

***FOLLOW-UP on Letter from 86 Organizations re:
Urgent Actions Required to Mitigate COVID-19 Impacts in Nuclear Energy Industry***

June 8, 2020

The White House
Office of the Vice President
Vice President, Michael R. Pence
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Cc:Robert R. Redfield, MD, Director, Centers for Disease Control and Prevention (CDC)
Anthony Fauci, MD, Director, National Institute of Allergy and Infectious Diseases (NIAID)
Chairman Katherine L. Svinicki, Chairman, Nuclear Regulatory Commission (NRC)
Loren Sweatt, Principal Deputy Assistant Secretary of Labor for Occupational Safety and Health (OSHA)
Peter T. Gaynor, Administrator, Federal Emergency Management Agency (FEMA)
Neil Chatterjee, Chairman, Federal Energy Regulatory Commission

Re: Nuclear Regulatory Commission's Failure to Protect Public Safety During the COVID-19 Public Emergency

Dear Mr. Vice President:

We hope you are safe and well. While we await your response to our April 22, 2020 letter from 86 organizations, , we want to update you on the impacts of the coronavirus pandemic in the nuclear energy industry, and to respond to a communication you received from Kristine L. Svinicki, Chairman of the United States Nuclear Regulatory Commission ("NRC" "or "the Commission") on May 18, 2020.

In our letter, we wrote to you to express our concern and dismay that the NRC had abdicated its legal responsibility to protect public health and safety during the COVID-19 public health emergency. Now that many states are lifting stay-at-home orders and restrictions on business operations, the actions we detailed are ever more important. The ongoing spread of the coronavirus within the nuclear industry, and the failure of federal agencies to mitigate its impact on medical and nuclear public health and safety, could lead to further outbreaks of COVID-19 and disrupt state and local government efforts to resume economic activity.

We requested six immediate corrective actions, summarized here, in brief:

1. Convene an interagency COVID-19 Nuclear Task Force to develop comprehensive plans and protective measures for nuclear workers and reactor operations.
2. Postpone refueling and decommissioning operations at nuclear power stations until the Task Force has developed, and licensees have implemented, site-specific plans to protect workers. The failure to do so has already resulted in significant infection rates, above the national average.

3. Provide for immediate reevaluation by the Task Force of NRC exemptions to lift work-hour limits for reactor power operations.
4. Provide for immediate preparation of required Disaster Initiated Reviews (“DIR”) of the impact of the pandemic on emergency response plans at all reactor sites and fuel cycle facilities.
5. Subject all current reviews of licensee-requested exemptions and deferrals to (a) a cumulative risk analysis and (b) an integrated review by the COVID-19 Task Force.
6. For any operations-related decisions, ensure that any potential safety impacts are fully mitigated. Work with regional transmission operators to determine which nuclear facilities are necessary for electricity system reliability.

Chairman Svinicki’s letter does not allay any of the concerns that we identified in our letter. It is a concise recitation of agency actions that NRC had publicly communicated in the weeks prior to our letter. It is the inadequacy and negligence of those actions that necessitated our letter to you. Chairman Svinicki’s communique contains no new information to indicate that NRC has taken any substantive action to address the problems we detailed. The NRC continues to place workers and communities in harm’s way during nuclear power operations. To date, nearly thirty nuclear power stations have completed refueling outages during the pandemic, and dozens more are scheduled for later this year, beginning in August. Reports of infection rates in the industry have continued to rise, and there are several lessons learned that have not been implemented by the NRC.

In her correspondence, the Chairman uses the term “public health” seventeen times. However, an agency has to be present to protect “public health.” The NRC has exercised “maximum teleworking” for its employees, but has not implemented or required similar safety standards for nuclear workers.

The Chairman stated, “The NRC is monitoring the effects of the COVID-19 public health emergency on NRC-licensed activities as well as actions taken in response to local conditions and is poised to take appropriate regulatory steps as needed.” Yet, the NRC has still taken no meaningful actions to protect the safety of workers or the public.

The Commission is not requiring reporting of or tracking COVID-19 incidents, nor is it enforcing strict guidelines. The Nuclear Regulatory Commission has put the public and workers in harm’s way, and this inaction, in concert with licensees’ inconsistent, untransparent, and unaccountable approach, has accelerated the spread of the pandemic among the nuclear workforce, in reactor communities, and potentially more widely.

In her letter, Chairman Svinicki stated, “To date, the COVID-19 public health emergency has not resulted in safety issues or events at any NRC- licensed facility.” This is simply unsupported by publicly available facts, and represents the Commission’s increasingly hands-off approach to regulation.

Chairman Svinicki assured you that the NRC was positioned to “protect public health and safety, including efforts to strike the right balance of inspection and oversight activities while limiting opportunities for the spread of the virus.” In fact, none of the statements in the Chairman’s letter addresses the concerns detailed in our letter. They are almost entirely recitations of previous statements NRC has made since the beginning of the pandemic.

The Chairman’s communication is also misleading, and misrepresents the facts on the ground. The Commission has absented itself from the field of operations during the pandemic, disavowing any responsibility for mitigating infection risks to workers. Contrary to the Chairman’s assertion, the NRC is not requiring systematic reporting or monitoring the effects of the COVID-19 public health emergency on NRC-licensed activities. NRC representatives have stated so in multiple public meetings and other forums since the advent of the public health emergency. In short, the Commission is not tracking COVID incidents, nor is it enforcing guidelines for the protection of the nuclear workforce.

NRC’s inaction has already resulted in health and safety impacts on hundreds of workers. Media reports confirm that there have already been numerous COVID-19 outbreaks within the industry, including, but not limited to the Fermi, Limerick, Grand Gulf, Millstone, and Vogtle nuclear power plants. This is a sampling of the impact of lax oversight of reactor operations and refueling outages. Because the NRC and other federal agencies with responsibility to protect workers’ health and safety have not instituted coronavirus reporting and tracking requirements (not to mention measures to maximize worker protections), there has been only anecdotal reporting of infection cases at reactor sites. It is, therefore, impossible to know the full extent of coronavirus spread within the industry, what measures are working and not working, and what impact the pandemic is having and may have on nuclear safety and security.

Nevertheless, it is clear that infection rates at reactor sites are far exceeding the national average. The following number of exposures and incidents have been reported in the media from March through May:

- **Fermi (Michigan):** As reported on May 12, at the Fermi, unit 2 reactor site in Michigan, over 200 out of 2,000 full-time and refueling outage workers have tested positive, a greater than 10% infection rate.¹
- **Grand Gulf (Mississippi):** News media reported 89 positive cases at the Grand Gulf nuclear station, as of April 29.²
- **Limerick (Pennsylvania):** On April 8, media outlets reported that three workers at the Limerick Nuclear Power Plant had tested positive, and over 40 were in quarantine, including two dozen exhibiting COVID-19 symptoms.³ Multiple workers complained of lack of social distancing, sanitation, and other protective measures. County officials rejected Exelon’s coronavirus plan, and requested that the company postpone the 1,400-

¹ <https://windsorstar.com/news/local-news/fermi-2-struggles-with-large-covid-19-outbreak-among-workers/wcm/c699ff00-c818-4921-8ceb-6f3f24ab93bb/>

² <https://www.vicksburgpost.com/2020/05/01/virus-outbreak-at-grand-gulf-impacts-surrounding-counties/>

³ <https://www.inquirer.com/business/limerick-nuclear-plant-refueling-coronavirus-workers-infected-20200408.html>

person refueling operation until it had put adequate protections in place. The company refused, and proceeded anyway.

- **Millstone (Connecticut):** Security guards at the Millstone 2 and 3 reactors have complained about inadequate sanitation, protective measures, and PPE since April.⁴ A Freedom of Information Request to state authorities revealed that positive cases increased more than ten-fold in 11 days, rising from one to eleven cases by April 24, when Millstone began a refueling outage.⁵ Infected workers included three control room operators.
- **Plant Vogtle (Georgia):** Between April 11 and May 19, media reports on coronavirus cases at the Plant Vogtle site in Georgia increased from 13⁶ to 230 workers.⁷ More recent reporting has not been available, despite the ongoing presence of over 7,000 workers on the construction site of units 3 and 4.

None of these workplace conditions would be tolerated by NRC staff working in Bethesda, Maryland, King of Prussia, Pennsylvania, or the agency's other regional offices. The NRC's spokesperson, Scott Brunell, declared in a public meeting that 96% of their work force was at "maximum tele-working." The NRC, out of an abundance of caution, sequestered their employees, and implemented "virtual oversight."

However, the NRC was not present to witness crowded and non-compliant work sites. Workers are frightened, and in many instances forced to work overtime in unsafe conditions due to pressure from licensees. Many licensees have refused to provide hazard pay, forced employees to use vacation time, and have not practiced sufficient social distancing or provided adequate protections.

Refueling workers are migratory and must live in communal accommodations during the outage, from hotels and motels, to campers and campsites, to home rentals and AirBnB's. Since their work is seasonal, they rely on the NRC to protect their health and safety. Moreover, these workers travel from reactor site to reactor site during the spring and fall "refueling outage seasons." They have their permanent residences in other states and return to their homes after outages.

We have participated in numerous COVID-19 exemption meetings throughout the winter and spring. The licensees and the Nuclear Regulatory Commission have been focused on fast-tracking approval of exemption and deferral requests, and have placed economics and speed above protection of health and safety.

The Commission's meetings are non-responsive and scripted events. The NRC and licensees rarely follow up on commitments or data requests. The NRC would not know what actions to take "in response to local conditions" nor is it "poised to take appropriate regulatory steps as needed," because the entire agency is homebound.

⁴ <https://apnews.com/07d738bf64681db622c1e2f50af8bbbe>

⁵ <https://www.theday.com/article/20200524/BIZ02/200529688>

⁶ https://www.aikenstandard.com/coronavirus/13-coronavirus-cases-confirmed-at-plant-vogtle-georgia-power-says/article_0e4c2164-7c17-11ea-8197-fbbee494ac48.html

⁷ <https://www.wrdw.com/content/news/Vogtle-has-seen-230-coronavirus-cases-198-of-those-workers-have-recovered--570595101.html>

Complicating an already difficult situation is the reactor owners' reluctance to share data with local and state officials. The Limerick Nuclear Station is a prime example of the disconnected responses from the licensee to municipal, county and state government officials. Similarly, these local and state governments are the same entities charged with implementing emergency planning.

Chairman Svinickii is correct in stating the NRC has "implemented a flexible strategy." The Commission's "flexible strategy" for NRC resident inspector site-coverage is "such that each site should be visited by a resident inspector at least once every three business days to perform plant inspections." It is hard to "monitor" a site when you are not at the site.

Finally, regarding emergency planning, we called for NRC and FEMA to conduct reviews of each nuclear facilities emergency response plans—a measure that is required by both agencies' operational guidelines whenever a natural disaster or pandemic might affect a nuclear facility. As detailed in our letter, this "disaster-initiated review" (DIR) requirement is specified in a longstanding memorandum of understanding between the agencies, to ensure that emergency response plans either remain adequate, or that compensatory measures can be implemented to protect the public health and safety. NRC and FEMA have conducted them regularly over the years, whenever, for instance, a hurricane is projected to make landfall near a nuclear facility.

These reviews, by necessity, involve a comprehensive evaluation of all critical aspects of the facility's offsite emergency response plan. Take, for instance, the review FEMA conducted in September 2019 of the ERP for the St. Lucie Nuclear Power Plant in Florida when Hurricane Dorian was projected to make landfall in the vicinity.⁸ FEMA's preliminary review concluded that the ERP was not impacted, based on consulting with state and local agencies and gathering information on the following elements of the ERP:

1. Emergency Response Facilities
2. Communications
3. Emergency Response Organizations
4. Public Alert and Notification Systems
5. Access and Functional Needs and Transportation Routes
6. Evacuation Routes
7. Accident Assessment
8. Population Shifts
9. Support Services
10. Supporting Documentation

At the time we delivered our April 22 letter to you, five weeks after the public health emergency had been declared, FEMA had completed no DIRs for any nuclear facilities in the U.S. Over the last two weeks, NRC has posted eight letters from five FEMA regional offices indicating that FEMA had conducted reviews of the pandemic's impact on offsite emergency response

⁸ Federal Emergency Management Agency. "Preliminary Capabilities Assessment – St. Lucie Nuclear Power Plant." September 6, 2019. <https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19253C792>

organizations for 17 reactor sites.⁹ However, it appears that the reviews conducted by FEMA are incomplete. All of the letters except for one indicate that the agency only assessed one element of the ERPs: “examination of the local offsite response organizations.” (The other letter, from FEMA Region VII, dated May 27, 2020, does not specify the scope of review.) In addition, the FEMA Region III letter notes that it only reviewed the status of the offsite response organizations for the Salem-Hope Creek nuclear complex in Delaware. FEMA Region II, where the complex is located does not appear to have filed a letter with NRC, to date.

FEMA’s apparent failure to review the adequacy of emergency response facilities, support services, and access and functional needs (e.g., public transportation) for over a dozen nuclear facilities during a pandemic would be negligent, given the need for social distancing, shortage of PPE, reduced capacity of public transportation systems, and the overstretched capacity of hospitals and first responders.

In addition, it is not clear whether even the limited scope of these reviews were thoroughly conducted. Nearly all of the letters appear to be *pro forma* communications. Although they were submitted by five different FEMA regional offices five of the eight letters are nearly identical in their wording. Aside from the names of the nuclear facilities and some corresponding phrases, the letters are almost entirely verbatim with one another, word-for-word. The letters also contain far less detail about the activities involved in FEMA’s review than other recent DIR letters, such as the 2019 St. Lucie letter above.

Taken on the whole, the Commission has been virtually absent amid the greatest public health disaster in the agency’s existence. It has thus far refused to coordinate with other governmental bodies and declared that its authority is limited to radiological safety impacts, by which it appears to mean imminent nuclear disasters. The NRC simply granted dozens of exemptions through rushed, cursory reviews. The Commission’s “expectations” are not aligned with the reality of a real-time pandemic.

This cannot be allowed to continue. Nuclear workers are the first and last line of defense for the public health and safety, risking their lives to protect the country every day. They and their communities need and deserve protection during the pandemic. A coordinated, comprehensive

⁹ FEMA Region I. Dated June 2, 2020. Re: Millstone and Seabrook nuclear power plants.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20157A036>

FEMA Region III. Dated May 19, 2020. Re: Beaver Valley, Calvert Cliffs, Limerick, North Anna, Peach Bottom, Salem-Hope Creek, Surry, Susquehanna, and Three Mile Island nuclear power plants.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20141L795>

FEMA Region VII. Dated May 27, 2020. Re: Duane Arnold and Quad Cities nuclear power plants.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20154K618>

FEMA Region VII. Dated May 28, 2020. Re: Calloway Energy Center.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20154K696>

FEMA Region IX. Dated May 20, 2020. Re: Diablo Canyon and Palo Verde nuclear power plants.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20150A151>

FEMA Region IX. Dated May 22, 2020. Re: Diablo Canyon and Palo Verde nuclear power plants.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20150A110>

FEMA Region X. Dated June 1, 2020. Re: Columbia Generating Station.

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML20154K703>

federal response is needed to mitigate the impact of COVID-19 within the nuclear industry, and—with refueling outages at over two dozen more facilities currently scheduled for the later summer and fall—you must act now to prevent further negligence by NRC and the industry it regulates.

We anxiously await your response to our April 22, 2020 correspondence, and call on you to adopt and implement our six recommendations prior to the resumption of the next round of refueling outages.

Sincerely,

Timothy Judson
Executive Director
Nuclear Information and Resource Service
6930 Carroll Ave., Suite 340
Takoma Park, MD 20912
TimJ@nirs.org
(301) 270-6477

Eric Epstein
President
Three Mile Island Alert
Middletown, PA
lechambon@comcast.net

Nikos Pastos
Alaska's Big Village Network
Anchorage, AK 99504
nikospastos@hotmail.com

Paul Gunter
Director, Reactor Oversight Project
Beyond Nuclear
Takoma Park, MD
paul@beyondnuclear.org

Deb Katz
Executive Director
Citizens Awareness Network
Shelburne Falls, MA
deb@nukebusters.org

Mary Gutierrez
Executive Director
Earth Action, Inc.
Pensacola, FL
earthethicsaction@gmail.com

Mary Beth Brangan
Co-Director
Ecological Options Network, EON
Bollinas, CA
mabbrangan@gmail.com

Manna Jo Greene
Environmental Director
Hudson River Sloop Clearwater, Inc.
Beacon, NY
ea1@clearwater.org

Sheila Parks, EdD
Founder
On Behalf of Planet Earth
Watertown, MA
sheilaruthparks@comcast.net

Bart Ziegler, PhD
President and Co-Founder
Samuel Lawrence Foundation
Del Mar, CA
bart@samuellawrencefoundation.org