PowerMind AI - AI Integration Layer Summary

This document summarizes all 4 key steps implemented in the AI Integration Layer:

1. Automation

- ai_loop_runner.py: Python loop to run AI every 60 seconds

- Cron Job Guide: For persistent automation on Raspberry Pi

2. Smart AI Model

- train_ai_model.py: Trains a Random Forest model using simulated data

- model.pkl: Saved model file

- ai_predictor_advanced.py: Predicts 'ok', 'standby', or 'shutdown' based on input

3. Override Feedback Collection

- override_logger.py: Records manual overrides for learning

- test_override_logger.py: Simulates example user override actions

4. Visualization Dashboard

- view_ai_dashboard.py: Displays power history, recommendations, and overrides

- power_log.csv: Sample data for testing the dashboard

Next Phase: Deployment Planning (Phase 5)

- To be executed once hardware arrives from China

- Will include script installation, startup automation, testing, and calibration

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