



Fuel Response Options to a Catastrophic Event

Western Regional Emergency Fuel Coordination Meeting

California Energy Commission Sacramento, CA

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Catastrophic Earthquake



• Unprecedented event - not experienced in our lifetimes





- Business-as-usual will not suffice
- Large portion of fuel supply will be lost or unavailable
- Demand outside the impacted region will experience varying degrees of panic-buying



Transportation Fuel Adequacy



- There will not be sufficient transportation fuel supplies in the SW United States to meet demand following a catastrophic earthquake
- Steps will need to be undertaken to *increase* fuel supply & decrease panicbuying/hoarding



Brooklyn gas lines during aftermath of Superstorm Sandy - Photo Credit: thehotzoneusa.com





- Options available to increase supply but require cooperation and pro-active actions to pave the way
 - Waiver of fuel specifications
 - California has its own gasoline & diesel fuel regulations require waiver by the California Air Resources Board gasoline and diesel fuel
 - U.S. EPA would also have to waive federal Reformulated fuel regulations
 - Waiver of non-taxable diesel fuel regulations
 - Allow dyed diesel to be used
 - Consider waiver of Jones Act to increase delivery capability of waterborne transportation fuels
 - Waiver of driver-hours restrictions for delivery tanker trucks will be automatic after declaration of emergency
 - To the extent feasible, all of these regulatory capabilities should be worked out in advance including regional states



Other Options for Re-supply



- FEMA/DLA efforts to create "hub-and-spoke" importation and re-distribution of transportation fuels
 - Utilize marine assets tankers and barges
 - Questions concerning availability and timing of response
- Potential re-tasking of existing rail receipt terminals
 - Can rail terminals be repurposed to receive rail cars of gasoline and diesel fuel rather than ethanol and crude oil?
 - Which locations may be feasible candidates and what effort/equipment modifications would be required?
- Identification of potential rail sites that could be proactively developed for use during a catastrophic event
 - Would target rail transloading potential



Transportation Fuel Demand



- Loss of production from Northern or Southern California refineries and/or ability to ship refined products from their facilities will significantly curtail or halt petroleum product pipeline deliveries to areas outside the impacted region
- Media and consumers will quickly arrive at this conclusion
- Inaction could result in supply shortages all motorists "topping off" their tanks equates to about three days-worth of gasoline production/demand – would drain the distribution system
- This scenario will not be isolated to California
 - Nevada pipeline deliveries will be curtailed, UNEV pipeline will not be able to completely make up the shortfall
 - Arizona supplies will also be reduced with additional supplies from the East Line lagging by several days and likely insufficient to replace all of the volume reduced on the West Line
 - These two states will also need to take similar steps to curtail demand



CEC Emergency Response Role: Petroleum Fuel Supplies



- The Office of Emergency Services (CalOES) is the lead State agency in an emergency
- CEC Role is outlined in the Energy Commission's Emergency Plan: <u>http://www.energy.ca.gov/emergencies/plan.html</u>
- Authority and Statutes that authorize these duties:
 - Public Resource Code Section 25216.5 (b)
 - Public Resource Code Section 25700
 - Government Code 8596
 - Emergency Order #6
- Emergency Order #6: Empowers the Energy Commission to hold control of and redirect petroleum stocks needed to ensure the health, safety and welfare of the public
- The Energy Commission does not own fuel supplies/resources nor does the program provide means or methods of delivery





Energy Emergency Response Phases



- Readiness normal monitoring mode
- Verification enables collection of information on a daily basis
 - Must announce this to media
- Pre-Emergency consider voluntary actions
 - Fuel demand reduction
- Emergency
 - Formal declaration
 - Energy situation very drastic requiring extensive government measures
 - Emergency Order #6, formal Fuel Set-Aside Program initiated

SET-ASIDE IMPLEMENTATION

Governor Signs Emergency Order #6

Governor Proclaims A State of Emergency

Supply Problem is Widespread

Fuel Unavailable At Any Price

Conservation Programs Unsuccessful

Energy Emergency Plan Activated





State Energy Officials

Fuels Set Aside Program - Purpose

From the Energy Commission Emergency Response Plan

- Page 9, Paragraph 2: The state's set-aside program is designed to interfere minimally with the market, using volumes of fuel sufficient to satisfy only emergency and essential services. All fuel delivered through the program will be purchased at the market price and, whenever possible, through the usual fuel supplier.
- Page 9, Paragraph 5: While it is hoped that market forces will assist in balancing supply and demand, this strategy generally results in higher energy costs.





- Authorizes the Energy Commission to hold "control and coordination" of petroleum and petroleum products in California
 - Formal Fuel Set-Aside Program (FSAP)
 - Emergency responders life and property
- The Energy Commission coordinates with the California Office of Emergency Services (OES) [ESF #7] to ensure critical fuel supplies get to where they are needed most during a declared emergency.
- Non-emergency FSAP activities handled by the CEC at their Sacramento headquarters
- Liquid transportation fuels, not electricity or natural gas
 - Gasoline & diesel fuel
 - Civilian and military jet fuel
 - Propane



FSAP – Formal & Informal



Role of the Energy Commission: Mediate communication between entities (responders) with *fuel needs* and entities with *fuel stock* (refineries & distributors)

- FSAP has two versions Emergency (formal) and Non-emergency (informal)
- Emergency-related transportation fuels requests
 - CEC personnel stationed at OES
 - Filling mission tasks for transportation fuels through OES Web EOC system
- Non-emergency-related transportation fuels requests
 - CEC personnel stationed at the Energy Commission
 - Fuel requests for other reasons
 - o Economic harm
 - o Community hardship
 - o Essential infrastructure
- Priority given to emergency-related requests if supplies are constrained





EMERGENCY SERVICES

- First responders requesting emergency fuel use standard resource request procedures set by their local or state agency through established emergency operating center (EOC) protocols
- The Energy Commission will coordinate with the Office of Emergency Services (CalOES) for these requests

Civilian Requests

- Civilian entities may submit requests based upon the program guidelines defined on the Energy Commission website
 - Petroleum Fuels Set-Aside Program
 - Resources FSAP Applicant Handbook



Actions to Augment FSAP Response



- Fuel for emergency response redundancy
- Identification of potential liquid fuel supply redundancy (LFSR) locations and partners outside the impacted zone
- Intent of LFSR concept to prearrange emergency fuel supply for California National Guard mission tasks immediately following catastrophic event
- Working with the California National Guard, OES, DGS, and refiners
- Would be triggered if the National Guard were to exhaust their primary source of fuel from the Defense Logistics Agency (DLA) or if mission tasks change to include delivery of transportation fuels not already held at DLA facilities





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Questions?





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