Task Specification

The agent is initialized with a **high-precision forecasting task** for the **Belgium Electricity Market (BE) dataset**. The input consists of a 168-hour historical sequence with a 1-hour resolution. The objective is to generate a **rigorous 24-hour** forecast that **maintains the statistical properties** of the series while adapting to real-time market fluctuations.

Memory

Rather than relying on raw generation, the agent consults its **memory**, retrieving **relevant historical tool-use experiences** to select and prioritize the appropriate diagnostic **toolset** for specific context.

Tool 1: Model Auxiliary Tool

The tool establishes a high-quality ensemble forecast baseline.

Tool 2: Exogenous Analysis Tool

The tool identifies correlations with Generation and System Load.

Tool 3: Event Summary Tool

The tool verifies a rising pattern to enforce macro-trend constraints.

Tool 4: Cross-Channel Tool

The tool detects lead-lag effects for preemptive bias correction.

Agentic Reasoning Trace

Refinement Logic: The LLM **fuses memory with diagnostics** to *rectify systematic errors*:

Bias Correction: Applies a +0.8 residual correction to midday peaks to align with abnormal load forecasts.

Lag Compensation: Implements a +0.3 early boost to synchronize the signal following 0.67-step lead.

Result: The final forecast closely matches the ground truth by bridging statistical priors and dynamic shifts.