

# Supplementary Materials: The Spectrum of Proactive, Resilient Multi-Microgrid Scheduling: A Systematic Literature Review

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## 1. Literature Identification

Several search terms were used to identify the key contributions. The list contains the search terms, the date of the search operation, as well as the resulting matches. For each search operation, Google Scholar was used as a search engine. Since subsequent entries were found to be less relevant, the number of considered matches was limited to the first 80 publications. The first three search terms were repeatedly applied to update the list of publications and to identify temporal changes in the search results. To avoid missing out relevant publications, all terms were selected such that a broad spectrum of publications is covered.

1. *Date:* 2018-11-28, *Terms:* “microgrid scheduling resiliency”: 80 publications, [1–80]
2. *Date:* 2018-12-03, *Terms:* “microgrid scheduling reliability”: 80 publications, [1,3,5,6,10–12,14,16,18,25,27,40,81–147]
3. *Date:* 2018-12-06, *Terms:* “microgrid energy management resiliency”: 80 publications, [1,3–5,7,8,12–15,17,19–22,26,31,37,40,43,46,51,52,58,64,66,71,114,124,148–198]
4. *Date:* 2019-11-07, *Terms:* “microgrid scheduling resiliency”: 80 publications, [1–32,34,35,37,38,40–43,46,47,49,51,53,59–63,67,68,72,77,78,80,124,199–221]
5. *Date:* 2020-03-10, *Terms:* “microgrid scheduling reliability”: 80 publications, [1,3,5,6,11,12,14,16,18,24,25,27,35,44,73,81–87,89,92,94,97–99,101,104–108,117–120,123,125–127,129,134,138,139,141,142,144,145,222–251]
6. *Date:* 2020-03-11, *Terms:* “microgrid energy management resiliency”: 80 publications, [1,4,7,8,13–15,19–22,26,30,31,38,40,42,43,45,48,56,58,64,68,148,149,151,155,159–162,166,170,182,187,190,199,206,207,209,218,219,225,252–287]
7. *Date:* 2020-03-17, *Terms:* “networked microgrid optimization resiliency”: 80 publications, [4,8,12,13,38,40,45,47,57,62,71,124,182,187,201,206,207,210,213,216,220,253,256,257,262,275,288–341]
8. *Date:* 2020-03-19, *Terms:* “multi-microgrid optimization resiliency”: 80 publications, [1,10,40,56,59,66,152,167,186,200,201,206,213,220,257,265,286,312,332,342–402]
9. External sources (e.g. recommendation) that are not covered by other terms: 2 publications, [403,404]

## 2. Screening and Eligibility Test Results

The following classification was recorded in the literature selection step. Please note that according to the review methodology, a contribution may be classified without screening the entire publication, in case enough evidence is collected. Hence, a contribution may not be assigned to all categories that indicate limited eligibility for the purpose of this research. For a detailed description on the selection criteria, please refer to the main publication.

- *Key Contributions:* 20 publications, [2,18,30,41,57,107,138,217,220,222,229,230,232,252,275,280,307,310,357,371]
- *Limited Topological Considerations:*
  - *No power transmission constraints:* 31 publications, [6,80,81,94,99,102,112,144,202,219,224,225,228,233,236,238,240,246,249,253,257,261,284,292,380,385,393–395,400,403]
  - *Single-bus microgrid only:* 15 publications, [1,5,11,43,86,87,95,97,211,214,223,237,241,243,263]
  - *AC/DC interlinking constraints only:* 4 publications, [13,207,212,216]
- *Limited Technological Coverage:*

- *Limited Asset Types*: 46 publications, [19,27,61,63,109,161,199,205,215,221,236,250,254,256,262,264,265,274,281,296,305,306,308,309,316,324,326,329,331,341,344–347,352,354,370,375–377,379,384,385,387,390,398]
- *Limited stochastic considerations*: 41 publications, [8,13,21,35,42,124,164,167,199,208,240,242,243,245,246,255,260,262,265,269,286,292,296,300,305,317,326,328,332,342,346,354,360,373,377,379,385,390,394,399,400]
- *Limited Resilience Aspect Coverage*: 98 publications, [4,12,16,17,23–25,29,32,33,36,39,50,53,58,65,66,70,71,73,75,76,79,82,83,88,91,92,100,101,103,104,106,108,113,115–118,121,126,128–134,136,139–142,147–149,152,166,171,174,184,185,202,204,210,219,224,226,233,240,243,245,249,251,253,260,261,263,265,284,285,316,319,328,361,364,365,375,377,379–382,387,399,400,403,404]
- *Limited Focus on Normal Operation*: 75 publications, [3,14,15,20,34,37,38,40,44,67,74,89,90,93,98,110,119,123,151,168,170,187,199,200,203,213,227,234,238,246,248,264,267,273,274,282,283,288,290,293,295,299,300,304–306,317,324,329,332,335,339,340,344,345,347,348,350,351,353,355,359,369,370,372,373,384,388–390,392,393,395,397,398]
- *No Scheduling Algorithm Available*: 140 publications, [7,9,10,22,26,28,31,45–49,51,52,54,56,59,60,62,64,68,69,72,77,84,85,96,105,111,114,120,122,125,127,135,137,145,146,150,153–160,163,165,169,172,173,175–183,186,188–198,201,206,209,218,231,235,239,242,244,247,258,259,266,268,270–272,276–279,283,286,287,289,291,294,297,298,301–304,309,311–315,318,320–323,325,327,330,333,334,336–338,343,349,356,358,362,363,366–368,374,386,391,396,401,402]
- *Limited Full-Text Availability*: 6 publications, [55,78,143,162,378,383]

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