Section 3:
Major ESF #3 Missions

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Commodities Distribution Mission Overview

- PSMAs are NIMS typed:
  - Type 1 - $800K - pre-dec, $6M - post-dec
  - Report and track 50 Points of Distribution
  - Assist FEMA with manning for commodities at 3 Staging Areas
  - 24 hour operations
  - Type 2 - $500K - pre-dec, $3.5M - post-dec
    - Report and track 25 Points of Distribution
    - Assist FEMA with manning for commodities at 2 Staging Areas
    - 24 hour operations
  - Type 3 - $200K - pre-dec, $750K - post-dec
    - Report and track 10 Points of Distribution
    - Assist FEMA with manning for commodities at 1 Staging Area
    - 12 hour operations
- Mission Execution Team deploys to ISB (Incident Support Base) This is a staging area.
- Mission Liaison deploys to Impacted District Office or Impacted District COOP location.
- Personnel need to be in place at ISB prior to any Commodities trucks arriving at ISB.
- If the State establishes a state staging area, the Commodities team will man that area with a Commodities Site Manager and QAs for monitoring and tracking commodity trucks who acts as a liaison to the site manager if presence is acceptable to the state.
- State and/or local governments will establish POD locations. Commodities Team QAs will serve as liaisons at the PODs.
- Commodities PRT may also be used to provide assistance to FEMA Log at various locations.
- The ATL overseeing the Commodities AO shall ensure that the daily strategic plan is accomplished (ATL to review document daily).

Commodities Mission Normal Execution Timeline

Orders based on actual burn rate

Orders based Corps Models

D+2

- Most PODs now open, re-supply cycle begins
- Begin to establish burn rate
- Orders begin to be based on burn rate

D+1

- POD QAs make contact at PODs
- First deliveries made to PODs if opened in time

Disaster

- MA Post Declaration issued
- IMAT coordinates with State Coordinating Officer on delivery site locations

D-1

- POD QA receive Just-In-Time Training

D-2

- Food, Water and possibly Ice arrive at ISB
- Commodities AO works with State to develop order

D-3

- Commodities Team arrives at ISB
- Mission Liaison arrives at Supported District
- AO arrives at State EOC
- Commodities Team helps to stand up ISB
- Just-In-Time Training of ISB QAs

D-4

- RRCC activated and Commodities MA issued
- Commodities Team prepares to deploy to ISB, State EOC, Supported District
- IMAT activated

Assumptions: Roads and airfields are accessible for contractors to utilize. FEMA issues pre-scripted mission assignments on this timeline.

Activities listed on D-Day are projected to begin after all clear is issued in area ISB is located.

Applicable to hurricane/typhoon relief. No-notice disasters (tornadoes/earthquakes) require a modified timeline starting at D-Day.

Commodities Mission No-Notice Execution Timeline

Orders based on actual burn rate

Orders based Corps Models

D+3

- Most PODs now open, re-supply cycle begins
- Begin to establish burn rate
- Orders begin to be based on burn rate

- Food, Water and possibly Ice delivered to OCONUS ISB

D+2

- Food, Water and possibly Ice arrive at ISB
- Commodities Team issues order for state
- POD QA receive Just-In-Time Training
- POD QAs make contact at PODs

- Commodities Team arrives at ISB
- Commodities Team helps to stand up ISB
- Just-In-Time Training of ISB QAs
- Mission Liaison arrives at Supported District
- AO arrives at State EOC
- IMAT coordinates with State Coordinating Officer on delivery site locations
- More PODs open today

D+1

- RRCC activated and Commodities MA issued
- Commodities Team prepares to deploy to ISB, State EOC, Supported District
- IMAT activated
- Some PODs may open

Disaster

Assumptions: Roads and airfields are accessible for contractors to utilize. FEMA issues pre-scripted mission assignments on this timeline.

Activities listed on D-Day are projected to begin after all clear is issued in area ISB is located.

Commodities Planning - Key Lessons Learned

- Commodities will be pushed forward before the logistical structures are in place.
- The critical planning factor for ordering commodities is “distribution” capability, not people without power.
- Distribution planning must be a priority with Local governments for the Commodities Mission to succeed.
- All levels of government must understand the distribution point concept.

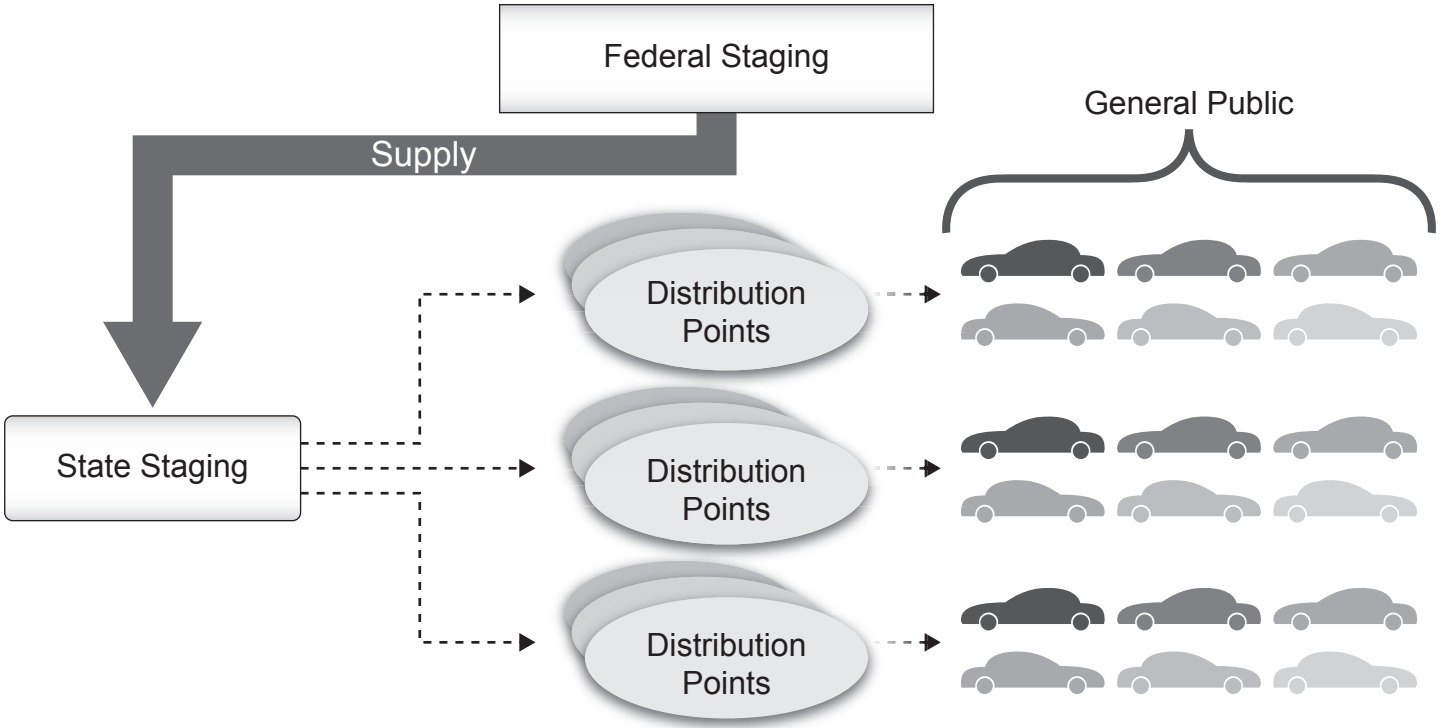
Key Planning Factors

- Water: One truckload (18,000 liters, 3+liters/per) serves 5000 people.
- Meals: One truckload (21,744 ea., 2 each/per) serves 10,000 people.
- Ice: One truckload (40,000 lbs. 8 lbs./per) serves 5000 people.
- Tarps: One truckload (4,400 ea.) serves 4,400 families with roof damage.
- One car represents one family or three people.
    - Each car is provided the following:
    - One case of water (9-12 liters)
    - Six meals
    - Two or three bags of ice
    - One tarp, if car occupants state they have roof damage

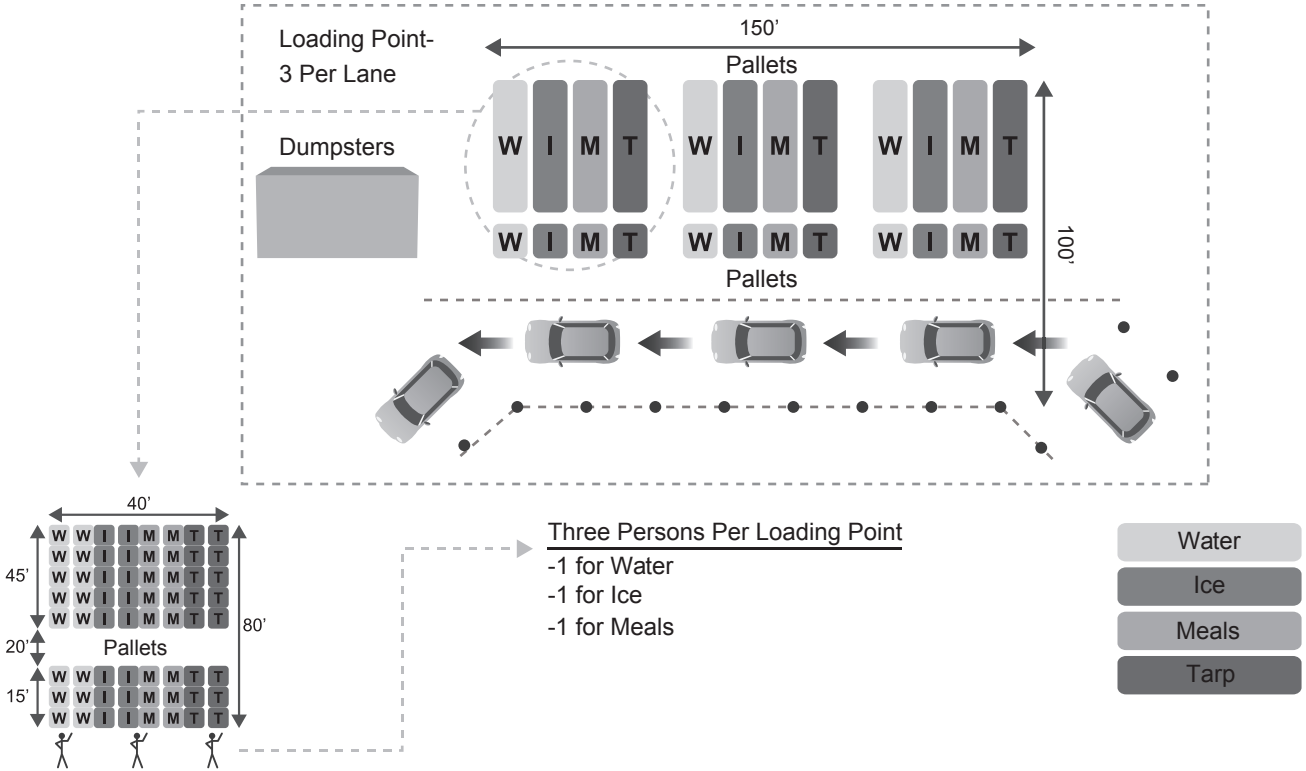
Key Planning Factors

- A distribution point (DP) with one supply lane can serve 1,660 cars or 5,000 people in one day (Type III Distribution Point).
- A Type II DP has two lanes.
- A Type I DP has four lanes.
- One Type III Distribution Point serves 5000 people and can distribute the following per day:
    - One truckload ice
    - One truckload water
    - One-half truckload meals
    - One truckload tarps (Only if necessary. Tarps should be distributed elsewhere)

Key Planning Factors

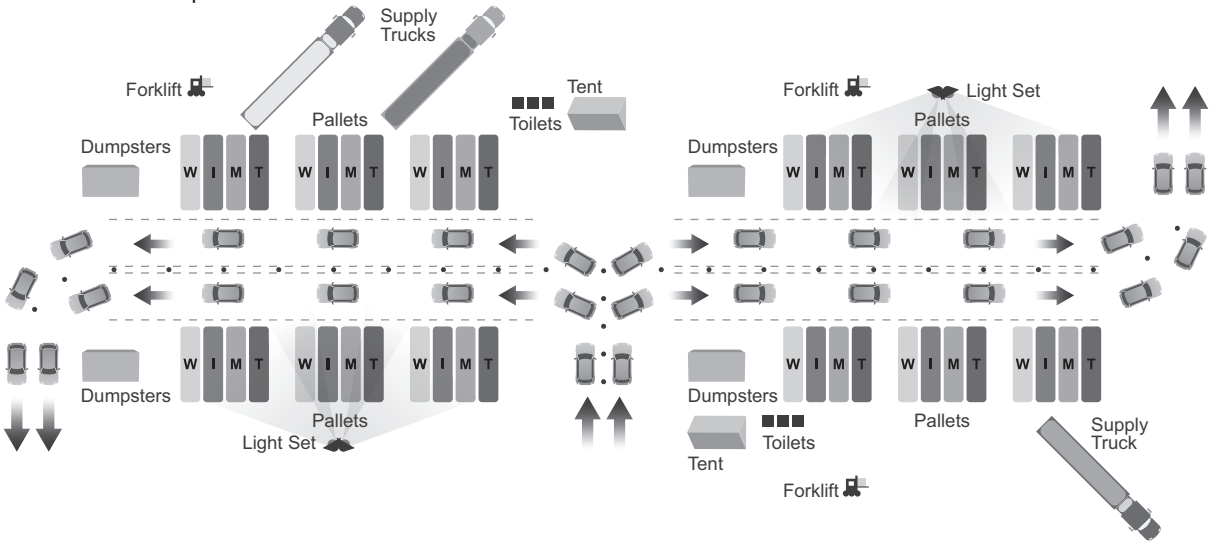


Key Planning Factors



Key Planning Factors

Type I - Point of Distribution
Serves 20,000 persons per day
12 Loading Points - 560 vehicles per hour



Note: Individual vehicles drive through, and ice and water are loaded into their trunks. Recommend one case water, two or three bags of ice per vehicle, and six meals.

Supply trucks for Ice, Water, Meals, and Tarps are to be off-loaded promptly and returned for re-supply.

Maximum Loads per Day - Type I

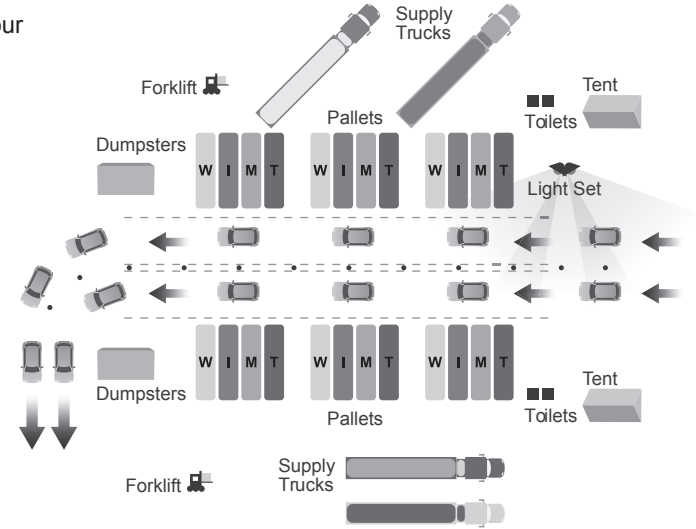
Water	4
Ice	4
Meals	2
Tarp	2

Type I Point of Distribution
Resources Required

Type I Point of Distribution						
	Manpower				Equipment	
	Type		Day	Night	Type	Number
Local Responsibility	Manager		1	0	Forklifts	3
	Team Leader		2	1	Pallet Jacks	3
	Forklift Operator		2	3	Power Light Sets	2
	Labor		57	4	Toilets	6
	Loading Point	36			Tents	2
	Backup Loading Point	18			Dumpsters	4
	Pallet Jacks Labor	3			Traffic Cones	30
	Totals		62	8	Two-way Radios	4
Others	Law Enforcement		4	1		
	Community Rel.		4	0		
	Grand Total		70	9		

Key Planning Factors

Type II - Point of Distribution
Serves 10,000 persons per day
6 Loading Points - 280 vehicles per hour



Note: Individual vehicles drive through, and ice and water are loaded into their trunks. Recommend one case water, two or three bags of ice per vehicle, and six meals.

Supply trucks for Ice, Water, Meals, and Tarps are to be off-loaded promptly and returned for re-supply.

Maximum Loads per Day - Type II

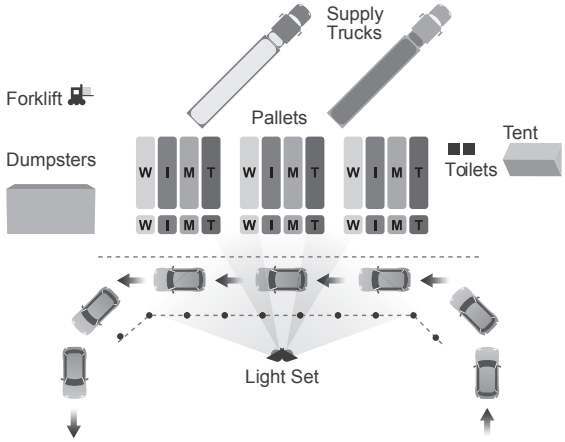
Water	2
Ice	2
Meals	1
Tarp	1

Type II Point of Distribution
Resources Required

Type II Point of Distribution						
Manpower					Equipment	
Type			Day	Night	Type	Number
Local Responsibility	Team Leader		1	0	Forklifts	2
	Forklift Operator		1	2	Pallet Jacks	2
	Labor		28	3	Power Light Sets	1
	Loading Point	18			Toilets	4
	Backup Loading Point	9			Tents	2
	Pallet Jacks Labor	1			Dumpsters	2
					Traffic Cones	15
	Totals		30	5	Two-way Radios	0
Others	Law Enforcement		2	1		
	Community Rel.		2	0		
Grand Total			34	6		

Key Planning Factors

Type III - Point of Distribution
Serves 5,000 persons per day
3 Loading Points - 140 vehicles per hour



Note: Individual vehicles drive through, and ice and water are loaded into their trunks. Recommend one case water, two or three bags of ice per vehicle, and six meals.

Supply trucks for Ice, Water, Meals, and Tarps are to be off-loaded promptly and returned for re-supply.

Maximum Loads per Day - Type III

Water	1
Ice	1
Meals	1/2
Tarp	1/2

Type III Point of Distribution
Resources Required

Type III Point of Distribution						
	Manpower				Equipment	
	Type		Day	Night	Type	Number
Local Responsibility	Team Leader		1	0	Forklifts	1
	Forklift Operator		1	1	Pallet Jacks	1
	Labor		14	2	Power Light Sets	1
	Loading Point	9			Toilets	2
	Backup Loading Point	4			Tents	1
	Pallet Jacks Labor	1			Dumpsters	1
					Traffic Cones	10
	Totals		16	3	Two-way Radios	0
Others	Law Enforcement		2	1		
	Community Rel.		1	0		
	Grand Total		19	4		

Pre-Planning Model

Enter # of people without power	400,000
(Equals number of customers x 3)	
# of people requiring commodities	160,000
# of Type III Dist. Points Req'd	32

	Type III	Dist.	Point		
Manpower	**Day**	**Night**		**Equipment**	
Local Req.				Forklifts	32
Forklift Oper	32	32		Pallet Jacks	32
Laborers	480	64		Traff Cones	320
Total	**512**	**96**		Light Sets	32
Law Enf	64	32		Toilets	64
Comun Rel	32	0		Tents	32
Grand Total	**608**	**128**		Dumpsters	32

Tarps	
Loads	Each
36	160,000

Number of truck loads required per day for 24 days		Water			ICE			Meals	
	Days	Loads		K Gal	Loads		K Pounds	Loads	Each
	1	32		152.0	32		1280	16	347,904
	2	29		139.0	29		1170	15	326,160
	3	27		125.9	27		1061	13	288,263
72 Hour Planning Total >		88			88			44	
	4	24		112.9	24		951	12	258,443
	5	21		99.9	21		841	11	228,623
	6	18		86.9	18		731	9.1	198,802
	7	16		73.8	16		622	7.8	168,982
60% Power back on-line >	**8**	13		60.8	13		512	6.4	139,162
	9	12		55.1	12		464	5.8	126,115
	10	10		49.4	10		416	5.2	113,069
	11	9.2		43.7	9.2		368	-	-
	12	8.0		38.0	8.0		320	-	-
	13	6.8		32.3	6.8		272	-	-
	14	5.6		26.6	5.6		224	-	-
	15	4.4		20.9	4.4		176	-	-
90% Power back on-line >	**16**	3.2		15.2	3.2		128	-	-
	17	2.8		13.3	2.8		112	-	-
	18	2.4		11.4	2.4		96	-	-
	19	2.0		9.5	2.0		80	-	-
	20	1.6		7.6	1.6		64	-	-
	21	1.2		5.7	1.2		48	-	-
	22	0.8		3.8	0.8		32	-	-
	23	0.4		1.9	0.4		16	-	-
	24	0.0		0.0	0.0		0	-	-
Total Loads		**249.6**		**1185.6**	**249.6**		**9984**	**101**	**2,195,523**

Post-Ordering Model

Enter Number of Type III Dist. Points to be used	25
- 1 Type II = 2 Type III	
- 1 Type I = 4 Type III	

Number of truck loads required per day for 24 days		**Water**		**ICE**		**Meals**		**Tarps**	
	Days	Loads	K Gal	Loads	K#	Loads	Each	Loads	Each
	1	25	118.8	25	1000	13	271,800		
	2	23	108.6	23	914	11	248,503		
	3	21	98.4	21	829	10	225,206		
Initial Order (72 Hour Planning Total) >		**69**		**69**		**34**		**28**	**125,000**
	4	19	88.2	19	743	9	201,909		
	5	16	78.0	16	657	8	178,611		
	6	14	67.9	14	571	7.1	155,314		
Next Order (next 72 Hour Planning Total) >		**49**		**49**		**25**			
	7	12	57.7	12	486	6.1	132,017		
60% Power back on-line >	**8**	10	47.5	10	400	5.0	108,720		
	9	9	43.0	9	363	4.5	98,528		
	10	8	38.6	8	325	4.1	88,335		
	11	7.2	34.1	7.2	288	-	-		
	12	6.3	29.7	6.3	250	-	-		
	13	5.3	25.2	5.3	213	-	-		
	14	4.4	20.8	4.4	175	-	-		
	15	3.4	16.3	3.4	138	-	-		
90% Power back on-line >	**16**	2.5	11.9	2.5	100	-	-		
	17	2.2	10.4	2.2	88	-	-		
	18	1.9	8.9	1.9	75	-	-		
	19	1.6	7.4	1.6	63	-	-		
	20	1.3	5.9	1.3	50	-	-		
	21	0.9	4.5	0.9	38	-	-		
	22	0.6	3.0	0.6	25	-	-		
	23	0.3	1.5	0.3	13	-	-		
	24	0.0	0.0	0.0	0	-	-		
Total Loads		**195.0**	**926.3**	**195.0**	**7800**	**79**	**1,708,943**	**28**	125,000

Commodity Distribution Essential Elements of Information (EEIs)

ESF #3 MISSION	EEI's	Last 24 hours	Next 24 hours
Commodities Distribution	POD Locations (total number of operating PODs)		
	Daily amount distributed per POD		
	Elm Street POD (actual POD name)		
	Maple Street POD		
	Lincoln High School		
	Civic Center		
	Total Distributed by POD		
	Elm Street POD		
	Maple Street POD		
	Lincoln High School		
	Civic Center		
	Commodities Inventory by ISB/Distribution Center, etc		
	FEMA ISB Randolph AFB Auxillary (actual name)		
	FEMA ISB Ford Center		
	Lufkin State Staging Area		
	Personnel/PRT Status (# people working/# still needed)		

Emergency Power Information Paper

Emergency Power Mission Capabilities:
USACE has the capability to provide local and state officials broad support for their unmet temporary emergency power needs. This support ranges from technical expertise/assistance through complete management of an emergency power mission including the procurement, installation and operation of generators. USACE assets include elements of the U.S. Army 249th Engineer Battalion “Prime Power,” Emergency Power Planning and Response Teams (PRTs) from across USACE, USACE-contracted forces, and USACE Deployable Tactical Operations System (DTOS) for communications. USACE also coordinates with other Federal partners such as the Federal Emergency Management Agency (FEMA) and the Department of Energy (DOE). These assets can provide Technical Assistance before, during or after an event which includes, but is not limited to:

- Assessing emergency power requirements needed at a facility
- Assessing conditions and capabilities of existing emergency generation equipment
- Troubleshooting, repair, and operation of emergency generation/distribution equipment
- Installation, operations, fueling and maintaining emergency power generation equipment
- Safety inspections of electrical distribution systems and equipment
- Assessing damaged electrical distribution systems and equipment
- All hazards emergency power planning

Emergency Power Information Paper

The execution of a power mission in an emergency involves the combined efforts of the 249th, the Power PRT, DTOS, the Advance Contracting Initiative (ACI) contractor, and our State and Federal partners. During these missions, the Technical Assistance items discussed above are brought to bear along with the following:

- Provide assistance to State and Local officials in determining priorities for assessing and installing generators at critical public facilities
- Assessing facilities to determine suitability for a generator, location for its placement and matching with the correct generator configuration
- Preparation, hauling, and installation of generators
- Operation, fueling, service, and maintenance of installed generators
- De-installation and return of generators; This can also include remediation of the generator installation site to its pre-installation site condition.
- Service, maintenance, and repair of generators prior to their return to long-term storage to ensure they are Fully Mission Capable (FMC); This may also include load testing.
- Replenishing any Bill of Materials (BOM) used during execution of the mission

Operational maintenance of FEMA generators is performed by a combination of 249th, PRT, and contractual support. Generator procurement and/or leasing can be performed by USACE through a contracting team which has pre-established contracting tools.

During Emergency Power response activities, facilities requiring generators are typically prioritized in the following order:

1. Life-Saving Facilities (911 centers, police, fire stations, and medical facilities)
2. Life-Sustaining Facilities (water and wastewater treatment and pumping facilities)
3. Other municipal facilities to reinstitute local command and control and post-event recovery

A video highlighting the USACE Temporary Emergency Power mission has been developed to assist emergency planners in understanding the capabilities and implementation of temporary emergency power missions in a disaster: www.youtube.com/watch?v=cOGaPwlxu0w

Emergency Power Information Paper

Emergency Power Contracting:
The ACI Contracts serve specific FEMA regions as shown below.

Contract Area	Serving FEMA Regions/Territories
I	I, II, and III
II	IV and V
III	Area I VI, VII, and VIII
IV	IX and X
V	All OCONUS to include: AK, HI, PR, USVI, Guam, and American Samoa

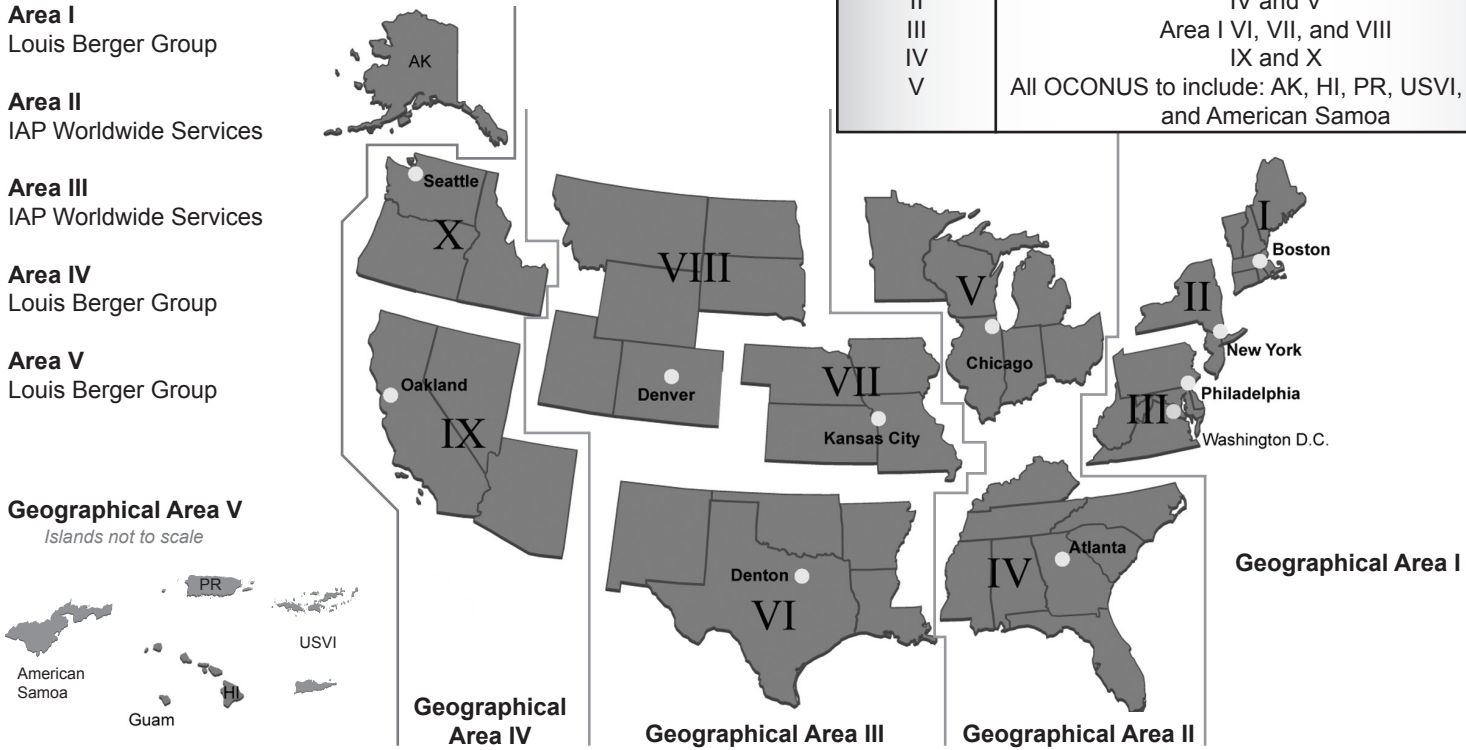
Area I
Louis Berger Group

Area II
IAP Worldwide Services

Area III
IAP Worldwide Services

Area IV
Louis Berger Group

Area V
Louis Berger Group



Emergency Power Information Paper

In addition to the three ACI contracts which are area-specific, USACE also provides additional capabilities through the Worldwide Power (WWP) Contingency Response Contracts. Three firms hold the WWP contracts: Berger Cummings JV, Fluor Corp., and IAP Worldwide Services. The WWP contracts provide for a wide array of electrical services, which include the following:

- Performance of world-wide emergency power services in locations not covered by the ACI Contracts
- Procurement and transportation of generators not in the FEMA inventory
- Procurement and shipment of BOM or other necessary supplies and equipment
- Procurement of specialized personnel including translators
- Maintenance and repair of generators

USACE Emergency Power Planning and Response Team (PRT) Locations:

CELRD - Great Lakes and Ohio River Division (Emergency Power Proponent Division)
CELRP - Pittsburgh District
CENWW - Walla Walla District
CEPOH - Honolulu District
CESPA - Albuquerque District
CESWT - Tulsa District
CESAS - Savannah District
CEMVM - Memphis District

Emergency Power Points of Contact

HQUSACE
Pete Navesky
Permanent Cadre Member
Peter.Navesky@usace.army.mil
202-341-0537 (cell)

USACE Proponent
Dave Bishop
Emergency Power SME
David.a.bishop@usace.army.mil
412-215-9200 (cell)

Contract Information
C.J. Infantino
Emergency Operations Specialist
Charles.J.Infantino@usace.army.mil
412-395-7147 (desk)

Power Interagency Coordination Cell (PICC)

1. Purpose. The Power Interagency Coordination Cell (PICC) will be activated at the onset of any Power Mission Assignment (MA) issued by the Federal Emergency Management Agency (FEMA) to the United States Army Corps of Engineers (USACE). The PICC will serve as the lead to identify, communicate and coordinate the logistics of providing temporary emergency power resources to ensure successful execution of an Emergency Power Mission.

2. Membership. PICC membership will include representatives from various levels within FEMA, USACE, and when necessary, other agencies such as DOE and State(s) Emergency Management. At a minimum, recommended PICC membership shall initially include the following, with overall participation determined by the specific event(s) and ultimate requirements of the Emergency Power Mission(s):

a. USACE

- Great Lakes and Ohio River Division (CELRD) Emergency Manager and/or Emergency Power SME: Proponent for USACE power mission activities
- Pittsburgh District (CELRP) Emergency Manager: Responsible for Emergency Power ACI activities and initial mobilization/ deployment of USACE power assets
- 249th Engineer Battalion (S-3 or staff NCO): Prime Power mission coordination and execution
- USACE Logistics Agency (ULA) at LRD: Assist LRP in resources movement coordination, both internally and externally with FEMA LMD, Philadelphia District contracting office (WWPCs), DOT and others
- ESF #3 TL or ATL at the NRCC, IOF/JFO
- Emergency Power PRT Mission Manager: Manages the power mission at Staging Area
- Emergency Power PRT Action Officer and 249th EN BN Mission Controller: Coordinates with FEMA, the State and other ESFs at the IOF/JFO, and the Mission Liaison at the District/RFO and the PIT Boss at the Staging Area
- Emergency Power SME assigned to the mission
- Supported District's Emergency Manager
- Philadelphia District Contracting: generators contract/leasing lead
- Great Lakes and Ohio River Division, Common Operating Picture and Mission Modeling (GIS) staff
- USACE Operations Center (UOC): deployment and movement of PRTs, 249th EN BN, and DTOS resources
- NRCC USACE Liaison

b. FEMA

- Fleet Manager: Primary FEMA POC for FEMA NRCC Logistics organization. For Regional Activations the FEMA Logistics Chief at the IOF/RRCC will be the primary POC.
- Logistics Fly-Away-Team Leader or staging area Manager: Primary FEMA Logistics POC and interface between USACE Power PRT Mission Manager and FEMA Logistics at Staging Area.

3. Teleconference Phone Numbers. PICC conference call numbers will be established and distributed by LRD at the time of the event.

4. Topics of Discussion. Anticipated PICC topics of discussion may include, but should not be limited to the following:

- Location of Staging Area or Incident Support Base (ISB), and Initial Operating Facility (IOF) or JFO
- Designation and identification of generator operations area within the staging area
- Generator and BOM requirements from FEMA and inventory management
- Identify generators that need to be leased to complete a “Power Pack” and potential larger size generator requirements
- District PRT, 249th EN BN, ACI Contractor: Report any problems meeting the Type I, II, III, or IV configuration requirements
- SME requirements/availability
- GIS services (LRD): Mission modeling (storm tracking, commercial power outages, critical facilities), and mission tracking
- DTOS: type, arrival schedule, ACE-IT support, SATCOM status, BGAN activation
- RSOI: Lodging and life support for Power responders (USACE, FEMA and Contractors)
- Establish PICC battle rhythm

249th Engineer Battalion Information Paper

Purpose: To provide information about the 249th Engineer Battalion's (Prime Power) organization, emergency power resources, support requirements, and coordination information.

Responsibilities:

a. Corps of Engineers. The USACE Operations Center (UOC) will task the Battalion to provide personnel and equipment in support of the disaster operation. This support will often include the staffing of the Initial Operating Facility (IOF)/ESF #3 Cell(s), the RFO(s), support to the FEMA Territory Logistics Centers, and the Disaster Staging Areas.

b. 249th Engineer Battalion. During actual operations under the National Response Framework, the 249th Engineer Battalion is an ESF #3 (USACE) asset tasked through the ESF #3 Cell in the EOC/IOF.

(1) If required, be prepared to assign an officer and an experienced 12P (Prime Power Technician) to the Initial Operating Facility (IOF) or the Joint Field Office (JFO) within 12 hours of notification.

(2) Operate a Battalion Emergency Operations Center (EOC) when required on a 24-hour basis. The EOC will enable the Battalion to rapidly respond to requests for further support. If the Battalion EOC is not conducting 24-hour operations, the UOC will have emergency points of contact for the key personnel within the battalion.

(3) Provide soldiers in the required deployment configurations to support relief missions based on ESF #3 requirements. Deployment time for the Battalion's soldiers and equipment is dependent on the availability of transportation. It is a Battalion requirement that all equipment and soldiers be deployable within 72 hours. In many cases, equipment and soldiers are ready to move well before transportation becomes available.

Resources And Support Requirements:

a. Organization. The 249th Engineer Battalion (Prime Power) is a USACE asset with headquarters at Fort Belvoir, VA. It consists of three line companies, and a Headquarters and Headquarters Company (HHC).

(1) HHC: BN Command Group, Battalion Staff and Heavy Maintenance Section: Fort Belvoir, VA
(2) A Company: Schofield Barracks, HI (4 Platoons)
(3) B Company: Fort Bragg, NC (4 Platoons)
(4) C Company: Fort Belvoir, VA (4 Platoons)

(a) The company HQs are command and control cells for the companies' platoons. Each company HQ consists of seven personnel to perform operations and supply functions. Each platoon is authorized one warrant officer, one 12X (Non-commissioned Officer in Charge) and 16 12P/R soldiers.

(b) There is one Prime Power platoon and three Power Line platoons in the Reserve Component which can be activated if required. Activation of these Reserve Component platoons requires a Presidential Call-up, however, an individual Reservist may volunteer for active duty. At present, these Reserve Component platoons have no generation or transformation capability, but are fully trained and qualified to perform the same missions as their active duty counterparts.

b. Assets. During disaster relief operations, a vast majority of the power generation equipment will come from the FEMA Territory Logistics Centers or additional USACE contractors. However, there have been several cases when the Battalion's larger generators were required and employed in support of these operations.

(1) Each platoon is equipped with a power plant consisting of four MEP-810B power units. Each power unit is 840KW, consisting of two 420kW generators that can be operated separately or in parallel. The power plant produces 3.36 MW at peak load with an output voltage of 4,160.

(2) The MEP-810B power units produce 4160 volts and require transformers to convert the voltage to a user level (120/208/277/480 volts). The 249th EN BN has seven Ruggedized Army Transformers (RAT) rated at 1 MVA that will transform 4160 volts to 480/277 volts. The transformers are a Battalion asset to be used when needed.

(3) The Battalion also maintains a limited amount of 5 to 15 kV cables to set up medium voltage distribution systems using the Battalion's transformers.

c. Additional Capabilities. Advice and Assistance to the Mission Manager on the Emergency Power PRT and Contracting Officer's Representative (COR). Battalion soldiers possess the expertise to provide assistance and advice in the following areas:

(1) Preparation of detailed Statements of Work (SOW). This includes assessing the requirements for power generation at each job site.

(2) Recommend priorities for generator placement.

(3) Install generators as assigned by the PRT Mission Manager.

(4) Preparation of Project Work Sheets (PWSs) on electrical generation and distribution systems.

(5) Verification/Quality Assurance of work performed on electrical generation and distribution systems.

(6) Limited troubleshooting and repair of power generation and distribution systems.

d. Accounting. Deployment of Battalion soldiers requires no special accounting procedures. Man-hours worked by these soldiers do not have to be accounted for by specific project, nor do these soldiers count against the Full Time Equivalent (FTE) of a supported District or Division. The Battalion must be reimbursed for all expenses incurred in the disaster recovery effort to include TDY costs, generator operating cost, generator deployment and recovery, materials and supplies, etc. Once activated, the Battalion will need contact information for the USACE district finance POC to execute the transfer of funds via CEFMS.

e. Support.

(1) The Battalion requires transportation support to move equipment from home station to the area of the operation. The Battalion will coordinate for transportation; however a formal request for transportation must be submitted either to the Department of Defense Directorate of Military Assistance (DOMS) or the Defense Coordination Office (DCO) in the DFO. Once the request for transport has been forwarded to DOMS or the DCO, the Battalion will prepare an Deployment Equipment List (DEL) which contains all pertinent information needed to transport the equipment (physical dimensions, height, etc.). This list will be forwarded through the 249th Engineer Battalion command channels to USTRANSCOM for scheduling of transportation assets. All equipment is transportable using a combination of Air Force cargo aircraft (C-17 or C-5).

(2) The power units are transportable using a 5th wheel tractor. All transformation and switching equipment organic to the Battalion will require a forklift (10,000 lbs) to handle the equipment and a flatbed trailer for transportation. A cable reel trailer is normally required to recover the cable. Most platoons have a cable reel trailer.

(3) The Battalion has no refueling assets and limited fuel storage capabilities. Refueling support is required during a deployment. Each platoon is equipped with five (5) 600 gallon fuel pods. Storage capacity of at least 5,000 gallons is required at sites where power units are operating continuously. Each power unit consumes approximately 60 gallons of diesel fuel per hour, operating at full load.

(4) Life support is required for soldiers in the area of operations. Soldiers are normally placed in a TDY status. Soldiers will deploy with the capability to be self-sustaining for up to 72 hours.

(5) Communication is a key to success in providing and restoring power to critical facilities.

(a) The 249th Engineer Battalion uses the BERC/BGANS Satellite communication system but at times will require additional communication support. The supported MSC and/or ESF #2 will normally provide additional cellular phones as required. The Philadelphia District Contracting Office is responsible for activating the BERC/BGANS contract once the decision has been made to deploy 249th personnel for inspections and installations.

f. Coordination.

(1) Procedure for requesting support.

(a) During actual operations under the National Response Framework, the ESF #3 TL will send a verbal support request to the UOC requesting support from 249th Engineer Battalion.

(b) 249th EN BN support will be requested using the following deployment configurations.

(1) Type I: When required, the 249th EN BN Prime Power will deploy 19+ soldiers and equipment for remote (not at staging area) satellite communications capabilities. Two (2) soldiers are at the EOC/IOF for mission control and 17+ are at the staging area providing technical expertise on generator operations, performing pre-installation inspections and quality assurance of ACI activities. This type is capable of completing 30+ Pre-Installation Inspections (assessments) per day.

(2) Type II: When required, the 249th Prime Power will deploy 19 soldiers and equipment for remote (not at staging area) satellite communications capabilities. Two (2) soldiers are at the EOC/IOF for mission control and 17 are at the staging area providing technical expertise on generator operations, performing pre-installation inspections and quality assurance of ACI activities. Capable of completing 30-50 Pre-Installation Inspections (assessments) per day.

(3) Type III: When required, the 249th Prime Power will deploy 16 soldiers, equipment and operating system for remote (not at staging area) satellite communications capabilities. Two (2) soldiers are at the EOC/IOF for mission control and 14 are at the staging area providing technical expertise on generator operations, performing pre-installation inspections and quality assurance of ACI activities. Capable of completing 30-50 Pre-Installation Inspections (assessments) per day.

(4) Type IV: When required, the 249th Prime Power will deploy nine (9) soldiers, equipment and operating system for remote (not at staging area) satellite communications capabilities. Two (2) soldiers are at the EOC/IOF for mission control and seven (7) are at the staging area providing technical expertise on generator operations, performing pre-installation inspections and quality assurance of ACI activities. Capable of completing 15-25 Pre-Installation Inspections (assessments) per day.

(5) Type V: When required, the 249th EN BN will deploy six (6) soldiers to provide limited technical support for localized events within a state or US Territory. Coordinate with local government representatives to establish relationships and assist in developing their emergency power requirements/needs and power mission strategy. This configuration is capable of providing 4-8 Pre-Installation Inspections per day.

(2) The 249th Engineer Battalion's point of contact for planning is the S -3 (Operations) Section at Fort Belvoir, VA.

(a) Phone: (703) 805-2469/9981
(b) Fax: (703) 805-2608
(c) Email: 249eoc@usace.army.mil
(d) Mail: 249th Engineer Battalion (Prime Power)
1418 Jackson Loop
Ft. Belvoir, VA 22060-5837

(3) Any request for support from the 249th Engineer Battalion must come through the USACE UOC, Telephone: (202) 761-1001.

Temporary Emergency Power Common Operating Picture (TEP-COP)

The TEP-COP is a web-based geo-referenced power mission modeling and mission tracking tool (accessed via the internet on the public domain) that can be used by all USACE, FEMA, State, and other disaster response agencies with a “need to know” about potential/current USACE NRF power missions.

As the Proponent MSC for Temporary Emergency Power, the Great Lakes and Ohio River Division (LRD) currently has the task of developing the TEP-COP for each event.

For notice events, the TEP-COP can be used for Emergency Power mission modeling by using geo-referenced data available from sources such as the NWS, NOAA, USGS ENGLink and EPFAT, to provide information that can be used to estimate the “Types/Configuration” of FEMA/USACE packages that may be required, or which Pre-Scripted Mission Assignments to use.

During USACE Emergency Power Missions the TEP-COP will provide up to date geo-referenced mission tracking and other pertinent information such as the following:

- Locations of RRCCs, State EOCs/IOFs, Emergency Power ISBs/staging areas, USACE District boundaries, FEMA Region boundaries, etc.
- Locations of FEMA and USACE leased generators in route to the staging areas (under development)
- Location and information on critical public facilities that are assessed, generator installation taskings issued to the ACI contractor, generators installed, generators de-installed, and generator no longer required or tasking closed-out
- Location and information of earthquake activity, weather/storm warnings and watches, flooding, etc.
- Can be used as a routing tool to determine the best way to get from point A to point B, and includes the ability to plot transportation barriers such as closed bridges, washed-out roads and flooded underpasses
- Will show the locations for USACE facilities that could potentially be used as emergency power staging areas (under development)

Emergency Power Facility Assessment Tool (EPFAT)

EPFAT facts:

- The EPFAT is a web-based tool accessed via the internet that can be used by critical public facility owners/operators or government emergency response agencies to input, store, update and/or view temporary emergency power assessment data.
- Critical facility assessments can be completed by qualified electricians who are on-site/staff, contracted, or volunteers.
- A data entry guidebook is available in EPFAT to print and filled-in before entering data into the program; and hard copies can be stored at the facility.
- Information and data is stored in a “Google-Map” type geo-referenced database.
- Information can be viewed by authorized emergency response personnel at the City, County, State, FEMA Region, or National levels.
- Information and data is easily retrieved and/or updated.
- Facility assessment data will periodically be exchanged to/from EPFAT and ENGLink for use in mission modeling, disaster response planning and mission execution.
- An EPFAT informational video is accessible from the ENGLink Public, Temporary Emergency Power web page.
- The URL for EPFAT is: https://epfat.swf.usace.army.mil/Welcome.aspx.
- In order to access the Emergency Power Facility Assessment Tool for the first time you may be required to download the DoD Certificate to acquire the proper security features (Instructions are provided on the welcome page).

EPFAT Q&As:

- Can multiple facility assessments be added at one time?
- Users can not do it, but they can email the EPFAT support team using the link in the EPFAT program and request it.

- Why was EPFAT developed?
- To explain the USACE ESF #3 role in assisting FEMA with disaster response, and how Local and State governments can benefit.

- Who developed and maintains it?
- The DOD/USACE developed the site and maintains the security and integrity of the system.

Emergency Power Facility Assessment Tool (EPFAT)

- Why should anyone use it, and how do facility owners, cities, counties, State, and the Federal government benefit?
- Maintaining the facility assessment data will speed up the time that it takes for Local, State, and/or Federal agencies to acquire the proper generators and associated bill of materials (BOM) needed to connect emergency power generators at a critical facility

- Who is “qualified” to do facility assessments?
- Journeyman or master electricians, electrical engineers, or others with an equally strong electrical background.

- Who should enter the data into the system/be the POC?
- Any contractor or someone from within an agency or facility who is a qualified electrician can do the assessment on a paper copy, but the facility POC who registers as a User can enter and maintain the data in the EPFAT.

- How secure is the web site?
- It is a secure DoD web site.

- What else can a facility owner/manager do to speed up getting a generator installed during a disaster?
- Purchase and install a generator pre-disaster, transfer switches, discuss with the County Emergency Management Office if the facility is considered “a Critical Public Facility” and qualifies for State or Federal assistance.

Emergency Power PRT Deployment Configurations and Typical Costs

Asset	Type I	Type II	Type III	Type IV	Type V
Positions	Type II base package plus additional team members as required. **(Total Pax: 20+)**	JFO – 2 AO, 1 MS (3 Pax) RFO – 2 ML, (2 Pax) ISB – 2 MM, 2 MS, 2 LS, 2 CS, 6 QA. 1 QA L (15 Pax) **(Total Pax: 20)**	JFO – 2 AO, 1 MS (2 Pax) RFO – 1 ML (1 Pax) ISB – 2 MM, 2 MS, 2 LS, 1 CS, 2 QA (9 Pax) **(Total Pax: 13)**	JFO – 1 AO, 1 MS (2 Pax) RFO – 1 ML (1 Pax) ISB – 1 MM, 1 MS,1 LS, 1 CS, 2 QA (9 Pax) **(Total Pax: 9)**	1 SME **(Total Pax: 1)**
Cost	Pre-Dec: $ varies (4Days) Daily: $ varies	Pre-Dec: $120,0000 (4Days) Daily: $30,000	Pre-Dec: $72,000 (4 Days) Daily: $18,000	Pre-Dec: $54,000 (4 Days) Daily: $13,500	$1,500 per day
Remarks		• C2 of the larger power staging area (> 5 acres) • Anticipates having to install up to 200 generators (total) from 10kw to 2MW • Additional CS supports KO at RFO • All costs assume minimum 12 hour days for Pre-Dec labor.	• C2 of the standard power staging area (5 acres) • Anticipates having to install 50-75 generators (total) of less than 800 KW. • All costs assume 12 hour work day.	• C2 of the standard power staging area (5 acres) • Anticipates having to install 25 -50 generators (total) of less than 800 KW. • All costs assume 12 hour work days.	• To assist states that want to install the FEMA generators themselves. • Technical support similar to WV Derrecho, FEMA Ice Storms

249th Engineer Battalion NRF Deployment Team Configurations /Costs

Asset	Type I	Type II	Type III	Type IV	Type V
Positions	Type II base package plus additional team members as required. **(Total Pax: 19+ = 1+ X Platoons)**	• MC Node (2 Pax) • Yard Dog (2 Pax) • PIIT Boss (1 Pax) • 7+ ea. PIIT's (14 Pax) **(Total Pax: 19+ = 1 X Platoon)**	• MC Node (2 Pax) • Yard Dog (1 Pax) • PIIT Boss (1 Pax) • 6 ea. PIIT's (12 Pax) **(Total Pax: 16 = 1 X Platoon)**	• MC Node (2 Pax) • Yard Dog/PITT Boss (1 Pax) (DUAL HAT) • 3 PIIT's (6 Pax) **(Total Pax: 9 = 1 X Section)**	• MC Node (1 Pax) • Yard Dog/PITT Boss (1 Pax) (DUAL HAT) • 2 PIIT's (4 Pax) **(Total Pax: = 6)**
Cost	Pre-Dec: $varies Daily: $varies	Pre-Dec: $60,000 (4 days) Daily: $15,000	Pre-Dec: $48,000 (4 days) Daily: $12,000	Pre-Dec: $27,000 (4 days) Daily: $6,750	Pre-Dec: $18,000 (4 days) Daily: $4,500
Remarks		• This package has the ability to perform 30-50 daily PII assessments • Ability to perform inspection and assess need for follow on forces	• This package has the ability to perform 30-50 daily PII assessments • Ability to perform inspection and assess need for follow on forces	• This package has the ability to perform yard duties as well as conducting 15-25 daily assessments • Ability to perform inspection and assess need for follow on forces	• To assist states that want to install the FEMA generators themselves. • Technical support similar to WV Derrecho, FEMA Ice Storms • 249th can perform installation with logistical support.

Emergency Power DTOS Deployment Configurations

	Type I	Type II	Type III/IV
Assets	Total Staff: 4 Total Equipment: 1 • ECCV	Total Staff: 2 Total Equipment: 1 • ECCV	Total Staff: 2 Total Equipment: 1 • ECCV
Event Type	• All events requiring Power PRT • 24/7 operations • Supporting 25+ USACE team members • Additional Bandwidth needs requested	• All events requiring Power PRT • 24/7 operations • Supporting 15+ USACE team members • Additional Bandwidth needs requested	• All events requiring Power PRT • Extended hours operations • Supporting 10 USACE team members
Cost	Pre-Dec: $24,000 (4 Days) Daily: $ 6,000	Pre-Dec: $12,000 (4 Days) Daily: $ 3,000	Pre-Dec: $12,000 (4 Days) Daily: $ 3,000
Remarks	• Two person team works 12 hours shift with overlap with second two person team.	• Each person works 12 hour shift with overlap.	• Team works extended day together, possibly staggering start/end of shifts.

Emergency Power Mission Management/Support Costs

	Type I	Type II	Type III/IV	Type V
Assets	Multiple deployments of Type I and/or Type II configurations to one event **(Total Pax: Varies)**	LRP --(8 Pax) ULA – (2 Pax) GIS – (1 Pax) SME – (1 Pax) **(Total Pax: 11)**	LRP --(5 Pax) ULA – (1 Pax) GIS – (1 Pax) SME – (1 Pax) **(Total Pax: 8)**	LRP (2 Pax) **(Total Pax: 2)**
Cost	**COST WILL VARY**	Daily: $11,000 per day	Daily: $8,000 per day	Daily: $2,000 per day
Remarks	• LRP manages Power Mission • LRP EM/RM support only • ULA assist with transportation/ accountability • GIS support for Emergency Power Common Operating Picture (EPCOP) • LRP/ULA procure/track BOM/ Lease generators • Incorporate management with Task Force Power	• LRP manages Power Mission • LRP EM/RM support only • ULA assist with transportation/ accountability • GIS support for Emergency Power Common Operating Picture (EPCOP) • LRP/ULA procure/track BOM/Lease generators • Incorporate management with Task Force Power	• LRP manages Power Mission • LRP EM/RM support only • ULA assist with transportation/ accountability • GIS support for Emergency Power Common Operating Picture (EPCOP)	• LRP manages Power Mission • LRP EM/RM support only

Emergency Power Mission Costs (FEMA Regions I – III/LBG)

	Type I	Type II	Type III	Type IV	Type V
PRT	Pre-Dec: $varies Daily: $varies	Pre-Dec: $120,000 Daily: $ 30,000	Pre-Dec: $72,000 Daily: $18,000	Pre-Dec: $54,000 Daily: $13,500	Pre-Dec: $6,000 Daily: $1,500
249th	Pre-Dec: $varies Daily: $varies	Pre-Dec: $60,000 Daily: $15,000	Pre-Dec: $48,000 Daily: $12,000	Pre-Dec: $27,000 Daily: $ 6,750	Pre-Dec: $18,000 Daily: $ 4,500
ACI	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,300,000 Daily: $ 261,000	Pre-Dec: $872,300 Daily: $170,900	Pre-Dec: $413,100 Daily: $78,000	N/A
Support	Pre-Dec: $varies Daily: $varies	Pre-Dec: $44,000 Daily: $11,000	Pre-Dec: $32,000 Daily: $ 8,000	Pre-Dec: $8,000 Daily: $2,000	Daily: $2,000
Total	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,524,000 Daily: $ 317,000	Pre-Dec: $1,024,300 Daily: $208,900	Pre-Dec: $502,100 Daily: $100,250	Pre-Dec: $25,000 Daily: $8,000

Event Type	• Catastrophic events 24/7 operations • Greater than 200 Generators • High demand on generators & BOM	• Significant event (i.e., CAT III + Hurricane, major earthquake, etc) • 24/7 operations • Greater than 100 Generators • High demand on generators & BOM	• CAT II or less Tropical Event • 24 hour operations with most installs completed during the day. • 50 to 100 Generators	• CAT I or Tropical Event • Any event in which FEMA Generators are deployed (5 – 10 per day/ 50 total) • Day Operations only	• Ice Storm • Severe Weather • Flooding • Tropical Storm

Emergency Power ACI (LBG) Deployment Configurations (FEMA Regions I-III)

	Type I	Type II	Type III	Type IV
Assets	Type II base package plus additional team members and equipment to meet the mission requirements as required.	**Total Staff: 114** • Management/Admin: 24 • Install/Assessment: 40 • Mechanics: 10 • Truck Drivers: 32 • MHE/Laborers: 8 **Total Equipment: 103** • Hauling Equipment: 22 • Fuel Trucks: 12	**Total Staff: 75** • Management/Admin: 19 • Install/Assessment: 22 • Mechanics: 7 • Truck Drivers: 23 • MHE/Laborers: 5 **Total Equipment: 77** • Hauling Equipment: 16 • Fuel Trucks: 8	**Total Staff: 39** • Management/Admin: 16 • Install/Assessment: 10 • Mechanics: 3 • Truck Drivers: 6 • MHE/Laborers: 4 **Total Equipment: 51** • Hauling Equipment: 12 • Fuel Trucks: 2
Cost	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,300,000* (4 Days) Daily: $261,000** Includes Mob/De-Mob costs ** Fully regular daily rate	Pre-Dec: $872,300* (4 Days) Daily: $170,900** Includes Mob/De-Mob costs ** Fully regular daily rate	Pre-Dec: $413,100* (4 Days) Daily: $78,000** Includes Mob/De-Mob costs ** Fully regular daily rate
Remarks		• Capable of installing 30-35 generators per day • Anticipates having to install • >200 generators with many "high end" generators. • 24/7 operations with 60% of installs occurring during the day, 40% installs and prep-work on staging area at night.	• Capable of installing 20-25 generators per day • Anticipates having to install 100-175 generators up to 2 MW. • 24/7 operations with 60% of installs occurring during the day and 40% installs and prep-work on staging area at night.	• Capable of installing 5-10 generators per day • Anticipates having to install 50 generators of less than 800 KW. • 24/7 operations with majority of installs occurring during the day and prep-work on staging area at night

Emergency Power Mission Costs (FEMA Regions IV-VIII/IAP)

	Type I	Type II	Type III	Type IV	Type V
PRT	Pre-Dec: $varies Daily: $varies	Pre-Dec: $120,000 Daily: $ 30,000	Pre-Dec: $72,000 Daily: $18,000	Pre-Dec: $54,000 Daily: $13,500	Pre-Dec: $6,000 Daily: $1,500
249th	Pre-Dec: $varies Daily: $varies	Pre-Dec: $60,000 Daily: $15,000	Pre-Dec: $48,000 Daily: $12,000	Pre-Dec: $27,000 Daily: $ 6,750	Pre-Dec: $18,000 Daily: $ 4,500
ACI	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,150,000 Daily: $ 230,000	Pre-Dec: $775,000 Daily: $167,000	Pre-Dec: $530,000 Daily: $105,000	N/A
Support	Pre-Dec: $varies Daily: $varies	Pre-Dec: $44,000 Daily: $11,000	Pre-Dec: $32,000 Daily: $ 8,000	Pre-Dec: $8,000 Daily: $2,000	N/A
Total	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,400,000 Daily: $ 280,000	Pre-Dec: $930,000 Daily: $200,000	Pre-Dec: $620,000 Daily: $130,000	Pre-Dec: $25,000 Daily: $6,250

Event Type	• Catastrophic events 24/7 operations • Greater than 200 Generators • High demand on generators & BOM	• Significant event (i.e., CAT III + Hurricane, major earthquake, etc) • 24/7 operations • Greater than 100 Generators • High demand on generators & BOM	• CAT II or less Tropical Event • 24 hour operations with most installs completed during the day. • 50 to 100 Generators	• CAT I or Tropical Event • Any event in which FEMA Generators are deployed (1 Power Pack) • Day Operations only	• Ice Storm • Severe Weather • Flooding • Tropical Storm

Emergency Power ACI (IAP) Deployment Configurations (FEMA Regions IV-VIII)

	Type I	Type II	Type III	Type IV
Assets	Type II base package plus additional team members and equipment to meet the mission requirements as required.	**Total Staff: 114** • Management/Admin: 24 • Install/Assessment: 40 • Mechanics: 10 • Truck Drivers: 32 • MHE/Laborers: 8 **Total Equipment: 103** • Hauling Equipment: 22 • Fuel Trucks: 12	**Total Staff: 75** • Management/Admin: 19 • Install/Assessment: 22 • Mechanics: 7 • Truck Drivers: 23 • MHE/Laborers: 5 **Total Equipment: 77** • Hauling Equipment: 16 • Fuel Trucks: 8	**Total Staff: 46** • Management/Admin: 12 • Install/Assessment: 10 • Mechanics: 5 • Truck Drivers: 15 • MHE/Laborers: 4 **Total Equipment: 50** • Hauling Equipment: 12 • Fuel Trucks: 4
Cost	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1,150,000* (4 Days) Daily: $230,000** Includes Mob/De-Mob costs ** Fully regular daily rate	Pre-Dec: $775,000* (4 Days) Daily: $167,000** Includes Mob/De-Mob costs ** Fully regular daily rate	Pre-Dec: $530,000* (4 Days) Daily: $105,000** Includes Mob/De-Mob costs ** Fully regular daily rate
Remarks		• Capable of installing 30-35 generators per day • Anticipates having to install • >200 generators with many "high end" generators. • 24/7 operations with 60% of installs occurring during the day, 40% installs and prep-work on staging area at night.	• Capable of installing 20-25 generators per day • Anticipates having to install 100-175 generators up to 2 MW. • 24/7 operations with 60% of installs occurring during the day and 40% installs and prep-work on staging area at night.	• Capable of installing 5-10 generators per day • Anticipates having to install 50 generators of less than 800 KW. • 24/7 operations with majority of installs occurring during the day and prep-work on staging area at night

Emergency Power Mission Costs (FEMA Regions IX-X & OCONUS)

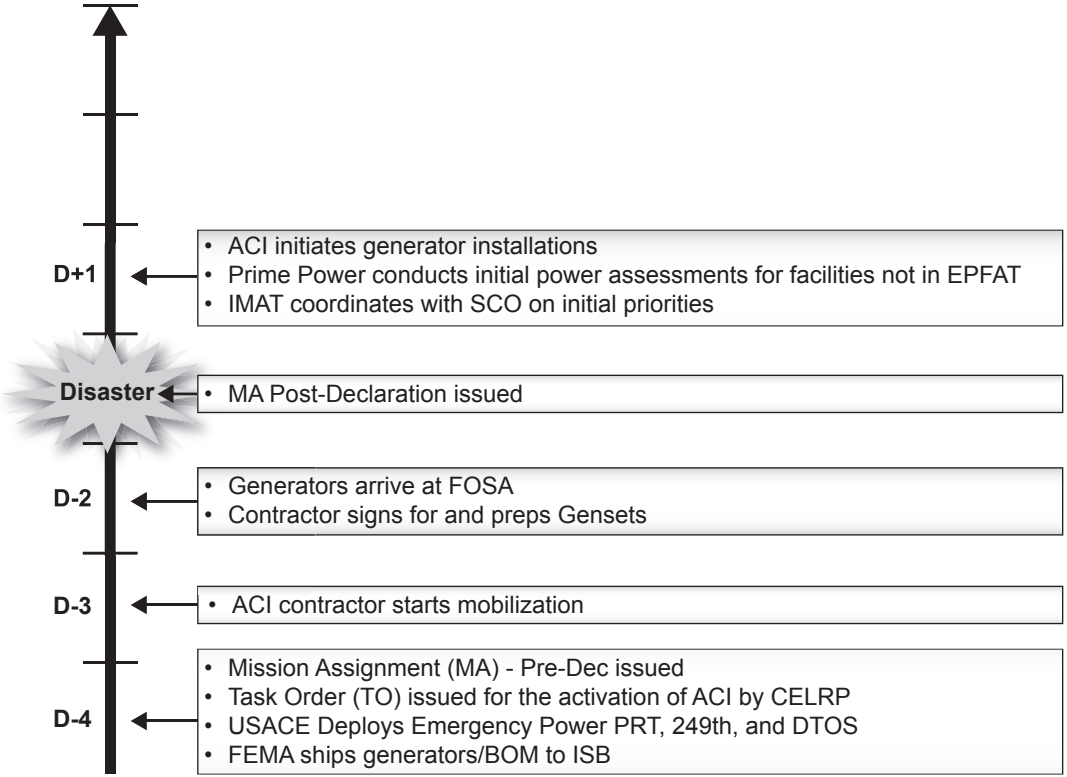
	Type I	Type II	Type III	Type IV	Type V
PRT	Pre-Dec: $varies Daily: $varies	Pre-Dec: $120,000 Daily: $ 30,000	Pre-Dec: $72,000 Daily: $18,000	Pre-Dec: $54,000 Daily: $13,500	Pre-Dec: $6,000 Daily: $1,500
249th	Pre-Dec: $varies Daily: $varies	Pre-Dec: $60,000 Daily: $15,000	Pre-Dec: $48,000 Daily: $12,000	Pre-Dec: $27,000 Daily: $ 6,750	Pre-Dec: $18,000 Daily: $ 4,500
ACI	Pre-Dec: $varies Daily: $varies	Pre-Dec: $1.5 million Daily: $310,338	Pre-Dec: $950,000 Daily: $202,000	Pre-Dec: $426,000 Daily: $88,000	N/A
Support	Pre-Dec: $varies Daily: $varies	Pre-Dec: $44,000 Daily: $11,000	Pre-Dec: $32,000 Daily: $8,000	Pre-Dec: $8,000 Daily: $2,000	N/A
Total	Pre-Dec: $varies Daily: $varies	Pre-Dec: **$1.5 million** Daily: $355,338	Pre-Dec: **$1.1 million** Daily: $240,000	Pre-Dec: **$515,000** Daily: $110,650	Pre-Dec: **$26,000** Daily: $8,000

Event Type	• Catastrophic events 24/7 operations • Greater than 200 Generators • High demand on generators & BOM	• Significant event (i.e., CAT III + Hurricane, major earthquake, etc) • 24/7 operations • Greater than 100 Generators • High demand on generators & BOM	• CAT II or less Tropical Event • 24 hour operations with most installs completed during the day. • 50 to 100 Generators	• CAT I or Tropical Event • Any event in which FEMA Generators are deployed (5 – 10 per day/ 50 total) • Day Operations only	• Ice Storm • Severe Weather • Flooding • Tropical Storm

Emergency Power ACI (LGB) Deployment Configurations (FEMA Region IX-X & OCONUS)

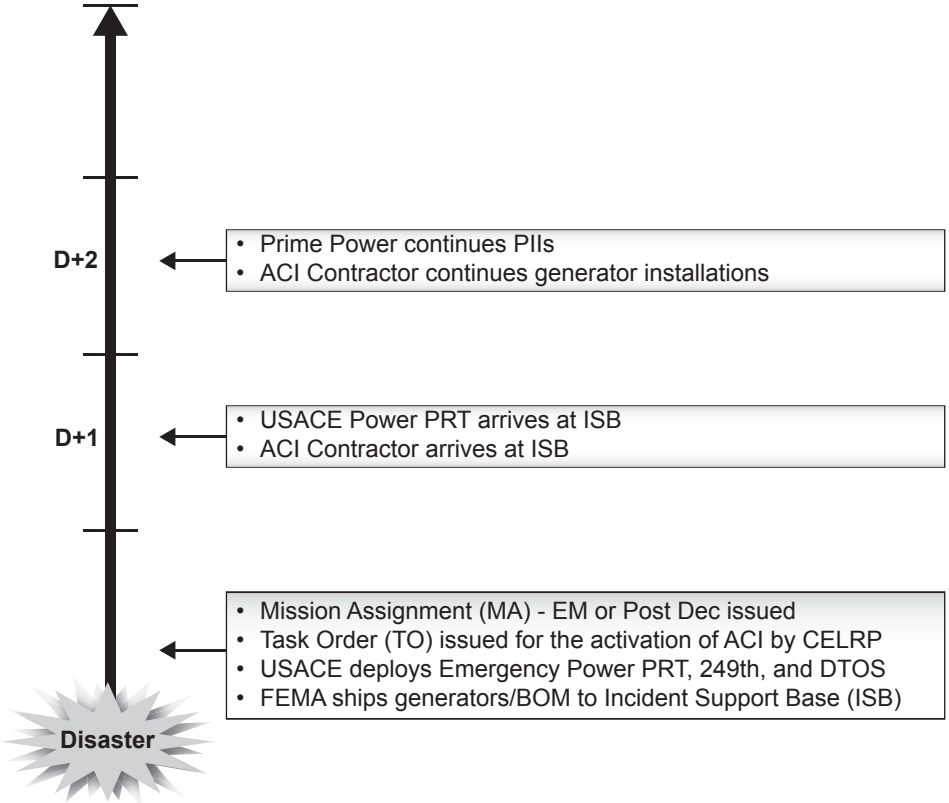
	Type I	Type II	Type III	Type IV
Assets	Type II base package plus additional team members and equipment to meet the mission requirements as required.	**Total Staff: 111** • Management/Admin: 21 • Install/Assessment: 40 • Mechanics: 10 • Truck Drivers: 32 • MHE/Laborers: 8 **Total Equipment: 101** • Hauling Equipment: 22 • Fuel Trucks: 12	**Total Staff: 74** • Management/Admin: 17 • Install/Assessment: 22 • Mechanics: 7 • Truck Drivers: 23 • MHE/Laborers: 5 **Total Equipment: 75** • Hauling Equipment: 16 • Fuel Trucks: 8	**Total Staff: 37** • Management/Admin: 14 • Install/Assessment: 10 • Mechanics: 3 • Truck Drivers: 6 • MHE/Laborers: 4 **Total Equipment: 51** • Hauling Equipment: 12 • Fuel Trucks: 2
Cost	Pre-Dec: $varies Daily: $varies	Pre-Dec: **$1.5 million** (4 Days) Daily: **$310,338**** Includes Mobilization costs ** Fully regular daily rate	Pre-Dec: **$950,000*** (4 Days) Daily: **$202,000**** Includes Mobilization costs ** Fully regular daily rate	Pre-Dec: **$426,000*** (4 Days) Daily: **$88,400**** Includes Mobilization costs ** Fully regular daily rate
Remarks		• Capable of installing 30-35 generators per day • Anticipates having to install • >200 generators with many "high end" generators. • 24/7 operations with 60% of installs occurring during the day, 40% installs and prep-work on staging area at night. • Does not include air shipment of contractor equipment OCONUS (separate MA).	• Capable of installing 20-25 generators per day • Anticipates having to install 100-175 generators up to 2 MW. • 24/7 operations with 60% of installs occurring during the day and 40% installs and prep-work on staging area at night.	• Capable of installing 5-10 generators per day • Anticipates having to install 50 generators of less than 800 KW. • 24/7 operations with majority of installs occurring during the day and prep-work on staging area at night • Does not include air shipment of contractor equipment OCONUS (separate MA).

Temporary Power Mission Execution Timeline



- Note for D-1: Timeline is keyed to the mobilization of the ACI contractor.
- Actual assessments would be D+1, but the reporting may not be until D+2, based on when the reporting time ends (e.g., 1500 hrs on D+1). Assessments could be done after 1500 hrs, but not reported until D+2.
- Little activity may occur during D-1, D+0, and D+1, due to weather and damage conditions. However on D+1 assessments and installations may be initiated and completed
- Assumptions: Roads and airfields are accessible for contractor crews. FEMA issues Pre-Scripted Mission Assignments. FEMA has generators and BOM available at ISB(s).

Temporary Power No-Notice Mission Execution Timeline



Notes:

- Timeline is keyed to the mobilizatiion of all power assets
  - Note for D+2: Arrival of all three players (Prime Power, PRT, and ACI Contractor) is critical for the rest of the timeline. Should PP or PRT be unable to reach disaster site, timeline will slide accordingly.
  - Actual assessments would be D+3, but the reporting may not be until D+4, based on when the reporting time ends (e.g., 1500 hrs on D+3). Assessments could be done after 1500 hrs, but not reported until D+4.
  - Little activity anticipated to occur during D+2. Assumptions: Roads and airfields are accessable for deploying assets. FEMA issues Pre-Scripted Mission Assignments D+1.

Temporary Power: Essential Elements of Information

1. Taskings
- Pre-Installation Inspection (PII) requests in the last 24 hours
- PII requests total
- PIIs completed in the last 24 hours
- PIIs completed total

2. Facilities
- Facilities requiring a generator based on PIIs above
- Facilities that no longer require a generator
- Facilities that still require generators
- Facilities with needs unable to be met

3. Generators
- Generators installed in the last 24 hours
- Generators installed total
- De-installs in the last 24 hours
- De-installs total
- Generators assigned to the mission

4. Personnel
- Total number of PRT members
- Total number of 249th personnel
- Total number of PII Teams (PIIT)
- Total number of contractor personnel
- Total number of installation teams

Note: Each Mission Manager is responsible for collecting and regularly communicating this information to the Mission Liaison to be entered into ENGLink for distribution and the use by decision makers at the regional and national levels.

Debris Removal Mission Overview

- Usually the largest Corps mission, funding, and personnel.
- Requires experienced/knowledgeable personnel to guide initial planning.
- Requires team effort: FEMA, USACE, ACI Contractor, other ESFs, and State/Local governments.
- Debris Clearance: Moving debris off roadway.
- Debris Removal: Load, haul, reduce, and dispose of debris.
- Disposal sites are key to scoping the mission.
- Units reported in cubic yard or tons. It is important to maintain debris volume records even if units are not contracted per cubic yard or ton (e.g., time and material, lump sum).
- Safety of the public, government personnel, military personnel, voluntary organization laborers, and contractors is kept a #1 priority to ensure no further losses incur as a result of debris clearance, removal and disposal operations.
- FEMA debris eligibility requirements can vary with each disaster.

Debris *Removal and Disposal* Mission Execution Timeline

D+7
- ACI contractor ramped up

D+5
- ACI contractor begins removal operations

D+4
- ACI contractor prepares reduction sites

D+3
- PRT and ACI contractor develops priorities, sectors/zones, and personnel requirements

D+2
- Debris PRT Support Elements report

D+1

Disaster
- MA Post-Declaration issued
- PRT Management cell conducts initial assessments with ACI contractor
- USACE deploys PRT support element
- Additional ACI Contract resources mobilized
- PRT coordinates scope/magnitude of mission with FEMA, ACI Contractor, and Local governments

D-2
- USACE Deploys Debris PRT Management Cell
- TO to ACI contractor to mobilize Planning Cell

D-3
- Mission Assignment (MA) - Pre-Dec issued
- IMAT activated

D-4
- RRCC activated

Notes:
- For OCONUS operations, add four days to start of removal operations.
- Note for D+5: A limited workforce (two-to-three contractor crews) can begin initial debris removal operations at approximately D+3 if existing local landfills can be utilized until the reduction sites are located and operational.
- Assumptions: FEMA issues Pre-Scripted Mission Assignments. ACI contracts will be utilized. If no ACI contract is in place or a combination of ACI and additional local contracts are required by FEMA, then ACI standard acquisition or technical assistance procedures will be used.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Debris *Clearance* Mission Execution Timeline

D+3
- PRT and ACI contractor develops priorities, sections/zones, and personnel requirements for transition from clearance to removal mission

D+2
- Debris Support Element reports
- ACI Contractor begins clearance operations

D+1

Disaster
- MA Post-Declaration issued
- Debris PRT Management Cell conducts initial assessments with ACI Contractor
- USACE deploys PRT Support Element
- PRT coordinates scope/magnitude of mission with FEMA, ACI Contractor, and Local governments

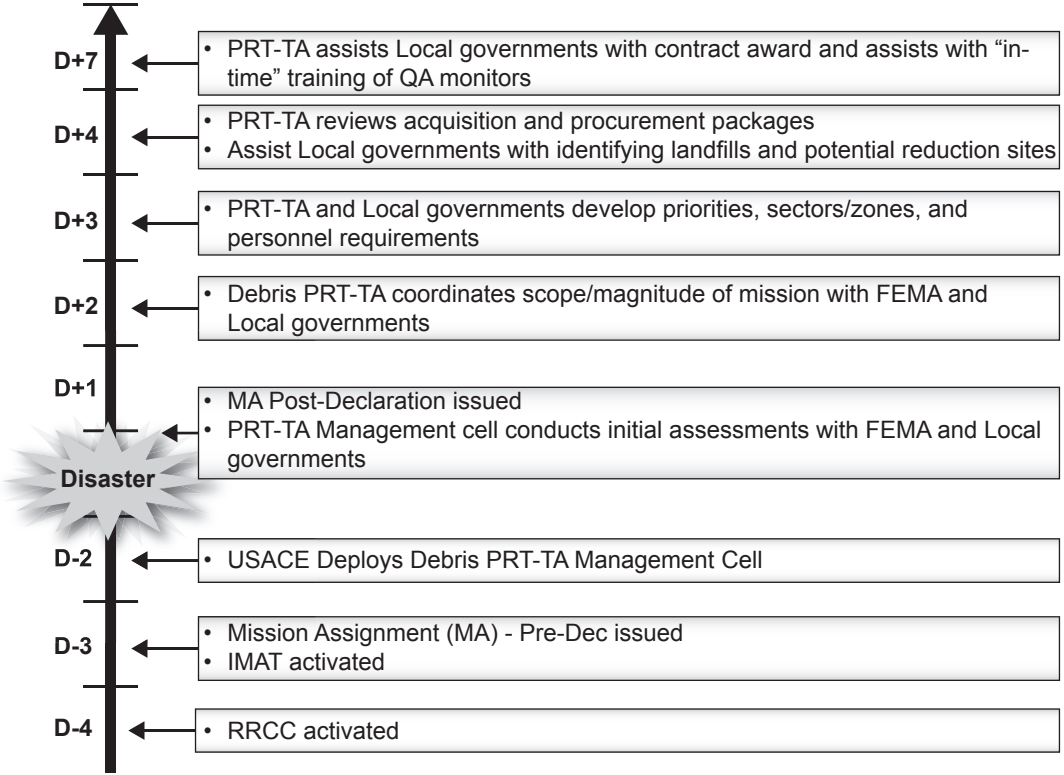
D-2
- USACE Deploys Debris PRT Management Cell
- TO for ACI Contractor to mobilize planning cell

D-3
- Mission Assignment (MA) - Pre-Dec issued
- IMAT activated

D-4
- RRCC activated

Notes:
- For OCONUS operations, add four days to start of removal operations.
- Assumptions: FEMA issues Pre-Scripted Mission Assignments. ACI contracts will be utilized. If no ACI contract is in place or a combination of ACI and additional local contracts are required by FEMA, then ACI standard solicitation and acquisition procedures will be used.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Debris *Technical Assistance* Mission Execution Timeline



Notes:

- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Debris No-Notice Mission Execution Timeline

D+5
- ACI contractor prepares reduction sites
- ACI contractor starts removal if local landfills are available

D+4
- ACI contractor starts emergency clearance

D+3
- ACI contractor mobilizes
- PRT and ACI contractor develops priorities, sectors/zones, and personnel requirements

D+2
- FEMA issues tasker for Debris DFA
- USACE activates ACI contractor
- Debris PRT Support Elements report

D+1
- President issues a disaster declaration
- FEMA issues MA for Debris Removal
- Debris PRT is deployed
- CS alerts the ACI contractor

Disaster
- NRCC activated

Notes:
- Removal will start at D+5 if permitted local landfills are available.
- If local permitted landfills are not available, removal will be delayed indefinitely until suitable sites are provided, environmentally documented, and cleared.

Assumptions:
- Timeline is based on early issuance of the MA.
- ACI contract will be used.
- If no ACI is in place or a combination of ACI and additional local contracts are required by FEMA, then emergency aquisition procedures will be used and the timeline will have to be extended.

ACI Fact Sheet: Debris Missions

- **Contracting Provisions:** The Advanced Contracting Initiative (ACI) contract is structured to begin debris removal within 24 hours. The ACI include both unrestricted Single Award Task Order Contracts (SATOC) and restricted SATOC (small business set aside) contracts.

- **Unrestricted SATOCs:** Coverage includes 8 USACE MSC boundaries. Total capacity over 5 years is $240 million per MSC total over contract length. Contract length is five years. Scope includes planning, debris removal, debris reduction, and demolition. Other key features include an Automated Debris Management System (ADMS) and an electronic load ticket system, which is provided by the contractor. Reachback capability is available, which allows bringing in another regional contractor.

- **Restricted SATOCs:** Coverage includes all 8 MSC boundaries and one (1) each in PR and USVI. Contracts are small business set-asides. Total capacity is $580 million for all 10 areas. Contract length is 5 years. Scope includes debris removal, debris reduction, and demolition.

- **Mission Time-Line:** The contractor will begin removing debris within 24 hours of receiving a Task Order or Notice To Proceed (NTP) and will reach full mobilization within four days after receipt of NTP. The total length of the mission will depend on the weather, debris quantities, available disposal/reduction sites, and political factors. The debris PRT will develop a close-out plan within the first two to three weeks of the mission.

A listing of the current debris ACI contracts can be found in ENGLink Interactive by:

1. Logging into ENGLink
2. Clicking on the “Documents” tab
3. Clicking the “ACI Contracts” sub-tab
4. Clicking on the “Debris” hot link

Debris Modeling

The modeling methodology described below was developed by the Mobile District, USACE Emergency Management staff using actual data from Hurricanes Frederick, Hugo, and Andrew. The estimates produced by the model are predicted to have an accuracy of +30%. (Accuracy is limited due to the many variables inherent to the debris removal process.) The primary factor the model uses to estimate storm-generated debris is the total number of households in a developed urban/suburban area. Other factors are cubic yards of debris generated per household per storm category, vegetative cover, commercial density, and precipitation. The household debris includes debris generated from damage to the house, including contents and surrounding shrubs/trees. Vegetative cover includes all trees /shrubbery and other debris located on public rights-of-way. Commercial density includes debris generated by damage to businesses and industrial facilities. The majority of commercial-related debris will be removed by private contractors, but disposal/reduction space is still required. The amount of precipitation generated by a storm has a direct relationship on debris quantities. Very wet storms will cause ground saturation, which increases tree fall.

See models for active, and previous, storms on the headquarters U.S. Army Corps of Engineers public internet website at the following location: http://www.usace.army.mil/Missions/EmergencyOperations/DisasterImpactModels.aspx

Debris Mission: Essential Elements of Information

	MIssion Status (% Complete)	Cumulative to Date	Next 24 Hours
MIssion Status (% Complete)			
Hauled (CY)			
Reduced (CY)			
Funding			
Authorized Funding ($)			
Funds Obligated ($)			
Funds Committed ($)			
Funds Expended ($)			

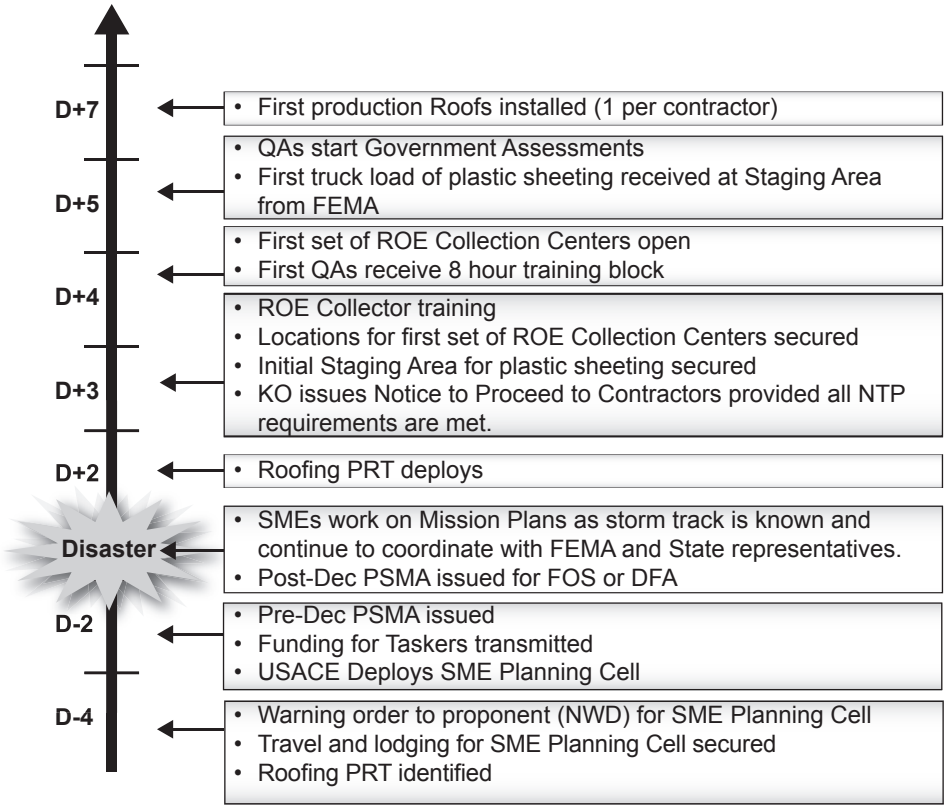
Note: Each Mission Manager is responsible for collecting and regularly updating the information contained within this chart. These Essential Elements of Information collected at the field level will be entered into ENGLink for distribution and the use by decision-makers at the regional and national levels.

Temporary Roofing Mission Overview

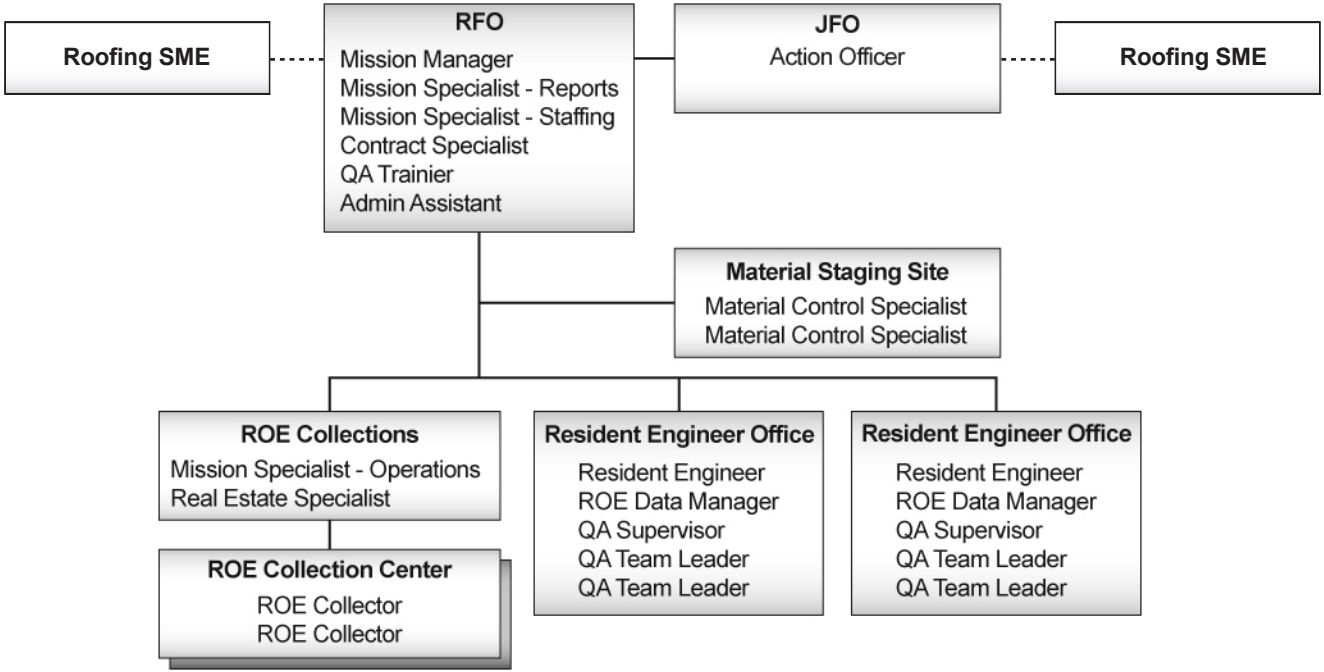
The main intent of the Temporary Roofing Mission is to shelter in place. It is considered an ESF #6 mission.

- ACI Contracts are in place for coastal states from Texas to Maine (8), FEMA Region IV (2), FEMA Region VI (2), Puerto Rico (1), U.S. Virgin Islands (1), Hawaii (1) and Guam and the Commonwealth of Northern Marianas Islands (CNMI) (1). If no ACI Contract is in place for the disaster area then emergency contracting procedures will be used.
- Plastic Sheeting is furnished by FEMA. Contractors provide all other materials.
- The Field Management System (FMS) database is used to track Rights of Entry (ROEs), Assessments and contractor activities.
- A National or Event Policy will clearly define which buildings are eligible by building use (occupancy) and roof type and will specify the amount of coverage for the primary structure.
- The minimum threshold for a Temporary Roofing mission is 3,000 roofs.
- The ROE Collection Centers require a large number of ROE Collectors.
- To perform Assessments and final spot checks of contractor installs, large numbers of Quality Assurance Inspectors (QAs) are required. Only Federal QAs can perform spot checks on contractors.
- The speed at which a Temporary Roofing Mission “ramps up” is largely dependent on the number of QAs performing Assessments.

Roofing Mission Execution Timeline



Temporary Roofing PRT Structure 2014



NOTE: Once a Roofing Mission is fully staffed, there may be from 10 to 45 ROE Collection Centers and up to four Resident Engineer Offices.

Temporary Roofing Process

ROE Collection
Home owners sign a Right of Entry request allowing USACE access to their property to perform an Assessment and if warranted install a Temporary Roof.

Assessments
Quality Assurance Inspectors (QAs) perform conduct an Assessment of the damage and if warranted prepare a contractor Work Order.

Installations
Contractors are given a Work Order for each individual structure. To allow scheduling flexibility, contractors have up to 10 days to complete the work. Once a Contractor has installed the temporary roof and performed the quality control, the roof is reported as being complete to USACE.

Spot Checks
Spot checks of the contractors work and quality control program are then conducted, the minimum being 10% and the max being 20%. Increasing Quality Assurance spot checks (finals) above 20% for any single contractor requires FEMA concurrence. State concurrence is also required if cost sharing is in effect.

ACI Contractor Production

Refer to existing contracts for terms and conditions.

Days after Notice to Proceed	Single Contractor Production Rate	Multiple Contractors Simultaneous Start*
Day 4	1 roofs / day	5 roofs / day
Day 5	5 roofs / day	15 roofs /day
Day 6	20 roofs / day	55 roofs / day
Day 7	40 roofs / day	125 roofs / day
Day 8	60 roofs / day	200 roofs / day
Day 9	120 roofs / day	400 roofs / day
Day 10	300 roofs / day	600 roofs / day

*Note: Multiple Contractors production ramp up is based on availability of crews not contractors. Not every contractor will be able to ramp up to a full contract production rate of 300 roofs per day by Day 10.

Types of Roofs Covered

The roof to be repaired is composed of standard roof shingles, or a similar material which lends itself towards temporary repair with plastic sheeting or similar method. Metal roofs will be repaired as practical on a case by case basis. Roofs composed of materials such as slate, asbestos or clay tile, or other material which would be exceptionally difficult to repair, or likely to be damaged, shall not be roofed. Mobile homes will be assessed on a case-by-case basis and will be covered if practicable.

Temporary Roofing Mission: Essential Elements of Information

Essential Elements of Information: Update by 1,500 each day, the progress made during the previous day or longer period. These are reported in the SitRep.

SitRep

C.05 Temporary Roofing Mission

C.050 Temporary Roofing Mission Overview

Mission assigned date	Date from PRT
Current estimate	# from PRT
Current funding	# from PRT
ROE collection to end on (PD+30)	Date from PRT
Last roof target date (D+45)	Date from PRT

C.051 ROE Collection

ROEs collected previous day	# from FMS
Total ROEs collected	# from FMS
Cancelled ROEs	# from FMS
Valid ROEs	# from ENGLink
ROE Collection Centers	# from PRT

C.052 Assessments

Assessments completed previous day	# from FMS
Total Assessments completed	# from FMS
Assessments on track to be complete by	D+33 PRT yes/no
Roofing QAs performing Assessments	# from PRT

Temporary Roofing Mission: Essential Elements of Information

C.053 Roof Installs

Work Orders given to Contractors	# from FMS
Roofs reported installed previous day (contractor reported)	# from FMS
Total roofs installed	# from FMS

C.054 Installation Spot Checks of contractors

Spot checks last 24 hours	# from FMS
Federal Roofing QAs performing Spot Checks	# from PRT

Spot checks by contractor	Number of installs	Number of checks	Percentage
Contractor name	ENGLink	PRT	%
Contractor name	ENGLink	PRT	%
Contractor name	ENGLink	PRT	%

C.055 Plastic Sheeting

Rolls on hand previous report	# from PRT
Rolls received	# from PRT
Rolls issued	# from PRT
Rolls currently on hand	# from PRT

Estimate of additional rolls needed to complete mission	# from PRT

Temporary Roofing Mission: Essential Elements of Information

C.056 Staffing

Total number of personnel assigned to Temporary Roofing Mission	# from PRT
PRT/SMEs	# from PRT
ROE Collectors	# from PRT
Roofing QAs	# from PRT
Data Entry	# from PRT

C.057 Temporary Roofing Comments

Short comment (Short paragraph)

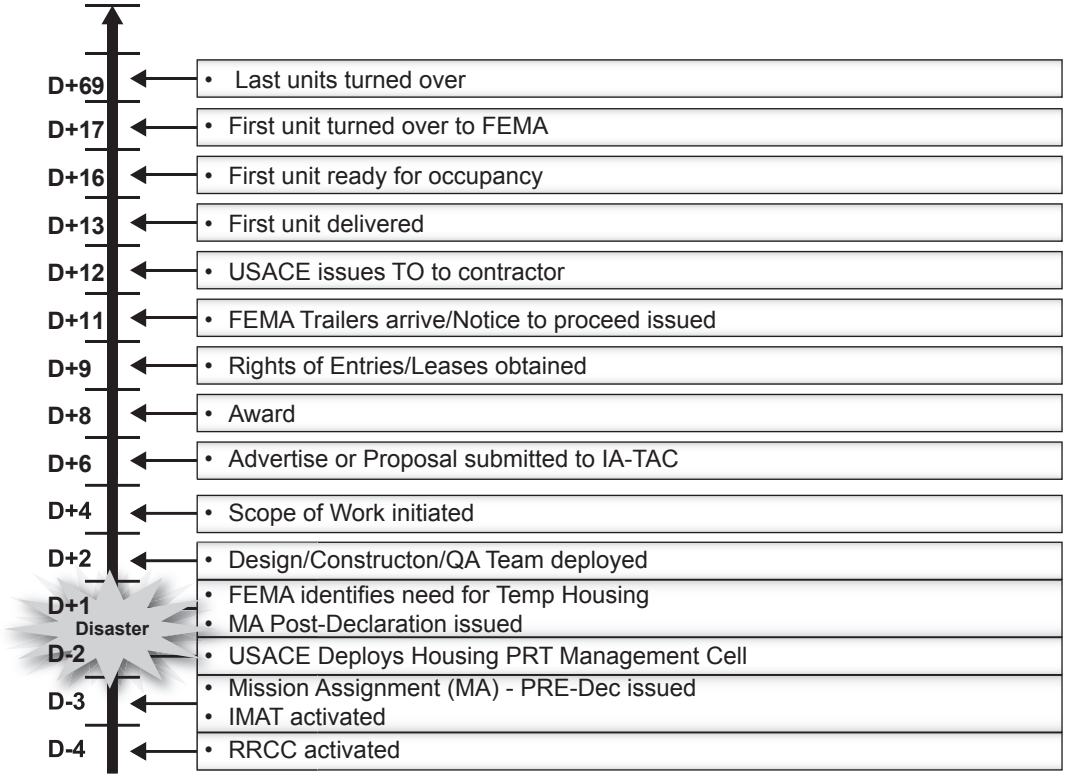
Note: Graphs, charts, etc. are not to be added to the SitRep.

Temporary Housing Mission Overview

- Temporary Housing is a highly visible mission.
- Success requires teamwork (FEMA/COE/State/Local) and advanced planning.
- FEMA's steps to providing housing relief:
  1. Provide rental and home repair assistance.
  2. FEMA may consider increasing limits on individual assistance (home repair limits, rental limits, self-help Manufactured Housing Unit [MHU] assistance).
  3. As a last resort, temporary housing Manufactured Housing Units (MHUs) may be considered:
     a. Depending on capabilities, the State may procure, transport, and set up units.
     b. In some cases, the Federal Government may take the lead (with State/Local cooperation).
- Options for Temporary Housing:
- Temporary Community Group Sites
- Replacement/rehabilitation of existing parks
- Development of new Community Group Sites
- Installation of MHUs at private home sites
- Minimum state requirements:
  - Site identification
  - Leasing and right-of-ways
  - Assistance with codes/permits
  - Community Group Site management
  - Deactivation/site restoration

Temporary Housing Mission Execution Timeline: *Existing & Private Home Sites*

(250 Manufactured Housing Units [MHUs])



Assumptions:

- These timeframes are contingent on the weather, availability of sites, and FEMA having the necessary MHUs readily available.
- Roads are accessible for contractor crews.
- FEMA issues Pre-Scripted Mission Assignments.
- No ACI is in place.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Temporary Housing No-Notice Mission Execution Timeline: *New Group Site*

D+64	• Construction complete
D+32	• Contractor mobilizes and begins work
D+30	• Notice to proceed
D+27	• Contract awarded
D+25	• Bid opening • Approval of environmental review/Finding of No Significant Impact signed
D+24	• QA Inspectors deployed
D+19	• Advertise contract or proposal to IA-TAC
D+18	• Scope of work prepared, design complete
D+15	• FEMA/State obtain lease from owner • Coordination with local governments complete
D+11	• Construction team deployed
Pre D+11	• All steps prior to D+11 are the same as the timeline for Park Expansion (40 Units)

Disaster

Assumptions:

- Schedule assumes housing need identified early. Typically does not happen until D+30.
- These timeframes are contingent on FEMA having the necessary MHUs readily available.
- These timeframes are contingent on responders being able to get into the area and assess the damage.
- FEMA has issued mission assignments.
- Roads are accessable for contractor crews to utilize.
- No ACI is in place.
- Timelines are dependent on FEMA tasking for specific sites and FEMA's Individual Assistance eligibility process.
- FEMA may utilize its IA-TAC contract and mission assign USACE only portions of mission such as design review and QA services.

Temporary Housing Mission Execution Timeline: *Park Expansion*

(40 Units)

D+33	• Construction complete
D+21	• Contractor mobilizes
D+19	• Notice to proceed
D+17	• Contract Awarded/QA Inspectors Deployed
D+16	• Bid opening/FEMA trailers arrive at OSA
D+14	• Advertise contract
D+13	• Scope of work prepared or Design completed
D+12	• FEMA obtains lease from owner
D+11	• Environmental clearance complete
D+9	• Complete local coordination/survey conducted
D+8	• Begin environmental clearance
D+6	• Site inspected
D+5	• Design/Construction Team deployed
D+4	• FEMA issues housing mission assignment
Pre D+4	• All steps prior to D+4 are the same as the Existing and Private Home Sites (250 MHUs)

Assumptions:

- Schedule assumes housing need identified early. Typically does not happen until D+30.
- Schedule assumes environmental review is a categorical exclusion (Cat-Ex).
- These timeframes are contingent on the weather, availability of sites, and FEMA having the necessary MHUs readily available.
- Roads are accessible for contractor crews.
- FEMA issues Pre-Scripted Mission Assignments.
- No ACI is in place.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Temporary Housing No-Notice Mission Execution Timeline: *Park Expansion*

D+37	• Construction complete
D+25	• Contractor mobilizes
D+23	• Notice to proceed
D+21	• Contract awarded/QA inspectors deployed
D+20	• Bid opening/FEMA trailers arrive at ISB
D+18	• Advertise contract
D+17	• Scope of work prepared, design completed
D+16	• FEMA obtains lease from owner
D+15	• Environmental clearance complete
D+13	• Complete local coordination/survey conducted
D+12	• Begin environmental clearance
D+10	• Site inspected
D+5	• Design/Construction team deployed
Pre D+4	• All steps prior to D+4 are the same as the Existing and Private Home Sites (250 MHUs)

Disaster

Assumptions:

- Schedule assumes housing need identified early. Typically does not happen until D+30.
- Schedule assumes environmental review is a categorical exclusion (Cat-Ex).
- These timeframes are contingent on FEMA having the necessary MHUs readily available.
- These timeframes are contingent on responders being able to get into the area and assess the damage.
- FEMA has issued mission assignments.
- Roads are accessable for contractor crews to utilize.
- No ACI is in place.
- Timelines are dependent on FEMA tasking for specific sites and FEMA's Individual Assistance eligibility process.
- FEMA may utilize its IA-TAC contract and mission assign USACE only portions of mission such as design review and QA services.

Temporary Housing Mission Execution Timeline: *New Group Site*

(100 Units)

D+59	• Construction completed
D+27	• Contractor mobilizes and begins work
D+25	• Notice to Proceed
D+22	• Contract Awarded
D+21	• Bid Opening • Approval of environmental review/Finding of No Significant Impact signed
D+19	• QA Inspectors deployed
D+15	• Advertise contract or proposal to IA-TAC
D+14	• Scope of work prepared, design completed
D+11	• FEMA/State obtain lease from owner • Coordination with local governments complete
D+10	• Construction team deployed
Pre D+10	• All steps prior to D+10 are the same as the timeline for Park Expansion (40 Units)

Assumptions:

- Schedule assumes housing need identified early. Typically does not happen until D+30.
- These timeframes are contingent on the weather, availability of sites, and FEMA having the necessary MHUs readily available.
- Roads are accessible for contractor crews.
- FEMA issues Pre-Scripted Mission Assignments.
- No ACI is in place.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Temporary Housing No-Notice Mission Execution Timeline: *Existing & Private Home Sites*

(250 Units)

D+72	• Last units turned over
D+21	• First unit turned over to FEMA
D+20	• First unit ready for occupancy
D+17	• First unit delivered
D+15	• FEMA Trailers arrive/Notice to proceed issued • USACE issues TO to contractor
D+13	• Rights of Entries/Leases Obtained
D+12	• Award
D+10	• Advertise or proposal submitted to IA-TAC
D+6	• Scope of work initiated
D+5	• Design/Construction/QAs deployed
D+4	• FEMA issues Housing Mission Assignment
D+2	• USACE deploys Housing PRT Management Cell
D+1	• FEMA issues disaster declaration • FEMA identifies need for Temporary Housing • Post Declaration Mission Assignment issued
Disaster	• RRCC activated • NRCC activated • IMAT activated

Assumptions:

- These timeframes are contingent on FEMA having the necessary MHUs readily available.
- These timeframes are contingent on responders being able to get into the area and assess the damage.
- FEMA has issued mission assignments.
- Roads are accessable for contractor crews to utilize.
- No ACI is in place.
- Timelines are dependent on availability of sites and weather.
- Timelines are dependent on FEMA tasking for specific sites and FEMA's Individual Assistance eligibility process.
- FEMA may utilize its IA-TAC contract and mission assign USACE only portions of mission such as design review and QA services.

Solicitation and Acquisition Procedures - Design

Each MSC should:

- Review existing IDIQ A-E contracts to assure this type design is within the Scope of Work.
- Prepare a list of those A-E contracts available for such use by 1 June annually.
- Identify Section 8(a) A-E firms within Major Subordinate Control (MSC) area of response (AOR) that could perform this work, negotiate price quickly, accept a letter contract if needed, and prepare a list of those firms by 1 June annually.
- Coordinate with appropriate SBA offices to establish expedited procedures for Section 8(a) award, if necessary.
- Contract for Site Adaptation issuing Task Orders under existing IDIQ A-E contracts or by letter contracts if no IDIQ A-E contracts available. Use of Section 8(a) A-E firms can be considered. In making decision, remember that there is a preference for A-E firms located in disaster area as well as a requirement for maximum practicable hiring and subcontracting in disaster location by A-E firms (Stafford Act). Assure contract requires daily reporting of local hiring and subcontracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- Consider that SADBU floors apply to this work (Small Business, Small Disadvantaged Business, Small Woman-Owned Business) in selecting the A-E. If the selected A-E is a large business, a provision must be added to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after contract ending date.

Acquisition Fact Sheet: Temporary Housing Missions

Solicitation and Acquisition Procedures - Construction

Contracting Actions:

- Specification and Schedule of Bid Items are developed and available on CD-ROM for Construction of Community Group Sites and Individual Sites. A draft solicitation is also developed and available.

Each MSC should:

- Develop, using the draft solicitation as a guide, a complete draft solicitation in standard procurement system (SPS) procurement desktop 2 (PD2) by 1 June annually. Construction contracts will be IDIQ.
- Develop construction contractor source lists and update annually by 1 June.
- Consider establishing a pre-qualification process for construction firms to perform this type of work.
- If an established pre-qualified bidders list is available, use sealed bid procedures for pricing. If not, use competitive negotiation procedures (Best Value Source Selection) for award of construction contract.
- Scopes of Work includes construction of Community Group Site to include water, sewer, power, pads, etc. Also includes hauling Manufactured Housing Units from Staging Area to group sites or individual sites, installation, and hook-up.
- Each Community Group Site should have a single construction contractor. A separate construction contract should be awarded for individual sites.
- Note that there is a preference for construction companies located in the disaster area as well as maximum practicable hiring and subcontracting by prime contractors in the disaster area (Stafford Act). Assure contract requires daily reporting of local hiring and subcontracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- Note that small and disadvantaged businesses (SADBU) floors apply to this work (Small Business, Small Disadvantaged Business, Small Woman-Owned Business). For any awards to Large Business concerns, the contract must include a provision to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after the contract ending date.

Acquisition Fact Sheet: Temporary Housing Missions

Solicitation and Acquisition Procedures - Manufactured Housing Units (MHUs)

Each MSC should:

- Develop a general specification detailing items, such as location of power, sewer, and water hook-ups.
- Establish a source list of MHU manufacturers, as well as retailers in their AOR and update annually by 1 June.
- Develop a draft solicitation and update annually by 1 June. The solicitation should be developed with Commercial Contracting Procedures in the IDIQ contract format with an option for increased quantities with a time frame for ordering increased quantities.
- Acquisition of MHUs should be from MHU manufacturers, if given purchasing mission is for Community Group Sites, and local retailers, if purchasing mission is for Individual Sites. Manufacturers/retailers are to deliver MHUs to the designated Staging Area.
- Manufacturers/retailers must have workers at Staging Area to make repairs or adjustments needed for government acceptance. Government inspection and acceptance will be at the Staging Area. MHUs that cannot be repaired at the Staging Area must be removed by the manufacturer or local retailer.
- There is a preference for MHU manufacturers or retailers located in the disaster area to include maximum practicable hiring and subcontracting in the disaster location by prime contractors (Stafford Act). Assure contracts require daily reporting of local hiring and subcontracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- SADBU floors apply to these contracts (Small Business, Small Disadvantaged Business, Small Woman-Owned Business). Add a provision to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after contract ending date.

Temporary Emergency Housing Essential Elements of Information: Overall Summary

Projected Requirement (Provided by FEMA)	
Units RFOed to Date (Private Sites)	
Units RFOed to Date (Community Group Sites)	
Projected Units to be RFOed in Next 24 Hours	
Units RFOed Past 24 Hours	
Personnel Deployed	
Contractor Personnel Deployed	
Install Capabilities (How Many Crews)	

Temporary Emergency Housing Essential Elements of Information: Private Home Sites

(Breakout by County)

Number of Sites Tasked (Work Orders Received)	
Number of Sites Assessed	
Number of Sites – Haul Orders Received	
Number of MHUs RFOed	

Temporary Emergency Housing Essential Elements of Information: Commercial Parks

(Breakout by County)

Number of Parks Assessed/Visited	
Number of Pads Feasible	
Number of Pads Tasked for Installation	
Number of MHUs RFOed	

Temporary Emergency Housing Essential Elements of Information: Community Group Sites

(Breakout by County)

Number of Sites Assessed	
Number of Parks Tasked for Construction	
Number of Parks Constructed	
Number of Pads Constructed	
Number of Units RFOed	

Critical Public Facilities

- Critical Public Facilities (CPF) is a highly visible mission.
- Success requires teamwork (FEMA/COE/State/Local) and advanced planning.
- FEMA's steps to providing Critical Public Facilities:
  - Provide office space for affected State and Local governments.
  - Provide classroom space for affected public school districts.
- FEMA funds CPF mission with Public Assistance (PA) funds.
- Options for CPF:
  - Temporary office/classroom complex
  - Rehabilitation of existing office/classroom space
- Minimum state requirements:
  - Site identification
  - Leasing and right-of-ways
  - Assistance with codes/permits
  - Site management
  - Deactivation/site restoration

Critical Public Facilities Execution Timeline

(25 Office/Classroom Buildings)

D+35	• First Units Ready for Occupancy (RFO)
D+17	• First Units delivered to site
D+16	• USACE issues Task Order to Contractor
D+14	• FEMA supplied Office/Classroom Units arrive at staging
D+13	• QA Inspector deployed
D+12	• Award contract; Notice to proceed issued
D+5	• Advertise Construction CT; RE obtains Right of Entry/Save & Hold Harmless
D+4	• Scope of Work Complete; Site Assessments begin
D+2	• Design/Construction/Support Team deployed
D+1	• FEMA identifies need for Critical Public Facilities; MA Post Declaration issued
D-2	• USACE Deploys Housing/CPF PRT Management Cell
D-3	• Mission Assignment (MA) Pre-Dec issued • IMAT activated
D-4	• RRCC Activated

Assumptions:

- Timeframes are contingent on the weather, availability of sites, and FEMA having the necessary office units readily available.
- With USACE supply contract, add ten days.
- Roads are accessible for contractor crews, and power is available.
- FEMA issues pre-scripted mission assignments.
- No ACI is in place.
- Categorical exclusion for NEPA compliance; if EA is required, add seven days.
- No-notice disaster events (e.g., tornado, earthquake) require a modified timeline starting at D+0.

Solicitation and Acquisition Procedures - Design

Each MSC should:

- Review existing IDIQ A-E contracts to assure this type design is within the Scope of Work.
- Prepare list of those A-E contracts available for such use by 1 June annually.
- Identify Section 8(a) A-E firms within Major Subordinate Control (MSC) Area of Response (AOR) that could perform this work, negotiate price quickly, accept a letter contract if needed, and prepare a list of those firms by 1 June annually.
- Coordinate with appropriate SBA offices to establish expedited procedures for Section 8(a) award if necessary.
- Contracting for site adaptation can be accomplished by issuing Task Orders under existing IDIQ A-E contracts or by letter contracts if no IDIQ contracts are available. Use of Section 8(a) A-E firms can be considered. In making decision, remember there is a preference for A-E firms located in disaster area as well as a requirement for maximum practicable hiring and subcontracting in disaster location by A-E firms (Stafford Act). Assure contract requires daily reporting of local hiring and sub-contracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- SADBU Floors apply to this work (Small Business, Small Disadvantaged Business, Small Woman-Owned Business) and should be considered in selecting the A-E. If the selected A-E is a large business, add a provision to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after contract ending date.

Acquisition Fact Sheet: Critical Public Facilities

Contracting Actions:

- Specification and Schedule of Bid Items are developed and available on CD-ROM for Construction of Office and/or classroom sites.

Each MSC should:

- Develop a draft solicitation and update annually by 1 June, using Commercial Contracting Procedures and an IDIQ contract format with an option for increased quantities with a timeframe for ordering increased quantities.
- Develop construction contractor source lists and update annually by 1 June.
- Consider establishing a pre-qualification process for construction firms to perform this type of work.
- If an established pre-qualified bidders list is available, use sealed bid procedures for pricing.
- If such a list is not available, use competitive negotiation procedures (Best Value Source Selection) for award of construction contract.
- Scopes of Work consist of construction of multi-unit sites to include water, sewer, power, pads, etc., as well as hauling units from Staging Area to worksite.
- Each site should have a single construction contractor. A separate construction contract should be awarded for individual sites.
- Note that there is a preference for construction companies located in the disaster area, as well as maximum practicable hiring and subcontracting by prime contractors in the disaster area (Stafford Act). Assure contract requires daily reporting of local hiring and subcontracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- Note that small and disadvantaged businesses (SADBU) floors apply to this work (Small Business, Small Disadvantaged Business, Small Woman-Owned Business). For any awards to Large Business concerns, contract must include a provision to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after contract ending date.

- Develop a general specification detailing items, such as the location of power, sewer, and water hook-ups.
- Establish a source list of office and classroom building retailers and manufacturers in their AOR and update annually by 1 June.
- Acquire office/classroom units from temporary office manufacturers, if given purchasing mission from FEMA.
- Manufacturers/Retailers would normally deliver CPF units to a designated Staging Area. Manufacturers/Retailers must have workers at Staging Area to make repairs or adjustments needed for government acceptance. Government inspection and acceptance will be at the Staging Area. CPF Units that cannot be repaired at the Staging Area must be removed by the manufacturer or local retailer.
- Show preference for temporary office manufacturers or retailers located in the disaster area to include maximum practicable hiring and subcontracting in the disaster location by prime contractors (Stafford Act). Assure contracts require daily reporting of local hiring and sub-contracting in the disaster area until all hiring/subcontracting for each Task Order is completed, then as required by the Contracting Officer.
- SADBU floors apply to these contracts (Small Business, Small Disadvantaged Business, Small Woman-Owned Business). Add a provision to require submission of SF 294 weekly and at the completion of each ordering period. If all optional ordering periods are exercised, a final SF 294 must be submitted within one month after contract ending date.

Infrastructure Assessment Mission Overview

- Infrastructure Assessment (IA) is a highly scalable and visible PRT with two main functions:
  - Augments local public works' post-earthquake/flood structural safety assessment efforts
  - Provides an overarching management cell for a broad range of special inspections (e.g. electrical, mechanical, geotechnical, water/wastewater infrastructure, heavy structural) and other ad hoc technical assistance missions that are not otherwise covered by a PRT
- IA PRT capabilities include Applied Technology Council-20 (ATC-20) Post-Earthquake (or ATC-45 Post-Flood) Training Officers who provide just-in-time training to Structural Safety inspectors. Sources of these inspectors include: local hire/public works, State assets, USACE Engineering and Construction community of practice, Forward Engineer Support Teams (FESTs), contractors, retired annuitants, and other Federal agencies (e.g. Bureau of Reclamation).
- IA PRT manages Water/Wastewater Assessment/Repair missions in coordination with US EPA. For sub-tasking US EPA, see Appendix G: Water/Wastewater Subtasking.
- Mission success requires interagency collaboration (FEMA/USACE/EPA/State/local) during all phases of emergency management (planning, response, recovery, long-term recovery).
  - Logistical support requirements for IA assistance:
    - Lodging
    - Transportation (e.g., car rentals, buses, vans, taxis, local hire, ATVs)
    - Office space/training facilities
  - Information Management support requirements
    - Communications with field teams (e.g., radios, cell phones)
    - Computers and audio visual needs
    - Work station/smart phones for portable data collection
  - Cost Estimates
    - 10,000 inspections @ $3M
    - 50,000 inspections @ $12M

EEIs for Infrastructure Assessment

Primary EEIs

- Mission Authorization Amount
- Mission Obligations
- Mission Personnel
    - USACE
    - Support Agencies
    - Contract Employees
- Inspections Requested to Date (Cumulative TOTAL)
- Inspections Completed in the last 24 hours
- Inspections Completed to Date (Cumulative TOTAL)

By County, Parish or Municipality

- Inspections Requested
- Inspections Completed in the last 24 hours
- Re-Inspections Completed in the last 24 hours
- Special Inspections Completed in the last 24 hours. (Special inspections include detailed structural inspections, geotechnical, water/wastewater infrastructure, electrical, mechanical, etc.)
- Total Inspections Completed to Date
- Special Considerations (e.g. safety issues)
- Estimated End-Date

Other Information Maintained in Data Management System for Structural Assessments (by County, Parish, etc.)

- Green-Tagged Buildings
- Yellow-Tagged Buildings
- Red-Tagged Buildings
- Water/Wastewater Infrastructure Inspections, Repairs, etc.
- Detailed Structural Inspections

Infrastructure Assessment Mission Execution Timeline

(10,000 Inspections)

D+37	• Redeploy PRT and Support Elements
D+36	• After Action Review with Management Cell and ITL
D+35	• Out Process Inspectors
D+34	• Complete Inspections
D+21	• Mission Execution IPR (Re-evaluate Requirements)
D+9	• Develop Transition/Close-out Plan
D+7	• Full Production Rate of 375 Inspections/Day
D+6	• Deploy 25 Inspection Teams
D+5	• Train 1st 50 Inspectors Alerted
D+4	• ATC-20/45 Inspectors (50) Arrive RFO
D+3	• Inspection Team Leaders Deploy and Identify Training Facility
D+2	• Mission Assignment Scoping with FEMA/State/Local • Identify Resource Requirements to RFO/UOC
D+1	• Receive Mission Assignment (MA)/PRT Management Cell Deploys
D+0	• PRT Alerted

Assumptions:

- No-notice event
- Rapid inspections
- 15 inspections/team/day
- 25 inspection teams
- One management cell for identified mission
- Inspection rate includes some downtime due to unforeseen circumstances

Infrastructure Assessment Mission Execution Timeline

(50,000 Inspections)

D+76	• Redeploy PRT and Support Elements
D+75	• After Action Review with Management Cell and SITL/ITL
D+73	• Complete Inspections
->	• Continue to Perform Inspections and QA/QC
D+60	• Mission Execution IPR (Re-evaluate Requirements)
D+36	• Complete Transition of Management Cell
D+33	• Begin Transition of Management Cell (2-3 day overlap)
D+8	• Full production rate of 750 inspections/day
D+7	• Deploy 2nd 25 Inspection Teams
D+6	• Deploy 25 Inspection Teams • Train 2nd 50 Inspectors
D+5	• Train 1st 50 Inspectors
D+4	• ATC-20/45 Inspectors (50) Arrive at RFO
D+3	• Inspection Team Leaders Deploy and Identify Training Facility
D+2	• Mission Assignment Scoping with FEMA/State/Local • Identify Resource Requirements to RFO/UOC
D+1	• Receive Mission Assignment (MA)/PRT Management Cell Deploys
D+0	• PRT Alerted

Assumptions:

- No-notice event
- Rapid inspections
- Fifteen (15) inspections/team/day
- 50 inspection teams
- Two Management Cells for identified mission
- Inspection rate includes some downtime due to unforeseen circumstances