AQUA (multi-modal Analytics for data QUAlity in power systems)
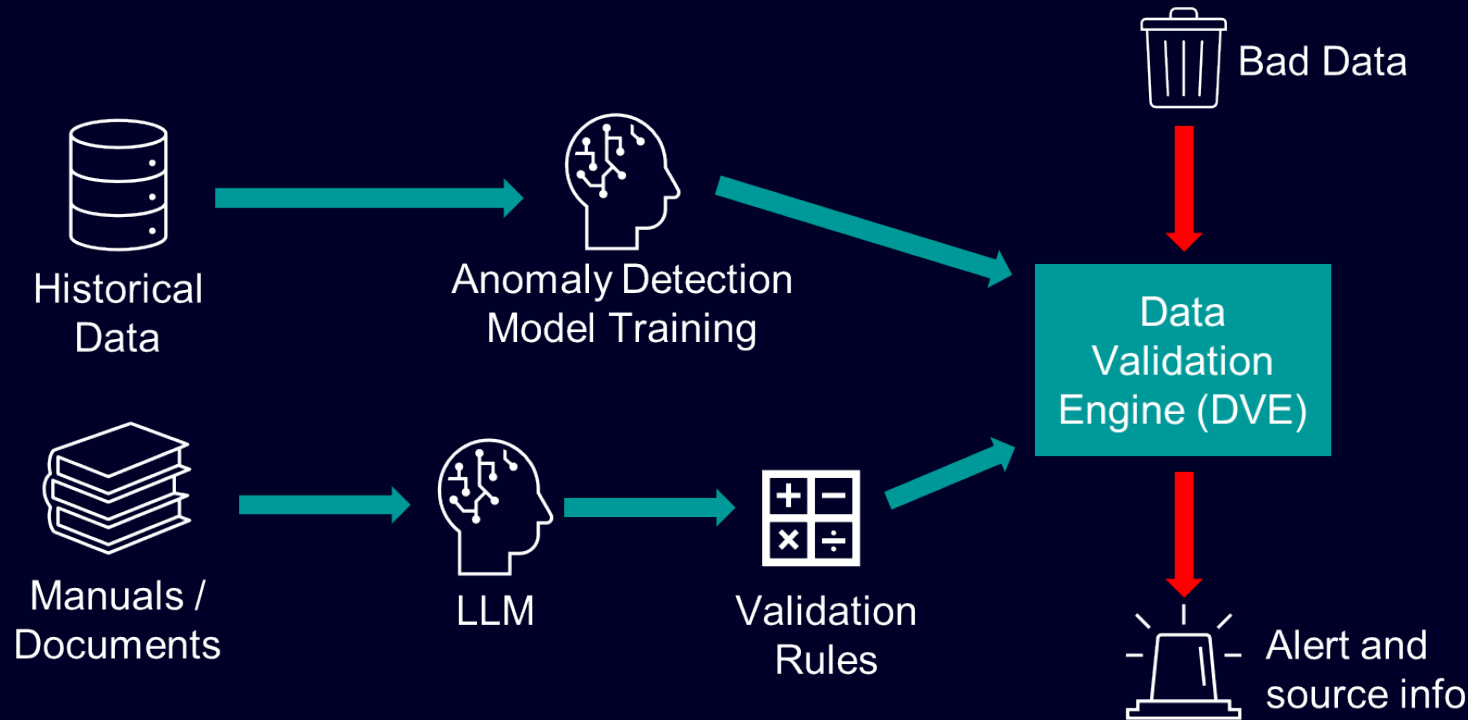
DOE Digitizing Utilities Prize Round 2, Track 1

Historical Data → Anomaly Detection Model Training → Data Validation Engine (DVE)

Manuals / Documents → LLM → Validation Rules → Data Validation Engine (DVE)

Bad Data → Data Validation Engine (DVE) → Alert and source info

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PSEG

Why? Data quality issues affecting the performance of Distribution Management Systems
What? Detection of data quality issues and identification of their sources even when no historical data is available
How? Combination of anomaly detection models with validation rules extracted using Large Language Models

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