Odd-Even Fuel Purchasing

Western Regional Emergency Fuel Coordination Meeting

California Energy Commission
Sacramento, CA

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California Energy Commission
Consumer Behavior Varies by Energy Type

• Appeals to consumers to alter behavior to reduce peak electricity demand are usually successful
  ▪ Minor inconveniences in operating appliances
  ▪ Minor discomfort in raising thermostats

• Trade-off – minor inconvenience in exchange for avoiding rotating outages

• Regulators and utilities understand this dynamic

• This is why appeals for conservation are widely dispersed and effective
  ▪ California Flex Alert system

When the California ISO calls a Flex Alert, take three simple actions:
- Turn off all unnecessary lights
- Postpone using major appliances until after 9:00 p.m.
- Set your air conditioning to 78° or higher

California Energy Commission
Transportation Fuel is Another Matter

- The Arizona Example
  - July 30, 2003 - leak in Kinder Morgan product pipeline in Tucson shuts down deliveries from the east into Phoenix
  - August 1 – pipeline repaired and pumping resumes at lower pressure
  - August 8 – pipeline shut-down due to test results showing pipe defect
    - August 11-12 – gasoline supplies tighten, especially for independents
    - August 13 – during press conference, Governor “predicted that there would be some outages at independent stations, but that there would be no widespread shortage”
    - August 16 – long lines & majority of stations are without gas
  - August 18 – long lines begin to recede
  - August 24 – start-up of Tucson to Phoenix line using bypass
  - September 12 – completed replacement of 4600 feet of new pipe, resumed operations at 50 percent normal operating pressure

Consumers have the opposite reaction to real or perceived fuel shortage – will tend to top-off and hoard
Odd-Even Rationing – Earlier Efforts

- Response to tightening supplies in a controlled market condition
  - December 1973 – March 1974
  - May 1979 – July 1979

Intent was to conserve fuel…debatable if that goal was achieved.
Odd-Even Purchasing

• Demand needs to be controlled & hoarding curtailed
  ▪ Odd-even rationing is an effective tool – statewide implementation
  ▪ Would require pre-planning and should be deployed shortly after the incident – *should be coordinated with regional states*
  ▪ Security would likely be required in urban areas
  ▪ Most California retail stations are self-serve and would need oversight to improve compliance
  ▪ Traffic control
  ▪ Adequate manpower
  ▪ New rule-making?
  ▪ New legislation?

Source: San Diego Historical Society.
Odd-Even Purchasing

- Enforcement not guaranteed
  - No more attendants available to oversee compliance
  - Many locations – single employee
    - Inside the store
  - More diverse vehicle plates
  - Could social apps be used?
    - Document offenders
    - Alert law enforcement
- Should review reselling laws
  - To ensure fuel not purchased for resale
    - ebay
    - Craig’s List
- Anti-gouging laws
  - CA allows 10 percent price increase – after declaration of emergency
  - Price increases can be greater if costs to supply rise
Questions?

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