Abstract : In recent years, the accuracy of wind power generation forecasting technologies utilizing deep learning has been improving. However, when operating multiple forecasting models, determining which model to select at each forecasting time point remains a significant challenge. In this study, we propose a dynamic ensemble model selection method based on reinforcement learning. Our proposed method achieves model selection that takes into account the models' own states by incorporating not only environmental information—such as wind speed data—but also the internal parameters and forecasting characteristics of each model as state variables. Furthermore, by employing a ranking-based Pointer Network PPO, we sequentially learn the relative importance of multiple models. In our empirical analysis, we used wind power generation forecast data from the Tohoku region to compare our method with (1) a fixed "best model" selection method based on validation data and (2) an ensemble method using the average of all models. The results confirmed that our proposed method demonstrated superior forecasting performance compared to both benchmarks and possesses the ability to flexibly select models according to prevailing weather conditions.