Westinghouse Electric Co

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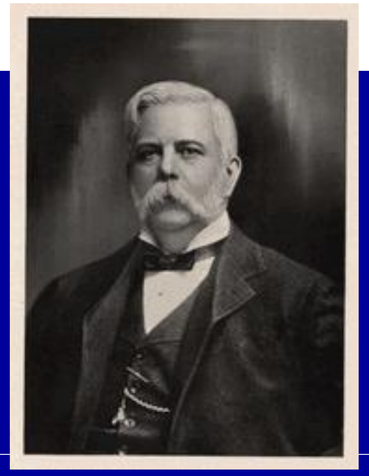
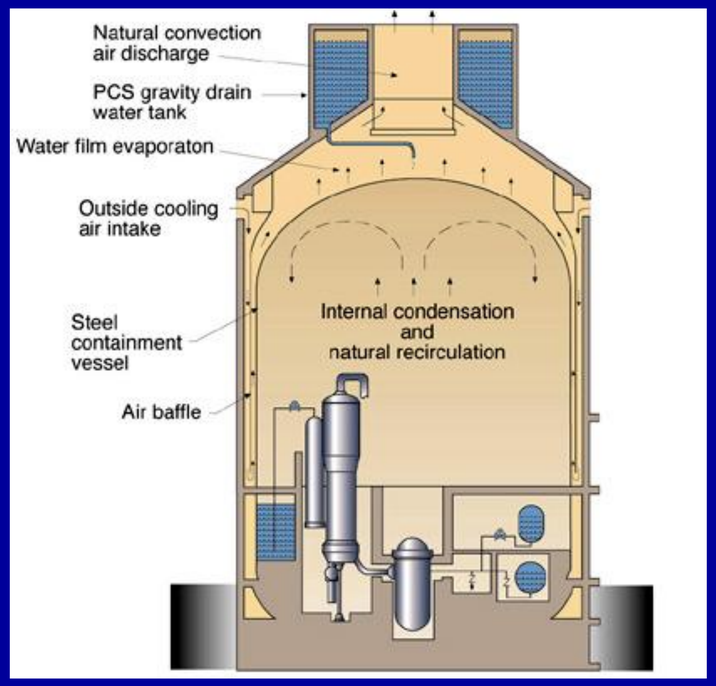
Background Information

Westinghouse Electric Co LLC was named after George Westinghouse, an inventor and entrepreneur. Some of George Westinghouse's inventions were the rotary steam engine, air brakes and a reduction valve. George Westinghouse and Nikola Tesla were advocates for alternating current (AC current), in opposition to Thomas Edison who advocated for direct current (DC). Within the first ten years of AC current, the AC system had proven itself a worthy cause.

Throughout the decades, Westinghouse companies have had many different directives ranging from power plants to televisions, refrigerators, light bulbs, air brakes and sensor/control systems for railroads. Today, however, Westinghouse Electric Co LLC deals solely in nuclear power. Currently, designs for the new AP1000 power plant are in finalization while construction is underway both domestically and internationally. Four AP1000 plants are under construction in China.

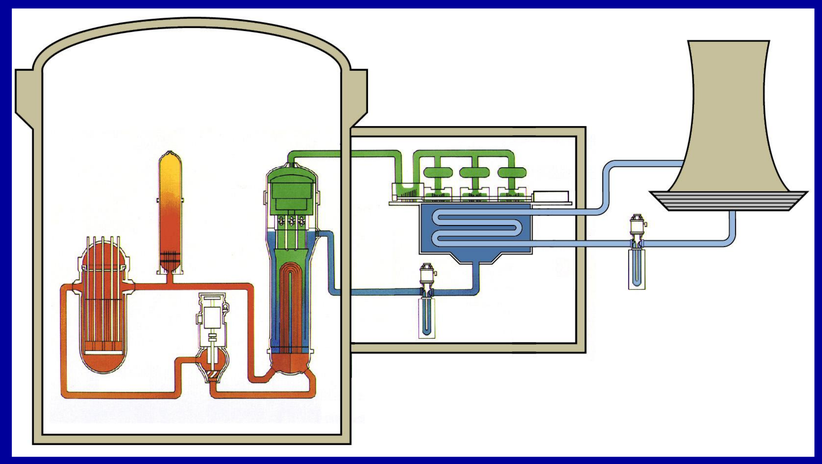
The AP1000 is and Advanced Passive power plant, meaning that natural convection and convection combined with density changes and other spontaneous processes.





Mechanical Work

Answered customer questions regarding heating loads on the HVAC system from storage tanks holding liquid waste. Calculations were completed and passed on to other HVAC groups within Westinghouse while solutions were passed along to the customer.



My Location in Westinghouse

Worked in the Nuclear Power Plants (NPP) group within Nuclear Systems Engineering (NSE). NSE designs all of the systems within the new nuclear power plant with the new AP1000 design. I was in the group dealing with radioactive wastes systems and chemical volume control systems.

Chemical Work

Developed an excel model to track liquid effluents throughout the liquid waste decontamination processes. Isotopes were individually tracked through different processes to model what liquid effluents would be discharged to the environment.

Miscellaneous Work

Updated and verified the standard Westinghouse Excel add-in functions. Verification was done for friction factor functions along with looking into verification for two phase flow functions. Corrections to the add-ins were made to several functions in which errors had been found through usage over the years.

Developed a system for updating drawing booklets for NSE system drawings and piping layouts with a third party company.