

## Appendix D: Examples of Real-World Storage Projects Suggested to Inform Use Cases

### 1. Distributed Storage

**SDG&E Primary Distribution** – Borrego Springs substation-level, 500 kW/1500 kWh

**TAS Energy/Raleigh, NC** – District cooling system using chilled water TES

### 2. Community Energy Storage

**AEP Ohio GridSmart** – 2 MW (80 units x 25 kW) for 2 MWh, li-Ion (installed this summer)

**SMUD Solar Smart** – Anatolia neighborhood, 15 x 8.7 kW/8.8 kWh + 3 x 30 kW/30 kWh, support local PV and explore other benefits.

**SDG&E Secondary storage** – 25 kW/50 MWh, relieve distribution circuit loading, ancillary services.

**Detroit Edison/KEMA** – (still in battery testing)

### 3. Peaker Displacement

**Primus Power/Modesto Irrigation District** – 25 MW/75 MWh, on-line Summer 2013?

### 4. VRE Sited Integration

**AES Laurel Mountain** – 32 MW battery to back up 98 MW wind farm; developer claims applications for regulation (PJM markets), ramping and VRE smoothing

**BrightSource/Edison PPAs** – Solar Tower w/storage – 3 x 200 MW, 6 hour storage w/molten salt.

### 5. Bulk Generation

**TAS Energy** “storage generation” turbine inlet cooling with TES, various US installations

**Pumped Storage** – various projects proposed

**CAES** – Alabama legacy project, PG&E in process.

### 6. Demand Side Management

**Xtreme Power** – integrated storage with digital power management

**Santa Rita Jail** – Microgrid application with 1 MW fuel cell, wind turbines and 2 MW battery storage

**Tesla/Solar City** – Various li-Ion backup for rooftop PV systems

**Ice Energy/SCPPA** – Thermal energy storage under utility ownership model.