The utilization of cogeneration has provided many benefits both economically and thermodynamically. The function of feedwater heaters and heat exchanging generators to provide cogeneration have helped to collect and efficiently use exhaust gases for furthering other functions or increasing power output. However, when designing a power plant that will incorporate cogeneration, the different costs associated with the design need to be acknowledged. Some costs of using cogeneration are directly related to the temperature difference between the two streams that are encompassed in the generators (Moran, 2008). Two types of cost that are important in this relationship include those of fuel and capital. As the temperature differences increase the fuel cost will increase, but the capital costs will decrease. This trend is beneficial to understand because it allows for a proper determination of the design of power plants depending on what costs is decided to be of greater importance. Other costs include those of maintenance and those for use of steam. Sometimes the costs of maintenance can outweigh those of other costs and make the use of cogeneration not optimal. Also, through analysis of the individual components in a power plant, the use of high-pressure systems can cost higher to implement. These factors are important to consider when designing power plants with cogeneration. Overall, the benefits of cogeneration have outweighed these costs and have helped to advance the way power can be produced.