



Scholarship for Nuclear Communications and Methods for Evaluation of Nuclear Project Acceptability

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ABSTRACT

The nuclear enterprise has long featured controversy and difficulties in gaining the broad social acceptance needed for project success. The base of scholarship available to help in this regard is smaller than needed, and not much used within the nuclear enterprise. Rather reliance upon public education efforts continues to be the main, and largely unsuccessful, tactic for such projects. We shall try to improve upon this situation. We shall develop a model for the social acceptability of nuclear projects, for use in assessment and refinement of their probabilities of success among essential stakeholders. To do this we shall build upon the existing literature to identify important factors of such success, and we shall utilize stakeholder interviews in relevant project environments in order to formulate the structure and causal strengths of such factors in determining acceptability. We shall utilize the system dynamics technique as the means of integrating the combined effects of these factors, and to reflect their simultaneous feedbacks. We shall refine the model by using it to reproduce the acceptance histories of selected nuclear project examples. We shall design an example nuclear waste storage facility to use in testing the ability of the model to improve understanding and to refine project designs. We shall disseminate the model and improved understandings of the dynamics acceptance to interested users via publications, conferences and workshops. Our success can be very valuable for the nuclear enterprise, and more broadly through strengthening our ability to understand how to design and implement large projects more efficiently.