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Practitioners| Mental Models of Participatory Modeling with Stakeholders: the Case of a Regulated Energy Utility

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Abstract: Many organizations are required by law to engage with external stakeholders. In the regulated world of energy utilities, this takes the form of participatory modelling: stakeholders are involved in determining the objectives of and models for the so-called resource plan, which is used for the approval of rate changes. A failure to effectively involve stakeholders can result in significant delays and losses for the utility and poor social and environmental outcomes. However, utility resource planning is not usually thought of as a participatory modeling process and has developed with limited input from academic research. So how do practitioners in the field reflect on their own practice?

Building on the participatory and environmental modeling literature and using Fuzzy Cognitive Mapping (FCM) as a methodology, this paper captures the mental models of four members of the strategic planning team of a major electric utility in the Pacific Northwest. The mental models about the stakeholder engagement process, its efficiency, its challenges, and its outcomes are captured in face to face interviews with each of the planning experts. They are compared and contrasted against each other and integrated into a team mental model. The integrated model is analyzed by comparing it with the participatory modeling literature. Based on the findings, the work gives recommendations for areas of improvements for the specific utility under study.

Keywords: Stakeholders Engagement; Participatory Modeling; Fuzzy Cognitive Mapping; Energy Planning;