26th West Coast Energy Management Congress 2008

(EMC 2008)

Seattle, Washington, USA 14-15 May 2008

ISBN: 978-1-62276-055-8

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2008) by AEE Energy Books All rights reserved.

Printed by Curran Associates, Inc. (2012)

For permission requests, please contact AEE Energy Books at the address below.

AEE Energy Books Attn. Linda Hutchings 700 Indian Trail Lilburn, Georgia 30047

Phone: (770) 925-9388 Fax: (770) 381-9865

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2634

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

CHAPTER 1	Rethinking Design for Energy Performance 1 Douglas A. Bors, P.E.
CHAPTER 2	Providence Everett Medical Center Energy Modeling for Integrated Design Case Study 5 Leslie A. Jonsson, P.E., LEED AP, CSBA
CHAPTER 3	Integrating Design and Construction Best Practices 21 Arun Jhaveri, Ph.D., C.S.D.P.
CHAPTER 4	Facing the Challenges of Integrated Project Delivery 23 Amy J. Hellmund, AIA, Kevin G. Van Den Wymelenberg and Kenneth Baker
CHAPTER 5	Energy Benchmarking 28 Cynthia Putnam
CHAPTER 6	Key Performance Indicators 48 Jim Volkman, P.E.
CHAPTER 7	Post-Occupancy Evaluation of Schools 56 Cathy Turner
CHAPTER 8	Evaluation Result from Green Building Performance 66 <i>John Goins</i>
CHAPTER 9	Commissioning Existing Buildings 86 Eliot Crowe
CHAPTER 10	Chilled Water Plant Optimization 101 Ben P. Erpelding, P.E., C.E.M.
CHAPTER 11	A Program to Transform Building Operation and Maintenance Practice In Washington State 109 Srinivas Katipamula, Ph.D.
CHAPTER 12	Developing an Effective Organizational Energy Savings Strategy 128 <i>James E. Sura, C.E.M., C.D.S.M., C.L.E.P.</i>
CHAPTER 13	Implementing a Strategic Energy Management Plan For Health Care 140 Ron Tolleson and Scott Dorough
CHAPTER 14	Incentives for Utility Programs 146 Robert Balzar
CHAPTER 15	PC Power Management: Energy Savings Sitting on Every Desktop 155 Mike Walker
CHAPTER 16	Think Green – How Green Computing Pays for Itself 180 Brian Canney

CHAPTER 17	Climate Savers Computing Initiative 192 Jon Carr
CHAPTER 18	Navigating High-Tech's Efficiency Potential: A National Lens on Data Center Efficiency Opportunities 201 Jason Erwin
CHAPTER 19	Automated Demand Response Strategies to Reduce Customer Electric Loads 211 Mary Ann Piette
CHAPTER 20	Selling Demand Response -A Case for a Value Proposition 221 <i>William G. Jackson Jr.</i>
CHAPTER 21	Utility Demand Response Pilot Program at Puget Sound Energy 228 <i>Gurvinder Singh</i>
CHAPTER 22	Climate Solutions Current Trends And Critical Issues 233 Jessica Coven
CHAPTER 23	Taking Positive Steps Forward: The Role Of Business in Climate Change 239 Jim Thomas
CHAPTER 24	Carbon Accounting 101 251 Lester Keel, P.E. and Justin Brant
CHAPTER 25	Greenhouse Gas Analysis at the Local Government Scale 253 Amy Shatzkin
CHAPTER 26	Allergan's Approach to Carbon Reduction 267 Michael Whaley, P.E.
CHAPTER 27	Renewable Energy for a Brighter Future 273 Steven J. St. Clair
CHAPTER 28	Measured Energy Savings for Solar & Boiler Projects Installed at an Oregon Swimming Pool 300 Richard W. Davis, C.E.M., LEED AP
CHAPTER 29	Biomass 101 304 Roger A. Huggins, P.E., C.E.M., C.D.S.M., G.B.E.