



April 28, 2017

Chair Richard Maullin  
Governor Ashutosh Bhagwat  
Governor Mark Ferron  
Governor Angelina Galiteva  
Governor David Olsen  
California Independent System Operator  
Folsom, California  
*Via email to Stacey Karpinen (SKarpinen@caiso.com)*

**RE: Congestion Revenue Rights Analysis Working Group**

Dear Board of Governors,

DC Energy appreciates the opportunity to express support for the California Independent System Operator's ("CAISO") efforts to collaboratively explore the scope and methodology for an analysis of the differences between Congestion Revenue Right ("CRR") purchase prices and congestion payments to CRR holders. We understand the ISO plans to start this analysis once it has developed the scope and methodology. We are committed to working with the CAISO and stakeholders on this important endeavor. The attached presentation provides a brief overview of our perspective on the CRR auction and its role in the competitive wholesale electric market.

Sincerely,

*S Cochran*

Seth Cochran  
Manager, Market Affairs and Origination

# **Congestion Revenue Right Auctions**

## **California ISO Board of Governors**

**May 1, 2017**



# Disclaimer

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## DC Energy

– Who We Are –

### Market Participant

- **Financial and Physical Trades**
  - FTR and similar markets
  - Bilateral spread contracts (financial and physical)
- **Comprehensive View of Market**
  - All Nodes
  - Physical Fundamentals
- **Not “Speculators” in the Traditional Sense**
  - We take a fundamental view
  - Long-term focus

### Market Advocate

- **DC Energy is Pro Regulation**
  - Regulation for a competitive market
    - Clear rules
    - Effective markets (good price discovery and resource allocation)
  - Innovative market solutions
  - Strong connection between physical and financial markets
  - More power market liquidity
    - DC Energy provided seed capital for Nodal Exchange
- **Active in “Public” Market Monitoring**
  - Assist in identifying market issues, more accurate ISO modeling of markets
  - Mitigating of market power



# CAISO CRR auctions are critical to facilitating risk management and are a key element of nodal market design

## Key Role of CRR Auctions

- **CRR auctions are a key element of the standard electric market design**
  - CRR auctions or their functional equivalent are found in all US-based ISO/RTO regions with nodal markets (i.e. SPP, MISO, PJM, ERCOT, ISO-NE, NYISO)
- **The CRR market provides an opportunity for market participants to hedge risk by shifting it to willing counterparties**
  - Allows each market participant to focus on their core competency
    - Energy provider: serve end users with clean and affordable energy
    - Energy supplier: efficient and reliable operation to ensure least cost supply
    - Financial participant: accept and manage price risk
  - Enables access to hedging opportunities in the form of a robust and centrally clearing auction
  - “The purpose of FTRs to serve as a congestion hedge has been well established.” - Order on Rehearing and Compliance, FERC Docket No. EL16-6-002, at 27 (January 31, 2017)



As the CAISO market evolves, it is important to review the performance of CRR auctions and study any identified issues

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## State of CRR Auctions

- **The CAISO's CRR auction was implemented in 2009 with the inception of the Market Redesign and Technology Upgrade (MRTU)**
- **The overall CAISO market has evolved, however until recently there has not been a comprehensive stakeholder initiative to study and address needed improvements to the CRR auction**
- **DC Energy is aware of the issues being raised and explained**
  - The issues involve both the CRR auction structure and external market factors



DC Energy is committed to working with the CAISO and stakeholders on developing solutions to enhance markets

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## State of CRR Auctions

- **The CAISO is developing a study in order to fully understand CRR auction issues**
  - The study scope is being developed
  - The CAISO is well suited to identify and define the issues
  - There is an opportunity to discover and work toward improvements
- **DC Energy is participating in the stakeholder process**
  - We offer a unique perspective based on our experience in all US-based Independent Service Operators and Regional Transmission Organizations
  - We are committed to participating in the process and working on the issues and solutions with the CAISO and its stakeholders



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# APPENDIX





## DC Energy

– CAISO Market Staff–

### CRR market

- Tyler Kuhn, Director
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### Bilateral

- Mark Bulkeley, Director
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### Market Affairs

- Seth Cochran, Manager, (ERCOT, CAISO, EIM, SPP focus)
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  - [cochran@dc-energy.com](mailto:cochran@dc-energy.com)
- Bruce Bleiweis, Director, (other ISO focus)
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**Dean L. Wilde, II**  
– Managing Director & CEO –

Dean L. Wilde is co-founder, Managing Director and CEO of DC Energy, an investment and trading firm with a focus in energy. DC Energy has become one of the leading financial participants in energy, and along a variety of measures consistently ranks among the top five in the competitive marketplace.

Prior to forming DC Energy, Mr. Wilde founded Dean & Company and Dean Ventures, which are affiliate companies providing investment management and strategic advice. They manage portfolios of equity and fixed income securities.

Mr. Wilde is also a co-founder Nodal Exchange and serves on its Board of Directors, along with other investors including NextEra, Macquarie Cook Power and Lindsay Goldberg. Nodal Exchange, is the first independent commodities exchange dedicated to offering cleared, locational (nodal) futures products and services to participants in the organized North American power markets.

Mr. Wilde has served on the faculty of MIT, where he taught courses in economics and strategy at the Sloan School of Management. He is co-author with Professor Arnaldo Hax of The Delta Project, discovering new sources of profitability in a networked economy which is published by Palgrave, a subsidiary of Macmillan. He has authored numerous articles for various business magazines and holds a US Patent regarding Auctions for Financially Settled Contracts.

Mr. Wilde started his career as a management consultant with Strategic Planning Associates where he became an Executive Vice President and served on the Policy Committee. This firm was later sold to Marsh and McLennan and has grown into what is now Oliver Wyman. Mr. Wilde continued to serve during a transition period as a member of the Board of Directors and headed the firm's worldwide Communications and Computing practice.

Mr. Wilde holds degrees from Iowa State University, 1978, in physics where he graduated as Top Scholar, and from the MIT Sloan School of Management, 1980, where he earned a Masters of Science in Management.

## Ware Adams

– Managing Director & CRO –

Mr. Adams is co-founder, Chief Risk Officer and Managing Director of DC Energy, a proprietary energy trading firm founded in 2002. Since its inception DC Energy has become one of the leading participants in deregulated energy markets and is an active voice for market openness and competition.

Prior to forming DC Energy Mr. Adams was a partner at strategy consulting firm Dean & Company, providing strategic advice to clients in the electric utility, telecommunications, retail banking and online services industries.

Mr. Adams began his career at Strategic Planning Associates (later Mercer Management Consulting) in 1989. He holds a degree in engineering from Dartmouth College where he graduated *magna cum laude* and was elected to Phi Beta Kappa.

## Andrew J. Stevens, Ph.D.

– Managing Director –

Andrew J. Stevens is a Managing Director and co-founder of DC Energy. He helped launch all power trading activities at DC Energy and is responsible for DC Energy's involvement with regulatory proceedings and ISO/RTO market affairs. In 2007, Dr. Stevens helped create the platform for an auction exchange of nodal energy products that forms the basis for Nodal Exchange, LLC, an emerging exchange for cleared power contracts.

Prior to DC Energy, Dr. Stevens worked as a Vice President with Dean & Company, a strategy consulting firm, where he developed the business model for DC Energy and managed the development of many of the analytical tools and processes that drive DC Energy's investment strategy. He has six years of consulting experience to large corporations in the telecommunications and energy industries on a range of business strategy and management issues. His work in the telecommunications industry has comprised sales and marketing strategy, product/network economics, and customer value assessment. His previous consulting experience in the energy business is extensive, with casework involving performance improvement, mergers, acquisitions, deal valuation, energy price forecasting, transaction strategy, transmission analysis and commodity risk hedging.

Dr. Stevens received a Ph.D. degree in Chemical Physics from Harvard University where he developed new synthetic and analytical techniques for novel amorphous materials. He graduated with a B.S. in Chemistry from the California Institute of Technology, where he received the Caltech Prize for academic excellence. Dr. Stevens was awarded graduate fellowships from both the National Science Foundation and the Office of Naval Research (Department of Defense).

## Matthew Tate

– Managing Director –

Matthew Tate is a Managing Director and a co-founder of DC Energy, a proprietary trading firm focused in the energy markets, in particular the wholesale electricity markets with locational marginal pricing (LMP). In addition to his contributions to the original trading strategies and managing ongoing strategic innovation, he plays a significant role in firm management, operations and development.

Prior to DC Energy, he earned his B.S. in Chemistry from the University of Chicago and a Ph.D. in Physical Chemistry from the Massachusetts Institute of Technology. He went on to work at Dean & Company, a strategy consulting firm, where he worked with clients in telecommunications, the internet space, and, of course, the energy industry. It was from this work in the electricity industry and nodal markets that DC Energy was formed in 2002. Today DC Energy is among the most active financial participants across the U.S. RTO/ISOs with nodal pricing and a strong vocal advocate for robust competitive markets

**Tyler Kuhn**  
– Director –

Tyler Kuhn is a Director and early employee of DC Energy, joining the firm in 2006. Over his career at DC Energy, Tyler has been involved in many aspects of DC Energy's trading activities, including exchange-traded power, OTC and bilateral spread trading, and FTRs in the PJM, CAISO, and ERCOT markets. He currently manages all FTR trading activities in the PJM and CAISO RTO markets.

Prior to DC Energy, Tyler earned his B.A. in Philosophy from Princeton University. He has extensive experience in power flow analysis, auction economics, and big data manipulation.

## Bruce Bleiweis

– Director –

Mr. Bleiweis, Director – Market Affairs, joined DC Energy in April, 2004. His responsibilities include assisting in developing and implementing regulatory strategy in the organized electricity markets throughout the U.S. DC Energy is currently active in the ISO/RTO markets operated by CAISO, ERCOT, ISO-NE, MISO, NYISO, PJM and SPP. He also represents DC Energy on numerous committees in many of these ISO/RTOs. His responsibilities also include working with FERC staff and Commissioners as well State Commission and Legislative personnel throughout these regions.

Prior to joining DC Energy, Mr. Bleiweis worked at Reliant Energy, Sithe Energies and PacifiCorp Power Marketing, Inc. between February 1996 and March 2004. His responsibilities included various commercial (wholesale and retail) and development assignments. Mr. Bleiweis was also very active in regulatory matters of the three Northeast ISOs during this period.

He began his career at the New York Power Authority followed by the Consolidated Edison Company of New York, Inc. Mr. Bleiweis had worked, for more than fifteen years, in various commercial and technical areas for these utilities, including New York Power Pool operational and economic dispatch development matters.

Mr. Bleiweis received a Bachelor of Science in Engineering degree from the Moore School of Electrical Engineering at the University of Pennsylvania in 1977. He also received a Masters of Business Administration in Finance from the Lubin School at Pace University in 1986.

## Seth Cochran

– Manager of Market Affairs and Origination –

Seth Cochran is Manager of Market Affairs and Origination for DC Energy Management, L.P. on behalf of DC Energy Texas, LLC and other DC Energy entities. He joined DC Energy in 2011 and has managed trading and regulatory functions in the wholesale energy markets for over 10 years.

In his current role, Mr. Cochran's responsibilities include assisting in development and implementation of regulatory and wholesale market strategy in ERCOT, Southwest Power Pool, and California ISO. He completed three years as Chair of the ERCOT Wholesale Market Subcommittee and is serving his second term as a Segment Alternate on the ERCOT Board of Directors. Prior to joining DC Energy, Mr. Cochran traded power products throughout the eastern US interconnection and provided market advocacy. He started his energy career trading power for an investor-owned utility, where he optimized a diverse portfolio of generation assets and oversaw the delivery and receipt of power.

Mr. Cochran received his Bachelor of Science in Business Administration from The Ohio State University.