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Post Evaluation of Distributed Energy Generation Combining the Attribute Hierarchical Model and Matter-Element Extension Theory

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Title: Post Evaluation of Distributed Energy Generation Combining the Attribute Hierarchical Model and Matter-Element Extension Theory

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Abstract: Distributed energy supply has a prominent impact on solving the contradiction between energy supply and demand, environmental degradation, and other issues. This paper analyzes the application of distributed energy supply for specific power projects. We developed a systematic post project evaluation index and evaluation model using the theory of matter-element extension, and determined weights for all indicators that influenced distributed energy generation projects, combined with the attribute hierarchical model. The proposed model was verified experimentally, and shown to enhance evaluation of distributed generation projects. In addition, (1) Distributed energy systems have been widely applied across the world due to their inherent advantages of flexibility, convenience, environmentally friendliness, and high reliability, so it is necessary to study. (2) This paper combined the matter-element extension theory (MEET) and the attribute hierarchical model (AHM) to develop an evaluation model for distributed generation projects. The proposed model was verified experimentally using actual distributed energy project data. (3) This paper enhances the evaluation theoretical research on the post-evaluation of distributed generation projects and capturing experience and lessons for subsequent projects.

Keywords: Matter-element extension theory; Attribute hierarchical model; Distributed generation

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