



EXPEDITING POWER RESTORATION WHITE PAPER

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How the Electric Sector is planning with regional states to gain shared perspectives, identify operational chokepoints to power restoration, develop joint operational solutions, and coordinate their actions

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PURPOSE

The United States experiences frequent power outages caused by a variety of storms and natural disasters (referred to as “regional event” or “large scale regional event”) every year.

For many of these regional events, the local electric company has the people and resources necessary to coordinate with the state(s) and jurisdictions they serve, respond to the event(s), and restore power quickly for its citizens, schools, hospitals, businesses, and government. From time to time, however, some of these events are quite large and impact a wide geographic area that can range from three (3) to twenty-five (25) states or more.

In addition, these large-scale regional events can overwhelm the resources of the local electric companies in the impacted areas causing them to engage their mutual assistance groups to bring in support from other electric companies from around the region or country (including Canada) to address large scale power outages. These large regional events not only involve states that are impacted by the outage (who are in “dark sky” conditions) but also non-impacted states (who are in “blue sky” conditions) that electric sector and supply chain fleets and resources need to pass through in order to get to these impacted states.

It is during these large regional events that operational coordination with multiple state agencies across multiple states (and the federal supporting agencies) is required for expediting power restoration efforts. During “blue-sky days”, the electric sector companies, along with the trade groups and associations, work with their states, regulatory organizations, and federal agencies to try to address many of the issues that surfaced during recent storms and past events.

Each regional event reminds everyone that the coordination across multiple states/agencies, private sector companies/ organizations, and federal agencies is required to address some of these complex problems. According to the private sector, more work is still needed to solve these key operational issues.

Going forward, some important questions need to be addressed:

1. How can multiple state agencies across multiple states coordinate on specific electric sector issues at the same time?
2. How can multiple federal agencies and national trade associations, who are normally engaged during a large power outage, synchronize with multiple states and the private sector to expedite power restoration efforts across a region or multiple regions?
3. How can we coordinate on the development of this coordination?
4. Which particular issues, of the thousands that arise, are the various organizations responsible and provide support for and when do they activate these resources?
5. What “status” information are the various organizations interested in receiving from the private sector so that a consistent, efficient, and trusted process can be developed for this communication?
6. Who is in charge during such efforts, government or the private sector?

The answer lies in thinking strategically, creating a joint public/private integrated “blue sky day” regional planning framework that helps all stakeholders better understanding the electric sectors operational needs and choke points; achieve a common perspective on a few key issues to address, and coordinate actions on these key issues as identified by the private sector and agreed to by the state advisers.

This white paper looks at a new, fresh innovative approach to begin addressing the expediting of regional/national power restoration efforts, integrate and coordinate the capabilities and resources from multiple public and private sector organizations, and leverage the present and future efforts and capabilities of the federal partner agencies during both emergency and non-emergency conditions.

OVERVIEW

National Disaster Policy has evolved by advocating "Getting Business Back to Business", as a strategy for rapid recovery of resilient "lifeline" infrastructures and by employing regional public-private partnerships to create a national capability to achieve resilience through integrating public/private preparedness, response and recovery activities.

Most of the critical infrastructures that support our modern society are not confined to single states, and are owned and operated by business. These networks and organizations of critical infrastructure cross multiple state lines, even national borders, in servicing their public and private customers across broad swaths of the nation.

ELECTRIC SECTOR

Within the electric sector, there are multiple types of electric sector companies that address power outages including investor owned utilities, municipal utilities and electric co-ops. Each of them coordinates in various ways with each other and with their respective trade organizations. These electric companies typically usually focus only on the states, jurisdictions or territories where their customers are. Multistate events very often overwhelm their local resources and they have to call in support from their Regional Mutual Assistance Groups (RMAG) and/or neighboring utilities who they have mutual aid agreements with. Many times, they have no multistate mechanism to coordinate with state/local governments for large regional events and related resource movements and communications.

The Edison Electric Institute (EEI) provides coordination for the investor owned utilities and has played a major role in the sector to help coordinate power restoration efforts at the federal and regional level. EEI normally functions as an interface for the publicly traded companies, the federal agencies, and the White House during large-scale events. EEI also works at the state level but usually on policy related issues, not operations issues. According to EEI, there is a need for improved coordination between multiple states during regional events at the operational level.

STATE/LOCAL GOVERNMENT

At the state level, when a declaration of emergency is made, all state agencies are required to coordinate through the State Department of Emergency Management. This provides the electric sector with a single point of contact for that State and eases the burden of coordination in or through that state by the private sector resources. When a State has not made a declaration of emergency, there is not always a state single point of contact. Some states involve multiple agencies in the coordination process who are responsible for various components of a fleet movement effort (e.g. transportation, emergency management, state police, toll authority, bridge authority, Governor's office and comptroller's office). Navigating through these undeclared states, referred to as pass-through states, causes the need for a significant increase in coordination with more people at more agencies across more states.

For example, during large scale regional events, 20+ states may be involved but only 3 or 4 states have made a declaration of emergency while the federal government has not made a declaration of emergency. During emergency declarations, there is a clear federal and state protocol to be followed. The problem exists when there are no federal declarations, and only a few states declare while many don't. This again creates a major burden for the private sector to coordinate with government in an efficient, legal, and safe manner while staying focused on the job of restoring power across multiple states

This was best illustrated during the late 2013 and early 2014 snow and ice storms that impacted 18 states across the central and eastern United States. There was no federal declaration, and only 3 out of 18 states declared emergencies. That meant that 15 states were involved with the electric sector fleet movement activities that did not declare an emergency. This means that multiple state agencies were involved versus a single agency acting as the point person for the state.

Lastly, to complicate things even more, if trusted relationships are developed with state leaders, inevitably there is government personnel turnover at the state/local level where regional operational coordination is critical to the electric sector. This restarts the trust building process all over again.

FEDERAL GOVERNMENT

At the federal level, large events usually involve multiple federal agencies including FEMA, DHS Infrastructure Protection, US Department of Energy, US Department of Transportation, and other agencies who engage various facets of the power restoration efforts. While the federal government has large pools of people and resources, it is difficult for them to move quickly at times, coordinate with each other, and coordinate with multiple state agencies that, at any given time, could be under a state declaration.

Additionally, the federal agencies have their own missions and areas of responsibility, but the states ultimately own the roads and control the communications and resources within their jurisdictions, where the private sector needs to pass through.

In another real world example, during the recent ice storms in February 2014, in one case twenty-two (22) states were involved in a scale fleet movement effort along with several federal agencies. Only four of the states had declared a state of emergency. The federal government did not declare an emergency in this case. The electric sector RMAGs moved 1500 resources and trucks from multiple companies in multiple states on the East Coast into Texas, Oklahoma, and Arkansas. The private sector needed to immediately alert all of the "pass through" state agencies as to their fleet movement timelines, routes taken, resource quantities and related information in order to expedite power restoration efforts. Most of this happened outside of the federal government's involvement.

Additionally, multiple federal government agencies were involved and needed information status reports periodically to provide answers to their agency leadership who wanted to stay abreast of the situation and the progress. The same progress occurred in the private sector for their leadership.

In summary, regional multi-state coordination with the private sector is an immensely complex process involving dozens of public and private sector organizations across wide geographic footprints. Regulation and policy alone cannot address every need. From the private sector's perspective, it is very difficult to move resources across state lines during a large-scale event while ensuring that the following is accomplished or adhered to:

- Staying in compliance with the federal/state regulations and company safety guidelines
- Move resources safely and efficiently to restore power to citizens as quickly as possible
- Coordinate with government at all levels
- Provide critical information to the proper organizations in the requested format in a timely, efficient, and effective manner

What is needed is a mechanism to coordinate public and private sector organizations at the regional level that can understand and support the electric sector's primary regional operational needs in order to help expedite their power restoration efforts.

To address this complex problem, **Operational Alignment** is the key.

DEVELOPING OPERATIONAL ALIGNMENT VIA PUBLIC-PRIVATE PARTNERSHIPS

Complex systems comprise multiple systems that operate independently of one another. When dealing with complex systems, however, it is critical for every system to see and understand their role in the bigger system...to see the big picture.

The electric sector companies, states agencies, and federal government agencies each have their own operating environments. Large regional events force these operating systems to come together in a unique way which causes a variety of issues yet also present some unique long-term opportunities to leverage capabilities and relationships in order to align operational systems, sync missions, and coordinate actions towards a common objective.

Since Hurricane Sandy, the electric sector has been working with a group of states on the East Coast via a regional Public/Private Partnership (PPP) (the AHC) and are achieving operational alignment in the electric sector with regards to expediting power restoration across a wide geographic area. Aligning of operational capabilities relies heavily on a shared understanding, clearly defined objectives, education, exercises, and a common language which is only achieved by sustaining integrated planning process year round.

Through the efforts of the AHC's Multi-State Fleet Response Working group, dozens of companies and states have agreed that aligning operational efforts on specific electric sector choke

points is a simple way to begin aligning capabilities, relationships, and operational systems to solve the important common problem of expediting power restoration efforts.

So why hasn't this type of collaboration effort happened in the past?

There are many types of public/private efforts that have been undertaken. Some sustain, most don't due to a variety of reasons which were mentioned before.

FEDERAL

At present, the federal government can provide the national policy, regulatory framework, capabilities and resources and should encourage and support the development and sustainment of regional endeavors with states. The federal government has limits on what it can do legally and operationally when the private sector is involved, particularly regulated utilities. There sometimes exists distrust in government of the private sector and visa-versa. Some of this to real and some is perceived. The fact is that it exists and without trust, very little can be sustained when turnover occurs.

STATE

The States have the responsibility for their jurisdictions which includes transportation, public safety, public health, etc... States are normally driven by their geographic nature and political setting, generally focusing on issues within their geographic borders. This thinking overlooks the vast interconnectedness of multi-state regions, which the economy and security of the nation depends on. The States also have limits on what it can do legally and operationally when the private sector is involved, particularly with regulated utilities. There also exists the trust issue mentioned above. Turnover of people is a major disruption for the private sector.

ELECTRIC SECTOR

The electric sector needs the regional States engaged and coordinated to resolve their operational issues that span across multiple states with regards to their fleet and resource movements to restore power. There are regulatory and safety requirements that take time and need to be followed. There is also a challenge at the regional level with regards to coordination and communication with multiple states in a timely manner for operational purposes. Sensitive fleet movement information needs to be shared with states at the regional level but it needs to be secured for safety and privacy reasons.

It is in this setting that a new approach is needed that respects state sovereignty, coordinates with federal agencies, and takes a multi-state regional approach to operational issues facing power restoration as outlined by the electric sector.

Based on recent experiences, a regional planning framework is needed to build and sustain trusted partnerships with the electric sector in order to expedite power restoration efforts following major outages impacting 5+ states. Sustainment of planning frameworks, according to the States, is very difficult for them to achieve do to the impacts of government turnover brought about by elections, political/economic drivers, agency cultures/personalities, and shifting economic priorities. Economically, the States use grant funds for much of their initiatives. History indicates that these important planning frameworks and the resulting private sector engagements cannot be sustained long-term by grants.

Conversely, the private sector's regulated electric utilities need the same regional planning frameworks with States to address their broad regional issues (like multi-state fleet movement) that cannot be addressed solely through the individual electric company relationship with the state(s) they serve. The electric sector companies experience little turnover compared to government, have regulatory guidelines they must meet, and have to coordinate with multiple states when responding to large scale events that impact large geographic areas of the U.S. They need a way to sustain planning, exercises, education and relationship development with groups of states in order to effectively address their operational issues when restoring large regional power outages.

Additionally, the federal government relies on the States to coordinate with the private sector and nurture the day-to-day relationships with them at the State and/or regional level during "blue sky" days (normal operational periods). These relationships become critical for rapid action during "black sky" days (emergency operational periods).

This regional, multi-State planning gap widens when the States don't have the people, time, funding priorities or resources to sustain these public/private relationships and planning activities at the multi-state level. Over the past 5 years, the FEMA Regional Catastrophic Planning Grant program has supported the creation of these regional state capabilities and actually led to the development of the Regional Integrated Planning Framework that gave birth to the private sector's Multi-State Fleet Response Working Group which now addresses planning and response efforts at the regional/national level for the electric sector. Operational results have been realized by the electric sector, the states, the federal government and several other sectors including fuel, food, water, rail and telecommunications.

The use of Public Private Partnerships (PPP) in these regional planning efforts has proven successful in several areas of the country. PPP's provide several capabilities that cannot be provided by states, federal agencies or regulated electric companies:

1. Serve as Regional Repository of Information – this capability can sustain stakeholder turnover, reduce duplication of efforts, manage contact directories and files, inventory projects and reports, and provide a scanning/capturing of regional best practices in both the public and private sectors
2. Provide Safe Legal Environment for Information Sharing - This can protect sensitive information from being shared or accessed by the media, the public, etc.... via the PPPs exemption from FOIA (Freedom of Information Act) status... except in cases of formal lawsuits of course
3. Neutral, Safe Planning Environment – a safe environment for public and private sector operations professionals to have honest and candid discussions on key electric sector issues without fear of retribution or penalty
4. Speed - The PPP framework can move much faster than government and large companies to resolve issues, communicate messages, reduce re-tape, streamline processes and jointly develop solutions

PRESENT STATE

As SANDY and other major events have proven, public & private sector operations professionals often need to work and plan together on a regional level. There is empirical evidence that regional Public Private Partnerships (PPP), built on addressing sector specific operational issues, can be a bridge to the public sector and give the private sector an equal role in the overall regional planning, response and recovery process. The states must be an active leader in the process, but need a neutral facilitating mechanism like the PPP – preferably one with a proven track record - to bridge the public and private cultures and tie together and sustain the regional connections and capabilities developed.

The All Hazards Consortium (AHC) is a nine-year-old 501c3 non-profit organization focused on a regional PPP planning "System" that coordinates and integrates planning, response and recovery efforts between the public and private sectors. The AHC's System links together operations professional in government and the private sector to improve coordination, enhance planning/training/exercises, and expedite resilience of the critical infrastructure and communities following regional disasters.

The AHC, acting as a PPP, serves to align, then coordinate and then synchronize regional operational capabilities between the electric sector and multiple states on key electric sector specific operational issues facing a region.

By allowing the electric sector to identify their top operational chokepoints, the PPP then invites the states to advise the private sector on how best to resolve the issue... from the state/regional perspective. The final solution is tested by both groups and then implemented.

This results in Operational Alignment of resources, information flow and synchronizing of efforts.

As an example of this, the public and private participants in the AHC's Multi-State Fleet Response Working Group, in 2013, identified their two top operational issues for the electric sector were:

1. Delays at Toll/Weigh Stations During Regional Fleet Movements
2. Better Define the Role of the ELO (Energy Liaison Officer) within a state EOC (Emergency Operations Center)

Throughout 2013, planning meetings were conducted as part of CATEX 2013, a regional exercise focused on expediting power restoration across the East Coast from North Carolina to New York. Through joint efforts of states and private sector electric companies, both of these issues began to be addressed with two (2) joint solutions that were developed and operationalized in late 2013

1. The Regional Fleet Movement Coordination Process – was used in ice/snow storms to coordinate actions between 20+ states and electric companies for power restoration efforts in several storms
2. The ELO (Energy Liaison Office) Position Specific Guide – a document developed to better support the role of the ELO within State EOCs

REGIONAL PUBLIC PRIVATE PARTNERSHIPS

There are several types of PPPs with varying capabilities:

1. Information Sharing
2. Training, Education & Exercises
3. Emergency Operations, Response & Recovery
4. Preparedness & Planning
5. Applied Research
6. Critical Infrastructure Protection & Resilience
7. Public-Private Sector Coordination
8. Raising Awareness & Community Outreach

The All Hazards Consortium (AHC) is involved all of these except #8. The AHC partners with other regional PPPs on various efforts, particularly with the Pacific Northwest Economic Region (PNWER). AHC leaders serve on several national councils of PPPs and related topics.

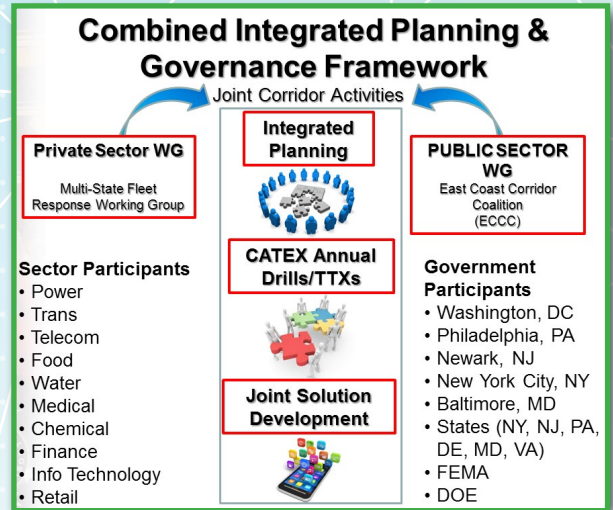
The AHC is guided by leaders from emergency management, homeland security, public safety, research, and business from the states of North Carolina, District of Columbia, Maryland, Virginia, West Virginia, Delaware, Pennsylvania, New Jersey and New York along with the urban areas (UASIs) of New York City-NY, Newark-NJ, Philadelphia-PA and the National Capital Region (Washington D.C.).

In 2010, the AHC jointly developed a "[Regional Integrated Planning Initiative](#)" (sometimes referred to as the System) with the private sector to help get business back to business faster following disasters. The primary focus was on the "life-line" sectors of power, transportation, telecommunication, food & water. Other sectors participated in the process. This System was perfected from 2010 until 2012 when Hurricane SANDY struck the East Coast.

This Regional Integrated Planning System process creates a [Regional Integrated Planning Framework](#) which produces trusted relationships and processes that provide government with access to private sector data and operational relationships that benefit both the public and private sectors in an operational incident. In doing so, the System bridges the public/private sector divide and improves coordination of planning and response efforts on specific topics.

The System's objectives are to:

- Create a safe, neutral planning environment for operational discussions
- Develop trust, shared perspectives, and unity of effort among stakeholders
- Find common operational chokepoints and requirements
- Develop operational solutions that support electric sector related chokepoints
- Coordinate actions and resources
- Communicate the progress and results
- Sustain the process




In order to enhance coordination within the electric sector, the AHC initiated the Multi-State Fleet Response Working Group to address operational chokepoints to expedite power and supply chain restoration. This Working Group operates under the AHC's Integrated Planning System

The Multi-State Fleet Response Working Group (FRWG) is a separately chartered, private sector lead working group of the AHC and is advised by the states. It provides a trusted partnership and planning framework in order to share critical, sensitive information between private sector, state/local government operational leadership, and federal entities on the movement of private sector resources across state lines in response to a specific regional/national disaster or emergency event.

This (FRWG) has developed a regional multi-state information sharing process along with operational information products designed to synchronize the planning, response and recover efforts across multiple states and electric sector companies in support of expediting power restoration. Other sectors benefit from the FRWG as well.



Geographic Focus	Members
 <p>Delaware, Maryland, New Jersey, New York, North Carolina, Pennsylvania, Virginia, West Virginia, and the District of Columbia, along with the UASI areas of New York City; Newark, New Jersey, Philadelphia; Baltimore; and the National Capital Region</p>	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; padding: 10px; margin-right: 10px;">15,000</div> <div style="margin-right: 10px;">→</div> <div> <p>person network</p> </div> </div> <p>Partners include representatives from:</p> <ul style="list-style-type: none"> • 9 State governments • 5 major urban areas • 22 Federal agencies • 78 private-sector entities • 16 higher education institutions <p>Subject Matter Experts from:</p> <ul style="list-style-type: none"> • 27 nonprofit entities

This process expedites operational information flow on the regional movement of electric sector fleets and resources through “pass through” states in order for them to reach the impacted states faster to begin power restoration activities.

Today the FRWG is recognized nationally for its innovative work with states and the electric sector.

NATIONAL POLICY ALIGNMENT – NIPP 2013

Nine years of working to encourage owners and operators of critical infrastructure to focus on disaster resilience has taught valuable lessons in how to work with both the public and private sectors. The newly updated National Infrastructure Protection Plan (NIPP) now in its third edition captures many of the best practices and sets forth a national framework within which to promote disaster resilience.

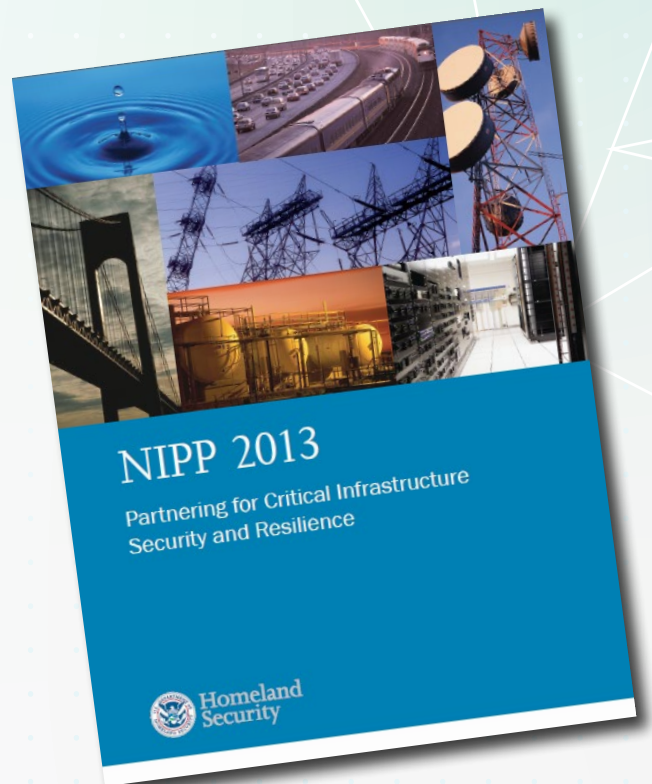
Core Tenant #5 of the NIPP says that: Regional and State, Local, Tribal, Territorial (SLTT) government partnerships are crucial to developing shared perspectives on gaps and actions to improve critical infrastructure security and resilience.

The National Plan appropriately creates a sense of urgency through a series of twelve Calls to Action (CTA). Three of them in particular support Tenant #5.

CTA #3: Empower Local and Regional Partnerships to Build Capacity Nationally.

CTA #8: Promote Infrastructure, Community, and Regional Recovery Following Incidents.

CTA #12: Learn and Adapt During and After Exercises and Incidents.



DHS Secretary Janet Napolitano personally reached out to the AHC to express her thanks for the unique support and the impact it had in aiding FEMA and the states in the response effort.

CASE STUDY – SANDY RESPONSE

CASE STUDY - SUPER STORM SANDY

During Super Storm SANDY in late 2012, multiple states and millions of citizens were impacted in a variety of ways, with homes destroyed, essential services lost, supply chains disrupted and massive power outages impacting millions of people. SANDY overwhelmed everyone's efforts in the first few days of the storm's aftermath. Both public and private sectors faced many issues, especially in interfacing with "out of state" responses regarding private sector resources and mutual aid:

- Locating and disseminating information about open fuel stations, fast food stores, vacant hotels and pharmacies
- Moving out-of-state utility fleets through tolls stations quickly and efficiently
- Information about points of contact in New Jersey for dealing with specific issues
- Information about the status of passenger rail service
- Monitoring social media looting and property damage to the facilities
- Locating stranded and distressed citizens
- Locating available housing to support the homeless and out of state workers

"The daily private sector resource availability reports provide an extremely valuable resource to help communities quickly recover and reconstitute during and after a major incident."

William F. Flynn
Deputy Assistant Secretary
DHS Infrastructure Protection

To assist, the AHC quickly turned to its trusted private sector partners for help. This resulted in the private sector providing data reports, support, and services, which lightened the load on state and local governments. Most notably, the daily [Private Sector Resource Reports](#), which showed potential "open and closed" locations for necessities such as fast food, fuel, hotels with available rooms and pharmacies were provided via email to tens of thousands of public and private stakeholders. This capability was used by FEMA in their NRCC and their daily White House briefings and was their most useful source of real-time situational awareness during the first 3 days of SANDY.

- The electric sector resolved toll station delays across the region by working with the AHC and its states to quickly develop a process to navigate toll stations by out of town utility trucks from around the country
- The food sector was able to find fuel and get bread products into New Jersey and New York City
- Law enforcement saved lives and property from the AHC's social media trend reports/alerts
- The finance sector was able to expedite the movement of essential personnel based on the daily open/closed reports

Following SANDY, the general feedback from the private sector owner/operators and government was positive, coupled with requests to further develop and stabilize the AHC's System and its capabilities so that it can be used across a wider geographic footprint in other disasters. The integrated planning process and trusted relationships needed to be sustained along with data and information sharing. Additionally, the data and information provided in the daily reports was useful but there is the need to expand it, to include more private sector information, and organize the information to support specific sector needs.

As it is clear that Super Storm SANDY will not be the last disaster that will strike the country, continued improvement of the AHC's System is essential. It is hoped that in future events, the foundation that was laid in establishing this System will increase the efficiency of future relief efforts.

To accomplish this, better coordination with the sectors, states and the federal agencies is needed. This will require planning, education & exercises during the "blue-sky" days. Integrating this process between the complex landscape of public and private organizations is the role Regional PPP.

"We used the daily private sector resource availability reports to support our essential personnel movement, supporting our vendor deliveries, and as a key indicator for recovery and restoration progress."

Jeffrey Dell
Bank of America
Senior Vice President
Global Business Continuity & Recovery
Crisis Management

OPPORTUNITIES TO COLLABORATE

This Multi-State Fleet Response Working Group comprises private sector representatives from electric, fuel, finance, telecommunications, food, water, retail and general supply chain related sectors. The capabilities developed by this PPP and its planning framework present several opportunities to for collaboration with federal agencies.

Leveraging the federal capabilities, products, technical assistance, and operational resources is an important component to the electric sector's need for year round planning, education, exercises and eventual response/recovery efforts.

There are many potential areas of collaboration between federal agencies and the AHC/MSFRWG. Based on initial meetings and experience, some of these are outlined below along with a graphic that illustrates the relationships and potential outputs:

- Support for federal agency product education and adoption into the electric sector's operational fabric
- Education on federal agency and electric sector issues, approaches, limitations, requirements and opportunities for integration
- Joint regional exercises with state, private sector and federal agencies focused on expediting power restoration
- Creation of a PPP Liaison program to enhance federal agency information sharing and coordination with the FRWG
- Coordination of federal & FRWG operations, planning, training, & solution development
- Jointly develop operational solution for the electric sector with states & EEI



PILOT PROGRAM APPROACH

To sustain and further develop these regional capabilities, the FRWG is looking to conduct demonstration projects with federal agency partners.

The demonstration projects would engage the private sector members of the AHC/Multi-State Fleet Working Group, the Edison Electric Institute (EEI), the participating states and the federal agency in several operational areas to potentially include exercises, education/training, operational coordination and joint solution development to address sector specific issues and operational choke points in the electric sector and other lifeline sectors in the future (e.g. rail, telecom, food, water, etc..).

Potential areas to demonstrate the integration of PPP capabilities with the federal agency are listed below:

GOVERNANCE:

1. Establish a Sub-Committee in the FRWG to work with private sector and the Federal Agency on expediting resource movement, expand to other regions, conduct planning, training and exercises, jointly develop solutions, sync operations efforts, align federal and private sector capabilities, educate and gain support from congressional and private sector leadership
2. Conduct weekly/monthly status meetings
3. Add a Federal Agency Adviser to the FRWG Committee

COMMUNICATIONS:

1. Jointly develop communication materials related to electric sector and the FRWG membership
2. Jointly support/promote specific activities that promote the partnership, the Federal Agency, EEI and the FRWG

EDUCATION:

1. Leverage joint education products/services with the private sector to support electric sector requirements, operational needs, and other related areas that impact regional response efforts
2. Create executive level education for states, private sector and congressional stakeholders to help them better understand the roles, gaps and efforts to resolve electric sector issues with expediting power restoration
3. Create awareness of the Federal Agency's capabilities, products and solutions that can enhance private sector operations

PLANNING:

1. Sustain regional "sector" working groups and relationships that identify transportation information sharing related "sector specific" operational issues and choke points
2. Align the Federal Agency mission and capabilities with sector specific operational requirements and issues to develop operational solutions in the electric sector
3. Identify opportunities to expedite information flow of the Federal Agency products/information directly into the field
4. Identify private sector requirements to support R&D efforts
5. Coordinate planning efforts and related calendars between FRWG, EEL, the Federal Agency and States for planning purposes
6. Provide feedback and recommendations from private sector operations people on the application of the Federal Agency products in their sector

OPERATIONS:

1. Align the Federal Agency capabilities with regional FRWG members to reduce overlaps, expedite and streamline communications, and increase adoption of the Federal Agency products and information into the private sector's decision making process
2. Coordinate the Federal Agency Operations with FRWG operations during large regional events via involvement in emails, alerts, access to products/information. As an option, the FRWG could assign a liaison to the Federal Agency Operations Center to expedite and sync real-time communications with EEL, the Federal Agency, States and FRWG.
3. Maintain a regional/national FRWG contact directory for operational purposes
4. Support/Participate in executive briefings to the Federal Agency's leadership, EEL, legislators and other related organizations
5. Provide the Federal Agency Operations Center access to real-time private sector data used by the FRWG during large regional events in the U.S.
6. Connect the Federal Agency Operations Center to the AHC/FRWG's virtual Regional Help Desk during specific events
7. Credential up to 5 Federal Agency Operations Center staff to have access to the secure information sharing portal of the FRWG for access to viewing and sharing sensitive operational information

CONCLUSION

The federal government can provide the national framework and should encourage and support the development and sustainment of regional endeavors. However, the States need PPPs to build and sustain critical partnerships with the private sector and the private sector operators often need to work on a regional level with other operators from the government.

The unique regional operational capabilities that have been developed by PPPs around the country provide a significant force multiplier for states and the federal government. Trusted by the private sector and states, the PPPs can move quickly to resolve electric sector operational issues, improve communication of sensitive information, provide a legal framework to support the privacy of information being shared, and provide a long term mechanism to coordinate actions and sustain trusted relationships that usually dissolve with government or private sector turnover.

Integrating these capabilities with the related federal agency capabilities can accelerate power restoration efforts and expedite the flow of private sector information into the federal government mechanisms during federal declarations and non-federal declarations times. Additionally, since the PPP capabilities are developed with limited resources, have federal resources made available to integrate with the PPP is critical to the sustainment and expansion of the PPP capabilities to more regions and stakeholders.

Most importantly, the PPPs are nimble organizations that can move and adjust quickly to certain dynamic regional multi-state events when government struggles. This capability can enhance federal coordination and communication with multiple state agencies and the private sector and can expedite the flow of information from the federal government to the private sector's operations personnel who can then make better informed decisions to restore power and related critical infrastructure.

In the end, the overall response efforts are better informed and coordinated, the duplication of effort is reduced and the critical infrastructure is returned to normal conditions faster which results in community and economic resiliency.