**1ai: Detailed List (Precise, Technical, Formal)**

**1. Plan Execution Sequence**

1. h1 (Human Electrician): Executes sequential Electrical installation (t2) tasks (ip2, then ip1) at location Room H. It then performs a state transition to Room D for Plumbing installation (t3\_bza), and a final move to Room E for the second Plumbing installation (t3\_bzb).
2. r1 (Robot 1): Initiates a movement action from Room B to Room F, where it executes its specialized Foundation preparation (t1\_msa) task instance.
3. r2 (Robot 2): Initiates a movement action from Room C to Room G, where it executes its specialized Foundation preparation (t1\_msb) task instance.
4. r3 (Robot 3 - Finishing Specialist): Commences the plan by executing Finishing work (t4\_se1) at its initial location, Room J. It then transitions to Room I via Room G to execute the final Finishing work (t4\_wcp1) task instance.

**2. Pareto Front Explanation**

The Pareto front represents the set of non-dominated solutions in the Quality of Service (QoS) objective space. It delineates the optimal trade-off curve between the two competing objectives: maximizing Mission Success Probability and minimizing Total Cost. A solution on this front is Pareto efficient, meaning no improvement can be made to one objective (e.g., lower cost) without degrading the performance of the other objective (e.g., lower probability).

**3. Optimal Solution for Minimum P ≥ 0.92**

1. The optimal solution that satisfies the minimum mission probability constraint of 0.92 is Solution ID 7.
2. This solution yields a Total Cost of 48.732 units and an overall Mission Success Probability of 0.921.
3. The retries allocated to critical task instances are as follows:
4. t4\_wcp1 (Finishing work) by r3: 5 retries (maximum allowed)
5. t1\_msa (Foundation preparation) by r1: 3 retries
6. t1\_msb (Foundation preparation) by r2: 3 retries