

Off-Grid Is a Design Architecture — Why We Define the Constraint-Optimal State as “JIZAI”

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Summary

Off-grid is described here as a design architecture that places the energy control point within the operator's reach and builds an appropriate structure from real constraints. By defining protected loads, priorities, state transitions, and recovery procedures, the system can preserve essential functions while retaining operational options. Kei Communication Technology Inc. defines this long-term operating state, built on autonomous, distributed, and asynchronous operation, as JIZAI.

Key Points

- Off-grid begins by placing the energy control point where the operator's intent can reach it. The design then decides what should remain external and what should be brought under local control, including protected-load priorities, state transitions, and recovery procedures. The more of these decisions remain within the operator's reach, the more the system can change state and restart while preserving essential functions. Kei Communication Technology Inc. calls this design state of autonomy and retained choice “JIZAI.”
- Product specifications that show an implemented example of the autonomous and distributed power architecture described in this article.
- Kei Communication Technology Inc. trademark record related to the term JIZAI used in this article.

Sources / References

Publisher-product-information

Personal Energy® product information

URL: <https://www.ieee802.co.jp/ppower-bbank/>

Publisher-trademark-record

Japanese trademark application No. 2014-097591

Source Article

<https://www.ieee802.co.jp/articles/article-101-offgrid-en.php>

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