

Federal Energy Management Program's Technical Resilience Navigator

Communications Plan

April 2020

LJ Sandahl JA Rotondo



Prepared for the U.S. Department of Energy under Contract DE-AC05-76RL01830

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes **any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights**. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

PACIFIC NORTHWEST NATIONAL LABORATORY operated by BATTELLE for the UNITED STATES DEPARTMENT OF ENERGY under Contract DE-AC05-76RL01830

Printed in the United States of America

Available to DOE and DOE contractors from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831-0062; ph: (865) 576-8401 fax: (865) 576-5728 email: reports@adonis.osti.gov

Available to the public from the National Technical Information Service 5301 Shawnee Rd., Alexandria, VA 22312 ph: (800) 553-NTIS (6847) email: orders@ntis.gov <http://www.ntis.gov/about/form.aspx> Online ordering: http://www.ntis.gov

Acronyms and Abbreviations

ACEEE	American Council for an Energy-Efficient Economy	
COOP	continuity of operations	
DOE	U.S. Department of Energy	
EERE	Office of Energy Efficiency and Renewable Energy	
FEMP	Federal Energy Management Program	
FUPWG	Federal Utility Management Working Group	
FY	fiscal year	
NREL	National Renewable Energy Laboratory	
PNNL	Pacific Northwest National Laboratory	
TRN	technical resilience navigator	

Contents

Acro	onym	s and Abbreviations	iii
1.0	Bac	kground	. 1
	1.1	FEMP TRN	. 1
2.0	Purp	bose of the Communications Plan	. 2
3.0	Prin	nary and Secondary Audiences	. 2
	3.1	Internal Audiences	3
	3.2	External Audiences	. 3
4.0	Con	nmunications Objectives and Key Messages for Primary and Secondary Audiences	. 5
5.0	Con	nmunication Criteria	5
6.0		pe of Communications Activities	
	6.1	Planning	5
	6.2	Development of Communications Resources	6
	6.3	Establish a TRN Advisory Board	6
	6.4	Progress Evaluation and Reporting	. 7
App	endix	A – Example TRN Tools and Resources and Their Alignment with Key Audiences A	.1
App	endix	B – Timeline of Communication PlanningB	.1

1.0 Background

Energy and water resilience is the ability for optimized operations to withstand, adapt, and recover from disruption as required. A site that is energy and water resilient has optimized operations to reduce energy and water demand as the "first line of defense" that enables the site to meet energy and water requirements. It has trained personnel and sufficient capabilities to anticipate, prepare for, adapt, withstand, respond to, and recover rapidly from energy and water disruption due to planned and unplanned events, and it has sufficient resources, sound infrastructure, and identified interdependencies that supply the required energy and water to essential functions during normal and disrupted operations.

Federal agencies are at various stages of planning and implementing their resilience initiatives—a few have established resilience programs and others are just getting started. The Federal Energy Management Program (FEMP) is working to develop a standard, agency-neutral energy and water technical resilience navigator (TRN) to assist federal agencies with their resilience planning efforts, building on agency-expressed needs. By using the TRN, agencies will interactively assess resilience, educate their workforce, and address resilience gaps.

The FEMP TRN Communications Plan is intended to document communications-related aspects of TRN development and implementation. The first plan was released for TRN 1.0 in February 2019. This latest edition of the plan includes updates that reflect FEMP's current communications messaging and outreach plans for TRN 2.0 (planned release August 2020), and replaces the earlier plan. It is expected that this plan will continue to be updated as the TRN 2.0 evolves.

1.1 FEMP TRN

The FEMP TRN is a systematic approach to agency and site resilience planning that helps organizations assess current infrastructure against critical functions and risk, identify relevant solutions, and prioritize solutions and projects for implementation. This web-based resource serves as an agency-neutral resilience planning and guidance framework designed to support federal agency adoption of resilience initiatives. The TRN and its associated resources and tools will provide guidance at the agency level as well as at sites, installations, and campuses. Both the TRN framework and content were first published in fiscal year (FY) 2019 and are currently being significantly revised in FY 2020. Components of the TRN include:

- Interactive web tool The TRN website, first introduced in August 2019, guides users through the key elements of site level resilience planning and offers links to additional resources (e.g., guidance documents and tools) to help users with key aspects of resilience planning. In August 2020, a new and enhanced TRN 2.0 web site tool, including a new URL, will be introduced. This tool will allow users to input their data directly into a user-friendly web-interface to help find, calculate, or identify resilience and risk information that can be used to develop and evaluate solutions. The TRN 2.0 also includes resources that provide additional information on key topics aimed at users who want to dive deeper into the content. A downloadable version of this tool is being planned for FY 21. While the current TRN 1.0 website and the planned TRN 2.0 web-based tool focus on site-level planning, a future update of the TRN tool plans to assist with portfolio-level planning.
- Information resources Fact sheets, papers, presentations, case studies, worksheets (templates), and other resources to support the TRN's adoption and use are developed on an ongoing basis. Where possible, existing resources are leveraged to help develop new, agency-neutral resources and can be modified as needed to support unique agency needs. For example, a resilience indicator library designed to help agencies assess the resilience posture of their sites is being developed in FY 2020.

• Training – While there are currently no training resources available for the TRN 2.0, mainly because the focus has been on web tool development, future editions of the TRN may have links to resources (e.g. webinars, slide decks, podcasts) that describe at a high level, how to use TRN 2.0 and its resources. This might also include resources, such as those developed for in-person events like Energy Exchange, that can be leveraged for training purposes in the future. The TRN Development team will work with FEMP to identify what material developed for upcoming events can be shared publicly

2.0 Purpose of the Communications Plan

The role of communications is to define strategy and ensure leadership and consistency in messaging, writing, outreach, media relations, editing, and design related to the TRN. The TRN Communications Plan is intended to identify and document communications-related aspects of TRN development and implementation. The plan defines how the project team and FEMP will generate awareness of the TRN, encourage its use across federal agencies, increase awareness among various audiences, and solicit user feedback on its usefulness including suggestions for improvement. In support of this purpose, the communications plan characterizes the key audiences, messages, communications channels, and activities needed to help ensure success.

The communications plan identifies a number of communications resources and strategies that may be utilized. Future updates of this communication plan will include relevant websites, printed and online materials, newsletters, blogs, and social media that could link to TRN 2.0 to help get the TRN and its resources to those who need it most. Since the TRN 2.0 is currently under development, many of these resources and strategies are not yet complete. Successful outreach will involve the following:

- creating a compelling message that describes the value proposition for both energy and water resilience and application of the TRN
- having a robust TRN that is easily accessible by users
- targeting the right audiences with messaging that resonates with them
- engaging audiences for feedback to help inform TRN refinement and resource development
- monitoring results and making improvements to outreach efforts based on feedback.

TRN communication and outreach goals include the following:

- establish TRN messaging appropriate for various audiences
- develop communications materials to deliver the appropriate messaging to target audiences
- identify communications channels
- identify primary and secondary audiences.

3.0 Primary and Secondary Audiences

Communications activities will target both internal (FEMP and other U.S. Department of Energy [DOE] offices) and external (federal agency, equipment and services industries, energy and water utilities, and community partner) audiences.

3.1 Internal Audiences

To help ensure that goals, objectives, and timing related to the TRN are clear, communications resources will be developed for FEMP leadership to use when reporting up the DOE chain, when coordinating with other DOE and Office of Energy Efficiency and Renewable Energy (EERE) program offices, or when discussing TRN with senior agency staff, for example:

- Sustainability Performance Division
- AU-21
- Resilience Community of Practice

3.2 External Audiences

External communications (beyond DOE) activities include both primary and secondary audiences that are expected to be key user groups for one or more elements of the TRN. The Primary audiences are those that will be the initial focus of TRN 2.0 outreach and communications. The table below describes the various audiences, how the TRN supports them, and how they might be supported in the future as the TRN evolves or as more emphasis is placed on these groups. Appendix A outlines the TRN tools and resources that align with each group.

Audience Type	Description	How the TRN Supports Them
Primary Federal Agency Headquarters staff	Agency Resilience Managers and Planners	 Describes systematic approach to resilience planning that can be adopted by sites across their portfolio Updates under consideration: Provide best practices and resources related to policy development and other headquarters functions that include: Identification of goals to reflect the intended outcome of resilience planning. Determining agency-wide focus areas Identifying critical missions, critical functions, and critical loads that will serve as a guide to help prioritize planning across and within sites. Guidance related to how sites should integrate resilience planning efforts with other efforts, including how the various energy and water stakeholders will communicate and how past or ongoing energy and water programs might be leveraged.
Primary Federal Agency Headquarters staff	Agency Energy and Water Managers	• With increased federal focus on resilience, the Agency Energy Manager and Agency Water Manager may or may not be formally tasked with resilience planning but may need to explain how their projects support resilience. The TRN's systematic approach to resilience can highlight linkages of resilience planning to existing energy and water site plans.
Primary Federal Site staff	Site staff that support resilience implementation • Site manager • Mission owners • Master planners • Utility, energy/facility managers • Environmental planners	 Describes systematic approach to resilience that can be applied at the site level. Offers resources and best practices to assist site staff with activities including: Goals and scoping to define the initial scope of the assessment. Baselining to identify energy and water needs as well as critical infrastructure and supporting mission interdependencies.

Audience Type	Description	How the TRN Supports Them	
	 Environmental, safety and health personnel Real estate Information security Information technology Chief Financial Officer Emergency operations/continuity of operations (COOP) Site contractors Procurement and contracting System planners/operators Analysis staff 	 Performing risk assessments to identify hazards and threats, define system criticality, assess system vulnerabilities, and establish consequences and risks. Performing opportunity assessments to determine energy and water infrastructure and operational improvements, and distributed generation potential. Generation and execution of solutions, identifying funding streams, executing projects, and implementing institutional practices and procedures. Resource under development: Evaluating progress against resilience indicators reporting to the Facility Manager and/or cognizant Agency Resilience Team, recognizing accomplishments, and updating plans. 	
SECONDARY AUDIENCES : Resources and outreach to these audiences are not a key priority in FY20 but will be considered in the future.			

Secondary Community partners	 Partners whose involvement is important to developing and implementing a resilience plan include: Transportation planners and operators Municipal/regional planners 	 Describes systematic approach to resilience that can be applied at the site level. Provides understanding of community-level partners to federal decision-making and prioritization and helping agencies and community partners identify mutual high-priority and interdependent areas that are addressed first.
Secondary Utility partners	Agencies and federal facilities/sites have existing and long-term relationships with their utility providers. These utility providers have long-term reliability planning efforts that must be considered alongside agency resilience planning.	• Describes systematic approach to resilience that can be applied at the site level.
Secondary Industry partners	 Partners whose involvement is important to developing and implementing a resilience plan include: Energy service company partners Equipment providers Support 	• Describes systematic approach to resilience that can be applied at the site level.
Secondary Independent partners	 Partners that operate independently in support of their members include: Trade associations Research associations / organizations 	 Describes systematic approach to resilience that can be applied at the site level. Provides link for coordination with other facility energy and water resilience outreach and research efforts.

4.0 Communications Objectives and Key Messages

The following are key communications objectives for FY 2020:

- develop communications strategies directed at primary audiences for launch of the TRN 2.0
- build awareness of the TRN 2.0 across primary audiences
- ensure audiences are targeted with the intended messages
- consider developing profiles (responsibilities, interests, success criteria, and concerns) and personas for key user groups, to better align products and messaging with user needs.

The following key messages characterize the TRN:

- Federal agencies are increasingly being called on to ensure they are both resilient and reliable, but many lack institutional knowledge of resilience planning. FEMP's TRN provides agency-neutral guidance to help agencies navigate the complex world of resilience planning, with information resources and tools to help make agency, portfolio, and site-specific planning decisions.
- The TRN presents actionable resources and a step-wise, multi-faceted assessment approach for baselining conditions, assessing risks, prioritizing solutions, executing plans and validating performance.
- The TRN provides federal agency stakeholders with a clearer understanding of the increasing value of resilience on federal sites and facilities. As federal agencies prioritize investments in energy and water resources that have resilience benefits, stakeholders who provide energy services, equipment, or other support services will need to incorporate these capabilities in the goods and services they provide. The TRN helps to clarify for community, industry, and utility partners the process the agency goes through to plan for resilience, reinforcing both the need for stakeholder engagement as agencies go through the planning process and helping prepare industry partners for future requested capabilities or features.

5.0 Communication Criteria

Communication activities should meet the following criteria:

- clearly describes the importance of energy and water resilience planning, and the value of using the TRN as a resource
- showcases available examples of how resources and tools have been applied
- meets the needs of the intended audiences.

6.0 Scope of Communications Activities

Communications activities include planning, development of communications resources, and progress evaluation and reporting as described below.

6.1 Planning

Effective communication requires planning. The FEMP Resilience Team, comprised of FEMP, Pacific Northwest National Laboratory (PNNL), and National Renewable Energy Laboratory (NREL) staff meet

regularly to discuss progress on TRN 2.0 development. Communications planning is discussed as needed during these meetings. Planning also includes identifying how the TRN 2.0 will be announced and launched at Energy Exchange 2020.

As the TRN 2.0 and the communication materials that support it continue to be developed, the FEMP lead lab responsible for the TRN 2.0 material will complete the FEMP Product Information Form and share it with the FEMP Technology Development Manager for approval and submittal to the Product Governance Committee. The FEMP Product Information Form includes details on materials such as the intended audience and how the resource will be shared with users. Information on this process at the following web page: https://www.energy.gov/eere/femp/downloads/federal-energy-management-program-communications-approvals-processes-and.

6.2 Development of Communications Resources

A variety of resources will be developed and/or updated to support the TRN 2.0 and resources that support it as necessary, including the following:

- written products (e.g., brochures, fliers, case studies, fact sheets, and training)
- newsletters (e.g., FEMP Digest, agency newsletters, lab newsletters)
- presentations (e.g., Federal Utility Partnership Working Group)
- media relations
- online communications
- meeting and conference materials (e.g., Energy Exchange 2020, National Association of Energy Service Companies, Environmental Security Technology Certification Program events, Government Services Administration events, FEMP on-demand webinar or live training, American Council for an Energy-Efficient Economy [ACEEE] National Conference on Energy Efficiency as a Resource, ACEEE Summer Study on Energy Efficiency in Buildings [August 2020].
- images and graphics, some of which will be used directly in the TRN 2.0 web-based tool or in the resources described above.

6.3 Establish a TRN Advisory Board

In future TRN efforts, an advisory board should be considered to solicit input on the TRN from various areas of expertise. Early engagement will help to ensure a comprehensive approach to resilience planning and avoid potential delays in the launch of the web application by soliciting stakeholder feedback during the development process. Once established, the advisory board would meet quarterly to review development plans (e.g., additional tools, resources, case studies, etc.) for the TRN. Recommended stakeholders may include:

- FEMP Resilience Program lead (Board Chair)
- Federal or laboratory staff with expertise in risk analysis, mission assurance planning, continuity of operations, agency verifiers, energy or resilience managers, financiers, etc.
- Laboratory resilience teams from NREL and PNNL
- Potential EERE stakeholders could include resilience leads from Energy Efficiency programs: Energy Transition Initiatives Building Technologies, Advanced Manufacturing Office, Weatherization and Intergovernmental Office.

Additional detail on proposed communication resources and their associated timelines can be seen in Appendix B.

6.4 Progress Evaluation and Reporting

A goal of the TRN communications activities is to measure the success of outreach efforts. Measurement metrics may include:

- Web analytics Once the TRN 2.0 is posted to the FEMP website, software that tracks user open and click rates will be used to monitor readership rates and help drive content selection and presentation. Google analytics can be used to track website use. Understanding where our audience does and does not spend time on the website is critical to decision-making and future TRN development and tool/resource identification.
- Audience analysis and feedback When TRN presentations are made, either in person or via webinars, the audience should be asked to provide feedback.
- Web feedback Adding a "box" on the website that asks users to rate the usefulness of the TRN, and a place to provide feedback including requests for new resources.
 - Capture contact information (electronically or with a sign-up sheet) of conference attendees.
- Track social media metrics on conference-related posts and document any new followers.
- Track downloads of tools and resources that are linked from the TRN.

Once the TRN 2.0 is launched, FEMP may want to prepare a quarterly update containing the information listed above.

Appendix A

Example TRN Tools and Resources and Their Alignment with Key Audiences

Appendix A lists the target audiences associated with a subset of TRN tools and resources that are complete or under development during FY 2020, and is intended to serve as an example.

FY 20	Tool/Resource	Description	Key Audiences
Q3	Methodology for Investment-grade Resilience Valuation (PNNL Lead)	A resilience valuation methodology that will specifically include vulnerability assessment and the baselining identified in the FEMP TRN, as well as determining the financial goals in addition to the resilience goals and objectives of the site, obtaining the weights required for decision analysis upfront and then revisiting them after the analysis has been undertaken. The methodology is designed for the expert user to undertake investment grade valuations.	Agency headquarters staff: policy and planning Site level expert users may include: • Site manager • Mission owners • Master planners • Chief Financial Officer • Analysis staff • Environment, safety and health personnel • Utility, energy & facility managers • Environmental planners • Emergency operations/COOP • System planners/operators
Energy and Water Resilience Indicator and Measurement (PNNL lead)Q4Q1 FY21		Agency-neutral energy and water resilience indicators framework developed for agencies to use as an examples or possible choice when selecting indicators for their own sites. Available as a PDF or interactive resource. - Resilience indicators library delivered to FEMP - Integration of indicator content into TRN 2.0	Agency headquarters staff: policy and planning Once indicators are established by the agency, users at the site level may include: • Mission owners • Master planners • Utility, energy/water & facility managers • Environmental planners • Emergency operations/continuity of operations (COOP) • System planners/operators
	CDF Guide (NREL lead)	A guide for estimating the costs associated with outages.	Federal agencies

Appendix B

Timeline of Communication Planning

FY 2020	Action Step	Associated Communications
Ongoing	Update static communication resources	 Develop a "Coming Soon" slide for FEMP and project team on TRN 2.0 1-page PowerPoint slide for inclusion in FEMP and project team presentations until launch to alert stakeholders about upcoming product for planned speaking engagements Develop TRN 2.0 overview slide(s) that FEMP leadership can use when reporting up the DOE chain, when coordinating with other DOE/EERE program offices, or when discussing TRN with senior agency staff. FEMP is the lead on this item.
	Continue to evaluate communications needs as the TRN 2.0 continues to develop	• Hold weekly progress meetings with project team and FEMP
	Update static written materials	• Update the FEMP Resilience factsheet as needed
Q3	Update Communication Plan	• Send to FEMP for review by 3/13/2020
	Brief FEMP Communication & Marketing team	• Schedule a meeting for Q3 to discuss the project schedule and draft communication plan, revising in response to feedback
	Develop web design for TRN 2.0 and page map	 Identify look, graphics, and user-interaction of the web application Ensure design is user-friendly Socialize design with select stakeholders for feedback Edit the FEMP Energy and Water resilience and Security website <u>https://www.energy.gov/eere/femp/energy-and-water-resilience-and-security</u>) to include plans for the TRN 2.0
	Identify communications resources (e.g. case studies, lessons learned, etc.) based on TRN 2.0 Technical Assistance experiences	• Identify up to 3 case studies or other potential resources that could be developed to provide federal agency-wide guidance and support for resilience planning based on TA conducted to date
	Refine audience analysis and messaging	• Update communications plan as needed
	Develop plan to create awareness of the TRN 2.0 for both current (TRN 1.0) and new users (TRN 2.0)	• Plan how both user groups will be reached, keeping in mind that TRN 2.0 will have a new URL that

FY 2020	Action Step	Associated Communications
	 Develop "personas" for key user groups Determine how to incorporate within TRN web design (will there be a pathway based on personas? Have personas be static web resources?) 	• Develop explanatory text for personas. Discuss at project team meeting. [Not currently funded]
	Propose TRN 2.0 as a session at Fall 2020 Federal Utility Management Working Group (FUPWG)	• If approved, will be included in FUPWG communications (website, e-blasts to registrants) in Spring 2020
	Develop TRN 2.0 release content	• Draft press release, social media messages, and other materials to support launch of web tool at EEx
	Propose TRN 2.0 as a session (or speaker) at Energy Exchange 2020	• If approved, will be included in Energy Exchange communications (website, e-blasts to registrants) in Spring 2020
	Propose TRN 2.0 (or specific modules) as a pre-event workshop at Energy Exchange 2020	• If approved, will be included in Energy Exchange communications (website, e-blasts to registrants) in Spring 2020
Q4	Launch TRN 2.0	 Include in FEMP Digest Include in PNNL and NREL topical newsletters Post FEMP/EERE/other news story on the new tool and its purpose Highlight on FEMP website (e.g., rotator)
	Meet with FEMP Training team to discuss inclusion in FY 2021's resilience training curriculum (or updates to static FY 2020 content)	• Identify to-do items
	Hold check-in meeting with FEMP communications team (quarterly meetings moving forward)	 Work with team to develop a list of expected communications items that need DOE approval & understand DOE current requirements Give update on all materials and expected plans in the coming quarter
	Develop static written materials	 Develop case studies and other material identified in Q3 based on TRN 2.0 Technical Assistance findings Develop a flier about the TRN 2.0 that can be used at the launch Develop draft news stories of TRN 2.0 launch for FEMP/NREL/PNNL
	TRN Advisory Board [if approved]	• Progress updates and solicitation of feedback from EERE resilience stakeholders [This activity is not currently funded]
	Develop static written materials	• Update FEMP Resilience factsheet with more details on TRN 2.0 (publish update post-launch)
	Host FEMP Brownbag	• Host DOE/FEMP brownbag to explain to broader FEMP team the intent and use of the TRN 2.0

FY 2020	Action Step	Associated Communications
	Check-in on user metrics	 Share web-statistics and any available user feedback across project team and FEMP to cross-check expected key audiences with actual audiences Develop plan for Phase 2 improvements after reviewing key feedback
	Deliver TRN 2.0 pre-event training at 2020 Energy Exchange	• If approved, complete planning timeline will be developed in Q3 2020
	Deliver TRN 2.0 training session at 2020 Energy Exchange	• If approved, complete planning timeline will be developed in Q3 2020
	TRN Advisory Board [if approved]	• Progress updates and solicitation of feedback from EERE resilience stakeholders [This activity is not currently funded]
	Deliver Fall FUPWG Training	• If approved, complete planning timeline will be developed in Q3 2020 (Dependent on topic area)



www.pnnl.gov

902 Battelle Boulevard P.O. Box 999 Richland, WA 99352 1-888-375-PNNL (7665)

