

KATHERINE ALLEN CORT
Research Scientist/Economist
Battelle Pacific Northwest Division
Pacific Northwest National Laboratory
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SUMMARY

Performed, planned, managed, and published technical economic and policy analysis in the areas of regional economics, national impacts, socioeconomic impact assessment, environmental impact assessment, economic and market survey analysis, and energy economics.

- + National Environmental Policy Act (NEPA) planning and economic impact assessment.
- + Nuclear Regulatory Commission Early Site Permit and License Renewal EIS Team.
- + Energy efficiency policy analysis.
- + Marketing and economic impacts assessment of emerging technologies.
- + National energy and economic modeling development and analysis.
- + Economic and performance analysis of energy efficiency issues.
- + Environmental justice and other socioeconomic analysis.
- + Training curriculum development (USDOE and USDHS)
- + State and Federal regulatory performance assessment.
- + Small business impact assessments.
- + Natural resource economics including tourism, water, and agriculture.

EDUCATION

M.A. Economics, University of Washington, Seattle, WA 1993
B.S. Southern Methodist University, Dallas, TX 1991

EXPERIENCE

Research Economist, Pacific Northwest National Laboratory, Richland, WA
1998 – Present.

NEPA support. Part of team of researchers reviewing construction and operating license applications for new nuclear plants and completing corresponding Environmental Impact Statements for the U.S. Nuclear Regulatory Commission (NRC). Specialize in the evaluation of matters related to socioeconomics, Environmental Justice, benefit-cost analyses, land-use issues, need for power assessments and potential energy alternatives. Act as resource coordinator for alternatives and need for power assessments. Contributed to developing guidelines for reviewing the impacts of nuclear plant closures. Also contributed to Canadian Nuclear Safety Commission's 2011 benefit-cost, land-use, and socioeconomic review of Darlington Nuclear Plant proposed expansion. Specific contributions to new reactor Early Site Permits, Combined Operating Licenses and Operating License project support, include the following:

- Watts Bar Nuclear Operating License (Tennessee): Subject matter expert (SME) and primary author for draft final environmental statement for the following subject areas: socioeconomics, land-use, environmental justice, need for power, alternatives, and benefit-cost sections.
- Vogtle early site permit (ESP) and combined operating license (COL) (Georgia): Subject matter expert and responsible author (ESP) for: socioeconomics, environmental justice, need for power, and benefit-cost.
- Turkey Point COL (Florida): Alternatives and land use mentor.
- Calvert Cliffs COL (Maryland): Review and writing support for alternatives.
- Lee COL (South Carolina): Mentor for socio, environmental justice, need for power, and benefit-cost and review/writing support for socioeconomics.
- Comanche Peak COL (Texas): Alternatives and land use mentor.
- Levy COL (Florida): Review and writing support for socioeconomics, environmental justice, and alternatives.
- Grand Gulf (Mississippi): Review and writing support for need for power and alternatives.
- Bellefonte COL (Alabama): SME for alternatives and land use, author of need for power.

Specific contributions to new license renewal applications include the following:

- Ginna (New York): SME for socioeconomics and environmental justice; coauthor on alternatives.
- Browns Ferry (Alabama): SME for socioeconomics and environmental justice; coauthor on alternatives.
- Arkansas Nuclear One (Arkansas): SME for socioeconomics and environmental justice.

Forecasting and Program Benefit Estimations. Performed quantitative analysis of energy and environmental benefits, as prescribed by the Government Performance and Results Act, of all Building Technology programs supported by the U.S. Department of Energy (USDOE). Managed task developing model to evaluate economic impact of proposed commercial building energy codes on individual states.

Benefit-Cost Analysis. Completed a series of benefit-cost studies evaluating the potential impact of commercial building energy codes. Project manager for evaluation of site restoration alternatives for two Washington State nuclear plants that had never been commissioned. Assisted in developing input/output model to evaluate economic impacts of energy-saving technologies and privatizing public facilities.

Energy Policy and Intelligence. Completed analyses and reports regarding the energy trade between FSU and Europe and Turkey's strategic influence on U.S. oil and gas supply. Completed economic portions of two USDOE technical information notes (TIN) on electricity deregulation and restructuring in U.S., Europe and Russia and completed assessment of economic structure and future viability of all nuclear plants in Russia.

Market Analysis and Staffing Assessments. Provide research support for market analysis and strategic planning (internal) for energy-efficiency programs. Managed tasks focusing on staffing, training, and sustainability issues related to the deployment of advanced detection technologies and systems at various international seaports.

Training Curriculum Development: Involved in managing and developing and deploying curriculum and training program for U.S. Department of Homeland Security Rail Security initiative and USDOE Second Line of Defense program focusing on installation of radiation detection equipment and international seaports.

PREVIOUS EXPERIENCE

Economic Analyst, Washington State, Office of Insurance Commissioner, Olympia, WA, 1996 - 1998. Analyzed economic impact of legislation and regulation, such as environmental claims rules and health insurance rate regulation, on citizens and businesses. Performed small business impact assessments for regulatory rule changes.

Research Associate, Tropical Science Center, San Jose, Costa Rica, 1994 - 1996.

Economic Incentives for Watershed Protection and Land Use. Worked in conjunction with the Tropical Science Center (Costa Rica) and the International Institute for Environment and Development of London (U.K.) to evaluate economic incentives for watershed protection and land use in Lake Arenal Region of Costa Rica, as part of a fellowship sponsored by the Social Science Research Council and the Ford Foundation. Lead Researcher for irrigation water valuation study and study of economic benefits of cloud forest biological preserves. Completed case study evaluating major drivers of Central American economies including the impact of sustainable eco-tourism. Supported GIS mapping of Arenal watershed and designed and managed statistical database for all participants in watershed land use study.

Economist Intern, Seattle Public Utilities, Seattle, Washington, 1993 - 1994.

Analyst for numerous economic studies regarding water conservation, utilizing cost-benefit and econometric techniques, including: benefit/cost analysis of proposed city landscape code and water conservation kit program; study of outdoor water use; estimation of indoor water demand for multi-family dwellings. Designed and managed large databases, including information on all Seattle water customers.

RECENT PUBLICATIONS AND PRESENTATIONS:

Chapters/PNNL Reports:

- Belzer DB, KA Cort, and DJ Hostick. 2011. *A Retrospective Analysis of Residential Building Energy Codes: 1992-2010*. PNNL-20708, September, 2011. Richland, WA.
- Belzer DB, MA Halverson, DJ Hostick, and KA Cort. 2011. *A Retrospective Analysis of Commercial Building Energy Codes: 1990-2010*. PNNL-20477_Rev 1, August, 2011. Richland, WA.
- Livingston OV, and KA Cort. 2011. *Analyzing the Impact of Residential Building Attributes, Demographic and Behavioral Factors on Natural Gas Usage*. PNNL-20235, March, 2011. Pacific Northwest National Laboratory, Richland, WA.

- Alvine, KJ, KA Cort, TS Mapes, BJ Russo, BE Bernacki, D Skorski. *Preliminary Scoping Report: Novel Coatings with Daylighting Applications*. June, 2011, PNNL-20520: Limited Distribution.
- Cort KA, RS Butner, and DJ Hostick. 2010. *Federally Funded Programs Related to Building Energy Use: Overlaps, Challenges, and Opportunities for Collaboration*. PNNL-19942, October, 2011. Pacific Northwest National Laboratory, Richland, WA.
- Cort KA, DJ Hostick, JA Dirks, and DB Elliott. 2009. *Analyzing the Life Cycle Energy Savings of DOE Supported Buildings Technologies*. PNNL-18658, Pacific Northwest National Laboratory, Richland, WA.
- Dirks JA, DM Anderson, DJ Hostick, DB Belzer, and KA Cort. 2008. *Lost Opportunities in the Buildings Sector: Energy-Efficiency Analysis and Results*. PNNL-17623, Pacific Northwest National Laboratory, Richland, WA.
- Cort KA, DJ Hostick, DB Belzer, and OV Livingston. November 2007. *Modeling EERE Deployment Programs*. PNNL-17089, Pacific Northwest National Laboratory, Richland, WA.
- Livingston OV, MJ Scott, DJ Hostick, JA Dirks, and KA Cort. 2008. *Impact of the FY 2009 Building Technologies Program on United States Employment and Earned Income*. PNNL-17598, Pacific Northwest National Laboratory, Richland, WA.

Final Nuclear Regulatory Commission Reports:

- *Final Environmental Impact Statement for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant Site*. Division of New Reactors, Office of Nuclear Regulatory Commission. NUREG-1872, Vol1, August 2008.
- *Final Environmental Impact Statement for License Renewal at the National Bureau of Standards Reactor*. Division of Regulatory Improvement Programs, Office of Nuclear Regulatory Commission. PNNL-16665 and PNNL-16779, Pacific Northwest National Laboratory, Richland, WA. June 2007.

Journal articles:

- "The value of energy efficiency programs for US residential and commercial buildings in a warmer world." Scott MJ, JA Dirks, and KA Cort. *Mitigation Adaptation Strategies for Global Climate Change* (June 2007).
- "The Impact of DOE Building Technology Energy Efficiency Programs on U.S. Employment, Income, and Investment" Scott MJ, DM Anderson, KA Cort, JM Roop, and RW Schultz. *Energy Economics* (Fall 2007).
- "Sustainable Ecotourism in Costa Rica: the Monteverde Cloud Forest Preserve" with B. Aylward, J. Echeverría, & J. Tosi. *Journal of Conservation and Biodiversity* (March, 1996)

Conference Papers and Presentations:

- Cort KA, DB Belzer, and ML Britt. 2011. "Building Energy Code Program National Impact Analysis Assumptions and Methodology ." Online webinar, June 21, 2011. PNNL-SA-80775.
- "Modeling residential energy demand via smooth backfitting: results on behavioral and demographic variables." Livingston OV, and KA Cort. 2010. Abstract submitted to Behavior, Energy and Climate Change Conference, Sacramento, CA. PNNL-SA-71638.
- "A Ten Year Retrospective on Environmental Justice: What Have We Learned?" Scott MJ, JA Jaksch, and KA Cort. 2005. " In Proceedings, Waste Management 2005, February 27 – March 3, 2005, Tucson, Arizona."Global Accomplishments in Environmental and Radioactive Waste Management: Cost-Effectiveness, Risk Reduction, and Technology Implementation." PNNL-SA-43942, Pacific Northwest National Laboratory, Richland, WA.