

RCx defined:

RCx (*retro-commissioning* and *recommissioning*) is a method that combines knowledge of HVAC fundamentals with specific testing and analysis techniques to optimize facility energy systems and solve comfort problems.

There are many potential tasks associated with RCx

Tune?

Calibrate?

Optimize?

Balance?

Trend?

Test?

Measure?

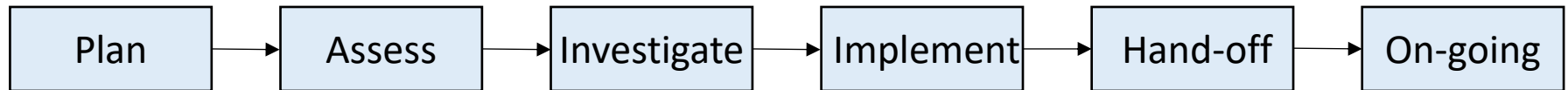
Validate?

Reprogram?

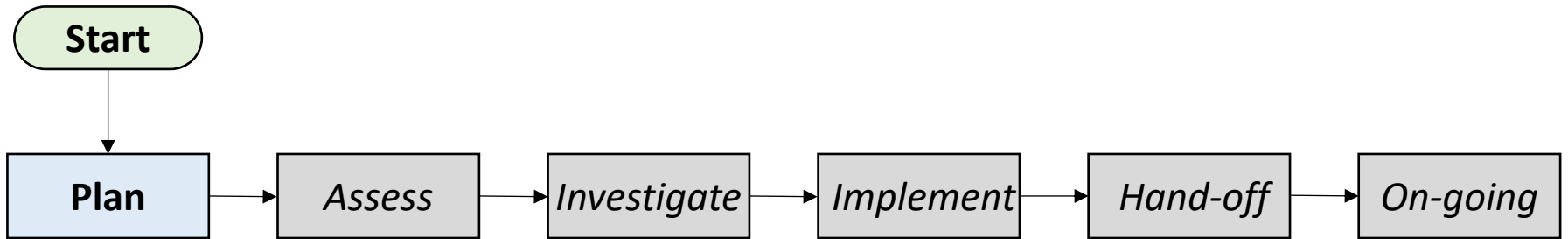
Repair?

Redesign?

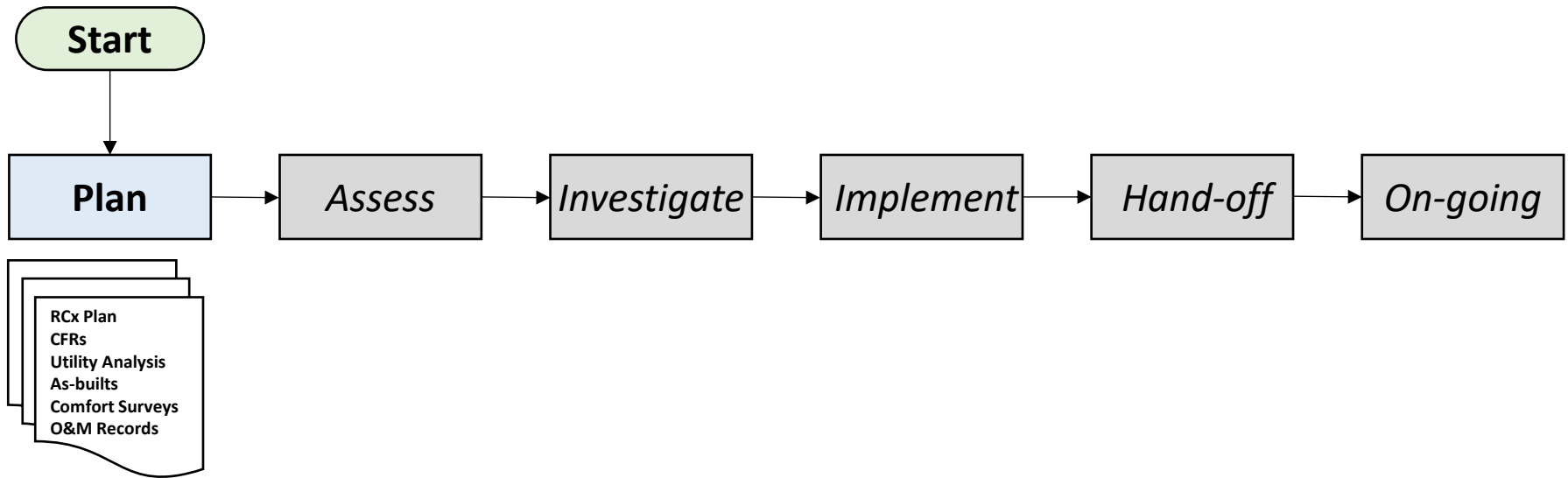
ASHRAE Guideline 0.2 organizes these tasks into phases that map well onto Army processes



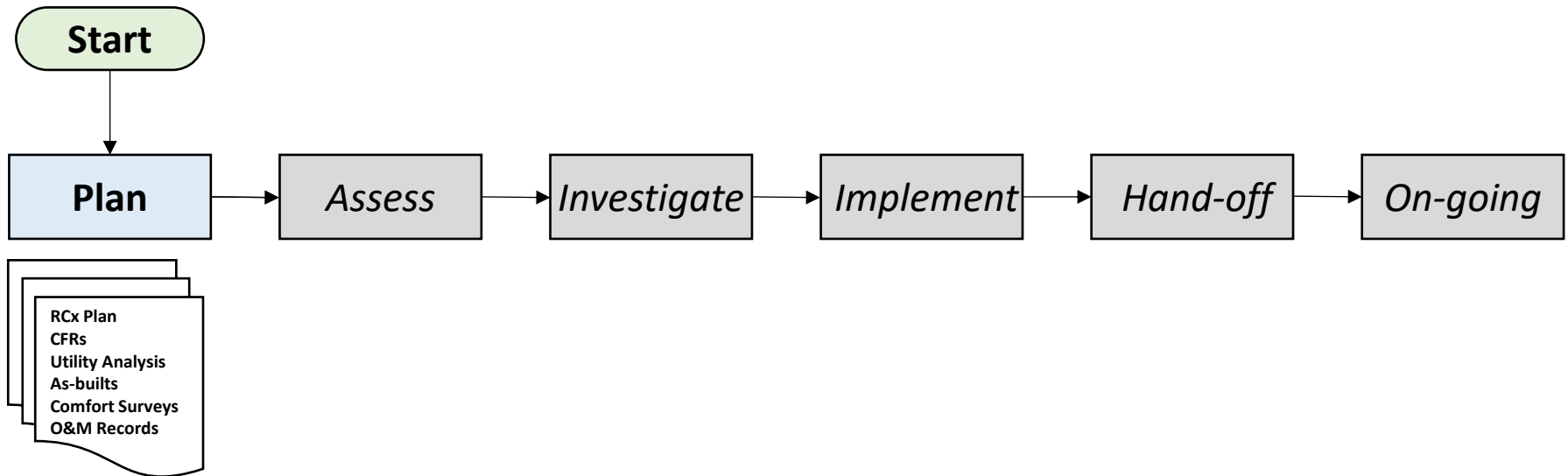
It starts with some level of planning



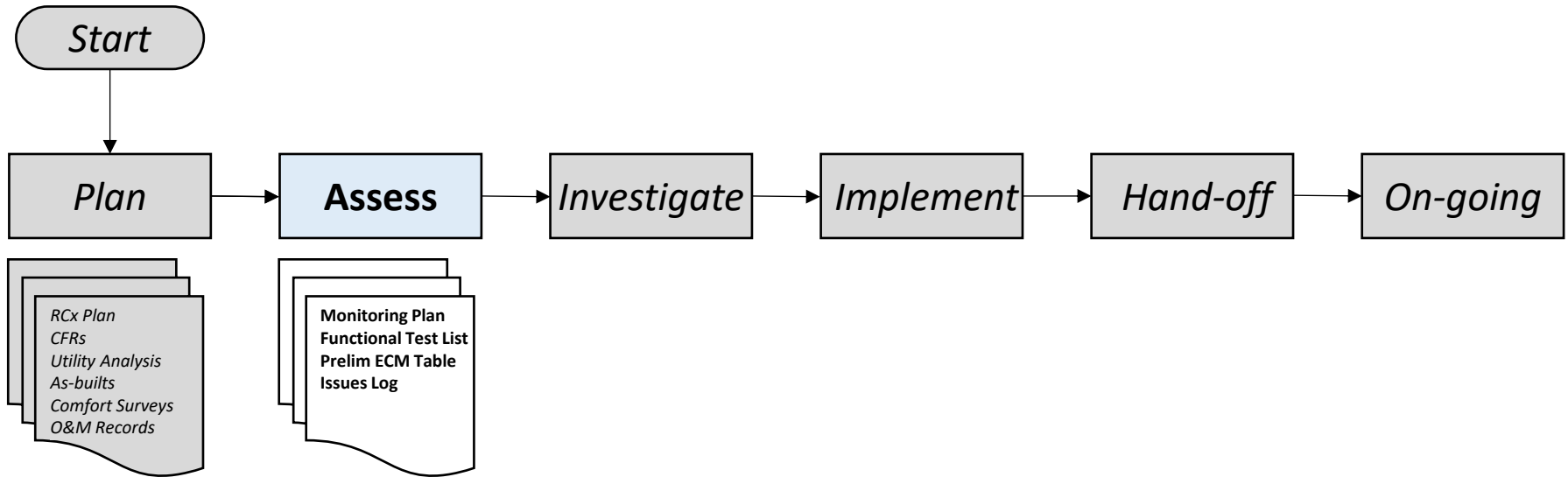
And associated planning documents



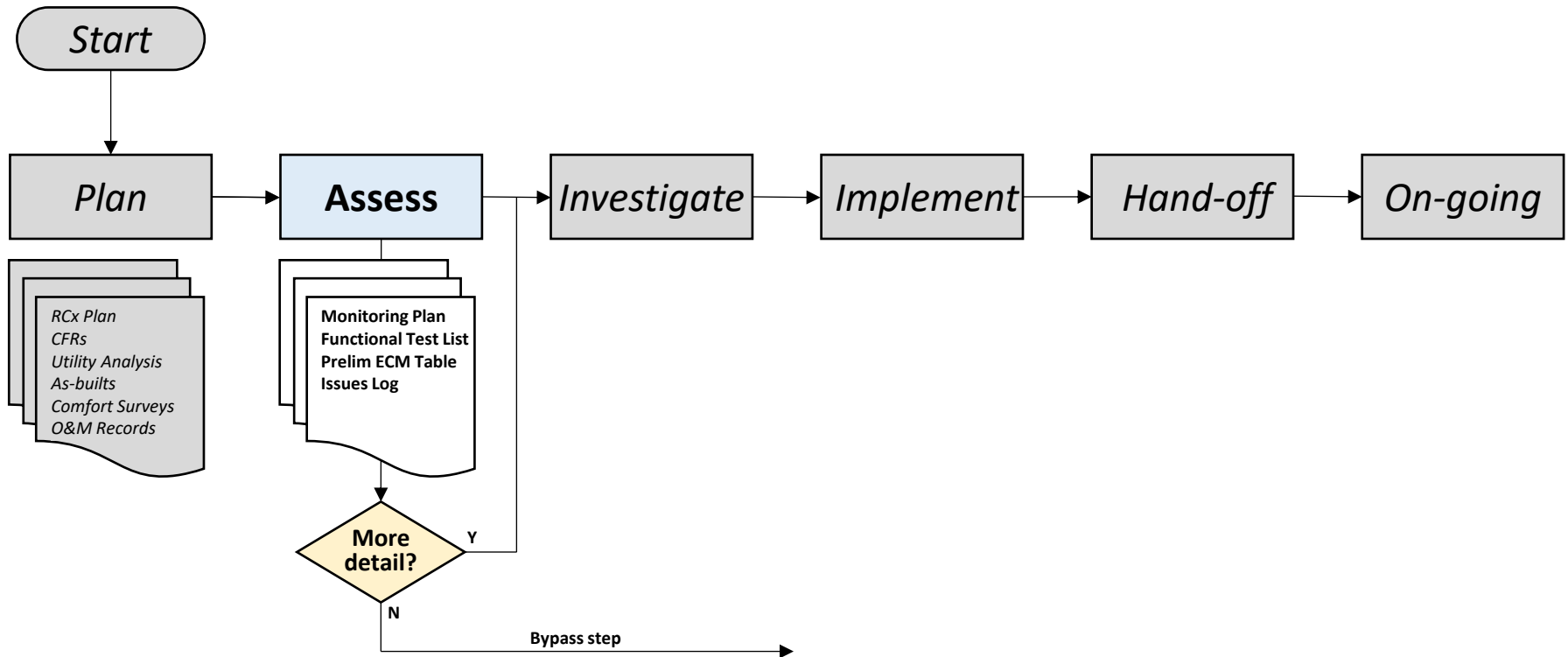
Much of this planning is best practice
but may not be possible with limited facilities support



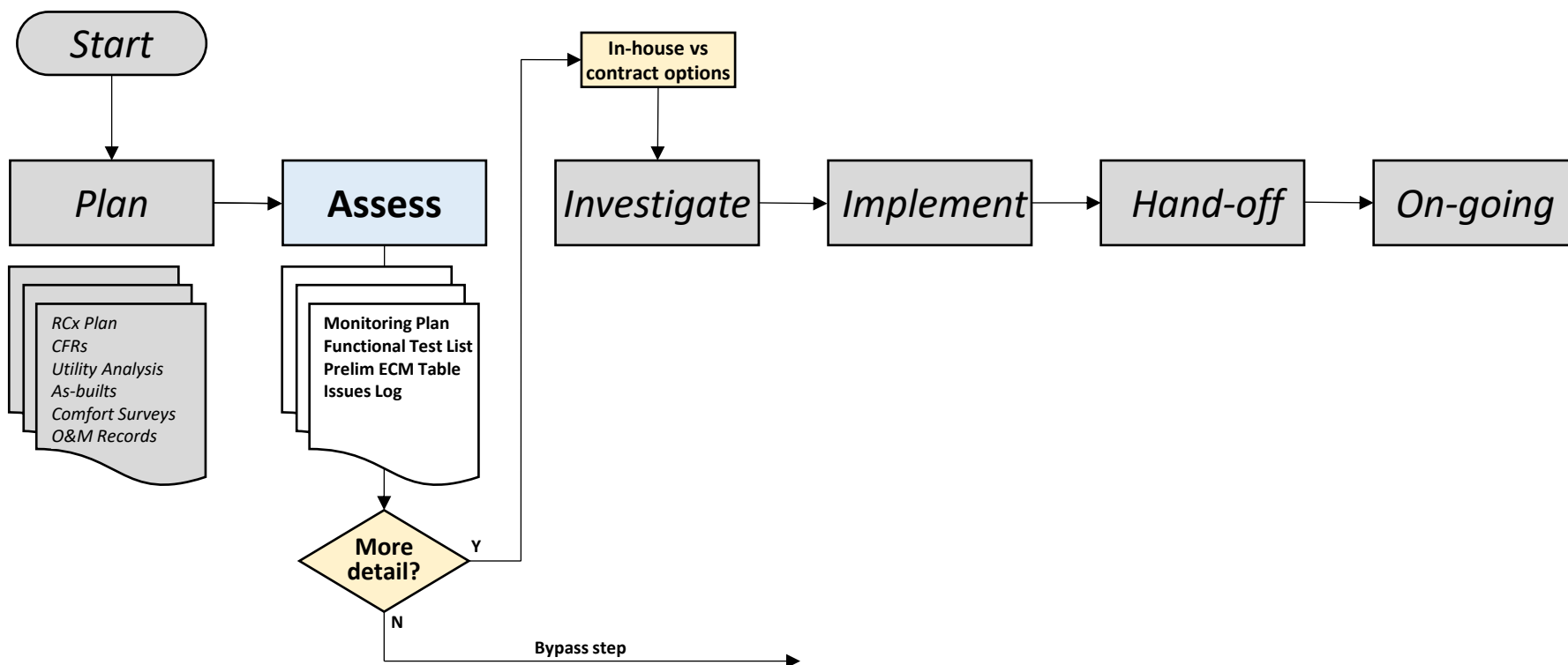
The RCx Assessment is a 1-2 day initial walkthrough done by facility staff that meets EISA 2007 requirement



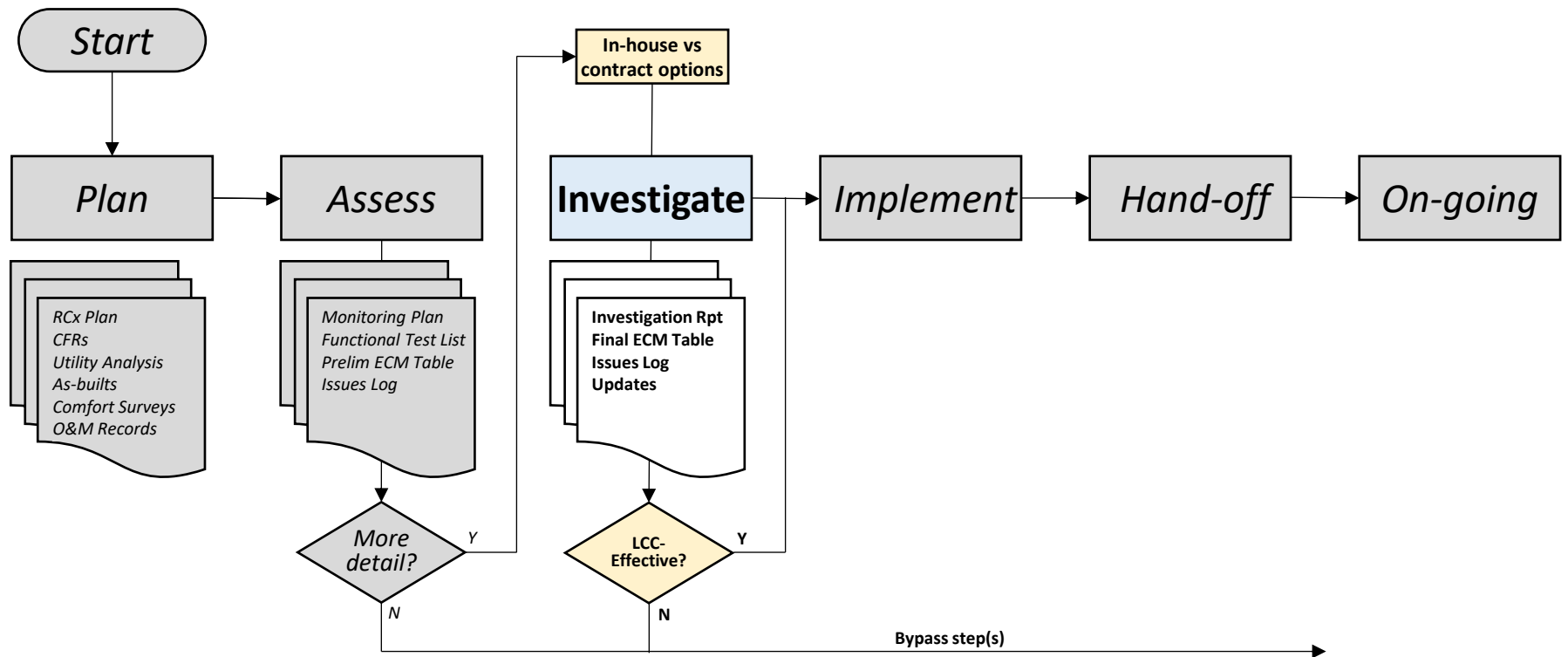
Facilities staff document the assessment:
what (if any) actions were performed and
what requires more in-depth investigation



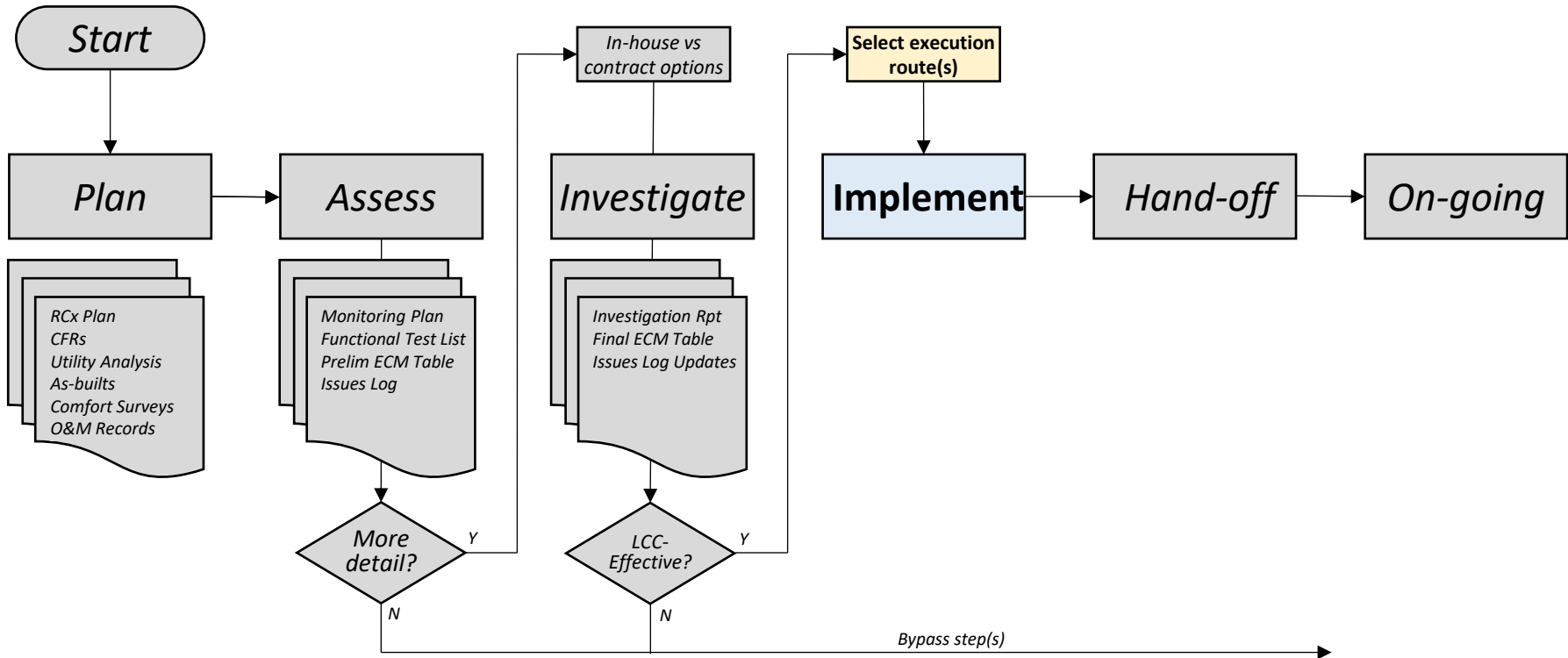
Where more in-depth RCx work is merited, facilities staff may have in-house or contract options (assessment results drive contract requirements)



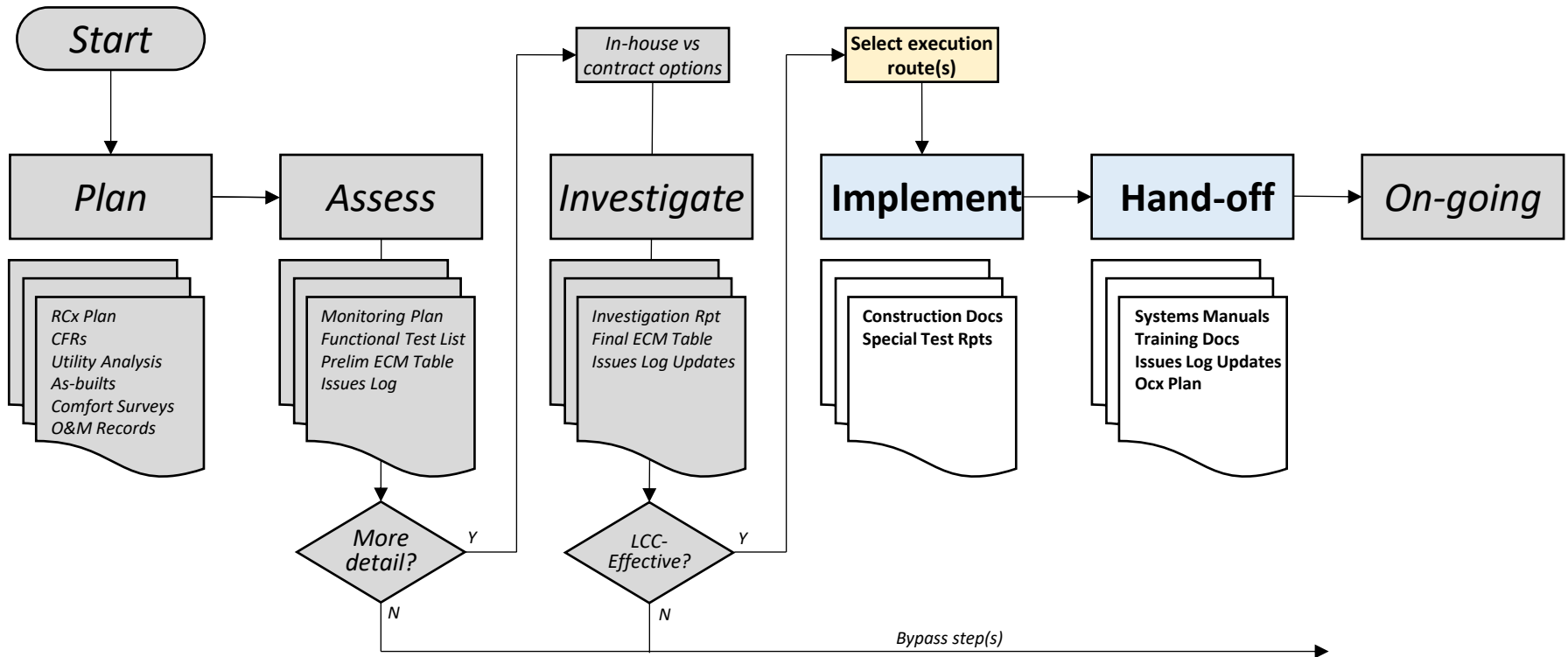
In either case, Investigation Phase should result in further tracking what's been adjusted/fixed so far and determining what additional ECMs will pay back



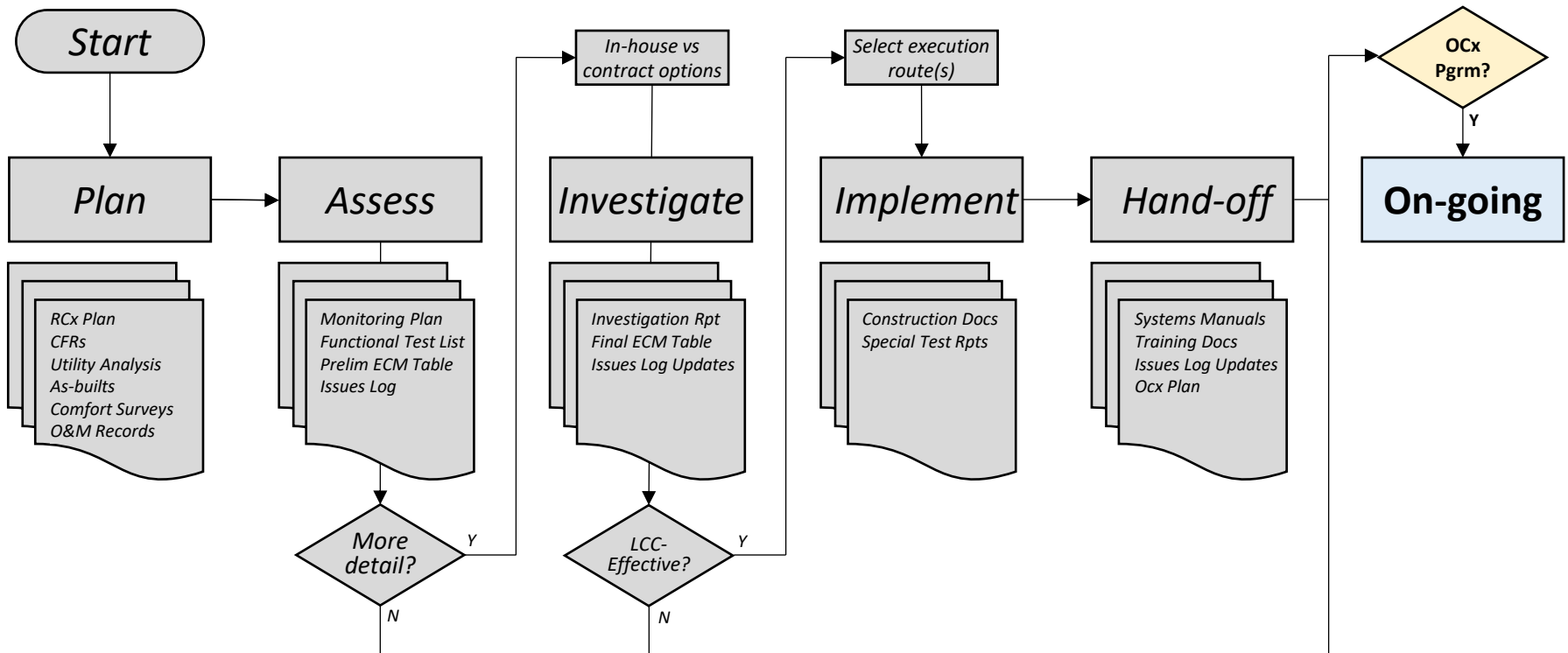
Implementation of ECMs may be done by multiple entities (in-house, O&M service request, controls service contractor, general contractor, etc)



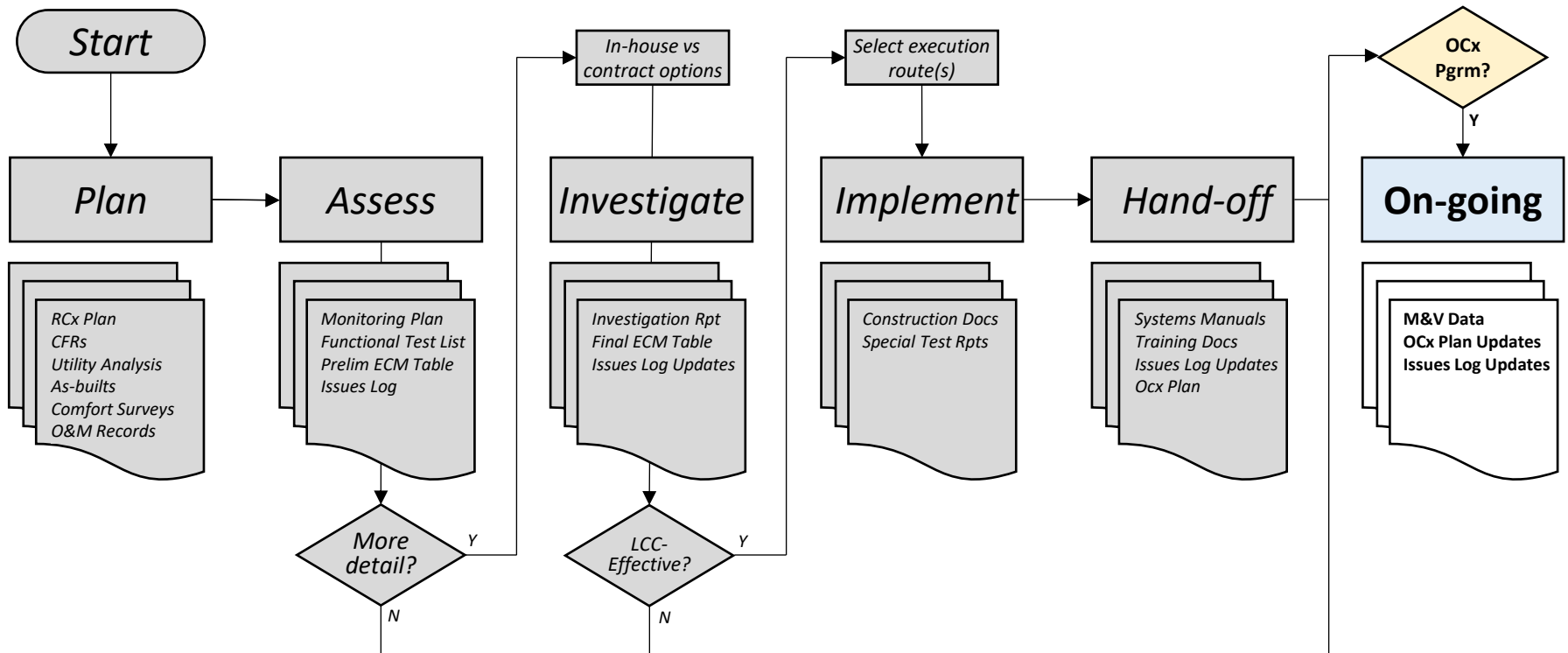
But implementation and hand-off of any given ECM will always be performed together



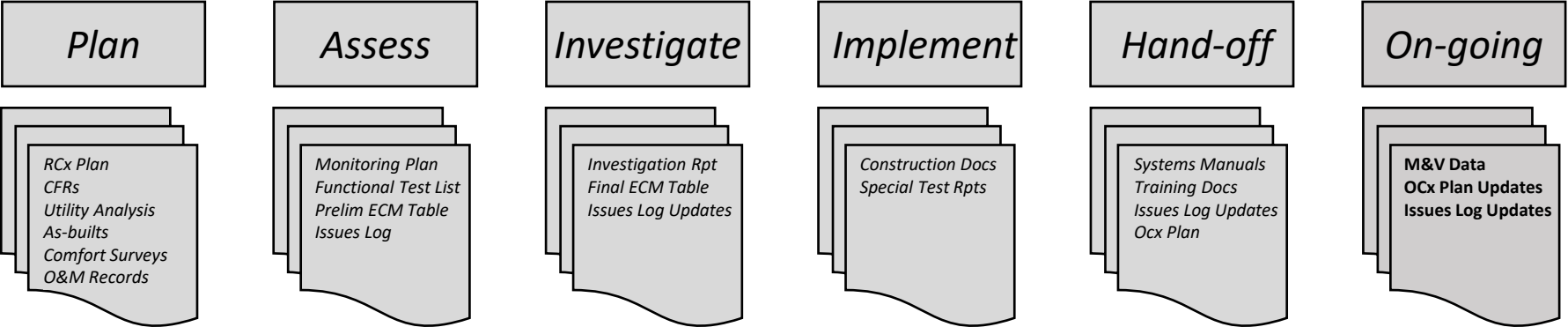
On-going Commissioning (OCx) is another best practice that may be performed differently or not at all



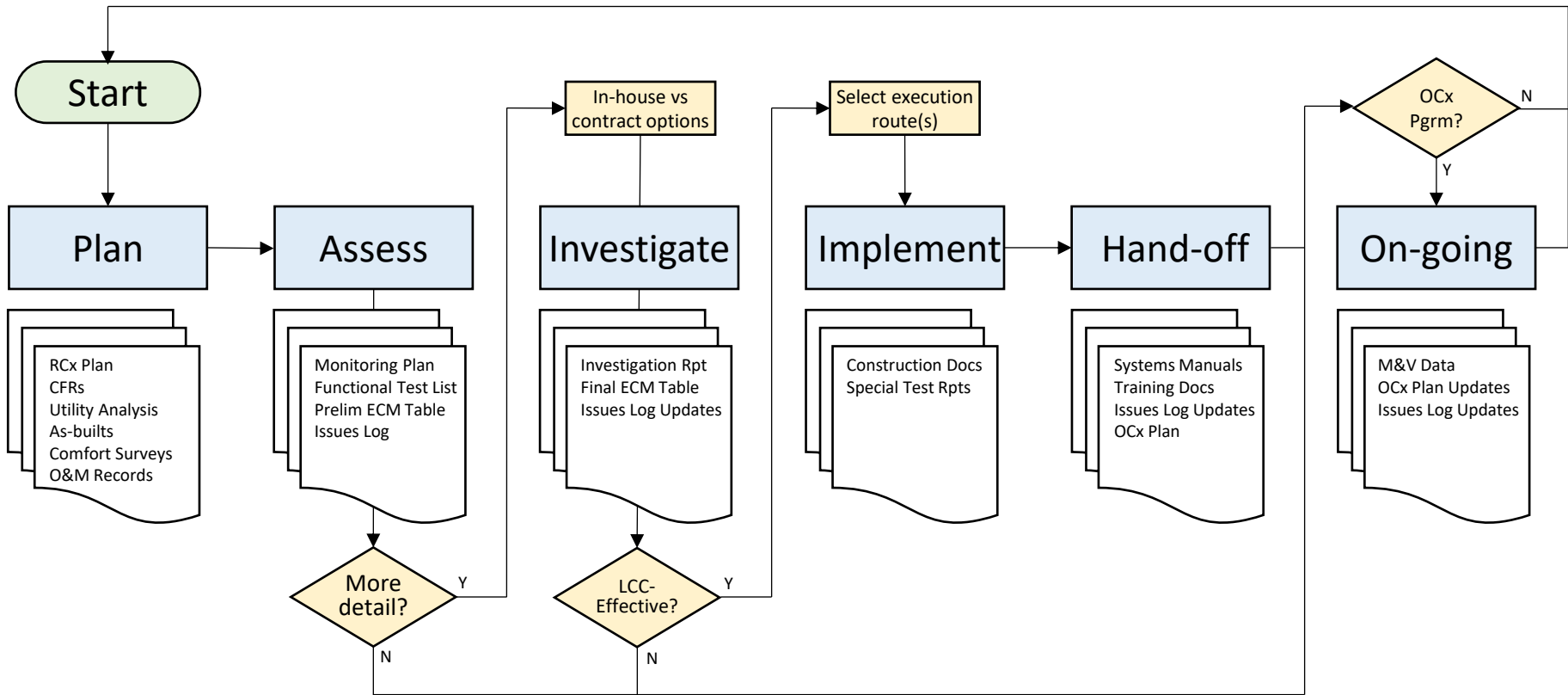
The goal of OCx is to continuously monitor specific facility performance metrics and have a plan for keeping buildings on track



Per EISA 2007 Section 432, repeat this process annually to assess all RCx candidates in a four year cycle



Army RCx Process



The following support materials Are available through as Army RCx resources

1. Army RCx Technical Guide
2. RCx Report Example
3. Template RCx scope of work documentation
4. Template RCx field worksheets
5. RCxU HVAC Fundamentals training videos and exercises
6. RCxU RCx-specific training videos and exercises
7. Preview of Army RCx policy recommendations