ENES489p Fall 2014: Project Statement

August 15, 2014

1 Introduction

The systems problem statement will form the basis for a team project in this course. Teams will consist of 3-5 members (preferably 4). Students will develop a design solution using model-based systems engineering methods employing the Systems Modeling Language (SysML) and its specific diagrams using MagicDraw by No Magic, Inc. Students will also employ other software design and analysis tools available in the Systems Engineering Integration Laboratory (SEIL).

At the end of the project, students are expected to gain a strong understanding of the problem and its nuances, technologies that could support alternative solutions, and express functions, requirements, and solution design using SysML diagrams. In addition, the project should identify a reasonable set of alternatives and use simple trade-off techniques to judge the value of the alternatives based on key performance parameters/measures of effectiveness identified throughout the semester.

2 Submission Contents

Please provide the following information (3 page maximum).

- Project Title

- Project description, including goals and objectives to be achieved

- Background information that justifies the need for a solution

- Key performance parameters or measures of effectiveness

- Key constraints (e.g., legal, time, physical, cost, lifetime) - anything that bounds the problem

- Reference material relevant tot he problem

- Potential mentor (with biographical information) for this problem and level of anticipated engagement