## Frequently Asked Questions Platte River's Building Tune-up Program

- 1. What is the Building Tune-up Program? The BTU program is Platte River and its four owner utilities' (Estes Park, Fort Collins, Longmont, and Loveland) retrocommissioning (RCx) program that help funds the cost to perform RCx services and helps customers achieve low or no cost energy savings by tuning up their existing equipment.
- 2. What are commissioning, re-commissioning and retrocommissioning? In general, commissioning is the practice of insuring the energy systems are operating as efficiently as it can and as designed by performing detailed testing and diagnostics of these systems. Typically low or no cost measures are identified that you can do to save energy in an existing building, but require an experienced commissioning agent to perform this analysis. Definitions are as follows:
  - Commissioning (New Construction): Insuring that a building will operate as the designers intended it to; design/submittal/BOD/OPR reviews, construction observations, witness system startup, functional testing, training, warranty checks
  - Retrocommissioning (Existing Building): Commissioning a building that has never been commissioned; systematically reviewing the comfort, operating issues, and energy performance to insure that the building is functioning in an optimum manner
  - Re-commissioning (Existing Building): Commissioning an existing building that has already been commissioned or retro-commissioned
  - Continuous Commissioning (Existing Building): An ongoing process to resolve operating problems, minimize comfort complaints, and optimize energy performance
- **3.** Who should I contact to start this process or ask questions? You can contact your city utility account representative, qualified retro-commissioning service provider (RSP) or Platte River Energy Services to get started.
- 4. What is considered a project, per building or multiple buildings per company (campus)? A project is per building.
- Do I need pre-approval by Platte River before I start work on my project? Yes
- **6. Do I have to use one of the RSPs on your list to perform the work?** Yes, but depends on your type and size of building being retro-commissioned. See our list of RSPs for details on their services and areas of expertise.
- 7. The BTU Manual describes that there are Tiers that define which option of the BTU program I should participate in. What if my building doesn't seem to fit these tiers? Most buildings qualify for the BTU program and rebates. Contact us to discuss the best fit for your building and project.

- 8. My building I am considering for a project is 65,000 and has a bunch of roof top units and single zone thermostats, which Tier should I use? The best option for your building is in Tier 1 and should be considered for a direct implementation of RCx measures. The BTU Manual describes this Tier in more detail.
- 9. My building I am considering for a project is 30,000 and has a couple air handling units, VAV boxes, and BAS system, which Tier should I use? The best option for your building is in Tier 2 (medium sized buildings) and should be considered for a simplified RCx study and implementation by your service contractor. The BTU Manual describes this Tier in more detail.
- **10. How much can I expect to save?** Energy savings will vary from business to business. In general, participating businesses will start saving right away and may save an average of 10 to 15 percent on their monthly energy use.
- **11.** How long does the process take? Any given RCx project may take between one to 9 months depending on size of building, complexity of systems, and/or weather.
- **12. Are O&M Savings included in the SPB for RCMs?** No. They can be used as leverage for additional information or help borderline measures, but will not be part of initial SPB calculations.
- 13. Is the Xcel Energy pariticipation on the Fast Tracks side of the program? Or how does that work? Probably work on the Fast Track
- **14.** What level of scoping does an RSP need to do if we are bringing in the customer? Is the application enough? At minimum, the application is all that is required for applying to the program to get pre-approval to start your project; just help them fill out the application completely.
- **15.** Is savings +/- 20% on a per measure basis or on a per project basis? Per measure, but measures are not set in stone at this phase. This applies to the Planning Phase RCM calculations, in terms of the level of accuracy expected on the predicted energy savings analysis provided by the RSP. During the Implementation Phase, the accuracy is expected to increase to +/- 5-10% for the RCM savings.
- **16.** Is trending going to be required as part of the deliverables for the Planning Phase? No. but trending is preferable when a building has complex systems that will be commissioned and achieve verifiable energy savings.
- **17. Can trending take the place of functional testing?** Partially. Functional testing is necessary as we need confidence that points are all calibrated before trusting the trend data. It would also be worth testing a few sequences before trending them as well.
- **18.** Are the RSPs going to recommend capital improvements as part of the scope of work? This is not required as part of the scope, but we recommend that capital improvement measures are identified for further analysis to be performed at the discretion of the customer outside of the BTU project.

19. What happens if RSP has to go back 2-3 times to do verification? The RSP can spend the budget really fast if they don't have watch over the controls and contractors and the RSP should not be responsible for that.

There are multiple facets to this answer:

- 1. RSP should budget for some minor rework as this will undoubtedly happen even with a good contractor.
- 2. There should be a 50/50 responsibility of the Customer and the RSP to make sure that the end of Implementation and the Verification phases go smoothly. This goes in hand with the RSP staying involved during implementation, looking over the shoulder of the customer doing the work, ensuring it's being done correctly. Also we recommend that the customer provide some sort of sign off near the end of the Implementation Phase at a meeting with the RCx team, stating that all of the work is implemented and functioning per the recommendations of the RSP.
- 3. There should be an agreement between customer and PRPA that will protect against this. For example, if the customer says that all implementation is complete, and the RSP determines that it is not complete and results in the RSP having to do additional verification analysis and site trips, the customer should be responsible for reimbursing the RSP for their additional time.