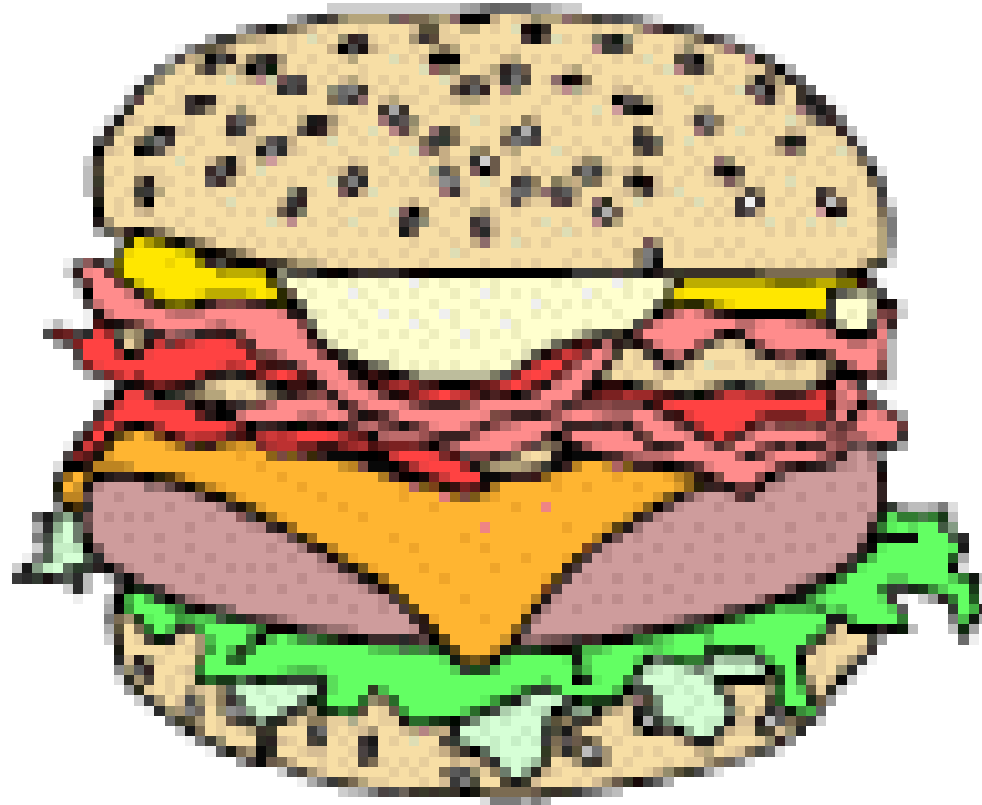


Making the Right Choices Utility Opportunities in DER

2005 CADER
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Perspective



Utility Perspective on DER

- Support DER as one of the choices for our customers to address their energy needs
- Support integration of cost-effective DER in utility planning
- Recognizing policy reasons may indicate need for subsidizing renewable DG
- Balance with need to control electricity prices for other customers
- Shareholders are generally indifferent, but there can be adverse rate impacts

DER at PG&E Today

- Perhaps the leading utility
- PG&E ratepayers are Third in Solar Worldwide (behind only Germany and Japan)
- Interconnection process streamlined
- Over \$310 million spent and committed on SGIP and CEC's ERP program (funded by PG&E ratepayers)
- Solar Schools Program
- 25% of energy sold comes from QFs
- Maintain fleet of mobile DG that can provide temporary support for distribution system (outages and system stresses)

How Should We Proceed?

Tomorrow

Today



Fitting it all together



- Use long term planning to implement loading order
- Offer customer integrated demand side management

DER in Long Term Planning

- Loading Order
 - Shaped by relative cost-effectiveness
 - Include energy efficiency and demand response
- All options considered in concert to better inform decision-maker
- Incorporating DER based on actual planning requirements

Customer Choice

- Integrate DG with energy efficiency and demand response
- Message delivered from customer perspective
- Market segmentation

Outcome

And after a lot of hard work on everyone's part, they all lived happier ever after

