff response is that it isn’t permitted to discuss the details with the public. But there is no law passed by Congress and no regulation promulgated by NRC that prohibits staff from discussing its decisions with the public, in fact MD 8.11 requires it to provide documentation explaining them.

These are just a few examples of how the NRC insulates itself against hearing public input, let alone acting on it. It offers the public extremely limited access, little recourse, and no appeal. The industry can and routinely does appeal NRC decisions it doesn't like. But the public may only ask questions about NRC process, typically in Q&A sessions at the end of hearings. It can't question the substance of NRC decisions and expect an answer, and it can't appeal them, other than by suing the NRC.

Seeking recourse through litigation is no substitute for the NRC being responsive and accountable to the public. Cutting itself off from accountability to the public is the hallmark of a captured regulatory agency. The NRC's stated mission is "to provide reasonable assurance of adequate protection of public health and safety and to promote the common defense and security and to protect the environment." The stakes of that mission are existential for Americans. But the NRC can't fulfill it as long as it is stonewalling public input and public concerns and catering to the industry it is supposed to regulate on the public's behalf.

In 2007, a coalition of citizens' groups including Don't Waste Michigan [appealed](#) the NRC's dismissal of a 2.206 petition filed at Palisades in Michigan, to the U.S. Court of Appeals for the District of Columbia Circuit. The case involved [violations of NRC earthquake safety regulations](#) concerning dry cask storage of irradiated nuclear fuel, dangerously close to the edge of Lake Michigan. The coalition had a retired NRC dry cask storage inspector, Dr. Ross Landsman, [testify](#) as its expert witness.

Don't Waste Michigan board member, Kevin Kamps, who serves as Beyond Nuclear's radioactive waste specialist, was invited to present to a meeting of NRC senior managers at an event in downtown Bethesda, MD. Kamps mentioned the appeal of the 2.206 dismissal to the federal court. A senior manager from NRC's Office of General Counsel questioned Kamps after his presentation. She affirmed that NRC OGC had worked very concertedly to make sure that no such 2.206 petition would ever prevail. As if to underscore that point, the appeal of the NRC's dismissal of Palisades 2.206 petition was duly rejected by the courts, despite its merits.

During her tenure as NRC Chair, Allison M. Macfarlane met with a coalition of environmental and watchdog groups. She was accompanied by another NRC Commissioner, as well as an entourage of commissioners' staff and other NRC staff. In the meeting Tom Cochran, an emeritus director of NRDC's (Natural Resource Defense Council) nuclear division, related that he had spoken with an attorney in NRC's Office of General Counsel, who claimed to have written the 2.206 implementing regulations to begin with, decades ago. Cochran said that the NRC attorney admitted to him, in an almost bragging fashion, that he had written the 2.206 regulations to be a "black hole," into which public intervenors could enter, but they would never be heard from again.

That is one indication among others that 2.206 process, supposed to provide a channel for meaningful public input, has been intentionally manipulated by the NRC to be a dead end. The dismal success rate for 2.206 filings from the public would seem to confirm this.

Watchdogs and other members of engage the 2.206 process in good faith, only to become enmeshed in the NRC's intentionally obstructed dead end. This helps explain why Frank von Hippel and others view the NRC as a captured regulator, and why Barack Obama while campaigning for president in 2008 referred to the NRC as a "moribund" agency. Members of the public and citizens groups who have interacted with NRC to any extent have learned this firsthand. But public participation is important to nuclear safety, and this pattern of the NRC's near-uniform stonewalling of public concerns is, as von Hippel says, the path to potential disaster.

5. SUMMARY APPROVAL OF LICENSE TRANSFER WITHOUT HEARINGS

NRC's insular attitude and pattern of stonewalling public input, described above with respect to 2.206 petitions, also extends to state government petitions, and even to some extent to members of Congress.

For example, Massachusetts, New York and Michigan each asked the NRC for hearings before it approve applications for license transfer of the Pilgrim, Indian Point, and Palisades nuclear plants, from Entergy to Holtec, so the states could air their objections. They expressed serious concerns over Holtec's lack of financial assurance and other qualifications to hold the licenses. Members of the states' Congressional delegations and their governors also weighed in to express their concerns and demand hearings.

But the NRC ignored this input and approved the Pilgrim, MA, and Indian Point, NY, license transfers without granting hearings. The Office of Michigan Attorney Dana Nessel intervened in the case of Palisades and Big Rock Point against license transfer from Entergy to Holtec on February 24, 2021. To date, four months later, the NRC has not even responded to the MI AG's request for a hearing and petition to intervene. Also faced with stonewalling, the Attorneys General of Massachusetts and New York both sued the NRC, supported by amicus briefs signed by eleven other state AGs.

Massachusetts settled its suit in return for some concessions from Holtec. The New York State Public Service Commission reached a settlement with Entergy and Holtec to approve the license transfer, which may render New York's lawsuit against the NRC effectively moot. The Michigan lawsuit is still pending. Additionally, four months ago, a coalition of citizens' groups (Beyond Nuclear, Don't Waste Michigan, and Michigan Safe Energy Future, represented by legal counsel Terry Lodge of Toledo, Ohio), plus Environmental Law & Policy Center of Chicago, also intervened in the Michigan license transfers. None of them has received any response from the NRC.

A joint letter of November 16, 2020 to the NRC complained about this pattern of stonewalling state requests for hearings on license transfer. Signed by Senators Chuck Schumer and Kirsten Gillibrand, and by Representatives Nita Lowey, Eliot Engel and Sean Patrick Maloney, it addressed requests from multiple stakeholders for hearings on the matter of transferring Indian Point's licenses to Holtec. New York State, local municipalities, and citizens groups had many

well-founded concerns and objections regarding Holtec acquiring Indian Point, which the NRC ignored. “As a matter of process,” Schumer et al. pointed out, “the Commission must fully adjudicate all pending petitions before issuing a determination on the Indian Point license transfer application.” But that didn’t happen. The NRC approved license transfer to Holtec without holding hearings or fully adjudicating requests for them.

6. DECOMMISSIONING TRUST FUNDS

Decommissioning licensees routinely seek, and the NRC routinely grants, exemptions to NRC regulations under Title 10 (e.g. 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv)) which require that decommissioning trust funds be used exclusively for decommissioning activities proper, as opposed to non-decommissioning uses such as spent fuel management. Exemption requests to allow the funds to be tapped for spent fuel management are often opposed by states and citizens’ groups (e.g. the NYS Attorney General [opposed](#) such an exemption in the case of Indian Point, and the State of Vermont opposed them in the case of Vermont Yankee). But the NRC routinely grants them anyway.

Examples of NRC exemptions allowing licensees to pay themselves for spent fuel management out of the decommissioning trust funds include Indian Point, Oyster Creek, Duane Arnold, Vermont Yankee, Three Mile Island Unit 1, and Kewaunee.

Decommissioning trust funds are funded by a surtax on ratepayers’ electric bills, levied solely to fund dismantling the plant and remediating the site, including cleaning up hazardous radiological contamination. Spent fuel management is excluded by federal regulation as an allowable use of these funds for good reason: it can run into the hundreds of millions of dollars, raising the risk that decommissioning companies could deplete the trust funds before decommissioning work was complete, and use their compartmentalized, limited liability subsidiary structures to walk away with no damage to the parent company, leaving reactor host communities and states to cope with the remaining costs and risks.

Routinely exempting licensees from Title 10 requirements undermines the intent of these regulations to protect ratepayers, communities and states from bearing these risks and experiencing these impacts. At the same time, these exemptions increase the risk that these impacts will occur. Some observers fear the NRC will codify these exemptions in new rulemaking on decommissioning, making them automatic and normalizing using DTFs for purposes for which they were not intended. If that happens, it will countermand Title 10 provisions and leave ratepayers, communities and states unprotected from licensees that regard the decommissioning trust funds as their own assets and their source of profit.

Just in terms of funding the costs of decommissioning proper, the adequacy of the trust funds is uncertain. The NRC has argued that DTFs are sufficient for decommissioning needs, or will be when the time comes to spend them. The Government Accountability Office has [criticized](#) the

NRC for being unreliable in estimating decommissioning costs, and failing to monitor or enforce standards for how licensees invest the funds.

Independent analysis consistently shows large shortfalls in the DTFs. The independent investment consulting firm Callan Institute conducts an annual nuclear decommissioning funding study. Its 2019 (pre-pandemic) assessment found that private and public utility nuclear DTFs totaled \$68 billion, but that projected decommissioning costs totaled \$96 billion, leaving a shortfall of \$28 billion, or 30%.

Nuclear power plant owners and decommissioning companies also routinely sue the U.S. Department of Energy (DOE) to recover spent fuel management costs. The Nuclear Waste Policy Act previously provided that DOE would begin contracting to take commercial reactor spent fuel to a geologic repository beginning in 1998, but since Yucca Mountain was scrapped, DOE violated that provision and so must reimburse licensees' spent fuel costs until a geologic repository opens. When licensees recover this money from DOE, they are effectively getting paid twice for the same spent fuel management activities: once via the exemption they obtain to tap the DTF, and again by suing DOE and receiving damage awards, which are funded by taxpayers. In some cases licensees may agree to put the DOE damage award money back into the DTF, but they aren't required to. In other cases, they've made it clear they intend to pocket the windfall as profit.

In the absence of oversight from the NRC, this has become a matter of negotiation with state governments. Some states dropped their opposition to license transfer to decommissioning companies which lack financial assurance (other than the DTFs and the exemptions allowing them to put them to non-decommissioning uses) in exchange for modest concessions, such as partial return of DOE spent fuel management money to the trust funds. But these are desperation measures, not solutions. States are at an untenable disadvantage in these negotiations, partly because the NRC is not upholding its own regulatory requirements on the uses of the trust fund. Instead, it has signaled that licensees can use them more or less how they like.

In fast decommissioning, licensees performing decommissioning work take over the DTFs as their own asset, with the intention of pocketing any leftover money as profit, and with hardly any accountability for how they spend it. Even though DTFs are public monies, paid for by ratepayers through surcharges on their electric bills, licensees aren't required to seek state approval for expenditures, or even reveal how they have spent the money.

There is no NRC requirement for decommissioning licensees to be transparent in how they spend the DTFs, to adhere to standard accounting practices and principles, or even to hire an auditor for decommissioning projects. This creates ripe conditions for waste, fraud, and abuse. In the case of the Zion nuclear plant in Illinois, the decommissioning contractor EnergySolutions did file a so-called "audit report." But it fit on just two pages, one of which was a cover letter, with a handful of vague line items purporting to certify the legitimacy of roughly \$300 million in expenditures from the DTF.

Licenses do have to report biannually or annually on the status of the DTFs to the NRC's Financial Assessment Branch in the Division of Rulemaking, Environmental, and Financial Support (NMSS/REFS/FAB). Under Office Procedure LIC-205, Revision 6, "Procedures for NRC's Independent Analysis of Decommissioning Funding Assurance for Operating Nuclear Power Reactors and Power Reactors in Decommissioning" is supposed to provide "efficiency, effectiveness, consistency, and timeliness in determining the extent to which licensees provide reasonable assurance that adequate funding will remain available for radiological decommissioning and license termination." But those words are carefully chosen, and notable for their omissions. Beyond the contested question of whether the decommissioning trust funds will be adequate, this language does not require accountability or transparency in how the funds are spent.

The NRC's performance in overseeing licensees' management and use of the DTFs should be evaluated not only according to the adequacy of the funds, but also according to transparency and accountability in how they are spent, and how they protect ratepayers, reactor communities and states from risks and costs. According to these criteria, NRC performance is lax, and needs scrutiny and reform.