

STATE OF COLORADO  
HAZARD MITIGATION GRANT PROGRAM  
GENERATOR PROJECTS

1. INTRODUCTION:

Hazard mitigation is any sustained action taken to reduce or eliminate long-term risk to people and property from natural hazards and their effects. Therefore, hazard mitigation actions are measured in terms of long-term hazard risk reductions and, when possible, the goal of hazard mitigation should be the permanent elimination of negative consequences resulting from a hazard. It is important to differentiate hazard mitigation from other phases of emergency management; chiefly because preparedness, response and recovery measures address the needs created by the occurrence of a disaster or emergency, rather than interrupting or eliminating the disaster caused cycle of damage, recovery and re-damage.

For the reason outlined above, the State of Colorado Division of Homeland Security and Emergency Management (DHSEM) encourages public and non-governmental agencies and organizations, private business and industry, and all Colorado citizens, to integrate hazard mitigation activities into their future development and sustainability plans.

On March 30, 2011, President Obama signed Presidential Policy Directive 8: National Preparedness (PPD-8), and the National Mitigation Framework was finalized in May 2013. The National Mitigation Framework comprises seven core capabilities, including Threats and Hazard Identification, Risk and Disaster Resilience Assessment, Planning, Community Resilience, Public Information and Warning, Long-term Vulnerability Reduction, and Operational Coordination. The Federal Emergency Management Agency's (FEMA's) Hazard Mitigation Assistance (HMA) programs provide funding for eligible activities that are consistent with the National Mitigation Framework's Long-term Vulnerability Reduction capability.

The Hazard Mitigation Grant Program (HMGP) is one of the HMA grant programs that support implementation of the National Mitigation Framework. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288, as amended), hereinafter referred to by the simplified title "Stafford Act", and implemented by Title 44, Code of Federal Regulations, Sub-Part N, Part 206.431. Further, FEMA's Hazard Mitigation Assistance Unified Guidance, dated June 12, 2013, outlines eligibility criteria and grant utilization methodologies for HMA grants.

Any use of coercive methods, police powers, or eminent domain condemnation used in connection to any FEMA funded mitigation project is prohibited. Additionally, Section 308 of the Stafford Act and Title VI of the Civil Rights Act of 1964 require administration of all HMA programs in an equitable and impartial manner, without discrimination on the grounds of race, color, religion, nationality, sex, age, disability, English proficiency, or economic status.

This handbook supplements the law, regulations, and guidance mentioned above and focuses exclusively on the HMGP and its ability to fund safe room projects.

## 2. PURPOSE OF THIS HANBOOK:

This guidance document was created to assist those applying for mitigation assistance through the Hazard Mitigation Grant Program (HMGP) offered by the Federal Emergency Management Agency (FEMA) and State of Colorado, DHSEM. It includes a step-by-step guide to the most common questions when filling out the Hazard Mitigation Generator Application. However, there may be additional assistance needed. If this occurs, please contact Colorado's State DHSEM Mitigation Team at 303-915-2848. To review FEMA's HMGP requirements please refer to the website at [FY 2013 Hazard Mitigation Guidance | FEMA.gov](#) which can be downloaded.

## 3. PURPOSE OF HMGP FUNDED GENERATOR PROJECTS:

The purpose of HMGP funded generator projects is to mitigate the effects of loss of function due to power interruption. Of particular importance to FEMA and the State of Colorado are critical facilities whose continuous functioning sustains community resilience and readiness in the presence of disaster and its negative effects. Examples of critical facilities include, but are not limited to: hospitals, fire & police stations, and water and waste treatment plants.

Generators are emergency equipment that provides a back-up source of emergency power. Generators and related equipment (e.g. hook-ups & transfer switches) are eligible provided that they are cost-effective, contribute to a long-term solution to the problem they are intended to address, and meet other program eligibility criteria.

To be eligible for the HMGP, a grant proposal must:

1. Be in conformance with the State Mitigation Plan and Local or Tribal Mitigation Plan approved under 44 CFR part 201.4; or for Indian Tribal governments acting as grantees, be in conformance with the Tribal Mitigation Plan approved under 44 CFR 201.7;
2. Have a beneficial impact upon the designated disaster area, whether or not located in the designated area;
3. Be in conformance with 44 CFR part 9, Floodplain Management and Protection of Wetlands, and 44 CFR part 10, Environmental Consideration;
4. Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed. Projects that merely identify or analyze hazards or problems are not eligible;
5. Be cost-effective and substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster. The grantee must demonstrate this by documenting that the project;

- i. Addresses a problem that has been repetitive, or a problem that poses a significant risk to public health safety if left unsolved,
- ii. Will not cost more than the anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future disasters were to occur,
- iii. Has been determined to be the most practical, effective, and environmentally sound alternative after consideration of a range of options,
- iv. Contributes, to the extent practicable, to a long-term solution to the problem it is intended to address,
- v. Considers long-term changes to the areas and entities it protects, and has manageable future maintenance and modifications requirements.

#### 4. COST EFFECTIVENESS:

When evaluating a generator project, it is necessary to determine the Benefit Cost Ratio (BCR) of the proposed project (unless the proposal is submitted under the initiative portion of the HMGP). This determination can be done by entering the data listed below:

##### 4.1. Key inputs for conducting a Benefit Cost Analysis (BCA):

###### a. Project Useful Life:

According to [OMB Circular A-76 – Revised Supplemental Handbook \(March 1996\), Performance of Commercial Activities](#), the useful life for generators or generator sets is nineteen years. This value can be used as the default useful life value when performing the BCA. It may be altered based on manufacturer warranty or other documentation that can demonstrate that the generator may be able to provide service for longer than nineteen years. Analysts should use the nineteen year project useful life first. For generator connection only proposals the useful life of miscellaneous electrical equipment and components is twenty years (*see OMB A-76 Appendix 3, FSC 6115 & 5999*).

###### b. Project Costs:

The cost of generators varies by size, installation, and purpose. The generator's size and specifications should be reasonable, appropriate, and necessary to continuing critical functions of the facility. The exact costs for generators, installation, and components should be tabulated by the subapplicant and included when performing the BCA.

###### c. Facility and Value of Service:

Analysis for facilities for potable water, waste water, police stations, fire stations, and hospitals can be quickly performed using FEMA's [BCA toolkit](#) and the [Damage Frequency Assessment \(DFA\) module](#), which provides service values for these facilities. To use these values, the analyst will need some information regarding the population served by the facility. For example, if a generator is to be installed at a waste water treatment plant, the analyst will need to know how many customers are served by the facility, as well as how many days the facility was not able to operate because of power

failure. These values can typically be obtained from the facility manager and can be provided on official letterhead for documentation purposes.

d. Recurrence Determination:

Recurrence information used in the analysis may vary by location or by cause of power failure, such as wind or flood.

Recurrence intervals may be determined by using some of the tools provided below:

- If power outages are attributed to flooding, recurrence information for the flooding event should be used in the analysis. The National Weather Services provides the Precipitation Frequency Data Server at <http://hdsc.nws.noaa.gov/hdsc/pfds/> which can be utilized to establish a frequency for various precipitation events.
- U.S. Geological Survey stream gauge data can also be used to extrapolate frequency information for flood events, details of which can be found in the *Supplement to the Benefit-Cost Analysis Reference Guide* in the FEMA library at <http://www.fema.gov/library/viewRecord.do?id=4830>
- National Snow and Ice Data Center (National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, National Science Foundation) at <http://nsidc.org/data/search/data-search.html>.
- Insurance claims, Bureau-Net information, damage repair records, data from the State/local agency, or local government Newspaper accounts citing credible sources (other than homeowner accounts) could be used in conjunction with the DFA module’s unknown frequency calculator. Using this method may require more time as three events are required for analysis.

4.2. Sample Budget

In this section, provide the details of all costs of the project. An accurate and reasonable cost estimate is essential.

**Do not include contingency costs in the budget.**

a. Materials

Item	Quantity	Cost per Unit	Cost
75 kw Diesel Generator	1	\$38,000.00	\$38,000.00
Transfer Switch, Wiring & Conduit	1	\$15,500.00	\$15,500.00
Concrete Pad 14’ x 10’	1	\$1,600.00	\$1,600.00
		Total Material	\$55,100.00

b. Labor

Description	Hours	Rate	Cost
Generator Installation	120	\$72.00	\$8,640.00
		Total Labor	\$8,640.00

c. Fees Paid

Description of Task	Hours	Rate	Cost
Engineering Const. Oversight/Permits	40	\$91.00	\$3,640.00
Project Management	52	\$92.00	\$4,784.00
		Total Fees	\$8,424.00

**Total Estimated Project Cost \$72,164**

- d. Funding Sources (round figures to the nearest dollar): The maximum FEMA share for HMGP projects is 75%. The remaining 25% can be made up of State and local funds as well as in-kind services. HMGP funds may not be matched with other Federal funds except for those funds which lose their Federal identity at the State level – such as CDGB).

Estimated FEMA Share	\$54,123.00	75 % of Total
Estimated State Share	\$9,021.00	12.5% of Total
Estimated Local Share	\$9,020.00	12.5% of Total

5. TYPES OF GENERATOR PROJECTS:

5.1. Fixed Generators:

A permanently installed generator that is a stand-alone project can be considered under regular HMGP funding if the generator protects a critical facility. A generator that is a component of a larger project (e.g. elevation of a lift station) can also be funded under the regular HMGP and aggregation of the BCA is permitted. Having a permanently installed generator is recommended for critical facilities, but not required.

Having any working generator can be helpful during an emergency since it assists in maintaining necessary, and potentially critical, operations. It can be set up with an automatic, remote, or manual transfer switch (mentioned below) depending on the circumstances likely to be faced by the facility. Regardless of the type of generator you choose, having a safe and accessible location which is pre-wired (or permanently wired) with connections for the generator, for a can save you valuable time during an emergency.

It should be noted that fixed generators are generally available in larger sizes than portable generators and usually at a lesser cost. However, very large fixed generators (750kw and above) often must be towed and/or hoisted into position and can be difficult to move in places with limited accessibility.

5.2. Portable Generators:

Portable generators are eligible provided that they meet all the HMGP requirements as described in 44 CFR Section 206.434. Portable generator projects that cannot be determined to be cost-effective via standard HMA benefit-cost methodology may still be eligible under the 5% initiative program (provided it can be demonstrated that the proposal would not

otherwise fail a BCA). The applicant must provide assurance that the portable generator will be readily available to protect the functions of the facility(ies) specified in the proposal. The proposal should describe transport, hook up, and fuel supply and storage requirements at multiple facilities and how these will be executed if the generator is portable.

A portable generator might be a better choice if you need to power only a few vital electrical items as would be less expensive than having a fixed generator. A portable generator would also be more applicable if you have multiple lift gates that need to be opened individually, but do not require continuous power. Or if you have another need to have a portable generator that you can move around to multiple needed locations.

Additionally, permanently installed generator connections that can receive power from a portable generator are cost-effective alternatives to fixed units. These connections are covered under HMGP 5% initiative. The benefit of this approach is flexibility. During an emergency a single generator could be moved into position, connected and used as needed; and when the need is met, it can be moved to the next position and the steps repeated.

### 5.3. Transfer Switches:

#### a. Manual Transfer Switches

Manual transfer switches are hardwired to your control panel and used to power portable or optional standby generators. Manual switches must be manually turned on and off when the electricity goes out or comes back on. The switch can be wired to essential circuits in the building, such as lights or wired to run the building. Manual transfer switches are most commonly used when a portable generator system is involved.

#### b. Automatic Transfer Switches

Automatic transfer switches automatically turn the generator on and switch power to it when they detect a drop in line voltage and turn the generator off when they sense the line power is restored. Automatic transfer switches can be beneficial because of their simplicity, but are generally more expensive and may not be cost effective. It is recommended that the applicant discuss their needs with a licensed electrician to determine which would be better suited for each individual project.

#### c. Remote Transfer Switches

In certain cases, such as mass alert warning systems, a battery powered remote transfer switch might be appropriate. This approach requires a higher level of implementation planning and, therefore, should be discussed with both a qualified electrician and the program staff at the State Hazard Mitigation Office. Additionally, as on-going maintenance of such systems is required, the Operations

and Maintenance Agreement for this project type is expanded to include identification of the source of such funding and an additional requirement for a written funds availability letter to cover the system during its useful life.

#### 5.4. Power Phase Differences

##### a. Single Phase:

The standby generator for a small facility must supply the same type of current that the utility company supplies to the home and should closely match the current in voltage and in the number of phases supplied. For the smaller facility, this means single-phase current at 120 and 240 volts. The generator will connect to the facility using four wires—two “line” wires which carry current, a third wire called a neutral used in conjunction with either “line” wire to provide 120 volts, and a ground wire for safety.

##### b. Three Phase:

Depending on the type of facility, there might be a need for three-phase current. Large motors are often used for commercial refrigeration, air cooling and handling, and to operate heavy machines. Three phase generators may be the best option for a facility that requires a large amount of power since they are more likely to provide the type of feed required for running the facility.

Some facilities may require voltages higher than 240 or 120 volts, and some three-phase standby generators are capable of supplying higher voltages. Some installations will need transformers and other equipment to change the voltage to the facility’s requirements. Three phase generators supply power with three wires that carry the three-phase current, a fourth neutral wire, and a ground wire. Many code jurisdictions require an engineering plan for commercial applications before permits are issued and some also require an engineer’s supervision during installation.

#### 5.5. Sizing Considerations:

The size of generator needed will vary dependent on the usage and type of facility. A local shelter, that would house displaced members in community during an emergency, would be different than a local fire house that needs a generator to assist in an emergency to operate the doors. It may not be necessary for the generator to support the facility at full capacity, but should be sized to support the critical functions of the facility.

Determining what functions the generator would need to support, is crucial in selecting the correct generator for the facility. The rated output of the selected generator must be matched to the maximum anticipated capacity needed. It is best to

create a worksheet to determine the needs of the facility. Making a list of what functions will be needed to be powered by the generator during an emergency.

The wattage needed is a major part of selecting a generator. The starting wattage and the running wattage are needed to determine the size of the generator needed. It is recommended to consult an electrician to help determine the size needed to allow the facility to function during emergency situation.

#### 5.6. Site Determination:

Determining a site for the generator is important. It should be close enough to the facility that it is easily accessible. This would also reduce the cost since less material would be used to hook-up the generator to the facility.

The selected site should not be in a Special Flood Hazard Area or, if no feasible alternative exists, the generator must be elevated to a height at or above the 500-year anticipated flood elevation and must also comply with the community's floodplain management ordinance.

### 6. SCENARIOS:

Different power failure scenarios at various facilities are outlined below. For analysis purposes, each facility was reviewed using 4 days of loss of service due to power failure at the 25-year recurrence. The 25-year recurrence interval for the test cases is based on observed wind speeds and the frequency was extrapolated using the [Advanced Technology Council Wind Speed tool](#) for the New York metropolitan area. Other project locations should use the appropriate recurrence intervals for the hazard being mitigated. Analysis was performed using the DFA module in the [BCA Toolkit](#).

The scenarios are for demonstration purposes only. Dollar amounts and frequency intervals were chosen for comparison purposes only. Analysts should use the appropriate values for the facility being examined. For those performing the analysis, assistance is available through the benefit-cost helpline at [bchelpine](#) or at 1-855-540-6744. The helpline is not allowed to perform or review analyses but can provide answers to specific questions regarding methodologies.

When performing the BCA, inputs used in the module should be documented, as with all analysis. Documentation sources may include, but are not limited to, correspondence with facility or site managers, data available from the county or facility Web site, information from other government Web sites, media releases, engineering analysis, and letters from the facility manager. Discussion of data documentation is available in the BCA training materials available on FEMA.gov. There are no special or extraordinary data documentation requirements for this project type.



### **Scenario 1: The Purchase and Installation of a Generator at an Urban Police Station**

In this scenario we have the following information:

- The police station has 119 officers who serve up to 27,000 residents
- The police station loses power and the efficiency of the police station drops to 50 percent (assumes 50 percent of the force are working out of other facilities or within the community)
- The power is not fully restored for 4 days
- The project useful life for the generator is 19 years
- The project cost is \$50,000

With the above information we come up with a benefit cost ratio of 1.23

### **Scenario 2: The Purchase and Installation of a Generator at an Urban Fire Station**

In this scenario we have the following information:

- The fire station has 119 firefighters who serve up to 27,000 residents
- The fire station loses power and the efficiency of the fire station drops to 50 percent
- The power is not fully restored for 4 days
- The project useful life for the generator is 19 years
- The project cost is \$50,000

With the above information we come up with a benefit cost ratio of 0.80

### **Scenario 3: The Purchase and Installation of a Generator at an Urban Hospital**

In this scenario we have the following information:

- The hospital serves up to 27,000 residents
- The power is not fully restored for 4 days
- The project useful life for the generator is 19 years
- The project cost is \$200,000

With the above information we come up with a benefit cost ratio of 1.0

### **Scenario 4: The Purchase and Installation of a Generator at a Rural Area Water Treatment Plant (Potable Water)**

In this scenario we have the following information:

- The water treatment plant serves up to 15,000 customers
- The plant loses power for 3 days

- A 100-year recurrence interval is used
- The project cost is \$200,000

With the above information we come up with a benefit cost ratio of 1.05

**Scenario 5: The Purchase and Installation of a Generator at an Urban Area Waste Water Treatment Plant**

In this scenario we have the following information:

- The waste water treatment plant serves up to 500,000 residents
- The waste water treatment plant loses power and there is no service
- The power is not fully restored for 4 days
- The project useful life for the generator is 19 years
- The project cost is \$1,500,000

With the above information we come up with a benefit cost ratio of 24.8

Even though this is a positive number, it would not be considered as a stand-alone project.

**7. KEY DEFINITIONS & CONCEPTS:**

GRANTEE: The State of Colorado enters into a FEMA-State agreement and in doing so becomes designated as the Grantee. The Governor designates an Authorized Representative (GAR); who may in turn appoint alternates and subordinates to implement the various assistance programs authorized by the President. The Grantee is required to develop and maintain a current FEMA approved State Standard Hazard Mitigation Plan in order to receive financial assistance.

SUB-APPLICANT & SUB-GRANTEE: State agencies, local units of government, Tribal governments, and certain non-profit organizations qualify as applicants, and those with FEMA approved mitigation proposals are designated as Subgrantees. The Grantee, through the Colorado DHSEM, enters into a grant agreement with Subgrantees who are authorized to acquire certain flood damaged real property. These grant agreements contain provisions to ensure HMGP funded acquisitions are undertaken in a manner that is consistent with the requirements of 44CFR§206.434 and other federal and state regulations.

FUNDING: The State of Colorado will receive a HMGP award equal to 15% of the FEMA funds expended by the Individual and Public Assistance programs, certain Mission Assignments, and certain other direct assistance programs. Because HMGP funding is formula based, it is not unusual for the grant estimate to undergo change long after the date of declaration.

FUNDS Applicants should be aware that historically the funds requested from the

AVAILABILITY: HMGP exceed the amount of money available. Therefore, applicants should regard the HMGP as a competitive grant; and should rank their proposals in priority order; highest first, second next, and so on.

NOTICE OF INTENT: Following a major disaster declaration, the Colorado Officer of Emergency Management will notify potential HMGP applicants of the program’s availability. In response to such a notification, potential applicants should prepare and submit to the Grantee a “Notice of Interest (NOI)” form (*see Sample NOI form*).

SUB-GRANT APPLICATION: Upon receipt of all NOI Forms, the Grantee evaluates the applicant’s proposed projects against the minimum eligibility requirements established under FEMA and State guidelines. The Grantee will send HMGP application packages to all eligible applicants who have submitted an acceptable NOI. Additionally, the Grantee will advise all eligible applicants of its priorities for distributing HMGP funding.

COST SHARING: The total project cost, once tabulated, is divided federal and non-federal shares. The maximum federal share may not exceed 75% of the project’s cost. The minimum non-federal share is no less than 25% and can be derived from multiple sources. Additionally, the non-federal share may be a cash contribution, cash equivalent contributions, or a combination of both.

BONA FIDE NEED RULE: FEMA will only consider HMGP proposals that undertake work related to mitigating a legitimate, or bona fide, need arising in, or sometimes before, and continuing to exist in the fiscal year for which the appropriation is/was made. In simpler terms, FEMA will not approve grant funding for any project that is already underway or complete before the project’s approval can be granted by FEMA. Additionally, project costs cannot be incrementally approved as a way of providing partial funding to a project already underway.

DUPLICATION OF PROGRAMS: Many federal grant programs prohibit duplication of program (DOP) payments or co-mingling funds between different grants. However, the Community Development Block Grant (CDBG) is a federal appropriation to states and certain communities that can be used to meet all or some of the non-federal match requirement under the HMGP. If used, you will be required to identify this source because the combination of FEMA HMGP and CDBG funds may trigger the requirement for a Single Audit Act report.

## 8. GETTING THE APPLICANTS PROPOSAL STARTED:

Once an applicant decides to pursue a HMGP grant a series of sequenced steps should occur.

### A. Applicant's Authorized Agent:

The applicant must pick an individual to manage development of the proposal. In many cases this individual will be an employee of the applicant who has knowledge of the applicant's organizational structure, local ordinances, and is aware of the problem(s) to be addressed through hazard mitigation. The selected individual is designated the "applicant's agent", and a resolution appointing the agent must be forwarded to the Grantee with the applicant's NOI (*see sample Designation of Agent Resolution form*).

### B. Duties Assigned to the Applicant's Authorized Agent:

The applicant's agent should become familiar with the laws, rules, regulations, and guidance that pertain to the HMGP. The State of Colorado provides assistance to help guide the agent through this process and much of the information necessary to manage the application's development is included in this handbook. The applicant's agent will ultimately manage development of the applicant's HMGP proposal; to include assigning tasks to others; while retaining overall responsibility for the work. In many cases the applicant's agent will become the Subgrantee's Project Officer if and when the proposal is approved.

### C. Pay Requests:

Federal HMGP funds are awarded to cover the federal share of all direct project costs. A portion of the project's non-federal required matching funds may be awarded by the State of Colorado or provided under the CDBG if so approved. The remaining non-federal share must be matched from the source(s) indicated in the applicant's proposal. Generally, funds are provided on a reimbursement basis. Although the Grantee reserves the right to waive the reimbursement rule for extraordinary circumstances, in most cases this action will be reserved to advancing funds necessary to acquire those real properties scheduled for closing within thirty days of the request for funds. Therefore, if your community does not have the financial resources to cover payments before receiving grant funds, you may want to plan ahead when it comes to scheduling closings or paying invoices.

Access to these funds will be through a Letter of Credit Pay Request (format to be supplied by the Grantee during the kick-off meeting). The Letter of Credit Pay Request must be accompanied by supporting documentation showing expense(s) for which reimbursement is being sought. The State Hazard Mitigation Officer reviews all pay requests and documentation before processing the request. From that point each request generally takes 10-15 days before funds are deposited electronically into the applicant's account. In the event the subgrantee does not have electronic

funds transfer (EFT) capabilities, a paper check (State Warrant) will be issued and mailed first-class to the subgrantee’s business address.

The following are the procedures for completing and submitting a Letter of Credit Pay Request:

1. The community’s Applicant’s Agent prepares and submits a full or partial payment request for allowable costs outlined in the Grant Agreement and the FEMA approved scope-of-work.
2. The Letter of Credit Pay Request will specify the FEMA and DHSEM project numbers; the name of the subgrantee; requester’s name; the project’s title; and date of the request.
3. Additionally, the Letter of Credit Pay Request will outline the funds being requested based on both the budget line item and the cost share for each expense. The following is an example of the fund request format (*see example below*):

Itemized Costs and Supporting Documentation	Grant Object (FEMA Approved Budget Line Item)	Eligible Expenditure	Federal Share (75%)	Non-Federal Share (25%)	Attached Supporting Documentation
	Engineering/Bid preparation	\$3,000.00	\$2,250.00	\$750.00	Copy of , bid for services, Invoice from John Doe Engineering Firm, Check 9876 to John Doe Engineering Firm fro \$3,000.00
	Excavation Site Work	\$6,000.00	\$4,500.00	\$1,500.00	Check 9877 to Jon Doe Engineering Firm for Excavation Site work.
	Foundation and electrical work	\$28,000.00	\$21,000.00	\$7,000.00	Check 9879 for foundation to Jon Doe Engineering Firm for the amount of \$2,000.00. Check 9882 to Jon Doe Engineering Firm in the amount of \$26,000.00.
	Generator/ Transfer Switch	\$36,000.00	\$27,000.00	\$9,000.00	Check 9885 to Jon Doe Engineering Firm in the amount of \$36,000.00 for generator and transfer switch.
	Site Restoration	\$2,500.00	\$1,875.00	\$625.00	Check 9895 to Jon Doe Engineering Firm for site restoration.
	<b>TOTAL COSTS</b>	<b>\$75,500.00</b>	<b>\$56,625.00</b>	<b>\$18,875.00</b>	Remaining non-federal share: \$18,875.00. Paid by subgrantee.

**D. Rounding to Whole Dollars:**

The federal government uses only whole dollar amounts when awarding and reconciling project awards. Therefore, the Letter of Credit Pay Request should also be prepared using a whole dollar amount system. Under this system each claimed expense is listed by approved budget line item and divided according to the authorized federal and non-federal cost shares. Tabulations are done line-by-line rather than by the total. Any line amount division resulting in fractional federal or state cost share will be rounded down if 49¢ or less and rounded up if 50¢ or more.

**E. Certification & Authorization**

This part of the Form is self-explanatory; however, if the Letter of Credit Payment Request is not signed by the subgrantee’s authorized agent or the Chief Executive or Fiscal Officer, the request cannot be processed and will be returned.

F. Scope of Work:

The approved Scope of Work (SOW) represents what information has been submitted, reviewed, and approved in the project. FEMA's approval letter will identify the specific locations and types of safe rooms approved for construction. Only the activities on the approval letter will be eligible for project inclusion. The SOW will also include details on budget line items and if conditions exist that may affect continuance of the work.

In the event the subgrantee discovers that the approved SOW needs to be modified, the subgrantee will notify the Grantee of the need for a change in writing. A Change of Scope is not guaranteed and the subgrantee should take all reasonable and necessary steps to limit or stop further project work until approval of the change has been granted by FEMA.

If an approved activity is found to be unworkable, the subgrantee may request in writing an activity to be substituted from the project's stand-by list. Because of environmental review requirements only those properties on the stand-by list may be substituted. When such a substitution does not cause an increase in the project's budget the Grantee may ask for expedited approval from FEMA of the substitution. However, when a cost increase is necessary, the Grantee must identify where the additional money will come from and whether or not the approved action remains cost-beneficial.

Although the Grantee reserves the right to deny the request as part of its management responsibilities, only FEMA has the authority to approve the requested action.

G. Activation of Subgrantee Project Support Systems:

The subgrantee should next activate all of its systems that were developed for support of the project. This includes drawing cash from the designated general or special account to open the project account; releasing advertisements for bid of design services; and, notifying the project participants that the project is approved.

H. Bidding Out Work:

The subgrantee must have written procedures that cover all procurement actions which must, at a minimum, comply with Federal requirements as stated by 44 CFR, Part 13.36. When procuring goods and/or services, the subgrantee's agent must use a fair and competitive process conducted pursuant to the applicable regulations and procedures outlined below:

1. In arranging for professional services, buyers are required to follow the procurement standards established by the Colorado Department of Personnel and Administration, State Purchasing Office.
2. All purchases are required to be made as prescribed in the appropriate state laws and the Federal *Uniform Administrative Requirements for Grants and Agreements* (2 CFR, Chapter II, Part 225 – formerly OMB Circular A-87).

3. “Cost-plus-percentage-of-cost” or “percentage of construction cost” contracting is prohibited and contract methodologies using same are not allowed.
4. In order to avoid awarding a contract to barred contractors, the subgrantee must conduct reasonable research into the background of bidders and sub-contractors before entering into a purchase agreement or contract.

#### I. Cost Over-Runs and Under-Runs:

It is understood that the project’s budget was based on best available information, but it was still developed through an estimation process. Therefore, it is important for the subgrantee to identify when the project’s budget has too little or too much money. The funds needed to cover cost over-runs should come from the approved project first.

When the approved project is able to restructure its budget to meet the requirement, the subgrantee can wait until its next quarterly report filing to notify the Grantee of the change. However, when the subgrantee is unable to restructure its obligations to accommodate the cost over-run, the subgrantee must immediately notify the Grantee of the situation and not incur any additional financial obligations. The Grantee may have a small amount of reserve funds available to deal with over-runs or not. If no reserve funds are available, the Grantee can examine other approved projects to determine if a cost under-run might exist, and if so, it can request from FEMA a de-obligation of funds from the donor project and a supplemental obligation of funds to the deficient project.

The obligation of funds to cover cost over-runs cannot be guaranteed since the HMGP is formula based and federal subscriptions may not exceed the Grantee’s total award.

#### J. Enforcement:

As a condition of receiving grant assistance, FEMA requires the subgrantee to maintain the generator in accordance with the approved project scope. The subgrantee is required to undertake periodic inspections of the generator to ensure that compliance is being maintained. If the subgrantee discovers that the project is out of compliance (or is informed of same at any time), the subgrantee shall notify the Grantee of the violation and indicate what steps are being taken to remedy the situation. The subgrantee will then have 60-days to bring the property back into compliance. If compliance cannot be achieved within the 60-day timeframe, the Grantee will notify the FEMA Regional Administrator of the violation and must also outline how the matter will be resolved. The Grantee may indicate any of the following as possible remedies:

1. The subgrantee is working to remedy the situation, but needs additional time (specify length) to complete the action. No enforcement action is needed.
2. The subgrantee is working to remedy the situation, but lacks the resources necessary to compel a solution. Enforcement action is needed.
3. The subgrantee has failed to demonstrate good faith and is not working to resolve the problem. Enforcement action is needed.

4. The Grantee lacks the authority to remedy the situation and asks the FEMA Regional Administrator to intervene.

If enforcement action is needed, the FEMA Regional Administrator may direct that future FEMA grant funds be withheld pending corrective action; that the subgrantee reimburse FEMA and the State a prorated portion of the expended project funds equal to all of the costs necessary to cure the violated property; and/or require the transfer of Title to another eligible entity. If none of these actions brings the property back into compliance, the FEMA Regional Administrator may refer the matter to the Office of Chief Counsel for criminal and civil prosecutions in a court of competent jurisdiction (*see 44 CFR §80.19*).

## 9. PROJECT CLOSEOUT:

### A. Closeout Request:

Once all approved mitigation actions are complete, and all issues connected with same are extinguished, the subgrantee may request formal project closeout from the Grantee. The closeout request must be in writing and the following supporting documentation must be attached:

1. A sufficient number of photographs demonstrating that the generator has been constructed / installed;
2. Latitude and Longitude coordinates for the generator;
3. Any equipment purchased, leased, or rented to support the project needs to be returned (for credit if possible), or disposed of under the terms of the General Services Administration's (GSAs) surplus property program. Tracking of government property may be accomplished using FEMA Form 20-18 (OCT 04 Version).

### B. Record Retention:

The subgrantee is required to maintain project documentation for at least three years after the project's "official" completion. In this case "official" means after all work is complete, all bills are paid and any non-expendable property is reconciled, all audit requirements (including Single Audit Act reporting) have been satisfied, and the Grantee and FEMA agree that the project is complete. Project files with records that contain personally identifiable information (PII) are covered under the Privacy Act of 1975 (5 U.S.C. §522A, as amended). The subgrantee must maintain confidentiality of all PII records and can only release said records in accordance with the disclosure rules outlined in the Act. Further, the subgrantee must document of all disclosures of PII information and re-set the three year record retention schedule to reflect the day of disclosure as the first day. These records are usually retained at the local level in accordance with local requirements.



### C. Single Audit Act:

Any time a non-federal entity expends \$500,000 in federal grant awards in a single fiscal year it is required to obtain an annual audit in accordance with the Single Audit Act Amendments of 1996. The Single Audit Act review will incorporate review elements included in Office of Management and Budget (OMB) Circulars A-87, A-102, A-110, and A-133 (to include the current year's compliance supplement). Additional information about the Single Audit Act may be found online at:

[http://www.whitehouse.gov/omb/financial\\_fin\\_single\\_audit](http://www.whitehouse.gov/omb/financial_fin_single_audit)

The cost of conducting an audit in compliance with the Single Audit Act is eligible for project reimbursement so long as the project award alone is \$500,000 or more and no other federal grant is in excess of the reporting threshold; or if the project award contributes 50% or more of the combined federal grants that equal or exceed \$500,000.00. If another federal award greater than the HMGP award exists, the cost for a Single Audit Act report will not be eligible.

## ADDITIONAL PROGRAM INFORMATION

GRANTEE RECOMMENDATION: The Grantee will convene a team of hazard mitigation subject matter experts to review and rank the submitted applications. Ranking factors may include any of the following:

- a. How completely does the proposed action solve the identified problem;
- b. How closely does the proposed action match the Grantee's priorities;
- c. What is the benefit versus cost ratio of the proposed action;
- d. What is the total cost of the proposal and what percentage does that cost represent out of the total funds available; and,
- e. Does the application identify a post-project use for the acquired land?

The project ranking team's recommendations are then submitted to the GAR for the final assessment of those projects to be included in the Grantee's HMGP application to FEMA.

FEMA APPROVAL: FEMA will review the State's application and award HMGP funds to the Grantee for those projects that meet all eligibility requirements. FEMA will follow the Grantee's ranking structure when reviewing applications. The Grantee will then execute a cooperative agreement with the subgrantee in order to release funding to the subgrantee for project execution.

The application's format will be created by the Grantee to ensure that opportunities to enter all data required by FEMA are included. Applications submitted in formats not approved by the Grantee will be returned to the applicant without consideration. Applicants will be advised of the Grantee's deadline for applicants to submit completed mitigation proposals. Interim deadlines may be required based upon project.

APPLICANT'S BRIEFING: The Grantee may conduct an HMGP applicant's briefing, either at its office in Centennial, CO, or in various locations throughout the impacted area, or both. The applicant's agent, the agent's back-up (if one exists), and any individual that has special responsibilities for assisting or participating in the development of the community's HMGP application should plan to attend the applicant's briefing. The briefing will outline general information about the HMGP, the disaster event and the Grantee's mitigation priorities; provide updates on any recent changes to rules, regulations or guidance; allow an opportunity for applicants to ask questions and receive answers; and, allow the Grantee to distribute HMGP materials such as forms, guidance documents, and brochures. This briefing is not intended for the general public and the applicant should not invite its citizens. The public will not be barred from observing the briefing.

FUNDING: The State of Colorado will receive a HMGP award equal to 15% of the FEMA funds expended by the Individual and Public Assistance programs, certain Mission Assignments, and certain other direct assistance programs. Because HMGP funding is formula based, it is not unusual for the grant estimate to undergo change long after the date of declaration.