MISSION

DEVELOP A COOPERATIVE INDUSTRY WORKING GROUP

✓ INCREASE OPERATIONAL EFFICIENCY
✓ MAXIMIZE OPERATIONAL CAPACITY
✓ ENHANCE COMMUNICATION
✓ IMPROVE O & M COST
✓ USDOE ARES PROGRAM
(Advanced Reciprocating Engine Systems)

✓ DEVELOPMENT OF RECIPROCATING ENGINES

➤ HIGHER EFFICIENCY

➤ LOWER EMISSIONS

➤ LOWER $/KWH MAINTENANCE COST
• CATERPILLAR 3500 SERIES
• LONG STANDING FIELD PROVEN SUCCESS IN LFG APPLICATIONS W/ 3516
CATERPILLAR 3520 - COMMERCIAL 2002
DEVELOPED SPECIFICALLY FOR BIOGAS APPLICATIONS
2005-2007: RECOGNIZED COMMON SITE CHALLENGES – REGIONAL AND NATIONAL

- OBSERVATIONS NOTED IN COMMON
  - DEVELOPER LIMITATIONS
    - KNOWLEDGE BASE
    - CONSUMABLES BUYING POWER
  - CAT DEALERSHIP PRODUCT SUPPORT
    - LARGE vs SMALL DEVELOPERS
    - LIMITED EXPERIENCE w/ LFG and 3520

- REVIEW OF 3516 EARLY IMPLEMENTATION AND WORKING GROUPS (w/ Steve King, PNGC Power)
DECEMBER 2007 – WORKING GROUP
- PNGC Power
- Peterson CAT
- Mobile Lubricants
- ENERGYneering Solutions

APPROACHED SWANA LFG UTILIZATION COMMITTEE (Ed Wheless) TO ASSEMBLE A 3520 USER GROUP

APPROACHED CATERPILLAR CORPORATE TO PARTICIPATE (Patrick Barrett, CAT)

MARCH 2008 – 3520 USER GROUP, SWANA LFG SYMPOSIUM
- FOCUSED ON COMMON CHALLENGES
- LARGE AND SMALL DEVELOPERS
- DEVELOPED WILLINGNESS TO WORK TOGETHER
- CATERPILLAR WILLING TO HOST WORKING GROUP WITH DEALERS AND ENGINEERS
EVOLUTION

✓ PRIMARY NEED - COMMUNICATION!!
- OPERATORS W/ DEALERS
- OPERATORS W/ OPERATORS
- DEALERS W/ EXPERIENCED DEALERS
- DEALERS W/ CAT CORPORATE
- CORPORATE / DEALERS / OWNERS / OPERATORS
PROGRESSION

✓ JUNE 2008 – USER GROUP MEETING, CATERPILLAR HOSTED, LAFAYETTE
  ➢ WEB BASED USER GROUP FORUM
  ➢ OWNER / OPERATOR NETWORKING
  ➢ OWNER / OPERATOR DIRECT INPUT TO CAT CORPORATE

✓ JULY 2009 – USER GROUP MEETING, LAFAYETTE
  ➢ IMPROVED DEALER PARTICIPATION
  ➢ ASSEMBLED INDUSTRY LOBBY

✓ SEPTEMBER 2010 – CATERPILLAR, LAFAYETTE
  ➢ OPPORTUNITY TO REVIEW AND PROVIDE INPUT TO FUTURE PRODUCT DEVELOPMENT
CHANGE

With a Crackle Like Frying Eggs
FORMED BIOGAS POWER ASSOCIATION

CONTINUE CAT 3520 USER GROUP

PROVIDE MODEL / EXAMPLE TO OTHER MANUFACTURES

EXPAND:

- FUEL UTILIZATION (LFG, WDG, ADG)
- LOBBY CAPABILITY
- BIOGAS OWNER / OPERATOR NETWORK
- VENDOR SUPPLY AND COMMUNICATION
SUMMARY

✓ EXTENSIVE EXPERIENCE IN LFGTE
✓ WILLINGNESS TO WORK TOGETHER AMONGST OPERATORS
✓ WHY REPEAT PROBLEMS

✓ RECOMMENDATION
  ➢ DISCUSS WITH SUPPLIER
  ➢ SUPPORT LMOP
  ➢ SUPPORT SWANA LFG UTILIZATION TECHNICAL COMMITTEE’S
THANK YOU

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