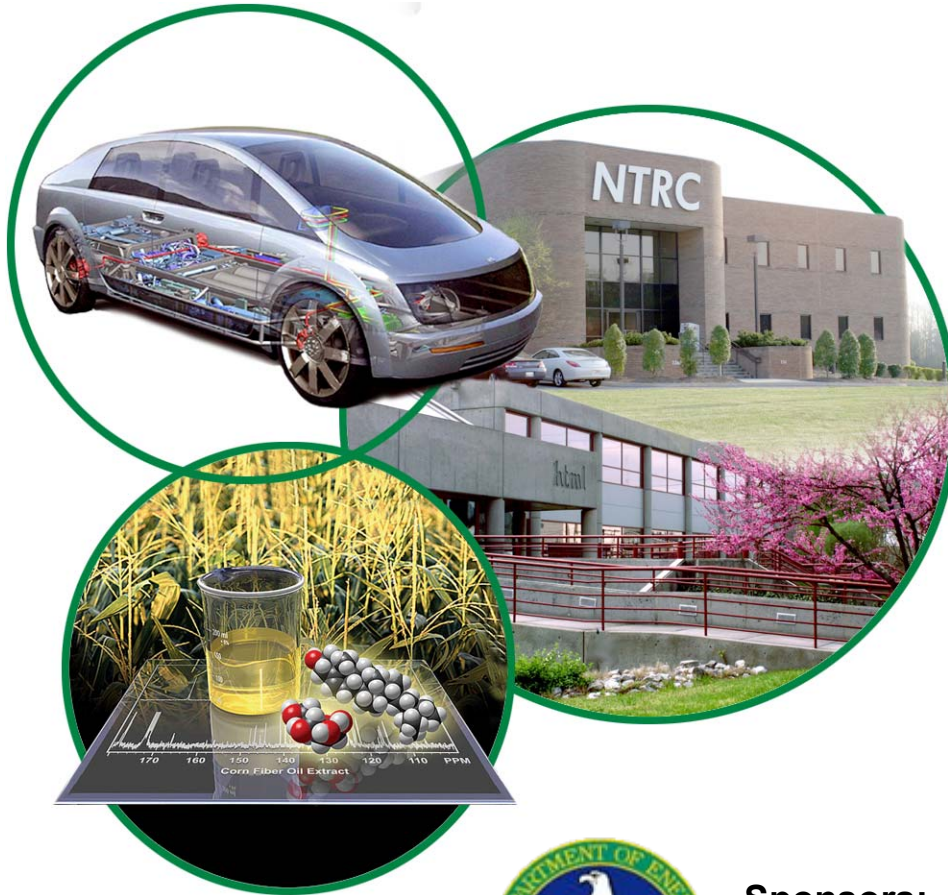


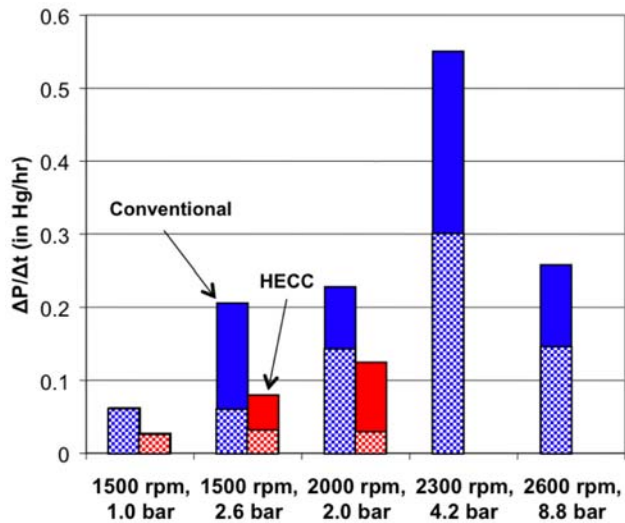
Impact of Lower PM from Multimode Operation on Fuel Penalty from DPF Regeneration



Vitaly Prikhodko and Jim Parks
Oak Ridge National Laboratory
15th DEER conference
Deaborn, MI
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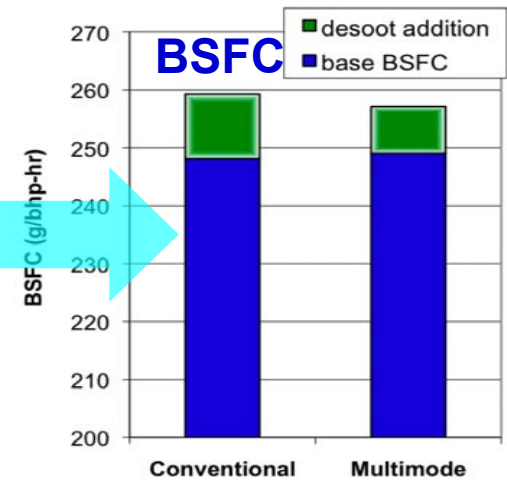
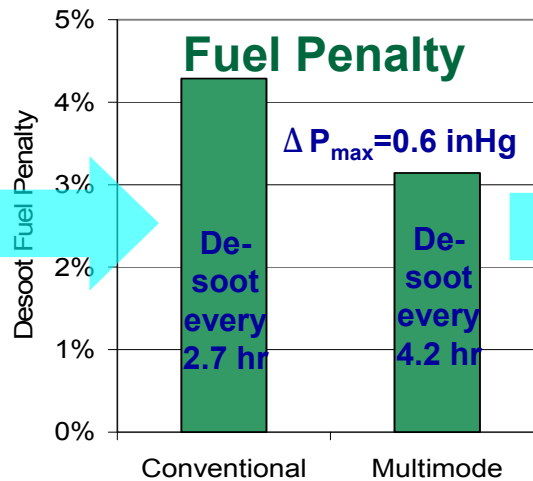
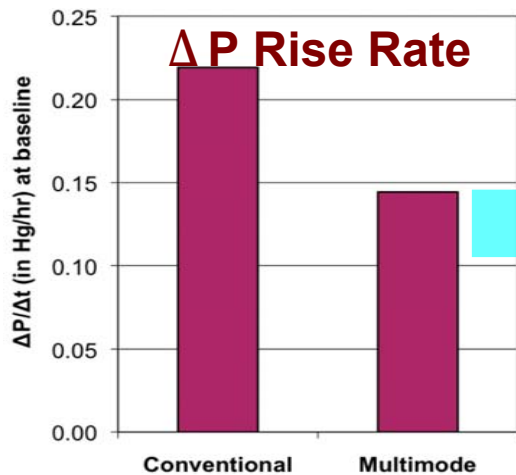


Sponsors:
Gurpreet Singh and Ken Howden
U.S. Department of Energy, Office of Vehicle Technologies



- Higher engine out PM emissions from conventional combustion lead to higher rise rates of DPF pressure drop at all of the points evaluated
- Additional PM produced during lean NO_x trap regeneration adds to the rise rate

Note: $\Delta P/\Delta t$ data based on before and after loading measurements at standard condition (checkered pattern indicates without LNT regeneration)



- Low engine out PM emissions from HECC result in lower pressure drop rise rates across the DPF, less frequent DPF regenerations and lower desoot fuel penalty
- Lower DPF regeneration fuel penalties in the multimode result in better overall BSFC