

American Samoa Earthquake, Tsunami, & Flooding FEMA-1859-DR-AS

Emergency Temporary Power Mission Update – 22 October 2009

PURPOSE

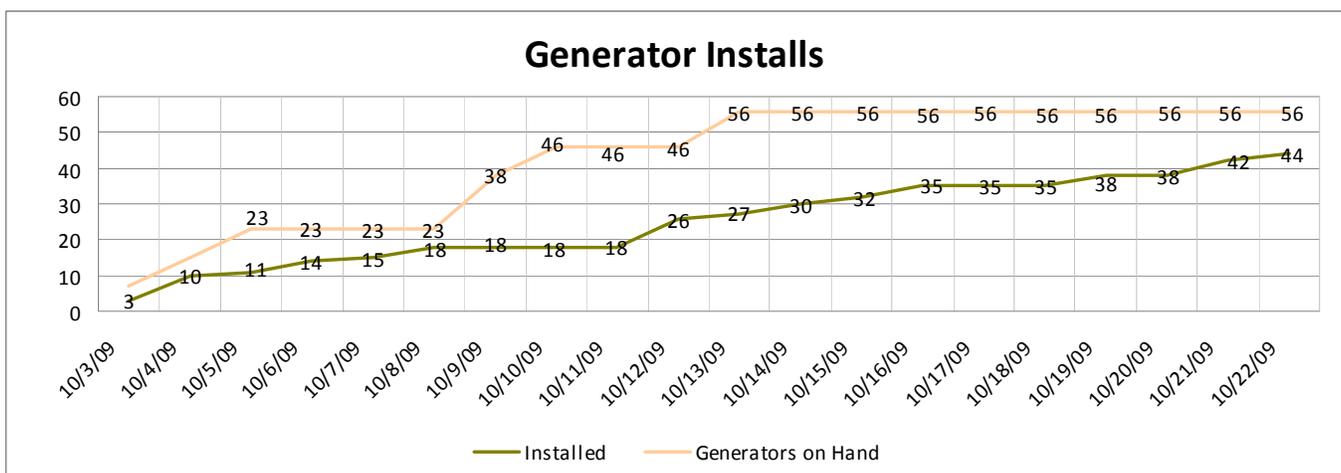
To provide and update on the emergency temporary power mission being executed by Emergency Support Function (ESF) # 3 with the resources of the Power Planning and Response Team and the Prime Power Battalion to support the power needs of American Samoa in coordination with the American Samoa Power Authority (ASPA) as a result of the ASPA Satala Power Plant being destroyed by the tsunami.

BACKGROUND

Tsunami wave inundation destroyed the ASPA Satala Power Plant, resulting in the loss of power to the east side of the island of Tutuila. The loss of the Satala Power Plant left the island of Tutuila with insufficient electrical generation for approximately 50% of its customer base. The Satala Power Plant sustained the most damage and is not operational. With the Satala Power Plant destroyed the Tafuna Plant has been operating at near or at full capacity. Normal system operations would be to run the facility in the 80 percent range to cover surge power demands. The current strategy is significantly taxing the Tafuna plant and increases the chance of total system failure throughout the island.

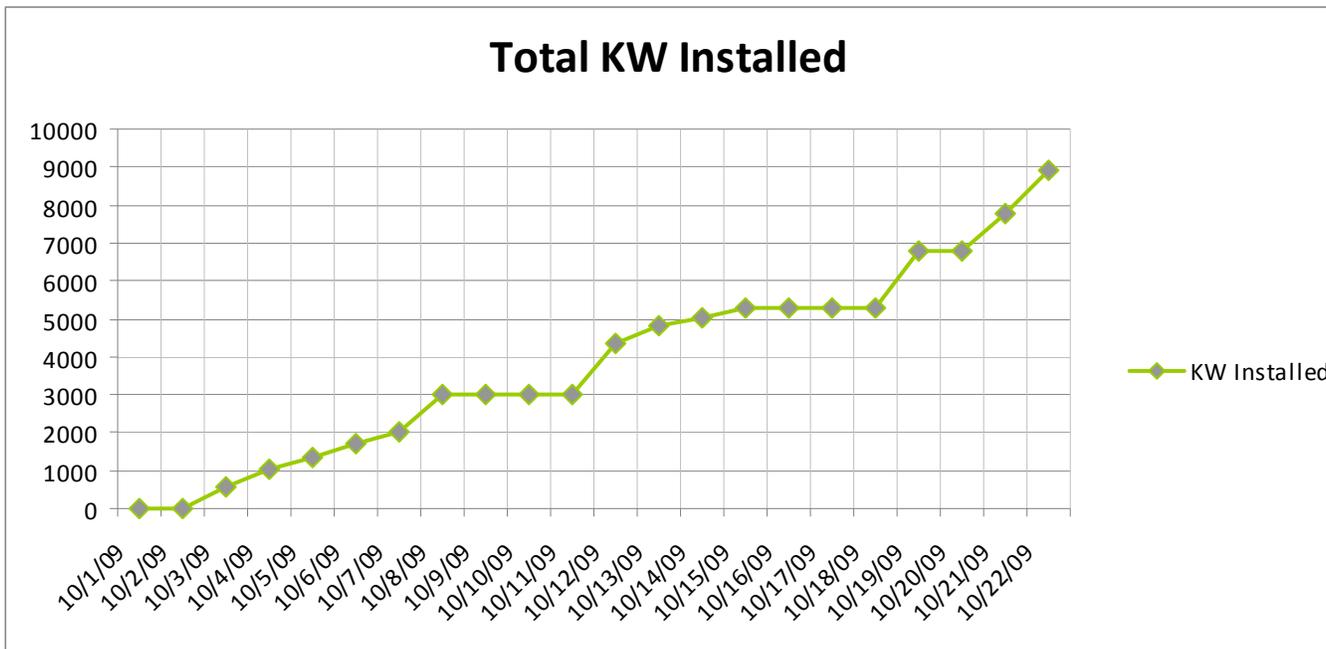
CURRENT OPERATIONS

Current operations are providing for Prime Power to install up to 56 generators, 46 of which are sized 11.5KW-640KW and 10-500KW units with transformers to restore temporary power delivery to commercial areas and critical government facilities, (not likely that all 56 generators will be online at the same time as some smaller size generators are replacing larger generators already installed). This first phase/tier provides immediate benefits but is not a long term solution. This effort will also provide some relief to the overstressed Tafuna Power Plant. Progress to-date is reflective of the following chart indicating that 44 installs have been accomplished to date.



During the last five days the installs on the 500KW and transformers have gone extremely well despite periods of tropical downpours. The Prime Power Battalion was successful in placing 500KW units with transformers at Leone; Fagatui'a; and Pago Pago East. In addition, they installed 2-640KW units at

Pago Pago Marketplace. These installs have dramatically increased power on the grid. Since Sunday, 18 September 2009, the Prime Power Battalion installs have put about 4 Megawatts on the ASPA system. Additional requirements are being identified for the Breakers Point area in coordination with ASPA.



640KW generators being placed in the Pago Pago Marketplace area with SSG Michael of USACE’s Prime Power Battalion making the connection from the generator to the transformer before power is placed on the ASPA grid.

In support of the current operations, ESF #3 continues to coordinate with the USACE Honolulu District for the award of Task Order #2 of the O&M Contract with KBR for operation and maintenance of the 56 FEMA generators currently on-site in American Samoa. In that regard, the KBR advance team has evaluated the requirements for performance on the contract and Task Order #2 is expected to be awarded by 23 October. It is anticipated that the O&M contract will be in full operation by 27-28 October 2009. The O&M Contract is a 60-day contract with two 30-day options. Due to expected delays of the Tier II effort the FEMA generators are expected to be in place for most of the 120-day period. See the Next Steps below.

NEXT STEPS

The Phase II effort Tier II effort provides for the procurement and installation of 25-1 Megawatt generators to be placed strategically on the electrical grid. This will replace generation that was lost when the Satala Power Plant was flooded, and significantly reduce the extra burden that the Tafuna Plant has been carrying since the loss of the Satala Power Plant. There will be 11-1 megawatt generators placed at Leloalooa, 7-1 megawatt generators placed in the Satala Power Plant area and 7-1 megawatt generators placed near the Tafuna Plant. These generators will remain in place for 18-24 months. The units are part of an overall requirement of 25 megawatts that will be remaining in service until the Satala Power Plant is replaced. Once these units are in-place most of the FEMA Tier I generators will be removed from service and shipped back to the FEMA TLC in Honolulu. The ASPA is to complete this effort via contract but does not expect the contracted generators to arrive on the island before 9 November 2009. The 9 November date reflects an initial shipping date of 25 October 2009.

The Phase III or Tier III effort provides for the replacement of the Satala Power Plant with a system generating at least 28MW. The U. S. Department of Energy completed an assessment of the Satala Power Plant on 7 October 2009 and determined that the repair of the facility would cost in excess of \$27 million while a total replacement cost would roughly amount to slightly more than \$47 million. The report has been provided to the FEMA Infrastructure Section. If the determination is that a new power plant is to be built to replace the Satala Power Plant the facility will more than likely be a series of substations rather than one large plant. These substations would also be located outside of the coastal flood zones.

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