IFS Copperleaf

Delivering Public Value from Asset Investment Planning (AIP) to Electric Utilities

Why this matters now

U.S. electric utilities face simultaneous pressures: replacing aging infrastructure, integrating new load and renewables, and protecting households from rising bills. Regulators increasingly ask for proof that capital plans deliver net public benefits-not just activity. Asset Investment Planning (AIP) is the planning system for making those trade-offs explicit: linking every dollar of spend to reliability, affordability, safety, and policy outcomes that matter to ratepayers. The question isn't whether to invest, but how to invest best-and to show the work.[10 8 9]

Reliability customers can feel

AIP prioritizes projects that prevent failures and shorten outages by directing dollars first to the riskiest spans, stations, and components. The result shows up in metrics that customers notice. Salt River Project (SRP) reported **SAIDI of 70 minutes in 2023**, the lowest in the U.S. Southwest among large utilities-evidence of disciplined investment and operational execution that translates to fewer and shorter interruptions. SRP's public Integrated System Plan (ISP) connects grid programs-such as ADMS deployment and a Daytime Saver time-of-use pilot-to customer benefits in language stakeholders can evaluate.[1 4]

Affordability and bill stability

When fuel markets spiked, SRP's board **forwent $124 million** of under-collected fuel costs in 2022 to soften near-term bill impacts. While a one-time decision, it demonstrates a broader affordability posture: use transparent planning to smooth spend profiles, avoid waste, and reserve headroom so rate shocks are less likely. Clear documentation of value and alternatives makes it easier for leaders-and regulators-to back measures that protect customers when it counts most.[2 3]

Transparent trade-offs and one plan governance

AIP works best when planning is a standard, shared process rather than a spreadsheet contest. National Grid US moved Massachusetts and New York electric planning onto a unified, data-driven platform (FutureNow), explicitly weighing one large substation project versus many smaller jobs on common criteria-reliability, cost, safety, and customer impact. That change didn't just streamline work; early pilots pointed to expected CapEx efficiency gains and lower planning effort, improving affordability and responsiveness for customers as plans adjust in-year.[5 6]

Regulators are rewarding quantified customer benefits

In California, the CPUC authorized **$4.3B** for 2024-2027 energy-efficiency portfolios but tied approval to **>= $3.5B** in documented net customer benefits-a clear standard: demonstrate quantifiable public value and credible alternatives. Across states, commission staff and advisors echo the same expectation-prudence, transparency, and traceable prioritization-exactly what AIP disciplines produce.[8 9]

Independent technical footing for where to spend

AIP is stronger when anchored to shared, third-party evidence about failure modes and performance. EPRI's transmission and distribution analytics provide industry datasets and methods to target the assets that actually drive outages and risk-informing when to replace a component, where to harden, and how much benefit (e.g., SAIDI|SAIFI|CMI reductions) to expect. Embedding those insights in planning helps ensure each dollar buys the most reliability per customer.[11]

From principles to practice

The SRP and National Grid examples show how AIP principles translate into customer outcomes when paired with transparent planning. In the same spirit, two large U.S. investor-owned utilities-Ameren Illinois and Duke Energy-have publicly documented planning reforms that carry these ideas forward in recent regulatory proceedings, settlements, and implementation updates. The thread that connects all four cases is the same: quantified value, clear alternatives, **added transparency** (auditable prioritization, added visibility into inputs, outputs, and formulas, accessible public materials), and portfolios that stay aligned to reliability and affordability under real-world constraints.[5 6 12 14]

Ameren Illinois

In December 2024, the Illinois Commerce Commission approved an amended 2024-2027 multi-year integrated grid plan alongside Ameren's multi-year rate plan after previously requiring stronger affordability and benefit-cost rigor. The approval materials and independent coverage note the Commission reduced the requested rate increase by about 7 percent and linked recovery to spending that is reasonable and prudent, with reliability improvements and clean-energy readiness emphasized. For ratepayers, that means targeted grid work with a smaller-than-requested bill impact and clearer accountability for outcomes.[12 13]

What these cases signal for the wider U.S. trend

Across SRP, National Grid, Ameren, and Duke, the direction of travel is consistent: commissions are rewarding filings that quantify net customer benefits and lay out credible alternatives; utilities are adopting common-scale value frameworks and integrated planning so they can demonstrate why each dollar does the most for reliability and affordability; and negotiated outcomes are tempering requested increases while advancing critical grid programs. In short, AIP is becoming the practical language of consensus-building among engineers, finance teams, regulators, and the public.[5 6 8 9 12 15]

Public trust and communications

When a utility can show its plan in one page-what benefits customers get, what was considered and rejected, and how choices change under scenarios-stakeholders come along faster. Press, consumer advocates, and commissioners all face the same paradox: fund essential grid work and protect bills. AIP doesn't solve economics, but it shows the math behind trade-offs and makes course-corrections quick and credible, which is what commissions are asking for.[9 10]

Bottom line

AIP is how utilities prove they are buying the most reliability, safety, and policy progress for each ratepayer dollar. The mix of outcome evidence (e.g., SRP reliability and affordability actions), regulatory standards (e.g., CPUC net benefits), independent methods (EPRI), and portfolio discipline (National Grid, plus Ameren and Duke examples) adds up to a compelling, verifiable public-value story.[1 2 5 6 8 11 12 14]

Sources:

1. Salt River Project–2024 Grid Performance Report (SAIDI 70 minutes; lowest in Southwest among large utilities)
2. SRP Newsroom–Fuel & Purchased Power Adjustment (board forgoes $124M under-collection to temper bills, 2022)
3. 12News (Phoenix)–Coverage of SRP decision to forgo $124M in fuel cost recovery
4. SRP–ISP Actions Progress Report (ADMS, Daytime Saver pilot, program roadmaps)
5. National Grid Partners–FutureNow story (unified planning; data-driven trade-offs in MA & NY)
6. Energy Central–Case Study: How National Grid Transformed Capital Work Planning (expected CapEx efficiency; reduced planning time)
7. Energy Central–Case Study: AES enterprise-wide implementation (regulatory-grade justifications; re-optimization)
8. California Public Utilities Commission–Decision Authorizing 2024-2027 Portfolios (>=$3.5B net customer benefits; $4.3B authorized)
9. Lawrence Berkeley National Laboratory–Cost Recovery for Grid Modernization Investments (prudence, alternatives, traceability)
10. Utility Dive–The regulator's dilemma: balancing grid modernization with rising power bills
11. EPRI Journal–Predicting Failures with the Transmission Asset Database (methods to target reliability spend)
12. Illinois Commerce Commission–ICC Approves Amended Ameren Illinois Multi-Year Integrated Grid Plan (2024-2027)
13. My Journal-Courier–Ameren plan gets OK, but with smaller-than-requested rate increase (Dec 13, 2024)
14. Duke Energy–Integrated System and Operations Planning (ISOP) overview
15. Duke Energy Carolinas–NCUC order summary (E-7, Sub 1276) in Form 8-K EX-99.1
16. Southern Environmental Law Center–Press release on SC settlement approval
17. PR Newswire–New rates approved for Duke Energy Carolinas customers in South Carolina

Production: IFS, August 2025.