Competition on Application of Modern Heuristic Optimization Algorithms

For Solving Optimal Power Flow Problems

**Team Member:**

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**Computing System:**

**Processor**: Intel ® Xeon ® CPU E5-2667 0 @ 2.90 GHz.

**Installed Memory (RAM)**: 64.0 GB.

**System Type**: 64-bit Operating System.

**Program Language:**

Matlab®

**Implemented Algorithm:**

Modified **ICDE** (Improved (μ+λ)-Constrained Differential Evolution Algorithm)

**Parameter Tuning:**

For 57, 118 and 300 bus systems:

**Population**: mu = 30; lambda = 90.

**DE Mutation Rate**: F = 0.8.

**DE Crossover Rate**: CR = 0.9.

**IBGA Mutation Probability**: pm = 0.05.

**Generation Threshold Parameter**: r = 0.7.

For 41 bus system:

**Population**: mu = 30; lambda = 90.

**DE Mutation Rate**: F = 0.8.

**DE Crossover Rate**: CR = 0.9.

**IBGA Mutation Probability**: pm = 0.05.

**Generation Threshold Parameter**: r = 0.8.