From System Analysis to System Design

Centre for Electric Technology
Department of Electrical Engineering

Technical Feasibility as a design question
A hypothetical dialogue

SystemAnalyst: Here's the Scenario. Is it feasible?

Engineer: *Looks difficult --- Let me try! ...*
... Hmmm, not with given technology

SA: It's ok, you don't have to invent the whole system. I just want to know if it *would* be feasible.

E: (puzzled) *What do you mean? I mean, how can I simulate a system that I don't know.*

<u>In Engineering, system design comes before feasibility.</u>

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Outline of Report.

1. **Control Architecture**
   - ***I. Control of Power Systems***
   - ***II. Future Control Needs***
   - ***III. Future Control Means***
   - *IV. System Analysis: Control needs and control possibilities*
2. **Mutual requirements between Control Architecture design and Scenario development**
   - ***I. Requirements from scenarios and other domains***
     Identification of requirements that guide the architecture
   - ***II. Requirements to scenarios and other domains***

This question is difficult, as it is not a classical engineering question.
Unclear if it can be answered generically.

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Addendum: from the minutes.

- **Henrik Lund:** We need to know from the WP if it can be done?
- **Kai Heussen:** It probably can be done.
- **Henrik Lund:** Can you be certain it can be done?
- **Poul Erik Morthorst:** We should state what is required in order for the system to work.
- **Henrik Wenzel:** Different percentage numbers between minimum and maximum should be included
- <u>Main conclusion:</u>

  Electric vehicles are important for our scenarios.

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