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**Petitioners Request that the Commission Reverse the Nuclear Reactor Regulation Director's Decision of May 18, 2005 To Deny an Emergency Enforcement Petition (10 CFR 2.206) Regarding Emergency Backup Power to Emergency Notification Systems and Grant the Requested Actions of February 23, 2005**

The petitioners of the February 23, 2005 request for emergency enforcement action under 10 CFR 2.206, respectfully request that the Commission reconsider the decision of Nuclear Reactor Regulation Director James Dyers dated May 18, 2005 to deny a request that the; 1) Nuclear Regulatory Commission (NRC) issue generic communications to ascertain the extent of failure of emergency notification systems (sirens, repeaters, etc.) in the event of regional and local power blackouts, and; 2) NRC require commercial nuclear power licensees to install emergency power back up systems to emergency notification sirens with rechargeable batteries preferably on photovoltaic solar arrays for all emergency planning zones.

The petitioners request that the Commissioners reverse the Director's decision as provided in NRC Management Directive 8.11 by granting the requested actions.

The Director's letter states that the petition does not meet the criteria for consideration as provided under NRC Management Directive 8.11 while at the same time stating "That is not to say that we find that your concerns lack merit."<sup>1</sup>

Given that NRC acknowledges that the petitioners' technical concerns are valid and have merit, the subject of our request hinges on whether the petition meets the established criteria. The petitioners submit that they have met all of the criteria as established under NRC Management Directive 8.11:

- 1) The petition clearly states its request for enforcement action that NRC issue generic communications (including Bulletins, Generic Letters, Request for Additional Information) to ascertain whether or not public notification systems within all emergency planning zones can operate independent of the

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<sup>1</sup> Letter, May 18, 2005, James Dyer, Director of Nuclear Reactor Regulation, US NRC, to Paul Gunter, NIRS, on behalf of Petitioners request for emergency enforcement action under 10 CFR 2.206 dated February 23, 2005

main power line supply and modify all operating licenses to provide and maintain full backup power to those emergency notification systems preferably through photovoltaic power charged battery systems.

- 2) The facts that constitute the bases for taking the requested actions are not in dispute by NRC. The consequence of a main line power failure at a majority of sites results in the partial and total loss of siren operability for notifying the public of a nuclear accident or act of terrorism resulting in a radiological release. An agency communication to petitioners subsequent to the Director's decision identifies that approximately 27 emergency planning zones for U.S. nuclear power stations public have no back up power capability for emergency notification systems and will not work in the simultaneous event of a catastrophic release of radiation and a blackout on main power lines.<sup>2</sup> The communication further identifies that approximately 18 emergency planning zones have only partial backup power for public notification sirens as in the example of Three Mile Island Unit 1 where 19 of 96 sirens are capable of operating independent of the electrical grid. The communication does not provide a description of the proportion of sirens within these partially operable sites that would be inoperable during main line power failure. Only 17 emergency planning zones have public alerting systems that have full power backup and are operable independent of main power lines. Furthermore, NRC has not publicly provided any specifications on the duration of the battery power supply to operate these back fitted systems to reasonably assure their operability for the duration of an emergency given extended and/or repeated grid failures or acts of sabotage to power lines.
- 3) Finally, there is no other NRC proceeding currently available to the petitioners to which they can be party and through which the petitioners concerns can be addressed in the context of the current emergency situation. There are no licensing proceedings currently available to the petitioners to address these non-compliances and inadequacies. It is also unreasonable to deliberately leave communities vulnerable with inoperable emergency notification systems and inadequate compensatory measures to pursue a petition for rulemaking which on average involves up to 2 years or more of deliberations. NRC has an obligation to uphold its licensing agreements and promptly address non-compliances with the maintenance of operable emergency notification systems, particularly where a significant number of licensees have demonstrated compliance by providing basic emergency backup power to their public notification systems.

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<sup>2</sup> Email, William Reckley, US NRC/NRR, Petition Manager, to Paul Gunter, NIRS, "Site List Re: Sirens," 05/27/2005

The petitioners further submit that the NRC has not satisfied the criteria for rejecting the petition as established under Management Directive 8.11:

- 1) The enforcement petition of February 23, 2005 requests clearly articulated enforcement action with sufficient factual bases supporting the petition and does not fall into categorical treatment as an allegation.
- 2) The petition does not raise issues that have already been the subject of NRC staff review and evaluation, other similar facilities, or on a generic basis, for which a resolution has been achieved, the issues resolved, and the resolution is applicable to facilities in question. The fact that 17 sites have demonstrated that backup power for emergency notification systems can be provided and but is not being consistently applied throughout all emergency planning zones demonstrates an illogical lack of consistency on the part of NRC to maintain operable emergency plans under the agency's oversight and enforcement of its licensing agreements. Petitioners contend that such treatment of emergency planning by some licensees and NRC staff is arbitrary and capricious. It is unreasonable and unacceptable that NRC tolerates a condition that potentially affects the public health and safety where some sites maintain full emergency power backup while a significant number of operators provide no or only partial backup power to emergency notification systems.
- 3) The petition does not request the denial of a license amendment or application. The licensees have not made application for a license amendment or exemption request with regard to the inoperability of emergency notification systems due to main line power failure.
- 4) The requested actions do not address deficiencies within existing NRC rules that should be addressed as a petition for rulemaking. NRC has sole federal jurisdiction to address the requested emergency enforcement actions under 10 CFR 2.206. The agency has sole federal jurisdiction to enforce its licensing agreements based in 10 CFR 50.47 Emergency Plans (a) (1) governing that "*no operating license for a nuclear power reactor will be issued unless a finding is made by the NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.*" NRC issued the initial license to power reactor operators under this agreement. As is clearly stated per 10 CFR 50 Appendix E (D) (3) that by February 1, 1982, it is the responsibility of each nuclear power station operator to maintain a radiological emergency plan and "*demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public within the plume exposure pathway (EPZ) for transient and permanent populations.*" Additionally, per NUREG-0654 Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness In Support of Nuclear Power Plants," E. entitled Notification Methods and Procedures, "*It shall be the licensee's responsibility to demonstrate that such means exist, regardless of who implements this requirement. It shall be the*

*responsibility of the State and local governments to activate such a system.”(p. 45)*

The Director has erroneously argued that the NRC staff did not find a compelling reason to “impose new requirements ahead of the efforts to evaluate and develop possible changes to Federal standards for public alerting and notification systems.”<sup>3</sup> The petitioners argue that at issue is that licensees must meet current operability requirements for their emergency plans. While the Department of Homeland Security/Federal Emergency Management Agency have been directed by Congress to revise Federal standards for all public alerting systems following the August 14, 2003 power blackout approximately 22 months ago, it is indisputably the sole jurisdiction and responsibility of NRC to maintain its current licensing agreements regarding the operability of emergency plans, specifically on emergency notification.

The petitioners are asking for consistent oversight and enforcement action from NRC to assure the operability of public notification systems for the duration of an emergency in the event of main power line failure and equal treatment and protection to all members of the affected public within every emergency planning zone. Clearly, the 17 sites that have provided backup power to emergency notification systems demonstrate a course of action to maintain siren systems as operable in the event of a main power line failure. The NRC has only to consistently apply and enforce its licensing agreements for all emergency planning zones to reasonably assure the adequacy of such systems to operate for the duration of an emergency independent of main power line supply. It is not reasonable or acceptable as NRC staff suggests that the agency can wait indefinitely on another federal agency for NRC to enforce its own licensing agreements. The agency’s sole jurisdiction to maintain its licensing agreements regarding emergency planning issues in relation to other federal activity is clearly stated in 10 CFR 50.54(s) (3), *“The NRC will base its finding on a review of the FEMA findings and determinations as to whether State and local emergency plans are adequate and capable of being implemented, and on the NRC assessment as to whether the licensee’s emergency plans are adequate and capable of being implemented. Nothing in this paragraph shall be construed as limiting the authority of the Commission to take action under any other regulation or authority of the Commission or at any time other than that specified in this paragraph.”*

The petitioners urge the Commission to exercise its authority as delineated in 10 CFR 50.54(s) (3) to be applied promptly to the requested emergency enforcement actions under 10 CFR 2.206.

Industry compliance with their licensing agreements on emergency planning is not voluntary. The petitioners cite the inconsistency of NRC and some licensees to provide equal protection to the public residing, working and recreating within the emergency planning zones around nuclear power stations. While NRR Director James Dyer has stated that the agency can wait upon a revised standard on public alerting systems from DHS/FEMA before mitigating the inoperability of the entire siren system around the Indian Point nuclear power station operated by Entergy in New York, in response to the

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<sup>3</sup> Dyer, USNRC, Letter to NIRS, May 18, 2005

media attention generated by the petition and NRC's rejection, Entergy recently announced it is back fitting its partially backed up siren system with full emergency power backup at the Vermont Yankee nuclear power station in Vermont. *"According to Rob Williams, spokesman for Vermont Yankee, the siren system is being updated. By the end of June, all 21 sirens will have battery backup."*<sup>4</sup>

It is illogical, unreasonable and unacceptable for NRC to deliberately and indefinitely leave entire sirens systems inoperable within the densely populated emergency planning zones around Entergy's Indian Point nuclear power stations while Entergy is promptly fixing its partially operable sirens systems around the Vermont Yankee nuclear power station to have full backup power status. What kind of justification can NRC possibly offer for this single disparity in maintaining a minimum standard of oversight and enforcement for protecting the public health and safety?

### The Compensatory Action For Inoperable Siren Systems Is Inadequate

The petition outlined that the current compensatory measures (mobile route alerting) are inappropriate, inadequate and unreliable. Mobile route alerting is where police and fire departments will get into their emergency vehicles and deploy into the 10-mile EPZ in the event of failure of sirens to either go door-to-door or broadcast an initial alert and instructions through bullhorns from the street.

First, there is the issue as to whether siren system failures due to power failures will be promptly detected to mobilize such a response to adequately compensate for the loss of automated notification. The petitioners point out that the timelines for prompt notification are established in NUREG-0654 Appendix 3(B)(2) under Criteria Acceptance with "minimum acceptable design objectives for coverage by the system" and are designated as the; a) Capability for providing both an alert signal and an informational or instructional message to the population on an area wide basis through the 10-mile EPZ within 15 minutes; b) Initial notification system will assure direct coverage of essentially 100% of the population within 5-miles of the site, and; c) Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification with in the entire plume exposure EPZ.

Second, the petitioners assert that "mobile route alerting" can not reasonably assure prompt initial notification to the public as described under a variety of plausible circumstances that include adverse weather conditions, earthquakes, etc. where some routes may be impassible or a fast breaking radiological event that includes a terrorist attack on the nuclear facility. Possibly already overburdened police and fire departments can not reasonably be counted upon to suspend all other emergency duties including traffic control and other vital services to go door-to-door to notify the public of a nuclear accident or attack. There is additionally the concern that such emergency responder activities could be delayed by role conflicts and role abandonment to prioritize family responsibilities. It is therefore vital to the public health, safety and security that NRC consistently apply and enforce its licensing agreements for all emergency planning zones

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<sup>4</sup> "NRC Rejects Coalition Petition on Emergency Evacuation Plan," Brattleboro Reformer, May 26, 2005.

to maintain that automated outdoor public notification systems will operate independent of the failure the main power line supply.

Finally, compensatory measures are intended only to compensate and augment for inadequacies for reasonable interims while efforts are underway to bring licensing agreements back into full compliance with the appropriate standards and requirements or until the special circumstances for augmented action have expired. Because many siren systems have been inoperable for an extensive period of time and remain inoperable in the simultaneous event of a radiological release and main line power failure, it is unacceptable to indefinitely continue inappropriate, inadequate and unreliable actions such as mobile route alerting, particularly in light that a significant number of licensees are already providing full emergency backup power for automated outdoor emergency notification systems. These so-called “compensatory actions” can not be considered interim as they constitute essentially replacement actions for power failures to the majority of notification systems and an unacceptable vulnerability that is unduly endured by large sectors of the public within inadequately prepared emergency planning zones.

It is Inappropriate and Unacceptable for Industry to Argue that Indoor Notification Systems Can Be Arbitrarily Substituted for Outdoor Siren Notification Systems in the Future as Justification for Deferring Current Operability Requirements

“Larry Gottlieb, a spokesman for Entergy Nuclear Northeast, which owns Indian Point, said the future of notification technology would likely move away from sirens to reverse-911 calling or other more targeted efforts.”<sup>5</sup>

Such statements attempt to evade the central issue that nuclear power stations are operating outside of compliance with current license agreements to maintain operable emergency plans including outdoor notification systems.

It is inappropriate for industry to suggest that it can deliberately and indefinitely abandon the operability of its outdoor siren systems with a promise that some day in the future it can substitute indoor alerting systems. Outdoor public notification systems must be maintained as part of the defense-in-depth philosophy for emergency planning. Industry arguments to eliminate outdoor siren systems may be raised under their own petition for rulemaking where all stakeholders including the public, elected government officials and emergency response networks have an opportunity to formally comment on the adequacy and inadequacy of such changes in emergency notification systems around nuclear power stations.

Therefore, the following petitioners request that the Commission reconsider the petition of February 23, 2005 and grant the requested actions.

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<sup>5</sup> “NRC rejects call for backup power at nuclear plant sirens,” The Journal News, May 21, 2005.

Sincerely,

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IPSEC member organizations include the following:

Beacon Sloop Club, Bergen County Greens, Bronx River Research Group, Cancer Awareness Coalition, CAN DO (Citizens Against Nuclear Energy – Dobbs Ferry), Chappaqua Against Nuclear Generated Energy (CHANGE), Children's Health Fund, Citizens Awareness Network, Citizens for Safe Energy, CODE PINK NYC, Communities United For Responsible Energy, Connecticut Citizens Awareness Network, Council on Intelligent Energy & Conservation Policy, Croton Close Indian Point Group, Earth Save Long Island, Environmental Advocates of New York, Federated Conservationists of Westchester Co, Inc., Fishkill Ridge Community Heritage, Friends of the Earth, Global Resource Action Center for the Environment (GRACE), Healthy Schools Network, Ironbound Community Corporation, Hackensack Riverkeeper, Hogarth Center for Social Action, Manhattanville College, Hudson River Sloop Clearwater, Inc., Hudson Riverkeeper, Irvington Neighbors Against Indian Point KLEAN NYC, Long Island Peacesmiths, Mid Island Radiation Alert, New York City Campaign to Close Indian Point, New York City Environmental Justice Alliance New York City SAFE (Seeking Alternatives for the Environment), New York City Women's Action for New Directions, New York City Physicians for Social Responsibility, New York Climate Rescue, New York Public Health Association, New York Public Interest Research Group (NYPIRG), Nuclear Control Institute, Nuclear Free Hudson, Nuclear Information and Resource Service (NIRS), Orange Environment, Inc., Pace Energy Project, Philipstown League for the Environment and Safe Energy (PLEASE), Public Citizen's Critical Mass Energy and Environment Program, Putnam Citizens Awareness Network Riverkeeper, Inc., Rockland Citizens Awareness Network, Rockland Coalition to Close Indian Point, Rockland County Civic Association, Rockland County League of Women Voters, Rockland County Conservation Association, Saw Mill River Audubon, Sierra Club – Atlantic Chapter, Sierra Club – Hudson-Meadowlands Group, Sierra Club – Lower Hudson Group, Scenic Hudson, Sprayno Coalition, Sound Shore Safe Energy Advocates (SSSEA), STAR Foundation (Standing for Truth About Radiation), Stony Point Action Committee for the Environment (SPACE), Sustainable South Bronx, Walkabout Clearwater Chorus, Waterkeeper Alliance, Westchester Citizens Awareness Network, Westchester Green Party, Northwest, Westchester Psychotherapists for Social Responsibility, WESPAC Foundation, Westchester SAFE (Seeking Alternatives for the Environment), Westchester Residents Advocating for Improved Neighborhoods (WRAIN), Yorktown Close Indian Point Group, Rockland FUSE

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