NPRE 412 Spring 2026
Reading List Week 2 Due 2026.02.03

Required

[1] Matt Bowen, Emeka Ochu, and James Glynn. The Uncertain Costs of New Nuclear Reactors: What Study Estimates Reveal about the Potential for Nuclear in a Decarbonizing World. Center on Global Energy Policy 112923, Columbia University, New York, NY, December 2023. URL: https://www.energypolicy.columbia.edu/the-uncertain-costs-of-new-nuclear-reactors-what-study-estimates-reveal-about-the-potential-for-nuclear-in-a-decarbonizing-world/.

[2] DOE. Pathways to Commercial Liftoff: Advanced Nuclear. LIFTOFF_doe_advnuclear-vX7, Department of Energy, Washington D.C., September 2024. URL: https://liftoff.energy.gov/advanced-nuclear-2/.

[3] NEI. Nuclear Costs in Context. Technical report, Nuclear Energy Institute, Washington D.C., February 2025. URL: https://www.nei.org/resources/reports-briefs/nuclear-costs-in-context.

[4] Nicholas Tsoulfanidis. The Nuclear Fuel Cycle: Chapter 8. In *The Nuclear Fuel Cycle*, pages 266–301. American Nuclear Society, La Grange Park, Illinois, USA, 2013. 00177.

Recommended

[5] J. Buongiorno, M. Corradini, J. Parsons, and D. Petti. The future of nuclear energy in a carbon constrained world-an interdisciplinary MIT study. Technical report, MIT Energy Initiative, Massachusetts Institute of Technology, Cambridge, MA, 2018. http://energy.mit.edu/wp-content/uploads/2018/09/The-Future-of-Nuclear-Energy-in-a-Carbon-Constrained-World-Executive-Summary.pdf. URL: http://energy.mit.edu/wp-content/uploads/2018/09/The-Future-of-Nuclear-Energy-in-a-Carbon-Constrained-World-Executive-Summary.pdf.

[6] Levi Larsen, Nahuel Guaita, Iza Lantgios, Abdalla Abou Jaoude, Nicolas Stauff, and Jia Zhou. Nuclear Energy Cost Estimates for Net Zero World Initiative – 2024 Update. Technical Report INL/RPT-24-80552-Rev000, 2476508, Idaho National Laboratory (INL), Idaho Falls, ID (United States); Argonne National Laboratory (ANL), Argonne, IL (United States), October 2024. URL: https://www.osti.gov/servlets/purl/2476508/, doi:10.2172/2476508.

Miscellaneous

[7] Anne Baschwitz, Gilles Mathonnière, Sophie Gabriel, Jean-Guy Devezeaux de Lavergne, and Yann Pincé. When would fast reactors become competitive with light water reactors? Methodology and key parameters. *Progress in Nuclear Energy*, 100:103–113, September 2017. URL: http://www.sciencedirect.com/science/article/pii/S0149197017301336, doi:10.1016/j.pnucene.2017.05.028.

[8] Bulletin. Nuclear Fuel Cycle Cost Calculator, 2017. URL: http://thebulletin.org/nuclear-fuel-cycle-cost-calculator.

[9] Christopher T. M. Clack, Aditya Choukulkar, Brianna Cote, and Sarah A. McKee. Technical Report: Economic and Clean Energy Benefits of Establishing a Southeast U.S. Competitive Wholesale Electricity Market. Technical Report SERTO_WISdomP_VCE-EI, Vibrant Clean Energy, LLC, Boulder, Colorado, August 2020. URL: https://energyinnovation.org/publication/economic-and-clean-energy-benefits-of-establishing-a-southeast-u-s-competitive-wholesale-electricity-market/.

[10] ETI, CleanTech Catalyst Ltd, and Lucid Strategy, Inc. The ETI Nuclear Cost Drivers Project: Summary Report. Deliverable Summary Report D7.3, Energy Technologies Institute, April 2018. https://d2umxnkyjne36n.cloudfront.net/documents/D7.3-ETI-Nuclear-Cost-Drivers-Summary-Report_April-20.pdf. URL: https://www.eti.co.uk/library/the-eti-nuclear-cost-drivers-project-summary-report.

[11] Paul L. Joskow and John E. Parsons. The economic future of nuclear power. *Daedalus*, 138(4):45–59, 2009. URL: http://www.mitpressjournals.org/doi/abs/10.1162/daed.2009.138.4.45.

[12] Paul L. Joskow and John E. Parsons. The future of nuclear power after Fukushima. 2012. URL: http://dspace.mit.edu/handle/1721.1/70857.

[13] Jessica R. Lovering, Arthur Yip, and Ted Nordhaus. Historical construction costs of global nuclear power reactors. *Energy Policy*, 91:371–382, April 2016. URL: http://www.sciencedirect.com/science/article/pii/S0301421516300106, doi:10.1016/j.enpol.2016.01.011.

[14] Carlo Mari. The costs of generating electricity and the competitiveness of nuclear power. *Progress in Nuclear Energy*, 73:153–161, May 2014. URL: http://www.sciencedirect.com/science/article/pii/S014919701400033X, doi:10.1016/j.pnucene.2014.02.005.

[15] NEI. Nuclear Costs in Context. Technical report, Nuclear Energy Institute, Washington D.C., December 2023. URL: https://www.nei.org/resources/reports-briefs/nuclear-costs-in-context.

[16] Nuclear Energy Agency. Nuclear Energy Agency - Projected Costs of Generating Electricity - Levelised Cost of Electricity Calculator. Technical report, International Energy Agency, Nuclear Energy Agency, 2020. URL: https://www.oecd-nea.org/lcoe/.

[17] Nuclear Energy Agency and International Energy Agency. Projected Costs of Generating Electricity - 2020 Edition. Technical report, IEA, NEA, 2020. URL: https://www.oecd-nea.org/jcms/pl_51110/projected-costs-of-generating-electricity-2020-edition?details=true.

[18] Monica Regalbuto. The Evolving National Fuel Cycle, December 2020. URL: https://arpa-e.energy.gov/sites/default/files/Regalbuto.pdf.

[19] Varun Sivaram, Colin Cunliff, David Hart, Julio Friedmann, and David Sandalow. Energizing America: A Roadmap to Launch a National Energy Innovation Mission. Technical Report Library of Congress Control Number: 2020917122, Columbia University SIPA Center on Global Energy Policy, New York, NY, September 2020. https://spark.adobe.com/page/Azf8uWSlPJOo9/. URL: https://www.energypolicy.columbia.edu/energizingamerica.

[20] George Tolley, Donald Jones, and others. The economic future of nuclear power: A Study Conducted at the University of Chicago. *University of Chicago*, August 2004. URL: `https://www.eusustel.be/public/documents_publ/links_to_docs/cost/uoc-study.pdf`.