SDG&E's View on DER

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Our Regulatory Position

- SDG&E supports cost-effective DER
- DER should be credited with fully supportable avoided costs
- Supportable avoided costs include the cost of generation (energy and some capacity)
- DER should avoid DWR costs
- We are not convinced that DER can supplant wires (except at the right time, right size, right place, and with physical assurance)

Challenges Facing DER

- Typically not cost effective versus wires solutions—not even close
- High natural gas prices
- More stringent emissions standards
- Limited waste heat sinks for CHP applications
- Bigger footprint than wires
- Additional maintenance/operational costs

Current Opportunities

- Remote sites requiring expensive wires
- Slow growth areas (wires are lumpier solution)
- Rapid response to emergencies (mobile)
- Planned outage support (mobile)
- Sustainable/green buildings
- Zero Energy New Homes projects
- Customer CHP applications with sufficient waste heat sinks
- Renewables using non-financial value streams

Longer Term Opportunities

- Renewable energy (particularly solar)
- Additional electrical distribution planning applications
- Customer applications with less waste heat sink capabilities
- Fuel cell and energy storage technologies due to low/no emissions

Summary

- DER is currently serving niche, higher value markets due to high first cost
- Challenge for DER is to reduce first costs while keeping eye on the emissions ball
- SDG&E will evaluate DER relative to wires solutions as part of its Distribution Planning Process as mandated by the CPUC
- With lower first costs will come greater market penetration

Food for Thought

Is a 50% reduction in DER first cost achievable?

75%?