

Fire-Rescue Department Engine Brown-Out Plan Update



Public Safety & Neighborhood Services Committee

April 7, 2010

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Brown-Out Plan Refresher

- Brown-outs refers to the temporary removal from service of 0-8 fire engines per day in the 13 fire stations that house more than one emergency response apparatus
- Brown-outs were implemented on February 6, 2010 as a budget reduction measure to save \$11.5M in overtime
- Each brown-out unit saves approximately \$1.4M annually
- Today's report covers February 6 though March 31, 2010
 - 16,828 emergency incidents during this period
 - 451 fires
 - 14,691 medical
 - 1,686 other

Why brown-outs and not other cuts?

- Brown-outs were the best of several unattractive options available to Fire-Rescue to achieve the necessary savings
 - Greatest area of expense is fire station staffing costs
 - Elimination of other services could not achieve savings
- Alternatives to brown-outs to achieve savings in Fire-Rescue
 - Permanent closure of fire stations, fire units or lifeguard towers
 - Lay-off of firefighters and lifeguards
- Alternatives would cause greater long-term damage to the provision of emergency services

Statistical Summary of Brown-Outs

- Out-of Service Time for Participating Engines
 - 21.27% - 99.25%
- Compliance with 5 min. First Unit Arrival Response Time
 - National Standard = 90%
 - Fire-Rescue Interim Target = 55%
 - City-Wide Same Period Last Year = 55%
 - City-Wide During Brown-Outs = 53.22%
 - Participating Districts Same Period Last Year = 29.88% - 87.55%
 - Participating Districts During Brown-Outs = 17.58% - 82.86%
- Average Response Times (minutes/seconds)
 - City-Wide Same Period Last Year = 5:03
 - City-Wide During Brown-Outs = 5:10
 - Participating Districts Same Period Last Year = 3:51 - 6:15
 - Participating Districts During Brown-Outs = 3:40 - 6:42

Effective Fire Force

- Defined as the number of firefighters required to perform operations at a typical single family dwelling fire
 - 14-15 firefighters depending on whether an aerial ladder is deployed
 - SDFD achieves this with 3 engines, 1 truck and 1 battalion chief

- Compliance with 9 min. Effective Fire Force Arrival Response Time
 - National Standard = 90%
 - Fire-Rescue Interim Target = 72%
 - City-Wide Same Period Last Year = 84.69%
 - City-Wide During Brown-Outs = 80.26%
 - Participating Districts Same Period Last Year = 66.67% - 100%
 - Participating Districts During Brown-Outs = 50% - 100%

- Average Effective Fire Force Response Times
 - City-Wide Same Period Last Year = 6.64 minutes
 - City-Wide During Brown-Outs = 7.86 minutes

What are risks associated with the Plan?

- Increased response times result in increased possibility of greater injury/death and fire spread/property damage

- Insufficient emergency units to handle large incidents or peak incident loads

- Diminished ability to handle non-emergency activities at impacted fire stations due to increased workloads

- Task of Fire Chief and staff is to minimize risks through planning, monitoring and refinement of plan and operations

- Not all risks can be mitigated and with 110,000 annual incidents, it is possible that poor outcomes will occur

Service Delivery Impacts of Brown-Outs

- Ample evidence exists to support that the more timely the arrival of the appropriate number and types of emergency response resources, generally speaking, the more favorable the outcome
- All delays in arriving at emergency scenes with the right resources result in service delivery impacts ranging from mild to severe
 - EMS – prolonged pain/discomfort/anxiety to possible death
 - Fire/Rescue – increased fire spread and damage to possible injury/death
- Brown-outs can create a ripple effect where units are responding to incidents in other districts leaving their district uncovered for responses and creating large gaps in unit coverage with resultant response delays

Isolating Service Delivery Impacts

- All response delays result in some level of impact
 - Mild to severe
- Can be difficult to isolate impacts attributable to brown-outs
- Many additional variables can impact incident outcomes
 - Unit availability due to non-brown-out reasons
 - Unusual traffic congestion
 - Delayed reporting of incident
 - Severity of incident upon arrival
 - Pre-incident condition of patient and typical prognosis for recovery
- Must exercise caution in judging outcome until all available facts are known

Fatal Fire Incident on March 19, 2010

- Fire in four-story apartment building at 22nd and Broadway
- Residents hear smoke alarm, but 9-1-1 call not made until resident in apartment below smells smoke, hears breaking dishes and a heavy object fall to floor (estimated 4-6 minute delay in reporting fire)
- Fire Station 11 is three blocks away, but E11 is browned-out
- Truck 11 sees column of smoke and arrives at the incident 57 seconds after dispatch to find heavy smoke coming from a 4th floor window
- Truck 11 advised by residents of probable trapped victim on 4th floor
- FFs force entry to apartment, find heavy smoke and heat to the floor
- Able to enter 6', see small fire in corner, but cannot see anything else
- Only able to stay in apartment for 1 minute before high heat and lack of a fire attack hoseline force them to abandon search
- FFs replace door to limit air to the fire, but the window has vented

Fatal Fire Incident on March 19, 2010

- Engine 7 arrives at scene 4 minutes and 26 seconds after dispatch, advances hoseline to the 4th floor and extinguishes now much larger fire
- Search of the apartment reveals a deceased male in the kitchen - victim is identified as 83-year-old resident of apartment
- Medical Examiner states cause of death as Carbon Monoxide Poisoning
- First engine arrived in within nationally accepted response time
- Effective Fire Force of 26 FFs all at scene within 5 minutes 22 seconds
- Known impact of brown-out of Engine 11 is that fire spread through apartment and into hallway while awaiting arrival of Engine 7
- It cannot be definitively determined whether the victim would have survived if Engine 11 was available, but known evidence suggests not
- Best efforts of FFs do not diminish tragedy of a lost life & all would agree that victims deserve the best chance for survival we can provide

Fatal Fire Incident on March 22, 2010

- Fire in single-family residence in Lincoln Park; near Fire Station 12
- Both Engine 12 and Truck 12 are in service and respond
- Engine 12 arrives in 2 minutes 45 seconds; Truck 12 in 6:02
- Engine 12 reports heavy smoke from structure and must force open a metal security door to access the fire
- Upon entry they discover a female victim in hallway
- They extricate the victim, assess her, but determine she has died
- First due unit and effective fire force all arrived well within the nationally accepted response times, but could not save the victim
- Engine 12 had been browned-out the previous month, and if this response had occurred at that time, speculation would have arisen regarding the victim's death and the impact of brown-outs

Re-Staffing Required During Period

- Fire Chief has the authority to re-staff brown-out units
- Weather conditions, operational workloads and special event impacts are continually monitored and adjustments to daily brown-outs are made when needed
- Re-staffing was necessary to provide coverage for
 - Mardi Gras on February 16 (1 unit re-staffed)
 - Floatopia on March 20-21 (1 unit re-staffed)
- Costs associated with re-staffing depend on number of personnel that must be hired back on overtime

Areas of Concern Going Forward

- Low 5 min. first unit arrival response time compliance
 - Rancho Penasquitos
 - 2009 = 29.88%
 - 2010 = 17.58%
 - University City
 - 2009 = 34.26%
 - 2010 = 27.51%
- Decreased ability to quickly staff brush apparatus
- Impacts on non-emergency activities
- Options to modify plan to adjust for impacts
 - Reassign apparatus to ensure extinguishment capability
 - Change which unit is brown-out to ensure extinguishment capability
 - Change location of brush apparatus to speed staffing

Questions?

