**1aii**

The automated task planner generated a temporally-ordered and resource-efficient plan alongside a set of **Pareto optimal solutions**, addressing the multi-objective optimization of cost and success probability. The **execution plan** designates h1 (Human Electrician) to perform both instances of Electrical installation (t2) at Room H sequentially, followed by sequential Plumbing installation (t3) tasks at Room D and Room E. Concurrently, r1 moves to Room F for Foundation preparation (t1\_msa), and r2 moves to Room G for Foundation preparation (t1\_msb). The specialized r3 begins at Room J with Finishing work (t4\_se1) before moving to execute the final Finishing work (t4\_wcp1) at Room I. The **Pareto front** is the set of non-dominated solutions that defines the boundary for optimal trade-offs between Mission Success Probability and Total Cost, ensuring any solution on the front cannot be simultaneously improved in both metrics. The **optimal solution** that adheres to the P ≥ 0.92 constraint is Solution ID 7, which yields a Total Cost of 48.732 and an Overall Probability of 0.921. This cost-probability balance is primarily achieved by allocating a maximum of 5 retries to r3's t4\_wcp1 task and 3 retries to both r1's t1\_msa and r2's t1\_msb tasks.