

Load Participation in ERCOT

Today



Resource Type	Service	Requirements
Voluntary Load Response (VLR)	Curtailment or reduction in response to Market Price or other factors	<ul style="list-style-type: none"> • Metering • Curtailment technology • Retail contract with price response incentives
Load Acting as a Resource (LaAR)	Responsive Reserves	<ul style="list-style-type: none"> • Interval metering • Telemetry • Curtailment technology • ERCOT Qualification
Emergency Interruptible Load Service (EILS)	Curtailment in response to ERCOT Verbal Dispatch (10 minutes)	<ul style="list-style-type: none"> • Interval metering • Curtailment technology • ERCOT Qualification

All of the above PLUS additional opportunities for:

Nodal Market



Controllable Load Resources (CLRs)	Regulation Service Responsive Reserves	<ul style="list-style-type: none"> • Interval metering • Telemetry • Ability to receive AGC-type signals • Governor-type response • ERCOT Qualification
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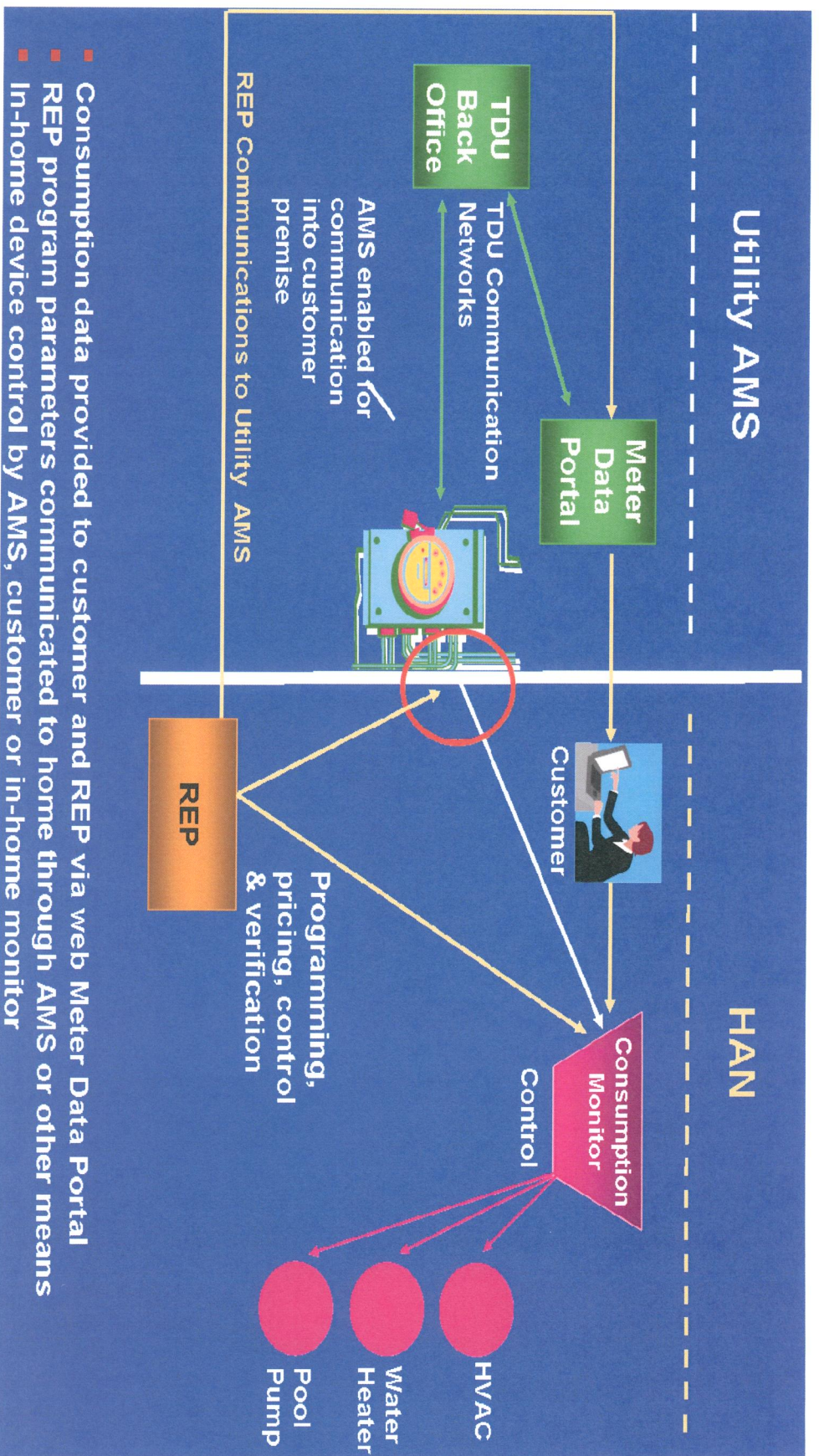
Future?



All of the above PLUS :		
Load Participation in Security-Constrained Economic Dispatch	Real-Time Energy Market and all Ancillary Services	<ul style="list-style-type: none"> • To be determined • Loads would submit DR energy offer curves to compete with generation in the energy market

Advanced Metering

Future Potential Envisioned with Advanced Meters



- Consumption data provided to customer and REP via web Meter Data Portal
- REP program parameters communicated to home through AMS or other means
- In-home device control by AMS, customer or in-home monitor

Plug-in Electric Vehicles



- **ERCOT and the other ISOs are actively preparing for a migration of a significant segment of the transportation sector from liquid fuels to electric power**
- **Many opportunities but also challenges**
- **Goals of study**
 - Work with policymakers and market participants to encourage “smart charging” incentives for PEV owners
 - Dynamic pricing to encourage smart charging
 - Emergency demand response
 - Enhanced aggregation – working with PEV aggregators to ensure efficient scheduling of charging load during off-peak hours
 - Evaluate possibility of PEV participation in ISO-RTO markets (ancillary services, etc.)
 - Project early adoption rates by region -- which areas of the country will be most likely impacted by early adopters?

Energy Efficiency



- Huge investments in energy efficiency are underway across the country
- ERCOT Planning dept. is integrating new tools into long-term load forecasting to account for this influx of EE
 - Confidence of financial community in ERCOT forecasts is crucial for ensuring long-term resource adequacy