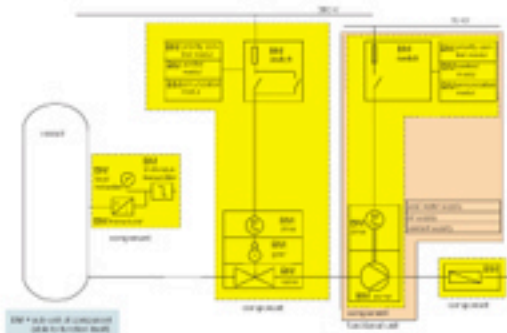


Statistical Evaluation of Reported Events (2)

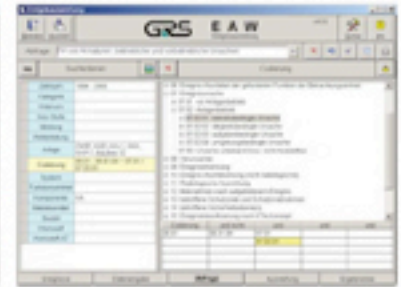
(G. Farber, H. Matthes)



Examples for the definition (boundaries) of components and functional units



Window for computer-assisted data input



Keyword combination for data evaluation

> The team

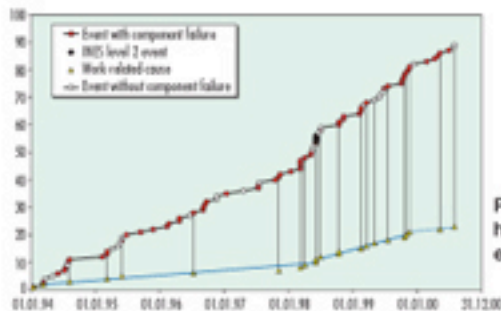
- for database concept and quality assurance
 - 1 expert in nuclear engineering (part-time)
- for database development/optimization and data administration
 - 1 expert in information technologies (part-time)
- for keyword directories, data input and evaluation
 - 2 experts in nuclear engineering (part-time)
 - experience in plant operation or commissioning



Valve testing device

> The state of activities

- database development
 - finished
- data input
 - finished for 1992 - 2000 (1158 data sets)
 - ongoing for 2001 - 2003
- data evaluation
 - finished for 1994 - 2000 (853 data sets)
 - comprehensive evaluation report



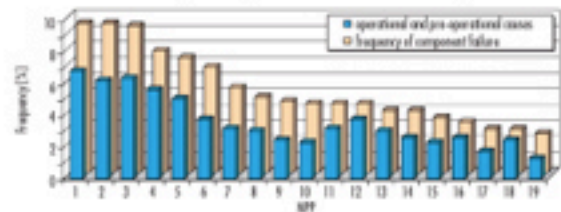
Plant-specific history of events

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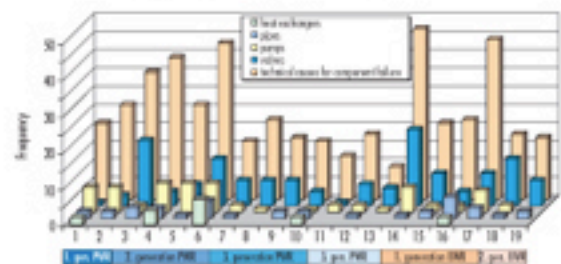
> The results

For example:

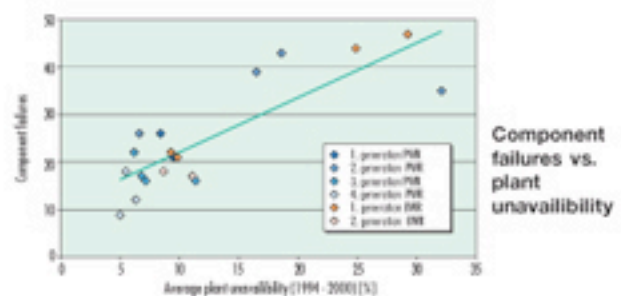
- frequencies of events and of component failures
 - plant-specific
- history of any combinations of failure characteristics
 - plant-specific
 - generic
- history, frequencies and causes of human errors
- correlation of failure frequencies respectively reactor safety and plant unavailability



Percentage of plant-specific component failures



Failure frequencies of components depending on NPP generation



Component failures vs. plant unavailability