

March 23, 2023

Armin Yeganeh, Ph.D.

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Email: armin@msu.edu

Dear Net-Load Forecasting Prize committee and members of U.S. Department of Energy's Solar Energy Technologies and Electric Power Research Institute (EPRI),

We are thrilled to submit our letter of intent to participate in the upcoming competition focused on net-load forecasting. We are confident that our skills and experience will make us a strong team for this competition. We are particularly impressed by the goals of this competition, which aims to increase stakeholder awareness of net-load forecasting and promote the use of probabilistic forecast models. We are eager to contribute to these goals by showcasing the latest techniques and methodologies in energy forecasting and providing valuable insights into the future. My team and I will use a developed deep learning-based method, which includes effective normalization of historical data, removal of duplicate inputs, appropriate data shuffling, and avoidance of overfitting to create high-quality and accurate forecasting models.

We are also excited to have access to the Solar Forecast Arbiter platform and historical net load data for the forecast evaluation platform. This will enable us to develop precise forecasting models that incorporate net-load data. We believe that our deep learning-based approach will provide a significant improvement in forecasting accuracy, leading to more effective energy management, and reducing waste. We are highly motivated to compete and win the prize, not only to gain recognition for my work but also to invest in further research and development of forecasting models for the benefit of the energy industry.

Included on the following page is the cover page information requested. Thank you for considering our application, and we look forward to contributing to the success of this event.

Sincerely,



School of Planning, Design & Construction

Construction
Management,
Interior Design,
Landscape,
Architecture,
Urban & Regional
Planning

Appendix

Team name:

Oracle

Key team members:

Armin Yeganeh, Ph.D.

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Dong Zhao, Ph.D.

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Competitor's city, state, and nine-digit zip code:

East Lansing, MI 48824-3706

Whether the competitor's organization currently provides forecasting services commercially:

We do not provide forecasting services commercially.

The partners and affiliates who significantly helped competitors develop the model.

Not applicable.