

Exhibit A: DynaSim Software Support and Maintenance Contract Statement of Work (SOW)

IV.1 Objectives

The Energy Commission expects a single contractor will be able to provide software support and maintenance for all elements of the DynaSim Model. As described above, the model has been developed using the Mathworks Matlab tool for the data intensive processing and Microsoft ASP.NET, C# for the user interface and reporting aspects of the application. All data is stored in a Microsoft SQL database. Reports are generated using Microsoft SQL Reporting Services and Dundas Maps

IV.2 Software Support and Maintenance Contractor Tasks and Responsibilities

The SSM's responsibilities include, but are not limited to the following tasks

IV.2.1 General Maintenance and Help Desk Support

1. Participate in meetings regarding software defect remediation as necessary. The contractor would be responsible for providing the remediation approach for outstanding issues.
2. Track software defects and enhancements in an on-line system that is accessible by Energy Commission authorized staff.
3. The contractor will be expected to provide help desk services to the Energy Commission during normal working hours (M-F, 8-5). Typically, end users will call Energy Commission staff, known as DynaSim Administrators, for assistance with running the model. If a DynaSim Administrator determines that there is a technical issue with the model, or they require guidance or additional training regarding a specific aspect of the model, they will initiate a call to the SSM contractor. Responsibilities for this task will include:
 - a. Tracking and documenting the nature of the call,
 - b. Establishing a remedial action plan,
 - c. Assigning a contractor technical resource to correct the problem.
 - d. Reporting back to the person who initiated the call with appropriate status.
 - e. Preparing a call report, (quantity, nature of the call, resolution status) on a monthly basis.
4. Repair software defects, found in the Microsoft C#, Microsoft SQL, and Matlab code. Repairs should occur as specified in the Service Level Agreement included in Attachment D.
5. Support installation of software patches onto Energy Commission servers.
6. Attend monthly status meetings. A tentative status meeting agenda would consist of:

- a. Call report review
- b. Discussion of open issues
- c. Status of any approved enhancement or modifications
- d. Budget remaining in contract

IV.2.2 Enhancement and Modifications to DynaSim

1. Attend software requirements meetings as needed to understand and develop minor enhancements to DynaSim. Develop a software requirements specification based upon the agreed upon requirements.
2. Update the DynaSim Software Design Document.
3. Provide guidance regarding the hardware infrastructure required to support DynaSim. Hardware is located at the Energy Commission office in Sacramento but will likely be moved to the Resource Agency Data Center as part of California's IT consolidation.
4. Enhancements to the model -- Potential new development in the Matlab, SQL Database, and Microsoft .NET, environments. These enhancements could be in the areas of usability, new interfaces, report creation using Microsoft Reporting Services, and/or changes to the underlying econometric model and equations. Changes to the model could be caused by policy changes resulting in new required analyses, adaptation of new or different economic theories, access to different data, or discovery of modeling anomalies. Expectations regarding contractor responsiveness to enhancement requests are:
 - a. All requests will be processed through the DynaSim Change Control Board (CCB),
 - b. Upon request for pricing by Energy Commission, response times will follow these guidelines:
 - i. Urgent – high level cost estimate for the change within 2 working days. Formal quote and Statement of Work once the Energy Commission has determined to move forward – 3 working days after notice from the Energy Commission request.
 - ii. Non-Urgent – high level cost estimate for the change within 10 working days. Formal quote and Statement of Work once the Energy Commission has determined to move forward – 10 working days after notice from the Energy Commission request.
 - c. All quotes should include costs for the enhancement, a schedule estimate, and Statement of Work.
5. Provide support during user acceptance testing of any enhancement or modification.
6. Provide support for the installation of enhancements or modifications on Energy Commission servers, test and production. This includes providing an updated version of the source code.

IV.3 Software Support and Maintenance Contractor Qualifications

Bidders should describe their experience and qualifications in detail. The qualification description should highlight the following areas:

1. Demonstrated expertise in developing, implementing, and maintaining energy models.
2. Demonstrated expertise in developing, implementing, and maintaining transportation models.
3. Demonstrated expertise in developing, implementing, and maintaining models that are used to evaluate policy alternatives in economic modeling frameworks.
4. Demonstrated expertise in developing, implementing, and maintaining custom software solutions using Microsoft .NET, Microsoft SQL, and MatLab software.
5. Proven track record of successful experience in support projects similar in size and scope of DynaSim.

Within the proposal, the bidder must provide resumes of key support personnel that will be working on this contract. An organizational chart should also be provided, showing the relationships of individuals within the organizational structure. Figure 3 shows the organizational chart for Energy Commission Staff involved with DynaSim.

IV.4 Energy Commission Responsibilities

1. The Energy Commission will provide the SSM with:
 - a. Facility access credentials.
 - b. Remote access to the application for troubleshooting and upgrades.
2. The DynaSim Administrator(s) is/are ultimately responsible for monitoring the operation of DynaSim, providing a point of contact for user support, and implementing or initiating remedial activities when problems arise. The DynaSim Administrator will:
 - a. Provide the SSM with general direction during the operations and maintenance phase.
 - b. Be responsible for the management and oversight of the DynaSim Program.
 - c. Serve as the primary DynaSim expert, communicating its vision in presentations, articles, outreach, and other forums.
3. The Energy Commission Information Technology Services Branch (ITSB) will be responsible for the following support services:
 - a. Hosting of the application at the Energy Commission offices,
 - b. Network and Server Security,
 - c. Network Access via the World Wide Web,
 - d. Back up and recovery of data in the SQL database,
 - e. Back up and recovery of the application,
 - f. Password resets.