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FOUR YEARS AFTER SANDY, TACKLING THE RISING THREAT OF FUEL EMERGENCIES

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Just a few weeks before the four-year anniversary of Superstorm Sandy, Hurricane Matthew swept through the Southeast serving as a powerful reminder of the ongoing threat these storms pose to homes, businesses, and cities up and down the East Coast. Matthew also reminded us of the ongoing danger of fuel emergencies, which at one point threatened 10 million barrels of refined fuel product stored in marine terminals in Florida.

Fortunately, the damage from Matthew was much less severe than expected. But here in New York, just four years ago, Superstorm Sandy wreaked havoc on our regional infrastructure. Not only did the crisis highlight vulnerabilities like our reliance on the electric grid and fuel transported from other states, it exposed the need for real-time information on critical energy facilities prior to and during fuel emergencies.

The good news is that since Sandy, considerable progress has been made in the Tri-State area to improve the resilience of the electric grid and prioritize power restoration to critical fuel supply infrastructure. Regulators in New York and New Jersey have already approved plans by utilities to upgrade key facilities and update emergency response plans.

To help meet the needs of residents and businesses, New York and New Jersey have also adopted programs to identify and provide back-up power generation at strategic retail gas stations. New York City has developed a Citywide Emergency Fuel Operations Plan and doubled its mobile fuel truck resources. Efforts have also been undertaken to improve public sector understanding of the fuel supply system serving the Tri-State area including key interdependencies.

But, as Ke Wei and I outlined in a report this summer on lessons from Superstorm Sandy, we have to do more – and we have to do it soon.

In the years since Sandy, threats to the fuel supply system and electric grid have continued to grow, including a projected increase in number and severity of extreme weather events, potential physical and cyber-attacks, and aging infrastructure.

Voluntary systems historically used by public officials for gathering critical real-time information simply cannot be relied on, especially during emergency conditions. And there is currently no regulatory program in place that requires owners and operators of critical fuel supply chain assets to prepare emergency response plans, conduct vulnerability assessments, or implement resiliency improvements.

We must establish secure channels of communication between the private and public sectors based on defined information sharing protocols (with appropriate protection for proprietary data) to ensure the government has the current, reliable information it needs when it needs it to minimize disruption to the fuel supply that keeps our communities up and running. For example, credible real-time data is required for public officials to provide timely regulatory relief to move fuel, such as waivers of or no-action determinations for certain environmental and transportation requirements, redirect fuel to first responders, implement rationing or other demand management programs, release fuel from available refined product reserves and expedite power restoration to critical fuel facilities. Furthermore, it is essential for effective

coordination of response actions by public officials with the private sector and maximization of reliance on market solutions which reflect common objectives.

To better protect public health and limit economic loss during emergencies, New York and surrounding states should establish reporting requirements for the fuel industry. Legislation introduced in the New York State legislature this Spring aims to do just that by mandating reporting of baseline data for normal operations and reporting of real-time data at least daily during energy emergencies by major petroleum suppliers and pipeline operators about available petroleum supplies and operational status.

Our interdependence on facilities across the region means that improving regional cooperation and planning for fuel disruptions is just as important as facilitating communication. New York and New Jersey should enter into an agreement to formalize information sharing and coordinate response plans and drills for fuel emergencies. Their actions should include coordination with New York City, DOE, the US Department of Homeland Security and potentially other neighboring states. Enhanced regional cooperation would also maximize the effectiveness of the Northeast Gasoline Supply Reserve recently established by the DOE and fuel reserves established in New York State during emergencies, including planning for product releases and securing authority to allocate fuel from the federal reserves to priority customers on an expedited basis.

Federal agencies have an important role to play, too. The U.S. Department of Energy (DOE) should establish a permanent Energy Response and Operations Center, place permanent regional response staff in the field, and mandate reporting by the petroleum sector of real time information to address fuel emergencies for critical facilities and share it with other federal and state officials. In developing information-gathering protocols, DOE should work with states to ensure its efforts serve their needs as impacted states are directly responsible for on-the-ground response actions.

For its part, the Department of Homeland Security (DHS) has received funding from Congress to establish a Regional Resiliency Assessment Program (RRAP) which assists participants in understanding the fuel supply chain, including critical infrastructure, vulnerabilities, and potential options to address them But participation in this program by the public and private sectors is currently voluntary, leaving the government with no authority to prescribe and implement resiliency improvements at critical facilities, and participation by DOE in the program has not been formalized.

If we're serious about preventing fuel emergencies, that has to change, and DOE's efforts to develop tools and metrics for measuring resiliency, as well as identifying options for enhancing it for the diverse set of critical assets in the fuel supply chain, will require much greater support.

Utilities should be required to conduct drills and exercises with their key fuel supply customers at least annually to test and strengthen power restoration plans and communication channels, and evaluate alternative power supply options.

Mandatory reporting of critical baseline and real time information should not be a heavy lift for industry—it generates this data as a matter of course, and in fact has been reporting similar historical data to DOE for over 30 years. Private sector concerns regarding disclosure of proprietary information, or potential anti-trust issues can be addressed with well-established confidentiality protections, and limiting reporting obligations to individual entities. Care should be taken to avoid undue interference with available market solutions while recognizing that the overriding obligation of public officials is to protect public health and welfare and limit socioeconomic loss to the extent feasible.

Improving the resiliency of critical fuel supply chain assets does not have to come with a huge price tag for industry. Regulatory programs could include potential cost sharing, funding, and other public incentives. But these efforts will require increased collaboration between energy and emergency management officials at all levels of government, and with key private sector stakeholders, as well as bi-partisan support from Congress.

Amid increasing natural and man-made threats to our infrastructure, being prepared for a fuel emergency is more important than ever. And as we know from Hurricane Matthew, there's no time to waste.