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Multi-objective optimization of reliability-redundancy allocation problem with cold-standby strategy using NSGA-II

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Highlights

- In this paper, the reliability-redundancy allocation problem (RRAP) has been considered.
- A bi-objectives model by considering standby strategy is developed for the problem.
- The recently introduced CTMC model is used to calculate the exact reliability values.
- Results demonstrate that the proposed algorithm leads to higher reliability compared to all previous studies.
- In each benchmark problem, at least one structure is obtained that outperforms the best solution in the literature.

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