



FEASIBILITY STUDY FOR A 10-12 MW CHP PLANT @ CANNABIS CULTIVATION FACILITY

SUMMARY

Bryan Power completed a comprehensive feasibility study on the development, design, and installation of a 10 – 12 MW combined cooling heat and power (CCHP) for Today's Healthcare Meds in Pueblo, Colorado. This CCHP plant would provide electricity, heat, cooling and carbon dioxide to an organic growing facility to be built at an old soft drinks bottling factory in Pueblo. Today's Healthcare Meds is a leading grower and supplier of medical and recreational marijuana that is legal in Colorado.

As the organic growing facility was still in design when Bryan Power conducted this detailed study, it was necessary to develop an extensive hour-by-hour model of the thermal and electrical uses of the facility. This required modeling all of the plant grow lighting, general purpose lighting, other electrical uses, the heating, cooling, ventilation and de-humidification systems, and the general use of thermal and electrical energy within the planned facility. With an installed load of over 24,000 Amps, over 100 electrical distribution panels, and an estimated year-round chiller load of 3,600 refrigeration tons, this was an extensive modeling process. At the end of the load modeling process, Bryan Power developed alternative CCHP configurations to meet the thermal and electrical load requirements.

The configurations proposed would provide approximately 10 MW of electrical generation and 4,800 RT of chilled water capacity. The CCHP project is currently on hold pending Today's Healthcare Meds funding for the whole project.

Client

- Today's Healthcare

Location

- Pueblo, CO

Equipment

- TBD

Service

- Technical & Economic Feasibility Study for a CHP Plant