

Ralph was a happily married man with two young sons – James and Charles. Ralph’s family was poor and they had difficulty keeping the heat on during the winter. Although Ralph had no formal training he was a brilliant amateur physicist. He liked to build things and this winter he’d built his own heater for the house. Ralph liked to keep warm during the cold Canadian winters. It was the early 1950’s and he was applying recently discovered nuclear physics theory. Ralph had managed to build a small nuclear reactor without respecting the potential dangers and not knowing what they may be. Still, his furnace reactor worked and it certainly kept the house warm. People asked him about the glowing packages from the east-coast.

One day Charles, the younger son, decided to turn on the reactor himself. Charles felt he was slowly freezing inside and felt he really needed the heat. His dad wasn’t around to turn the furnace on and they were out of wood for the old wood stove. He dumped a little fuel brick on the bottom plate of the reactor and lit it on fire. Something he’d seen his father do. At first there weren’t any problems. The reactor heated up and began warming the house. But then he noticed that the reactor was too hot. He’d done something wrong.

When James got home sparks were flying everywhere. The reactor in the basement was pulsating a bright blue-white, it was overloading. One corner of the room had caught fire. Smoke rising from the one corner of the house had caused James to race home as fast as he could. There was only one thing James could do to stop the runaway reaction, use his own body to dampen the reaction. He jumped on the furnace.

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