

Development of Operator Training System Which Synchronizes Process Simulation with Accident Simulation in Real Time at pressure regulatory station

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Development of operator training system(OTS) has been long in progress since several decades. In typical OTS, focuses are only on control room operators(CROP). However, OTS for field operators(FOP) is being developed for increasing demand of late. Pressure regulatory station in which natural gas is expanded in sequence to supply that to the places in need, is a good process model for start-up of developing OTS. In pressure regulatory station, several potential accident scenarios are possible. From these options, selective scenarios are embedded in an entity first. Then, real-time synchronization of these scenarios with process and accident simulation are done via linkage with the entity. The entity which links the two simulations is Microsoft Excel. Process and accident simulation are done in Aspen Hysys and FLACS respectively. In this poster, I mainly focus on the scenario generation. Next, algorithm of how these are synchronized will be introduced. Lastly, actual demonstration of real time synchronization will be shown.