

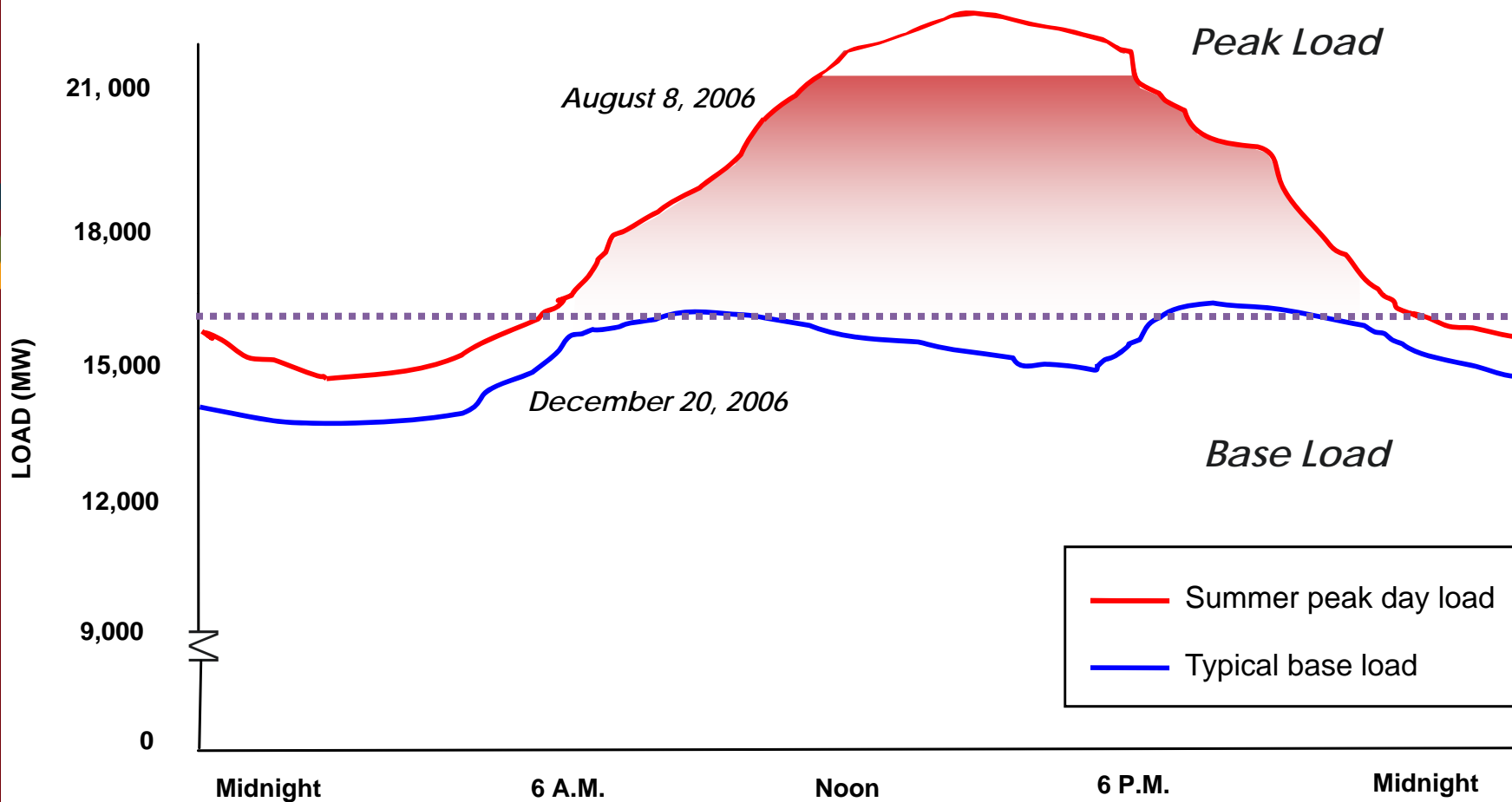
Demand Response with AMI

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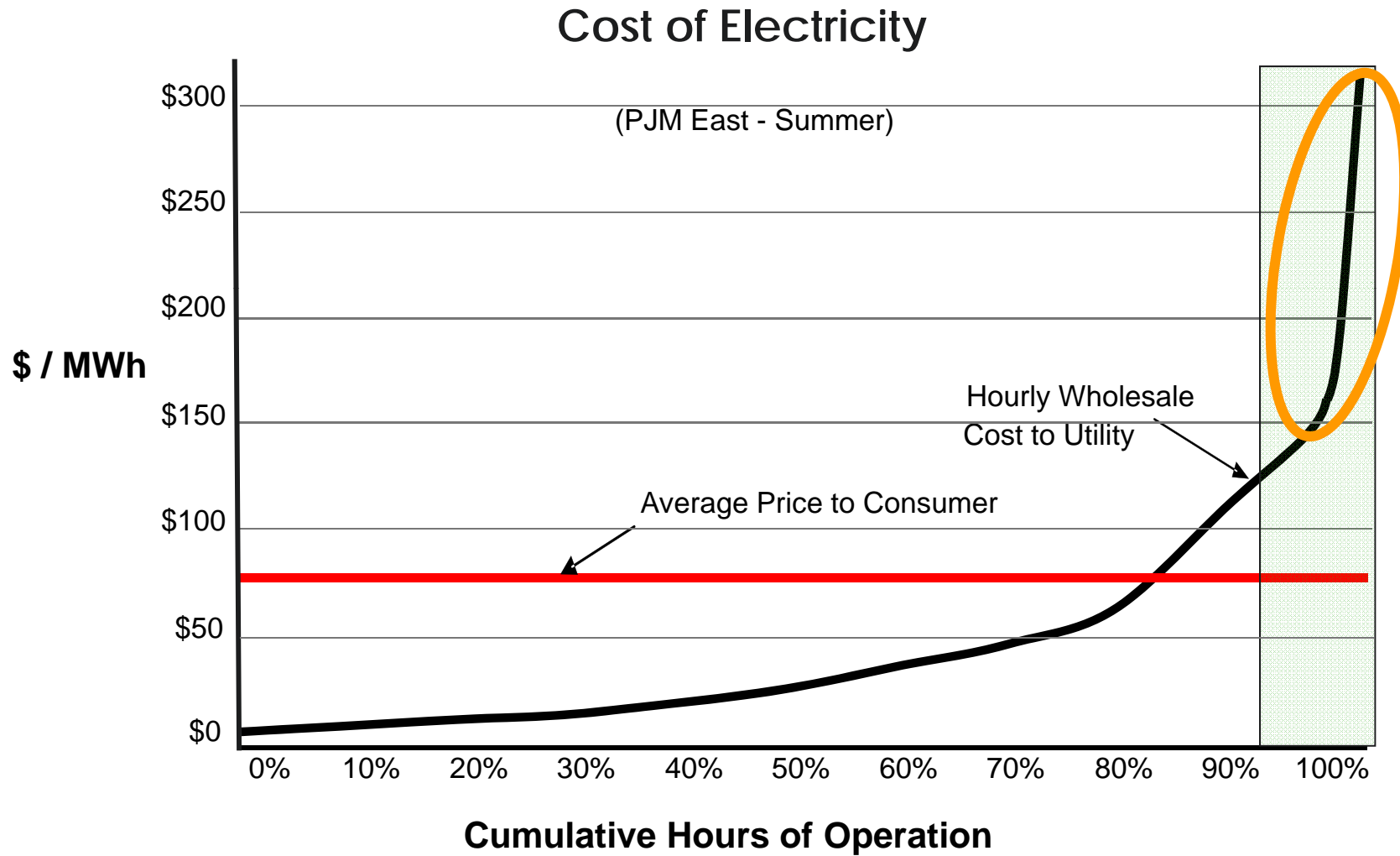


Electric Utility Peak Demand



“...dangerously close to not having enough capacity.” *Walter Higgens, CEO, Sierra Pacific Resources*

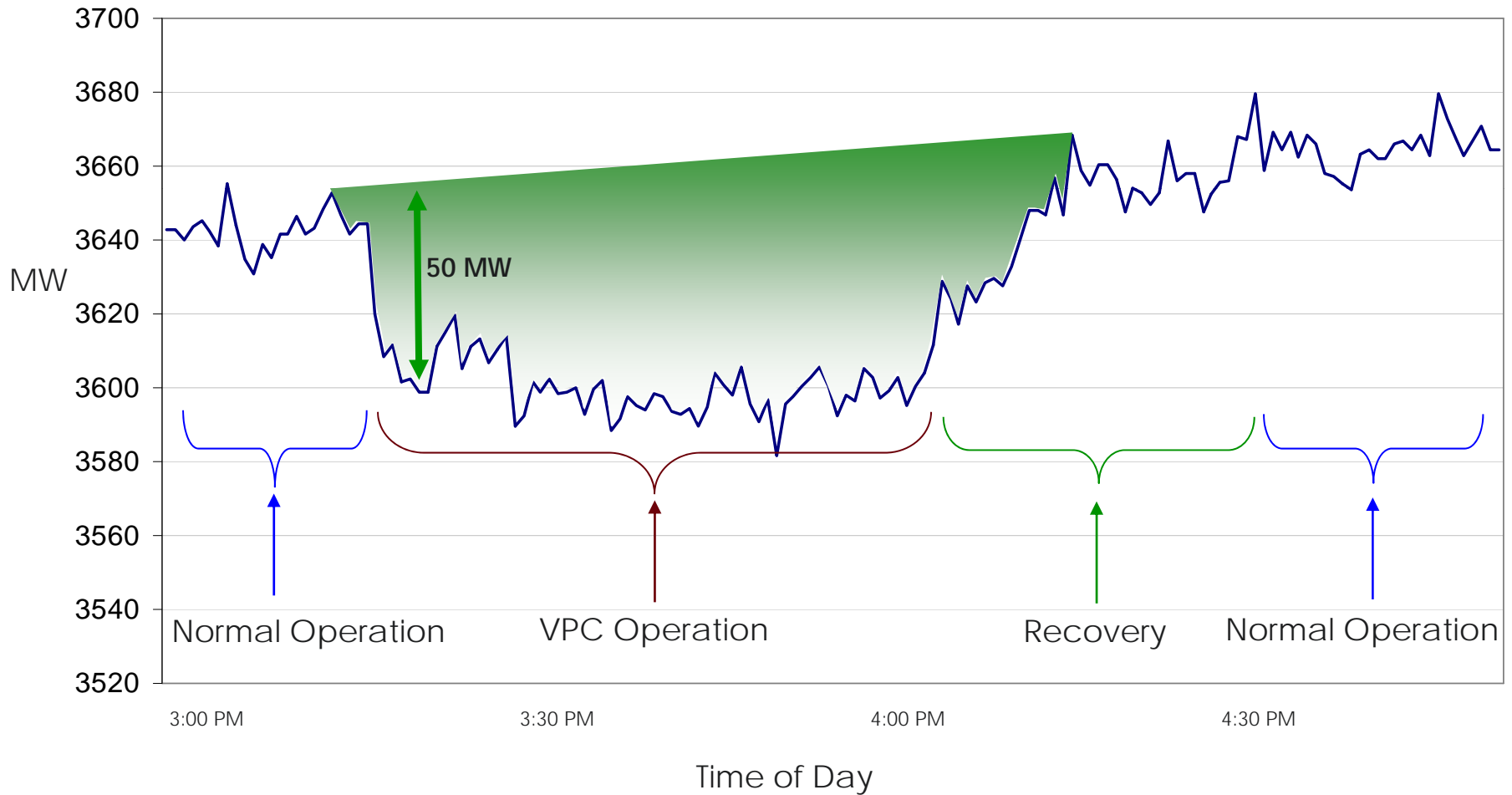
Electric Utility Dilemma



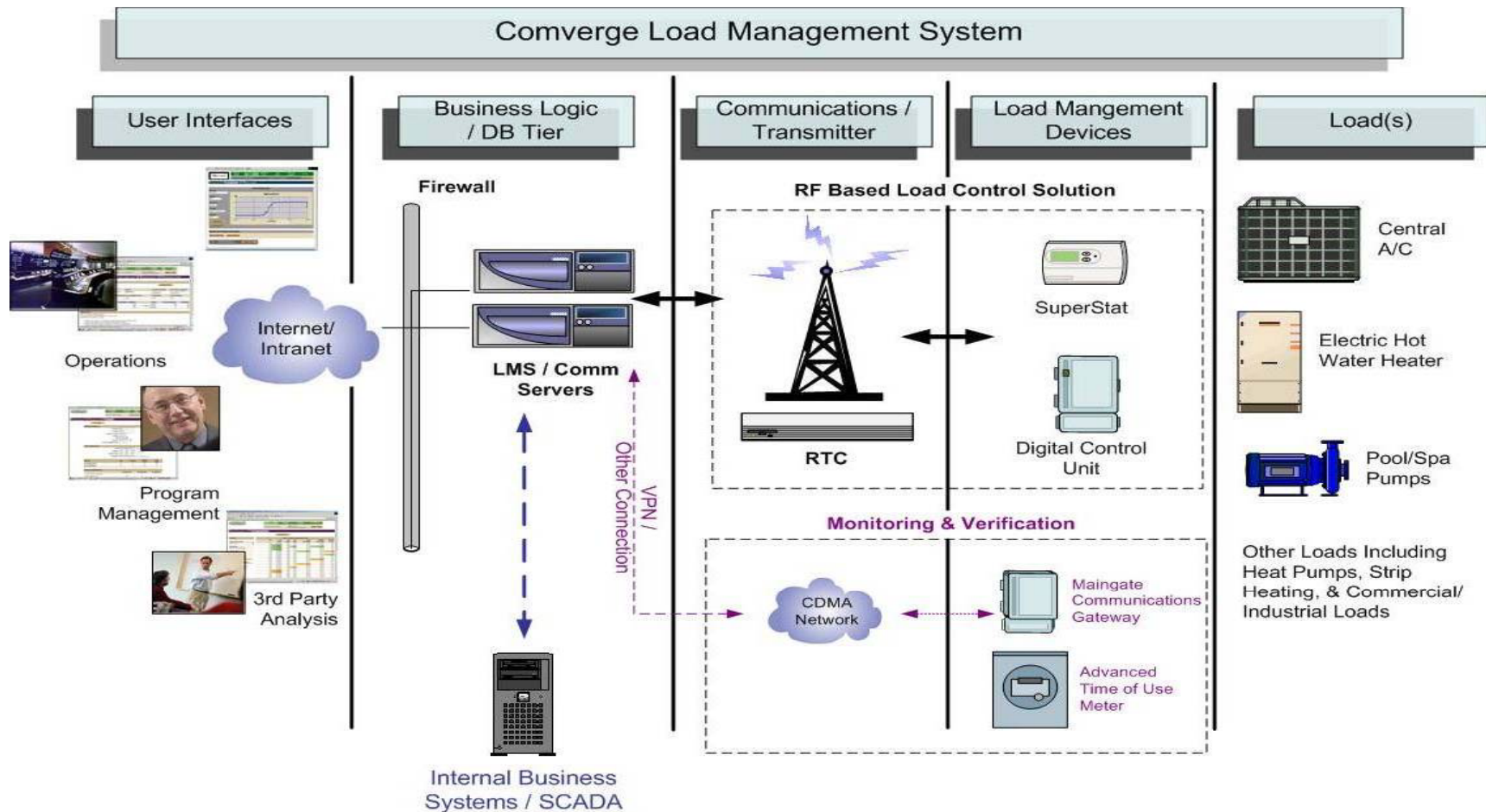
“DR Programs are the most cost effective options for reducing peak demand...” *California Energy Commission 2005*

Comverge Proven VPC Track Record

PacifiCorp Power Sheds Load: 50 MW in 50 Seconds

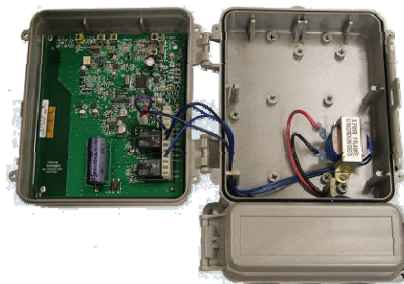


Communication System Architecture



DCU

- Controls **HVAC** and/or **appliances** with up to 4 relay/driver outputs
- Powerful and flexible **cycling strategies** provides precise control of energy shed and restoration, including control of snapback (if desired)
- **Intelligent Adaptive Algorithm** option eliminates “free-riders” and provides increased and more consistent energy saving
- **Flexible Addressing**
 - Control a single device, a group of devices, or a sub-group of devices
- **Fail-safe Command Architecture** - does not require restore command to be received
- Proven **rain-proof enclosure**



Thermostat

- Compatibility
 - HVAC
- Ease of Use
 - Large Backlight Display
 - Programming
 - Web Interface
- Control Operations & Effect
 - Cycling/Setback
 - Adaptive Algorithm
 - ComforTemp (temp. limit)
- Migrate-ability
 - DLC/TOU/ CPP
 - AMI



Strategic Utility Market Partnership

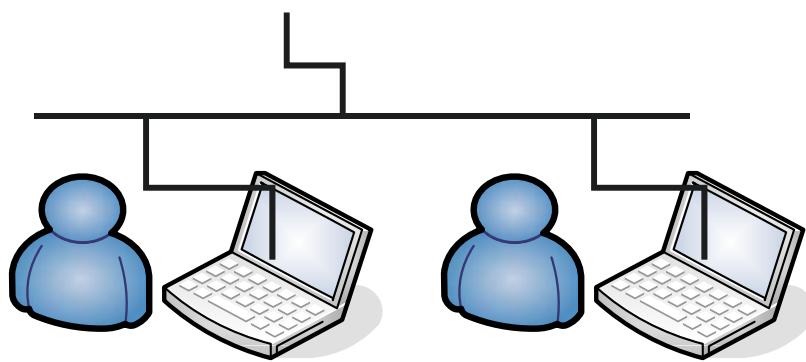
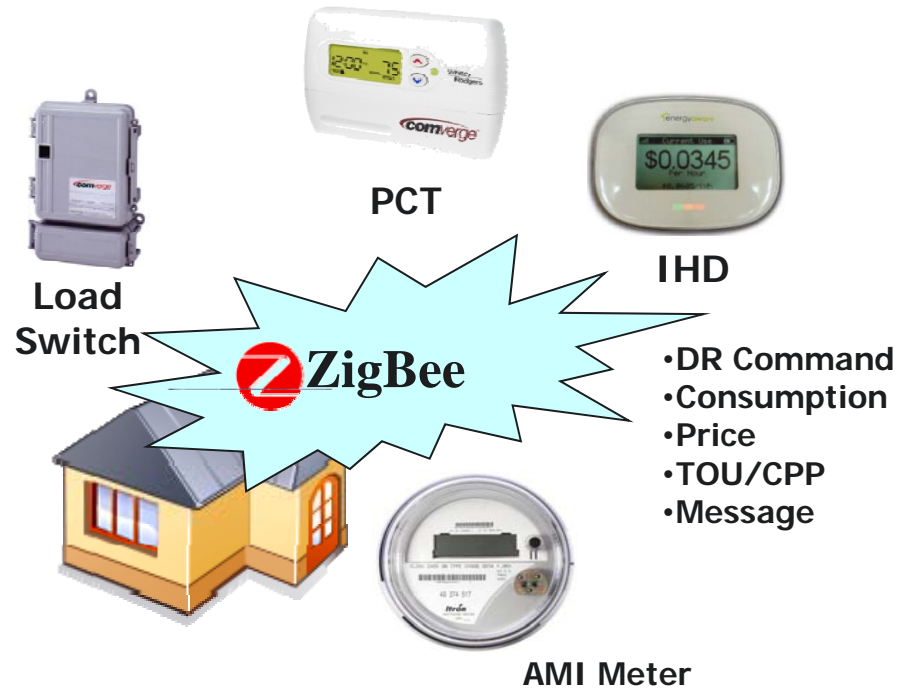


White ▼
Rodgers

AMI system with DR

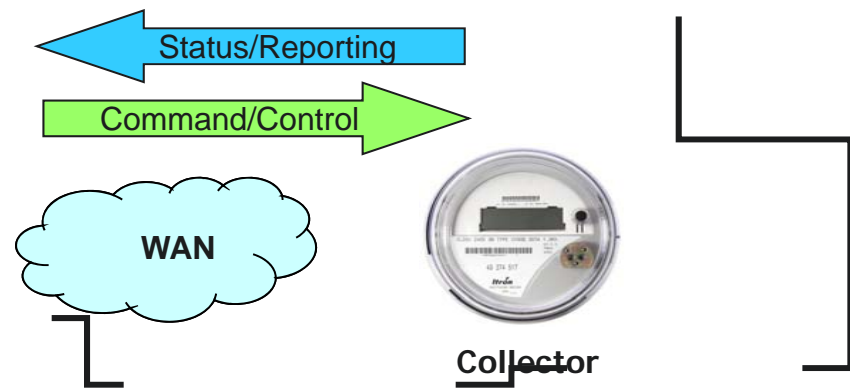


Load Management System (LMS)

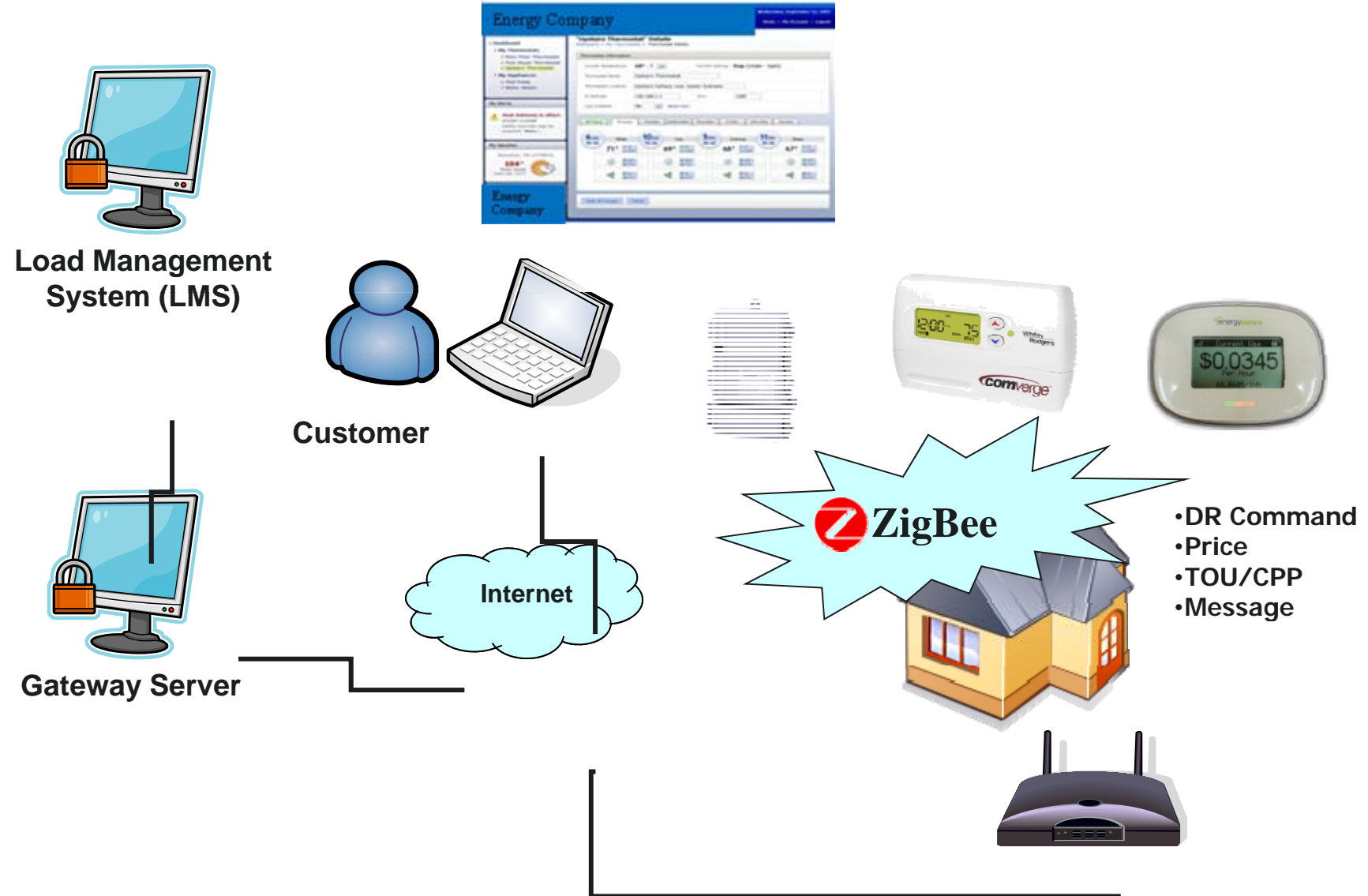


BIS/CIS System

AMI System MDM



Gateway System



Benefits of 2-Way AMI Integration

- Validation and confirmation of control
 - Acknowledgement of control and operation
 - Periodic heartbeat
- Unified Communication
 - Synchronize meter with DRI devices necessary for TOU/ CPP or RTP programs
- Expands DRI capability
 - Expand to additional loads including customer's personal HAN devices
- Increase customer awareness through energy usage & billing information
 - In-Home Display
- Retrieve profile and diagnostic data
 - Improve control strategy
- Firmware upgrade capability

Questions?