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Utility Solar Business Models:  
Developing Value in Solar  
Markets

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# Utility Solar Business Models: Developing Value in Solar Markets

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## Acknowledgements

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## Feedback

The Solar Electric Power Association would appreciate feedback on this and past reports, as well as new areas of research we should consider in the future. Please take a moment to provide comments and suggestions through an online survey:

<http://tinyurl.com/SepaReportFeedback>

## About the Authors

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John Nimmons is a San Francisco attorney and consultant specializing in sustainable energy law, policy, business and development strategies. John is one of the nation's leading legal and business authorities on utility ownership of solar and other distributed resources, and on the competitive implications of ownership and other forms of utility participation in emerging energy markets. Since 2007, he has led SEPA working groups; tracked utility solar business model design and implementation; authored SEPA's 2008 and 2010 reports on this topic; and developed SEPA's decision mapping tool for utility solar initiatives. John previously practiced commercial litigation for eight years with a leading San Francisco law firm, and directed the Energy Policy Group at U.C. Berkeley's Earl Warren Legal Institute. He received his B.A. *magna cum laude* from Oberlin College, and his Juris Doctor from Stanford Law School.

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# SEPA Research Report Summaries

## **Utility Solar Tax Manual (2009)**

In 2008, Congress extended the federal solar investment tax credit for eight years and removed the utility exemption, allowing regulated investor-owned utilities to utilize the credit. This manual provides detailed explanations of the tax provisions related to the bill, as well as exploring other tax issues such as Clean Renewable Energy Bonds, and unique business tax structures and issues.

## **Decoupling Utility Profits from Sales: Issues for the Photovoltaic Industry (2009)**

The reduced sale of electricity creates an inherent problem for electric utilities in maintaining long-term operating revenue, especially as the solar industry expands. Decoupling is a regulatory policy option that can change the way utilities recover revenues to adjust this disincentive. This decoupling white paper introduces the concept into the solar community, explaining what decoupling is, and defining the different types. It includes a case study showing how solar market development in the future might affect utility rates under decoupling.

## **Distributed Photovoltaic Generation for Regulated Utilities (2009)**

This analysis looks at both the regulatory and practical issues surrounding the installation of utility-owned distributed photovoltaics by investor-owned utilities.

## **Photovoltaic Incentive Programs Survey (2009)**

In coordination with SEPA, an electronic survey was developed and distributed by U.S. utility and state PV incentive program managers to consumers who installed PV systems and received a rebate to offset the cost. The survey asked about the participants' satisfaction and experiences with the installation, incentive, interconnection, and ongoing maintenance of their systems. The resulting report analyzed the data across geographies to draw distinctions and parallels across the country

## **Top Ten Utility Solar Rankings 2009 (2010)**

This report is the third of SEPA's annual survey of US utilities' grid connected solar. The results are top ten rankings of the most solar integrated utilities.

## **International Utility Survey: Utility Procurement Influences & Practices (2010)**

Gartner and SEPA conducted a survey of 134 utilities in Europe and the United States to understand their requirements and objectives for implementing photovoltaic (PV) technologies in their energy generation portfolios. This telephone survey was complemented, in the U.S., by an online survey.

## **PV Technology Characterization Review (2010)**

The PV market continues its explosive growth and simultaneously a wide array of commercially available PV technology and application options are emerging. This SEPA report provides a comparative understanding of the PV technologies along with pertinent metrics, from the manufacturing process through deployment in the field across a broad range of upstream and downstream metrics, including manufacturing processes, feedstock and materials availability, module physical and operating characteristics, market applications and environmental characteristics.