

Energy Delivery Distribution System of the Future

Hydrogen Road Tour – 2008

August 15, 2008



**LOOKING
AT POWER
IN A
NEW LIGHT.**

**A BALANCED SOLUTION
FOR THE FUTURE.**

ENERGY EFFICIENCY

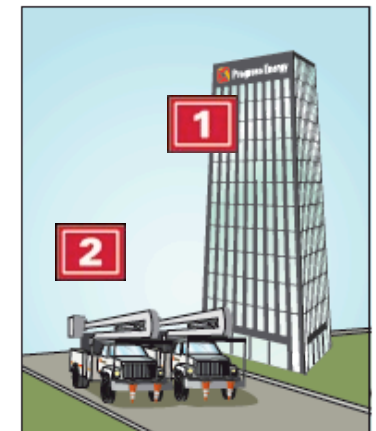
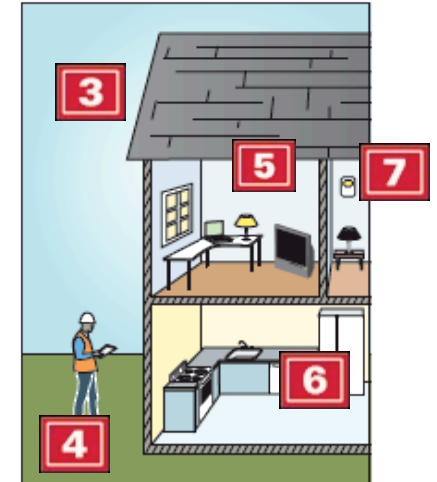
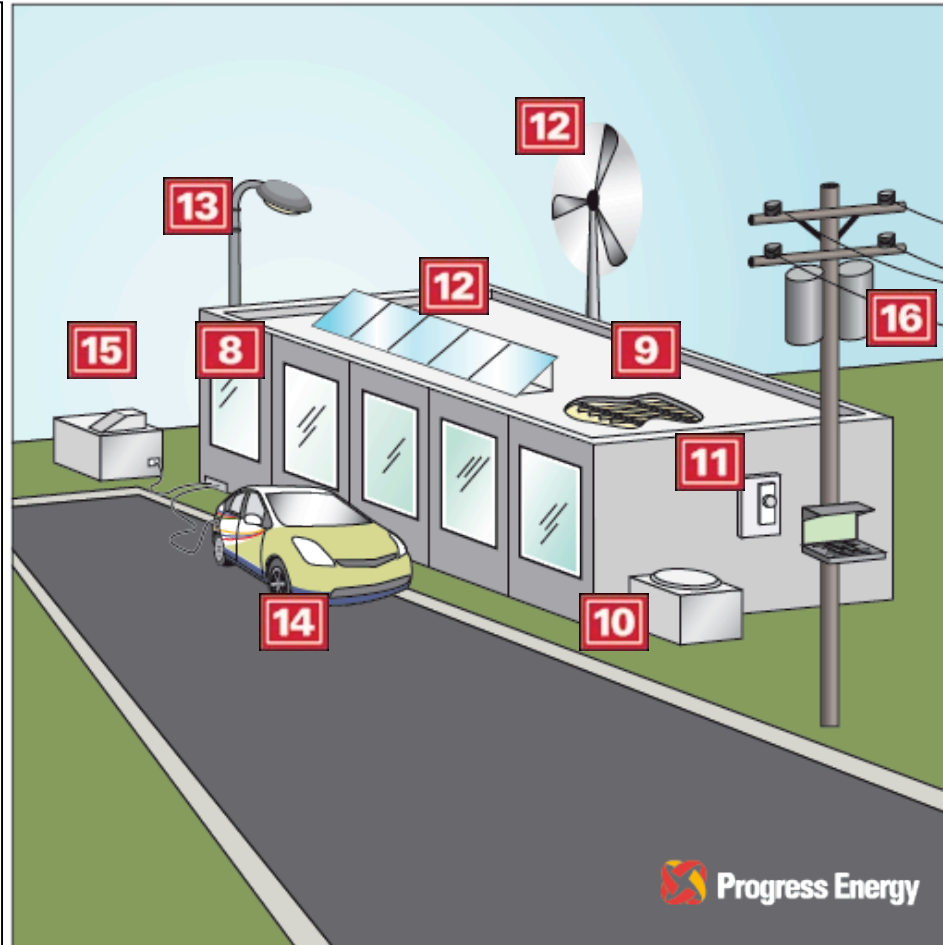
ALTERNATIVE ENERGY

STATE-OF-THE-ART PLANTS

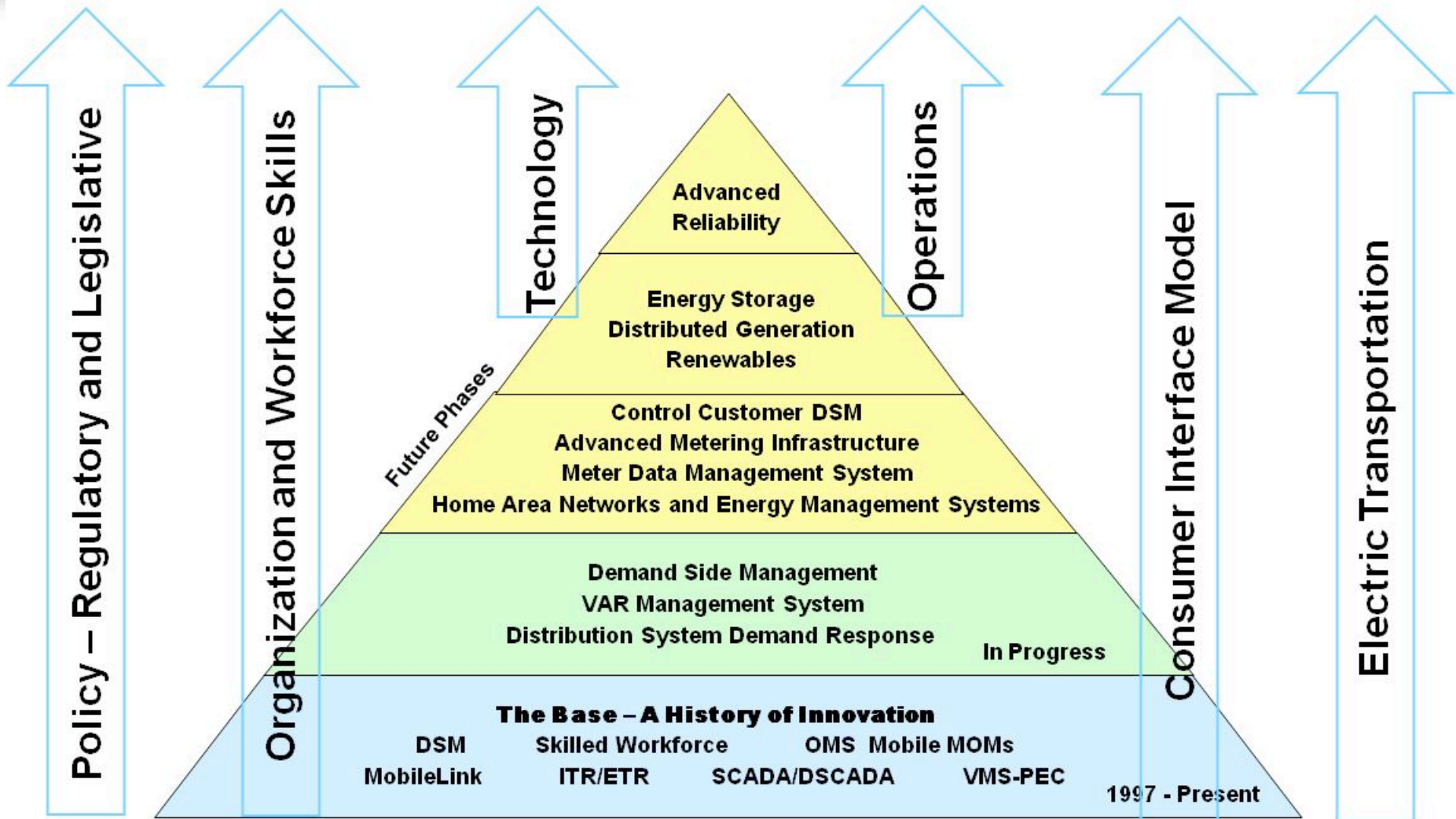


The Smart Distribution Grid

- 1) Progress Energy Facilities
- 2) Progress Energy Fleet
- 3) Residential Building Envelope
- 4) Home Energy Audits
- 5) Compact Fluorescent Bulbs
- 6) Energy Efficient Appliances
- 7) Smart Thermostats
- * Smart Pricing
- 8) Commercial Building Envelope
- 9) Fluorescent Lighting
- 10) Heating & Cooling
- 11) Smart Metering
- 12) Distributed Renewable Energy
- 13) Efficient Outdoor Lighting
- 14) Plug-In Hybrids
- 15) Distributed Generation
- 16) Dist System Demand Response
- * Emerging Technologies

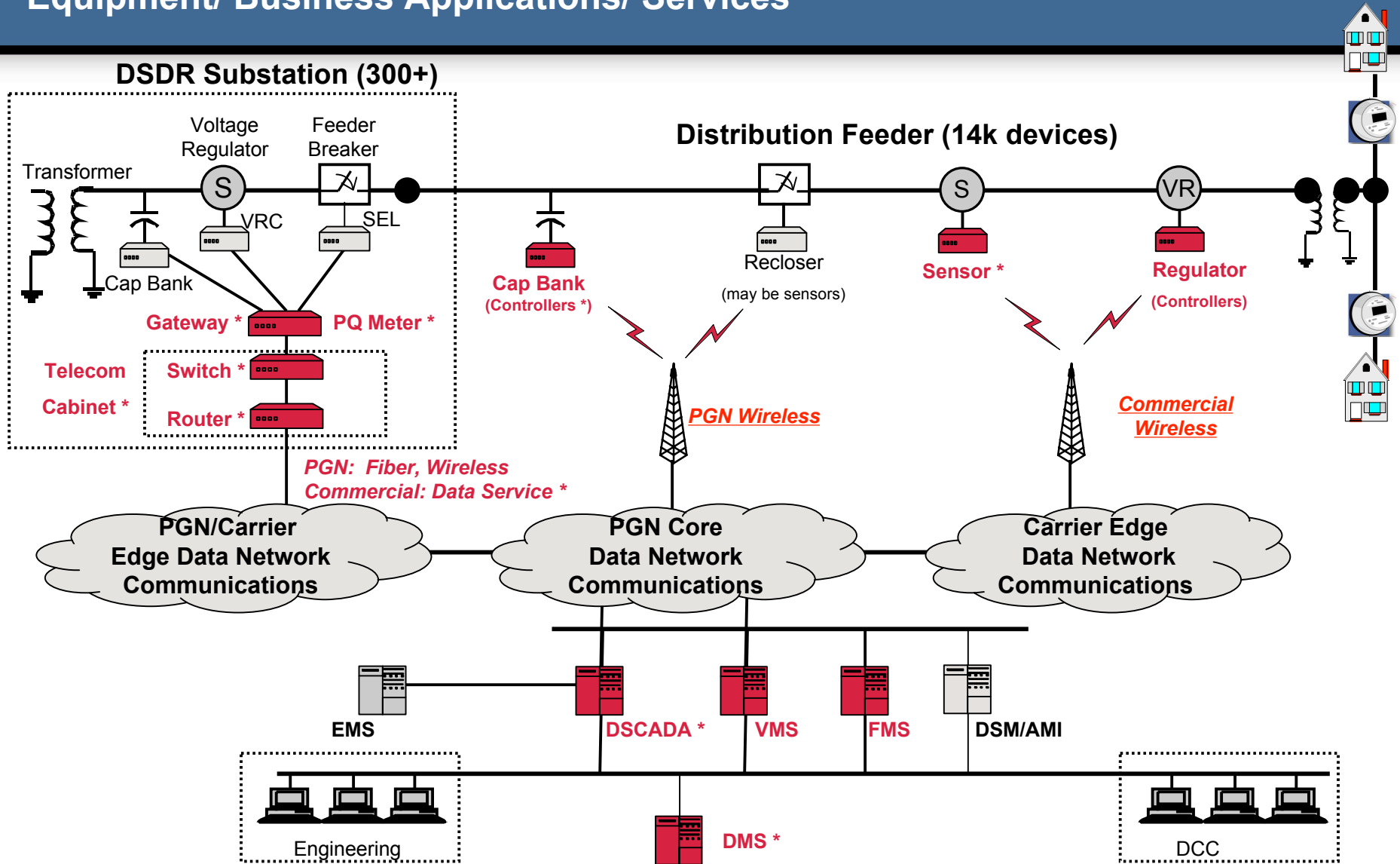


Building the Smart Grid – PEC Strategy



Smart Grid Phase I – Infrastructure

Equipment/ Business Applications/ Services



7-30-08

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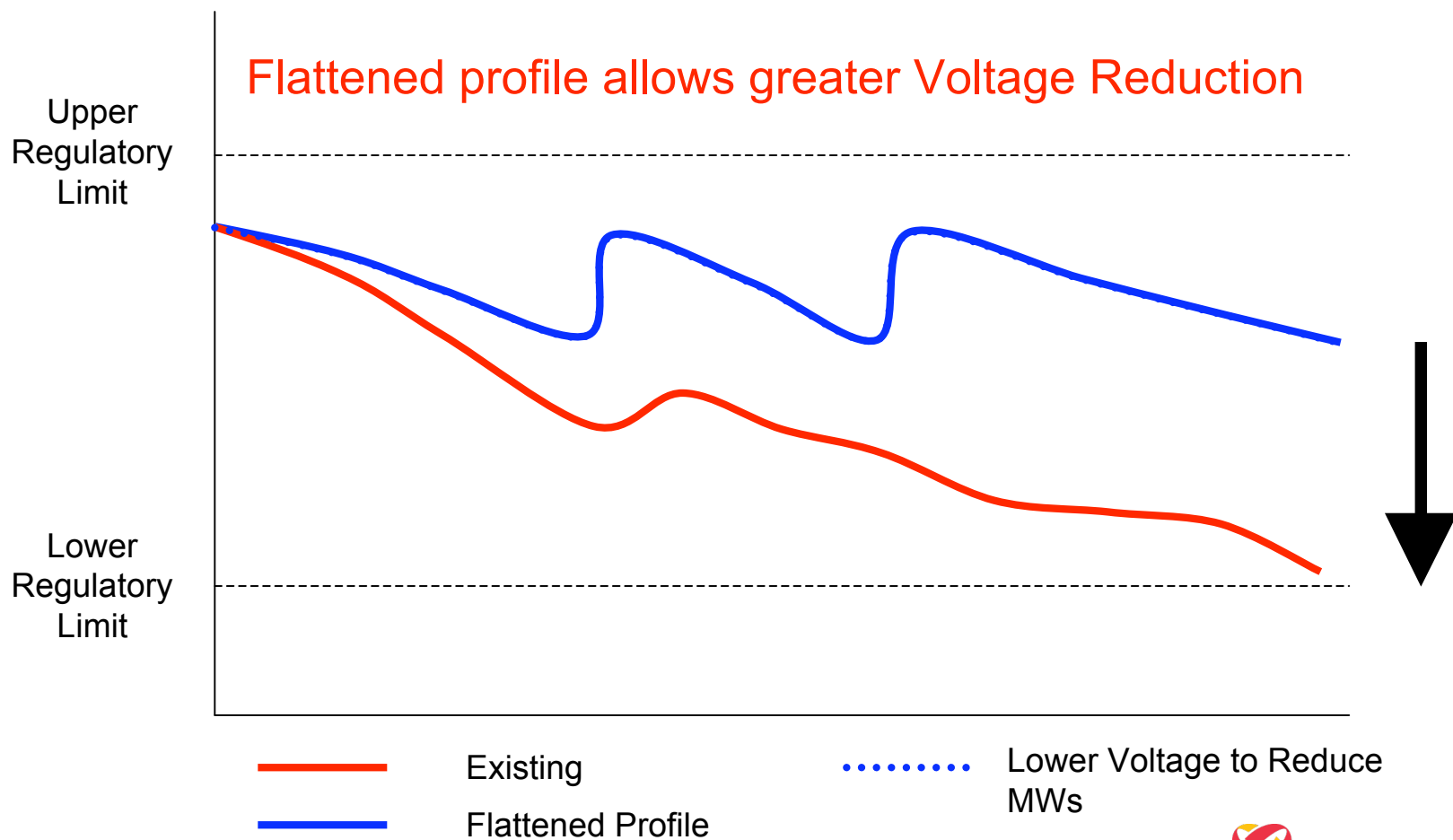
Notes: Asterisk "*" indicates in 2008 external vendor RFI, RFP, and/or RFQ s being evaluated by DSDR team

Equipment/ business applications/ services that will be impacted by DSDR reflected in "red"



Smart Grid Phase I – Function

- Coordinate voltage and var control to defer investment in additional generation by providing peak load reduction.



Smart Grid – Future

