Stochastic Programming Models in Energy

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Citation Report

#	Article	IF	CITATIONS
1	A two-stage stochastic integer programming model for a thermal power system expansion. International Transactions in Operational Research, 2004, 11, 243-257.	1.8	33
2	Hydroelectric reservoir optimization in a pool market. Mathematical Programming, 2005, 103, 445-461.	1.6	55
3	Optimization of Fuel Contracts Management and Maintenance Scheduling for Thermal Plants under Price Uncertainty. , 2006, , .		10
4	A contingency analysis for managing the risk of water spillage and shortage in a mid-term hydro scheduling model. , 2006, , .		6
5	Optimal Price and Quantity Determination for Retail Electric Power Contracts. IEEE Transactions on Power Systems, 2006, 21, 180-187.	4.6	115
6	Optimal operation of dispersed generation under uncertainty using mathematical programming. International Journal of Electrical Power and Energy Systems, 2006, 28, 618-626.	3.3	82
7	Decision making under uncertainty in electricity markets. , 2006, , .		106
8	Optimal Scheduling of Hydro-Electric Power Generation with Simultaneous Participation in Multiple Markets. , 2006, , .		9
9	Wind power integration studies using a multi-stage stochastic electricity system model. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	9
10	Strategic Bidding for Price-Taker Hydroelectricity Producers. IEEE Transactions on Power Systems, 2007, 22, 2187-2203.	4.6	48
11	Risk-averse profit-based optimal scheduling of a hydro-chain in the day-ahead electricity market. European Journal of Operational Research, 2007, 181, 1354-1369.	3.5	112
12	A complementarity model for solving stochastic natural gas market equilibria. Energy Economics, 2008, 30, 113-147.	5.6	45
13	A Hybrid Method for Optimal Scheduling of Short-Term Electric Power Generation of Cascaded Hydroelectric Plants Based on Particle Swarm Optimization and Chance-Constrained Programming. IEEE Transactions on Power Systems, 2008, 23, 1570-1579.	4.6	80
14	Assessing marginal water values in multipurpose multireservoir systems via stochastic programming. Water Resources Research, 2008, 44, .	1.7	89
15	Optimal Electric Energy Production scheduling for Thermal-Hydro Electric Power Systems. , 2009, , .		0
16	Electricity and CO2 emissions system prices modeling and optimization. , 2009, , .		7
17	Simulation of Optimal Medium-Term Hydro-Thermal System Operation by Grid Computing. IEEE Transactions on Power Systems, 2009, 24, 1208-1217.	4.6	34
18	Effects of uncertain fuel costs on fossil fuel and electric energy flows in the US. Energy Systems, 2010, 1, 209-243.	1.8	7

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#	Article	IF	CITATIONS
19	A survey of stochastic modelling approaches for liberalised electricity markets. European Journal of Operational Research, 2010, 207, 543-556.	3.5	98
20	POWER PLANT INVESTMENT PLANNING BY STOCHASTIC PROGRAMMING / STOCHASTINIO PROGRAMAVIMO NAUDOJIMAS PLANUOJANT ELEKTROS ENERGIJOS INFRASTRUKTŮRĄ, IR GAMYBĄ. Technological and Economic Development of Economy, 2010, 16, 753-764.	2.3	4
21	Modeling Risk Management in Oligopolistic Electricity Markets: A Benders Decomposition Approach. IEEE Transactions on Power Systems, 2010, 25, 263-271.	4.6	16
22	Restoring a flow regime through the coordinated operation of a multireservoir system: The case of the Zambezi River basin. Water Resources Research, 2010, 46, .	1.7	47
23	Decision Making Under Uncertainty in Electricity Markets. Profiles in Operations Research, 2010, , .	0.3	665
24	Optimal yearly scheduling of generation and pumping for a price-maker hydro producer. , 2010, , .		9
25	Valuation of Storage at a Liquefied Natural Gas Terminal. Operations Research, 2011, 59, 602-616.	1.2	58
26	A multi-stage stochastic optimization approach to optimal bidding on energy markets. , 2011, , .		5
27	Mid-Term Stochastic Scheduling of a Price-Maker Hydro Producer With Pumped Storage. IEEE Transactions on Power Systems, 2011, 26, 1856-1865.	4.6	76
28	Stochastic Optimization Model to Study the Operational Impacts of High Wind Penetrations in Ireland. IEEE Transactions on Power Systems, 2011, 26, 1367-1379.	4.6	280
30	Logistics systems and optimisation strategies under uncertain operational environment. International Journal of Decision Sciences, Risk and Management, 2011, 3, 327.	0.1	1
32	Day-ahead market bidding for a Nordic hydropower producer: taking the Elbas market into account. Computational Management Science, 2011, 8, 75-101.	0.8	55
33	Optimal storage design for a multi-product plant: A non-convex MINLP formulation. Computers and Chemical Engineering, 2011, 35, 255-271.	2.0	18
34	On interior-point based retrospective approximation methods for solving two-stage stochastic linear programs. , 2011, , .		1
35	SMART: A Stochastic Multiscale Model for the Analysis of Energy Resources, Technology, and Policy. INFORMS Journal on Computing, 2012, 24, 665-682.	1.0	77
36	A Stochastic Mixed-Integer Programming approach to the energy-technology management problem. Computers and Industrial Engineering, 2012, 63, 594-606.	3.4	13
37	Optimal power flow: a bibliographic survey I. Energy Systems, 2012, 3, 221-258.	1.8	394
38	Demand response control for PHEV charging stations by dynamic price adjustments. , 2012, , .		61

#	Article	IF	CITATIONS
39	A stochastic model for the daily coordination of pumped storage hydro plants and wind power plants. Annals of Operations Research, 2012, 193, 91-105.	2.6	27
40	Risk-averse feasible policies for large-scale multistage stochastic linear programs. Mathematical Programming, 2013, 138, 167-198.	1.6	15
41	Active network management: Planning under uncertainty for exploiting load modulation. , 2013, , .		20
42	A methodology to analyse the impact of offshore wind forecasting error on electricity markets. , 2013, , .		1
43	Stochastic scheduling for a price-maker hydro producer considering forward trading. , 2013, , .		6
44	Two-Stage Minimax Regret Robust Unit Commitment. IEEE Transactions on Power Systems, 2013, 28, 2271-2282.	4.6	191
45	Improving Electricity Market Price Forecasting with Factor Models for the Optimal Generation Bid. International Statistical Review, 2013, 81, 289-306.	1.1	6
46	Risk-averse medium-term hydro optimization considering provision of spinning reserves. , 2014, , .		16
47	Feasibility of linear decision rules for hydropower scheduling. , 2014, , .		3
48	Medium-term optimization of pumped hydro storage with stochastic intrastage subproblems. , 2014, , .		6
49	Value of price dependent bidding for thermal power producers. , 2014, , .		1
50	Upgrading hydropower plants with storage: timing and capacity choice. Energy Systems, 2014, 5, 233-252.	1.8	3
51	Energy supply planning and supply chain optimization under uncertainty. Journal of Process Control, 2014, 24, 323-331.	1.7	39
52	Clearing the Jungle of Stochastic Optimization. , 2014, , 109-137.		45
54	An Investment Optimization Model for the Firms Pursuing Energy Saving and Carbon Emission Reduction Technology. SSRN Electronic Journal, 0, , .	0.4	0
55	An optimization algorithm selection to regulate the power plant work. , 2015, , .		1
56	Impact of the limitations of transmission line capacity on pricing. , 2015, , .		0
57	University impact on power supply economy, reliability and sustainability enhancement decreasing climate changes. , 2015, , .		3

CITATION REPORT

ARTICLE IF CITATIONS # A parallelised distributed implementation of a Branch and Fix Coordination algorithm. European 3.5 7 58 Journal of Operational Research, 2015, 244, 77-85. Large-scale Unit Commitment under uncertainty. 4or, 2015, 13, 115-171. 1.0 Managing Hydroelectric Reservoirs Over an Extended Horizon Using Benders Decomposition With a 60 4.6 10 Memory Loss Assumption. IEEE Transactions on Power Systems, 2015, 30, 563-572. Short-term uncertainty in long-term energy system models $\hat{a} \in$ "A case study of wind power in Denmark. 79 Energy Economics, 2015, 49, 157-167. Improving stochastic dynamic programming on hydrothermal systems through an iterative process. 62 2.113 Electric Power Systems Research, 2015, 123, 147-153. Energy planning and development in Malaysian Borneo: Assessing the benefits of distributed 3.3 technologies versus large scale energy mega-projects. Energy Strategy Reviews, 2015, 8, 15-29. Combined scheduling and capacity planning of electricity-based ammonia production to integrate 64 3.5 73 renewable energies. European Journal of Operational Research, 2015, 241, 851-862. Stochastic Optimization for Unit Commitmentâ€"A Review. IEEE Transactions on Power Systems, 2015, 30, 4.6 441 1913-1924. Using stochastic dual dynamic programming in problems with multiple nearâ€optimal solutions. Water 1.7 19 66 Resources Research, 2016, 52, 4151-4163. Stochastic optimization with value function approximation for micro-grid operation., 2016, , . 1 Hydropower Storage Optimization Considering Spot and Intraday Auction Market. Energy Procedia, 19 68 1.8 2016, 87, 36-44. Reducing costs of electric power generation through the integration of desalinated water 1.0 production into insular weak electric systems. Desalination and Water Treatment, 2016, 57, 1623-1633. Valuation of performance-based contracts for capital equipment: A stochastic programming 71 0.3 8 approach. Engineering Economist, 2016, 61, 1-22. Combining sampling-based and scenario-based nested Benders decomposition methods: application to 1.6 stochastic dual dynamic programming. Mathematical Programming, 2016, 156, 343-389. Linear Decision Rules for Hydropower Scheduling Under Uncertainty. IEEE Transactions on Power 73 4.6 15 Systems, 2017, 32, 103-113. Hydro power flexibility for power systems with variable renewable energy sources: an IEA Task 25 74 cóllaboration. Wiley Interdisciplinary Reviews: Energy and Environment, 2017, 6, e220. Challenges and trends of energy storage expansion planning for flexibility provision in low-carbon 75 8.2 109 power systems – a review. Renewable and Sustainable Energy Reviews, 2017, 80, 603-619. Integrating short term variations of the power system into integrated energy system models: A 8.2 methodological review. Renewable and Sustainable Energy Reviews, 2017, 76, 839-856.

CITATION REPORT

CITATION REPORT

#	Article	IF	CITATIONS
77	Operational planning and optimal sizing of microgrid considering multi-scale wind uncertainty. Applied Energy, 2017, 195, 616-633.	5.1	86
78	Generation expansion planning under uncertainty: An application of stochastic methods to the German electricity system. , 2017, , .		3
79	Generation Expansion Planning With Large Amounts of Wind Power via Decision-Dependent Stochastic Programming. IEEE Transactions on Power Systems, 2017, 32, 3015-3026.	4.6	66
81	A multistage decision-dependent stochastic bilevel programming approach for power generation investment expansion planning. IISE Transactions, 2018, 50, 720-734.	1.6	11
82	Reliability-constrained hydropower valuation. Energy Policy, 2018, 118, 633-641.	4.2	6
83	Self-consumption through power-to-heat and storage for enhanced PV integration in decentralised energy systems. Solar Energy, 2018, 163, 150-161.	2.9	25
84	Optimal hedging strategies for salmon producers. Journal of Commodity Markets, 2018, 12, 60-70.	0.9	7
85	Optimal design of multi-energy systems with seasonal storage. Applied Energy, 2018, 219, 408-424.	5.1	357
86	Scaling: managing a large number of distributed battery energy storage systems. Energy Informatics, 2018, 1, .	1.4	2
87	Partially Adaptive Stochastic Optimization for Electric Power Generation Expansion Planning. INFORMS Journal on Computing, 2018, 30, 388-401.	1.0	12
88	Grey-fuzzy solution for multi-objective linear programming with interval coefficients. Grey Systems Theory and Application, 2018, 8, 312-327.	1.0	19
89	Risk-averse stochastic model predictive control-based real-time operation method for a wind energy generation system supported by a pumped hydro storage unit. Applied Energy, 2018, 226, 631-643.	5.1	31
91	Improving the computational efficiency of stochastic programs using automated algorithm configuration: an application to decentralized energy systems. Annals of Operations Research, 0, , 1.	2.6	2
92	Stochastic Optimization for Energy Management in Power Systems With Multiple Microgrids. IEEE Transactions on Smart Grid, 2019, 10, 1068-1079.	6.2	40
93	Value of information analysis of snow measurements for the scheduling of hydropower production. Energy Systems, 2019, 10, 1-19.	1.8	9
94	On the number of stages in multistage stochastic programs. Annals of Operations Research, 2020, 292, 581-603.	2.6	8
95	Sampling Scenario Set Partition Dual Bounds for Multistage Stochastic Programs. INFORMS Journal on Computing, 2020, 32, 145-163.	1.0	8
96	Impact of Long-Term Water Inflow Uncertainty on Wholesale Electricity Prices in Markets with High Shares of Renewable Energies and Storages. Energies, 2020, 13, 2347.	1.6	6

CITATION REPORT

#	Article	IF	CITATIONS
97	Bidirectional linkage between a long-term energy system and a short-term power market model. Energy, 2020, 198, 117311.	4.5	15
98	Chanceâ€constrained optimal inflow control in hyperbolic supply systems with uncertain demand. Optimal Control Applications and Methods, 2021, 42, 566-589.	1.3	4
99	Container Slot Allocation for Time-Sensitive Cargo in Maritime Transportation: A One-Phase Model with consideration of Port Congestion. Discrete Dynamics in Nature and Society, 2021, 2021, 1-11.	0.5	3
100	Global warming impact to River Basin of Blue Nile and the optimum operation of its multi-reservoir system for hydropower production and irrigation. Science of the Total Environment, 2021, 767, 144863.	3.9	21
101	Balancing risk: Generation expansion planning under climate mitigation scenarios. European Journal of Operational Research, 2022, 297, 665-679.	3.5	5
102	Optimal Dispatch of Hydropower Stations based on Chance-Constrained Programming. , 2021, , .		0
104	Price-Driven Hydropower Dispatch Under Uncertainty. Profiles in Operations Research, 2013, , 73-104.	0.3	4
105	Delta-Hedging a Hydropower Plant Using Stochastic Programming. Energy Systems, 2009, , 507-524.	0.5	10
106	Optimization of Fuel Contract Management and Maintenance Scheduling for Thermal Plants in Hydro-based Power Systems. Energy Systems, 2010, , 201-219.	0.5	2
107	Stochastic Optimization of Electricity Portfolios: Scenario Tree Modeling and Risk Management. Energy Systems, 2010, , 405-432.	0.5	18
108	Integration of Wind Power Production in a Conventional Power Production System: Stochastic Models and Performance Measures. Energy Systems, 2013, , 129-152.	0.5	1
109	Integrating Intermittent Renewable Wind Generation - Insights from the Stochastic Electricity Market Model (stELMOD). SSRN Electronic Journal, 0, , .	0.4	7
110	Integrating Intermittent Renewable Wind Generation: A Stochastic Multi-Market Electricity Model for the European Electricity Market. SSRN Electronic Journal, 0, , .	0.4	5
111	A Scalable Bounding Method for Multi-Stage Stochastic Integer Programs. SSRN Electronic Journal, O,	0.4	3
112	Optimal Storage, Investment and Management under Uncertainty: It is Costly to Avoid Outages!. Energy Journal, 2020, 41, 1-28.	0.9	17
113	Multistage Stochastic Programming via Autoregressive Sequences. Acta Oeconomica Pragensia, 2007, 15, 99-110.	0.1	Ο
114	Optimal Scheduling Strategy for Energy Consumption Minimization of Hydro-Thermal Power Systems. Energy and Power Engineering, 2009, 01, 54-64.	0.5	0
116	Developing Reduced Gradient Approach for Solving Multi-Stage Stochastic Nonlinear Programs. Journal of Computational and Theoretical Nanoscience, 2020, 17, 3194-3199.	0.4	0

#	Article	IF	CITATIONS
117	Jointly Learning Environments and Control Policies with Projected Stochastic Gradient Ascent. Journal of Artificial Intelligence Research, 0, 73, 117-171.	7.0	1
118	A Nested Cross Decomposition Algorithm for Power System Capacity Expansion with Multiscale Uncertainties. INFORMS Journal on Computing, 2022, 34, 1919-1939.	1.0	1
119	Short-term risk management of electricity retailers under rising shares of decentralized solar generation. Energy Economics, 2022, 109, 105956.	5.6	8
121	Adaptive robust optimization for European strategic gas infrastructure planning. Applied Energy, 2022, 324, 119686.	5.1	5