



AB 868

Fuel Delivery Temperature Study

Advisory Group Meeting
California Energy Commission

Sacramento, CA
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ATC Costs

- Business costs will be calculated using:
 - Fuel dispensers – make & model
 - ATC retrofit equipment costs @ expected lifetime
 - Installation labor costs & periodic maintenance
 - Incremental costs for ATC-capable new dispensers
 - Agency impacts
 - Labeling
- Analysis will be performed on a county-specific basis
- Gasoline and diesel fuel dispensers will be included in the assessment
 - Lack of data will likely preclude analysis for other types of transportation fuels, with possible exception of aviation gasoline



Temperature Compensation (TC) Operation

- ATC will automatically adjust the volume depending on dispensed temperature
 - Fuel Density
 - Volume Correction Factor (VCF)
- Reference Temperature (Hawaii Example)
 - Determine annual statewide fuel temperature
 - Using VCF, establish a statewide standard for cubic inches per dispensed “gallon”
 - US gallon equals 231 cubic inches
 - California gallon equals ?



Temperature Data

- Use DMS temperature data to estimate fuel temperature profiles for each county on a monthly basis.
- Use temperature data along with VCF from ASTM and retail price (per county) to estimate benefits.



Status-quo Operation of Retail Station

- Do all suppliers sell to service stations the same way (net or gross) or are there differences in the marketplace?
- Confirming with survey
 - Assumption: temperature compensation is occurring at distribution terminals
 - Assumption: posted prices at distribution terminals are in petroleum gallons
 - Assumption: wholesalers are sold net gallons
 - Assumption: retailers sell gross gallons



Business Impacts of ATC Implementation

- Market (pricing) impacts from ATC costs
 - Assumption: gallons will now be priced in petroleum gallons (231 in³ @ 60 F)?
 - Assumption: costs will ultimately be passed through to the consumers
 - Change in retail station revenue?
- Timing of ATC implementation and when costs and benefits occur



Fairness and Transparency of ATC Implementation

- What will change from status-quo?
- ATC technology and labeling issues
 - Pump
 - Receipt
 - Street signage



The Canadian Experience – How it Relates to California

- What is the story behind the economic decision of voluntary ATC implementation in Canada?
 - Incentives
 - Labeling
 - Consumer education



Leak Detection

- Would ATC improve current leak detection capabilities for California retail stations?
- Current leak detection capabilities are a plus or minus...?
- What would be the improved inventory accuracy of ATC?
 - California UST vs. non-California UST (Canadian)



Contact Information



Gordon Schremp
gschremp@energy.state.ca.us

Nick Janusch
njanusch@energy.state.ca.us

Paul Deaver
pdeaver@energy.state.ca.us