

PROJECT DEVELOPMENT AREA		
Title: Reference Grids TE Scenarios “Well Posed Problems”	Brief Description: Write 2-3 sentences/bullets to describe the project development area and the necessary partnerships <ul style="list-style-type: none"> • Topologies • Identities and capacities of elements • Keep it simple from beginning <ul style="list-style-type: none"> – One complexity at a time 	Challenges: Identify the anticipated challenges for creating a workable demonstration or testbed for the concept <ul style="list-style-type: none"> • Utility distribution engineering input • Is PNNL already doing this?
PROJECT APPROACH		
Major Tasks: Describe a possible approach to developing the project, including 3-5 major tasks <ul style="list-style-type: none"> • Interconversion of data from standard library to a form usable by the model • IEEE test cases (transmission/distribution) • Polish grid • Define actors (+TE Actors) • Challenges built on top of a baseline (Do it first) • Define minimum description for credible analysis/simulation 	Major Milestones with dates: Define 3-5 milestones that can be used to measure progress (what markers can we use to measure and assess progress in development?) <ul style="list-style-type: none"> • Initial set of base cases ID's <ul style="list-style-type: none"> – Topologies • Base cases populated • Base cases populated and structured 	Performance Targets: Identify 1-5 (quantitative) performance targets that define a successful outcome (what does success look like?) <ul style="list-style-type: none"> • Limits: What parameters should be used to define the realistic limits to use of the system/platform <ul style="list-style-type: none"> • Use of scenarios by researchers • Use of scenarios by solutions providers • Use of scenarios by utilities
PROJECT IMPACTS and DEMONSTRATION		
Impacts: Describe the anticipated economic benefits (new products, jobs, economic growth, exports, tax base, etc.) as well as impacts on energy, health, safety, environment, and other quality of life aspects <ul style="list-style-type: none"> • Sequence of problems • Validation tests (inputs for) • Credibility tool for models 	Demonstration vehicle: Describe how you might demonstrate the project concept (physical or virtual) <ul style="list-style-type: none"> • Successful execution on multiple platforms Status of Commitment: Please advise on the current status of the CPS idea detailed on this worksheet (underline/circle one): Launched Ready for Public Announcement <u>IN DELIBERATIONS / NEGOTIATIONS</u> – Based on PNNL Status <u>CONCEPT ONLY STAGE / NO PARTNERS YET</u> – Based on PNNL Status	Team Lead: <ul style="list-style-type: none"> • Neutral standards based party, who could validate the output Participants and Roles: <ul style="list-style-type: none"> • Warren Wang, Navigant; Khaled Masri, NEMA; Steven Ray, CMU; Jason Veneman, MITRE; Alex Brissette, ABB Additional Notes: <ul style="list-style-type: none"> • Team would jointly accomplish milestones of what are the cases, what is the data, and how should it be structured