



Clean Energy Generation Systems

Electric Program Investment Charge Southern California Kickoff Workshop

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Clean Energy Generation Goals

- Provide IOU electric ratepayer benefits
- Increase cost competitiveness
- Mitigate variable renewable generation
- Reduce environmental impacts, including climate change effects on the energy system
- Streamline permitting and develop workforce
- Help technologies overcome “valleys of death”
- Complement and leverage other public and private funding sources

- Key Policy Drivers
 - Renewables Portfolio Standard (RPS)
 - Governor Brown’s Clean Energy Jobs Plan
 - 12,000 MW of localized renewables
 - 8,000 MW of large scale renewables
 - 6,500 MW of combined heat and power (CHP)



Questions

1. What are the major barriers to developing and commercializing clean energy technologies?
2. Where should funding be placed to maximize the deployment of clean energy technologies? (i.e. where is technology innovation needed versus where is support for commercial scale-up the critical need?)
3. What specific initiatives are recommended to advance innovative energy technologies that benefit ratepayers?
4. Define the ratepayer need for which EPIC investment should be targeted.
5. Prioritize initiatives and identify the benefits that should be anticipated and measured, such as:
 - Energy and cost savings, grid reliability, job creation, economic benefits, environmental benefits, likelihood of return on investment, other.
6. What areas are already well covered by DOE and private funding?



Potential Clean Energy Generation Investment Topics

- Energy Smart Communities
- Distributed Generation
- Utility Scale Generation
- Environment and Public Health
- Market Facilitation
- Others?



Energy Smart Communities

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Potential Initiatives

- Zero-Net Energy Buildings and Communities
- Community Energy Storage
- Community Energy Test Beds
- Microgrids
- Others?



Distributed Generation

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Potential Initiatives

- Distributed generation technologies
- Distributed energy storage
- Community-scale bioenergy
- Integration technologies and strategies
- Others?



Utility Scale Generation

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Potential Initiatives

- Utility scale generation technologies
- Utility scale energy storage
- Offshore renewables
- Integration technologies and strategies
- Others?



Environment and Public Health

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Potential Initiatives

- Climate change impacts on energy infrastructure
- Environmental barriers to deployment
- Supply chain issues
- Public health impacts
- Energy generation and disadvantage communities
- Others?



Market Facilitation

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Potential Initiatives

- Performance data clearing house
- Resource assessments and planning tools
- Permitting and deployment facilitation
- Innovation clusters
- Workforce development
- Others?

**Full Discussion
Tomorrow**



Written Comments

Submit written comments by 8/17/12 to:

E-mail: Docket@energy.ca.gov

Include “Docket No. **12-EPIC-01**” in the subject line

OR

California Energy Commission

Dockets Office, MS-4

Re: Docket No. **12-EPIC-01**

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