# Roy Billinton Test System

The following documents contain descriptions, one-line diagrams and data tables of the RBTS.

**File** : “A reliability test system for educational purposes-basic data.pdf”

**Note**: First version – No distribution.

**File** : “A reliability test system for educational purposes-basic distribution system data and results.pdf”

**Note**: First extension of the RBTS with buses 2 and 4 extended into distribution systems.

**File** : “A test system for teaching overall power system reliability assessment.pdf”

**Note**: Second extension of the RBTS with buses 3, 5 and 6 extended into distribution systems.

**File** : Appendix A of “Reliability Assessment of Electric Power Systems Using Monte Carlo Methods.pdf”

**Note**: Description and data of the RBTS and its extended version.

The only data found is a m-file containing an improvement of the distribution system extension of bus 2 originally found in “A reliability test system for educational purposes-basic distribution system data and results”:

**Files**: ImpRBTSbus2.m & RBTS\_Bus\_2.pdf

**Note**: Matpower code & Topology of the distribution system extension of bus 2.

**Source**: “Improved RBTS Bus 2 test system data for power system reliability assessment and risk management studies” <https://data.mendeley.com/datasets/v4sdczmg38/1>

# New files

**Folder:** OPF data

* RBTS.py: OPF data in pandapower format
* RBTS\_ACOPF\_peak.iidm: load flow resulting from an ACOPF (no security constraints) on the above data at peak load exported to Dynawo/PowSyBl format

Dynamic data and models on <https://github.com/FredericSabot/dynawo/tree/3_RBTS> (to be refined)