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Abstract

Nuclear power is one of many options available to achieve reduced carbon dioxide emissions likely to be mandated by an (as yet) undefined national climate change policy. Investment costs in nuclear power are greater than in any other conventional generating technology. They are irreversible and involve uncertainties during the project’s development, construction, and commercial operation. This article extends a real-option value model (Robert Pindyck, 1993) to explain the uncertainties facing prospective nuclear plant developers and applies that model to describe mitigation strategies available for the development, construction, and operation of new nuclear plants.

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