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## **Safety Outreach and Incident Response Stakeholder Strategy**

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# **Safety Outreach and Incident Response Stakeholder Strategy**

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## **Abstract**

The objective of this document is to set out a strategy to reach all stakeholders that can impact the timely deployment of safe stationary energy storage systems in the built environment with information on ESS technology and safety that is relevant to their role in deployment of the technology.

### **Top Issues in Safety Outreach and Incident Response**

- A. Provide guidance and information on ESS installation and protection design
- B. Provide guidance and information operational safety including thermal management
- C. Develop first responder training material for responding to an ESS fire
- D. Develop guidance and information on ESS safety analysis through energy storage websites, the ESS Handbook, and by offering safety analysis courses to developers and startups
- E. Promote first responder knowledge and confidence by developing a template for providing information to and working with local fire departments and by make safe methods available to first responder groups through demonstration (practice system fire), videos, guides, and courses.
- F. Provide links to educational material on cyber security on energy storage websites
- G. Provide guidance and information on the safe transportation/delivery of energy storage systems

## **ACKNOWLEDGMENTS**

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## 1. OVERALL APPROACH

1. Identify key stakeholders and group them based on the role they plan in development and deployment of ESS technology (*see stakeholder categories below*)
2. Define the needs of each stakeholder group and the messages and content that can address those needs (*see stakeholder categories below – need to discuss and ID their key needs and content required to address those needs*)
3. Develop core content that can be used as a basis for specific content and messaging to each stakeholder group (*TBD based on item 2 above and in consideration of the content that is currently available for direct use or re-purposing/tweaking*)
4. Identify vehicles to carry the messages and content to stakeholders (*see matrix below for a start*)
5. Establish collaborative relationships with organizations representing various stakeholders to work with and through them in deploying the messages and content via appropriate communications vehicles (*after development of initial thoughts then reach out to each organization, introduce the effort, explain the value we place on the stakeholders they represent, and begin the process of engaging them in the completion of this activity – messaging, content, media and outreach to their constituents through and with them*)

## **2. STAKEHOLDER CATEGORIES**

1. Building Owners, Universities, Industry/manufacturing plants, Utilities, Federal, state and local Agencies and lenders (those who would procure, finance, or own systems as part of the buildings or infrastructure they own or finance)
2. Manufacturers of ES components or systems, building and system designers, specifiers and utilities (those who would sell ESS an ESS to those in category 1 above or who are involved in facilitating that sale because of their involvement in the design and construction process associated with the location and installation of the ESS)
3. Building, electrical, fire officials and inspectors as well as testing laboratories and certification entities and utilities (those who are involved in the review of ESS products, components, installation of ESS, etc. and the approval of what is proposed and the acceptability of its final installation as well as compliance with any regulations governing ongoing safety compliance)
4. Builders, contractors, commissioning entities, utilities, etc. (those who would install an ESS or perform work associated with the installation of an ESS or its components parts and/or systems, materials, products, etc. proximate to or associated with the ESS)
5. First Responders, (Fire Service Personnel)
6. facility managers, operations and maintenance personnel, etc. (those who would be involved during the installation or commissioning of an ESS or involved in an incident of some nature post commissioning that requires action to mitigate the incident or a potential incident)  
Planning
7. Legislative and regulatory entities and policy makers, etc. (those who make public policy, oversee governmental processes and programs and in some way would influence or direct the development, adoption and application of mandatory or incentive programs affecting ESS deployment)
8. Insurance, banking, underwriters, etc. (those who underwrite technology investments or in some way have a financial stake in the safe deployment of ESS)
9. Standard development organizations (SDOs)
10. Research Organizations
11. General public

### 3. ORGANIZATIONS REPRESENTING STAKEHOLDERS

The following stakeholders are presented in the format:

**Acronym or short name – Full name – Stakeholder Category #**

- ABA – American Banking Association – 7
- AIA – The American Institute of Architects – 2
- AIA – American Insurance Association – 7
- AGC – Associated General Contractors of America – 4
- APPA – Association of Physical Plant Administrators – 1
- APPA – American Public Power Association – 1, 3, 4 and 5 (would cover the various roles utilities play in ESS deployment)
- ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc – 2
- ASME – American Society of Mechanical Engineers – 2
- BOMA – Building Owners and Managers Association – 1
- CSI – Construction Specifications Institute – 2
- DoD – Department of Defense – 1, 3 and 5 (represents federal building owner – note there are many more federal building owners that would also have to be identified and possibly contacted logically through DOE OE – these include DOJ, NASA, USPS, DOI and many others)
- EEI – Edison Electric Institute – 1, 3, 4 and 5 (would cover the various roles utilities play in ESS deployment)
- EPRI – Electric Power Research Institute – 1, 3, 4 and 5 (would cover the various roles utilities play in ESS deployment)
- ESA – Energy Storage Association – 2
- GSA – General Services Administration – 1, 3 and 5 (would be both for US and each state as to federal or state owned buildings)
- IAEE – International Association of Electrical Inspectors – 3
- IAPMO – International Association of Mechanical and Plumbing Officials – 3
- IBEW – International Brotherhood of Electrical Workers – 4
- ICC - International Code Council – 3
- IEEE – Institute of Electrical and Electronics Engineers – 10
- IFMA – International Facility Management Association – 5
- NAHB – National Association of Home Builders – 4
- NACO – National Association of Counties – 6
- NARUC – National Association of Regulatory Utility Commissions – 6
- NASEO – National Association of State Energy Officials – 6
- NECA – National Electrical Contractors Association – 4
- NEMA, The National Electrical Manufacturers - 2
- NCSL - National Conference of State Legislatures – 6
- NCSL – National Conference of Standards Laboratories – 3
- NFPA – National Fire Protection Association – 3 and 5



- NGA – National Governors Association – 6
- NIBS – National Institute of Building Sciences – (vehicle to all categories)
- NLC - National League of Cities – 6
- NMHC – National Multifamily Housing Council – 1
- NRECA – National Rural Electric Cooperative Association – 1, 3, 4 and 5 (would cover the various roles utilities play in ESS deployment)
- UL – UL LLC & Underwriters Laboratories, Inc. – 3, 10
- Research organizations, first responder research and dissemination institute
- USCM – U.S. Conference of Mayors – 6

#### **4. AGGREGATION INTO A MESSAGING AND OUTREACH STRATEGY**

Based on the work above under activities 1 to 5 we would have needs, messaging and content initially addressed. In addition we would have potential media and outreach vehicles identified and would have had some interaction with either the organizations representing key stakeholders or some of their members. Based on those efforts we could then complete a matrix such as the one suggested below. Each cell would identify a particular initiative that would carry a particular message and content via a media or outreach vehicle to one or more stakeholder groups. Ideally those activities would be with and through an organization representing the stakeholders but if not successful in engaging the stakeholder organization at the national level a regional or state based approach could be considered or we could attempt to connect directly with stakeholders when we feel it is critical to communicate with them. To help manage this effort, priorities could be placed on various stakeholder groups and/or messaging/content and on media/outreach vehicles. Table 1 shows the outreach strategy developed by the working group.

**Table 1 Outreach And Education Working Group Strategic Map**

Stakeholder Group	Print 2-4 pager	Full report (guide)	Magazine/on line publication article	Self-guided training	1+/- hour webinar (rec.)	Conference or workshop presentation
Building Owners, Universities, Industry/manufacturing plants, Utilities, Federal, state and local Agencies and lenders	Action (Prepare an Fact Sheet for City and counties. (non-Legislative))	CSR working group is preparing a Compliance Guide for building owners)	Conover is developing an article for NIBS			Sandia and PNNL have prepared a ESS 101 presentation – Action (adapt it for building owners) what it is and how it is of value in our EE portfolio
Manufacturers of ES components or systems, building and system designers, specifiers and utilities	Action (Prepare Fact Sheet for testing and certification of ESS products and safety validation)					Action (Prepare a presentation for ESA General Meeting (April 2016), EESAT ESS safety )
Building, electrical, fire officials and inspectors as well as testing laboratories and certification entities and utilities	Action (Prepare an Fact Sheet for the Code officials)	The ESIC has prepared a Guide to safety in the utility integration of energy storage				Action (Prepare a presentation for ICC conference (educational track))
Builders, contractors, commissioning entities, utilities, etc.	Action (Fact sheet)					Action (Prepare a presentation for IEEE PES Meeting)
First Responders	Action (Prepare an Fact Sheet for the fire service)		Fire Engineering Magazine Fire House Magazine Fire Rescue Magazine	The NFPA is developing self-guided training for firefighters	Action (Prepare a webinar for UL- Regional Training Events)	Action (Prepare a presentation for UL- Regional Training Events) FDIC – Fire Department Instructors Conference Firehouse World Fire Rescue International (IAFC) IAFF Redmond Symposium
Facility managers, operations and maintenance personnel, etc.						
Legislative and regulatory entities and policy makers, etc.	Action (Prepare an Fact Sheet for State and local entities)					
Insurance, banking, underwriters, etc.						
SDOs						
Research orgs.						
General Public	Action (Prepare a Fact Sheet for the general public)					

### **3. ACTIONS IDENTIFIED FOR THE SAFETY OUTREACH AND INCIDENT RESPONSE WORKING GROUP**

- Action (Prepare an Fact Sheet Something for City and counties (non-Legislative))
- Action (Prepare an Fact Sheet for testing and certification for of ESS products and safety validation)
- Action (Prepare an Fact Sheet for State and local entities)
- Action (Prepare a Fact Sheet for the general public)
- Action (Prepare a webinar for Regional Training Events)
- Action (Prepare a presentation for Regional Training Events)
- Action (adapt ESS101 for building owners) what it is and how it is of value in our EE portfolio
- Action (Prepare a Panel for ESA General Meeting (April 2016), EESAT ESS safety )
- Action (Prepare a presentation for IEEE PES Meeting)

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