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July 30, 2001

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Ms. Blanca S. Bayo, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket Nos. 001148-EI, 010577-EI and 000824-EI

Dear Ms. Bayo:

Enclosed for filing on behalf of Florida Power & Light Company, Tampa Electric Company and Florida Power Corporation are the original and fifteen (15) copies of each of the following:

1. Direct Testimony of Bradford L. Holcombe with the following exhibits: 09242-01

   (BLH-1) Business Blueprint (separately bound)
   (BLH-2) Matrix showing highlights of Accenture's experience
   (BLH-3) Spreadsheet prepared by the GridFlorida Companies showing the incremental cost impact on GridFlorida users of estimated start up and operating costs

2. Direct Testimony of Henry I. Southwick with the following exhibits: 09243-01

   (HIS-1) RTO Start-Up Costs Letter
   (HIS-2) GridFlorida LLC Request for Information Regarding Program Management Services and Business Systems
   (HIS-3) Summary of Proposals Received

3. GridFlorida Companies Witness Naeve Exhibit No. (CMN-1) containing the GridFlorida Formation Documents (5 volumes, separately bound) 09244-01

APP ____
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CMP ____
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CTR ____
ECR ____
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Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

JDB/pp
Enclosures

cc: All parties of record (w/encls.)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing testimony and exhibits, filed on behalf of Florida Power & Light Company, Tampa Electric Company and Florida Power Corporation has been furnished by hand delivery (*), overnight delivery (**) or U. S. Mail on this 30th day of July 2001 to the following:

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FLORIDA POWER & LIGHT COMPANY – DOCKET NO. 001148-EI

FLORIDA POWER CORPORATION – DOCKET NO. 000824-EI

TAMPA ELECTRIC COMPANY – DOCKET NO. 010577-EI

DIRECT TESTIMONY OF BRADFORD L. HOLCOMBE

ON BEHALF OF THE GRIDFLORIDA COMPANIES

INTRODUCTION

Q. Please state your name and business address.

A. My name is Bradford L. Holcombe. My business address is 128 Third Street South, St. Petersburg, FL 33701.

Q. By whom are you employed and in what capacity?

A. I am employed by Accenture as a Partner.

Q. Please provide a brief outline of your educational background and business experience.

A. I received a BA Degree with double major in Accounting and Finance from the University of South Florida in 1975, and an MBA Degree from the University of South Florida in 1976. I joined Accenture (then the consulting organization of Arthur Andersen & Co.) in 1976. I have been working in the Utilities Industry for most of my 25 years with Accenture, and exclusively for the last 10 years.

Q. What are your responsibilities in your current position?

A. As it relates to this testimony, I am the Accenture Client Partner for GridFlorida. That means I am directly responsible for Accenture's work for GridFlorida. I have other responsibilities as well. I am also the Accenture Client Partner for Florida Power & Light ("FPL"). I am also the leader of our Solutions Engineering Service Line (the organization through which we build technology and solution delivery capability) for our North America Utilities Practice.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to demonstrate the reasonableness of the estimated start up costs and preliminary annual operating budget for the proposed GridFlorida Regional Transmission Organization ("RTO").

Q. What issues in this case does your testimony address?

A. My testimony is part of the case being put on by the GridFlorida Companies to address Issue 4 (What are the estimated costs to the utility's ratepayers of its participation in GridFlorida?) of the Order Identifying Issues issued on July 16, 2001 in the above referenced dockets.

Q. Are you sponsoring any exhibits to your direct testimony?

A. Yes. Exhibit No. ___ (BLH-1) is the Business Blueprint. The Business Blueprint is the preliminary start up plan for implementation of the business functions of GridFlorida. This exhibit includes seven separate

documents which I describe in some detail later in my testimony. Exhibit No. ___ (BLH-2) is a matrix that depicts Accenture's experience with RTO-related projects. Exhibit No. __ (BLH-3) is a spreadsheet prepared by FPL, Florida Power Corporation ("FPC") and Tampa Electric Company ("TECO") (collectively, the "GridFlorida Companies") showing the incremental cost responsibility of the GridFlorida Companies of estimated start up and operating costs.

DEVELOPMENT OF BUSINESS BLUEPRINT

Q. What was the scope of the assignment that you received from GridFlorida?

A. We were asked to develop a blueprint for GridFlorida that would outline the GridFlorida organization, its functions and operations, and identify the computer applications for GridFlorida operations based on the Open Access Transmission Tariff ("OATT") currently on file with the Federal Energy Regulatory Commission ("FERC") and based on the requirements imposed by FERC's Order No. 2000.

Q. What issues does the Business Blueprint address?

A. At a high level, the Business Blueprint, attached hereto as Exhibit No. __ (BLH-1), identifies the key GridFlorida business functions that are to be put in place, the resources and scheduling to put these functions in place by an agreed upon date, and an estimate of the costs involved in putting these functions in place.

Q. How does the Business Blueprint fit into the overall development of the GridFlorida RTO?

A. The Business Blueprint is the first stage in a three-stage process. The Business Blueprint contains a general approach for implementation of GridFlorida, provides preliminary budget numbers, and establishes a basis for the second phase of work. The second phase in development of GridFlorida will be the design phase. During the design phase the Business Blueprint will be further refined and validated, and sourcing strategies (decisions on what functions will be done in-house and what functions will be outsourced) will be agreed upon. The third phase in the development of GridFlorida will be the capability build and roll out phase.

Q. In developing the Business Blueprint, did Accenture draw from experience with other RTOs?

A. Yes. Accenture currently is doing RTO work for the Electric Reliability Council of Texas ("ERCOT"), the Southwest Power Pool ("SPP") and GridSouth. We have also worked on RTO related projects at PJM, ISO New England, and BC Hydro. Exhibit No. __ (BLH-2) is a matrix representing highlights of Accenture's experience and expertise in RTOs, independent system operators and transmission companies in North America. This matrix was originally submitted by Accenture as a part of Accenture's response to GridFlorida's Request for Information Regarding Program Management Services and Business Systems ("RFI"). The RFI

is attached as Exhibit No. __ (HIS-2) to the direct testimony of GridFlorida Companies' Witness Henry I. Southwick.

Q. Did Accenture perform all of the work that went into the Business Blueprint?

A. No. We were the prime contractor; however, we engaged the services of Alstom Esca, Open Access Technology International, Hay Group, Utility Consulting International, and Powersmiths in their respective areas of expertise. Accenture supervised and directed the work performed by the subcontractors, and reviewed and approved all deliverables they produced. We used the Hay Group to assist with organization and compensation issues and the others to assist primarily in systems operations issues. We also utilized expertise from FPL, FPC and TECO, particularly as it relates to the current environment.

Q. Please describe the Business Blueprint.

A. The Business Blueprint is attached hereto as Exhibit No. (BLH-1). It contains seven documents which are included in my Exhibit No. (BLH-1), individually tabbed, in the following order: (1) the End State Operating Model, (2) the End State Capability Model, (3) the End State Organization Model, (4) the End State Application Architecture, (5) the Cost Estimates, (6) the First Release Discussion Document, and (7) the Release One Organization Model. The process of developing the Business Blueprint starts with the Capability Model, where we define the functions that

GridFlorida must be able to perform in order to comply with Order No. 2000 and the GridFlorida OATT. The next step in the process is to determine, through the Operating Model, how these functions interrelate. Then, we develop the Application Architecture Model, where we identify the systems and processes capabilities that are required to support the functions as they are specified in the Operating Model. Finally, we determine the staffing required to operate and support the systems and functions identified. Based on the results of this process, we develop the cost models for implementation (start up) and operations. It should be noted that the entire Business Blueprint process described herein starts with Accenture's experience and estimating models used in other RTO projects and is customized to address GridFlorida's specific needs.

Q. Please describe your document 1 to Exhibit No. __ (BLH-1).

A. The End State Operating Model is attached hereto as Tab 1 of Exhibit (BLH-1). It contains the key assumptions that are expected to govern the operations of GridFlorida, as defined in GridFlorida's FERC filings. For example, the End State Operating Model recognizes that GridFlorida will own and operate certain transmission facilities but only operate certain other facilities. It also recognizes that GridFlorida will have multiple control areas and will need to develop procedures to manage interactions with non-participating control areas. The Operating Model also contains graphic depictions of how each function is expected to interface with one another. For instance, the Operating Model shows the interrelationship of

functions from the perspective of transmission operations, security coordination, generation control, and market operations.

Q. Please describe your document 2 to Exhibit No. __ (BLH-1).

A. The End State Capability Model is attached hereto as Tab 2 of Exhibit No. __ (BLH-1). It depicts the identified business capabilities required to enable the GridFlorida End State Operating Model, such as the capability to plan, build and maintain transmission facilities, and the capability to maintain system reliability. It is comprised of a Map of Required Capabilities by Key Business Function and a Sub-capability Definition. It includes System Operations, Market Operations, Commercial Operations, Customer Interfaces, Asset Optimization, Corporate Services, and Technical Support.

Q. Please describe your document 3 to Exhibit No. (BLH-1).

A. After the business capabilities were identified, we developed an End State Organization Model that could support these capabilities. The End State Organization Model is attached hereto as Tab 3 of Exhibit No. __ (BLH-1). It shows, in an organizational chart, the types of positions and number of individuals required to support the capabilities identified in the Operating Model. By function, benchmarks are used to develop a top-down estimate of staffing needs.

Q. Please describe your document 4 to Exhibit No. __ (BLH-1).

A. The End State Application Architecture, attached hereto as Tab 4 of Exhibit No. __ (BLH-1), contains an inventory of the computer applications required to operate GridFlorida. The document contains a summary level chart depicting the Application Architecture and detailed charts showing the applications required for each capability. GridFlorida needs a great number and a wide variety of applications to handle system operations, market operations, settlements and billings and other commercial matters, accounting, data warehousing and many other functions. The End State Application Architecture also identifies the use of existing transmission owner applications, the interaction between various applications, and the hardware and other infrastructure to support the applications.

Q. Please describe your document 5 to Exhibit No. __ (BLH-1).

A. The Cost Estimates document is attached hereto as Tab 5 of Exhibit No. __ (BLH-1). It document contains all of the cost estimate numbers associated with implementation and the operation, in the End State mode, of the Business Blueprint. The estimates are provided in summary level on pages 2 and 6, and in detail in subsequent pages. The Cost Estimates reflect the business functions, operational characteristics and organization depicted in the above-described models.

Q. Please describe your documents 6 and 7 to Exhibit No. (BLH-1).

A. The First Release Discussion Document and the Release One Organization Model documents are attached hereto as Tabs 6 and 7 of

Exhibit No. __ (BLH-1). They will be discussed later in my testimony when I address "Release 1," a limited scope of operations for GridFlorida expected to be put into place approximately nine months after the project is restarted.

START UP COST ESTIMATES

Q. How did you go about estimating the start up costs of GridFlorida?

A. Start up costs are those costs incurred to develop the GridFlorida proposal and implement the proposal to the point of commercial operation. We applied estimating methods used in other RTO development work, adjusted and refined to correspond to the RTO functions to be implemented in the case of GridFlorida. To be more specific, the process for producing almost all of the deliverables for the GridFlorida Business Blueprint, including the start up and operating cost estimates, used as input the planned and actual information, the Models as they have been described in this testimony, from our prior RTO projects. Using experienced consultants from Accenture and our subcontractors we conducted extensive information sessions with subject matter experts from the GridFlorida Companies. These sessions were targeted to identify specific areas where GridFlorida may have unique or different requirements, identify characteristics of the existing environment, and confirm the requirements as we understood them from GridFlorida plans, including the preliminary OATT. The Models based on other actual RTO experience were then modified to reflect the implementation for

GridFlorida. As mentioned earlier, Accenture has had extensive experience both in estimating the costs of implementing RTO functions and in actually implementing these functions. The estimates developed for GridFlorida are based on that actual experience, customized for the specific characteristics of GridFlorida.

Q. In developing cost estimates for GridFlorida, did you consider the use of existing utility facilities?

A. Yes. For example, start up and operating cost estimates assume that GridFlorida initially will lease the FPL control center. This should reduce the implementation risk associated with developing and/or moving the capabilities that already exist at the control center, particularly at a time when GridFlorida will be developing and focusing on other functions that are required to commence operations. Thus, the use of existing facilities will contribute to maintaining the reliability of the system. Leasing the FPL control center also should reduce start up costs. Leasing the FPL control center will allow GridFlorida to save the initial costs of finding, preparing a suitable facility for control center operations. The facility is structurally fortified to withstand hurricane force winds, has redundant external power feeds and on-site back-up diesel power, and has the communications equipment required to operate GridFlorida.

Q. In developing cost estimates did you consider recommending outsourcing some of the functions to be performed by GridFlorida?

A. Yes. GridFlorida could help hold down costs and increase efficiency by outsourcing certain information technology and other functions. For example, because there are existing vendor applications that are tailored to RTO needs, and which can be readily configured for GridFlorida's use, I would expect that many if not most of GridFlorida's computer applications could be outsourced. Other functions that could be outsourced include legal, accounting and human resources systems and services. While the Business Blueprint identifies certain functions that could be outsourced, as mentioned earlier, specific decisions on outsourcing would be made by GridFlorida in the next phase of GridFlorida development – the design phase.

Q. What criteria typically guides such outsourcing decisions?

A. Typically, outsourcing decisions are made based on the relative costs of performing and outsourcing the functions, the availability of contractors with the required skills to perform such functions, the impact on the quality of the work, the timing, and strategic considerations.

Q. What is the projected cost of starting up GridFlorida?

A. It is estimated to be $150 million. Page 2 of the Cost Estimates document, contained in document 5 of Exhibit No. ___ (BLH-1) shows a breakdown of this estimate.

Q. Does the $150 million estimate contain a contingency?

A. Yes. In addition to $9 million in actual start up costs as of May 31, 2001, start up costs were projected to be $118 million. A 20 percent contingency was added on all costs other than those costs incurred to date, resulting in a total estimate of $150 million.

Q. Why is a contingency appropriate, and what is the basis for setting it at 20 percent?

A. Between today and the time that GridFlorida reaches its end state operation date, there are many variables that could affect the start up costs that will be actually incurred. For example, certain specifics of the market design have not yet been determined. This contingency covers uncertainties, and also reflects the fact that we are early in the development cycle and are still working with higher-level assumptions and estimates in many cases. It is our view, based on our experience, that it is prudent to include a 20 percent contingency at this stage in the start up of GridFlorida. The contingency factor of 20 percent is the same factor as we employed in estimating the costs of other RTOs.

Q. Is there an exhibit that presents the estimate of the incremental cost responsibility of start up costs of FPL, FPC and TECO, respectively?

A. Yes. Exhibit ___ (BLH-3) has been prepared by the GridFlorida Companies for this purpose. It summarizes by cost type those items that comprise Accenture's estimate of start up costs. Using load information

provided by the three companies, the exhibit derives the estimated additional cost responsibility of each of the three companies.

Q. Are all of GridFlorida's estimated start up costs of $150 million representative of incrementally new transmission costs that are not being incurred today by transmission owners?

A. No. GridFlorida plans to utilize elements of existing system control systems from FPL. The resulting amount of incrementally new start up costs is estimated at $136 million, as shown on Exhibit (BLH-3).

OPERATING COST ESTIMATES

Q. How did you go about estimating the operating costs of GridFlorida?

A. We used the same approach described herein for developing an estimate of start up costs.

Q. What is GridFlorida's projected operating cost?

A. For the first full year of operation in the End State mode, the projected cost to operate GridFlorida is estimated to be $182 million. Page 6 of the Cost Estimates document, contained in document 5 of Exhibit ___ (BLH-1) shows a breakdown of this estimate.

Q. Does the $182 million estimate also contain a contingency?

A. Yes. This estimate also reflects a 20 percent contingency.

Q. Is the 20 percent contingency for the operating budget based on the same contingency approach used for estimating start up costs?

A. Yes.

Q. What is the largest variable that could affect operating costs?

A. One of the largest variables will be sourcing decisions. As GridFlorida decides whether to outsource certain functions the start up costs may be reduced but the annual operating costs may increase.

Q. Are all of GridFlorida's estimated annual operating costs of $182 million representative of incrementally new transmission costs that are not being incurred today by transmission owners?

A. No. Much of the estimated annual operating costs of GridFlorida are the same costs that are being incurred today. For example, GridFlorida's operating budget contains $77 million of expenses for operating and maintaining the transmission facilities that will be acquired from FPL and TECO. Obviously, this cost is being incurred today by FPL and TECO. When the costs that are being incurred today are excluded by each of the companies, and the new internal costs that each company may incur as a result of taking transmission service from GridFlorida are added, the net new incremental annual operating costs result in an amount of $52 million rather than $182 million, as shown in Exhibit No. ___ (BLH-3) which was prepared by the GridFlorida Companies.

Q. Is there an exhibit that derives the incremental annual operating costs of $52 million and presents an estimate of the net responsibility of FPL, FPC and TECO, respectively?

A. Yes. Exhibit ___ (BLH-3) prepared by the GridFlorida Companies summarizes by cost type the items comprised in Accenture's estimated annual operating budget. The impact of cost offsets by company, which I describe below, is also shown. Using load information provided by the three companies, the exhibit derives the estimated additional cost responsibility of each of the three companies.

RELEASE 1

Q. What is Release 1?

A. Release 1 is a limited scope of operations for GridFlorida expected to be put into place approximately nine months after the project is restarted. It is my understanding that FPL, FPC and TECO have suspended development of the GridFlorida RTO proposal pending the outcome of this proceeding. If and when work on the GridFlorida proposal is restarted, it is scheduled to take approximately 18 months from restart (beginning of the design phase) to implement the End State functions for GridFlorida. However, GridFlorida could be operational nine months after restart with an initially reduced menu of functions and services, which is referred to as Release 1. As discussed in Mr. Southwick's testimony, during Release 1 operation, services related to congestion management, energy imbalance, and other ancillary services are expected to be simplified while

development continues on establishing the market-based functions in the End State for these services, along with a necessarily more complex attendant billing system.

Q. What is the scope of the GridFlorida functions to be performed during the Release 1 stage?

A. The First Release Discussion Document, which is contained in the Business Blueprint, is a matrix itemizing the expected differences between the End State and the Release 1 functions.

Q. Why did the GridFlorida Companies decide to develop a plan for Release 1?

A. There are several reasons why Release 1 was developed. We were asked to develop a Release 1 Plan because GridFlorida wanted to look at an implementation approach that would provide for achieving operational status at an earlier date than provided for in the End State implementation plan. Having an earlier implementation date would also give GridFlorida valuable initial operating experience which would be useful as GridFlorida moves towards implementation of the End State.

Q. In your opinion, will the interim step of implementing Release 1 increase the overall start up costs of the End State?

A. We have developed a plan that allows for incremental development where the End State will for the most part build on the capabilities implemented

in Release 1. For this reason we believe that there will not be a significant increase in start up costs as a result of using this two-release approach, and the value gained by phasing implementation will be well worth it.

Q. Document 7 of Exhibit No. __ (BLH-1), the Business Blueprint also contains a Release 1 Organization Model. What is the purpose of that model?

A. The limited scope of business functions to be implemented in Release 1 will require a lesser number of staff than will be necessary to implement the End State. The Release 1 Organization Model is an estimate of the staffing necessary to implement Release 1.

Q. When GridFlorida reaches the point of implementing Release 1, how much of the $150 million in start up costs do you project will be expended?

A. We estimate that GridFlorida will need to spend approximately $80 million to achieve Release 1. This amount includes a 30% contingency. The percentage of the contingency for Release 1 is higher due to the compressed timeframe and some uncertainty as to the actual applications. In other words, some contingency is front loaded in Release 1, which we think is prudent.

Q. What are the projected costs of operating GridFlorida during the Release 1 stage?

A. The projected total annual costs of operating GridFlorida during the Release 1 stage are approximately $165 million, which is somewhat less than the projected operating costs of the End State. The lesser amount reflects simplified market functions and a resulting smaller organization. Again, as explained earlier, this $165 million total includes costs already incurred by the three companies.

Q. Is Release 1 an alternative to the End State?

A. No. Release 1 is reasonable step on the path to the End State. It is not intended to be a permanent approach; it does not meet all of the requirements of Order No. 2000, and should not be viewed as an alternative to the End State. The main focus of the Business Blueprint and my testimony in this case is to support the End State.

CONCLUSION

Q. How do your projected start up costs and first year operating budget for GridFlorida compare with the costs and budgets of other RTO projects Accenture has worked on?

A. While the estimated costs contained in the Business Blueprint are, of course, preliminary and subject to refinement as the details of the project are finalized in the next stage of development, the estimated GridFlorida costs are very much in line with the costs associated with similar projects (as our estimating model is based on both estimated and actual costs from similar projects) and, therefore, are reasonable in my opinion.

Q. Does this conclude your direct testimony?

A. Yes.

Docket No. 001148-EI
Docket No. 000824-EI
Docket No. 010577-EI
GridFlorida Companies Witness Holcombe
Exhibit No. _____ (BLH-1)
Business Blueprint Documents

GridFlorida

Establishing the Grid Florida RTO BluePrint Project June 2001

BUSINESS BLUEPRINT

GridFlorida

Establishing the GridFlorida RTO BluePrint Project May 2001

End State Operating Model- v5

GridFlorida

Topics

Market Assumptions

Operating Model

Questions

Appendix

Market Entity Descriptions

The GridFlorida Operating Model is driven by the following market assumptions (currently):

- GridFlorida will own and have operational control of transmission assets of 69 KV and above for FPL and TECO, and will have operational control of FPC transmission assets via a Participating Owner Agreement (PO). Other entities may decide to join later; otherwise, they will be termed 'non-participating owners'.
- There will be multiple control areas both within GridFlorida and between GridFlorida and non-participating entities within peninsular Florida (will not be combined into one control area). Therefore, GridFlorida will operate an overlay control area.
- GridFlorida will need to develop procedures and rules for managing interactions with other RTOs and non-participating control areas.
- There will be no dis-aggregation of vertically integrated utilities (except for Divesting Owners who are partially dis-aggregated, having contributed their transmission) based on the reliability needs of the grid.
- GridFlorida may initially rely on existing control area operators to implement its Direct control and/or instructions.
- GridFlorida will be the Transmission provider, administering its OATT, with sole responsibility for transmission reservations service & transmission scheduling.
- GridFlorida will have authority to approve when generation and transmission facilities will be placed in and out of service (outages/maintenance).
- GridFlorida will receive, confirm and implement all interchange schedules for other RTOs, participating control areas, and non-participating control areas (from a Scheduling Coordinator).

The GridFlorida Operating Model is driven by the following market assumptions (currently):

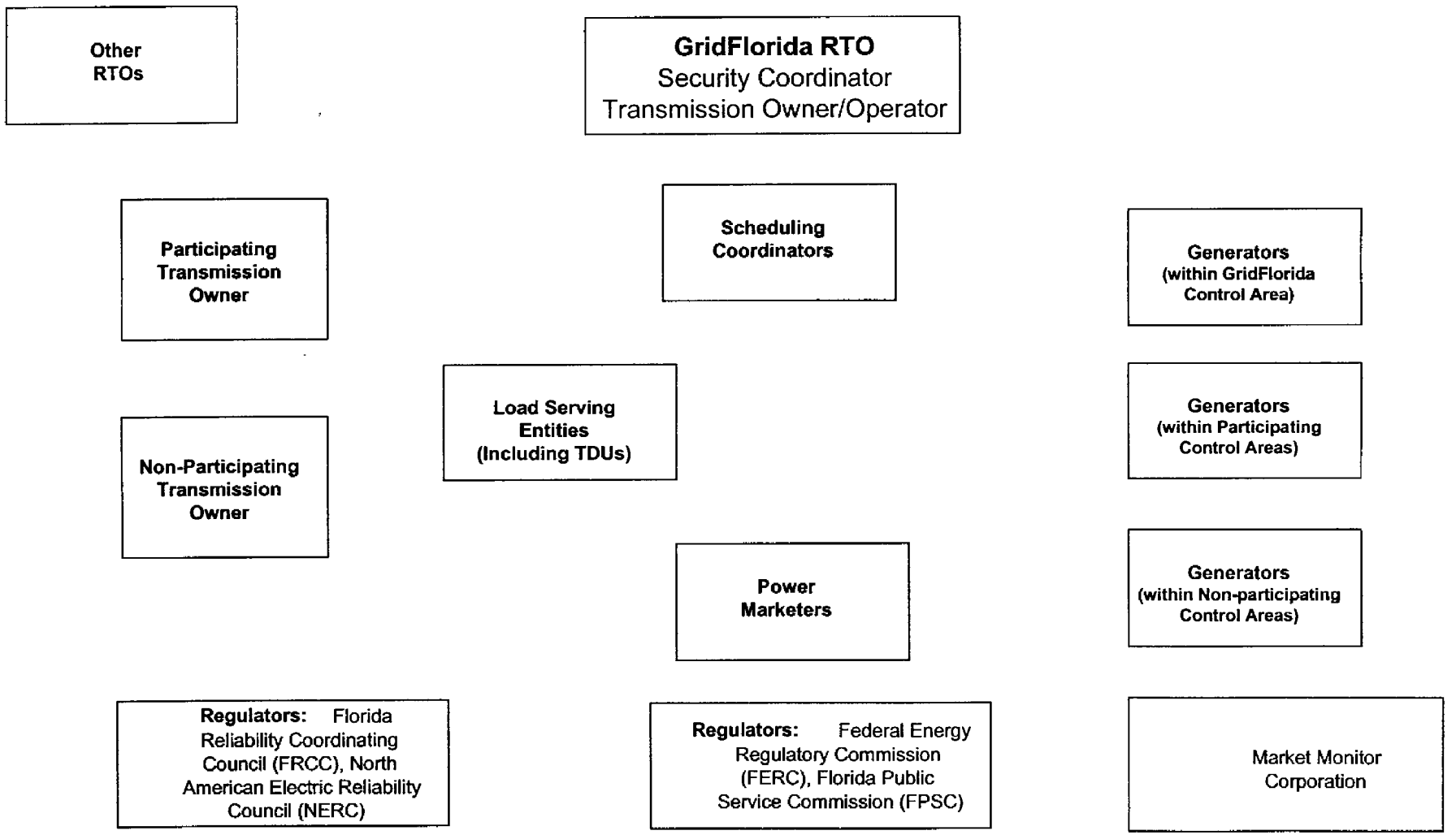
- GridFlorida will be the provider of last resort for ancillary services to support transmission services. Participants may self provide or contract to supply Regulation and Frequency Response Service and Operating Reserves, but must buy (and can offer to sell) Balancing Energy, Scheduling, System Control and Dispatch Service, and System Blackstart Service. Generators must provide Reactive Supply and Voltage Control (sometimes there may be a charge).
- GridFlorida currently does not plan to operate a forward energy market.
- A Day Ahead congestion management regime will be based on a physical rights model. Each PTR will be defined as the right to schedule the delivery of one MW of energy, capacity, or ancillary service in a specific direction across a specified flowgate for one hour. Details are still being determined (e.g. define flowgates, PTR rules, etc).
- Scheduling coordinators will submit to GridFlorida a set of hourly balanced schedules for the following day (capacity to balancing energy, self supply plans and offer to supply ancillary services to others, PTRs, etc). Interim Scheme for Release 1.
- GridFlorida will perform a settlement function for balancing energy, ancillary service markets, access charges, grid management charges, transmission service charges (some zonal and some system-wide), and the collection and allocation of transmission congestion costs once real time operations commences.
- Pending FRCC approval and execution of a contract, GridFlorida will become the agent for Security Coordination for all entities in the FRCC. The FRCC has additional roles.
- There are no current plans for retail competition in Florida.

Market Assumptions

Certain elements of the Market Design are still in progress and impact market assumptions:

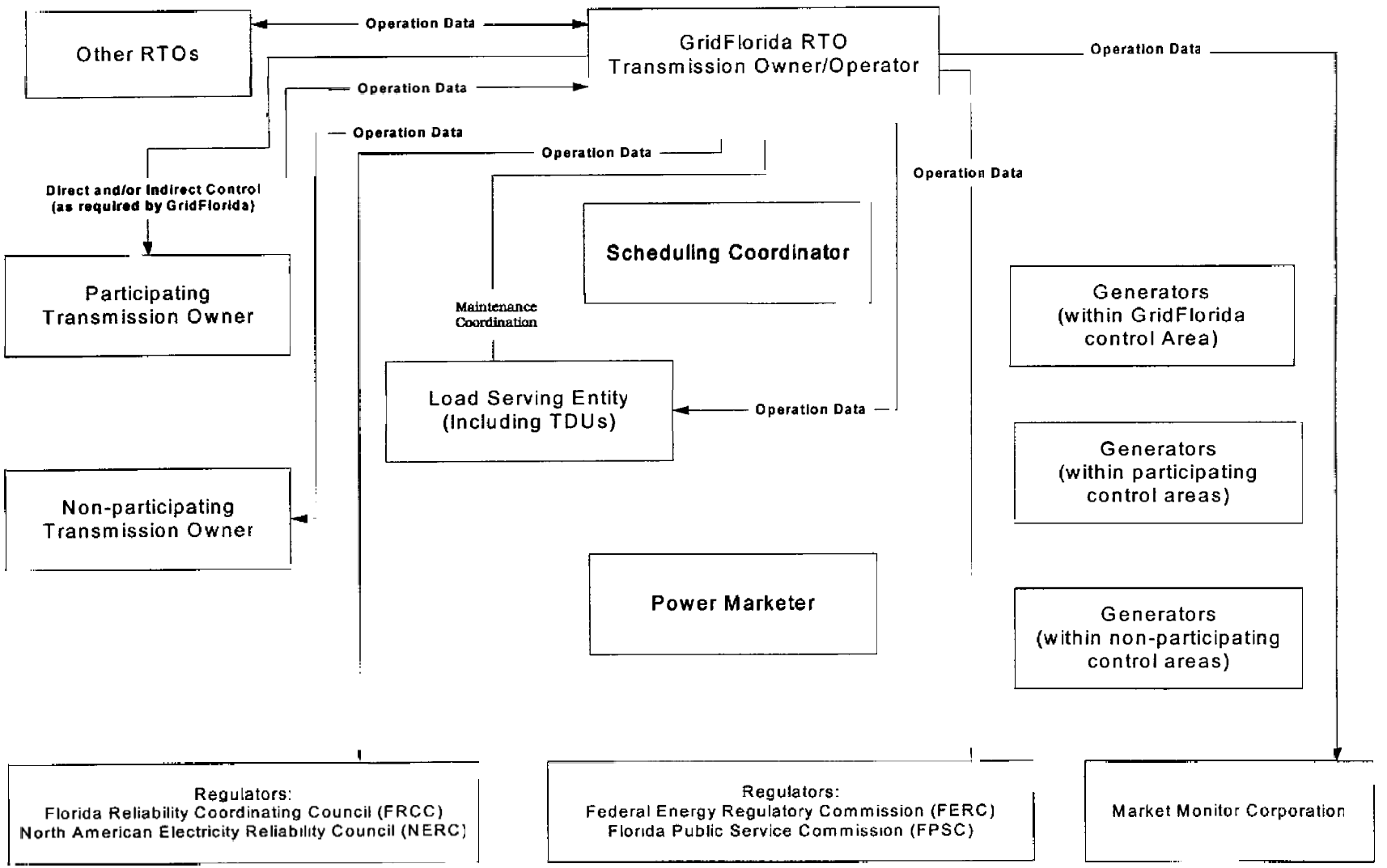
- Congestion Management Details
- ICE – Installed Capacity and Energy Obligation
- Losses
- Energy Balancing Market Details
- Control Area Hierarchy and Relationships

GridFlorida Operating Model- Participants View



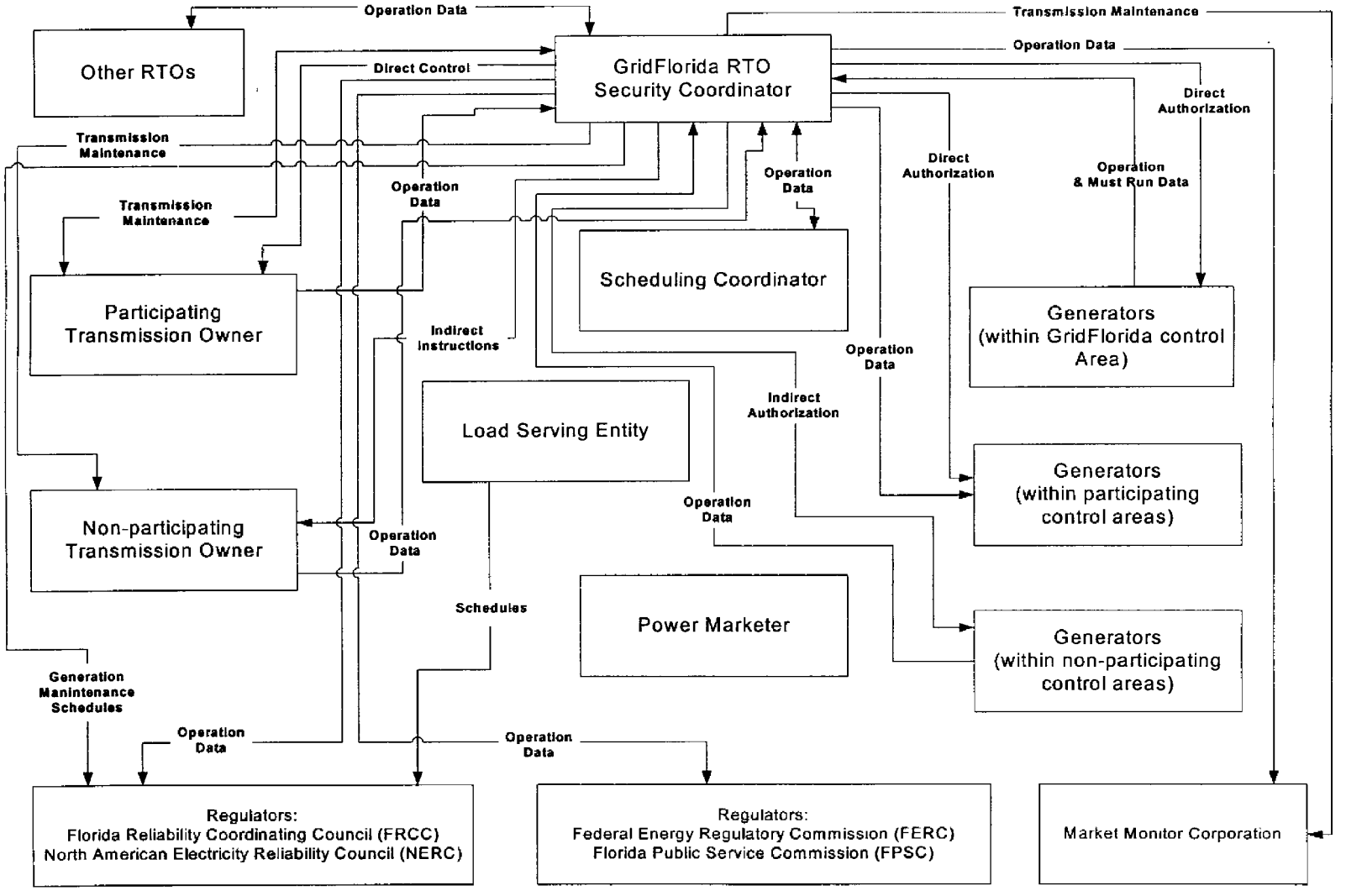
Note: Florida is not a dis-aggregated market. However, for the purposes of depicting the overall operations of the market, the entities are broken down.

GridFlorida Operating Model- Transmission Operations View



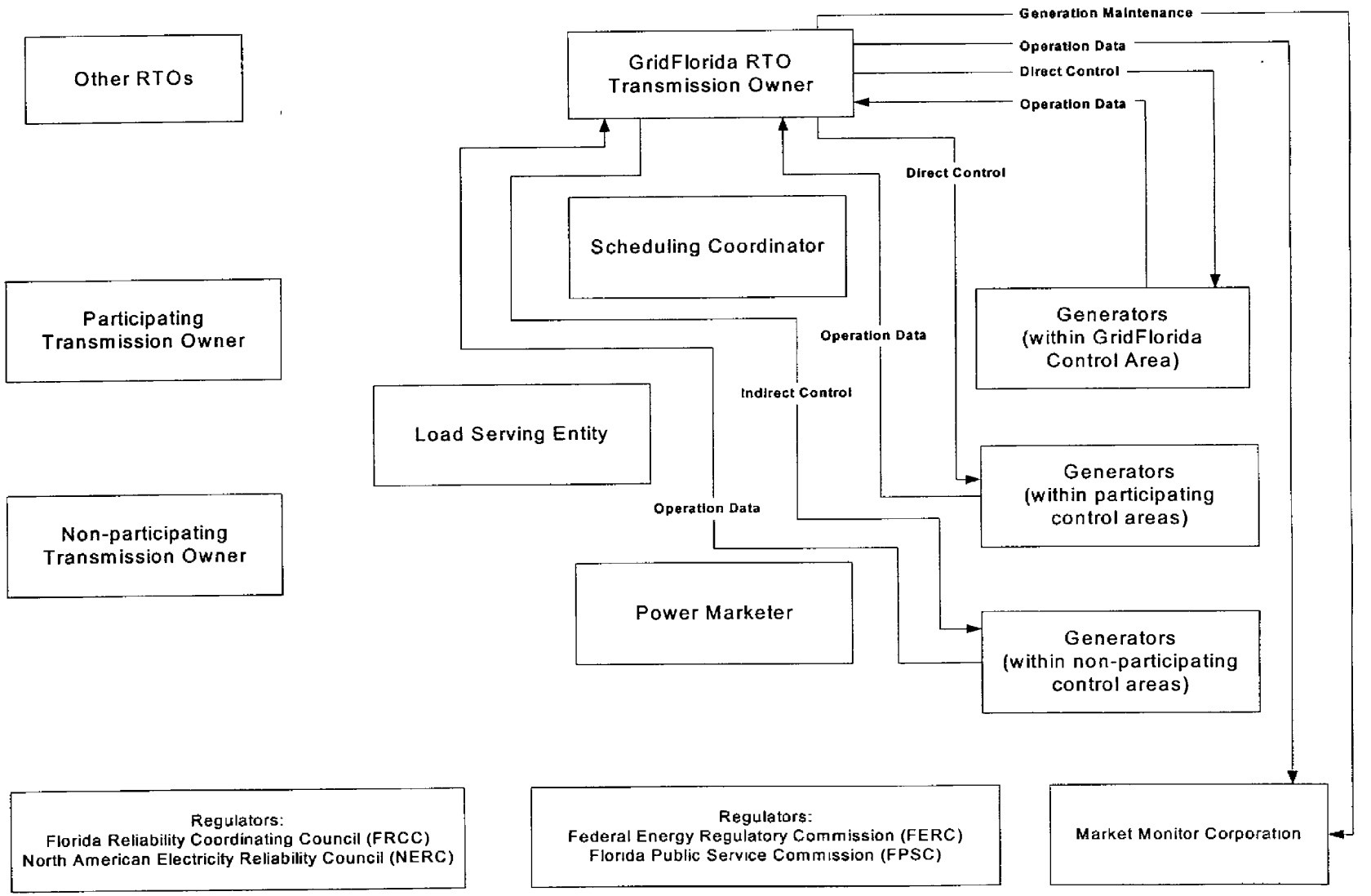
GridFlorida

Operating Model- Security Coordinator View



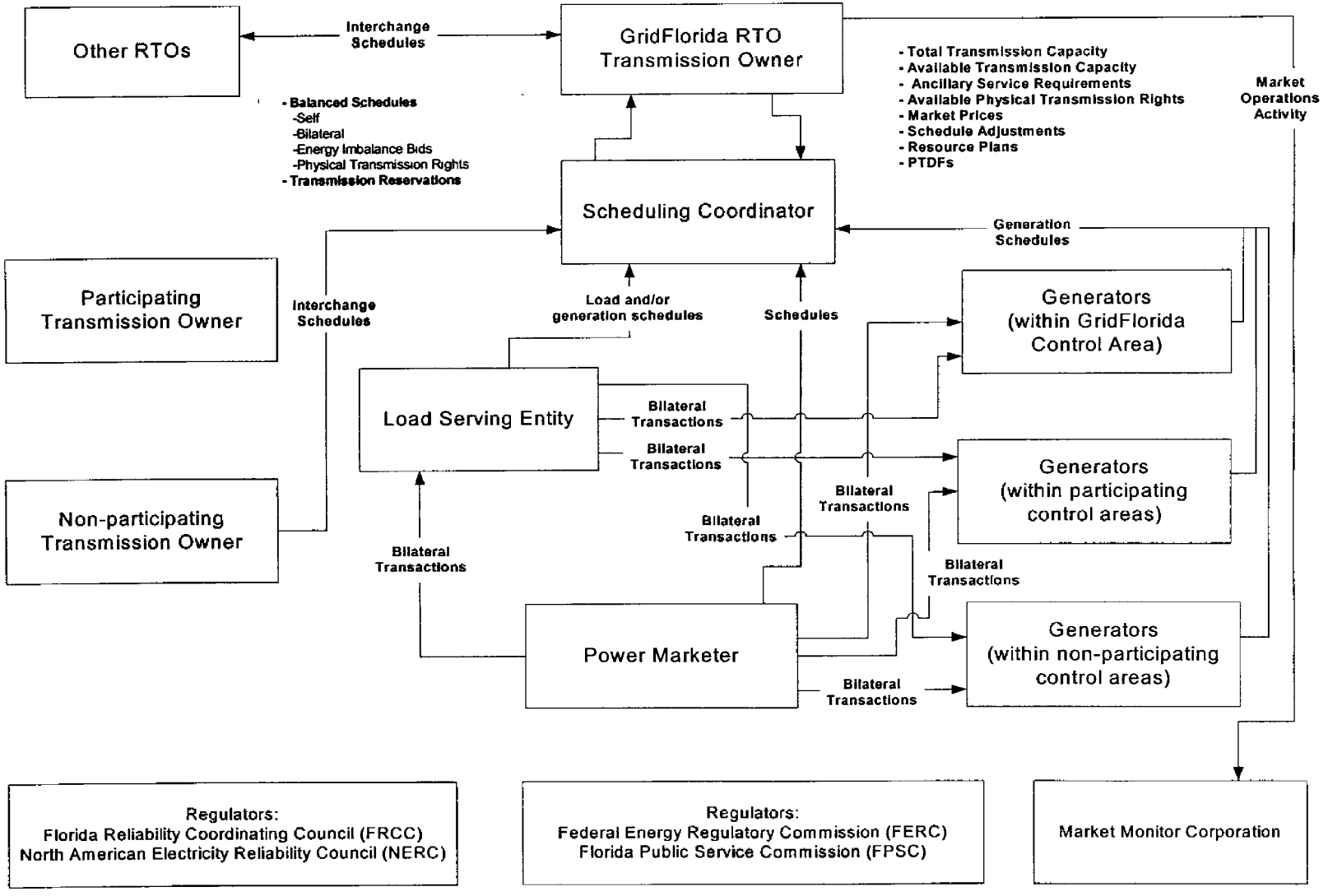
GridFlorida

Operating Model- Generation Control View

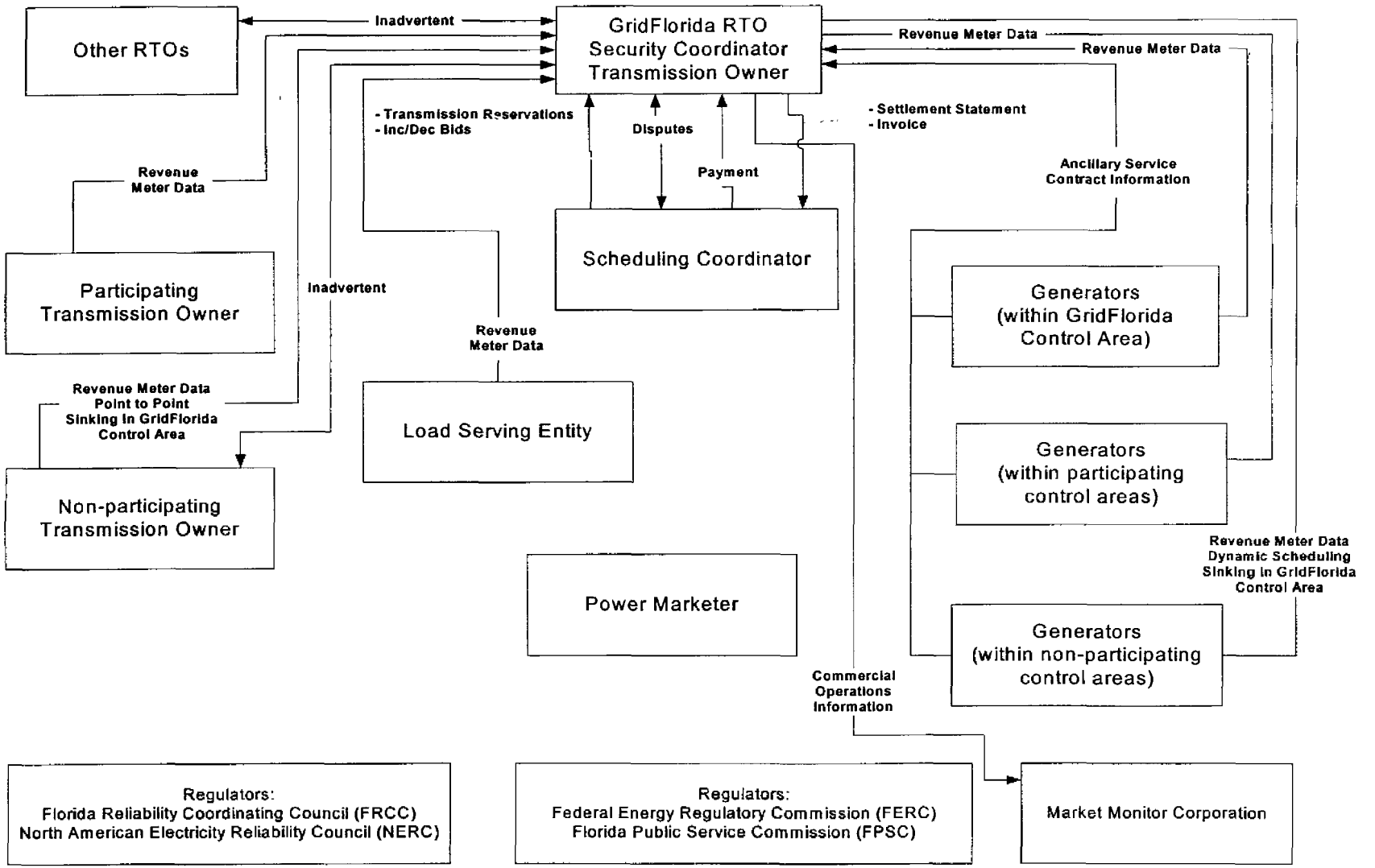


GridFlorida

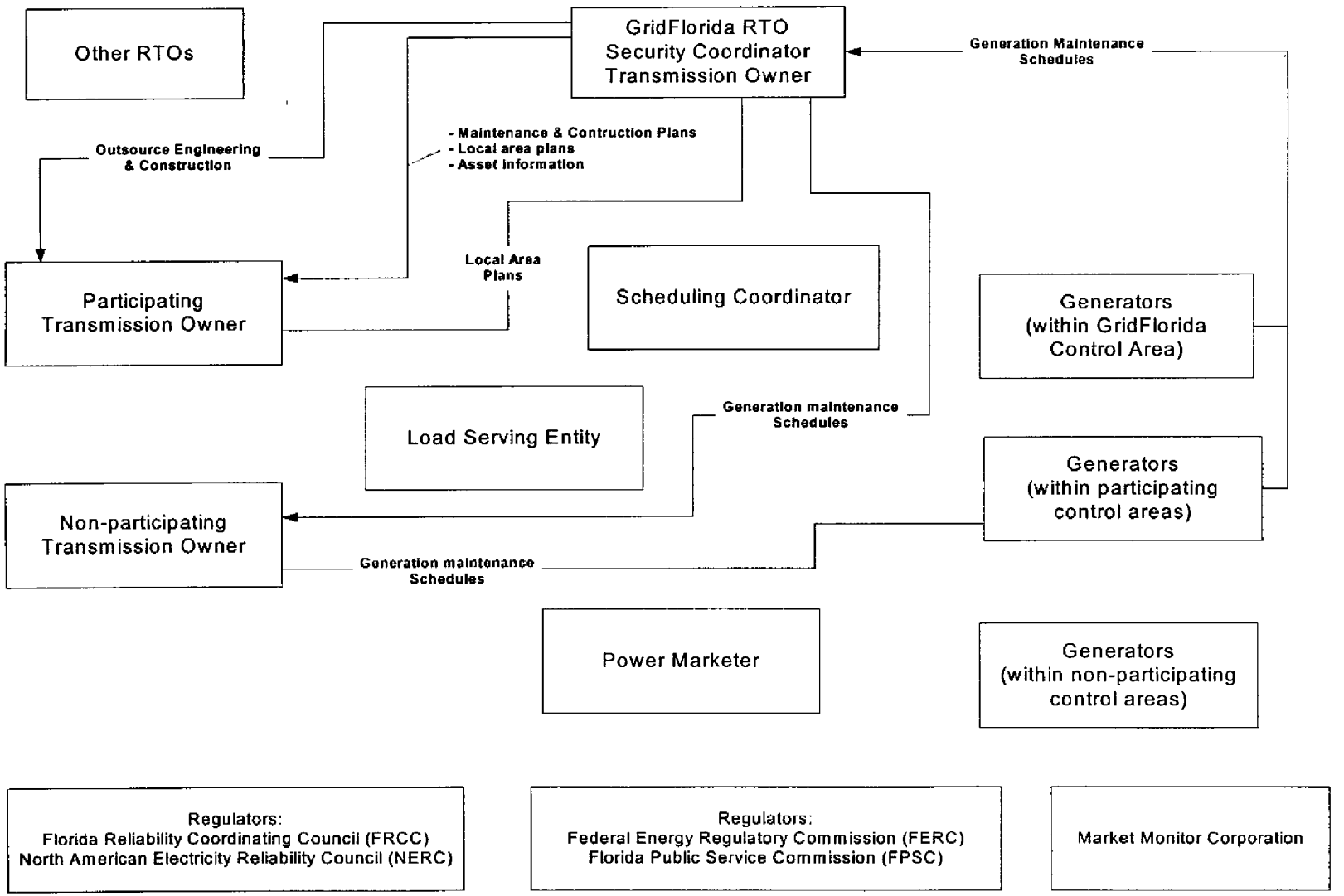
Operating Model- Market Operations View



GridFlorida Operating Model- Financial Commercial Operations View



GridFlorida Operating Model- Asset Optimization View



Appendix

Market Entity Descriptions

GridFlorida

Market Entity Descriptions

GridFlorida RTO	GridFlorida has received provisional status as a Regional Transmission Organization under FERC Order 2000. GridFlorida will be responsible for security coordination, planning, and will offer ancillary services for purchase. GridFlorida is an Independent Transmission Company (ITC), which means it owns some assets and is for profit. Therefore, it is a ITC acting as an RTO.
Scheduling Coordinator	A Scheduling Coordinator (SC) could be an: 1)existing utility, 2) a private power exchange, or 3) an entity which exists only to sell scheduling coordinator services. Any market participant that meets the necessary qualifications can be a Scheduling Coordinator. Those qualifications include maintaining a 24-hour a day (24 x 7) scheduling center and necessary communications and IT equipment, and meeting financial qualifications. The SC submits to the transmission provider requests for reservations and balanced schedules for energy and ancillary services.
Control Area Operator	Any party who maintains its own control area with all of its attendant NERC-defined control area rights and obligations and purchases or sells inadvertent energy, as applicable, from the real-time energy imbalance market.
Transmission Owner	An entity which owns transmission facilities.

GridFlorida

Market Entity Descriptions

Load Serving Entity	An entity that purchases and or generates electricity that it sells to retail customers. A joint action agency or other agent for a group of LSEs, and which is the Transmission Customer for such LSEs, shall have the right to act as the agent for the LSEs with respect to all aspects of the GridFlorida Tariff.
Generators	Owner or controller of a generator used for generating electricity and electrically connected to a transmission or distribution system. Generators may be part of a vertically integrated power utility that includes the transmission or distribution system.
Power Marketer	An entity who (a) becomes an owner of electric energy for the purpose of selling the electric energy at wholesale; (b) does not own generation, transmission or distribution facilities; (c) does not have a certified service area; and (d) has been granted authority by the FERC to sell electricity at market-based rates or is registered as a power marketer.
Regulatory Bodies	These include: Florida Reliability Coordinating Council (FRCC), North American Electric Reliability Council (NERC), Federal Energy Regulatory Commission (FERC), and Florida Public Service Commission (FPSC).

GridFlorida

Market Entity Descriptions

Market Monitor Corporation	This entity will examine: 1- the structure and operation of the markets GridFlorida operates and administers, 2- compliance with market rules by market participant and GridFlorida, 3- competitive prices, and 4- market power and market power abuses. Can file a complaint with the Commission if it observes specific violations of market rules or otherwise anticompetitive behavior.

GridFlorida

Establishing the GridFlorida RTO BluePrint Project May 2001

End State Capability Model- v5

GridFlorida

Capability Model

System Operations

Management and control of the grid assets to maintain system reliability, stability, efficiency. For the Transmission Operator and Security Coordinator roles.

Market Operations

Management and control of the market functions in order to provide open access to transmission resources enabling a competitive wholesale electricity market.

Commercial Operations

Financial and other commercial operations related to market participant and market participant contracts and transactions.

Customer Interface

Mechanisms for Customer information collection, operations and market interactions and publishing.

Asset Optimization

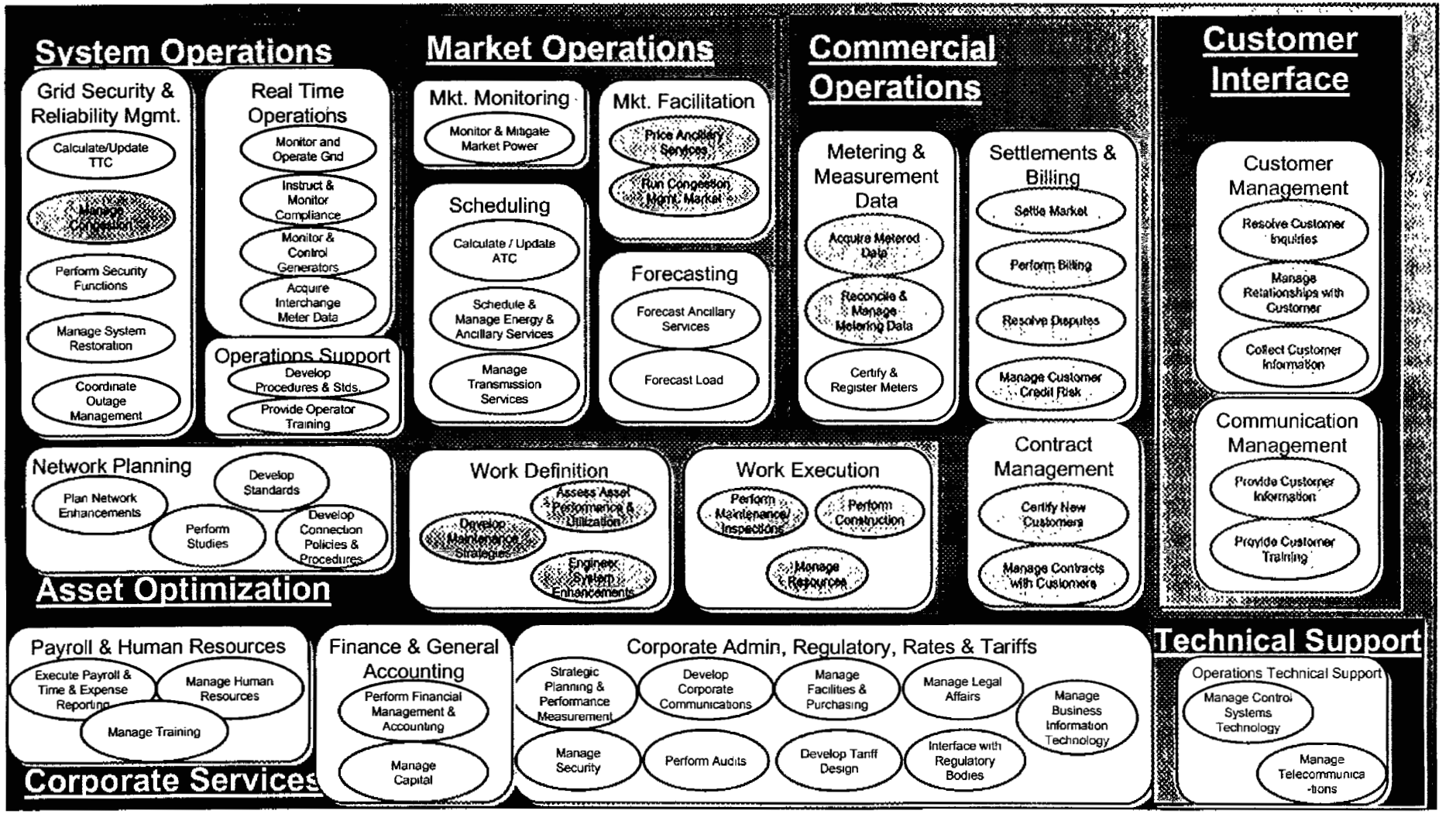
System planning, maintenance policy development, project design, and oversight of work to improve physical and financial performance of assets.

Corporate Services

Governance, administration, and support services to operate the organization, manage the people and technology, and measure/meet the performance objectives of the RTO.

GridFlorida

Capability Model



Capability: Grid Security & Reliability Management

Sub-Capability: Calculate/Update TTC

Sub-Capability Description

GridFlorida has sole authority to determine, update and post the TTC for its transmission facilities based on system design, scheduling, outage and operations data.

Requirements

- TTC will be determined by line ratings, design criteria and other relevant data provided by TOs and subject to GridFlorida's independent verification and confirmation
- Calculations will be in accordance with the FRCC ATC Coordination Procedures and NERC standards
- Posting will be made daily
- Value will be based on calculations for each defined flowgate

Key Assumptions

- Capability will be required for Release 1 (possible use of FPC tool)and End State
- Current TTC calculation methods and posting practices are in place in the FRCC and will form the basis of the new capability

Solution Strategy

Technology

- TTC Calculator
- Contingency Analysis (Steady-state, dynamic)
- Integrated Model Management tool
- Load Forecaster
- Load Flow

People:

- Operations Prep

Facilities:

- Control center (back offices)

Capability: Grid Security & Reliability Management

Sub-Capability: Manage Congestion

Sub-Capability Description

GridFlorida will manage congestion to maintain firm transmission service and transmission system security using mechanisms that provide all transmission customers with efficient price signals regarding the consequences of their transmission use decisions.

Requirements

- Coordinate a short and long-term scheduling and congestion management process
- Manage congestion through a flowgate approach with PTRs and a balancing market to clear congestion in real time
- Balanced schedules and PTRs to minimize need for redispatch to resolve congestion during real time operations
- Require inc and dec bids with resource schedules to facilitate least-cost redispatch
- Only GridFlorida will be authorized to redispatch generation or call for TLRs
- Firm PTR allocations for existing uses; non-scheduled PTRs will be auctioned as recallable PTRs (use-it-or-lose-it)
- Maintain and post a PTR holder list on a web page
- Real time congestion resolution by a least-cost redispatch of generation based on inc and dec bid prices
- Facilitate bilateral redispatch contracts to enable schedules by avoiding flowgate impacts
- Flowgate impact analysis performed on all submitted schedules to ensure operational feasibility

Key Assumptions

- Full flowgate-based regional pricing (PTR) will follow as part of a final approved regime
- Current NERC TLR solution and interim CM (MRD/SRD) will be implemented for the Release 1 and be part of the End State

Solution Strategy

Technology:

- Redispatch bid collection application/bulletin board with user-interface for entry and non-firm bilateral redispatch solution information
- Congestion Management software: Impact analysis using current state as input, running various scenarios to determine solutions
- Mechanism to capture redispatch decisions, incremental increase/decrease in output
- Price Based Security Dispatch

People:

- 7 x 24 coverage by Security Coordinator
- Settlements Analysts

Facilities:

- Control center

Capability: Grid Security & Reliability Management

Sub-Capability: Perform Security Functions

Sub-Capability Description

GridFlorida will monitor and asses the transmission system with an emphasis on contingency analysis and security coordination. It may implement an on-line dynamic assessment capabilities in order to more quickly and accurately analyze and predict stability problems and potentials, determine realistic operating limits in order to update TTC and ATC values in order to pursue more aggressive system operations.

Requirements

- Ability to monitor and assess state (security, stability, contingencies) of transmission system.
- Ability to communicate preventative and corrective actions to Control Areas when needed.
- Use of static security study and assessment tools
- Implementer of NERC Policy 9 (Security Coordination Sub-Capability)
- Network model and analysis data from the real-time database and sequence applications in the EMS
- Ability to perform on-line transient and voltage assessment analysis using real-time data
- Visualization of identified contingencies

Key Assumptions

- Static assessment capability will be required for the End State; FRCC Security Coordinator capabilities through FPL required for the Release 1
- Value in accurately determining TTC/ATC and realistic operating limits in real-time
- Additional requirements may be implemented beyond the End State to maintain & enhance system stability while operating closer to constraints

Solution Strategy

Technology:

- Same tools as in Monitor Transmission System
- Access to Internet: ISN, IDC, SCIS
- Network Model interface
- Contingency analysis (Steady state, dynamic, voltage)
- Security Constrained OPF
- Dynamic mapboard
- FTMS message exchange

People:

- NERC-certified 24 x 7 Security Coordinator

Facilities:

- Control Center

Capability: Grid Security & Reliability Management

Sub-Capability: Manage System Restoration

Sub-Capability Description

GridFlorida will plan, coordinate and have operation control of system restoration for the GridFlorida area, as well as coordinate restoration for the FRCC region.

Requirements

- GridFlorida will develop an RTO-wide plan to conduct system restoration based on plans currently in place at individual Control Areas
- GridFlorida will determine the black start capability it requires and its locations
- System restoration has real time transmission monitoring implications (getting the system back up) as well as planning/contingency implications (developing system restoration contingency plans)
- GridFlorida will review after-the-fact restoration information & file appropriate reports
- Black start service will be obtained through bilateral arrangements and collect costs as authorized in the tariff
- GridFlorida will manage and deploy system black start capability

Key Assumptions

- GridFlorida will take planning lead and coordination role in system restoration
- Capability required for End State; capability through the current FPL coordinated FRCC plan will be implemented for the Release 1

Solution Strategy

Technology:

- Real-time: same applications as Monitor Transmission System
- Planning: Offline Power Flow, office software, and DTS

People:

- Real-time: Security Coordinator
- Planning: Security Coordinator, Operations Prep

Facilities:

- Real-time: Control Center
- Planning: Office

Capability: Grid Security & Reliability Management

Sub-Capability: Coordinate Outage Management

Sub-Capability Description

GridFlorida will accept, approve, and change or deny transmission maintenance outage requests based on system reliability coordination criteria. GridFlorida will take into account the generator outage schedules and will change these only for security provision purposes.

Requirements

- Ability to accept, validate and evaluate the annual, monthly and day-ahead outage request combinations
- Ability to modify, if needed, the timing of outages within predetermined tolerances

Key Assumptions

- GridFlorida will have RTO and Security Coordinator authority over coordination of transmission & generation maintenance outage for security purposes
- Capability required for the End State; existing FPL Security Coordinator functions will provide capability for the Release 1

Solution Strategy

Technology:

- Outage Scheduler
- Message Exchange
- Same applications as Calculate/Update TTC

People:

- EMS NERC-certified control center operators
- Operations planning engineers- Operations Prep

Facilities:

- Control Center
- Office

Capability: Real Time Operations

Sub-Capability: Monitor and Operate Grid

Sub-Capability Description

GridFlorida will monitor the transmission system state in real time for events that affect system security and transfer capacity.

Requirements

- Ability to monitor & assess state of transmission system
- Ability to control and/or communicate corrective instructions to Control Area Operators when needed
- Ability to monitor and audit compliance

Key Assumptions

- GridFlorida to have Security Coordinator level authority over all Control Areas and either direct or indirect operational control of Control Area facilities.
- Capability will be required for the End State; capability provided through existing Control Area Centers for the Release 1

Solution Strategy

Technology:

- SCADA (control, including alarming, logging, equipment tagging)
- State Estimator
- Load Flow (input from State Estimator)
- Contingency Analysis
- LSE Interfaces
- Dynamic Overview/Mapboard
- Weather forecast/radar
- FTMS Messaging

People:

- EMS NERC-certified Control Center Operators 7x24

Facilities:

- Control room with Internet access and high speed data links to Control Areas and other Security Coordinators, dual redundant CPUS, etc.
- UPS
- Backup Control Center facility with minimal Sub-Capabilities

Capability: Real Time Operations

Sub-Capability: Monitor & Control Generation

Sub-Capability Description

GridFlorida will monitor the generation units in real time in accordance with the GridFlorida OATT and FRCC Security Coordinator responsibilities.

Requirements

- Ability to monitor & assess state of generators
- Ability to control and/or communicate corrective instructions to the generator units directly or indirectly through the Control Area facilities or through the Scheduling Coordinators
- Ability to monitor and audit compliance

Key Assumptions

- GridFlorida will have RTO authority to redispatch for congestion management and balancing energy purposes
- GridFlorida will have Security Coordinator authority over all Control Areas
- Security Coordination capability will be required for the End State; capability provided through existing Control Area Centers for the Release 1

Solution Strategy

Technology:

- SCADA (control, including alarming, logging, equipment tagging)
- Load Forecast
- Operating Plan (Control Area schedules)
- Load & Frequency Control (LFC) (Regulation market)
- LSE interfaces
- Reserve Monitoring
- LFC Performance Monitoring
- Dynamic Overview/Mapboard

People:

- EMS NERC-certified Control Center Operators, 7x24

Facilities:

- Control room with Internet access and high speed data links to Control Areas and other Security Coordinators, dual redundant CPUS, etc.
- UPS
- Backup Control Center facility with minimal Sub-Capabilities

Capability: Real Time Operations

Sub-Capability: Instruct & Monitor Compliance

Sub-Capability Description

GridFlorida will issue instructions to Control Areas, monitor the compliance of Control Areas, and verify they followed the issued instructions for congestion management, Energy Imbalance, etc. This function also includes monitoring GridFlorida compliance with NERC Compliance Programs.

Requirements

- Mechanism for logging instructions and a feedback loop for determining if instructions were implemented
- Mechanism for logging NERC compliance templates
- Verify and track ancillary services usage

Key Assumptions

- Determination if instructions to Scheduling Coordinators & Market Participants were followed in a timely manner is required
- Failure to follow GridFlorida instructions or meet NERC compliance templates has implications
- SCADA will be used for monitoring where appropriate
- Capability will be required for the End State; capability for reduced functions and operations through existing Control Areas for the Release 1

Solution Strategy

Technology:

- Electronic logging application and messaging system with a Database for storing/retrieving all GridFlorida instructions
- Telephone for giving instructions to Control Areas and Voice recorder
- Other Control Center applications as needed

People:

- 7x24 Operators at Security and Generation consoles are responsible for logging instructions when issued
- Backroom personnel recording/monitoring compliance (after the fact)- Post Operations

Facilities:

- Control Center
- Office

Capability: Real Time Operations

Sub-Capability: Acquire Interchange Meter Data

Sub-Capability Description

Interchange meter data will be collected on an hourly basis to coordinate with operations data and will be used in the inadvertent process. GridFlorida will serve as a collection point for this data.

Requirements

- Control Areas will be the primary collectors for interchange meter data, which will be passed to GridFlorida
- Data should be verified each hour
- Data should be matched with schedules
- Process should support the Settlements and Billing capability

Key Assumptions

- Asset owners are responsible for validity and timely delivery of metered data
- GridFlorida operators are responsible for ensuring data is received
- Capability will be required for the End State; existing metering through control centers & new scheduling service will be used for the Release 1

Solution Strategy

Technology:

- ICCP
- ISN Portal
- FTMS
- Scheduling Service with inadvertent calculation

People:

- Operators, 7X24
- Settlements Analysts

Facilities:

- Control Center
- Office

Capability: Operations Support

Sub-Capability: Provide Operator Training

Sub-Capability Description

GridFlorida will provide comprehensive training for its operators and support staff. This training will included classes, OJT, field work and simulator training.

Requirements

- Training needs of Operations personnel must be defined
- GridFlorida should develop training with the Dispatcher Training Simulator to simulate the GridFlorida environment as closely as possible
- Field work (i.e. travel to member utilities, customer sites, etc.) should be included
- NERC certification
- Regulatory and code of conduct training
- Other potential, non-EMS training

Key Assumptions

- Capability with full applications will be required for the End State
- Leverage existing FPL DTS system for training of personnel for the Release 1

Solution Strategy

Technology:

- DTS (EMS, CM & market applications)
- Other Control Center applications as needed

People:

- Operators
- Dedicated training staff, including experienced NERC-certified Operators for training new and less-experienced operators
- Regulatory and NERC experts

Facilities:

- Control Center

Capability: Operations Support

Sub-Capability: Develop & Maintain Operating Procedures & Standards

Sub-Capability Description

GridFlorida will develop and maintain the processes, procedures and standards necessary to securely and efficiently operate the power system and coordinate operations.

Requirements

- Develop and maintain rules for implementation of market
- Develop and maintain the power system operations procedures and standards
- Determine the training protocols for Operations personnel

Key Assumptions

- Capability will be required for the End State; initial procedures & standards capability required for the Release 1

Solution Strategy

Technology:

- DTS (EMS, CM & market applications)
- Other Control Center applications as needed

People:

- Operators
- Operations Management staff

Facilities:

- Control Center

Capability: Scheduling

Sub-Capability: Calculate/Update ATC

Sub-Capability Description

Calculate Available Transmission Capability (ATC) based on OASIS reservations, energy schedules and transmission system conditions.

Requirements

- Knowledge of scheduled transmission outages, generation outages, and any other transmission-related equipment
- Need to know how transactions are dispersed across control areas to compute accurate ATCs
- Daily & hourly ATC calculations & posting to OASIS
- Calculate ATC's for Control Area to Control Area, Congestion Zone to Congestion Zone (flowgate and non-flowgate)
- Calculate ATC's for interfaces to contiguous non-GridFlorida Control Areas

Key Assumptions

- OASIS will be implemented per FERC requirements
- GridFlorida will adopt the existing FRCC calculation methodology
- Capability will be required for the End State; use existing tool (possible FPC) extended for GridFlorida data for the Release 1

Solution Strategy

Technology:

- OASIS software
- ATC Calculator
- Integrated Model Management tool
- Interface to TTC data
- Interchange Scheduling software
- Transmission Scheduling software
- IDC
- FTMS

People:

- 7x24 coverage at a ATC Console
- Planning personnel (power system engineers)

Facilities:

- Control Center

Capability: Scheduling

Sub-Capability: Schedule & Manage Energy & Ancillary Services

Sub-Capability Description

GridFlorida will receive day ahead, balanced energy and self-provided ancillary services schedules, transmission reservations and adjusted energy schedules from Scheduling Coordinators and determine their validity and operational feasibility.

Requirements

- Receive generator and forecasted energy load schedules (intra-Control Area)
- Receive energy schedules for transmission reservations (tagging for inter-Control Area)
- Determine net interchange schedules
- Disseminate all interchange schedules to Control Area Operators
- Validate interchange schedules with adjacent Control Areas and perform hourly checks and adjustments electronically

Key Assumptions

- All Ancillary Services will be dispatched in real-time by GridFlorida
- After-the-fact schedules are needed for settlement process
- Capability will be required for the End State; capability provided through existing Control Areas for the Release 1

Solution Strategy

Technology:

- Energy Scheduling service to parse schedules and determine interchange schedules for control areas.
- Provide schedules to Control Areas via a common format
- Mechanism to receive feedback on how schedules were implemented (synching logic)
- Congestion Management Software
- Tagging Service (NERC & GridFlorida)
- FTMS
- Transmission Scheduling Service
- Interface with overlay Control Area application

People:

- Transaction Scheduling Console position, 24 x 7

Facilities:

- Control Center

Capability: Scheduling

Sub-Capability: Manage Transmission Services

Sub-Capability Description

Market Participant requests for transmission service will be submitted via OASIS. GridFlorida will be responsible for receiving the reservation requests, validating them, and approving or denying the transmission service requests.

Requirements

- Distribute transactions across control areas to compute accurate ATCs
- Receive, validate, accept/reject, and tag incoming transmission requests for GridFlorida Transmission service
- Perform curtailments & schedule adjustments as required
- Track disposition of all requests under OATT

Key Assumptions

- OASIS will be implemented to meet FERC requirements
- GridFlorida will be single point of contact for OASIS reservations for transmission beginning, ending or passing through the GridFlorida region
- Capability may need to be transitioned prior to the Release 1; capability (possible OASIS Phase 2) will be required for the End State

Solution Strategy

Technology:

- Reservation Priority Tracking Software
- ATC Calculator interface
- OASIS/Transmission Scheduling Service
- IDC
- Integrated Model Management tool
- Provide data to Settlements and Interchange Scheduling

People:

- 7x24 coverage at a Transmission Reservation console by a NERC-certified operator
- Operational Planning staff

Facilities:

- Control Center

Capability: Forecasting

Sub-Capability: Forecast Ancillary Services

Sub-Capability Description

GridFlorida will forecast short-term ancillary services needs within its control area, and it will procure ancillary services when necessary in its role as the provider of last resort for its region.

Requirements

- Verify that proposed transactions can be supported by the required ancillary services
- Determine the ancillary service requirements (e.g. voltage support), based on forecasted load
- Coordinate ancillary service requirements for imbalance, reserves, voltage support, etc., with self-suppliers or contract suppliers

Key Assumptions

- GridFlorida will be the provider of last resort for day-ahead & 1-hour ahead ancillary services within its region
- Provision of ancillary services will be from GridFlorida (procured through market and non-market mechanisms), or through self-supply or contracts with generators under the auspices of the OATT
- Capability will be required for the End State; capability will be provided by Control Areas for the Release 1

Solution Strategy

Technology:

- Scheduling Tools for documenting transactions supported by required ancillary services.

People:

- Scheduling personnel 24 x 7
- Operations planning personnel

Facilities:

- Control Center

Capability: Forecasting

Sub-Capability: Forecast Load

Sub-Capability Description

GridFlorida will develop short, mid and long-term load forecasts for its security coordination area and for planning the expansion and enhancement of the transmission system with information from SC's LSE's and Generators.

Requirements

- Track area forecasts for accuracy and develop historical data for analysis on a system-wide, control area, congestion zone and bus load basis
- Gather information from LSEs, Generators, and adjacent Control Areas to develop forecasts
- Develop an independent forecast to minimize underscheduling

Key Assumptions

- Short-term load forecast horizon will cover hourly load over 7 days, comprising 168 hourly values; mid-term will cover up to 1 year; long term will be 1 year and longer
- Data will be used to look at day-ahead and review of morning forecasts
- Capability will be required for the End State; capability will be provided by Control Areas for the Release 1

Solution Strategy

Technology:

- Method or application for creating and aggregating load forecasts
- Mechanism to receive load forecast data in a common format
- Mechanism for inserting aggregated data into network applications
- Tool to track accuracy of forecasts
- Weather forecast information
- FTMS message exchange

People:

- Security Operator, 24 x 7

Facilities:

- Control Center

Capability: Market Facilitation

Sub-Capability: Operate a Market for Ancillary Services & ICE

Sub-Capability Description

GridFlorida will operate markets to obtain ancillary services for Regulation, Balancing and Operating Reserves. It will also operate a market for LSEs to meet Installed Capacity and Energy (ICE) requirements.

Requirements

- Support for overlay Control Area
- Produce a MCP using inc/dec bids from SCs for balancing market and congestion management redispatch
- Produce a MCP using capacity and energy bids from SCs for regulation and operational reserve
- Amounts of services determined by requirement forecast less self-supply or third party contracts by SCs
- Conduct a monthly deficiency auction to purchase sufficient installed capacity for LSEs to meet FPSC and FRCC reserve requirements

Key Assumptions

- Capability for Ancillary Services will be required for the End State; capability will not be required for the Release 1
- Assume overlay Control Area in place for the Release 1
- ICE market requirements have not been defined and are an uncertain requirement for the End State

Solution Strategy

Technology:

- Bidding and market clearing pricing mechanism
- Market Participant interfaces to support bidding
- Overlay Control Area application

People:

- Market desk staffing, 24 X 7

Facilities:

- Control Center or Office

Capability: Market Facilitation

Sub-Capability: Run Congestion Management PTR Market

Sub-Capability Description

GridFlorida will operate a bulletin board system where offers to buy and sell PTRs can be posted.

Requirements

- Track use of PTRs and post as recallable (RTRs) if not scheduled in day-ahead process
- Identify additional capacity PTRs, based on ATC calculations, for auction
- Auction available PTRs and RTRs, clear prices and settle

Key Assumptions

- NERC TLR and interim CM (MRD+SRD solutions) will be used for the Release 1
- Full CM market solution will be required within 1-year from the Release 1 & will likely be included in the End State

Solution Strategy

Technology:

- Bulletin board and bidding/pricing mechanism
- Congestion management clearing engine
- Calculate PTDFs (from Network Sensitivity Analysis)

People:

- Market desk staffing, 24 x 7

Facilities:

- Control Center or Office

Capability: Metering & Measurement Data

Sub-Capability: Acquire Metered Data

Sub-Capability Description

Revenue-quality metering data must be collected by GridFlorida in order to support the Settlements and Billing capability. GridFlorida will serve as a collection point for metering data from the individual Control Areas.

Requirements

- Control Areas will be the primary collectors for metering data. The data will be passed from the Control Areas to GridFlorida through a pre-described interface in a defined format.
- Provide metering database with data analysis capability, and ability to store large volumes of meter data.
- Maintain flexibility to meet future demands once improved and additional metering data is available (beyond the end state).
- Archive Meter & Meter Read Data

Key Assumptions

- Revenue quality metering will not be available in many cases. Specifically metered load data is available at the ties/interchange points, but not at most load points of delivery. Generation metered data is mostly available, but may not all be revenue quality or may be in the wrong location in some cases. The lack of meter data will impact Settlements calculations for EI, Congestion Management, etc (see other sub-capabilities).
- Minimal new metering beyond what is currently available is assumed for the end state. There might be selective replacement of some metering.
- Where possible, revenue quality meter data will be provided to GridFlorida according to the settlement interval (assumed to be 10 seconds)
- All metered data is received from the Control Areas; GridFlorida does not poll any meters, for example, to retrieve data
- Asset owners are responsible for validity and timely delivery of metered data and GridFlorida is responsible for ensuring data is received
- It is not yet determined who will own the meters in all cases (some GF, some the Transmission companies)

Solution Strategy

Technology:

- Portal (EDI transaction) to receive metered data from Control Areas
- ICCP protocol for transfer of generation meter data
- ISN Portal

People:

- Meter Data Analysts

Facilities:

- Receive data through GridFlorida Control Center
- Office

Capability: Metering & Measurement Data

Sub-Capability: Reconcile & Manage Metering Data

Sub-Capability Description

The primary purpose of this function is to reconcile and validate the meter data acquired for Settlements and Billing. Where necessary, this sub-capability will also have the responsibility to convert the meter data into the correct format and Settlements interval.

Requirements

- Reconcile and manage metering data
- Perform load allocation/load profiling methodologies to disaggregate or allocate total load actuals down to the level required (e.g. to each load asset) on the network, in order to calculate charges. This will be a complex, but necessary part of the Commercial Operations capability, given an absence of revenue quality metering data, particularly at load points.
- Interface with the Settlement & Billing sub-capabilities
- Identify and implement corrective action for apparent metering data errors and lack of metering data

Key Assumptions

- This is a required capability for the end state. A potential Release 1 of GridFlorida would not have this capability in place, and may need to rely on current methods (of utilities) for calculating Energy Imbalance, and other, in the absence of a metering data sub-capability.
- For the end state, GridFlorida expects to have to make use of the current metering system if possible. There may be some replacement of selective meters, and in the case of new customers, correct metering should be installed wherever possible.
- The primary purpose of this function is to prepare the meter data for Settlements and Billing
- GridFlorida will receive revenue quality meter readings from the different Control Areas

Solution Strategy

Technology:

- Meter data database (significant size and storage capabilities)
- Load allocation/profiling tool(s)

People:

- Meter Data Analysts, who support the Settlements sub-capability by performing the day-to-day operations of reconciling & managing meter data

Facilities:

- Office

Capability: Metering & Measurement Data

Sub-Capability: Certify and Register Meters

Sub-Capability Description

The primary purpose of this function is to ensure that meters connected to the Grid Florida system and/or providing meter data to GridFlorida for Settlements & Billing are certified and registered, in order to ensure the accuracy of the Settlements & Billing calculations.

Requirements

- Have ability to certify and register meters being used by the GridFlorida system
- Requires specialized skills/training to do the certification and registration
- Document results of the certification and registration in the meter data system, such that meter data received can be recognized as from a certified and registered meter

Key Assumptions

- This is a required capability for the end state. A potential Release 1 of GridFlorida would assume that this sub-capability is in place through the Transmission companies.
- The question of meter ownership will need to be resolved. The initial assumption is that TECO is keeping its meters, and FP&L is planning to contribute its meters to GridFlorida. This discrepancy will need to be resolved.
- Irregardless of meter ownership, GridFlorida have the ability to certify and register meters in order to ensure the Settlements & Billing results.

Solution Strategy

Technology:

- Meter database in which to store certification and registration of each meter – assumed to be either in the main meter database or in the Settlements system

People:

- Meter Technicians – with qualifications to certify and register various meters – at Generation and Load points

Facilities:

- Office, and work will be done in the Field

Capability: Settlements & Billing

Sub-Capability: Settle Market

Sub-Capability Description

Responsible for performing settlements steps and functions in order to reconcile scheduled data with actual usage information for the calculation of charges/credits for services provided by GridFlorida. (e.g. transmission service (point to point vs network), ancillary services, and other RTO services). Both the tariff and specific market rules will drive the settlements calculations.

Requirements

- Calculate and allocate the charges & credits for GridFlorida services to each customer. The tariff and specific market rules will drive calculations.
- Perform settlement function for transmission services, ancillary services, energy imbalance, congestion management, grid management, & losses
- Transmission is settled for network load and point to point. Network load is settled by a percent of system peak monthly (including losses). For the first 1-5 years, it is settled by zonal transmission rates at zonal peak. For 6+ years (and 1-5 years for new facilities), transmission is settled using a system wide average charge. Point to point is settled on reservation with a potential penalty for exceeding (or not meeting) reservation.
- Ancillary services scheduling is linked to transmission for point to point and network. Customers can self supply Regulation and Frequency Response Service (RFR) and Operating Reserves. There will not be markets for these two in the end state.
- Customers must purchase Balancing Energy Service from GridFlorida and may offer/bid to sell Balancing Energy to GridFlorida.
- Charges for Scheduling, System Control and Dispatch Service, Grid Management and Black Start services will be applied to customers.
- Reactive Supply and Voltage Control (RSVC) will not result in charges/credit, except in security constrained situations – there may be a charge.
- Settlements functions will be performed on a periodic (i.e. daily, monthly) basis and will occur in 10 minute intervals.
- Details for how to settle for Congestion management are not yet fully defined. There may be an interim plan which changes in the long term.
- Includes initial settlements (some may be on estimates) followed by resettlements. Requirement to validate, balance & audit Settlements data.

Key Assumptions

- This is a new capability for GridFlorida and is a required capability in the end state. An initial Settlements capability will be required in a potential Release 1 scenario. This initial capability will not settle for any market services, and may be done by GridFlorida or may have to be done through the Transmission companies. Capability depends on details of OATT and on completion of specific market rules design.

Solution Strategy

Technology:

- Settlements system and interfaces to Energy Schedules (etags), Generation Schedules, OASIS(Transmission reservations), Meter Data, Prices, and Market Operations results. Ability to store large volumes of data over time, in order to recreate historical charges.
- *People & Facilities:*
- Settlements Manager, Settlements Analysts, Office and powerful PCs

Capability: Settlements & Billing

Sub-Capability: Perform Billing

Sub-Capability Description

Based on the settlements data calculated a periodic (i.e, weekly, monthly) invoice must be constructed and sent to the customer and with charges/credits captured as Accounts Receivable/Account Payables. The invoice must be prepared/calculated covering all charges and credits. The invoice will be electronically prepared and sent to the customers (potentially through the customer interface portal).

Requirements

- Develop a billing engine which uses the settlements results and billing determinants to calculate the charges and credits
- Customer account information, previous payments processed, resolution of previous customer disputes/inquiries, taxes, outstanding receivables carried from prior periods, penalty charges, and adjustments are consolidated with the current charge and credit information into bill line items
- Tariff requires monthly billing for transmission service; imbalances may need to be more often.
- Typically in active, competitive wholesale markets, with market services, settlements statements are generated on a daily basis and sent to the customer, with bills/invoices generated approximately weekly or potentially monthly.
- At the creation of a bill, amounts are recorded in the Accounts Receivable/Accounts Payable systems and handed off to Corp. Finance & Acctg.

Key Assumptions

- This is a new capability for GridFlorida, with little/no reuse from member utilities and is a required capability on Release 1.
- An invoice is the compilation of multiple settlement statements. A settlement statement is for one settlement day. An invoice is for a set amount of previous settlement days combined.
- Settlement statements and bills will be posted via the portal to Scheduling Coordinators (who then settle with customers).

Solution Strategy

Technology:

- Portal for distribution of Settlements statements and potentially bills
- Settlements and Billing system. Bill print software.
- Financial Management system – specifically Accounts Receivable and Accounts Payable.

People:

- Settlements Manager, who is responsible for overall Settlements and Billing functions. Oversees the calculation of settlements and services charges for each customer, ensures that settlement statements and bills are accurate and created on a timely basis.
- Settlements Analysts, who support the Settlements Manager by performing the day-to-day operations of settlements and billing

Facilities:

- Office

Capability: Settlements & Billing

Sub-Capability: Resolve Disputes

Sub-Capability Description

All customer inquiries are captured in the Resolve Customer Inquiries and Disputes function (in the Customer Interface capability). Inquiries specifically related to Settlements and Billing disputes are then routed to Settlements personnel for resolution. Dispute Resolution process will follow rules and process outlined in the tariff.

Requirements

- Strong communication and interface between customer service account reps. roles and Settlements roles to ensure solid dispute resolution from a customer service point of view
- Ability to answer customer questions in areas such as billing adjustments, missing meter data notification, customer information requests, and technical assistance
- Ability to follow steps to investigate/resolve inquiries, and determine when an official dispute must be logged.
- Details of disputes must be tracked and used to ensure that procedures and specific dispute resolution rules are being followed
- Research or re-routing of disputes to appropriate personnel where necessary

Key Assumptions

- This sub-capability will increase in scope for GridFlorida (compared to current), with little/no reuse from member utilities and is a required capability in both the end state and potential Release 1 timeframes.

Solution Strategy

Technology:

- Portal for distribution of results and information to customers
- Settlements and Billing system to review and recreate (where necessary) historical charges and credits
- System in which to record disputes – steps and resolution
- Access to operational data necessary to resolving disputes (e.g. reviewing dispatcher logs and taped conversations)

People:

- Settlements Manager, who is responsible for overall Settlements and Billing functions. Oversees the calculation of settlements and services charges for each customer, ensures that settlement statements and bills are accurate and created on a timely basis.
- Settlements Analysts, who support the Settlements Manager by performing the day-to-day operations of settlements and billing

Facilities:

- Office

Capability: Settlements & Billing

Sub-Capability: Manage Customer Credit Risk

Sub-Capability Description

This sub-capability is responsible for assessing and managing any potential ongoing credit risks, specific to Transmission customers of GridFlorida.

Requirements

- Evaluate potential credit risks on an ongoing basis. Develop specific credit management policies.
- Required to evaluate a combination of factors to assess customer specific risks. Factors include: established credit limit, outstanding amounts owing, collections history, and amount of new business booked/reserved (e.g. Transmission reservations made, not billed/paid).
- Ensure that customers do not purchase over their credit limits. Alert Market Operations/Scheduling to "close to credit" situations.
- Does not include more general credit management sub-capability (e.g. for establishing/assessing credit limits of parties other than Transmission customers).

Key Assumptions

- This is a required sub-capability in the end state.
- In a potential Release 1 scenario, GridFlorida may need an initial, simplified version of this sub-capability.
- This sub-capability requires coordination and information from a number of sub-capabilities: Scheduling, Collections, Certify New Customer.

Solution Strategy

Technology:

- Access to information in Scheduling, OASIS, Settlements & Billing, Accounts Receivable, and Customer System/Portal
- Potential for regularly produced report that would "flag" close to credit customers, from data in multiple systems

People:

- Credit Risk Analyst/Manager (might be part of Settlements Manager role)
- Settlements Analysts, who support the Settlements Manager by performing the day-to-day operations of settlements and billing

Facilities:

- Office

Capability: Settlements & Billing

Sub-Capability: Collect Payments & Make Disbursements

Sub-Capability Description

GridFlorida must coordinate collections and disbursements of cash, track and monitor outstanding amounts, and enforce collections procedures when necessary.

Requirements

- Payments from customers are received (electronic funds transfers between banks and potentially by checks) and distributed to the appropriate outstanding accounts
- Customer accounts are updated in accordance with their received payment
- Customers with outstanding accounts are given notification and collection action is taken if required
- Late charges are assessed immediately after due date
- Disbursements are made to service providers
- In participating owners agreement, GridFlorida pays the Transmission Owner for use of the transmission system as the Transmission Customer pays GridFlorida (pass through to meet revenue requirements)

Key Assumptions

- This is a new capability for GridFlorida, with little/no reuse from member utilities and is required in both the end state, and in a potential Release 1 scenario
- All financial transactions go through the Scheduling Coordinators

Solution Strategy

Technology:

- Financial Management System (Accounts Receivable and Accounts Payable), Electronic Funds Transfer capability between banks

People:

- Settlements Manager, who is responsible for overall Settlements and Billing functions. Oversees the calculation of settlements and services charges for each customer, ensures that settlement statements and bills are accurate and created on a timely basis.
- Settlements Analysts, who support the Settlements Manager by performing the day-to-day operations of settlements and billing
- CFO

Facilities:

- Office

Capability: Contract Management

Sub-Capability: Certify New Customers

Sub-Capability Description

Contract Management is the management of the contractual agreements between GridFlorida and its customers. Everyone who will be providing or procuring OATT/transmission services to/from GridFlorida (e.g., ancillary services) will need to be certified customers. This process will gather customer details (business, credit, and operational related) in order to certify the customer to do business with GridFlorida.

Requirements

- Develop standard procedures, policies and requirements for certification of new customers of GridFlorida
- Develop customer information package detailing business, credit and operational related data. Portions of this is gathered by the new customer.
- Interface with customer for certification inquiries. Customer must meet requirements related to information technology, transmission service, and establishing training
- Perform evaluation of legal and technical requirements (e.g equipment and characteristics) and financial requirements (e.g. credit check). Review and approve (may require multiple levels of review across capability areas (e.g. System & Market Operations, and Corporate Services)
- Set-Up & Notify customers, including the training on the use and setup of systems, and the notification of user names and passwords, etc.

Key Assumptions

- Services will only be procured from or sold to customers who have been certified through the Certify New customers function
- This is a new capability for GridFlorida, with some reuse from member utilities and is required in the end state. In a potential Release 1 scenario, this could be based on current certification procedures implemented by current Transmission companies.

Solution Strategy

Technology:

- Set up of new customers in Contract Management software, Customer Information system and Settlements & Billing system

People:

- The Contract Administrator is responsible for monitoring and coordinating the negotiation of contracts for GridFlorida. This manager will provide contracting support to all areas of the organization and will receive support from the appropriate legal counsel whenever required.
- Account Managers, who are a key point of contact for customers. They will manage and maintain the registration and certification of the entire Contract Management process.

Facilities:

- Office

Capability: Contract Management

Sub-Capability: Manage Contracts with Customers

Sub-Capability Description

This process establishes and maintains the contractual arrangements between GridFlorida and its Transmission customers (e.g. contracts for Transmission services). GridFlorida will verify that the terms and conditions of contracts are met, and manage any Settlements & Billing impacts.

Requirements

- Process must support the verification and certification of existing contract arrangements (grandfathered contracts)
- GridFlorida will only administer contracts in its tariff. However, GridFlorida can file with FERC to modify contracts if they are not in line with GridFlorida's operating guidelines.
- There will be a few existing contracts with not be able to be amended. However, the TO takes on that responsibility and risk (i.e. the TO will buy from GridFlorida and then take have to settle/bill with their own customer according to the contract terms).
- Contract and legal documentation development
- Standard contract management capability to monitor the contracts with each customer
- Process supports contract compliance monitoring and enforcement if necessary

Key Assumptions

- This is a new capability for GridFlorida, with some reuse from member utilities and is required in the end state. Additional analysis is required to determine status impact of contracts in a potential Release 1 scenario.
- GridFlorida needs to determine how previously agreed upon contracts will be incorporated into the new market
- Current Transmission owners have significant work to do to get current contracts converted to fit with new rules

Solution Strategy

Technology:

- Contract Management software

People:

- The Contract Administrator is responsible for monitoring and coordinating the negotiation of contracts for GridFlorida. This manager will provide contracting support to all areas of the organization and will receive support from the appropriate legal counsel whenever required.
- Account Managers, who are a key point of contact for customers. They will manage and maintain the registration and certification of the entire Contract Management process.
- Settlements Analysts to analyze and manage the Settlements & Billing implications of contract terms

Facilities:

- Office

Capability: Customer Management

Sub-Capability: Resolve Customer Inquiries

Sub-Capability Description

Once the customers are certified and registered with GridFlorida, this process becomes their main interface with GridFlorida for resolving inquiries and obtaining information for existing and new relationships

Requirements

- Development of customer service activities such as the establishment of a key account manager function for inquiries to serve as one point of contact
- Maintain and store customer information
- Handle customer registration and route questions. Will need to coordinate with the rest of the organization.
- Answer customer questions in areas such as the planning process, meter data, project construction, training, study requests- longer term, disputes, credit and billing, tariff questions, maintenance schedules, customer feedback (market rules, etc), certify/register new customer profile (load, contacts, future connects, etc), load forecasts from customers (annually), and technical problems
- Research or re-routing of inquiries to appropriate personnel
- Account managers must understand the tariff

Key Assumptions

- This is a new capability for GridFlorida, with no reuse from member utilities and is a required capability prior to Release 1
- Skilled, capable personnel with technical and functional skills will perform the customer service responsibilities
- Initial contact person will have access to all necessary data and appropriate skills/training to handle most calls
- Customer info will be captured on a common data base used by other processes
- Need consistent communication of tariff information to all customers

Solution Strategy

Technology:

- A customer service application would assist in the resolution/routing/monitoring of customer inquiries and the management of customer relationships and data
- Web interface which is accessible from OASIS
- Phone calls

People:

- Account Managers, who are a key point of contact for customers. AMs should be able to resolve questions or problems posed by their customers. They should be functional experts as well as customer service experts.

Facilities:

- Corporate Headquarters

Capability: Customer Management

Sub-Capability: Manage Relationships with Customers

Sub-Capability Description

This process supports proactive customer service by gathering input from customers and supporting the development of new services, and communication and training to meet customer needs

Requirements

- Information collection from customers (and advisory committee) through customer focus groups, surveys and other RTO processes
- Analysis of input, and identification of alternatives to meet those needs
- Coordination with the appropriate parts of the RTO organization to develop effective communications and training
- Facilitate the delivery of adequate training and communication to facilitate participation (systems and OATT)
- Coordinate with additional appropriate GridFlorida capabilities to create customer development and marketing plans and strategies

Key Assumptions

- This is a new capability for GridFlorida, with no reuse from member utilities and is a required capability prior to Release 1
- Personnel with technical, functional, and interpersonal customer service skills will perform the customer service responsibilities

Solution Strategy

Technology:

- A customer service application would assist in the resolution/routing/monitoring of customer inquiries and the management of customer relationships and data
- Web interface which is accessible from OASIS

People:

- Account Managers, who are a key point of contact for customers. Account Managers should be able to resolve questions or problems posed by their customers. They should be functional experts as well as customer service experts.

Facilities:

- Corporate Headquarters

Capability: Customer Management

Sub-Capability: Collect Customer Information

Sub-Capability Description

GridFlorida must maintain information about each customer. This function is the key step to gathering the appropriate information, verifying, and maintaining it in a common format and facility

Requirements

- Information is collected through a well-defined registration process
- Verify that customers have completed proper contract documentation for services being requested
- Data should be captured and stored in a single location
- Data should be accessible by internal GridFlorida users
- Appropriate levels of security over data should be maintained
- Coordinate with the rest of the organization to maintain information about customers

Key Assumptions

- Customers will convert at some date determined by GridFlorida
- This is a new capability for GridFlorida, with no reuse from member utilities and is a required capability prior for Release 1

Solution Strategy

Technology:

- Customer Service Application
- Web interface which is accessible from OASIS

People:

- Account Managers, who are a key point of contact for customers. They collect customer data and enter it into the appropriate system. They also maintain the integrity of the customer information database.

Facilities:

- Corporate Headquarters

Capability: Communication Management

Sub-Capability: Provide Customer Information

Sub-Capability Description

Customer Management & Communication is the capability which allows the RTO to provide customers with operational information while managing relationships with these customers. GridFlorida will provide information to customers and the public about the transmission system, settlements and invoicing, OATT, and other relevant information

Requirements

- This process serves as a primary interface between GridFlorida and its customers
- Market information should be provided by GridFlorida to customers, regulators, and internal users
- Information should be posted to an area, such as a portal or electronic bulletin board, that allows for fair and equal access to all customers
- Appropriate levels of security must be determined and maintained for sensitive data (i.e. there will be a public "site" and a "private site")

Key Assumptions

- This is a new capability for GridFlorida, with no reuse from member utilities and is a required capability for Release 1

Solution Strategy

Technology:

- Web interface which is accessible from OASIS (public and private interface)
- Web interface would interface with Data Warehouse

People:

- Communications Analysts /Webmasters are responsible for maintaining the information portal, bulletin or adding information to OASIS- these people could be outsourced

Facilities:

- Corporate Headquarters

Capability: Communication Management

Sub-Capability: Provide Customer Training

Sub-Capability Description
This process meets the training needs of GridFlorida external customers and users (including regulators)

Requirements
- Training needs of customers must be defined
- GridFlorida must design, develop, and deliver customer training (and certify customers)
- Perform training needs analysis for ongoing customers as changes to the tariff, procedures, and computer systems impact the way they operate or deal with GridFlorida
- Regulatory and code of conduct training

Key Assumptions
- This is a new capability for GridFlorida, with no reuse from member utilities
- This is a required capability prior to Release 1
- Some training may be conducted by third-party vendors as needed (outsourced)

Solution Strategy

Technology:
- Low tech paper based training (Release 1)
- Registration system on web interface for training (end state)
- Web based training (end state)

People:
- Communications and Training Analysts (CTA), who are responsible for supporting Account Managers and other areas of the organization to provide customers with the comprehensive training and communications necessary to be effective. On an on-going basis, the CTA will monitor customer needs and will provide regular communication, education, or training as appropriate
- Coordinate with internal training department
- Some or all of training staff could be outsourced

Facilities:
- Corporate Headquarters- training staff
- Training can be conducted in off site meeting locations or at customer's location

Capability: Network Planning

Sub-Capability: Plan Network Enhancements

Sub-Capability Description

The planning process to be used by GridFlorida is intended to satisfy FERC's directive that a single entity must coordinate both transmission planning and expansion within its region to ensure a least-cost outcome that maintains or improves existing reliability levels and accommodates growth.

Requirements

- Regional planning analyses and basis for decisions must be available for review by interested parties; through annual planning process and is intended to ensure fair, unbiased and efficient enhancement of the transmission system to support robust wholesale competition
- GridFlorida shall have the obligation & sole responsibility for planning and directing the expansion of Controlled Facilities
- GridFlorida will have review and approval authority over transmission facilities connecting either load serving delivery points or a specific generating unit, and will coordinate the review of the impact of new additions on the Transmission System with the Transmission Owner, Generation Owner, and Local Distribution Utility planning the addition, as appropriate.
- GridFlorida will perform analyses to ensure compliance with NERC Planning Standards

Key Assumptions

- GridFlorida holds final responsibility for the regional transmission plan and requires the capability to do bulk transmission and interconnection planning (including planning around seams issues); includes managing potential congestion
- There is a transition provision for Local Area Planning – for the first three years GridFlorida will contract back the Local Area planning to be done by FP&L, TECO and FPC, with final review/approval by GridFlorida. GridFlorida will develop capability to do Local Area Planning over time (beyond both Release 1 and end state).
- In the event a Participating Owner doesn't want to construct/modify/expand facilities, GridFlorida may do so themselves
- If a non-participating owner requests a new interconnection, GridFlorida will have to review/approve request
- GridFlorida will adopt 5-10 year expansion plans of Pos/Dos, at commencement of operations, as baseline plan (will change as required)

Solution Strategy

Technology:

- Network planning suite (e.g. PSSE) and extracts of real time data, transfer analysis software (e.g. MUST), ATC calculations, and OASIS access
- Real time data archive - PI/EMS type of data, and e-tag access

People:

- Network Planning Group (Engineers and others) will be required in both end state and a potential Release 1 scenario

Facilities:

- Office, including PC's with sufficient speed & memory to simultaneously run PSSE, MUST & Office software

Capability: Network Planning

Sub-Capability: Perform Studies

Sub-Capability Description

System studies will be conducted by various committees, workgroups, and GridFlorida personnel in order to promote grid reliability, system efficiency, and coordinated planning efforts.

Requirements

- GridFlorida will have primary responsibility for the coordinated performance of all system studies and will define coordinated planning studies to be conducted under its direction and develop work assignments and schedules for conducting such studies
- GridFlorida will have the obligation and sole authority to receive and process requests from generation owners to interconnect
- Transmission studies associated with new load connections will be conducted, where grid reliability is affected, transmission congestion increased, or ATC reduced, and other studies associated with transmission service requests, including System Impact Studies
- Generator studies including the determination of System Upgrades & Direct Assignment Facilities and associated costs
- GridFlorida may also perform its own alternative system expansion studies, commission studies to be performed by a third party, and consider the input of studies from other interested parties in choosing a preferred plan

Key Assumptions

- Existing processes at member utilities will be leveraged to Perform Studies. GridFlorida will have the overall responsibility for doing studies, and will outsource back to engineering in the three Transmission Cos. to get the study and estimates done (end state & potential Release 1 scenario)
- Example: Generator requires an impact study. GridFlorida has the responsibility, contracts with FP&L, TECO or FPC to get the work done. GF charges and collects from the Generator, while the Utility charges and collects from GF.
- As Utilities will still be doing studies to meet their needs (e.g. voltage/VAR related studies), and GF will have an interest in studies as well, there is potential for duplication (e.g. GF does study from security point of view & LSE does from a network development view)

Solution Strategy

Technology:

- Network planning suite (e.g. PSSE), transfer analysis software (MUST)
- Real time operations data (PI/MMW/EMS)

People:

- Network Planning Engineers and Analysts

Facilities:

- Office

Capability: Network Planning

Sub-Capability: Develop Standards

Sub-Capability Description

Develop GridFlorida standards for Planning, Design, Construction and Maintenance. Develop and then maintain/update standards on an ongoing basis. Will require a central repository for standards, equipment manuals, procedures, etc.

Requirements

- GridFlorida needs to develop standards for all planning, design and work done to the transmission facilities.
- GridFlorida will be starting with the standards of three current Transmission groups, but will need to develop their own standards for Design and Construction, integrating and changing the current standards, as well as developing new to meet the needs of the new RTO
- The standards will include such items as: materials standards, estimated labor standards, and procedures/standards and expectations around how work will be done
- Once standards are developed, they must be updated on a regular basis, in part based on measuring/comparing estimates to actuals in Design and/or Construction. Include feedback loop based on actuals to update design standards

Key Assumptions

- This capability will develop over time, and could take approximately a year for initial development, followed by full development of standards. Therefore this is primarily beyond end state capability, and in a potential Release 1 scenario, GridFlorida would need to rely on current standards. GridFlorida will be starting with the standards developed in each of the Utilities
- GridFlorida expects it could take 3-5 years to fully develop a new set of standards, however at a minimum GridFlorida will need to understand current standards from three Utilities in order to work with them in the Work Definition sub-capabilities

Solution Strategy

Technology:

- Tool in which to develop, record and modify standards (common repository and/or might be part of a Work/Maintenance Management system)
- Access to information on current standards and actuals from the Work/Maintenance Management, Financial and other systems

People:

- People (Engineers, Planners, Designers) from current organizations familiar with Design and Construction standards

Facilities:

- Office

Capability: Network Planning

Sub-Capability: Develop Connection Policies and Procedures

Sub-Capability Description

Develop interconnection agreements between GridFlorida and generation owners & transmission customers and LSEs.

Requirements

- GridFlorida will develop requirements for connection to GridFlorida Controlled Facilities
- GridFlorida will perform the planning required for generation interconnections through GIS Feasibility and Facility studies
- The intent of the requirements is to ensure reliable transmission system operations and adequate response for the purposes of maintaining system control security, and to comply with NERC and other applicable industry standards and guidelines
- GridFlorida will coordinate transmission planning process associated with interconnecting generators that wish to provide Installed Capability

Key Assumptions

- Existing policies and procedures at member utilities can be leveraged
- GridFlorida will develop interconnection and queuing procedures
- GridFlorida will enter into operating agreements, Point-to-Point Transmission Service agreements or Network Integration Transmission Service agreements, as appropriate, with all Transmission Customers (including Transmission Owners) or other interconnected entities for the purpose of ensuring reliable operations of the Transmission System
- Currently working on Generation Interconnection studies in preparation for RTO in a potential Release 1 scenario. Interconnection Agreements (TECO and FP&L) have to be in place).

Solution Strategy

Technology:

- Business Software
- Access to previous connection policies and procedures

People:

- Network Planning personnel
- Access to Legal and Contract staff
- Some overlap with Plan Network Enhancements

Facilities:

- Office

Capability: Work Definition

Sub-Capability: Develop Maintenance Strategies

Sub-Capability Description

Develop strategy for performing routine and non-routine maintenance work on transmission assets. Strategy to balance cost and benefit for scope and frequency of maintenance. Goal is to maintain/increase profitability of assets.

Requirements

- Goal is to maximize the use of assets to generate optimum sustainable financial returns
- Determine required maintenance strategies based on a number of criteria: network age and condition, historical data available, reliability results, utilization rate
- Determine elements of maintenance strategies for transmission assets; fix vs: replace, frequency, methods depending on component
- Link maintenance strategies to revenue opportunities (not just reliability & safety)
- Measure results of maintenance strategies and modify accordingly

Key Assumptions

- GridFlorida has the obligation to provide reliable service through solid maintenance planning and execution and will do maintenance planning in the long-term, but in the end-state and in the Release 1 scenario will contract back to the Transmission owners for this service
- First GridFlorida will take as-is maintenance plans and use these. Reliability criteria will drive spending. Within first year of operation GridFlorida will need to measure results/costs and revise budgets. Later there may be performance incentives to increase efficiency.
- GridFlorida will determine and own the budget for maintenance
- Question re: materials. FPL – once materials are in-service, sell to GF. TECO plans to sell all their materials to GF.
- Ability to develop/maintain their own records on the network assets and their condition/performance. (Initial for Release 1, with additional later).

Solution Strategy

Technology:

- Access to information/reporting from three Transmission companies re: maintenance strategies & plans. For Release 1 – initial Asset Management system (e.g. with high priority assets).
- End state - Maintenance Management System may be the same/part of the Work Management System
- Access to information from other systems (reliability results, historical maintenance done, costs to do maintenance work, etc.)

People:

- Maintenance Supervisors and Maintenance Planners
- Contract Managers – to manage the process and outsourcing relationships and results

Facilities: - No special facilities required

Capability: Work Definition

Sub-Capability: Assess Asset Performance & Utilization

Sub-Capability Description

Assess the performance and utilization of transmission assets, through physical and financial modeling, with the goal to maximize profitable, sustainable use of the assets.

Requirements

- Measure results and assess performance of transmission assets based on a number of criteria; profitability, compliance/reliability, sustainability, and transmission customer satisfaction
- Measure and assess asset utilization or the extent to which existing assets are used for given demands (e.g. asset turnover)
- Requires ability to model and proactively manage current and future demand and compare to current and future utilization rates.
- Link results into maintenance strategies

Key Assumptions

- Assessing asset performance and utilization becomes more important in a competitive, for-profit environment
- Optimum asset utilization ensures effective use of invested capital
- This is not a required capability in a potential Release 1 scenario. In the end state, there will be focus on costs/results of work done to assets. Full analysis of asset performance will come later in the evolution of GridFlorida.

Solution Strategy

Technology:

- For Release 1 – initial Asset Management system (e.g. with high priority assets).
- Information on reliability incidents, information from Scheduling/Market Operations re: Transmission system usage
- Information from costing system(s)
- Long-term - Maintenance and/or Work Management systems and may require financial modeling (in case that profitability analysis beyond standards for rate-making change).

People:

- Combination of people & skills from: Network Planning, Develop Maintenance Strategies, Finance and Accounting and Scheduling Capabilities. Shared responsibility between Corporate Services and Asset Optimization.

Facilities: - PCs

Capability: Work Definition

Sub-Capability: Engineer System Enhancements

Sub-Capability Description

Create standard, cost-effective plans, designs and work estimates for approved system enhancements. Approve/review others' plans and designs.

Requirements

- Engineer system enhancements for transmission assets owned by GridFlorida. Covers more detailed planning stemming from the overall network plan.
- Coordinate with Transmission owners (for assets not owned by GridFlorida) on their plans and designs for system enhancements

Key Assumptions

- GridFlorida will have the obligation to engineer plans for system enhancements, however will outsource the development of detailed plans and cost-effective work estimates for transmission system enhancements. Will be outsourced in both the end state, and a potential Release 1 scenario
- Review detailed plans produced by others to enhance the system
- Identify and manage dependencies that impact design (e.g. permits, critical path)
- Manage other approval processes required

Solution Strategy

Technology:

- Access to information/reporting from three Transmission companies re: details of System Enhancement Plans
- Long-term - Work Management System and/or estimating tool with Compatible Units (or similar)
- Network model, routine office software

People:

- Engineer (one in lead role), plus support staff (Asset Planners/Designers, Contract Managers)
- Maybe some remote work (e.g. on-site)

Facilities:

- Laptop PCs (potentially)

Capability: Work Execution

Sub-Capability: Perform Maintenance/Inspections

Sub-Capability Description

Perform routine and non-routine maintenance work on transmission assets. Focus on operational efficiency in completing the work, and optimize the lifecycle and performance of assets through appropriate application of maintenance strategies. Ensure qualified maintenance crews.

Requirements

- Initiate or receive maintenance work orders (may be unplanned, emergency or routine/planned work). Review details of work required, adjust if necessary
- Ensure work site is ready for maintenance (materials available, resources, schedules, permits/other procured).
- Coordinate with control area operators to schedule and start work, execute work in the field, supervise resources, capture information required to track progress and gather as-built information
- Complete the work and timely capture of all as-built information. Will be a more streamlined version of work completion.
- Close out the work and feed details back into Asset Performance/Maintenance Management system.

Key Assumptions

- GridFlorida will outsource the Perform Maintenance/Inspections capability back to Transmission Owners and will have a large role around managing this outsourced work (in other sub-capabilities as well) both in the end state and in a potential Release 1 scenario
- GridFlorida will need to coordinate and provide oversight of contract work forces doing maintenance/inspections and evaluate results which will then feed back into the changing maintenance strategies, budgets or practices. Must be able to get detailed information from the TOs.

Solution Strategy

Technology:

- For Release 1 – initial Asset Management system (e.g. with high priority assets).
- Access to information from Transmission systems (financial/cost systems, reliability results, historical maintenance, costs to do maintenance)
- Longer-term - Maintenance Management System may be the same/part of the Work Management System

People:

- Maintenance Supervisors/Managers, Contract Managers
- Field crews – will be an outsourced/contracted workforce – initially coming from the three Transmission companies. Crews may overlap maintenance and construction work.

Facilities: - No special facilities required

Capability: Work Execution

Sub-Capability: Perform Construction

Sub-Capability Description

Perform construction of system additions/modifications. Focus on maximizing the productivity, and managing the work effectively throughout the lifecycle of the project(s). This sub-capability focuses more on the complex, longer cycle work. Ensure qualified construction crews.

Requirements

- Review and ensure work or ready for construction (design approved, materials will be available, resources, schedules, permits/other procured). Review details of project plan, adjust if necessary, and ensure project approved.
- Coordinate with control area operators to schedule and start work, execute work in the field, supervise resources, capture information required to track progress and gather as-built information
- Complete the work and timely capture of all as-built information. Close out the work and conduct detailed review of costs and results. Feed information back into the Design capability for improvements.

Key Assumptions

- GridFlorida will outsource the Perform Construction capability back to Transmission Owners and will have a large role around managing this outsourced work (in other sub-capabilities as well) both in the end state and in a potential Release 1 scenario
- GridFlorida will need to coordinate and provide oversight of contract work forces doing construction and evaluate results which will then feed back into the changing system enhancement plans. Must be able to get detailed information from the TOs.
- Requires linkage to System Operations for scheduling outages to perform work.
- There is also a key role to coordinate construction work with network requirements, ensuring the security and reliability of the grid
- Need ability to capture as-built information and update asset records.

Solution Strategy

Technology:

- Access to information from Transmission systems (financial/cost systems, detailed construction project plans, etc.), Project Management tool, and potentially a Contract Management tool.
- Longer-term - Work Management System

People:

- Project/Construction Managers, Contract Managers
- Field crews – will be an outsourced/contracted workforce – initially coming from the three Transmission companies. Crews may overlap maintenance and construction work.

Facilities:

- Potentially – laptop PCs or mobile computing devices

Capability: Work Execution

Sub-Capability: Manage Resources

Sub-Capability Description

Ensure that resources are matched and available to meet workload requirements. Manage resources across multiple priorities, maximize number of productive hours, and meet service level agreements internally and externally.

Requirements

- Forecast, plan and schedule work over the short and medium term (e.g. 3-18 months). Jointly forecast work, coordinating between Transmission and Distribution where necessary
- Schedule resources using a detailed resource plan; include multiple resources – labour, materials, equipment
- Require contractors to plan, schedule and manage their work in a detailed manner
- Coordinate contractors and any internal workforces to understand their schedules and assignments to maximize ability to meet commitments
- Increased reliance on external service providers and potential for separation of T workforce from D workforce
- Inventory management and Purchasing of Transmission materials sold into GridFlorida will be outsourced back to utilities, and GridFlorida will need visibility into what utilities are holding, as they will be paying for it.

Key Assumptions

- GridFlorida will outsource resource requirements (labor, and equipment) for work execution back to utility companies.
- GridFlorida will require visibility into the materials that the utilities are holding
- GridFlorida will require its own Resource and Contract Management capabilities to coordinate agreements with the Transmission companies. This will be a significant challenge in both the Release 1 and longer-term situations.
- Will require access to benchmarking information to monitor costs and make sure that they are paying a fair amount to service providers.
- Will require visibility into the work that service providers have planned, but don't need detailed ability to do detailed scheduling (approx. 5 yrs)

Solution Strategy

Technology:

- Project Management tool and access to information out of Work Management and/or Scheduling systems that schedule, assign and manage work flows in the Transmission companies
- Longer term - Forecasting tool to forecast work vs: resource requirements over time, Work and/or Maintenance Management systems

People:

- Resource Manager/Contract Manager and Resource Schedulers, with input from Finance and Accounting

Facilities:

- Laptop PCs

Capability: Payroll & Human Resources

Sub-Capability: Execute Payroll & Time & Expense Reporting

Sub-Capability Description

This capability calculates the compensation and benefits for GridFlorida employees and provides tax reporting. It also allows GridFlorida personnel to appropriately submit time and expense reports on a regular basis. GridFlorida will be able to track and monitor time, expense and payroll activity as needed.

Requirements

- The calculation of payroll will be done on a periodic basis (bi-weekly, monthly, etc.)
- The payroll systems should be flexible and scalable to handle changes in compensation, benefits plans, and volumes of employees
- Perform general tax reporting functions for Payroll taxes and Income taxes (including state, federal, local, social security, etc.)
- Proper levels of security should be maintained for sensitive data
- This process will coordinate closely with the Manage HR sub-capability in order to ensure that corporate policies and procedures are being implemented properly
- GridFlorida personnel should log their time and expense items in a common format on a timely basis for processing
- Support the Cost Accounting process which feeds into other processes (e.g. Tariff Design, Product & Service Development)
- Prepare reports to periodically track and manage time and expenses
- Develop policies, procedures, and guidelines for time and expense reporting

Key Assumptions

- This capability is required prior to Release 1(GridFlorida startup personnel requirements)
- Elements of the payroll/time & expenses requirement can potentially be outsourced (payroll, Benefits, Time, Expenses)

Solution Strategy

Technology:

•Payroll and benefits application -

•Time and Expense Tracking System

•Reporting capabilities

People:

•A Payroll Clerk

•Manager – Outsource relationship

Facilities:

•Office

Outsource :

•Payroll

•Benefits administration

Capability: Payroll & Human Resources

Sub-Capability: Manage Human Resources

Sub-Capability Description

The Manage Human Resources sub-capability will support managers across the organization to attract, hire, compensate, develop, and keep the best professionals that appropriately fit with the GridFlorida organization. Strategies, policies, and programs for developing and training GridFlorida employees will also be the responsibility of the Human Resource area.

Requirements

- Develop & enforce HR Policies and procedures
- Manage corporate procedures and information
- Monitor process effectiveness
- Implement change
- Design and manage organization structure
- Recruit employees
- Design and manage employee and organizational development, such as managing performance, career, and compensation and producing performance evaluations
- Manage employee benefits
- Provide reports to EEOC on issues such as discrimination and affirmative action
- Develop and maintain employee information system
- Administer executive compensation
- Define and administer employee insurance/compensation
- Manage health and safety requirements

Key Assumptions

- This is a new capability for GridFlorida, with potentially significant reuse from member utilities through leveraging existing HR processes and skills
- Elements of the Human Resources requirements can potentially be outsourced (HR representative, policies and procedures, Systems)
- This capability is required prior to Release 1

Solution Strategy

Technology:

•HR System

•Reporting capabilities

People:

•HR Manager

•Recruiter

Facilities:

•Office

Outsource:

•None

Capability: Payroll & Human Resources

Sub-Capability: Mange Training

Sub-Capability Description

This process meets the training needs of GridFlorida personnel and business users

Requirements

- Define and plan customer and employee training needs
- Identify and manage legally required training (for example labor law)
- Deliver and manage training plan
- Perform periodic training needs analysis for employees and customers to reflect changes to procedures and related systems
- Support multiple methods of training -- computer based (CBTs), workshops, external training seminars, etc.
- Coordinate with the Customer Training group as necessary in the development and delivery of training

Key Assumptions

- Customer and employee training requirements for GridFlorida will be a centralized function
- This is a new capability for GridFlorida, with some reuse from member utilities through leveraging existing training documentation and materials
- This is a required capability prior to Release 1 and there will be significant training around the time of start-up (new systems, processes, and relationships between entities)
- GridFlorida personnel will be cross-trained in technical and functional areas wherever possible
- Some training may be conducted by third-party vendors as needed

Solution Strategy

Technology:

•Computer-Based Training

•Distance Learning

People:

•Training Analysts

Facilities:

•Office

Outsource:

•Generic training requirements

(note RTO specific training will be developed and managed internally by GridFlorida HR)

Capability: Finance & General Accounting

Sub-Capability: Perform Financial Management & Accounting

Sub-Capability Description

Financial Management & Accounting is the core financial and accounting process for general ledger, budgeting, fixed assets, accounts payable, accounts receivable and other associated capabilities.

Requirements

- Manage financial accounting including General Ledger, Accounts Receivable, Accounts Payable, Fixed Assets Invoicing, Miscellaneous billing
- Define chart of accounts per FERC uniform system of accounts
- Develop and manage budgets and Monitor costs
- Manage cash flow/treasury and financing
- Manage financial market relationships (Bank, debt & equity markets)
- Perform regulatory accounting functions
- Manage property accounting
- Develop and manage job costing function
- Generate and distribute internal and external financial and management reports
- Manage taxation including depreciation and deferred tax implications of acquiring transmission assets at book value
- Credit control and revenue collection
- Financial Risk Management (including insurance, self insurance)

Key Assumptions

- Cut off between settlements and financials is clearly defined
- Miscellaneous billing items exist outside of the settlement system system (Surveys, settlement agreements… etc)
- The monitoring function to determine whether costs and revenues are in balance will be performed by the Financial Management and Accounting process
- This sub-capability has key interfaces with Settlements & Billing and the Customer interface system
- Elements of the financial and manage accounting requirement can potentially be outsourced (System, Treasury, Taxation, Reporting)
- Elements of the insurance requirement can potentially be outsourced (Insurance assessment/acquisition, Claim management)

Solution Strategy

Technology:

- Financial Accounting system
- Tax accounting system
- Job Costing System
- Reporting capabilities management and regulatory reporting

People:

- Finance and Accounting Analysts

Facilities:

- Office

Outsource:

- None

Capability: Finance & General Accounting

Sub-Capability: Manage Capital

Sub-Capability Description

This process involves the management of GridFlorida's investments and capital decisions. The process includes evaluating opportunities, reporting recommendations to management, coordinating the acquisition of investments, and the ongoing management and maintenance of the investments.

Requirements

- Define capital management processes and procedures
- Identify costs and related revenues of providing new services or products and capital investment.divestment opportunities
- Develop capital budgets
- Interface with marketing participations on capital budgeting and prioritizing capital projects
- Validate key assumptions relating projected costs, revenues and market conditions
- Provide efficient capital management with a goal of full revenue recovery, plus making a reasonable rate of return on assets
- Develop and manage performance tracking and reporting
- Provide management reports
- Manage capital structure and policies (i.e, desired debt/equity ratios, bond ratings, etc.)
- Define approval and funding process for capital projects including new [products and services
- Determine the costing targets and return on investments that is needed for the business
- Compare actual costs to forecasted costs. Analyze the difference and allocate appropriately
- Coordinate with other GridFlorida capabilities (such as Develop Products & Services and Manage Facilities & Purchasing) as necessary

Key Assumptions

- This is a new capability for GridFlorida and is required for Release 1; elements are required pre- Release 1 for investment decisions for start-up of GridFlorida
- In the interim expenditures for acquisition of software, etc. must be reviewed by Advisory Committee, potentially prior to the Board being in place

Solution Strategy

Technology:

•Investment analysis tools

•Reporting tool

People:

•Finance and Accounting Analysts

Facilities:

•Office

Outsource:

•None

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Strategic Planning & Performance Measurement

Sub-Capability Description

This process is responsible for the long term vision and strategy for GridFlorida.This process includes defining the GridFlorida mission, core values and culture. The high level tactical plans to implement the GridFlorida strategy are included as part of this capability

Requirements

- Develop long term strategy for GridFlorida growth and development
- Communicate strategy to personnel at all levels of the organization
- Support Mergers & Acquisitions and asset acquisition
- Support development of new markets
- Involve internal and external groups for thoughts and approval on long term vision
- Develop and manage continuous improvement function
- Perform high level business planning
- Perform environmental and scans and benchmarking exercises (market information/analysis, strategic decision information)
- Identify and manage risk within GridFlorida business

Key Assumptions

- Growth is the key strategic goal of GridFlorida
- Strategic direction is a key requirement for effective business operation within GridFlorida
- Strategy is a priority item for the GridFlorida Board of Directors and CEO in the short term

Solution Strategy

Technology:

•Planning tool
•Risk management tool
•Performance assessment tool (Balanced Score Card, Business Metric)
•Reporting tool

People:

•Strategic Planning Manager
•Strategy Analyst

Facilities:

•Office

Outsource:

•None

Capability: Finance & General Accounting

Sub-Capability: Manage Security

Sub-Capability Description

This processes involves the the management of security at GridFlorida facilities to ensure proper access, control and safe use of GridFlorida plant and assets

Requirements

- Define, implement and manage security access controls to all GridFlorida facilities including offices, sites, control room...etc)
- Define, implement and manage, asset management to to control ownership, use and location of GridFlorida Assets
- Manage physical security of facilities, including security risk assessment on new facilities
- Define and administer security policies and procedures

Key Assumptions

- This is a new capability for GridFlorida
- Growth through new products and services is consistent with GridFlorida Strategic plan

Solution Strategy

Technology:

•Security systems

•Asset management system

•Key facility access tracking system

•Reporting tool

People:

•Faciltiies Team Member

Facilities:

•Office

Outsource:

•Physical security tasks can be outsourced to security service providers

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Develop Corporate Communications

Sub-Capability Description

This process is responsible for communication GridFlorida activities both internally and externally

Requirements

- Manage external communications with City, State and Federal authorities, Environmental Groups, Financial Institutions and the media
- Manage internal communications including change issues, employee information and corporate performance
- Report to the GridFlorida Board on status of FERC proceedings and filings
- Coordinate stakeholder meetings and gather their comments on issues
- Manage interface with Board of Directors
- Serve as primary contact for external inquiries related to GridFlorida activities
- Develop press releases and promotional literature

Key Assumptions

- This is a new capability for GridFlorida
- This is a required capability prior to Release 1
- Elements of the communications requirements can potentially be outsourced (Public relations)

Solution Strategy

Technology:

•Reporting tool

•Portal

People:

•Communications Manager (Will manage outsource relationships)

Facilities:

•Office

Outsource:

•Transactional Public Relations Activities

- •Promotional literature
- •Marketing Information
- •Employee Newsletter
- •Media Campaigns… etc.

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Perform Audits

Sub-Capability Description

This process involves the internal auditing of all GridFlorida systems, applications, processes, and procedures. The requirement for external financial audits is also included within this process

Requirements

- Develop a prioritized audit schedule for all areas within GridFlorida
- Perform detailed audits and analyses of GridFlorida policies and procedures
- Validate that all GridFlorida applications and systems meet internal and external requirements
- Report audit findings to the Grid Florida Board of Directors
- Follow industry standard auditing practices

Key Assumptions

- Internal Audit is independent and reports directly to the GridFlorida Board of Directors
- All processes, systems and divisions are subject to audit
- Internal audit is deemed a key governance tool by the Board of GridFlorida
- Substantial audits are required at start-up to ensure processes and systems are operating correctly
- This is a new capability for GridFlorida and is required for Release 1, but with a phased approach
- Elements of the internal audit requirement can potentially be outsourced (Audit execution, Audit schedule)

Solution Strategy

Technology:

•Confidential reporting tool

People:

•Finance and Accounting Manager

Facilities:

•Office

Outsource:

•Audit execution

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Manage Facilities & Purchasing

Sub-Capability Description

This process is responsible for the management and maintenance of GridFlorida facilities and purchasing decisions.

Requirements

- Develop and manage plans for GridFlorida facilities needs including
- Coordinate building leases, maintenance contracts, etc. with external personnel
- Define procurement process and controls (routine business assets and transmission assets)
- Manage procurement of goods and services including request for tenders and vendor selection for transmission and business support assets
- Manage vendor contracts for operations and corporate materials and services
- Coordinate activities with the Manage Capital capability to ensure consistent approach
- Manage inventory control for business support assets

Key Assumptions

- All purchasing requirements for GridFlorida are centralized and managed through Financial services
- Inventory control is required for maintenance and new works capability
- Operations such as network maintenance and new works are outsourced and no inventory management capability is required
- This is a new capability for GridFlorida
- This is a required capability prior to Release 1

Solution Strategy

Technology:

•Procurement System

•Inventory Control System

•Reporting Tool

People:

•Facilities Manager

Facilities:

•Office

Outsource:

•Facilities management

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Manage Legal Affairs

Sub-Capability Description

This process includes the coordination of all GridFlorida legal requirements and the management of external legal relationships.

Requirements

- Set up and file the GridFlorida Inc.
- Support GridFlorida internal functions on legal matters including, labor issues, facilities leasing, Market participant disputes, vendor contracts, vendor disputes
- Define and manage GridFlorida code of conduct and work ethic
- Represent GridFlorida legal perspective prior to enactment of deregulation legislation
- Manage insurance issues and claims, corporate legal decisions, and financial legal decisions
- Coordinate with GridFlorida's Regulatory team to manage legal interfaces with regulatory bodies
- Manage Routine Legal Affairs
- Support Contract Negotiations with Ancillary Services Providers
- Manage Contracted Legal Services

Key Assumptions

- This is a new capability for GridFlorida and is a requirement for GridFlorida prior to Release 1
- Elements of the legal affaires requirements can be outsourced, however there is a critical need to have legal support internally

Solution Strategy

Technology:

•Legal research tool

•Reporting Tool

People:

•Lawyer

Facilities:

•Office

Outsource:

•Additional legal services will be outsourced as required)

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Develop Tariff Design

Sub-Capability Description

Manages the entire process from the development of regulatory policy to the actual creation, filing, and obtaining approval for the tariffs. Also includes the translation of tariff information into contractual terms and conditions and operating procedures for GridFlorida.

Requirements

- Identify and manage the development of new or revised rates and tariffs for the purposes of recovering the costs associated with system operations
- Monitor market trends to check on the market value of the various services offered by GridFlorida
- Define the products and services that will be offered by GridFlorida and develop a rate strategy for them
- Design rates
- Define specification for enhancing related systems and procedures to settle new tariff
- Prepare, file, and manage the FERC proceedings for amendments to the OATT and protocols
- Coordinate with other GridFlorida departments to negotiate contracts with customers and file those new or revised contracts with FERC
- Communicate new tariff rates to Market Participants

Key Assumptions

- The FERC approved OATT will be subject to change on a periodic basis
- Account managers are involved in the contract negotiations
- This is a required capability for Release 1

Solution Strategy

Technology:

•Revenue requirement modeling tool

•Cost of service modeling tool

•Reporting tool

People:

•Tariff Manager

•Rate design

Facilities:

•Office

Outsource:

•None

Capability: Corporate Admin, Regulatory, Rates & Tariffs

Sub-Capability: Interface with Regulatory Bodies

Sub-Capability Description
This process is responsible for keeping regulatory bodies updated on the activities of GridFlorida, for participating in the development of new or modified rates and monitoring regulatory developments

Requirements
- Define and understand regulatory reporting requirements
- Manage FERC proceedings and filings
- Coordinate changes with external governing and regulatory bodies
- Assess the impact of proposed changes in regulatory reporting requirements and provide constructive feedback
- Manage Regulatory & Governmental Relationships
- Manage interface with Board of Directors, advisory committee, FERC Monitor Co
- Coordinate with GridFlorida's Legal team to manage legal obligations and relationships
- GridFlorida will monitor the activities of regulatory bodies
- Manage regulatory filings and coordination of FERC Audits

Key Assumptions
- Interface with regulatory bodies is viewed as a key public relations issue for GridFlorida
- This is a new capability for GridFlorida
- This is a required capability prior to Release 1

Solution Strategy

Technology:
•Reporting Tool

People:
•Lawyer

Facilities:
•Office

Outsource:
•Additional legal services will be outsourced as required)

Capability: Corporate Administration

Sub-Capability: Manage Business Information Technology

Sub-Capability Description

Provides information technology strategy to support the non-control systems aspects of the organization (e.g., Payroll, HR, Finance). Its main development and maintenance responsibilities are related to corporate business systems. This includes supporting non-control center infrastructure (e.g., email, office desktops, document management, bill imaging, etc.). This group is also responsible for ensuring that Business IT standards are met and corporate systems are integrated with Operations Systems where appropriate.

Requirements

- Develop/integrate new business software
- Maintain business systems and databases
- Manage corporate technical infrastructure (e.g., office desktops, LANs, backups, file servers, etc.)
- Develop Business IT policies and procedures
- Manage Suppliers & Vendors
- Assist internal business users with inquiries and problems (Help Desk)
- Coordinate with Operations Systems Technical Specialists
- Ensure protection against viruses (Business Systems)
- Coordinate site security with Corporate Security
- Corporate Portal Management

Key Assumptions

- This is a new capability for GridFlorida. Outsourcers will bring in own standards, etc.
- This is a required capability prior to Release 1. Scale will increase over time.
- Some aspects of Corporate Technical Support can be outsourced (e.g., Appl. Dev. & Maint. for Business Systems, Help Desk, technical infrastructure support, etc.)

Solution Strategy

Technology:

- Interface Development
- Enterprise Application Integration Tool
- Desktop Supplier (e.g., ENTEX) with Productivity Tools and Workstation
- Tier 1 Help Desk and Tools for Desktop and Business Applications

People:

- IT Specialists (Corporate desktop expertise)

Facilities:

- Corporate Headquarters
- Control Center if needed

Capability: Operations Technical Support

Sub-Capability: Manage Control System Technology

Sub-Capability Description

This process will be focused on providing operations staff with high quality and reliable technology to support the System, Market, and Commercial operations of the Transmission System, as well as Asset Optimization and the Customer Interface. This function involves interfacing with Corporate Technical Support to ensure that operations system technology standards are met and systems are integrated where appropriate.

Requirements

- Develop policies and procedures
- Maintain systems and databases
- 7x24 callout capabilities
- Develop/integrate new software
- Manage operations system technical infrastructure (e.g., HVAC, UPS, Generators)
- Coordinate with Corporate Telecommunications Specialists
- Assist Operations users with inquiries and problems
- Provide integration with GridFlorida business systems, where appropriate

- Ensure protection from outside intrusion (Data Security)
- GridFlorida Back-up Site Configuration & Support
- Coordinate Site Security with Corporate Security (i.e., physical)
- Website Management
- Technical Disaster Recovery Site & Plan (e.g., data backups, etc.)

Key Assumptions

- This is a new capability for GridFlorida. Due to continued Control Area Operations, little reuse from member utilities can be leveraged (i.e., existing IT procedures & skills)
- This is a required capability for pre-End State. It is recommended that a core group is brought in early to be part of the development team for the end-state systems.
- A data warehouse is required for End State. Some portion of the data warehouse may be required for Release 1.
- This capability will be insourced.

Solution Strategy

Technology:

- Software Configuration Management Software
- Compilers
- Source Code Control
- Project Management Software
- Operating Systems, Servers
- Database Management
- Name Services
- Firewalls

People:

- Technology Professionals specializing in Power Systems Marketing & Operations Applications & Development
- Experience in Real-Time Computer Programming
- Power System Engineer
- 7x24 support

Facilities:

- Control Center and/or Corporate Headquarters (i.e., closest to the user)

Capability: Operations Technical Support

Sub-Capability: Manage Telecommunications

Sub-Capability Description

This process will provide telecommunications strategy to support the all aspects of the organization. Its main development and maintenance responsibilities are related to both the corporate and control systems telecommunications network and systems. This process will ensure that control system standards are met and that systems are integrated where appropriate.

Requirements

- Maintain all systems and databases (e.g., control center & office PBX, IP)
- Manage telecommunications infrastructure which is dispersed all over the state (@200 or so RTU's around the state)
- Manage business telecommunications infrastructure
- Develop Telecommunications policies and procedures
- Assist control system users with inquiries and problems
- 7x24 callout capability
- Coordinate with all providers of Telecommunications services
- Manage telecomm bill processing for all data circuits
- Oversight group to manage vendor relationships

Key Assumptions

- Contracts that each utility currently has with telephone companies for communications to the transmission substation RTUs may need to be renegotiated before Release 1 to show change of ownership of the circuits to GridFlorida.
- May also need agreements with LSEs for circuits which go over LSE-owned fibre and microwave facilities.
- This is a new capability for GridFlorida, with some reuse from member utilities by leveraging existing procedures and skills
- Some form of corporate telecommunications management will be required before Release 1 and it would be contracted out (i.e., the facilities [office PBX, etc.) & office infrastructure [desktops, email] functions would be outsourced).
- Will coordinate problems with LSEs and others around telecommunications
- The control system telecommunications capability will be insourced
- RTU and Telecommunications maintenance will be leased back to the LSEs.
- Maintenance of IP Network backbone will be insourced (e.g., WANs)

Solution Strategy

Technology:

- Network Monitoring Tools
- Problem Tracking Tool
- Basic Toolkit

People:

- Telecommunications Specialist
- 7x24 support
- Contract Oversight
- Engineering or strong technical background
- Network Specialist
- Microwave Radio experience

Facilities:

- Office & Control Center

GridFlorida

Establishing the GridFlorida RTO BluePrint Project June 2001

End State Organization Model and Sizing- v6

GridFlorida

Contents

- Benchmark and Research
- Organization Model for End State with Sum Totals
- Organization Model for End State with Sum Totals and Breakdowns

GridFlorida

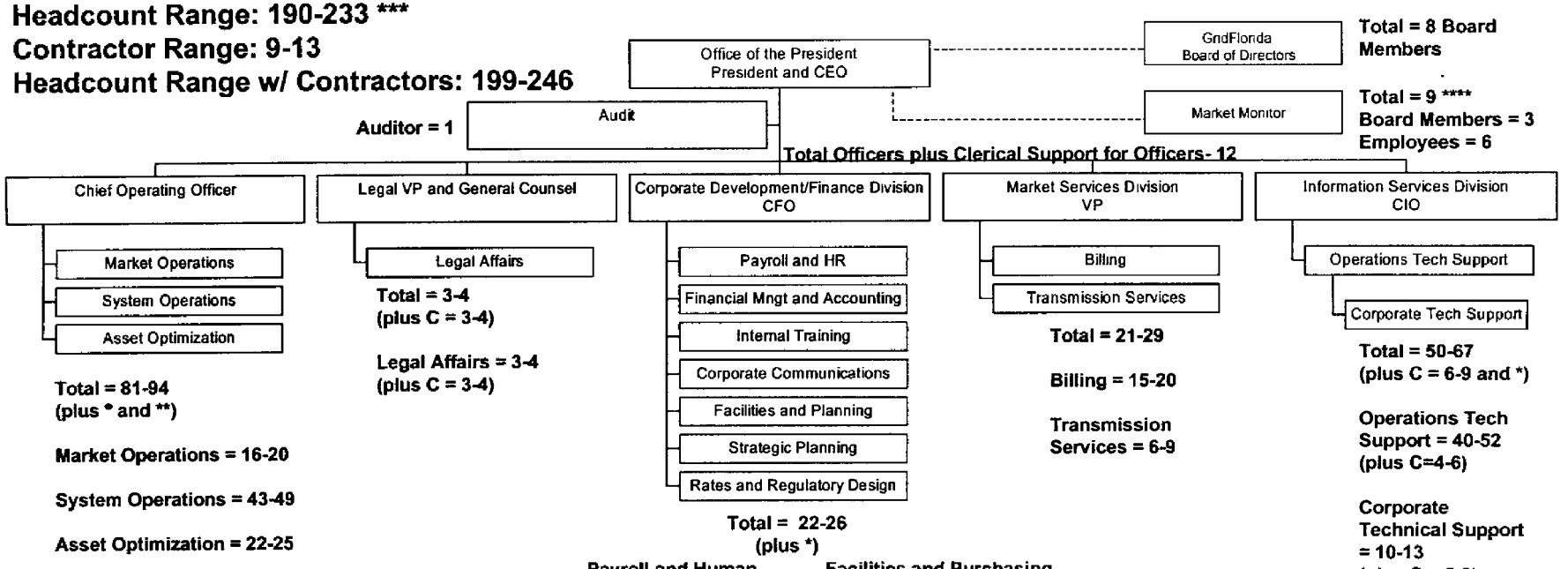
Benchmark and Research

- Benchmarked estimates and model against other RTOs and ISOs
- Received and reviewed as is data from TECO, FP&L, and FPC
- Interviewed transmission owner SMEs from TECO, FP&L and FPC regarding estimates, roles, and outsourcing
- Interviewed Accenture SMEs regarding estimates, roles, and outsourcing
- Received input regarding organizational structure and key executives from the Hay Group

GridFlorida

Organization Model for End State Sum Totals and Breakdowns

Headcount Range: 190-233 ***
Contractor Range: 9-13
Headcount Range w/ Contractors: 199-246



Total = 81-94
(plus * and **)

Market Operations = 16-20

System Operations = 43-49

Asset Optimization = 22-25

Total = 3-4
(plus C = 3-4)

Legal Affairs = 3-4
(plus C = 3-4)

Total = 22-26
(plus *)

Payroll and Human Resources = 3

Financial Mngt & Accounting = 6-7

Internal Training = 1

Corporate Communications = 2

Admin- 3

Facilities and Purchasing = 1-2 *

Strategic Planning = 2

Rates and Regulatory Design = 4-6

Total = 21-29

Billing = 15-20

Transmission Services = 6-9

Total = 50-67
(plus C = 6-9 and *)

Operations Tech Support = 40-52
(plus C=4-6)

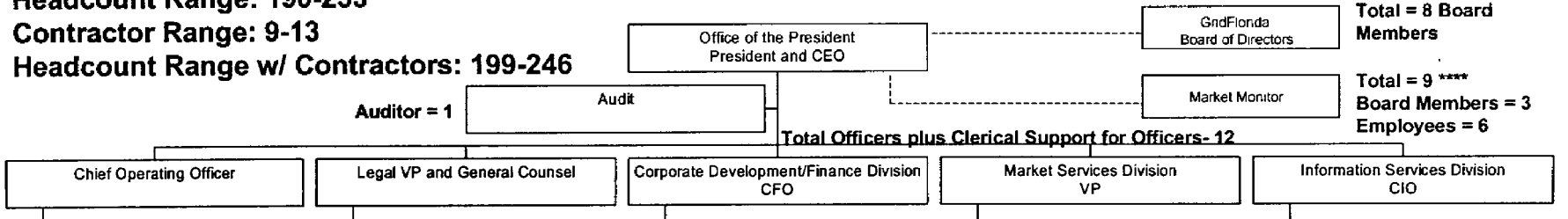
Corporate Technical Support = 10-13
(plus C = 2-3)

Note:
C = Contractors
* Outsource Service
** Under Asset Opt, Work Defn and Work Exec outsource #s are not included since these groups outsource large #s of people for engineering, construction, and maintenance.
*** This total does not include the GridFlorida Board of Directors or the Market Monitor Board of Directors or employees
**** Market Monitor Organization model and sizing was not analyzed as a part of the Blueprint.

GridFlorida

Organization Model for End State Sum Totals and Breakdowns

Headcount Range: 190-233 ***
Contractor Range: 9-13
Headcount Range w/ Contractors: 199-246



Total = 81-94
plus * and **)

Market Operations = 16-20
Director- 1
Admin- 1
Scheduling- 5-6
Tagging- *
Forecasting- 1-2
Market Facilitation- 8-10

System Operations = 43-49
Director- 1
Admin- 1
Real-time Operations- 25-30
Grid Security and Reliability Mngt- 6
Operations Engineering- 8
Operations Support (training & procedures)- 2-3

Asset Optimization = 22-25
Director- 1
Admin- 1
Network Planning- 14-15
Work Definition- 3-4 (**)
Work Execution- 3-4 (**)

Total = 3-4
(plus C = 3-4)

Legal Affairs = 3-4
(plus C = 3-4)
General Counsel- 2-3
(plus C- 3-4)
Admin- 1

Total = 22-26
(plus *)

Payroll and Human Resources = 3
Manager- 1
Payroll- 1 *
Human Resources- 1

Financial Mngt & Accounting = 6-7
Finance-6-7 *

Internal Training = 1
Training Coordinator- 1

Corporate Communications = 2
Communications Coordinator- 1
Communications- 1

Admin- 3

Facilities and Purchasing = 1-2 *
Facilities and Supply Chain- 1-2

Strategic Planning = 2
Manager- 1
Planning- 1

Rates and Regulatory Design = 4-6
Manager- 1
Tariff and Rate Design- 2-3
Regulatory Affairs- 1-2

Total = 21-29

Billing = 15-20
Director- 1
Admin- 1
Metering & Measurement Data- 5-7
Settlements & Billing- 6-8
Contract Mngt- 2-3

Transmission Services = 6-9
Director- 1
Admin- 1
Account Mngt- 2-3
Communication Mngt- 1-2
Customer Training- 1-2

Total = 50-67
(plus C = 6-9 and *)

Operations Tech Support = 40-52
(plus C=4-6)
Director- 1
Admin- 1
Application Dev & Main-18-24 *
Networks & Ops Sys- 10-14
Database Support- 4-6
Telecomm- 6-8 (C= 4-6)

Corporate Technical Support = 10-13
(plus C = 2-3)
Manager- 1
Admin- 1
Application Mngt- 4-5 *
Workstation Support- 2-3 (plus C=2-3)
Help Desk- 2-3

Note:
C = Contractors
* Outsource Service
** Under Asset Opt, Work Defn and Work Exec outsource #s are not included since these groups outsource large #s of people for engineering, construction, and maintenance
*** This total does not include the GridFlorida Board of Directors or the Market Monitor Board of Directors or employees.
**** Market Monitor Organization model and sizing was not analyzed as a part of the Blueprint

GridFlorida

Establishing the GridFlorida RTO BluePrint Project May 2001

End State Application Architecture- v8

Outline

- Assumptions
- Architecture
- Blueprint
- Details

GridFlorida

Assumptions

- Reuse/relicensing of applications from TO's existing systems will be considered where possible, while ensuring independence.
- Consider alternative sourcing (outsourcing or short-term leasing) where capabilities are not core to RTO or development time is short.
- Some functionality required pre- End State release that may be served through current TO systems. This will be considered further at a later point.

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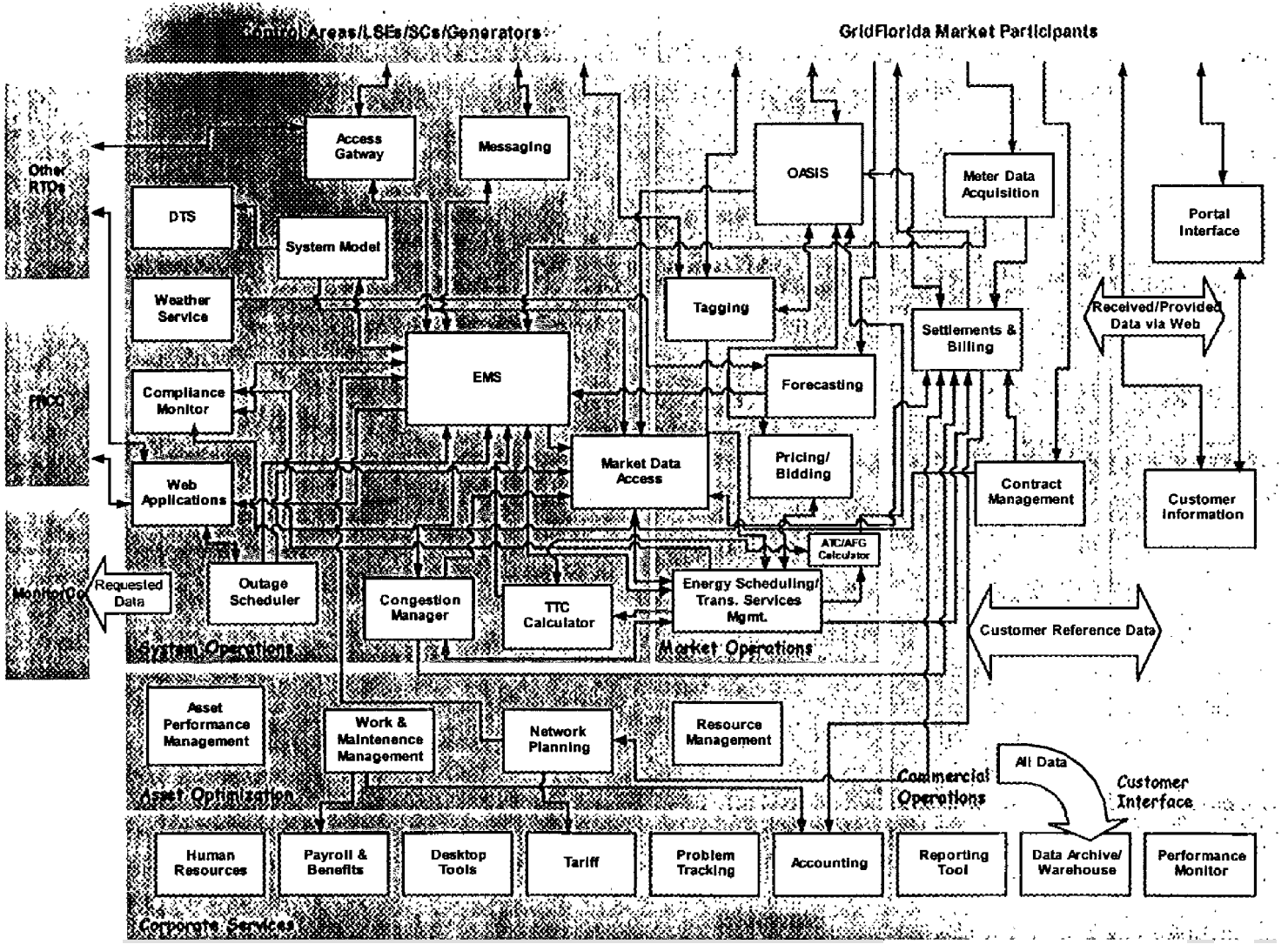
Application Architecture



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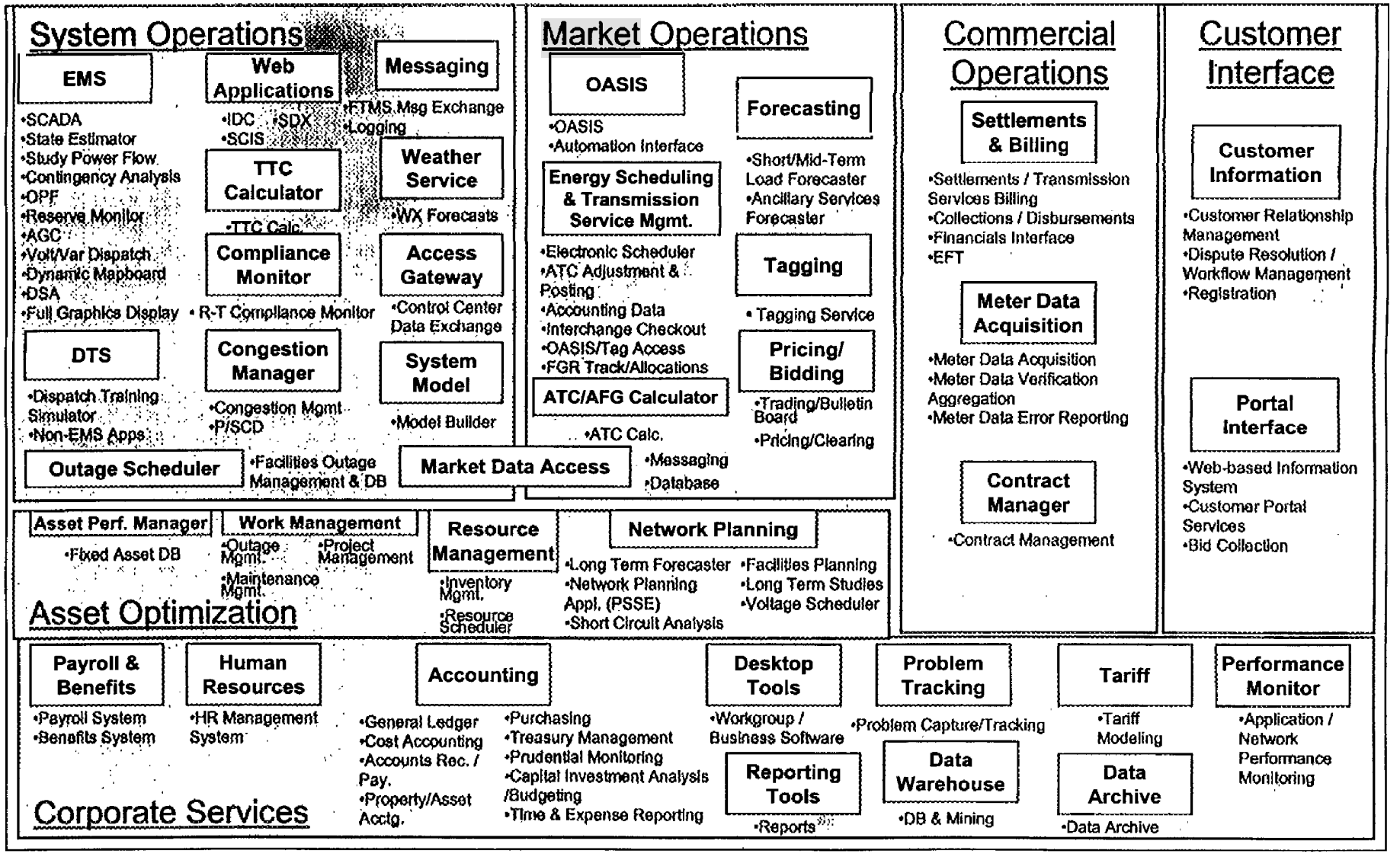
Applications in each Capability



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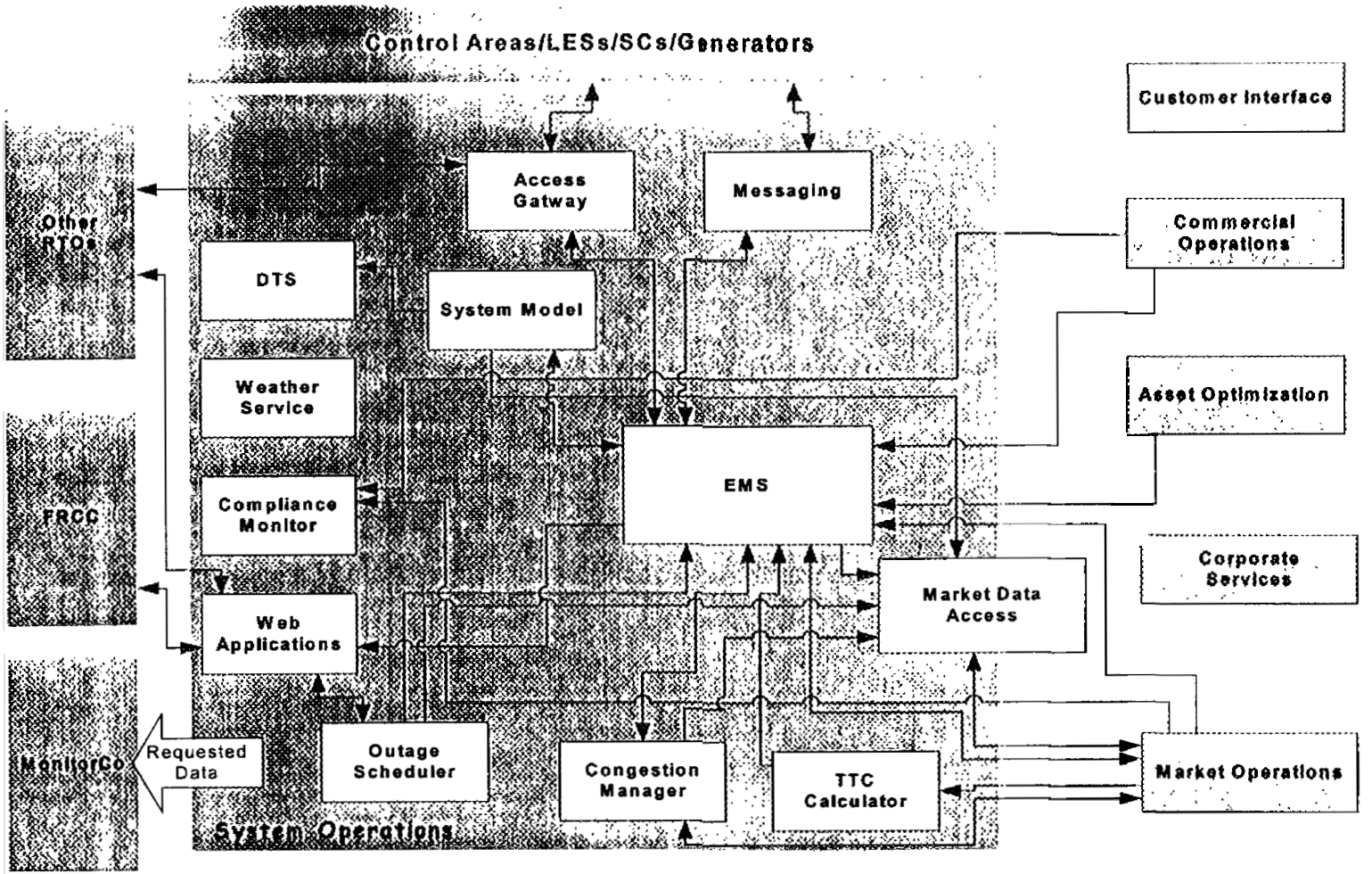
System Operations



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System Operations

Applications	Existing Capability		End State Release Sourcing (Options)			
	Source	Scope	Buy/Build	Reuse/Upgrade	Lease	Outsource
EMS						
•SCADA	FPL	Full		FPL	FPL	
•State Estimator	FPL	Full		FPL	FPL	
•Study Power Flow	FPL	Full		FPL	FPL	
•Contingency Analysis	FPL	Full		FPL	FPL	
•OPF	FPL	Full		FPL	FPL	
•AGC	FPL	Part.		FPL/Vendor		
•VoltVar Monitor	FPL	Full		FPL	FPL	
•Reserve Monitor	FPL	Full		FPL	FPL	
•Dynamic Mapboard	FPL	Partial		FPL/Vendor	FPL	
•DSA	---	---	Vendor Pkg.			
•Full Graphics Display	FPL	Full		FPL	FPL	
TTC Calculator	FPC	Partial		FPC		
Outage Scheduler						
•Outage DB	FPL	Partial		FPL	FPL	
•Facilities Outage Manager						

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System Operations

Applications	Existing Capability		End State Release Sourcing (Options)			
	Source	Scope	Buy/Build	Reuse/Upgrade	Lease	Outsource
Compliance Monitor						
•Performance Monitor	FPL	Partial		FPL/Vendor	FPL	
Dispatcher Training						
•DTS	FPL	Full		FPL	FPL	
•Non-EMS Applications	FPL	Partial		FPL/Vendor		
Web Applications						
•IDC	FPL	Full		FPL	FPL	Vendor
•SDX	FPL	Full		FPL		Vendor
•SCIS	FPL	Full		FPL		Vendor
Congestion Manager						
•Price/Security Constrained Dispatch	FPL	Partial		FPL/Vendor		
•Congestion Management Application	---	---	Vendor Pkg.			Vendor
Market Data Access						
•Market Database	---	---	Vendor Pkg.			
•Market Messaging	---	---	Vendor Pkg.			

Applications	Existing Capability		End State Release Sourcing (Options)			
	Source	Scope	Buy/Build	Reuse/Upgrade	Lease	Outsource
Weather Service	Service	Full				Vendor
Messaging						
•FTMS Message Exchange	FPL	Partial		FPL/Vendor		Vendor
•Message Logging	FPL	Partial		FPL/Vendor		Vendor
System Model						
•Model Builder	FPL	Full		FPL	FPL	
•Integrated Model Mgmt.	FPL	Full		FPL	FPL	
Access Gateway						
•Control Center Data Exchange (ICCP/ISN)	FPL	Partial		FPL/Vendor		

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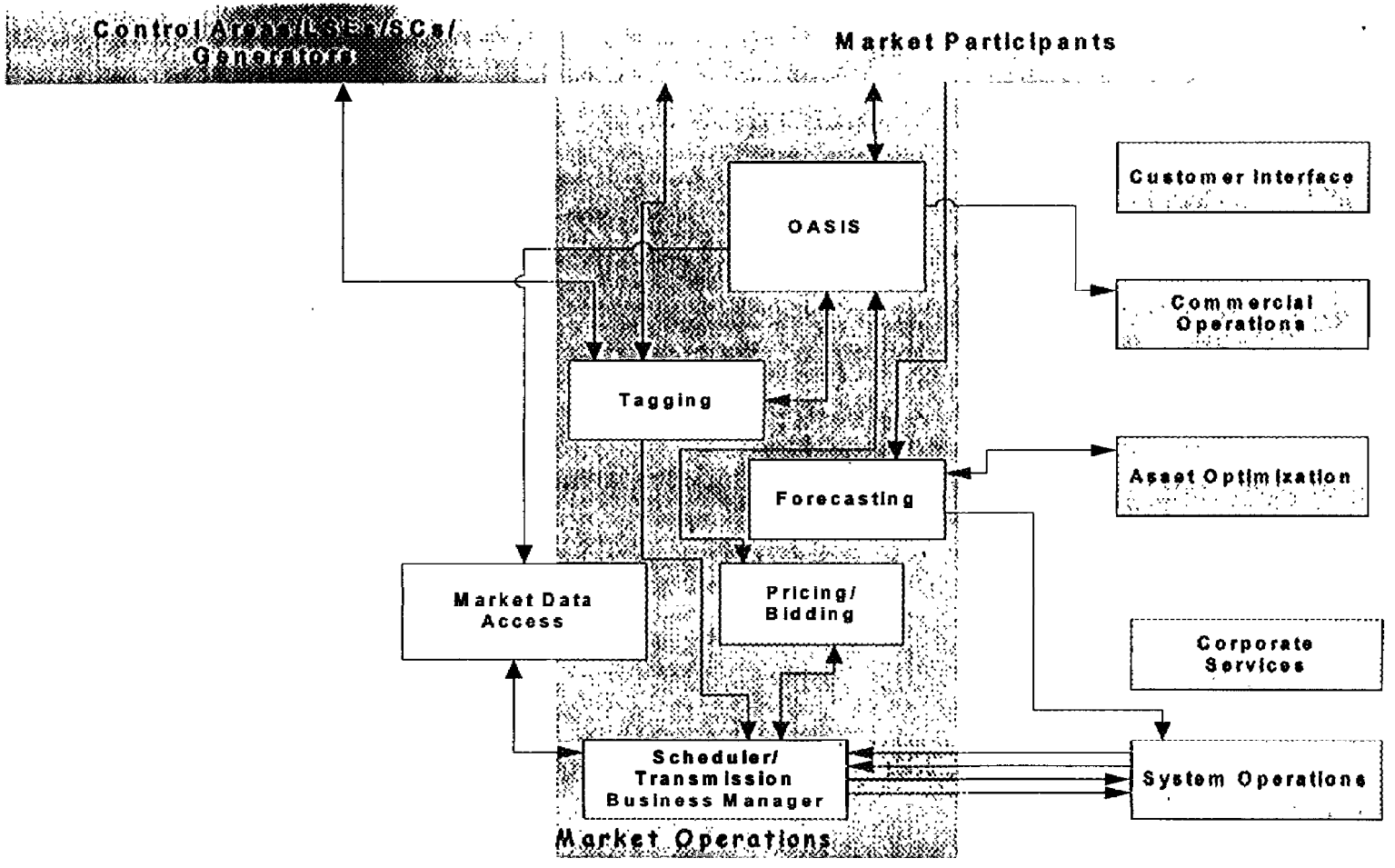
Market Operations



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Market Operations

Applications	Existing Capability		End State Release Sourcing (Options)			
	Source	Scope	Buy/Build	Reuse/Upgrade	Lease	Outsource
OASIS						
•OASIS	FOA	Partial		Vendor		Vendor
•Automation Interface	FPL	Partial		FPL/Vendor		Vendor
Energy Scheduling &Trans. Services Mgmt.						
•Electronic Scheduler	FPL	Partial		FPL/Vendor		Vendor
•ATC Adjustment & Posting	FPC	Partial		FPC/Vendor		Vendor
•Accounting Data	FPL	Partial		FPL/Vendor		Vendor
•Interchange Checkout	FPL	Full		FPL	FPL	Vendor
•OASIS/Tag Access	FPL	Full		FPL	FPL	Vendor
•FGR Track & Allocation	---	---	Vendor			
Forecasting						
•Short & Mid-Term Load Forecaster	FPL	Full		FPL	FPL	
•Ancillary Services Forecaster	---	---	Vendor			

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Market Operations

Applications	Existing Capability		End State Release Sourcing (Options)			
	Source	Scope	Buy/Build	Reuse/Upgrade	Lease	Outsource
Tagging •Tagging Service	Service	Full				Vendor
Pricing/Bidding •Trading/Bulletin Board •Pricing/Clearing	--- ---	--- ---	Vendor Vendor			Vendor Vendor
ATC/AFG Calculator	FPC	Partial		Vendor		

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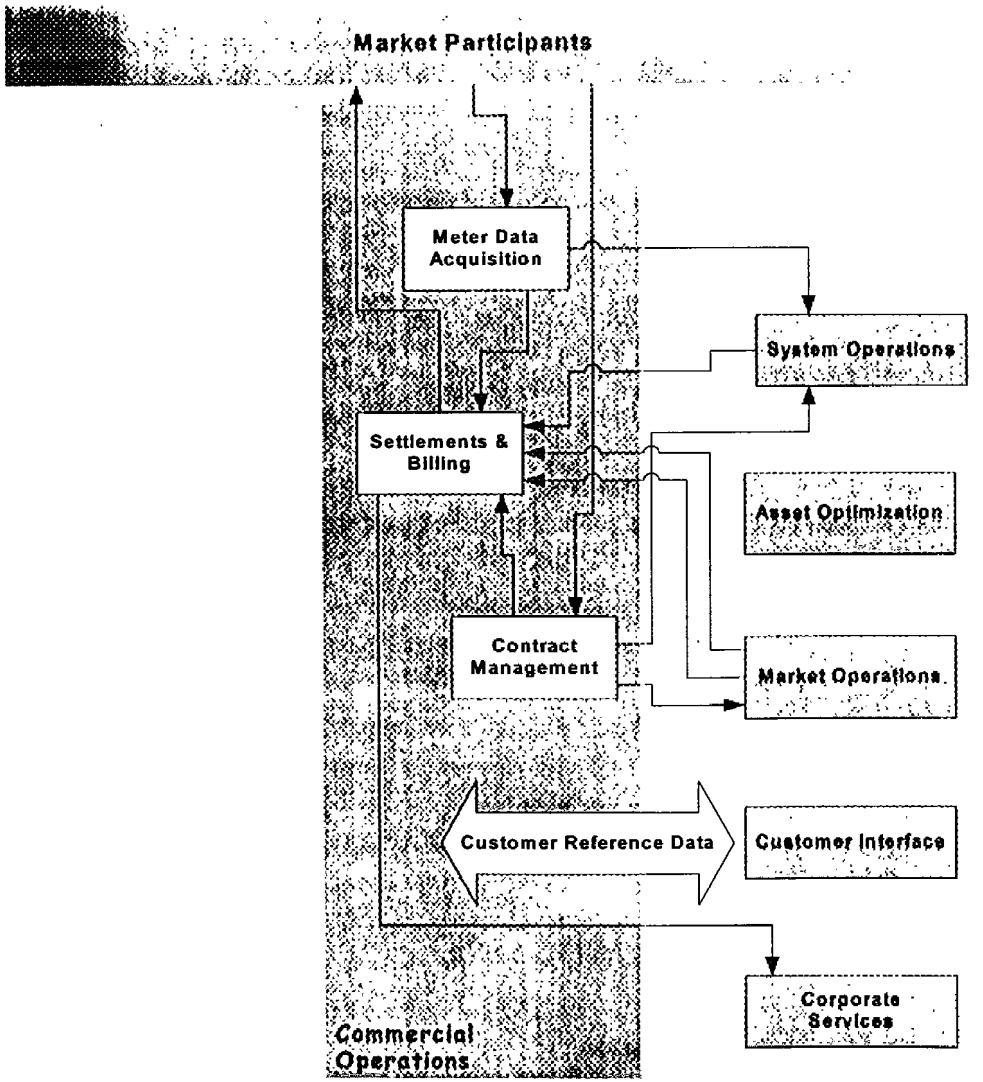
Commercial Operations



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Commercial Operations

Applications	Business Requirements		Potential Sources		
	Release 1	End State	Buy/Build	Reuse	Outsource
Settlements & Billing •Settlements/Transmission Services Billing •Collections/Disbursements •Financials Interface •EFT	• Need to settle for Transmission services • AS & CM may be as-is today • Need to Bill & interface to Financials	•Full Settlements & Billing of AS, Market based services (EI, AS and CM) •Additional interfaces and data	• Typically a bought package, with significant configuration required	•Potentially in an release 1, however not likely a solution that will meet full requirements	• Potentially, however would require build first to specific GF requirements
Meter Data Acquisition •Meter Data Acquisition •Meter Data Verification & Aggregation •Meter Data Error Reporting	• Application to store interchange and generation meter data • Might be part of Settlements system • Large volume of data & interfaces	• Application must be scaleable to accommodate different types & additional volume of data in the future - as metering is replaced/added	•Typically a bought solution, with large database & key interface with Settlements	•May be specific interfaces today that would not hold up in future with additional data	•Potentially in future, more typical in retail space today, not in wholesale
Contract Manager •Contract Manager	• May be limited contracts on Release 1 if managed by Utilities	•Need place to store contract terms (e.g. new contracts) that are used in Settlements	•Typically may be part of Settlements/ Customer solutions	•May be handled today manually	•Usually specific & not outsourced alone

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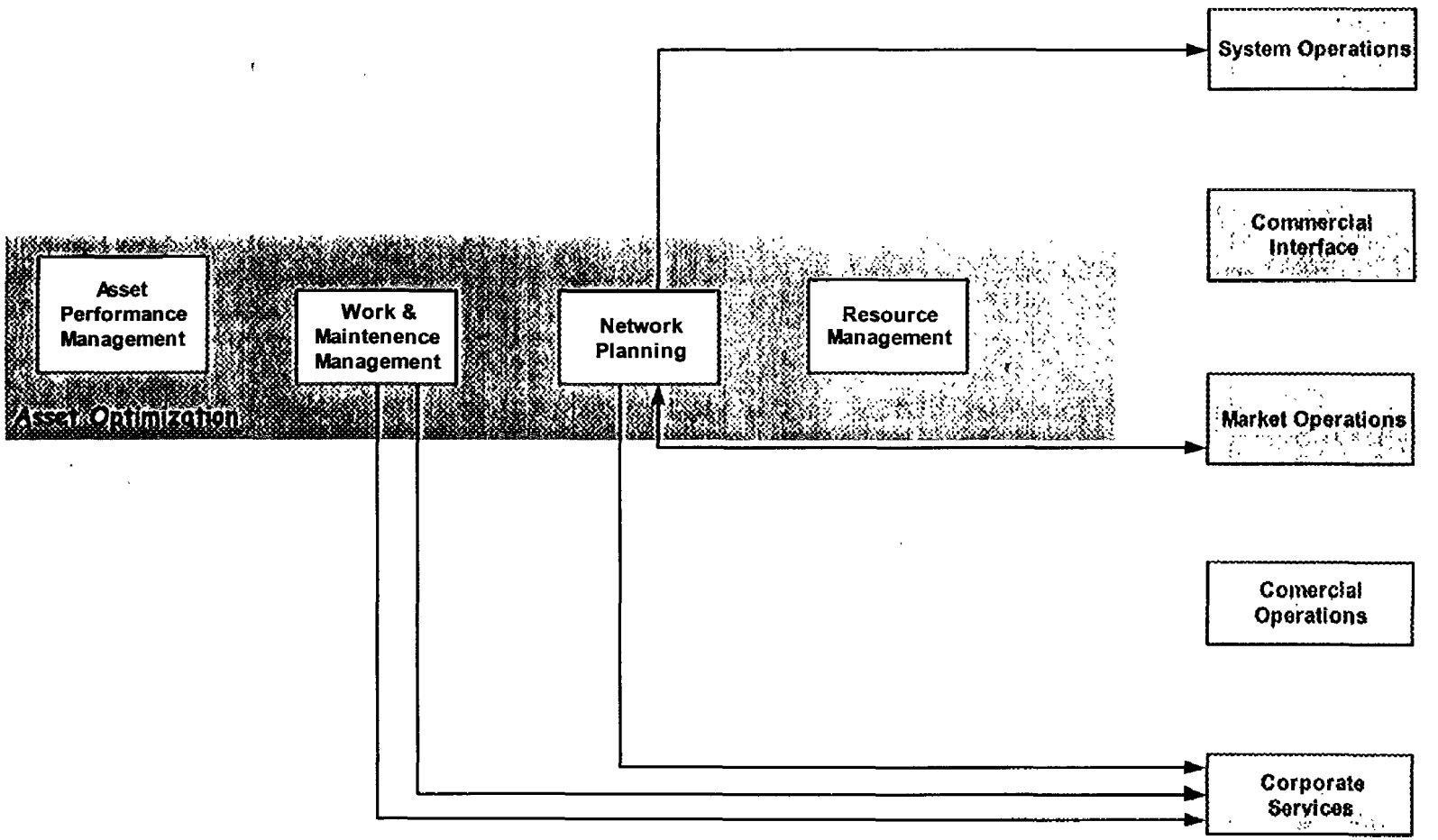
Asset Optimization



Asset Optimization

Applications	Business Requirements		Potential Sources		
	Release 1	End State	Buy/Build	Reuse	Outsource
Asset Performance Management • Fixed Asset Database(Release 1) • Asset Assessment Tool(End State)	• Manage high priority assets • Measure results of maintenance strategies	• Manage current & future utilization and performance of assets • More asset data converted • Link results to revenue opportunities(i.e. which asset segments are profitable)	• Typically a package, with significant configuration & data conversion required	• Can't likely reuse as utilities will need to keep own systems for all assets	• No, GF will need to manage the assets they own
Work Definition & Execution • Work and/or Maintenance Management(simple tracking Release 1 • Outage Management • Project Management Tool	• Coordinate outages and recovery procedures • Track work performed by Utilities • Evaluate maintenance & construction, & outage management strategies & plans	• Increased tracking capability to track work done(may not be a full work/or maintenance management system)	• Typically packages, with configuration required	• Can't likely reuse as utilities will need to keep own systems for all assets	• Yes at first, but, GF will need to define information requirements of Utilities.
Network Planning • Network Planning Appl. Suite • Long Term Studies Tool/Tracking mechanism	• Will need to be able to perform long term studies & bulk transmission planning • Will have to review & approve planned maintenance and expansion	• Will be the same as Release 1 • On a longer term time frame (e.g.. Past three years will do local area planning)	• Typically packages with configuration required	• Can't likely reuse as utilities will need own systems	• Can not be outsourced, because it is one of the key necessities of being an RTO
Resource Management • Inventory Management • Resource Scheduler(only if & when GF brings work in house	• Visibility into resources held by TOs – Release 1 will be done through reports/info from utilities	• Same as Release 1 • Inventory Mgmt and resource scheduling would be much later	• Typically a package	• No, most likely bought new	• Will be outsourced back to utilities initially

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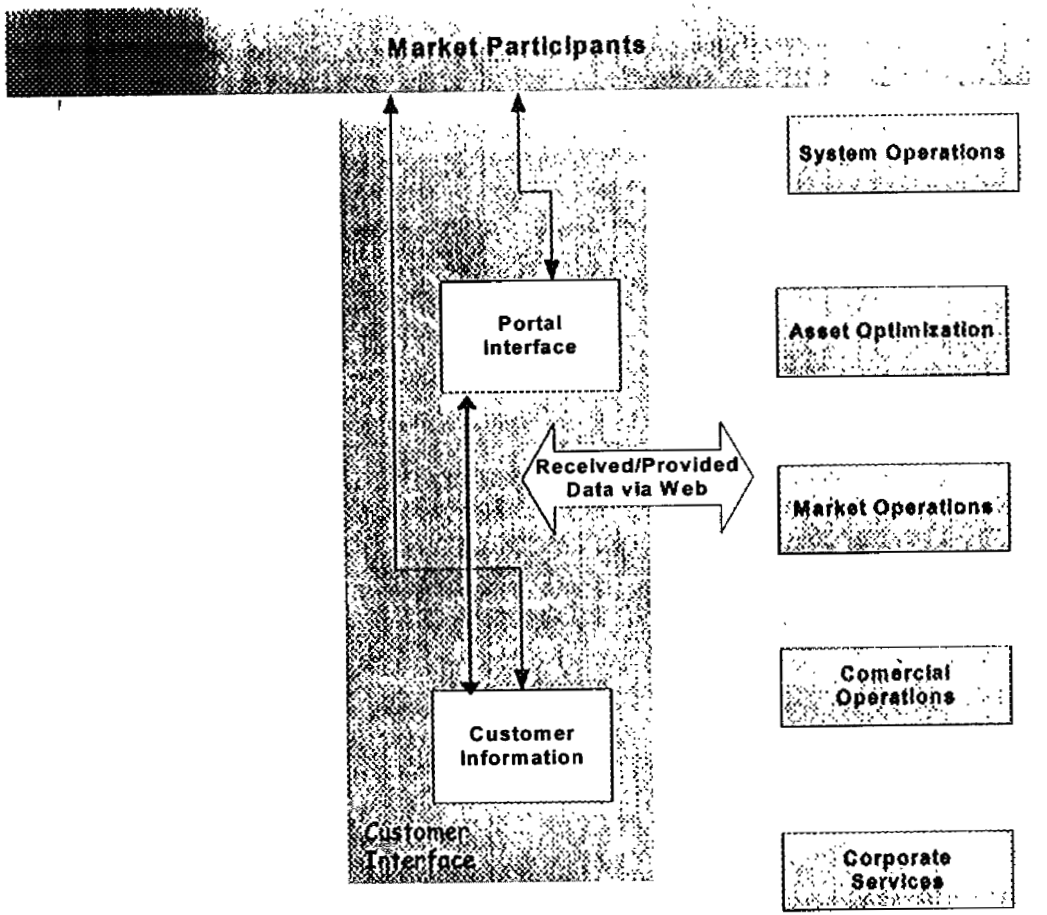
Customer Interface



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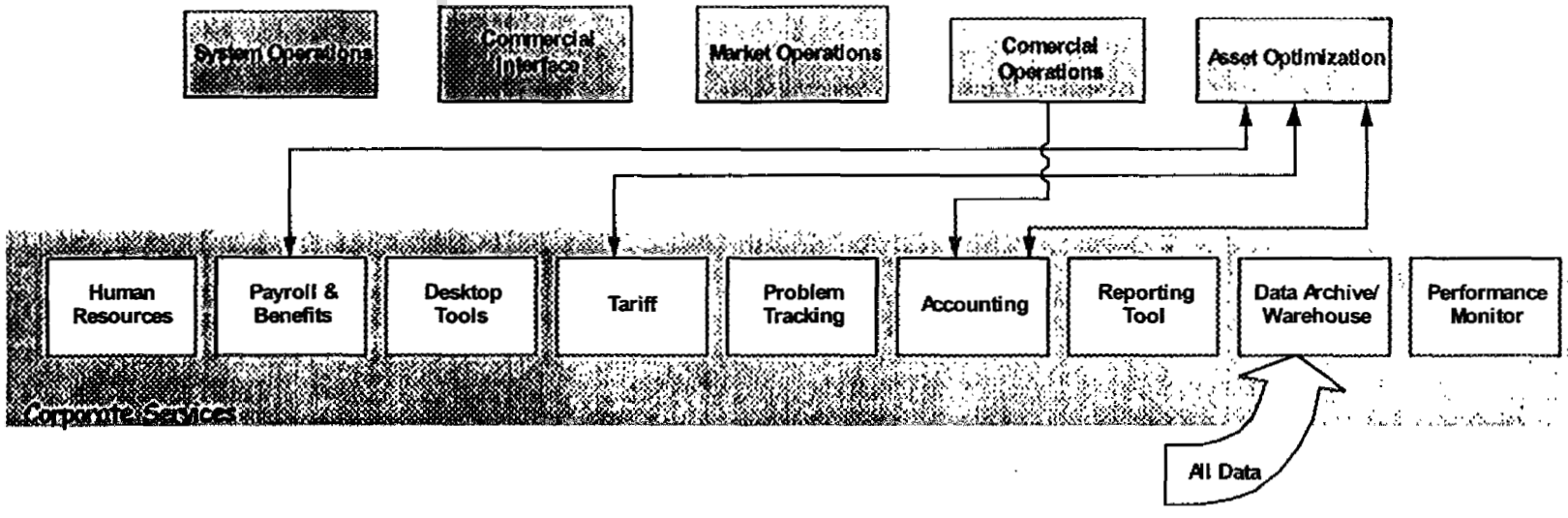
Customer Interface

Applications	Business Requirements		Potential Sources		
	Release 1	End State	Buy/Build	Reuse	Outsource
Customer Information •Customer Relationship Management •Dispute Resolution/Workflow Management •Registration	All functionality required Release 1 - robustness depends on functionality decided on in other capabilities	Enhancements and maintenance	Buy application and configure		
Portal Interface •Web-based Information System •Customer Portal Services	All functionality required Release 1 - robustness depends on functionality decided on in other capabilities	Enhancements and maintenance	Buy application and configure		

Corporate Services



Applications	Business Requirements		Potential Sources		
	Release 1	End State	Buy/Build	Reuse	Outsource
Payroll & Benefits •Payroll System •Benefits System	Need to run payroll and manage benefits and prior to start up				Outsource to service provider
Human Resources •HR Management System	Required prior to start up. Can be minimal automation	Develop robust personnel system	Buy and configure		
Accounting •General Ledger •Cost Accounting •Accounts Receivables/Payables •Purchasing •Treasury Management •Capital Investment Analysis/Budgeting •Property/Asset Accounting •Time & Expense Reporting •Tax Accounting	Require Accounts receivable/payable, General ledger, Purchasing, Capital management, Budgeting at start up	Cost accounting, Treasury Management,time & expense tracking. These systems will become critical soon after Release 1	Buy financial package and configure		Outsource time and expenses
Desktop Tools •Workgroup/Business Software	Required at start up		Buy – standard office software		

Applications	Business Requirements		Potential Sources		
	Release 1	End State	Buy/Build	Reuse	Outsource
Reporting Tools •Reports	May be required at start up	Enhance and maintain	Buy		
Problem Tracking •Problem Capture/Tracking	Basic system required at start up	Enhance to cover full IT help desk	Buy		
Data Archive •Data Archive DB & Tool	May not be required at start up Need to archive and version data	Enhance and maintain	Build		
Data Warehouse •Data Warehouse •Warehouse Development Tool •Data Mining Tool	May not be required at start up	Enhance to develop customer and management reports	Build		
Tariff •Tariff Modeling	Work to file tariff for start up	Tariff analysis and design	Buy		
Performance Monitor •IT Applications/Network Performance Monitoring	May be required at start up		Buy		

Docket No. 000824-EI
Docket No. 010577-EI
Docket No. 001148-EI
GridFlorida Companies Witness Holcombe
Exhibit No. _____ (BLH-1)
Business Blueprint Documents

GridFlorida

Establishing the Grid Florida RTO BluePrint Project June 2001

COST ESTIMATES

Start-up Cost Element	Sub-Total	Total	% of Total Program Costs
pplication Hardware		$10,373,538	8%
System Operations Project	5,786,038	ok	
Commercial Operations & Customer Interface Project	352,000	ok	
Corporate Services Project	490,000	ok	
Infrastructure Management	1,025,000	ok	
Market Operations	2,612,500	ok	
Asset Optimization	108,000	ok	
oftware**		$15,019,433	11%
System Operations Project	8,219,433	ok	
Commercial Operations & Customer Interface Project	2,005,000	ok	
Corporate Services Project	555,000	ok	
Infrastructure Management	690,000	ok	
Market Operations	2,950,000	ok	
Asset Optimization	600,000	ok	
elecommunications		$500,000	0%
System Operations Telecommunications Infrastructure	500,000	ok	
Network Routers/T1 and CAT 5 Connections		ok	
Business Telephone System (existing)		ok	
utsourced Start-up Costs		$24,993,778	19%
Market Monitoring	400,000	ok	
Salary Study	100,000	ok	
Benefits Study	500,000	ok	
Legal Fees	8,000,000	ok	
Financial & Operational Audits	200,000		
Executive Search Firm fees	1,536,000	ok	
Time & Expense Reporting		not outsourced	
Payroll Administration	244,560	ok	
Benefits Administration	479,520	ok	
System Operations Vendor Labor	6,696,198	ok	
Datalink Services for Infrastructure	100,000	ok	
Market Operations Vendor Labor	6,737,500	ok	
tart-up Project Labor		$34,391,528	26%
Internal	7,179,040		
External	27,212,488		
ecruiting & Sourcing Costs		$5,181,000	4%
Incentive and Moving expenses -- Senior Management	468,000	ok	
Incentive and Moving expenses -- Skilled Personnel	4,213,000	ok	
Recruiting Expenses	500,000	ok	
acilities		$5,131,366	4%
Office Furniture	115,000	ok	
Office Infrastructure -- Desktops	60,000	ok	
Upfit Construction of Office and Control Center	303,216	ok	
Permanent HQ Facility	1,913,750	ok	
Interim Office Space	495,000	ok	
Disaster Recovery Facility	2,244,400	ok	
ncentives for Internal Resources(1)		$600,000	0%
xpenses for Internal Resources (2)		$1,534,680	1%
xpenses for External Resources		$4,081,873	3%
otal before Contingency		$101,807,195	
ontingency 20%		$20,361,439	16%
pplicants & GF LLC Total Costs to Date (end of May 2001)		$9,041,418	7%
OTAL START-UP PROGRAM COSTS		$131,210,051	100%
2001 and 2002 Non-Program Payroll		$12,034,491	
2001 and 2002 Board & Executive Management Salary		$3,912,000	
ontingency 20%		$3,189,298	
OTAL INTERIM OPERATING COSTS		$19,135,789	
TOTAL START-UP COSTS		$150,345,840	

1 Assumes 60 personnel receive bonuses of $10,000 at completion of project.

2 Assumes 50% of average internal resources travel, $4000 in expenses per month for 16 months total.

Start-up Program Estimated Effort	
Labor	Total Days
Internal	14,358
External	15,118
Total	29,476

Start-up Program Average Headcount
86

Quarter	% Build Costs Incurred	Projected Quarterly Cash
Q2 2001	5%	$7,517,292
Q3 2001	10%	$15,034,584
Q4 2001	10%	$15,034,584
Q1 2002	20%	$30,069,168
Q2 2002	20%	$30,069,168
Q3 2002	20%	$30,069,168
Q4 2002	15%	$22,551,876
	100%	$150,345,840

Project/Component	Internal %	External %	Estimated Days	Internal Days	External Days	Labor	HW, SW, Facilities & Other**	Comments
Operationalizing the Business Project	80%	20%	1901	1521	380	$ 1,444,760	8,200,000	External Legal fees
Establish Legal Entity & Develop Governance Model			540	432	108			
File with FERC & Manage Filing			492	394	98			
Consummate Agreements			342	274	68			
Develop Brand & Image			220	176	44			
Develop Budgets			80	64	16			
Certify Operations			15	12	3			
Design & Maintain Rules & Procedures			212	170	42			
Organization & People Project	60%	40%	1406	844	562	$ 1,434,120	7,317,000	Exec Search Firm Fees, Incentive Packages, Board & Mgmt
Plan and Select Board & Transition			30	18	12			
Recruit Management & Board			93	56	37			
Design HR Policies/Practices			45	27	18			
Design Organization			91	55	36			
Design Compensation			44	26	18			
Develop Sourcing Strategy			51	31	20			
Recruit Personnel			732	439	293			
Communications			320	192	128			
Facilities Project	85%	15%	416	354	62	$ 289,120	5,131,366	Bldg, Telephone & Network infrastructure, Bldg lease & svc fees
Procure & Manage Project Space			10	9	2			
Confirm Control Center Facility Requirements			30	26	5			
Contract Control Center Site & Vendors			10	9	2			
Design IT / Telecom Infrastructure			20	17	3			
Upgrade Control Center Facility			27	23	4			
Test Site			20	17	3			
Procure & Manage Backup Facility			116	99	17			
Procure & Manage Headquater Facility			183	156	27			
*System Operations**	60%	40%	1949	1169	779	$ 1,987,470	21,201,668	
System Operations			450	270	180			
Grid Security, Reliability Management & Real Time Operations Capabilities			403	242	161			
System Operations Data Setup			450	270	180			
Design Business Policies & Procedures			330	198	132			
Design Jobs & Compensation			66	40	26			
Internal Training Development and Delivery			250	150	100			
*Market Operations**	50%	50%	2244	1122	1122	$ 2,580,600	12,300,000	
Plan & Manage Project			450	225	225			
Market Facilitation			250	125	125			
Scheduling			250	125	125			
Forecasting			20	10	10			
Market Operations Data Setup			245	123	123			
Design Business Policies & Procedures			534	267	267			
Design Jobs & Compensation			90	45	45			
Internal Training Development and Delivery			295	148	148			
Market Operations Product Test			110	55	55			
Commercial Operations	30%	70%	4459	1338	3122	$ 6,287,627	2,357,000	Measurement, Stlmt & Billing, Contract Mgmt
Plan & Manage Project			366	110	256			
Metering & Measurement Data Capability			422	127	295			
Settlement & Billing Capability			1921	576	1345			
Contract Management Capability			98	29	69			
Commercial Operations Data Setup			256	77	179			
Design Business Policies & Procedures			160	48	112			
Design Jobs & Compensation			30	9	21			
Internal Training Development and Delivery			309	93	216			
Commercial Operations Product Test			897	269	628			

RTO #1
Start-up Cost Summary - 4

Project/Component	Internal %	External %	Estimated Days	Internal Days	External Days	Labor	HW, SW, Facilities & Other**	Comments
Customer Interface	50%	50%	3507	1754	1754	$ 4,033,280		HW, SW & Facilities in Comm Ops for Customer Information, Portal
Plan & Manage Project			290	145	145			
Customer Interface Capability			1578	789	789			
Customer Interface Data Setup			256	128	128			
Design Business Policies & Procedures			144	72	72			
Design Jobs & Compensation			30	15	15			
Internal Training Development and Delivery			269	135	135			
Portal Usability Test			50	25	25			
Customer Training Development and Delivery			263	132	132			
Customer Readiness			48	24	24			
Customer Interface Product Test			579	290	290			
Asset Optimization	60%	40%	1796	1077	718	$ 1,831,531	708,000	Asset Management & Work Tracking
Plan & Manage Project			89	54	36			
Network Planning Data Capability			206	124	82			
Work Definition Capability			123	74	49			
Work Execution Capability			324	194	130			
Asset Optimization Data Setup			340	204	136			
Design Business Policies & Procedures			156	94	62			
Design Jobs & Compensation			30	18	12			
Internal Training Development and Delivery			289	173	116			
Asset Optimization Product Test			239	143	95			
Corporate Services Project	60%	40%	2304	1382	922	$ 2,350,160	1,769,080	Financial software, HRMS, Payroll & Benefits outsourcing
Plan & Manage Project			190	114	76			
Finance & General Accounting Capability			750	450	300			
Payroll & Human Resources			324	194	130			
Corporate Administration			50	30	20			
System Administration and IT Management			118	71	47			
Design Business Policies & Procedures			176	106	70			
Design Jobs & Compensation			79	47	32			
Internal Training Development and Delivery			239	143	96			
Corporate Services Product Test			377	226	151			
Transition & Conversion Project	40%	60%	1110	444	666	$ 1,420,800		
Plan & Execute Cutover			210	84	126			
Operational Preparation			900	360	540			
Technical Architecture Project	40%	60%	3333	1333	2000	$ 4,265,744	1,815,000	Overall technical infrastructure (backbone to rest)
Technical Architecture Integration & Infrastructure Management			3333	1333	2000			
Integration Test & Simulation Project	40%	60%	2618	1047	1571	$ 3,351,040		
Cross-Capability Integration Testing			608	243	365			
Simulation Planning			260	104	156			
Support Simulation			1600	640	960			
Design Integration Architecture			150	60	90			
Program Management & Monitor Co Start-up	40%	60%	2434	974	1460	$ 3,115,275		
Program Management			2434	974	1460			
Monitor Co Startup Costs - Outsourced							400,000	Outsource start-up costs. Ongoing in Operating Budget
Total Days			29476	14358	15118	$34,391,528	$61,199,114	

*Only RTO #1 project team days are included. Vendor days are not included because it is assumed System Ops and Market Ops applications will be delivered turn-key.

Resource Split		Days	Cost/Day	Labor Cost		Other/Totals
Internal		14,358	$ 500	$ 7,179,040		
External		15,118	$ 1,800	$ 27,212,488		
SUBTOTAL		29,476		$ 34,391,528		$61,199,114
INCENTIVES FOR INTERNAL RESOURCES [1]				$ 600,000		
EXPENSES FOR INTERNAL RESOURCES [2]						$1,534,680
EXPENSES FOR EXTERNAL RESOURCES	15%					$4,081,873
TOTAL BEFORE CONTINGENCY				$ 34,991,528		$66,815,667
CONTINGENCY	20%	5,895		$ 6,998,306		$13,363,133
TOTAL AFTER CONTINGENCY		35,371		$ 41,989,833		$80,178,800
APPLICANTS & 6F LLC TOTAL COSTS TO DATE (end of May 2001)						$9,041,418
TOTAL PROJECT START-UP COSTS						$131,210,051
Y2001 & 2002 NON-PROJECT PAYROLL					$ 12,034,491	
Y2001 & 2002 BOARD & EXECUTIVE MANAGEMENT SALARY					$ 3,912,000	
CONTINGENCY	20%				$ 3,189,298	
TOTAL INTERIM OPERATING COSTS					$ 19,135,789	
TOTAL START-UP COSTS						$ 150,345,840

1 Assumes 60 personnel receive bonuses of $10,000 at completion of project.

2 Assumes 50% of average internal resources travel, $4000 in expenses per month for 18 months total.

RTO #1
Gantt Chart - End State - 5

	Effort Days	Duration Months	Duration Weeks	Avg FTEs	check	Int/Tot Ratio	MONTHS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Operationalizing the Business Project	1901	11	44	8.6	1900		8	8	8	9	9	9	9	10	10	10	10							
Internal FTEs						80%	4	4	7.2	7.2	7.2	7.2	7.2	8	8	8	8							
External FTEs							1	1	1.8	1.8	1.8	1.8	1.8	2	2	2	2							
Organization & People Project	1406	9.0	36.0	7.8	1400		6	6	6	6	6	6	6	6	6	6	6	6						
Internal FTEs						60%	3	3	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6						
External FTEs							2	2	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4						
Facilities Project	416	6	24	3.5	420			6	6					3	3							8	8	
Internal FTEs						65%		1.7	2.55					2.55	2.55							4.25	4.25	
External FTEs								0.3	0.45					0.45	0.45							0.75	0.75	
System Operations Project	1949	15	60	6.5	1950		6	6	6	6.5	6.5	6.5	7	7	7	7	7	7	7	7	7			
Internal FTEs						60%	3	3	3	3.9	3.9	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2			
External FTEs							2	2	2	2.6	2.6	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8			
Market Operations	2244	15	60	7.5	2240		5	5	5	7.5	7.5	8	8	9	9	8	8	8	8	8	8			
Internal FTEs						50%	2.5	2.5	2.5	3.75	3.75	4	4	4.5	4.5	4	4	4	4	4	4			
External FTEs							3	3	3	4	4	4	4	5	5	4	4	4	4	4	4			
Commercial Operations	4459	15	60	14.9	4460		6	6	10	10	15	15	15	15	17	19	19	19	19	19	19			
Internal FTEs						30%	1.8	1.8	3	3	4.5	4.5	4.5	4.5	5.1	5.7	5.7	5.7	5.7	5.7	5.7			
External FTEs							4.2	4.2	7	7	10.5	10.5	10.5	10.5	11.9	13.3	13.3	13.3	13.3	13.3	13.3			
Customer Interface & Customer Readiness	3507	15	60	11.7	3500		5	5	7	12	12	12	13	13	13	14	14	14	14	14	13			
Internal FTEs						50%	2.5	2.5	3.5	6	6	6	6.5	6.5	6.5	7	7	7	7	7	6.5			
External FTEs							2.5	2.5	3.5	6	6	6	6.5	6.5	6.5	7	7	7	7	7	6.5			
Asset Optimization	1796	15	60	6.0	1800		3	3	3	6	6	6	7	7	7	7	7	7	7	7	7			
Internal FTEs						60%	1.8	1.8	1.8	3.6	3.6	3.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2			
External FTEs							1.2	1.2	1.2	2.4	2.4	2.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8			
Corporate Services Project	2304	15	60	7.7	2300		5	5	5	8	8	8	8	9	9	9	9	8	8	8	8			
Internal FTEs						60%	3	3	3	4.8	4.8	4.8	4.8	5.4	5.4	5.4	5.4	4.8	4.8	4.8	4.8			
External FTEs							2	2	2	3.2	3.2	3.2	3.2	3.6	3.6	3.6	3.6	3.2	3.2	3.2	3.2			
Transition & Conversion Project	1110	6	24	9.3	1110													7.5	6	6	6	8	8	8
Internal FTEs						40%												3	3.2	3.2	3.2	3.2	3.2	3.2
External FTEs																		4.5	4.8	4.8	4.8	4.8	4.8	4.8
Technical Architecture Project	3333	18	72	9.3	3300		5	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Internal FTEs						40%	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
External FTEs							3	3	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Integration Test & Simulation Project	2618	5	20	26.2	2620															15	20	32	32	32
Internal FTEs						40%														6	8	12.8	12.8	12.8
External FTEs																				9	12	19.2	19.2	19.2
Program Management	2434	18	72	6.8	2430		4	4	4	7	7	7	7	7	7	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Internal FTEs						40%	1.6	1.6	1.6	2.8	2.8	2.8	2.8	2.8	2.8	3	3	3	3	3	3	3	3	3
External FTEs							2.4	2.4	2.4	4.2	4.2	4.2	4.2	4.2	4.2	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

Projected Start-up Project Headcount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Avg FTE
Total Projected FTEs	48	50	62	82	87	88	90	96	98	98	98	94	89	104	108	63	63	58	86
Projected Internal FTEs	25	27	34	43	44	44	46	50	51	49	49	44	40	46	48	27	27	23	43
Projected External FTEs	23	23	28	39	43	43	44	46	47	48	48	51	48	57	60	35	35	35	43

Construction Costs	1	178,000,000	$ 178,000,000	$ 178,000,000	Includes Land & Land Rights, Renew & Replacement, Expansion, & Generation Integration Costs. FPL = $154M; TECO = $24M
TOTAL CAPITAL EXPENSE				$ 178,000,000	
O&M Related costs					Assumes $34,113,337M for FPL Assets & $13.2M for TECO assets, annually.
	1	47,813,337	$ 47,813,337	$ 74,413,337	In addition 5 M for TECO for transmission switching operations & telecom & computer costs
Property Taxes	1	23,500,000	$ 23,500,000		Assumes $20M annually for FPL and $3.5M for TECO
Offices, Service Centers and Storerooms	1	2,000,000	$ 2,000,000		Cost-based lease rates on service centers
Use Fee for Shared Station Equipment	1	1,100,000	$ 1,100,000		GF will pay DOs for use of shared station equipment (such as RTUs, battery banks, etc.), also DOs will pay a use fee to GF for use of the same equipment at its stations. Estimated to be $1 M for FPL. Agreed to use an estiamte 10% of FPL number for TECO = $100k (June 18). Non-applicable for FPC.
Salaries & Benefits (190 Emps)				$ 25,374,600	
Executive	6	405,000	$ 2,430,000		300,000 with 35% loading
Skilled Personnel	164	101,250	$ 16,605,000		75,000 with 35% loading
Assistants	20	47,250	$ 945,000		35,000 with 35% loading
Annual Incentives	19,980,000	20%	$ 3,996,000		Incentives for all personnel
Payroll Taxes	19,980,000	7%	$ 1,398,600		
Contractors				$ 806,400	
Information Services	6	134,400	$ 806,400		Assume 4 telecomm contractors and 2 workstation support contractors.
Lease Back Arrangements				$ 23,100,000	
Information Services	0	-	$		This is a placeholder for costs associated with Utility Lease Back Arrangements
Access Arrangements	1	23,100,000	$ 23,100,000		This is the cost that GF must pay to the Utilities for their cost of ownership of the land. This covers the lease of the land to access GridFlorida's facilities (e.g. GF owns the facilities, FPL owns the land). Estimated at $21M for FPL. Agreed to use an estimate of 10% of FPL number for TECO =
Legal & Consulting Services				$ 4,000,000	TECO Estimate
Legal	1	4,000,000	$ 4,000,000		Based on balance of estimate from original estimate of $12M $8M in release 1, $4M remaining.
Control Center Facilities and Building Services				$ 1,796,067	Assumes lease-back arrangement to FPL for control center facilities in Miami.
Annual Lease Cost	1,760,850	2%	$ 1,796,067		Assumes annual lease agreement for 7-10 years for 45,000 square feet @ $39.13.Existing control room and computer room are 16,500 sq ft each. Assumes a 2% increase of lease cost each year.
Headquarters Facilities and Building Services				$ 637,500	Assumes that location is somewhere other than Miami, however, Miami was used to estimate this as it is most expensive city.
Annual Lease Cost	625,000	2%	$ 637,500		Assumes annual lease agreement for 7-10 years for 25,000 square feet at $25/sq. ft. Assumes a 2% increase of lease cost each year.
Disaster Recovery Facility				$ 297,048	
Annual Lease Cost	32,400	2%	$ 33,048		
Computer Services Maintenance	1,320,000	20%	$ 264,000		20% of HW acquisition cost. 20% of hardware acquisition costs for Disaster Recovery only. Number comes from HW,SW, Facil sheet, purchase for HW for backup.
Telecommunications	1	-	$ -		FPL stated that this number is included in the overall Telecomm # of $750,000.
Computer Services/Project Dev. Costs	10,325,538	20%	$ 2,065,108	$ 2,065,108	20% of HW Acquisition cost for everything but Disaster Recovery. Number comes from total Application Hardware number in Start-up Cost Breakout worksheet.
Insurance	1	2,000,000	$ 2,000,000	$ 10,470,000	Assumes insurance for Property, Surety Bond, Brokerage Fees, Automobile, Liability, Directors & Officers, Workers Comp
Storm Fund Insurance	1	8,470,000	$ 8,470,000		Based on an estimate of $7.7M from FPL to cover assets from FPL. Agreed to use an estimate of 10% of FPL number for TECO = 770k (June 18). FPC will continue to have its own assets and own storm fund.
Telecommunications	1	774,000	$ 798,000	$ 798,000	Based on FPL's prorated costs of $750k currently. In addition estimated ISP costs for internet connectivity at $2000/month ($24k).
Board Of Directors	8	60,000	$ 480,000	$ 480,000	8 members, $60,000 annual comp., includes incentives and expense reimbursement
Mtgs., Travel, Seminars	1	500,000	$ 500,000	$ 500,000	
Market Monitoring Fees	1	1,691,945	$ 1,691,945	$ 1,691,945	From MonitorCo Operating Budget Worksheet
Payroll Administration	$ 24,456,000	1%	$ 244,560	$ 244,560	From ADP PEO. 1% of gross annual salary. (Includes board of directors)
Benefits Administration	$ 23,976,000	2%	$ 479,520	$ 479,520	From ADP PEO. 2% of gross annual salary. (Includes board of directors)
Financial & Operational Auditing	1	1,800,000	$ 1,800,000	$ 1,800,000	Assumes Annual Audit = $1.5M; Add'l audits = $300k.
Employee Training Budget (external)	90	3,000	$ 270,000	$ 270,000	90 employees, $3000 per employee. Assumes limited training in first year.
Miscellaneous Fees	1	25,000	$ 25,000	$ 25,000	Assumes annual FRCC membership fee of $25k, FPUC will assess a 1/8 of 1% of annual revenues which are unknown at this time.
FERC Fees	1	1,000,000	$ 1,000,000	$ 1,000,000	As a benchmark, PJM Operating Budget line item for FERC Fees were $2M in 1999.
Communications/Community & Customer Relations	1	500,000	$ 500,000	$ 500,000	Charitable contributions assumes 1% of Labor Costs; the Balance was added for Communications & Customer Relations
Miscellaneous	1	500,000	$ 500,000	$ 500,000	Includes office expenses for postage, supplies, etc. Added money for annual report production, etc
Total Before Contingency				$ 151,249,085	
Contingency	20%			$ 30,249,817	
Total After Contingency				$ 181,498,902	

Salaries & Benefits (6 Emps)					**$ 1,114,425**	
	Executive	1	303,750	$ 303,750		225,000 with 35% loading
	Skilled Personnel (Market Analyst, Economic Modeling Skills)	2	162,000	$ 324,000		120,000 with 35% loading
	Skilled Personnel (IT & Other Support)	2	101,250	$ 202,500		75,000 with 35% loading
	Assistants	1	47,250	$ 47,250		35,000 with 35% loading
	Annual Incentives	877,500	20%	$ 175,500		Incentives for all personnel
	Payroll Taxes	877,500	7%	$ 61,425		
Legal & Consulting Services		1	545,000	$ 545,000	**$ 545,000**	LEGAL: 1 FTE external lawyer, (450/hr x 6mo x 18d x 8h = 388,800) + expenses (20% of total fees = $78k) = $545k
MonitorCo Facilities & Building Services					**$ -**	Assumes that space is shared with GridFlorida.
	Annual Lease Cost	-	2%	$ -		
	Utilities	-	3	$ -		
Board Of Directors		3	40,000	$ 120,000	**$ 120,000**	3 members, $40,000 annual comp.; includes incentives and expense reimbursement
Time & Expense Reporting Administration		0	-	$ -	**$ -**	Use GridFlorida's application as shared service.
Payroll Administration		$1,053,000	1%	$ 10,530	**$ 10,530**	Use GridFlorida outsourced solution as shared service
Benefits Administration		$1,053,000	2%	$ 21,060	**$ 21,060**	Use GridFlorida outsourced solution as shared service
Total w/o Contingency					**$ 1,811,015**	

Note: Outsourcing benchmark is @ $500k annually based on quote from Charles River to GridSouth. GridSouth will outsource this function and their independent BOD

Note: Total in here goes as a line item in the 2003 Operating Budget.

Salaries & Benefits (190 Emps and 8 Board Members)								
Q3 2001 (Jul - Sep)		5%					$ 219,375	
Executive	0		0	405,000	101,250	$ -		Executives captured in start-up cost (and below)
Skilled Personnel	164		8	101,250	25,313	$ 207,563		75,000 with 35% loading
Assistants	20		1	47,250	11,813	$ 11,813		35,000 with 35% loading
Cumulative Non-Project Employees			9					
Q4 2001 (Oct - Dec)		15%					$ 658,125	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	164		25	101,250	25,313	$ 622,688		
Assistants	20		3	47,250	11,813	$ 35,438		
Cumulative Employees			28					
Q1 2002 (Jan - Mar)		35%					$ 1,535,625	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	164		57	101,250	25,313	$ 1,452,938		
Assistants	20		7	47,250	11,813	$ 82,688		
Cumulative Employees			64					
Q2 2002 (Apr - Jun)		50%					$ 2,193,750	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	164		82	101,250	25,313	$ 2,075,625		
Assistants	20		10	47,250	11,813	$ 118,125		
Cumulative Employees			92					
Q3 2002 (Jul - Sep)		75%					$ 3,290,625	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	164		123	101,250	25,313	$ 3,113,438		
Assistants	20		15	47,250	11,813	$ 177,188		
Cumulative Employees			138					
Q4 2002 (Oct - Dec)		100%					$ 3,349,688	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	123		123	101,250	25,313	$ 3,113,438		Roughly 41 of the 164 (25%) total skilled personnel will still be working on the project in the final quarter. Therefore, 123 Skilled Personnel are assumed on the non-project payroll in Q4 of 2002.
Assistants	20		20	47,250	11,813	$ 236,250		
Cumulative Employees			143					
INTERIM PAYROLL SUB-TOTAL							$ 11,247,188	
Salary for Board							720,000	Assumes 8 members for 18 months of work (July 2001- December 2002); includes incentives
Salary for Management							3,192,000	Assumes 6 team members for 16 months of work, average salary of $300K (July 2001- December 2002), includes incentives ** It is 16 months to account for all executives not starting right on July 1, 2001
Payroll Taxes			7%				787,303	
PROJECTED INTERIM PAYROLL BEFORE CONTINGENCY							$ 15,946,491	
CONTINGENCY			20%				3,189,298	
PROJECTED INTERIM PAYROLL AFTER CONTINGENCY							$ 19,135,789	

No.	End State Start-Up Assumptions
1	Some estimates are case-based, using Accenture experience and knowledge capital
2	Standard estimating factors are used throughout the estimate.
3	The capability map created in the blueprint phase is the basis for the different "projects" represented in this estimate. For example, System Operations, Market Operations, Asset Optimization, Commercial Operations, Customer Interface, etc.
4	GridFlorida will be funded from the 3 utilities: TECO, FP&L, and FPC.
5	This estimate includes four facilities: Control Center facility, Headquarter facility, Disaster Recovery facility, and a Project facility.
6	The following start up costs are assumed to be outsourced (partial or whole): market monitoring, salary study, benefits study, facilities design and project management, legal fees, executive search firm fees,payroll administration, benefits administration, and system operations and market operations vendor labor.
7	The effort to conduct a salary study for GridFlorida management and board positions will be outsourced.
8	An Executive Search Firm will be retained to seek candidates for the Management positions
9	Estimate does not include any third-party vendor costs for advertising or marketing assistance. It is assumed that all Brand & Image activities will be in-house.
10	Subject Matter Experts will be available on an as-needed basis by the project team.
11	Project Start-up costs assume build out of applications except where noted as outsourced
12	In Portal development, only the licensing fees for the tool itself are included. Additional content from other websites - news, stocks, radio, tv feeds would require additional fees.
13	Updating or reconfiguring the GridFlorida web site is not included in this estimate.
14	Financing costs are to be included in the estimate - to be confirmed.
16	The organization size is assumed to be 190, with 6 executives, 163 skilled personnel, and 20 assistants.
17	Anticipated payroll and benefits for non-project GridFlorida personnel in 2001 and 2002 is captured on the "2001 & 2002 Payroll" tab. It is assumed that most of the non-project personnel will be hired in Q3 and Q4 and will spend much of their time training for their operational roles and participating in simulated operations.
18	The internal daily rate of $500 was determined through estimates submitted by the utilities.
19	Internal expenses were estimated by assuming 50% of the average number of internal resources will travel to the project site. Of those that travel a monthly expense rate of $4000 was used ($1000/wk x 4 wks a month, 16 months in the program).
20	Internal training is broken down into each capability area.
21	All customer training is accounted for in the Customer Interface capability.
22	Commercial Operations Capability has 2 applications: a Settlements & Billing application and a meter data acquisition application. Contracts will be managed by the customer information application which is accounted for in the Customer Interface project with an interface with Settlements & Billing.
23	Customer Interface Capability has 2 applications: Customer Information (for storing info about customers) and Portal Interface (for collecting and disseminating information to GridFlorida customers).
24	Corporate Services Capability has 5 primary applications: Human Resources, Finance & Accounting, Time & Expense Reporting, Payroll & Benefits, and Facilities & Purchasing.
25	Asset Management Capability has 2 primary applications: an asset management application and a work tracking application.
26	One cutover equals 10 people for 2 days to execute and analyze mock cutovers.
27	Each cutover would be monitored for one week with 6 people.
28	Each cutover would require follow-up for one week with 6 people.
29	The costs for split of SCADA on the new EMS are yet to be determined and included.
30	GridFlorida's unique characteristics include: ownership of transmission assets, Datawarehouse capability, Market Operations capability, to management participant offering/trading, etc.
31	GF employees estimated at 190
32	3 Market participants, FPL, Progress, Teco linked in a dedicated wan links
33	Internet connectivity via dual isp
34	2 Hour outage on a hardware failure ok for Corporate Services, Asset Optimization, Commercial Ops, and Non-portal customer interface
35	Equipment will be acquired via capital purchase and not via leasing
36	All components will be hosted internally by GridFlorida Except for portions of Market Ops
37	DR must be in place for all application and office components
38	All systems disk will be centrally managed via the SAN
39	Great Plains or similar suite of products will be used for back office corporate services function

RTO #1
HW, SW, Facil. - 10

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	#########	#########	########	$ 61,199,114	
Operationalizing the Business Project	$ -	$ -	$ 8,200,000	$ 8,200,000	
Financial & Operational Audits			$ 200,000		Two audits included in start up costs. Initial audit of divesting owner's agreements = 100k. Audit of initial investment = 100k
Start-up Legal Fees			8,000,000		Assumes that this will be outsourced until GridFlorida hires some permanent legal staff Estimate is based on a burn rate of $2M/quarter. Estimate is based upon four quarters.
Organization & People Project	$ -	$ -	$ 7,317,000	$ 7,317,000	
Search Firm Fees			1,536,000		For Board & Management & some skilled personnel positions; Equivalent to 40% of the 1st year's cash compensation. Assume 8 Board Members ($30K each), 1 CEO ($300K), 5 Senior Management personnel ($300K each), and 24 (15% of 164) skilled personnel ($75K each)
Incentive/Bonus Package -- Senior Management			180,000		Assumes average senior management incentive/bonus package for 6 FTEs is $30K
Moving Expenses -- Senior Management			288,000		Assumes relocation as a homeowner is $48000 for 6 senior management.
Incentive/Bonus Package -- Skilled Personnel			1,630,000		Assumes non-management personnel receive average signing bonuses/incentives of $10K for 164 FTEs
Moving Expenses -- Skilled Personnel			2,583,000		Assumed relocation as a homeowner is $48,000, and relocation cost for a renter is approximately $15,000. Of the 163 skilled personnel, assume half are relocating Of the half, half are homeowners and half are renters.
Recruiting Expenses (airfare, hotel, etc.)			500,000		Assumes travel expenses for recruiting management and personnel
Salary Study - Outsource			100,000		Case-based estimate (ISO-NE)
Benefits Study - Outsource			500,000		Includes retirement plans, medical insurance, etc.
Facilities Project - End State	$ -	$ -	$ 5,131,366	$ 5,131,366	
Control Center Facility - End State			478,216		Assume some space in LFO leased for last 90 days before go live - will be 11,000 sq. ft @ $39.13 per sq. ft. After 90 days, lease goes into operating budget. The rest of the Control Center space to a total of 44,000 sq. ft will be occupied by GF at go live (switch over), so not including a lease cost for this. Assume space (in total) for approx. 50 people in R1. Existing control room and computer room are 16,500 sq ft each, plus there are multiple offices and conf. rooms
Office infrastructure (desktop, network routers, cables, wiring, etc.)			60,000		Assumes $3000/workstation for 20 workstations; Assumes $2000 is for desktops, $1000 is for the rest of the infrastructure
Office furniture (cubicles, desks, chairs)			115,000		Assumes $5000/workstation for 15 open office workstations, $8000/office for 5 closed office spaces
Building Lease fees			107,607		See assumption three lines above. 90 days only for part of the space Rest of lease cost goes into annual lease.
Tenant Improvement Allowance			0		Assumes no allowance
Upfit Construction of Office and Control Center			150,000		Assumes no upfit required for the LFO except upgrade of mapboard B. Smith called Mauell - upgrade of mapboard estimated at 140k-150k. Assumed this will be done in end state.

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	#########	#########	########	$ 61,199,114	
Back-Up Generator			0		Existing

RTO #1
HW, SW, Facil. - 12

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	########	########	########	$ 61,199,114	
UPS/Batteries			0		Existing
Network/Phones			0		Includes CAT 5 and TI connections . Existing telecomm operating expense is $500,000 prorated to Ops. This number is included in the Operating Budget - so is zero here.
Business Telephone/PBX system			0		Existing
Separate Electric Service			0		Separate service for Control Center and 24x7 operations-existing
Facilities Design & Project Management -- Outsource			20,609		Assumes 8% of lease and upfit cost (industry average planning factor)
Training site with dedicated user desktops			0		Assumes existing training room with no upfit per FPL
Moving Expenses to Permanent Facility			25,000		Includes hiring moving company to pack, transfer, and unpack assets to new facility; Assumes $500/person for 50 personnel
Permanent HQ Facility - End State		0	0	1,913,750	Various scenarios exist initial. (1) Sublet/try to get smaller space from one developer and then get more. (2) Move into industrial building (only $6/sq ft & then outfit it ($30/sq ft) more flexible, but may be more costly. (3) Work with Divesting owners on using some vacant space they may have - would be at an embedded cost rate of $15/sq ft. Conclusion: Assumes 25,000 square feet, for 100 people in the end state (250 sq ft/person) at $25/sq ft. Other scenarios might be ways to reduce number later.
Office infrastructure (desktop, network routers, cables, wiring, etc.)			300,000		Assumes $3000/workstation for 100 workstations; Assumes $2000 is for desktops, $1000 is for the rest of the infrastructure.
Office furniture (cubicles, desks, chairs)			545,000		Assumes $5000/workstation for 85 open office workstations, $8000/office for 15 closed office spaces
Building Lease fees			156,250		See assumption three lines above 90 days only. Rest of lease cost goes into annual lease. Assumes 25,000 square feet, for 100 people (250 sq ft/person) at $25/sq ft.
Tenant Improvement Allowance			0		Assumes no allowance
Upfit Construction of Office and Control Center			0		Includes 25,000 sq ft of Office space @ $75/sq ft; Upfit includes construction, electricity, HVAC, plumbing, and fire protection. We are assuming zero additional dollars for upfit of HQ.
Back-Up Generator			0		None
UPS/Batteries			250,000		To be used for critical business areas
Network/Phones			250,000		Includes CAT 5 and TI connections (estimate)
Business Telephone/PBX system			275,000		Estimate is installed business phone system with voicemail and battery backup to support 150 employees
Separate Electric Service			50,000		Separate service for 24x7 operations
Facilities Design & Project Management -- Outsource			12,500		Assumes 8% of lease and upfit cost (industry average planning factor)
Moving Expenses to Permanent Facility			75,000		Includes hiring moving company to pack, transfer, and unpack assets to new facility; Assumes $500/person for 150 personnel
Project Facility - End State		0	0	495,000	
Project Space -- Lease			490,000		Assumes 50 project personnel, with an average of 250 sq ft/person located at the LFO at $39.13/sq ft. Assumes all space will be office space, with no additional requirements for Control Center space. Assumes lease will be for twelve months
Project Space -- Office Furniture			0		Assumes no upfit cost at LFO

RTO #1

HW, SW, Facil. - 13

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	########	########	########	$ 61,199,114	
Project Space -- Office Infrastructure			5,000		Assumes $100/workstation to lease for 50 project personnel; Includes desktops, telephones, cables, wiring, etc
Disaster Recovery Facility - John/Bill Smith - End State	0	0	2,244,400		Assume existing back-up site at the customer service center East in West Palm Beach
Building Lease Fees			32,400		Assumes 1,200 sq ft facility for FPL Customer Service Center East and office space; Assumes $27/sq ft;
Tenant Improvement Allowance			0		Assumes no allowance
Office Furniture			21,000		Assumes $3000/workstation for low-end open office space; Assumes 7 workstations
Office Infrastructure			21,000		Assumes $3000/workstation for 7 workstations
Upfit Construction of Office and Control Center			0		Assumes no upfit required
System Operations HW & SW			0		Backup Sys. Ops. HW & SW covered in original FPL EMS project. See SO-HW spreadsheet for details. Allocated 50% of the backup to Grid Florida - this number is included in System Operations on this spreadsheet.
Market Operations HW & SW			450,000		Assumes minimal software licensing fees, only purchase for HW, Backup for market ops
Commercial Operations HW & SW			410,000		Assumes minimal software licensing fees, only purchase for HW Backup of S& B system
Corporate Services HW & SW			350,000		Assumes minimal software licensing fees, only purchase for HW Backup of corp services
Asset Optimization HW & SW			110,000		Assumes minimal software licensing fees, only purchase for HW Backup of Asset opt applications
Infrastructure HW & SW			600,000		Includes scaled down Disk storage, tape backup/recovery unit, network equipment, and minimal SW
Telecommunications Infrastructure			250,000		Assumes some level of reconfiguration will be required
Telecommunications Operating Expense			0		Operating Expense covered under 2003 Operating Budget
System Operations Project	$ 6,286,038	$ 8,219,433	$ 6,696,198	$ 21,201,668	
System Operations					
Allocated EMS costs (from FPL new EMS)	0	5,185,446	4,691,921		Allocation of costs for FPL EMS system to GF See Cost Summary - FPL and System Operations Cost Summary spreadsheets for detailed assumptions Based on costs that are sharable between GF and FPL.
Incremental EMS costs to prepare for GridFlorida	5,706,038	1,500,000	1,250,000		Based on estimate of incremental costs to prepare for GF. See SO-HW spreadsheet for Hardware costs SW and Other from mid-point of vendor estimate.
Plus allocated costs from FPL EMS for functions that will be put in place in the end state (e.g. some Generation related functionality)		783,987	604,277		See System Operations Cost Summary and Cost Summary - FPL spreadsheets for these costs. They are for allocated software and other (labour) costs allocated from FPL to GF - but not until the end state.
Database Management SW		700,000			Oracle DB requires its own license as FPL has own corporate deal.
Telecommunications Infrastructure	500,000	0			Routers and switch equipment
Voice Recorder	80,000		0		Addition to Main Control Center
Outage Scheduler		50,000	150,000		Very approximate estimate for Outage Scheduling (coordinate longer term - in advance of 1 week)
Mapboard			0		June 8 - Zero out mapboard here - covered under Control Center Rework of existing Mauell mapboard(add 40 feet to existing) (Resurfacing would be $450,000).

RTO #1

HW, SW, Facil. - 14

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	########	########	########	$ 61,199,114	
Commercial Operations & Customer Interface Project	$ 352,000	$ 2,005,000	$ -	$ 2,357,000	
Production	220,000	1,390,000	0		
Settlements & Billing Database Serve	30000	80000	0		1 NT, Oracle Maintenance software, scheduling software, SQL Analysis Software
Settlements & Billing NT App Server	30000	630000	0		1 NT, Batch Scheduling software, Settlements and Billing Application Software
Customer Interface Database Server	30000	80000	0		1 NT, Oracle Maintenance software, scheduling software, SQL Analysis Software
Customer Interface NT App and Wor	30000	310000	0		1 NT, Batch Scheduling software, Customer Information application software
Web Servers	50000	50000	0		2 NT, Security Software, Portal Application software
Portal Application Server	25000	50000	0		1 NT, Scheduling Software, Portal Application Software
Portal Database Server	25000	50000	0		1 NT and SQL Server
Database Management SW	0	140000	0		Oracle DB Case-based estimate
Test and Training	66,000	245,000			
Test and Training Web Server	12,000	100,000	0		1 NT, SQL Server, Scheduling software, Portal Development Tools
Test and Training DB Server	30,000	80,000	0		1 NT, Oracle Maintenance software, scheduling software, SQL Analysis Software
Test and Training Settlements and Billing App Server	12,000	10,000	0		1 NT, Batch Scheduling software, Settlements and Billing Application Software assumed included in production license
Web Based Training and Registration Application		45,000	0		Assumes 30 customers using with 10 users per customer at a rate of 100 per user plus a fee for maintenance and support.
Test and Training Customer Interface App Server	12,000	10,000	0		1 NT, Batch Scheduling software, Settlements and Billing Application Software assumed included in production license
Development	66,000	370,000	0		
Development Web Server	12,000	100,000	0		1 NT, SQL Server, Scheduling software, Portal Development Tools
Development DB Server	30,000	80,000	0		1 NT, Oracle Maintenance software, scheduling software, SQL Analysis Software
Develoment Settlements and Billing A	12,000	10,000	0		1 NT, Batch Scheduling software, Settlements and Billing Application Software assumed included
Develoment Customer Interface App	12,000	10,000	0		1 NT, Batch Scheduling software, Settlements and Billing Application Software assumed included
Develoment Test Software	0	120,000	0		Mercury Interactive assumed
Source Code Management Tools	0	40,000	0		$1000/user; Assumes 40 users
Compiler	0	10,000	0		$250/user; Assumes 40 users
Market Operations	$ 2,612,500	$ 2,950,000	$ 6,737,500	$ 12,300,000	
Production, Test, Development, Training	2,612,500	2,950,000	6,737,500		
Package Software and System for Market Operations Capability	2,612,500	2,650,000	6,737,500		Assumes vendor build, test and delivery of all applications; includes all labor, services & training for systems. Assumes a mid-point of two vendors' range of estimates
Database Management SW		300,000	0		Oracle DB Software
Asset Optimization	$ 108,000	$ 600,000	$ -	$ 708,000	
Production	60,000	160,000	0		
Asset Optimization Database Server	30,000	80,000			1 NT, Oracle Maintenance software, SQL Analysis Software
Asset Optimization NT App Server	30,000	10,000			1 NT, Batch Scheduling software
Database Management SW	0	70,000			Oracle DB
Test and Training	24,000	95,000	0		
Asset Optimization Database Server	12,000	50,000	0		1 NT, Oracle Maintenance software, SQL Analysis Software
Asset Optimization NT App Server	12,000	10,000	0		1 NT, Batch Scheduling software
Database Management SW	0	35,000	0		Oracle DB
Development	24,000	345,000	0		

RTO #1
HW, SW, Facil. - 15

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	#########	#########	########	$ 61,199,114	
Asset Optimization Database Server	$ 12,000	$ 50,000	$ -		1 NT, Oracle Maintenance software, SQL Analysis Software
Asset Optimization NT App Server	$ 12,000	$ 10,000	$ -		1 NT, Batch Scheduling software
Database Management SW	$ -	$ 35,000	$ -		Oracle DB
PSSE Application Suite	$ -	$ 250,000	$ -		Estimated cost - Verified with FPL.
	0				
Corporate Services Project	$ 490,000	$ 555,000	$ 724,080	$ 1,769,080	
Production	490,000	555,000	724,080		
File/Print Server Cluster Servers	20,000	30,000	0		2 NT, Antivirus
Active Directory Domain Servers	30,000		0		3 NT
Intranet Web Server Cluster	20,000		0		2 NT
Exchange email Cluster	20,000	15,000	0		2 NT, Exchange 2000
Office SQL Server Cluster	20,000	20,000	0		2 NT, SQL Server
Office Network Infrastructure	200,000		0		Switches, Hubs, Routers
Corporate Services Application Serve	60,000	100,000	0		2 NT and Great Plains e-enterprise or similar Corporate Services Software, Crystal Reports
Corporate Services Database Server	30,000	30,000	0		1 NT and SQL Server
Data Warehouse Database Server	30,000	80,000	0		1 NT, Oracle Maintenance software, scheduling software, SQL Analysis Software
Data Warehouse Query Server	30,000	210,000	0		1 NT, Batch Scheduling, Cognos Query License
Data Warehouse Enterprise Server	30,000	0	0		1 NT, Batch Scheduling, Cognos Enterprise License
Database Management SW	0	70,000	0		Oracle DB
Time & Expense Reporting		0	0		Assuming will be in-house
Payroll Administration -- Outsource			244,560		Assumes administration will be equal to 1% of annual salary expenses (employees & board). Case based
Benefits Administration --			479,520		Assumes administration will be equal to 2% of annual salary expenses. (employees) Case based
Infrastructure Management	$ 1,025,000	$ 690,000	$ 100,000	$ 1,815,000	
Infrastructure	1,025,000	690,000	100,000		
Spare Server in event of DB or App Server failure	50000	0	0		2 NT, 1 Production and 1 Dev/Test/Train
Primary Screening Routers	30000	0	0		4 Routers for Dual Network
Primary Firewall	30000	30000	0		1 NT and Checkpoint Software
Primary Central Switch	60000	0	0		4 Switches for Dual Network
Primary Web Load Balancer	20000	0	0		Cisco Directors
LDAP/PKI/Citrix Server	30000	50000	0		1 NT, Verisign, RSA SecureID, Citrix
Centralized Disk Storage	300000	300000	0		EMC Symetrics and EMC Software (Timefinder, Powerpath, Optimizer, Volumelogics)
Centralized Tape Library	250000	100000	100000		StorageTek M700 and Veritas Netbackup, and Datalink services for SAN installation
Master Backup Server	30000	10000	0		1 NT and Veritas Master Server License
Primary Fibre Channel Switches	150000	0	0		Brocade
Job Scheduling Software / Systems Management	30000	200000	0		1 NT, BMC Patrol, Tivoli Scheduling Console, HP Network Node Manager, Veritas SAN Management
Network Printers (1 per 10 employees)	45000	0	0		Assumes 15 network printers @$3000/ea
Market Monitor Co Start-up	$ -	$ -	$ 400,000	$ 400,000	
Monitor Co Startup	0	0	400,000		

Project/Capability	HW	SW	Other	Total	Comments
TOTAL	########	########	########	$ 61,199,114	
Monitor Co Startup Costs	0	0	400,000		Cost estimate case-based from another project. Ongoing costs are est. in Operating Budget sheet. It has not yet been determined how GF will start-up Monitor Co - e.g. outsource or

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
1.0	Operationalizing the Business Project					Project Total:	1901.0		
	Establish the Legal Entity & Develop Governance Model						540.0		
	Establish the LLC Trust Account	Fixed Effort	1	108.0	108.0				Assumes 1 FTE for 6 months
	Manage regulatory legal issues	Fixed Effort	1	324.0	324.0				Assumes 1 FTE for 18 months
	Manage business/operational legal issues	Fixed Effort	1	108.0	108.0				Assumes 1 FTE for 6 months
	File with FERC & Manage Filing						492.0		
	File with FERC	Fixed Effort	6	10.0	60.0				Assumes 6 FTEs for 10d
	Revise FERC filings	Fixed Effort	4	108.0	432.0				Assumes 4 FTEs for about 6 months
	Consummate Agreements						342.0		
	Renegotiate Telecomm agreements	Fixed Effort	1	54.0	54.0				Assumes 1 FTE for 3 months of design
	Develop & negotiate agreements w/ LSEs	Fixed Effort	1	36.0	36.0				Assumes 1 FTE for 2 months
	Develop & negotiate agreements w/ Generators for AS	Fixed Effort	2	108.0	216.0				Assumes 2 FTEs for 6 months
	Develop & negotiate agreements w/ other Transmission Owners	Fixed Effort	1	36.0	36.0				Assumes 1 FTE for 2 months
	Develop Brand & Image						220.0		
	Determine Marketing Strategy for RTO #1	Fixed Effort	1	60.0	60.0				Assumes 1 FTE for 12 months for all Brand & Image activities
	Execute the Marketing Strategy	Fixed Effort	1	80.0	80.0				
	Provide Public Relations support	Fixed Effort	1	80.0	80.0				
	Develop Budgets						80.0		
	Develop annual operating and capital budgets for 2002	Fixed Effort	1	80.0	80.0				Responsibility of RTO Budget Analyst
	Certify Operations						15.0		
	Support RTO Certification by Transmission Owners	Fixed Effort	1	15.0	15.0				Assumes 5 days of effort for each of the 3 TO's
	Design & Maintain Rules and Procedures						212.0		
	Develop the GridFlorida tariff	Fixed Effort	5	10.0	50.0				Assumes 5 FTEs for 10 days
	Manage the GridFlorida tariff	Fixed Effort	3	54.0	162.0				Assumes 3 FTEs for 3 months

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
2.0	**Organization and People Project**					**Project Total:**		**1406**	
	Plan Stakeholder Process						**30.0**		
	Develop process to establish Stakeholder Committees	Fixed Effort	1	30.0	30.0				Assumes 3 FTEs for 10 days, Responsibility of Governance team
	Recruit Management & Board						**93.0**		
	Conduct Salary Study for Management Positions	Fixed Effort	1	18.0	18.0				Assumes 1 FTE for 1 month to coordinate with outsource group
	Determine incentive and bonus packages for Management	Fixed Effort	1	15.0	15.0				Includes coordination and review time with Executive Search Firm
	Identify Management candidates	Fixed Effort	1	60.0	60.0				Includes coordination and review time with Executive Search Firm
	Design HR Policies/Practices						**45.0**		Particularly policies/procedures for employees
	Create Process Maps	Processes	15	2.0	30.0				Responsibility of HR Team
	Implement HR Policies	Processes	15	1.0	15.0				
	Design Organization						**91.0**		
	Confirm Organization Structure					10.0			
	Confirm Organization Structure	Case-based estimate	1	10.0	10.0				Assumes use of organization structure defined in Planning Phase
	Define Organization Infrastructure					26.0			
	Determine Management Structure, Performance Measurement, Reporting Relationships	Case-based estimate	4	2.5	10.0				Assume 4 internal work groups
	Identify Work Group Support & Measurement Tools	Case-based estimate	4	2.0	8.0				Assume 4 internal work groups
	Confirm Facilities & Logistics Plan	Case-based estimate	1	3.0	3.0				Fixed effort
	Identify Integrating Mechanisms	Case-based estimate	1	5.0	5.0				Fixed effort
	Design Teams					23.0			
	Evaluate processes	Case-based estimate	1	3.0	3.0				
	Design Teams	Case-based estimate	4	5.0	20.0				Assume 4 internal work groups
	Develop Support for New Structure					32.0			
	Develop Support Tools	Case-based estimate	4	2.0	8.0				Assume 4 internal work groups
	Develop Post-Independence Day Support Strategy	Case-based estimate	1	5.0	5.0				Fixed effort
	Modify Performance Support Needs Analysis/Training: Job Changes	Case-based estimate	4	2.0	8.0				Assume 4 internal work groups
	Develop Contingency Plan	Case-based estimate	1	5.0	5.0				Fixed effort
	Develop and Handoff Knowledge Transfer Plan	Case-based estimate	1	6.0	6.0				Fixed effort
	Design Compensation						**44.0**		
	Conduct Salary Study for Staff Positions	Fixed Effort	1	10.0	10.0				Assumes 1 FTE for 2 weeks to coordinate with outsource group
	Conduct Benefits Study for All Positions	Fixed Effort	1	24.0	24.0				Assumes 1 FTE for 6 weeks to coordinate with outsource group
	Determine incentive and bonus packages for staff	Fixed Effort	1	10.0	10.0				
	Design Sourcing Strategy						**53.0**		
	Design Sourcing Strategy	Fixed Effort	2	18.0	36.0				Assumes 2 FTEs for 1 month for all Sourcing activities
	Identify & Develop Sourcing Opportunities	Fixed Effort	1	15.0	15.0				
	Recruit Personnel						**732.0**		
	Design staff recruiting process	Fixed effort	1	30.0	30.0				
	Post Job Listings	# of New Job Roles	44	5.0	220.0				Includes advertising and marketing of positions
	Review Resumes	Fixed Effort	2	108.0	216.0				Assumes 2 FTEs for 6 months
	Conduct Interviews	Fixed Effort	2	108.0	216.0				Assumes 2 FTEs for 6 months
	Manage Sourcing Relationships	Fixed Effort	1	50.0	50.0				Assumes 1 FTE for 5 days a month, for 10 months
	Communications						**320.0**		Assumes 1 FTE for 16 months
	Plan, Develop, and Manage Internal Communications					160.0			
	Determine message, timing, channel, sender/receiver	Case-based estimate	1	40.0	40.0				
	Develop communication messages – internal	Case-based estimate	1	90.0	90.0				
	Schedule/Coordinate Internal Delivery	Case-based estimate	1	30.0	30.0				
	Plan, Develop, and Manage External Communications					160.0			
	Determine message, timing, channel, sender/receiver	Case-based estimate	1	35.0	35.0				
	Develop communication messages – external	Case-based estimate	1	95.0	95.0				
	Schedule/Coordinate External Delivery	Case-based estimate	1	30.0	30.0				

No.	Project/Work Package/Task/Sub-Task	User/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.F. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
4.0	**Facilities Project**					Project Total:		416	
	Procure & Manage Project Space						10.0		
	Conduct Project Space Requirements Analysis	Fixed Effort	1	5.0	5.0				Assumes 1 FTEs, 1 week
	Select Project Space	Fixed Effort	1	0.0	0.0				Assumes LFO will be used
	Manage preparation of site with office infrastructure	Fixed Effort	1	5.0	5.0				Assume 1 FTEs, 1 week
	Confirm Control Center Facility Requirements						30.0		
	Conduct Facility Requirements Analysis	Fixed Effort	2	10.0	20.0				Assume 2 FTE, 2 week
	Prepare cost estimates and analyses for leases	Fixed Effort	2	5.0	10.0				Assume 2 FTE, 1 week
	Contract Control Center Site & Vendors						10.0		
	Negotiate building leases and maintenance contracts	Fixed Effort	1	10.0	10.0				Assume 1 FTE, 2 week
	Prepare cost estimates and analyses for lease improvements	Fixed Effort	1	0.0	0.0				Assumes no upfit required
	Design IT / Telecom Infrastructure						20.0		
	Conduct IT and Telecom Requirements Analysis	Fixed Effort	1	5.0	5.0				Assumes 1 FTE, 1 week
	Design IT and Telecom Infrastructure	Fixed Effort	1	5.0	5.0				Assumes minimal changes required
	Design & Develop IT policies and procedures	Fixed Effort	2	5.0	10.0				Assume 2 FTE, 1 week
	Upgrade Control Center Facility						27.0		
	Manage procurement of goods and services	Fixed Effort	0.5	54.0	27.0				Assumes .5 FTE for 3 months. Includes office supplies, furniture, and other expenditures
	Manage preparation of site with office infrastructure	Fixed Effort	1	0.0	0.0				Assumes minimum upfit required
	Coordinate with contractors for site upfit	Fixed Effort	1	0.0	0.0				Assumes minimum upfit required
	Test Site						20.0		
	Plan & Conduct Site Operational Readiness Test	Fixed Effort	2	10.0	20.0				Assume 2 FTE, 2 week
	Procure & Manage Backup Facility						116.0		
	Conduct Backup Facility Requirements Analysis	Fixed Effort	2	5.0	10.0				Assumes 2 FTEs, 1 weeks
	Negotiate building leases and maintenance contracts	Fixed Effort	1	0.0	0.0				Assumes site is identified
	Conduct IT and Telecom Requirements Analysis	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Design IT and Telecom Infrastructure	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Manage procurement of goods and services	Fixed Effort	0.5	54.0	27.0				Assumes .5 FTE for 3 months. Includes office supplies, furniture, and other expenditures
	Manage preparation of site with office infrastructure	Fixed Effort	1	10.0	10.0				Assumes 1 FTE for 2 weeks
	Coordinate with contractors to build out site	Fixed Effort	0.5	18.0	9.0				Assumes .5 FTE for 1 months
	Plan & Conduct Site Operational Readiness Test	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Procure & Manage Headquarter Facility						183.0		
	Conduct Headquarter Facility Requirements Analysis	Fixed Effort	2	10.0	20.0				Assumes 2 FTEs, 2 weeks
	Select Facility Site	Fixed Effort	2	10.0	20.0				Assumes 2 FTEs, 2 weeks
	Negotiate building leases and maintenance contracts	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Conduct IT and Telecom Requirements Analysis	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Design IT and Telecom Infrastructure	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks
	Manage procurement of goods and services	Fixed Effort	0.5	54.0	27.0				Assumes .5 FTE for 3 months. Includes office supplies, furniture, and other expenditures
	Manage preparation of site with office infrastructure	Fixed Effort	1	18.0	18.0				Assumes 1 FTE for 1 month
	Coordinate with contractors to build out site	Fixed Effort	0.5	36.0	18.0				Assumes .5 FTE for 2 months
	Plan & Conduct Site Operational Readiness Test	Fixed Effort	2	10.0	20.0				Assume 2 FTEs, 2 weeks

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
4.0	**System Operations**					Project Total:		1949	
	System Operations						450		Assumes that 7 FTEs will be needed by GF team across entire project for involvement in delivering System Ops capabilities. Includes design, test, model building. Vendor delivery days are not represented.
	Manage System Operations					450			
	Manage System Operations Project	Case-based estimate	1.5	300.0	450.0				Assumes 1.5 FTEs for 15 Months
	Grid Security, Reliability Management, Real Time Operations Capabilities						403		Assume package application
	Requirements Analysis	Estimating Factor	4.5	35.0	158				
	Select Vendor	Fixed Effort	2	10.0	20				Assume 2 people, 2 weeks
	Functional Design	Estimating Factor	4.5	50 0	225				
	Development (code, configure, unit test)	Case-based estimate	0	0 0	0				See HW, SW & Other - to be done by Vendor
	Assembly Test								See HW, SW & Other - to be done by Vendor
	Plan Assembly Test	Estimating Factor	0	0.0	0				
	Execute Assembly Test	Estimating Factor	0	0 0	0				
	Learn Product Customization and Test	Estimating Factor	0	0 0	0				
	System Operations Data Setup						450.0		5 FTE for 5 Months
	Plan RTO EMS Data Model & Displays					50 0			
	Develop Overall Data Model & Display Approach	Case-based estimate	5	10.0	50.0				
	Build RTO EMS Data Model & Displays					400.0			
	Design and Build Data Model & Displays	Case-based estimate	5	80.0	400.0				
	Design Business Policies & Procedures						330.0		
	Design Workflows for Processes, Activities and Tasks					180 0			
	Create Process Maps	Processes	9	10 0	90 0				Assume 9 processes per capability
	Identify Skill Requirements	Processes	9	5 0	45.0				Assume 9 processes per capability
	Identify Process Performance Metrics and Initial Targets	Processes	9	5 0	45.0				Assume 9 processes per capability
	Maintain Processes, Policies, and Rules					150 0			
	Track and Manage Changes to Processes, Policies & Rules	Months	15	4 0	60.0				Assumed 15 months
	Manage On-going Integration of Solution	Months	15	6 0	90.0				
	Design Jobs & Compensation						66.0		
	Identify and Document New Roles	Case-based estimate	8	2 0	16.0				Based on number of new job roles. Assume 8 new job roles.
	Map Roles to Responsibilities	Case-based estimate	8	3 0	24 0				Based on number of new job roles. Assume 8 new job roles.
	Determine K, S, As (knowledge, skills & abilities) for each new role	Case-based estimate	8	3.0	24 0				Based on number of new job roles. Assume 8 new job roles.
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Internal Training Development and Delivery						250.0		
	System Ops. Training and Performance Support Development					160 0			
	Develop DTS Training Scenarios	# of Scenarios	20	8 0	160.0				
	System Ops. Training Delivery					90 0			
	Coordination Support	Case-based estimate	1	20 0	20.0				Includes time to work with other vendors to coordinate training (e.g., ESCA)
	Logistics Preparation and Support	Case-based estimate	1	10 0	10.0				
	Conduct functional testing of database/scenarios/training material	Case-based estimate	1	20 0	20 0				
	Dispatcher Training Delivery -- Trainers	Case-based estimate	1	40.0	40.0				Assumes training 20 users. 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
5.0	Market Operations					Project Total:		2244	
	Plan & Manage Project						450		Assumes that 8 FTEs will be needed by GF team across entire project for involvement in delivering Market Ops capabilities. Includes design, test, model building. Vendor delivery days are not represented.
	Plan & Manage Project	Estimating Factor	1.5	300.0	450				Assume 1.5 FTEs over 15 months
	Market Facilitation						250		Assume package application
	Requirements Analysis	Estimating Factor	2	40.0	80				
	Select Vendor	Fixed Effort	2	10.0	20				Assume 2 persons, 1 week
	Functional Design	Estimating Factor	2.5	60.0	150				
	Development (code, configure, unit test)	Case-based estimate			0				
	Assembly Test								
	Plan Assembly Test	Estimating Factor			0				
	Execute Assembly Test	Estimating Factor			0				
	Learn Product Customization and Test	Estimating Factor			0				
	Scheduling						250		Assume package application
	Requirements Analysis	Estimating Factor	2	40.0	80				
	Select Vendor	Fixed Effort	2	10.0	20				Assume 2 persons, 2 weeks
	Functional Design	Estimating Factor	2.5	60.0	150				
	Development (code, configure, unit test)	Case-based estimate			0				
	Assembly Test								
	Plan Assembly Test	Estimating Factor			0				
	Execute Assembly Test	Estimating Factor			0				
	Learn Product Customization and Test	Estimating Factor			0				
	Forecasting						20		Assume part of application provided under System Operations Project
	Requirements Analysis	Estimating Factor	1	5.0	5				
	Select Vendor	Fixed Effort	1	5.0	5				Assume 1 person, 5 days
	Functional Design	Estimating Factor	1	10.0	10				
	Development (code, configure, unit test)	Case-based estimate			0				
	Assembly Test								
	Plan Assembly Test	Estimating Factor			0				
	Execute Assembly Test	Estimating Factor			0				
	Learn Product Customization and Test	Estimating Factor			0				
	Market Operations Data Setup						245.0		
	Prepare Conversion Coordination Approach					45.0			
	Develop Overall Conversion Approach	Case-based estimate	1.5	10.0	15.0				
	Develop Detailed Conversion Coordination Plan	Case-based estimate	1.5	20.0	30.0				
	Coordinate & Validate Converted Data					200.0			
	Identify & Capture Required Business Data	Fixed Effort	4	20.0	80.0				
	Execute Conversion and Validate Results	Case-based estimate	4	30.0	120.0				
	Design Business Policies & Procedures						534.0		
	Design Workflows for Processes, Activities and Tasks					406.0			
	Create Process Maps	Processes	14	15.0	210.0				Assume 14 processes
	Identify Skill Requirements	Processes	14	10.0	140.0				Assume 14 processes
	Identify Process Performance Metrics and Initial Targets	Processes	14	4.0	56.0				Assume 14 processes
	Maintain Processes, Policies, and Rules					128.0			
	Track and Manage Changes to Processes, Policies & Rules	Months	16	4.0	64.0				Assumed 16 months
	Manage On-going Integration of Solution	Months	16	4.0	64.0				
	Design Jobs & Compensation						90.0		
	Identify and Document New Roles	Case-based estimate	8	3.0	24.0				Based on number of new job roles. Assume 8 new job roles.
	Map Roles to Responsibilities	Case-based estimate	8	4.0	32.0				Based on number of new job roles. Assume 8 new job roles.
	Determine K, S, As (knowledge, skills & abilities) for each new ro	Case-based estimate	8	4.0	32.0				Based on number of new job roles. Assume 8 new job roles.
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Internal Training Development and Delivery						295.0		
	Market Ops Training and Performance Support Design					50.0			
	Conduct Needs Analysis	Case-based estimate	2	10.0	20.0				Determine audience, content, delivery, etc.
	Create Standards	Case-based estimate	2	5.0	10.0				Development standards for program
	Design Training and Performance Support	Case-based estimate	2	10.0	20.0				Includes work schedule, training & performance support plan, design reviews and sign-off
	Market Ops Training and Performance Support Development					160.0			
	Market Facilitation Capability	Case-based estimate	1	65.0	65.0				
	Scheduling Capability	Case-based estimate	1	65.0	65.0				
	Forecasting Capability	Case-based estimate	1	30.0	30.0				
	Market Ops. Training Delivery					85.0			
	Coordination Support	Case-based estimate	1	20.0	20.0				Includes time to work with other vendors to coordinate training
	Logistics Preparation and Support	Case-based estimate	1	10.0	10.0				
	Conduct functional testing of database/scenarios/training mate	Case-based estimate	1	15.0	15.0				Assumes build time is included in Tech Arch estimates, assumes data needed for Training db is provided and supported by Testing Team.
	Internal Users Training Delivery – Trainers	Fixed Effort	1	40.0	40.0				Assumes training 20 users, 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver
	Market Operations Product Test						110		Assumes need for testing of interfaces MO to others
	Product Test/Fix-it					110			
	Plan Product Test	Case-based estimate	1	30.0	30				
	Execute Product Test	Case-based estimate	1	40.0	40				
	Fix Defects	Case-based estimate	1	40.0	40				

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
6.0	**Commercial Operations**					Project Total:		4459	
	Plan & Manage Project						366		
	Plan & Manage Project	Estimating Factor			366				
	Metering & Measurement Data Capability						422		Assume package application
	Requirements Analysis	Estimating Factor			22				
	Select Vendor	Fixed Effort	1	30.0	30				
	Functional Design	Estimating Factor			60				
	Development (code, configure, unit test)	Case-based estimate	1	200.0	200				Revenue quality meter data not available in many cases. Quality of meter data to be verified (Database, Analysis, Validation & Exception reporting). Required to allocate and/or roll-up available data to standard intervals and zones
	Assembly Test								
	Plan Assembly Test	Estimating Factor			41				
	Execute Assembly Test	Estimating Factor			55				
	Learn Product Customization and Test	Estimating Factor			14				
	Settlement & Billing Capability						1921		Assume package application
	Requirements Analysis	Estimating Factor			104				
	Select Vendor	Fixed Effort	1	60.0	60				
	Functional Design	Estimating Factor			285				
	Development (code, configure, unit test)	Case-based estimate	1	950.0	950				Estimated complexity is high due to: - Market settlements for congestion & balancing energy - Inadvertent calculations - Ancillary services provider of last resort - Grand-fathered contracts
	Assembly Test								
	Plan Assembly Test	Estimating Factor			195				
	Execute Assembly Test	Estimating Factor			260				
	Learn Product Customization and Test	Estimating Factor			67				
	Contract Management Capability						98		Assume part of the Customer Interface - Integration required
	Requirements Analysis	Estimating Factor			5				
	Select Vendor	Fixed Effort	0	0.0	0				
	Functional Design	Estimating Factor			15				
	Development (code, configure, unit test)	Case-based estimate	1	50.0	50				Configuration and integration with Customer Interface required to obtain settlement data for Contracts between - GridFlorida and Ancillary Services providers - Grand-fathered contracts
	Assembly Test								
	Plan Assembly Test	Estimating Factor			10				
	Execute Assembly Test	Estimating Factor			14				
	Learn Product Customization and Test	Estimating Factor			4				
	Commercial Operations Data Setup						256.0		
	Prepare Conversion Coordination Approach					40.0			
	Develop Overall Conversion Approach	Case-based estimate	1	20.0	20.0				
	Develop Detailed Conversion Coordination Plan	Case-based estimate	1	20.0	20.0				Assume Fixed Effort
	Coordinate & Validate Converted Data					216.0			
	Identify & Capture Required Business Data	Fixed Effort	1	96.0	96.0				Data from three utilities
	Execute Conversion and Validate Results	Case-based estimate	1	120.0	120.0				
	Design Business Policies & Procedures						160.0		
	Design Workflows for Processes, Activities and Tasks					96.0			
	Create Process Maps	Processes	12	5.0	60.0				Assume 12 processes
	Identify Skill Requirements	Processes	12	1.0	12.0				Assume 12 processes
	Identify Process Performance Metrics and Initial Targets	Processes	12	2.0	24.0				Assume 12 processes
	Maintain Processes, Policies, and Rules					64.0			
	Track and Manage Changes to Processes, Policies & Rules	Months	16	2.0	32.0				Assumed 16 months
	Manage On-going Integration of Solution	Months	16	2.0	32.0				
	Design Jobs & Compensation						30.0		
	Identify and Document New Roles	Case-based estimate	4	2.0	8.0				Based on number of new job roles. Assume 4 new job roles
	Map Roles to Responsibilities	Case-based estimate	4	2.0	8.0				Based on number of new job roles. Assume 4 new job roles.
	Determine K, S, As (knowledge, skills & abilities) for each new ro	Case-based estimate	4	3.0	12.0				Based on number of new job roles. Assume 4 new job roles
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Internal Training Development and Delivery						309.0		
	Commercial Ops. Training and Performance Support Design					21.0			
	Conduct Needs Analysis	Case-based estimate	1	8.0	8.0				Determine audience, content, delivery, etc
	Create Standards	Case-based estimate	1	3.0	3.0				Development standards for program
	Design Training and Performance Support	Case-based estimate	1	10.0	10.0				Includes work schedule, training & performance support plan, design reviews and sign-off
	Commercial Ops. Training and Performance Support Development					220.0			
	Metering & Measurement Data Capability	Case-based estimate	1	40.0	40.0				
	Settlement & Billing Capability	Case-based estimate	1	180.0	180.0				
	Commercial Ops. Training Delivery					68.0			
	Coordination Support	Case-based estimate	1	25.0	25.0				Includes time to work with other vendors to
	Logistics Preparation and Support	Case-based estimate	1	5.0	5.0				
	Conduct functional testing of database/scenarios/training mate	Case-based estimate	1	18.0	18.0				Assumes build time is included in Tech Arch estimates, assumes data needed for Training db is provided and supported by Testing Team
	Internal Users Training Delivery – Trainers	Case-based estimate	1	20.0	20.0				Assumes training 20 users, 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver
	Commercial Operations Product Test						897.0		
	Product Test/Fix-It					897			
	Plan Product Test	Estimating Factor			117				
	Execute Product Test	Estimating Factor			390				
	Fix Defects	Estimating Factor			390				

Min.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
7.0	Customer Interface Project					Project Total		3507	
	Plan & Manage Project						290		
	Plan & Manage Project	Estimating Factor			290				
	Customer Interface Capability						1878		
	Customer Management/Customer Information Application					1089			Assume package application
	Requirements Analysis	Estimating Factor			36				
	Select Vendor	Fixed Effort	3	10.0	30				Assume 3 people 2 weeks
	Functional Design	Estimating Factor			158				
	Development (code configure unit test)	Case-based estimate	1	525.0	525				Based on input from RTO#1
	Assembly Test								
	Plan Assembly Test	Estimating Factor			108				
	Execute Assembly Test	Estimating Factor			144				
	Users Product Customization and Test	Estimating Factor			37				
	Communication Management/Portal Interface					520			Assume package application
	Requirements Analysis	Estimating Factor			27				
	Select Vendor	Fixed Effort	3	10.0	30				Assume 3 people 2 weeks
	Functional Design	Estimating Factor			75				
	Development (code configure unit test)	Case-based estimate	1	250.0	250				Based on input from RTO#2
	Assembly Test								
	Plan Assembly Test	Estimating Factor			51				
	Execute Assembly Test	Estimating Factor			69				
	Users Product Customization and Test	Estimating Factor			18				
	Customer Interface Data Setup						256.8		
	Project Conversion Coordination Approach					40.0			
	Develop Overall Conversion Approach	Case-based estimate	1	25.0	25.0				
	Develop Detailed Conversion Coordination Plan	Case-based estimate	1	15.0	15.0				Assume Fixed Effort
	Coordinate & Validate Converted Data					216.8			Assumes 2 FTEs for 6 months
	Identify & Capture Required Business Data	Fixed Effort	1	96.0	96.0				
	Execute Conversion and Validate Results	Case-based estimate	1	120.0	120.0				
	Design Business Policies & Procedures						144.0		
	Design Workflows for Processes, Activities and Tasks					80.0			
	Create Process Maps	Processes	10	5.0	50.0				Assume 5 processes for portal and 5 processes for customer interface for a total of 10
	Identify Skill Requirements	Processes	10	1.0	10.0				Assume 5 processes for portal and 5 processes for customer interface for a total of 10
	Identify Process Performance Metrics and Lists	Processes	10	2.0	20.0				Assume 5 processes for portal and 5 processes for customer interface for a total of 10
	Maintain Processes, Policies, and Rules					64.0			
	Track and Manage Changes to Processes, Policies	Months	16	2.0	32.0				Assumed 16 months
	Manage On-going Integration of Solution	Months	16	2.0	32.0				
	Design Jobs & Compensation						30.0		
	Identify and Document New Roles	Case-based estimate	4	2.0	8.0				Based on number of new job roles. Assume 4 new job roles
	Map Roles to Responsibilities	Case-based estimate	4	2.0	8.0				Based on number of new job roles. Assume 4 new job roles.
	Determine K, S, As (knowledge, skills & abilities)	Case-based estimate	4	3.0	12.0				Based on number of new job roles. Assume 4 new job roles.
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Integral Training Development and Delivery						269.0		
	Customer Interface/Training and Performance Support Design					21.0			
	Conduct Needs Analysis	Case-based estimate	1	8.0	8.0				Determine audience content delivery, etc.
	Create Standards	Case-based estimate	1	3.0	3.0				Development standards for program
	Design Training and Performance Support	Case-based estimate	1	10.0	10.0				Includes work schedule, training & performance support plan, design reviews and sign-off
	Customer Interface Training and Performance Support Development					180.0			
	Customer Interface Capability	Case-based estimate	1	180.0	180.0				Includes contract management in customer application
	Customer Interface Training Delivery					68.0			
	Coordination Support	Case-based estimate	1	25.0	25.0				Includes time to work with other vendors to coordinate training
	Logistics Preparation and Support	Case-based estimate	1	5.0	5.0				
	Conduct functional testing of databases/scenarios	Case-based estimate	1	18.0	18.0				Assumes build time is included in Tech Arch estimates, assumes data needed for Training db is provided and supported by Testing Team.
	Internal Users Training Delivery -- Trainers	Case-based estimate	1	20.0	20.0				Assumes training 20 users, 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver
	Portal Usability Test						96.0		
	Portal Usability Test					96.0			
	Conduct Usability Test of Portal	Case-based estimate	1	50.0	50.0				Assuming portal will be the front end for accessing the systems that complete the overall business solution. Assuming users include individuals transacting Core Ops and Customer Interface processes as well as Customers viewing appropriate information.
	Customer Training Development and Delivery						263.0		
	Customer Training and Performance Support/Development					183.0			
	Conduct users need analysis for Customer training	Case-based estimate	1	10.0	10.0				
	Conduct Customer Role and Task Analysis	Case-based estimate	1	18.0	18.0				
	Create standards for Customer training documentation	Case-based estimate	1	5.0	5.0				
	Develop Customer training documentation	Case-based estimate	1	150.0	150.0				Assumes overview of Customer Registration application, entitlements training, asset management training, system ops and market ops training, process documentation outlining Customer roles, instruction on using/navigating the portal, viewing appropriate information and reports. Assumes 10 days of informational/training sessions. Assumes 20 hours development time per hour of delivery, 10days x 6hours per day = 60 hours delivery x 20 hours development = 1200 devel hours/8 = 150 days
	Customer Training Delivery					80.0			
	Train the Trainer delivery	Case-based estimate	2	15.0	30.0				Assumes 15 days of delivery (10 days to review content and 5 days to review training techniques and practice/feedback), 2 FTEs to deliver
	Internal Users Training Delivery -- Trainers	Case-based estimate	2	25.0	50.0				Assumes 5 conducts, 5 days of training for each conduct 2 FTEs to deliver
	Customer Readiness						48.0		
	Customer Readiness					48.0			
	Customer Readiness Activities	Case-based estimate	1	48.0	48.0				Assume 1 FTE at 2 days per week for 6 months working on communications presentations to market participants, coordinating with the organization, market monitor, regulators to get them ready for the "go live"
	Customer Information System Product Test						529		
	Product Test/Fix-It					529			
	Plan Product Test	Estimating Factor			76				
	Execute Product Test	Estimating Factor			252				
	Fix Defects	Estimating Factor			252				

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
8.0	**Asset Optimization Project**					**Project Total:**		**1796**	
	Plan & Manage Project						89		
	Plan & Manage Project	Estimating Factor			89				
	Network Planning Data Capability						206		Assume package application
	Requirements Analysis	Estimating Factor	1		11				Similar scope to RTO#1
	Select Vendor	Fixed Effort	1	10.0	10				Assume 1 person, 2 weeks
	Functional Design	Estimating Factor			30				Similar scope to RTO#1
	Development (code, configure, unit test)	Case-based estimate	1	100	100				Similar scope to RTO#1/RTO#2
	Assembly Test								
	Plan Assembly Test	Estimating Factor			21				
	Execute Assembly Test	Estimating Factor			27				
	Learn Product Customization and Test	Estimating Factor			7				
	Work Definition Capability						123		There will be no Asset Management System. GP expects to do this manually without a system.
	Requirements Analysis	Estimating Factor			33				
	Select Vendor	Fixed Effort	1	0 0	0				
	Functional Design	Estimating Factor			90				
	Development (code, configure, unit test)	Case-based estimate	1	0 0	0				
	Assembly Test								
	Plan Assembly Test	Estimating Factor			0				
	Execute Assembly Test	Estimating Factor			0				
	Learn Product Customization and Test	Estimating Factor			0				
	Work Execution Capability						324		Assume custom development of Access DB application
	Requirements Analysis	Estimating Factor			16				
	Select Vendor	Fixed Effort	3	10 0	30				Assume 3 people, 2 weeks
	Functional Design	Estimating Factor			45				
	Development (code, configure, unit test)	Case-based estimate	1	150 0	150				Based on implementing a work tracking application (not full Work or Maintenance Management)
	Assembly Test								
	Plan Assembly Test	Estimating Factor			31				
	Execute Assembly Test	Estimating Factor			41				
	Learn Product Customization and Test	Estimating Factor			11				
	Asset Optimization Data Setup						340.0		
	Prepare Conversion Coordination Approach					40.0			
	Develop Overall Conversion Approach	Case-based estimate	1	25 0	25 0				
	Develop Detailed Conversion Coordination Plan	Case-based estimate	1	15 0	15 0				Assume Fixed Effort
	Coordinate & Validate Converted Data					300 0			
	Identify & Capture Required Business Data	Fixed Effort	3	40.0	120.0				Assume asset data gathered from 3 companies
	Execute Conversion and Validate Results	Case-based estimate	3	60.0	180.0				
	Design Business Policies & Procedures						156.0		
	Design Workflows for Processes, Activities and Tasks					96.0			
	Create Process Maps	Processes	12	5.0	60 0				Assume 12 processes (4 per area)
	Identify Skill Requirements	Processes	12	1 0	12 0				Assume 12 processes (4 per area)
	Identify Process Performance Metrics and Initial Targets	Processes	12	2.0	24 0				Assume 12 processes (4 per area)
	Maintain Processes, Policies, and Rules					60.0			
	Understand & manage Utilities Work Policies and Rules	Fixed Effort	3	20.0	60 0				Assume 3 people for 4 weeks
	Design Jobs & Compensation						30.0		
	Identify and Document New Roles	Case-based estimate	4	2 0	8.0				Based on number of new job roles. Assume 4 new job roles.
	Map Roles to Responsibilities	Case-based estimate	4	2.0	8.0				Based on number of new job roles. Assume 4 new job roles.
	Determine K, S, As (knowledge, skills & abilities) for each new role	Case-based estimate	4	3 0	12 0				Based on number of new job roles. Assume 4 new job roles.
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Internal Training Development and Delivery						289.0		
	Asset Optimization Training and Performance Support Design					21.0			
	Conduct Needs Analysis	Case-based estimate	1	8.0	8.0				Determine audience, content, delivery, etc
	Create Standards	Case-based estimate	1	3.0	3.0				Development standards for program
	Design Training and Performance Support	Case-based estimate	1	10 0	10 0				Includes work schedule, training & performance support plan, design reviews and sign-off
	Asset Optimization Training and Performance Support Development					200 0			
	Network Planning	Case-based estimate	1	30.0	30.0				
	Work Definition	Case-based estimate	1	85.0	85.0				
	Work planning	Case-based estimate	1	85.0	85.0				
	Asset Optimization Training Delivery					68 0			
	Coordination Support	Case-based estimate	1	25.0	25.0				Includes time to work with other vendors to coordinate training
	Logistics Preparation and Support	Case-based estimate	1	5.0	5.0				
	Conduct functional testing of database/scenarios/training materi	Case-based estimate	1	18.0	18.0				Assumes build time is included in Tech Arch estimates, assumes data needed for Training db is provided and supported by Testing Team.
	Internal Users Training Delivery – Trainers	Case-based estimate	1	20.0	20.0				Assumes training 20 users, 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver
	Asset Optimization Product Test						239		
	Product Test/Fix-it					239			
	Plan Product Test	Estimating Factor			31				
	Execute Product Test	Estimating Factor			104				
	Fix Defects	Estimating Factor			104				

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
9.0	Corporate Services Project					Project Total:		2304	
	Project Management						190		
	Plan & Manage Project	Estimating Factor			190				
	Finance & General Accounting Capability						750		
	Financial System Application					618			Assume package application install
	Requirements Analysis	Estimating Factor			33				
	Select Vendor	Fixed Effort	1	30	30				
	Functional Design	Estimating Factor			90				
	Development (code, configure, unit test)	Case-based estimate	1	300	300				Based on starting point from RTO#1 Increased complexity includes: - Property/Fixed Asset Accounting - Misc. Invoicing - Credit Control/Assessment - Job Costing - Budgeting System Note - includes A/P, A/R, and G/L
	Assembly Test								
	Plan Assembly Test	Estimating Factor			62				
	Execute Assembly Test	Estimating Factor			82				
	Learn Product Customization and Test	Estimating Factor			21				
	Manage Facilities and Purchasing Application					133			
	Requirements Analysis	Estimating Factor			7				Assume application purchase and configuration
	Select Vendor	Fixed Effort	1	15	15				Application - Time & Expenses
	Functional Design	Estimating Factor			18				
	Development (code, configure, unit test)	Case-based estimate	1	60	60				Configuration of Time & Expenses
	Assembly Test								
	Plan Assembly Test	Estimating Factor			12				
	Execute Assembly Test	Estimating Factor			16				
	Learn Product Customization and Test	Estimating Factor			4				
	Payroll & Human Resources						324		Assume payroll and benefits is outsourced
	Human Resources Management Application					93			
	Requirements Analysis	Estimating Factor			4				
	Select Vendor	Fixed Effort	1	15	15				
	Functional Design	Estimating Factor			12				
	Development (code, configure, unit test)	Case-based estimate	1	40	40				Develop simple custom Personnel database - Complexity estimated at low
	Assembly Test								
	Plan Assembly Test	Estimating Factor			8				
	Execute Assembly Test	Estimating Factor			11				
	Learn Product Customization and Test	Estimating Factor			3				
	Time and Expense Reporting Application					148			
	Requirements Analysis	Estimating Factor			7				Assume application purchase and configuration
	Select Vendor	Fixed Effort	1	30	30				Application - Time and Expenses
	Functional Design	Estimating Factor			18				
	Development (code, configure, unit test)	Case-based estimate	1	60	60				Configuration of Time and Expenses
	Assembly Test								
	Plan Assembly Test	Estimating Factor			12				
	Execute Assembly Test	Estimating Factor			16				
	Learn Product Customization and Test	Estimating Factor			4				
	Payroll & Benefits Application					83			Assume payroll and benefits is outsourced
	Design Payroll and Benefits Process	Fixed Effort	1	200	200				Assume low level of complexity
	Design Executive Payroll and Benefits Process	Fixed Effort	1	150	150				
	Select Vendor to perform Payroll and Benefits functions	Fixed Effort	1	200	200				
	Implement the Payroll and Benefit process	Fixed Effort	1	280	280				
	Corporate Administration						50.0		
	Manage Internal Audits					50			
	Design internal audit requirements and schedule	Fixed Effort	1	200	200				
	Select Vendor to perform internal audits	Fixed Effort	1	100	100				
	Develop a post-Independence Day audit schedule	Fixed Effort	1	200	200				
	System Administration and IT Management						118		
	Problem Tracking Application					118			Assume package software used to track both internal and external problem tickets
	Requirements Analysis	Estimating Factor			5				
	Select Vendor	Fixed Effort	1	30	30				
	Functional Design	Estimating Factor			14				
	Development (code, configure, unit test)	Case-based estimate	1	45	45				Based on RTO experience
	Assembly Test								
	Plan Assembly Test	Estimating Factor			9				
	Execute Assembly Test	Estimating Factor			12				
	Learn Product Customization and Test	Estimating Factor			3				

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
	Design Business Policies & Procedures						176.0		
	Design Workflows for Processes, Activities and Tasks					112.0			
	Create Process Maps	Processes	14	5.0	70.0				Assume 14 processes across Corp Services
	Identify Skill Requirements	Processes	14	1.0	14.0				Assume 14 processes across Corp Services
	Identify Process Performance Metrics and Initial Targets	Processes	14	2.0	28.0				Assume 14 processes across Corp Services
	Maintain Processes, Policies, and Rules					64.0			
	Track and Manage Changes to Processes, Policies & Rules	Months	16	2.0	32.0				Assumed 16 months
	Manage On-going Integration of Solution	Months	16	2.0	32.0				
	Design Jobs & Compensation						79.0		
	Identify and Document New Roles	Case-based estimate	11	2.0	22.0				Based on number of new job roles Assume 7 new job roles
	Map Roles to Responsibilities	Case-based estimate	11	2.0	22.0				Based on number of new job roles Assume 7 new job roles
	Determine K, S, As (knowledge, skills & abilities) for each new rol	Case-based estimate	11	3.0	33.0				Based on number of new job roles Assume 7 new job roles
	Determine Profile Format/Interface with HR	Case-based estimate	1	2.0	2.0				
	Internal Training Development and Delivery						239.0		
	Corporate Services Training and Performance Support Design					21.0			
	Conduct Needs Analysis	Case-based estimate	1	8.0	8.0				
	Create Standards	Case-based estimate	1	3.0	3.0				
	Design Training and Performance Support	Case-based estimate	1	10.0	10.0				
	Corporate Services Training and Performance Support Development					150.0			
	Financial System Application	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software. Assume some time to customize documentation
	New Employee Orientation Job Aids	# of Job Aids	6	5.0	30.0				Includes New Hire orientation, email and other office equipment, voice/phone systems, etc
	Human Resources Management Application	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software Assume some time to customize documentation
	Time and Expense Reporting Application	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software Assume minimal time to customize documentation
	Purchasing & Facilities Application	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software. Assume minimal time to customize documentation
	Reporting Tools	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software. Assume some time to customize documentation for RTO #1 use
	Performance Monitoring/Budgeting/Other	Case-based estimate	1	20.0	20.0				Estimate assumes that training documentation will be included in package software Assume some time to customize documentation for RTO #1 use
	Corporate Services Training Delivery					68.0			
	Coordination Support	Case-based estimate	1	25.0	25.0				Includes time to work with other vendors to coordinate training
	Logistics Preparation and Support	Case-based estimate	1	5.0	5.0				
	Conduct functional testing of databases/scenarios/training material	Case-based estimate	1	18.0	18.0				
	Internal Users Training Delivery – Trainers	Case-based estimate	1	20.0	20.0				Assumes training 20 users, 2 conducts, 10 people per class, 10 days of training, 2 FTEs to deliver
	Corporate Services Product Test						377		
	Product Test/Fix-It					377			
	Plan Product Test	Estimating Factor			49				
	Execute Product Test	Estimating Factor			164				
	Fix Defects	Estimating Factor			164				

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
10.0	**Transition & Conversion Project**					**Project Total:**		**1110.0**	
	Plan and Execute Cutover						210.0		
	Plan for Cut-over					50.0			
	Create Cut-over Approach	*Case-based estimate*	1	10.0	10.0				Fixed effort
	Define Go/No-go Criteria	*Case-based estimate*	1	10.0	10.0				Fixed effort
	Create and Revise Detailed Cut-over Plan	*Case-based estimate*	3	10.0	30.0				Assumes 3 revisions, 10d each
	Execute Cut-over					160.0			
	Execute and Analyze Mock Cutovers	*Cutovers*	2	20.0	40.0				Assumes 2 cutover, 5 days to follow up
	Monitor Cut-over Activities	*Cutovers*	2	30.0	60.0				Assumes 2 cutovers, 2 weeks to monitor
	Follow-up on Issues After Cut-over	*Cutovers*	2	30.0	60.0				Assumes 2 cutovers, 2 weeks to follow-up
	Operational Preparation						900.0		
	Provide support of business processes for full operational capabilities after go live	*Case-based estimate*	1	900.0	900.0				Assumes adding 10 people for 4 months, 5 people for 2 months

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
11.0	**Technical Architecture Project**					Project Total:	3333	3333	
	Technical Architecture Integration						3333		
	Technical Infrastructure					1234			
	Setup Development Environments - Commercial Ops & Customer Interface	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 3 applications (Settlement & Billing, Portal, Customer Information)	12	12.0	144.0				Includes setup of servers and the environments/software to support the applications Assumed that Contract Management is done with MS Access and/or is part of Customer System, therefore no special environment setup
	Setup Development Environments - Corporate Services	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 3 applications (HR Mgmt System, Finance & Acctg, Time Reporting)	12	12.0	144.0				Includes the setup of servers and the environments/software to support the applications.
	Setup Development Environments - Asset Optimization	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 2 applications (Asset Management and Work Tracking)	8	14.0	112.0				Includes the setup of servers and the environments/software to support the applications.
	Setup Test Environments - Market Operations	Based upon number of development, test, environments for each application, includes time to config hw & install sw 3 environments (test, stage, train) for each package * 3 applications (OASIS, Scheduling, and Bidding)	9	14.0	126.0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Commercial Ops & Customer Interface	1 Production Environment, but much more complex due to volume and additional hardware, 3 applications	3	50.0	150.0				Includes the setup of servers and the environments/software to support the applications.
	Setup Production Environments - Corporate Services	1 Production Environment, 3 Applications	3	40.0	120.0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Asset Management	1 Production Environment, 2 Applications	2	40.0	80.0				Includes the setup of servers and the environments/software to support the applications.
	Setup Production Environments - Market Operations	1 Production Environment, 3 applications	3	14.0	42.0				Includes the setup of servers and the environments/software to support the applications
	Setup Infrastructure Environment	Estimate is three weeks for each major component Components are the backup system, monitoring system, scheduling system, and security system. Installation of the SAN is covered by Datalink services estimated in the HW/SW section and therefore is not included	4	15.0	60.0				Includes setup of hardware and configuration of the software components
	Project Web Site	Status Reporting, NetMeeting, etc on Central Location for Distant Locations	18	9.0	162.0				Hardware and software setup
	RTO #1 Administrative Environment Setup	Create/Install File Servers, Printers, LAN, Configure Security at project location	1	30.0	30.0				Assume that project site will NOT be at RTO #1 headquarters originally.
	Technical Infrastructure SME Time (Procurement)	4 days per month - life of project	16	4.0	64.0				Assume 16 months
	Security Architecture					124.0			

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
	Security	Used setup environment to build comprehensive security plan covering requirements - digital certificates, secure communications, etc	1	60.0	60.0				Case-based estimate from RTO#3
	Security Architect SME Time	4 days per month - life of project	16	4.0	64.0				Assume 16 months
	Performance					354.0			
	Application Performance Testing	Assume testing/tuning for all packaged applications # of package apps	10	20.0	200.0				Excludes System Operations and Market Operations Assumed that they will be performance tested by the vendor off-site
	Integration Performance Testing	Complete Performance Testing of Systems, Interfaces, Etc.	1	90.0	90.0				Includes All applications
	Performance SME Time	4 days per month - life of project	16	4.0	64.0				Assume 16 months
	Interface Architecture					129.0			
	Point to Point Interface Architecture	Standardize architecture approach for interfaces between System Ops, Comm Ops, Customer Interface	1	25.0	25.0				
	Portal Integration	Number of Applications = 4	4	10.0	40.0				Portal to integrate with Settlement & Billing, System Operations, Transmission Access Operations, Customer Information (4)
	Interface Architect SME Time	Life of project, 4 days a month	16	4.0	64.0				Assume 16 months
	Operations/Management Architecture					1348.6			
	Technology Management	Case-based estimate % of Total Workdays - Support for test/implementation environments	6%	1431.0 2	859				Percentage of total Commercial Operations + total Corporate Services days+total Asset Optimization days + total Market Operations days + total Customer Interface days
	DBA Support at RTO #1	Full time DBA for life of project	1	216.0	216.0				Assume 12 months of full time DBA support, DBA support not required for entire life of project
	Define DR Requirements By Application	Total Number of Applications = 10	10	5.0	50.0				Disaster Recover definition for System and Market Operations to be done by vendor and are not included in this estimate
	Backup/Recovery Implementation/Testing	Total Number of Applications = 10	10	16.0	160.0				Test the ability to successfully backup and recover systems.
	Operations Architect SME Time	4 days per month - life of project	16	4.0	64.0				Assume 16 months lifecycle of project
	Plan Disaster Recovery Procedures					108.0			
	Design Disaster Recovery Procedures	Case-based estimate	2	54.0	108.0				Assumes 2 FTEs for 3 months
	Develop and Maintain Standards					35.0			
	Develop and Maintain GUI Standards	Fixed Effort - 3 weeks	3	5.0	15.0				Assumes re-use from other RTO implementation
	Develop and Maintain Data Definition Standards	Fixed Effort - 4 weeks	4	5.0	20.0				Assumes re-use from other RTO implementation

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
12.0	**Integration Architecture, Test & Simulation Project**					**Project Total:**		**2618**	
	Cross-Capability Integration Testing						**605.0**		
	Define Cross-Capability Integration Test Approach					23.0			
	Define Cross-Package Test Strategy	Fixed Effort	1	5.0	5.0				
	Define Test Plan	Projects	6	3.0	18.0				Coordinate across 6 core project (System Ops, Market Ops, Commercial Ops, Corp Svcs, Customer & Asset Optimization)
	Define Cross-Capability Integration Test Model					260.0			
	Define Test Cycles	Cycles	5	2.0	10.0				
	Create Conditions and Test Scripts	Scripts	25	5.0	125.0				
	Define Test Data and Expected Results	Scripts	25	5.0	125.0				
	Execute Cross-Capability Integration Test					325.0			
	Execute Test Scripts	Scripts	25	5.0	125.0				
	Identify & Fix SIRs	SIRs (5/script)	125	1.0	125.0				Assume approx. 5 SIRs per script
	Follow-up on SIR Completion / Regression Test	Scripts	25	3.0	75.0				
	Simulation Planning						**260.0**		
	Define Simulation Approach	Fixed Effort	1	15.0	15.0				1 FTE for 3 weeks
	Develop Detailed Simulation Plan	Fixed Effort	3	15.0	45.0				3 FTE for 3 weeks
	Prepare Supporting Materials	Fixed Effort	5	40.0	200.0				5 FTE for 8 Weeks
	Support Simulation						**1600.0**		
	Support Simulation	Fixed Effort	40	40.0	1600.0				Assume 40 FTEs for 5 weeks
	Design Integration Architecture						**150.0**		
	Define Integration/Interfaces					120.0			
	Define Integration/Architecture	Fixed Effort	1	120.0	120.0				Assume 1 FTE for 24 weeks
	Confirm Supporting Architectures for Capabilities					30.0			
	Confirm Application & Interface Architecture	Application Areas	6	5.0	30.0				Six high-level app arch areas: System Operations, Commercial Operations, Corporate Services, Market Operations, Customer Interface, Asset Optimization

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
13.0	**Program Management**					**Project Total:**		**2434**	
	Program Management						**2434**		
	Manage Program	Estimating Factor	1	27042	2434				9% of total days.

Project/Capability	HW	SW	Other	Total	Comments

The following changes were made to the end state estimate post June 7th meeting.

The end state was not essentially changed, except where there were errors. The end state has not been adjusted for R1.

Facilities changes - Reduced from $10,932,360 to $5,131,366

(1) $500,000 was removed from the Control Center facility. It was for telecomm operating expenses and belongs in the Operating Budget

(2) Decreased lease costs for Control Center and Headquarters based on three months lease only See Facilities for additional detail.

(3) $140,000 was removed from System Operations for Mapboard upgrade, as it was/is already covered under Facilities - Control Center upfit.

(4) Removed upfit charge estimated on Headquarters. Assuming included in lease cost per. FPL.

System Operations

(1) Increased Voice Recorder from $32,000 to $80,000 (more accurate estimate)

(2) Increased Telecommunications Infrastructure from 100,000 to 500,000 (more accurate estimate)

(3) Added $200,00 for Outage Scheduling (long-run in advance) based on 50,00 for software and 150,000 for integration

(4) June 15th - minor decrease in First Release numbers. Increase in end state due to allocation of some EMS SW and Labour to end state for functions not in Release 1 (see System Operations Cost Summary &

Cost Summary - FPL.

Asset Optimization

(1) Increased estimate for PSSE software to 250,000 (instead of 200,000), based on estimate from FPL Hardware already in estimate.

Operating Budget

(1) Updated 3 sections in 2003 Operating Budget. changed legal fees to account for $8M being spent in R1, changed market monitor outsourcing fees to reflect 3 board and $500K estimate, and updated facilities fees to reflect new assumptions (change in square footage for Control Center from 38,000 to 45,000, change in in square footage for Headquarters from 37,500 to 25,000)

(2) Added a placeholder in 2003 Operating Budget to capture Lease Back Arrangement Fees. This field is blank until these numbers are known.

Organization

(1) Total organization size went up from 189 to 190.

Costs to Date

(1) Updated the money spent to date (to end of May) based on new information from applicants. See spreadsheet that documents this information.

Estimating Factors * Note: These are approximate. Some are used in the estimate directly & some are general guidance.

The following percentages are based on Functional Design thru Development for Software Configuration		
Program Management	9%	
Project Management	9%	
Requirements Analysis	8%	
Plan Application Assemby Test	15%	Assembly Test
Prepare and Execute Application Assembly Test	20%	Assembly Test
Functional Design	30%	
Learning Product Customization and Test	7%	
Product Test Fix	0%	
Plan Capability Product Test	7.5%	Product Test
Prepare and Execute Capability Product Test	25%	
Perform Capability Product Test Fixes	25%	
Workdays per Month		
Workdays per month	18	
Functional Architechture QA/Integration Testing/Fixit	40%	

Costs incurred by Applicants and GF LLC to end of May, 2001

(Information from FPC (Bill Slusser), FPL (Bob Croes), and Teco (Tom Salisbury) - for applicants
Information for GF LLC from Board of Managers - June 13th

FPL			
	To end of May, 2001	3,915,591	
	May, 2001		
	FPL Total	3,915,591	
Teco	Year 2000	1,356,000	
	Year 2001 to end of May	1,061,000	
	Teco Total	2,417,000	
FPC	Costs through end of May	1,708,827	
	FPC Total	1,708,827	
GF LLC	Costs through end of May	1,000,000	Board Selection, Consultant & Insurance Costs
		1,000,000	
	TOTAL FOR 3 APPLICANTS	9,041,418	

**** Note: Other companies may join GridFlorida. If they do, GF must reimburse their costs to join. This is an unknown amount at this point, partly as it is unknown how many/who may join.**

GridFlorida System Operations Estimates -- Hardware Costs

Component	FPL SCC Project	GF Requirement	Comment
SCC/Backup Systems Hardware			
Phase 1 System	2,319,811	2,319,811	Full requirement
DMS Servers (Compaq)		-260,967	Distribution servers & OS
Emergency Backup System	886,441	443,221	50% allocated from FP&L backup
Additional Compaq Allowance	-65,000	-50,724	Compaq allowance in original procurement
Subtotal System Hardware (UNIX)	3,141,252	2,451,340	
Compaq List Price Adder		2,262,776	48% Compaq discount in original procurement
Total System Hardware (UNIX	3,141,252	4,714,116	
NT Servers	224,821	224,821	Dell procurement; full requirement
Dispatcher's PCs	150,000	150,000	Dell procurement;full requirement
Adder from Base Bid	267,101	267,101	Unknown adder origin; full requirement
Total Dell HW	641,922	641,922	
Total HW	3,783,174	5,356,038	
Other EMS Hardware			
New GF System Operations		350,000	Vendor estimate
Total Incremental EMS Hardware Costs		5,706,038	
Other Hardware			
Mapboard		140,000	Mauell upgrade
Voice Recorder		32,000	Addition to Main Control Center
Telecommunications Infrastructure		100,000	Routers and switch equipment
Total Other Hardware		272,000	
Grand Total Hardware		5,978,038	

Florida Power & Light System Control Center
(Information from Ray Falcon)

Assumptions:
1) Assume warranty period of 5 yrs (5 day X 9 hour X next day response)

	COST
Phase 1 System	$2,319,811
Emergency Backup System	$886,441
Additional Compaq Allowance	($65,000)
Total System Hardware (UNIX)	$3,141,251
NT Servers	$224,821
Dispatcher's PC's	$150,000
Adder from Base Bid	**$267,101**
Total	**$3,783,173**

Summary of System Operations Costs - first release and second release

(Based on decisions made at the June 6th and 7th meeting)

	FIRST RELEASE	SECOND RELEASE	ASSUMPTIONS
Allocated Costs		(**Note end state numbers include all numbers)	
Hardware	0		
Software	5,185,446		From Cost Summary - FPL
Other - Labour	4,691,921		From Cost Summary - FPL
Incremental Costs to prepare EMS for GF plus some Allocated Costs			
Incremental Hardware		5,706,038	New HW for GF - see SO-HW sheet for details
Incremental Software		1,500,000	Mid-point of ESCA estimate & includes 248,620 nonsharable licenses from Cost Summary - FPL
Allocated Generation Software (50% Alloc)		502,999	From Cost Summary - FPL
Generation SW License - non-Transferable		280,988	From Cost Summary - FPL
Other (Vendor time & expenses)		1,250,000	Mid-point of ESCA estimate
Allocated Labour		604,277	From Cost Summary - FPL
Sys Ops Other Costs			
Database Management SW (Oracle)		700,000	
Telecommunications Infrastructure		500,000	
Voice Recorder	80,000		
Mapboard Upgrade (Mauell) (included in Control Center Facility costs)	0	0	
Sys Ops - Outage Scheduler			
Hardware & Software	50,000		
Estimated Labour (approx.) (for interfaces, integration, set-up)	150,000		
TOTALS	10,157,367	11,044,302	

** Note: Plus estimated 974 workdays to implement Sys Ops (project management, requirements analysis, process & procedures design, data conversion, training, etc.)
** Database Management SW (Oracle) is not required until GF has its own hardware (per Ray Falcon)
** No maintenance fee in the first 2 years due to a 2 year warranty

RTO #1
COST SUMMARY - FPL - 38

SYSTEM SOFTWARE COST SUMMARY

		% of Total Cost
Distribution Total	**$3,701,329**	26%
Generation Software Total	**$1,005,998**	10%
Generation License Total	**$280,988**	
Transmission Total	**$2,369,349**	18%
Total of System to be allocated	**$6,112,479**	46%
Additional ESCA Licenses	**$248,620**	
System Software Total	**$13,470,142**	100%

LABOR EXPENSES

	FPL Payroll	Consultant	ESCA	Training	Totals
Distribution Total	**$1,550,601**	**$467,699**	**$4,227,451**	**$137,181**	**$6,382,932**
Generation Software Total	**$305,189**	**$51,507**	**$832,057**	**$99,000**	**$1,287,753**
Transmission Total	**$1,196,105**	**$213,589**	**$3,261,064**	**$105,819**	**$4,776,576**
FPL System Totals	**$3,051,895**	**$732,794**	**$8,320,572**	**$342,000**	**$12,447,261**

GRID FLORIDA SYSTEM COSTS- NO HARDWARE

Allocation Percentage based on Transmission Points **46.07%**

	First Release	End State
Allocated System Cost	$2,816,096.81	
Transmission Only Software	$2,369,349	
Generation Software(50% Allocation)		$502,999
Generation Software License - Non transferable(see Note)		$280,988
Non sharable ESCA licenses (see Note)		$248,620
System Software Total	**$5,185,446**	**$1,032,607**

Note--Costs for Generation and "Non sharable" licenses may be obtained as an incremental costs from ESCA at some reduced cost.

System Total **$6,218,053**

Labor Costs (End state allocated at 50% for Gen)	First Release	End State	Totals
FPL	$1,196,105	$152,595	$1,348,699
Consultant	$213,589	$25,753	$239,342
ESCA	$3,261,064	$416,029	$3,677,093
Training(20% of total for start up)	$21,163 79	$9,900	$31,064
Totals	**$4,691,921**	**$604,277**	**$5,296,198**
TOTAL SYSTEM COSTS TO GRID FLORIDA	**$9,877,367**	**$1,636,883**	**$11,514,250**

	First Release							
Project/Component	Internal %	External %	Estimated Days	Internal Days	External Days	Labor	HW, SW, Facilities & Other***	Comments
Operationalizing the Business Project	80%	20%	1331	1065	266	$ 1,011,332	6,150,000	Approx 70% of Operationalize the Business Project Required Assume 75% of original HW, SW, Other costs for audits and start up legal fees
Establish Legal Entity & Develop Governance Model			0	0	0			
File with FERC & Manage Filing			0	0	0			
Consummate Agreements			0	0	0			
Develop Brand & Image			0	0	0			
Develop Budgets			0	0	0			
Certify Operations			0	0	0			
Design & Maintain Rules & Procedures			0	0	0			
Organization & People Project	60%	40%	1125	675	450	$ 1,147,296	5,853,600	Approximately 80% of the Organization and People required Assume 80% of original for Other (primarily outsourced items e.g. recruiting, searches, and moving/relocation costs)
Plan and Select Board & Transition			0	0	0			
Recruit Management & Board			0	0	0			
Design HR Policies/Practices			0	0	0			
Design Organization			0	0	0			
Design Compensation			0	0	0			
Develop Sourcing Strategy			0	0	0			
Recruit Personnel			0	0	0			
Communications			0	0	0			
Facilities Project	85%	15%	250	212	37	$ 173,472	3,505,066	Reduction for R1 varies depending on facility (e.g. headquarters or control center, etc.) See R1 Facilities & Systems spreadsheet for assumptions behind the reductions. Reduce project labour by 40%, due to less complexity at facilities.
Procure & Manage Project Space			0	0	0			
Confirm Control Center Facility Requirements			0	0	0			
Contract Control Center Site & Vendors			0	0	0			
Design IT / Telecom Infrastructure			0	0	0			
Upgrade Control Center Facility			0	0	0			
Test Site			0	0	0			
Procure & Manage Backup Facility			0	0	0			
Procure & Manage Headquater Facility			0	0	0			
*System Operations**	60%	40%	974	585	390	$ 993,735	10,157,367	Reduced project labor by 50% based on reduced scope in Sys. Ops For SW & Other (time & expenses) see System Operations HW is in end state. Assumed to use FPL HW in first release.
System Operations			0	0	0			
Grid Security, Reliability Management & Real Time Operations Capabilities			0	0	0			
System Operations Data Setup			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
*Market Operations**	50%	50%	1122	561	561	$ 1,290,300	1,000,000	Reduced by 50% from end state due to no market facilitation Vendor estimate, based on services model, is approx. $650,000/yr Discussion (June 7th) & decision to stay with service based estimate as GF not planning to buy the applications in here
Plan & Manage Project			0	0	0			
Market Facilitation			0	0	0			
Scheduling			0	0	0			
Forecasting			0	0	0			
Market Operations Data Setup			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
Market Operations Product Test			0	0	0			
Commercial Operations	100%	0%	134	134	0	$ 66,890	37,241	Assume labor is 3% of original estimate and HW, SW, Other is 1.6% of original estimate
Plan & Manage Project			0	0	0			
Metering & Measurement Data Capability			0	0	0			
Settlement & Billing Capability			0	0	0			
Contract Management Capability			0	0	0			
Commercial Operations Data Setup			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
Commercial Operations Product Test			0	0	0			

Project/Component	Internal %	External %	Estimated Days	Internal Days	External Days	Labor	HW, SW, Facilities & Other**	Comments
Customer Interface	50%	50%	701	351	351	$ 806,656	250,000	HW, SW & Facilities in Comm Ops for Customer Information, Portal
Plan & Manage Project			0	0	0			
Customer Interface Capability			0	0	0			
Customer Interface Data Setup			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
Portal Usability Test			0	0	0			
Customer Training Development and Delivery			0	0	0			
Customer Readiness			0	0	0			
Customer Interface Product Test			0	0	0			
Asset Optimization	60%	40%	1347	808	539	$ 1,373,648	706,000	Reduce Asset Optimization further by 25%,
Plan & Manage Project			0	0	0			based on making work tracking more manual,
Network Planning Data Capability			0	0	0			and assuming less of related tasks (data conversion, interval,etc.)
Work Definition Capability			0	0	0			Do not reduce HW & SW in first release.
Work Execution Capability			0	0	0			Continue to assume PSSE planning suite still required
Asset Optimization Data Setup			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
Asset Optimization Product Test			0	0	0			
Corporate Services Project	60%	40%	2304	1382	922	$ 2,350,160	1,769,080	Financial software, HRMS, Payroll & Benefits outsourcing
Plan & Manage Project			0	0	0			Assume 100% of original estimate
Finance & General Accounting Capability			0	0	0			
Payroll & Human Resources			0	0	0			
Corporate Administration			0	0	0			
System Administration and IT Management			0	0	0			
Design Business Policies & Procedures			0	0	0			
Design Jobs & Compensation			0	0	0			
Internal Training Development and Delivery			0	0	0			
Corporate Services Product Test			0	0	0			
Transition & Conversion Project	40%	60%	610.5	244	366.3	$ 781,440		This is about 4.7% of total Based on experience & similar
Plan & Execute Cutover			0	0	0			to original end state numbers.
Operational Preparation			0	0	0			
Technical Architecture Project	40%	60%	2166	866	1300	$ 2,772,734	1,361,250	Reduce labour days by 35% due to fewer applications, environments
Technical Architecture Integration & Infrastructure Management			0	0	0			and shorter project and technical support See R1 Tech Arch.
								Reduce HW, SW by 25% - most will still be required
Integration Test & Simulation Project	40%	60%	1440	576	864	$ 1,843,072		but will be some reduced complexity.
Cross-Capability Integration Testing			0	0	0			
Simulation Planning			0	0	0			
Support Simulation			0	0	0			
Design Integration Architecture			0	0	0			
Program Management & Monitor Co Start-up	40%	60%	1339	535	803	$ 1,713,401		
Program Management			0	0	0			
Monitor Co Startup Costs - Outsourced							200,000	MonitorCo will be outsourced for First Release (Assumed 50% of original cost to outsource it)
Total Days			14843	7994	6848	$16,324,136	$30,991,603	

Resource Split			Days	Cost/Day	Labor Cost		Other/Totals
	Internal		7,994	$ 500	$ 3,997,101		
	External		6,848	$ 1,800	$ 12,327,035		
SUBTOTAL			14,843		$ 16,324,136		$30,991,603
INCENTIVES FOR INTERNAL RESOURCES [1]					$ 300,000		
EXPENSES FOR INTERNAL RESOURCES [2]							$790,450
EXPENSES FOR EXTERNAL RESOURCES		15%					$1,849,055
TOTAL BEFORE CONTINGENCY					$ 16,624,136		$33,631,108
CONTINGENCY		30%	4,453		$ 4,987,241		$10,089,333
TOTAL AFTER CONTINGENCY			19,296		$ 21,611,376		$43,720,441
APPLICANTS & 6P LLC TOTAL COSTS TO DATE (end of May 2001)							$9,041,418
TOTAL PROJECT START-UP COSTS							$74,373,235
Y2001 & 2002 NON-PROJECT PAYROLL						$ 2,943,169	
Y2001 & 2002 BOARD & EXECUTIVE MANAGEMENT SALARY						$ 960,000	
CONTINGENCY		30%				$ 1,170,951	
TOTAL INTERIM OPERATING COSTS						$ 5,074,119	
TOTAL START-UP COSTS							$ 79,447,355

1 Assumes 30 personnel receive bonuses of $10,000 at completion of project

2 Assumes 50% of average internal resources travel, $4000 in expenses per month for 9 months total

RTO #1
R1 -Gantt Chart - 42

	Effort Days	Duration Months	Duration Weeks	Avg FTEs	check	Int/Tot Ratio	MONTHS 1	2	3	4	5	6	7	8	9
Operationalizing the Business Project	1331	9	36	7.4	1330		8	8	8	8	8	8	8	8.8	8
Internal FTEs						80%	4	4	6.4	6.4	6.4	6.4	6.4	6.8	6.4
External FTEs							1	1	1.6	1.6	1.6	1.6	1.6	1.7	1.6
Organization & People Project	1125	9	36.0	6.2	1120		4	4	4	7	7	7.0	7.0	7.0	7.0
Internal FTEs						60%	2.4	2.4	2.4	4.2	4.2	4.5	4.5	4.5	4.5
External FTEs							1.6	1.6	1.6	2.8	2.8	3	3	3	3
Facilities Project	250	4	16	3.1	250			2	3					3.6	4
Internal FTEs						85%		1.7	2.55					3	3
External FTEs								0.3	0.45					1	1
System Operations Project	974	7	28	7.0	970		4	4	8	8	8	8	8.5		
Internal FTEs						60%	2.4	2.4	4.8	4.8	4.8	4.8	5.1		
External FTEs							1.6	1.6	3.2	3.2	3.2	3.2	3.4		
Market Operations	1122	7	28	8.0	1120		5	5	9	9	9.5	9.5	9		
Internal FTEs						50%	2.5	2.5	4.5	4.5	4.75	4.75	4.5		
External FTEs							3	3	5	5	5	5	5		
Commercial Operations	134	7	28	1.0	140		1	1	1	1	1	1	1		
Internal FTEs						100%	1	1	1	1	1	1	1		
External FTEs							0	0	0	0	0	0	0		
Customer Interface & Customer Readiness	701	7	28	5.0	700		3	3	6	6	6	6	5		
Internal FTEs						50%	1.5	1.5	3	3	3	3	2.5		
External FTEs							1.5	1.5	3	3	3	3	2.5		
Asset Optimization	1347	7	28	9.6	1340		6	6	11	11	11	11	11		
Internal FTEs						60%	3.6	3.6	6.6	6.6	6.6	6.6	6.6		
External FTEs							2.4	2.4	4.4	4.4	4.4	4.4	4.4		
Corporate Services Project	2304	7	28	16.5	2200		10	10	18	18	18	18	18		
Internal FTEs						60%	6	6	10.8	10.8	10.8	10.8	10.8		
External FTEs							4	4	7.2	7.2	7.2	7.2	7.2		
Transition & Conversion Project	611	5	20	6.1	620						5	5	6	5	5
Internal FTEs						40%					2	2	2	3.2	3.2
External FTEs											3	3	3	4.8	4.8
Technical Architecture Project	2166	9	36	12.0	2100		7	7	13	13	13	13	13	13	13
Internal FTEs						40%	2.8	2.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2
External FTEs							4.2	4.2	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Integration Test & Simulation Project	1440	4	16	18.0	1440							8	8	28	28
Internal FTEs						40%						3.2	3.2	11.2	11.2
External FTEs												4.8	4.8	16.8	16.8
Program Management	1339	9	36	7.4	1340		4	4	8	8	8	8	9	9	9
Internal FTEs						40%	1.6	1.6	3.2	3.2	3.2	3.2	3.6	3.6	3.6
External FTEs							2.4	2.4	4.8	4.8	4.8	4.8	5.4	5.4	5.4

Projected Start-up Project Headcount

	1	2	3	4	5	6	7	8	9	Avg FTE
Total Projected FTEs	49	51	69	69	95	103	103	78	78	82
Projected Internal FTEs	28	30	40	40	52	55	55	37	38	44
Projected External FTEs	21	22	29	29	43	48	48	40	40	38

Salaries & Benefits (87 Emps and 8 Board Members)								
Q1		20%					$ 371,250	
Executive	0		0	405,000	101,250	$ -		Executives captured in start-up cost (and below)
Skilled Personnel	64		13	101,250	25,313	$ 324,000		75,000 with 35% loading
Assistants	20		4	47,250	11,813	$ 47,250		35,000 with 35% loading
Cumulative Non-Project Employees			17					
Q2		50%					$ 928,125	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	64		32	101,250	25,313	$ 810,000		
Assistants	20		10	47,250	11,813	$ 118,125		
Cumulative Employees			42					
Q3		100%					$ 1,451,250	
Executive	0		0	405,000	101,250	$ -		
Skilled Personnel	48		48	101,250	25,313	$ 1,215,000		Roughly 16 of the 64 (25%) total skilled personnel will still be working on the project in the final quarter. Therefore, 48 Skilled Personnel are assumed on the non-project payroll in the last quarter.
Assistants	20		20	47,250	11,813	$ 236,250		
Cumulative Employees			68					
INTERIM PAYROLL SUB-TOTAL							$ 2,750,625	
Salary for Board							360,000	Assumes 8 members for 9 months of work (3 quarters), includes incentives
Salary for Management							450,000	Assumes 3 team members for 6 months of work (assuming not all hired first month), average salary of $300K (prorated for 6 months each), includes incentives
Payroll Taxes			7%				192,544	
PROJECTED INTERIM PAYROLL BEFORE CONTINGENCY							$ 3,753,169	
CONTINGENCY			20%				750,634	
PROJECTED INTERIM PAYROLL AFTER CONTINGENCY							$ 4,503,803	

Project/Capability	HW	SW	Other	Total	Comments
Facilities Project - First Release	$ -	$ -	$ 3,505,066	$ 3,505,066	
Control Center Facility - First Release			316,216		Assume some space in LFO leased for last 90 days before go live - will be 11,000 sq. ft @ $39.13 per sq. ft. After 90 days, lease goes into operating budget. The rest of the Control Center space to a totall of 44,000 sq. ft will be occupied by GF at go live (switch over), so not including a lease cost for this. Assume space (in total) for approx. 50 people in R1. Existing control room and computer room are 16,500 sq ft each, plus there are multiple offices and conf. rooms
Office infrastructure (desktop, network routers, cables, wiring, etc.)			60,000		Assumes $3000/workstation for 20 workstations. Assumes $2000 is for desktops, $1000 is for the rest of the infrastructure
Office furniture (cubicles, desks, chairs)			115,000		Assumes $5000/workstation for 15 open office workstations, $8000/office for 5 closed office spaces
Building Lease fees			107,607		See assumption three lines above 90 days only for part of the space. Rest of lease cost goes into annual lease.
Tenant Improvement Allowance			0		Assumes no allowance
Upfit Construction of Office and Control Center			0		Assumes no upfit required for the LFO except upgrade of mapboard. B. Smith called Mavell - upgrade of mapboard estimated at 140k-150k- decision that this will be done in the end state per Ray Falcon
Back-Up Generator			0		Existing

Project/Capability	HW	SW	Other	Total	Comments
UPS/Batteries			0		Existing
Network/Phones			0		Includes CAT 5 and TI connections . Existing telecomm operating expense is $500,000 prorated to Ops. This number is included in the Operating Budget - so is zero here.
Business Telephone/PBX system			0		Existing
Separate Electric Service			0		Separate service for Control Center and 24x7 operations-existing
Facilities Design & Project Management -- Outsource			8,609		Assumes 8% of lease and upfit cost (industry average planning factor) Some work will need to be done to organize for GridFlorida.
Training site with dedicated user desktops			0		Assumes existing training room with no upfit per FPL
Moving Expenses to Permanent Facility			25,000		Includes hiring moving company to pack, transfer, and unpack assets to new facility. Assumes $500/person for 50 personnel
Permanent HQ Facility - First Release	0	0	1,258,750		Various scenarios exist initial (1) Sublet/try to get smaller space from one developer and then get more. (2) Move into industrial building (only $6/sq ft & then outfit it ($30/sq ft) more flexible, but may be more costly (3) Work with Divesting owners on using some vacant space they may have - would be at an embedded cost rate of $15/sq ft. Conclusion: Assumes 25,000 square feet, for 100 people (250 sq ft/person) at $25/sq ft. Other scenarios might be ways to reduce number later
Office infrastructure (desktop, network routers, cables, wiring, etc)			150,000		Assumes $3000/workstation for 45 workstations; Assumes $2000 is for desktops, $1000 is for the rest of the infrastructure. Assume only put in infrastructure for initial 50 people in R1.
Office furniture (cubicles, desks, chairs)			265,000		Assumes $5000/workstation for 45 open office workstations. $8000/office for 5 closed office spaces. Assume only put in office furniture for initial 50 people in R1.
Building Lease fees			156,250		See assumption three lines above. 90 days only for part of the space. Rest of lease cost goes into annual lease. Assumes 25,000 square feet, for 100 people (250 sq ft/person) at $25/sq ft.
Tenant Improvement Allowance			0		Assumes no allowance. Assumes moving into a building that is ready, other than office infrastructure above.
Upfit Construction of Office and Control Center			0		Assume not required to upfit/construction of office. Will be zero in R1 Usually - Includes 12,500 sq ft of Office space @ $75/sq ft, Upfit includes construction, electricity, HVAC, plumbing, and fire protection
Back-Up Generator			0		None
UPS/Batteries			250,000		To be used for critical business areas
Network/Phones			250,000		Includes CAT 5 and TI connections (estimate)
Business Telephone/PBX system			100,000		Estimate is installed business phone system with voicemail and battery backup to support 50 employees
Separate Electric Service			50,000		Separate service for 24x7 operations
Facilities Design & Project Management -- Outsource			12,500		Assumes 8% of lease and upfit cost (industry average planning factor)
Moving Expenses to Permanent Facility			25,000		Includes hiring moving company to pack, transfer, and unpack assets to new facility; Assumes $500/person for 50 personnel
Project Facility - First Release	0	0	495,000		
Project Space -- Lease			490,000		Assumes 50 project personnel, with an average of 250 sq ft/person located at the LFO at $39.13/sq ft. Assumes all space will be office space, with no additional requirements for Control Center space. Assumes lease will be for twelve months
Project Space -- Office Furniture	-		0		Assumes no upfit cost at LFO

Project/Capability	HW	SW	Other	Total	Comments
Project Space -- Office Infrastructure			5,000		Assumes $100/workstation to lease for 50 project personnel. Includes desktops, telephones, cables, wiring, etc.
Disaster Recovery Facility - First Release	0	0	1,435,100		Assume existing back-up site at the customer service center East in West Palm Beach
Building Lease Fees			8,100		Assumes 1,200 sq ft facility for FPL Customer Service Center East and office space; Assumes $27/sq ft;
Tenant Improvement Allowance			0		Assumes no allowance
Office Furniture			21,000		Assumes $3000/workstation for low-end open office space, Assumes 7 workstations
Office Infrastructure			21,000		Assumes $3000/workstation for 7 workstations
Upfit Construction of Office and Control Center			0		Assumes no upfit required
System Operations HW & SW			0		Backup Sys. Ops. HW & SW covered in original FPL EMS project. See SO-HW spreadsheet for details. Allocated 50% of the backup to Grid Florida - this number is included in System Operations on this spreadsheet.
Market Operations HW & SW			0		Assumes no Market Ops Backup software and hardware in Release 1
Commercial Operations HW & SW			75,000		Assumes no Comm. Ops Backup software - as using FPL home grown solution. Assumes minimal HW for backup of Comm Ops in R1
Corporate Services HW & SW			350,000		Assumes arrangement could be worked out with outsource provider for hot site backup.
Asset Optimization HW & SW			110,000		Assumes arrangement could be worked out with outsource provider for hot site backup.
Infrastructure HW & SW			600,000		Includes scaled down Disk storage, tape backup/recovery unit, network equipment, and minimal SW
Telecommunications Infrastructure			250,000		Assumes some level of reconfiguration will be required
Telecommunications Operating Expense			0		Operating Expense covered under 2003 Operating Budget

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
11.0	**Technical Architecture Project**					Project Total:		2172	
	Technical Architecture Integration						2172		
	Technical Infrastructure					984			
	Setup Development Environments - Commercial Ops & Customer Interface	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 2 applications (Settlement & Billing, Customer Information)	8	12 0	96 0				Includes setup of servers and the environments/software to support the applications Assumed that Contract Management is done with MS Access and/or is part of Customer System, therefore no special environment setup
	Setup Development Environments - Corporate Services	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 3 applications (HR Mgmt System, Finance & Acctg, Time Reporting)	12	12 0	144 0				Includes the setup of servers and the environments/software to support the applications.
	Setup Development Environments - Asset Optimization	Based upon number of development, test, environments for each application, includes time to config hw & install sw 4 environments (build, test, stage, train) for each package * 1 applications (Work Tracking)	4	14 0	56 0				Includes the setup of servers and the environments/software to support the applications
	Setup Test Environments - Market Operations	Based upon number of development, test, environments for each application, includes time to config hw & install sw 3 environments (test, stage, train) for each package * 2 applications (OASIS, Scheduling)	6	14 0	84 0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Commercial Ops & Customer Interface	1 Production Environment, but much more complex due to volume and additional hardware, 2 applications	2	50 0	100 0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Corporate Services	1 Production Environment, 3 Applications	3	40,0	120,0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Asset Management	1 Production Environment, 1 Applications	1	40 0	40 0				Includes the setup of servers and the environments/software to support the applications
	Setup Production Environments - Market Operations	1 Production Environment, 2 applications	2	14 0	28 0				Includes the setup of servers and the environments/software to support the applications
	Setup Infrastructure Environment	Estimate is three weeks for each major component. Components are the backup system, monitoring system, scheduling system, and security system Installation of the SAN is covered by Datalink services estimated in the HW/SW section and therefore is not incl	4	15 0	60,0				Includes setup of hardware and configuration of the software components
	Project Web Site	Status Reporting, NetMeeting, etc on Central Location for Distant Locations	10	9 0	90 0				Hardware and software setup
	RTO #1 Administrative Environment Setup	Create/Install File Servers, Printers, LAN, Configure Security at project location	1	30 0	30 0				Assume that project site will NOT be at RTO #1 headquarters originally.
	Technical Infrastructure SME Time (Procurement)	4 days per month - life of project	9	4 0	36 0				Assume 9 months
	Security Architecture					96.0			
	Security	Uses setup environment to build comprehensive security plan covering requirements - digital certificates, secure communications, etc	1	60 0	60 0				Case-based estimate from RTO#3
	Security Architect SME Time	4 days per month - life of project	9	4 0	36 0				Assume 9 months

No.	Project/Work Package/Task/Sub-Task	Unit/ Assumptions	Total Units	Days/Unit Assumption	Task Workdays	W.P. Workdays	Total Workdays	Project Workdays	Comments/Assumptions
	Performance					286.0			
	Application Performance Testing	Assume testing/tuning for all packaged applications # of package apps	8	20.0	160.0				Excludes System Operations and Market Operations Assumed that they will be performance tested by the vendor off-site
	Integration Performance Testing	Complete Performance Testing of Systems, Interfaces, Etc	1	90.0	90.0				Includes All applications
	Performance SME Time	4 days per month - life of project	9	4.0	36.0				Assume 9 months
	Interface Architecture					61.0			
	Point to Point Interface Architecture	Standardize architecture approach for interfaces between System Ops, Comm Ops, Customer Interface	1	25.0	25.0				
	Portal Integration	Number of Applications = 0	0	10.0	0.0				Portal to integrate with Settlement & Billing, System Operations, Transmission Access Operations, Customer Information (4) June 8 - assume no portal in R1
	Interface Architect SME Time	Life of project, 4 days a month	9	4.0	36.0				Assume 9 months
	Operations/Management Architecture					702.5			
	Technology Management	Case-based estimate % of Total Workdays - Support for test/implementation environments	6%	5608.0	336				Percentage of total Commercial Operations + total Corporate Services days+total Asset Optimization days + total Market Operations days + total Customer Interface days
	DBA Support at RTO #1	Full time DBA for life of project	1	162.0	162.0				Assume 9 months of full time DBA support DBA support not required for entire life of project
	Define DR Requirements By Application	Total Number of Applications = 8	8	5.0	40.0				Disaster Recover definition for System and Market Operations to be done by vendor and are not included in this estimate.
	Backup/Recovery Implementation/Testing	Total Number of Applications = 8	8	16.0	128.0				Test the ability to successfully backup and recover systems
	Operations Architect SME Time	4 days per month - life of project	9	4.0	36.0				Assume 9 months lifecycle of project
	Plan Disaster Recovery Procedures					108.0			
	Design Disaster Recovery Procedures	Case-based estimate	2	54.0	108.0				Assumes 2 FTEs for 3 months
	Develop and Maintain Standards					35.0			
	Develop and Maintain GUI Standards	Fixed Effort - 3 weeks	3	5.0	15.0				Assumes re-use from other RTO implementation
	Develop and Maintain Data Definition Standards	Fixed Effort - 4 weeks	4	5.0	20.0				Assumes re-use from other RTO implementation

	Construction Costs	1	178,000,000	$178,000,000	$178,000,000	Includes Land & Land Rights, Renew & Replacement, Expansion, & Generation Integration Costs. FPL = $154M; TECO = $24M
	TOTAL CAPITAL EXPENSE				$178,000,000	
O&M Related costs						
		1	48,113,337	$ 48,113,337	$ 74,713,337	Assumes $34,113,337M for FPL Assets & $13.5M for TECO assets, annually. In addition .5 M for TECO for transmission switching operations & telecom & computer costs.
	Property Taxes	1	23,500,000	$ 23,500,000		Assumes $20M annually for FPL and $3.5M for TECO
	Offices, Service Centers and Storerooms	1	2,000,000	$ 2,000,000		Cost-based lease rates on service centers
	Use Fee for Shared Station Equipment	1	1,100,000	$ 1,100,000		GF will pay DOs for use of shared station equipment (such as RTUs, battery banks, etc), also DOs will pay a use fee to GF for use of the same equipment at its stations. Estimated to be $1 M for FPL. Agreed to use an estiamte 10% of FPL number for TECO = $100k (June 18) Not applicable for FPC.
Salaries & Benefits (87 Emps)					$ 10,972,800	
	Executive	3	405,000	$ 1,215,000		300,000 with 35% loading
	Skilled Personnel	64	101,250	$ 6,480,000		75,000 with 35% loading
	Assistants	20	47,250	$ 945,000		35,000 with 35% loading
	Annual Incentives	8,640,000	20%	$ 1,728,000		Incentives for all personnel
	Payroll Taxes	8,640,000	7%	$ 604,800		
Lease Back Arrangements					$ 23,100,000	
	Information Services	0	-	$ -		This is a placeholder for costs associated with Utility Lease Back Arrangements.
	Access Arrangements	1	23,100,000	$ 23,100,000		This is the cost that GF must pay to the Utilities for their cost of ownership of the land. This covers the lease of the land to access GridFlorida's facilities (e.g. GF owns the facilities, FPL owns the land). Estimated at $21M for FPL. Agreed to use an estimate of 10% of FPL number for TECO = $2 1M (June 18) Not applicable for FPC.
Legal & Consulting Services					$ 8,000,000	TECO Estimate
	Legal	1	8,000,000	$ 8,000,000		This is based on $2M a quarter.
Control Center Facilities and Building Services					$ 1,796,067	Assumes lease-back arrangement to FPL for control center facilities in Miami.
	Annual Lease Cost	1,760,850	2%	$ 1,796,067		Assumes annual lease agreement for 7-10 years for 45,000 square feet @ $39.13.Existing control room and computer room are 16,500 sq ft each. Assumes a 2% increase of lease cost each
Headquarters Facilities and Building Services					$ 637,500	Assumes that location is somewhere other than Miami, however, Miami was used to estimate this as it is most expensive city.
	Annual Lease Cost	625,000	2%	$ 637,500		Assumes annual lease agreement for 7-10 years for 25,000 square feet at $25/sq. ft. Assumes a 2% increase of lease cost each year
Disaster Recovery Facility					$ 140,048	
	Annual Lease Cost	32,400	2%	$ 33,048		
	Computer Services Maintenance	535,000	20%	$ 107,000		20% of HW acquisition cost.
	Telecommunications	1	-	$ -		FPL stated that this number is included in the overall Telecomm # of $750,000.
Computer Services/Project Dev Costs		1,813,790	20%	$ 362,758	$ 362,758	20% of HW Acquisition cost for everything but Disaster Recovery Number comes from total Application Hardware. See RI Operating Budget- Computer Services spreadsheet for more detail on how this number was calculated
Insurance		1	2,000,000	$ 2,000,000	$ 10,470,000	Assumes insurance for Property, Surety Bond, Brokerage Fees, Automobile, Liability, Directors & Officers, Workers Comp
	Storm Fund Insurance	1	8,470,000	$ 8,470,000		Based on an estimate of $7.7M from FPL to cover assets from FPL. Agreed to use an estimate of 10% of FPL number for TECO = 770k (June 18). FPC will continue to have its own assets and own storm fund.
Telecommunications		1	774,000	$ 798,000	$ 798,000	Based on FPL's prorated costs of $750k currently. In addition estimated ISP costs for internet connectivity at $2000/month ($24k).
Board Of Directors		8	60,000	$ 480,000	$ 480,000	8 members, $60,000 annual comp., includes incentives and expense reimbursement
Mtgs., Travel, Seminars		1	500,000	$ 500,000	$ 500,000	
Market Monitoring Fees		1	620,000	$ 620,000	$ 620,000	3 board members and $500,000/yr estimate for outsourcing (based on quote from Charles River to GridSouth)
Payroll Administration		$ 10,848,000	1%	$ 108,480	$ 108,480	From ADP PEO 1% of gross annual salary. (Includes board of directors)
Benefits Administration		$ 10,368,000	2%	$ 207,360	$ 207,360	From ADP PEO, 2% of gross annual salary (Includes board of directors)
Financial & Operational Auditing		1	1,800,000	$ 1,800,000	$ 1,800,000	Assumes Annual Audit = $1.5M; Add'l audits = $300k.
Employee Training Budget (external)		45	3,000	$ 135,000	$ 135,000	45 employees, $3000 per employee. Assumes limited training in first year.
Miscellaneous Fees		1	25,000	$ 25,000	$ 25,000	Assumes annual FRCC membership fee of $25k; FPUC will assess a 1/8 of 1% of annual revenues which are unknown at this time.
FERC Fees		1	1,000,000	$ 1,000,000	$ 1,000,000	As a benchmark, PJM Operating Budget line item for FERC Fees were $2M in 1999.
Communications/Community & Customer Relations		1	500,000	$ 500,000	$ 500,000	Charitable contributions assumes 1% of Labor Costs, the Balance was added for Communications & Customer Relations
Miscellaneous		1	500,000	$ 500,000	$ 500,000	Includes office expenses for postage, supplies, etc. Added money for annual report production, etc.
Total Before Contingency					$136,866,350	
Contingency		20%			$ 27,373,270	
Total After Contingency					$164,239,620	

Computer Services/Project Development Costs in R1 Operating Budget

Project	Percent of HW, SW, Other Used In R1	Total HW for End State	Total for R1	Assumption
SO	0%	$0.00	$0.00	No HW for R1
CO	2%	$352,000.00	$7,040.00	Based on $100,000 assumption of using FPL's system
Corp Services	100%	$490,000.00	$490,000.00	Based on the need for all Corp Svcs HW in R1
Infrastructure	75%	$1,025,000.00	$768,750.00	Based on the need for 75% of infrastructure due to reduced complexity for R1
MO		$2,612,500.00	$390,000.00	Based on estimate from OATI to outsource HW for R1. End state is based on buying HW for MO.
AO	100%	$108,000.00	$108,000.00	Based on the need for all Corp Svcs HW in R1
Customer	20%	$250,000.00	$50,000.00	Based on reduction of customer interface complexity in R1
Total			**$1,813,790.00**	
Reduced by 20%			**$362,758.00**	

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
1	System Operations – Allocated EMS Costs from FPL new EMS	▪ Estimated following components: o Hardware - Allocated zero$ – see incremental numbers o Software - Allocated 50% of total numbers from FPL Cost Breakdown numbers. Subtracted numbers for Generation o Other – Allocated 50% of total from FPL (other includes vendor and FPL labor)	▪ The first release will include Allocated EMS costs for SW and Other (labor and expenses) ▪ First release will function on FPL HW	▪ N/A	**Remaining:** ▪ No additional allocated costs **Incremental:** ▪ No additional allocated costs. See incremental below.
2	System Operations – Incremental EMS costs to prepare for GridFlorida	▪ Based on estimate from Vendor of incremental costs to change the FPL EMS to a GF RTO EMS. o Hardware – Assumed GF requires its own hardware plus incremental hardware. Numbers based on original FPL hardware (5.356 M), plus incremental hardware (350k)	▪ The first release will NOT include incremental EMS costs for HW, SW, and Other. This will be captured in the End State ▪ Vendor indicates incremental costs include: license fees for point counts associated with GF sizing,	▪ 1 Director ▪ 10-12 Real Time Operations ▪ 6 Grid Security and Reliability Management ▪ 5 Operations Engineers ▪ 1-2 Operations Support (Procedures and Training) ▪ Total= 23-26	**Remaining:** ▪ Requirements analysis, design, and build for changes to EMS to accommodate market based functions (CM, EI) ▪ All incremental HW, SW and Other will need to

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Exhibit No. _____ (BLH-1)
Business Blueprint Documents

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		○ Software – 1.5 M based on mid-point of vendor estimate ○ Other – 1.25 M based on mid-point of vendor estimate for labor & expenses	interfacing to Market Operations, project engineering, project management, testing, incremental hardware, installation, and planning associated with changing the FPL EMS to a GF RTO EMS.	Operations Technical Support ▪ 1 Director ▪ 1 Application Development and Maintenance ▪ 0 Network and Ops Support ▪ 1 Database Support ▪ 0 Telecomm ▪ Total= 3 (plus 2 from Commercial Operations) ▪ Chief Operating Officer will reside over Market Operations, System Operations, Asset Optimization, Billing and Transmission Services ▪ 2 admin people will be shared amongst Market Operations, System Operations, Asset Optimization, Billing	be accounted for in End State **Incremental:** ▪ Additional testing to reintegrate EMS with other components

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
				and Transmission Services	
3	System Operations – Other	▪ Database Management SW – assumed that GF requires own license. FPL license cannot be used by two companies. ▪ Telecommunications Infrastructure – assumed minimal additions required ▪ Voice Recorder – assumed GF will require its own voice recorder ▪ Mapboard – enhancements to existing mapboard required to fit for GF. The cost for this is in the Control Center Facility.	▪ The following will be a part of the First Release: Database Management SW and Voice Recorder and Mapboard (mapboard covered in Control Center Facility costs) ▪ Telecommunications Infrastructure will be in the end state, assuming use FPL telecomm. in first release.	▪ N/A	**Remaining:** ▪ Telecommunications Infrastructure ▪ **Incremental:**
4	System Operations – Other Labor	▪ Cost for other labor includes tasks for: requirements analysis and functional design, integrated design and testing with other capabilities, business process design, job design, training design and	▪ Assume reduction to manage capability, based on reduced scope in Release 1 ▪ Continue to require some of each of the tasks listed.	▪ N/A	**Remaining:** ▪ Reqts. analysis, design and overall project management related to changes and additions in functions in

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		development, and data set-up.			second release; e.g. GF takes on more direct control of Tx assets, new congestion management model, etc. **Incremental:** ▪ Some limited rework of Release 1 functions and retest with new functions
5	Market Operations	Based on vendor estimates for the following components: ▪ OASIS ▪ Energy Scheduling & transmission Service Management o Scheduler o ATC posting o Interchange checkout o Settlement information ▪ Forecasting o Load	▪ No market facilitation o Congestion management o Ancillary Services o Energy Imbalance ▪ Customization of OASIS to GridFlorida requirements ▪ NERC tag approval service operational ▪ Simple tool required to integrate Tagging and	▪ 1 Director ▪ 5 Schedulers ▪ 0 Forecasting ▪ 0 Market Facilitation ▪ Outsource Tagging ▪ Total= 6 ▪ Chief Operating Officer will reside over Market Operations, System Operations, Asset Optimization, Billing	**Remaining:** ▪ Market facilitation o Congestion management o Ancillary Services o Energy Imbalance **Incremental:** ▪ Interface with new settlements and

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		○ Ancillary services ▪ Tagging Services ▪ Pricing & Bidding ▪ ATC Calculator ▪ Assume GridFlorida requires new Hardware - $2.61M based on vendor estimates. ▪ Software - $2.95M Based on mid-point of vendor estimates ▪ Other – Includes requirements definition, design, development configuration, testing training and data set up - $6.74M	OASIS ▪ MAP tool required to manage redispatch ▪ Utilise FPC ATC/TTC calculator ▪ GridFlorida will contract to procure and settle ancillary services from control areas and IPPS as provider of last resort	and Transmission Services ▪ 2 admin people will be shared amongst Market Operations, System Operations, Asset Optimization, Billing and Transmission Services	billing ▪ Transition from contracted to market based pricing for Congestion management, Energy Imbalance and ancillary services.
6	Commercial Operations	Based on: ▪ Settling for the following tariff based charges: ○ Transmission Service - Point to Point ○ Transmission Service – System Wide Charge	GridFlorida will Settling for the following charges: ○ Transmission Service - Point to Point ○ Transmission Service – System Wide Charge	▪ 1 Supervisor ▪ 0 Metering and Measurement Data ▪ 3 Settlements and Billing ▪ 0 Contract Management ▪ Total= 4	**Remaining:** ▪ Market for congestion management ▪ Market for ancillary services ▪ Transfer of

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		○ Transmission Services – Grid Management ○ Ancillary Services – Scheduling, System Control and Dispatch ○ Ancillary Services – Reactive Supply & Voltage Control ○ Ancillary Services – Energy Imbalance ○ Ancillary services – Spinning Reserve ○ Congestion Management ○ Losses ▪ Ancillary service market – settle on market price by the hour ▪ Balancing energy market – settled on market based price by the hour ▪ Congestion management – ○ PTR ownership over flow gates ○ Auction of spare and unused RTRs ○ Recallable PTRs (2hours	○ Transmission Service – Zone transmission charge ○ Transmission Service – network interchange ○ Transmission Services – Grid Management ○ Ancillary Services – Scheduling, System Control and Dispatch ○ Ancillary services – Spinning and Non-spinning Reserve ○ Congestion Management ○ Losses ▪ No settlement for reactive ▪ No market for congestion management – performed using TLR process and re-dispatch costs will be allocated to customers based on load share ratio	Operations Technical Support ▪ 1 Application Development and Maintenance ▪ 0 Network and Ops Support ▪ 1 Database Support ▪ 0 Telecomm ▪ Total= 2 (plus 3 for System Operations) ▪ Chief Operating Officer will reside over Market Operations, System Operations, Asset Optimization, Billing and Transmission Services ▪ 2 admin people will be shared amongst Market Operations, System Operations, Asset Optimization, Billing and Transmission	settlement responsibility to GridFlorida ▪ Revenue quality metering required or method to allocate loads to market services **Incremental:** ▪ Transfer of settlement and resettlement history ▪ Transfer of customer information ▪ Data integrity check ▪ Data format changes (map to second release data specifications) ▪ Settlement consistency (must be able to resettle

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		prior to dispatch) o Congestion on non-flow gates - costs allocated to customers on congested path in load ratio share ▪ Settling & managing inadvertent ▪ Settling for grandfathered contracts from 3 control areas ▪ Revenue Quality Meter Data available ▪ Hardware - $0.352M Based on Vendor estimates ▪ Software - $2.0M Based on Vendor estimates ▪ Other costs include system Requirements, design, development, data set up, policies and procedures, training and test – 4459 Days Settling for grandfathered contracts from 3 control areas ▪ Revenue Quality Meter Data available	▪ No market for energy imbalance ▪ No market for ancillary services ▪ GridFlorida will contract to procure (and will settle) ancillary services from control areas and IPPS as provider of last resort ▪ First release will utilise the current FPL Transmission Billing System. (The System is currently used to settle contracted transmission charges with 2 FPL customers.) The system will be customized to settle for GridFlorida First release OATT (see list above) Estimated time to customize the FPL system for GridFlorida first release is 80-120	Services	in the second release bills generated in first release) Transition from first release system to end-state system

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		▪ Hardware - $0.352M Based on Vendor estimates ▪ Software - $2.0M Based on Vendor estimates ▪ Other costs include system Requirements, design, development, data set up, policies and procedures, training and test – 4459 Days	days Estimated cost to customize the FPL system for GridFlorida first release is $100,000		
7	Asset Optimization	▪ Based on: o Network Planning capability in place o Limited Work Definition – mainly manual o A simple tool (probably access and/or reporting) for Work Execution o Assumption that some Asset data will need to be converted and set-up for GF o Assumes 22-25 personnel	▪ Same Network Planning capability, with fewer people ▪ Same limited Work Definition – mainly manual ▪ Small decrease in the amount of time spent on tracking Work Execution. Assumes implementation of a very simple tool. ▪ High risk: Some external SMEs thought that Asset Optimization was already very small	▪ 1 Director ▪ 10 Network Planning ▪ 2-3 Work Definition ▪ 2-3 Work Execution ▪ Total= 15-17 ▪ Chief Operating Officer will reside over Market Operations, System Operations, Asset Optimization, Billing and Transmission Services ▪ 2 admin people will be shared amongst Market Operations, System	**Remaining:** ▪ Will require additional asset optimization capability based on better defined requirements & information expected by the utilities **Incremental:**

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
			in the end state estimate.	Operations, Asset Optimization, Billing and Transmission Services	
8	Corporate Services	Based on: ▪ Financial Accounting o Accounts Receivable o Accounts Payable o General Ledger o Property/Fixed Asset Accounting o Miscellaneous invoicing o Credit Control/Assessment o Job Costing ▪ Payroll & Human Resources o Outsource Solution - management of outsource vendor required o Vendor application for time and expenses tracking ▪ Corporate Administration o Strategic planning o Corporate governess o Internal audit o Facilities o Tariff design	▪ Same corporate service capability required for first release	▪ 1 Payroll Analyst ▪ 1 HR Analyst ▪ 5 Finance and Accounting ▪ 1 Communications Coordinator (PR) ▪ 2 General Counsel ▪ Outsource 1-2 General Counsel ▪ 1 Tariff and Rate Design ▪ 1-2 Regulatory Affairs ▪ 1 Facilities and Supply Chain Analyst ▪ 1 Auditor ▪ 1 Supervisor of Corporate Technical Support ▪ 2 Application Management ▪ 2 Workstation Support ▪ 1 Help Desk	**Remaining:** ▪ Financial accounting system ▪ Asset logs **Incremental:** ▪ Transition of financial data to new system ▪ Data integrity check ▪ System configuration ▪ Testing ▪ Implementation ▪ Transfer of control from control areas to RTO

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		○ Procurement ○ Legal Affaires ○ Regulatory affaires ▪ IT management ▪ Data warehouse and reporting ▪ Hardware - $0.5M based on vendor estimates ▪ Software - $0.5M based on vendor estimates ▪ Other includes vendor selection, system configuration (mainly financial) implementation, testing, data set up and training – 2304 Days		▪ 2 admin across all of above ▪ Total= 23-24 (plus outsourcing 1-2) (Ops Tech Support numbers captured in Commercial Operations and System Operations) ▪ CFO will reside over Legal Affairs, Rates and Regulatory Design, Payroll and HR, Corporate Communications, Audit, Facilities and Purchasing, Operations Tech Support, Corporate Tech Support for Release 1	
9	Transmission Services	▪ Covered days for tasks to plan and manage this project, design and build the customer interface capability, complete the data	▪ Rather than a complex customer management system and portal, an access database will be used for the customer	▪ 1 Supervisor ▪ 2 Account Management ▪ 1 Customer Training ▪ Total 4	**Remaining:** ▪ Need to create a portal

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		set-up for the customer management system, design policies and procedures, design jobs and compensation, design, develop and deliver internal training, complete a portal usability test, design, develop, and deliver customer training, complete customer readiness activities, and complete product test for the customer information system. ▪ Includes estimate for the customer management system (hardware and software) and the portal (hardware and software), as well as a training and registration web based system	management system and the GridFlorida public website and OASIS will be utilitized in replace of a robust portal. As well, no web-based training will be used. ▪ Policies, procedures, and training still need to be conducted. It will be to a lesser extent.	▪ Chief Operating Officer will reside over Market Operations, System Operations, Asset Optimization, Billing and Transmission Services ▪ 2 admin people will be shared amongst Market Operations, System Operations, Asset Optimization, Billing and Transmission Services	**Incremental:** ▪ Need to create a more robust customer management system
10	Facilities	▪ Control Center Facility – for approx. 50 people ▪ Permanent Headquarters Facility – for approx. 150	▪ Control Center – for approx. 50 people. Reduced the lease time to 90 days.	▪ N/A	**Remaining:** ▪ Control Center – additional for additional people

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		people ▪ Temporary Project Facility for a team of approx. 50 people ▪ Disaster Recovery Facility – to backup all capabilities ▪ Labor to procure and manage facilities = 416 days	▪ Headquarters – assume reduction of costs. To accommodate 100 people. Reduce lease time to 90 days. ▪ Project Facility – assume continue to require project facility. ▪ Disaster Recovery Facility – reduced number to assume facility only for EMS and core business applications (e.g. Corporate Services & Comm. Ops) ▪ Reduce Labor days to manage facilities project assuming reduced complexity		▪ Perm. HQ – additional space and infrastructure for additional people ▪ Project Facility – will need to continue through to end state ▪ Disaster Recovery – will need to increase capability **Incremental:** ▪ Would be incremental if any part of the facilities starts in one place and then has to move.
11	Operationalize the Business Project	▪ Covered days for tasks to set up the business, manage filings with FERC, develop service agreements, develop company brand and image,	▪ All these items need to get accomplished for the First Release, some to a lesser extent	▪	**Remaining:** ▪ Further develop image and branding, work on any remaining

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		budgets, and design and maintain rules & procedures for overall business ▪ Includes estimate for outsourced legal assistance			FERC filings **Incremental:** ▪ 2 releases requires 2 tariffs, additional changes to rules, procedures, agreements
12	Organization and People Project	▪ Covered days for tasks to plan and select board, recruit management and board, design HR policies and practices, design the organization, design compensation, develop sourcing strategy, recruit personnel, and plan and develop internal and external communications ▪ Includes estimate for search firm fees, incentives/bonus packages for senior management and skilled personnel, moving expenses for skilled personnel, recruiting expenses, and a	▪ All these items need to get accomplished for the First Release, some to a lesser extent (e.g. less jobs)	▪	**Remaining:** ▪ Need to recruit the rest of the organization, Need to make communications more robust for larger organization **Incremental:** ▪ May be small incremental for communications

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		salary and benefits study			
13	Transition and Conversion	▪ Covered days for tasks include planning and executing cut-over before go live, and preparing for full operational capabilities	▪ This is based on a percent of the test of the projects	▪	**Remaining:** **Incremental:** ▪ There will be incremental cost for additional data that needs to be converted. New and changed capabilities will be have to be prepared
14	Integration Test and Simulation Project	▪ Covered days for tasks include defining and executing cross-capability integration test approach, planning and executing a simulation, and defining and confirming integration architecture (application and interface architecture)	▪ This is based on a percent of the rest of the projects	▪	**Remaining:** **Incremental:** ▪ An entire new integration test needs to be conducted.
15	Program	▪ Covered days for tasks	▪ Program management is	▪	**Remaining:**

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
	Management and MonitorCo	include time to manage the entire program, and time to set up the MonitorCo	based on a percent of the rest of the projects ▪ MonitorCo is assumed to be outsourced for a First Release		▪ Need to build the remainder of the MonitorCo **Incremental:** ▪ The entire program across will take longer since it is across 2 releases
16	2001 and 2002 Payroll	▪ Covered payroll for executives, skilled personnel, assistants and the board ▪ Includes incentives for board and executives/management	▪ The reduction for the First Release is based on 2 things: the First Release Organization Chart, and the First Release time span only covers 3 quarters (rather than 7 quarters for the 2nd release)	▪	**Remaining:** ▪ Need to hire the rest of the organization **Incremental:** ▪ Payroll costs will be higher since some people will be on for the length of the First Release and the 2nd Release (may be a longer duration in total)
17	Technical Architecture	▪ This project is to design and support the overall technical	▪ Based on fewer applications and shorter	▪ N/A	**Remaining:** ▪ Require technical

	Project/Component	End State Assumptions	First Release Assumptions	First Release Organization Assumptions	End State- What is remaining and incremental?
		architecture across the projects ▪ Sized to cover all end state projects and applications, over an end state timeframe	timeframe, reduce labor and supporting HW, and SW. Reduced by 20%. Overall technical support and integration will be required.		architecture support for additional applications implemented in the end state. **Incremental:** ▪ There could be some incremental associated with supporting reworked applications (e.g. Billing) & reintegrating.

GridFlorida

Establishing the GridFlorida RTO BluePrint Project June 2001

Release 1 Organization Model and Sizing v2

Contents

- Benchmark and Research
- Organization Model for Release 1 with Sum Totals
- Organization Model for Release 1 with Sum Totals and Breakdown

GridFlorida

Benchmark and Research

Release 1

- Scaled down organization from End State based on minimal functions in place for Release 1
- Received sizing input from the Hay Group
- Received sizing input from Accenture SMEs

End State

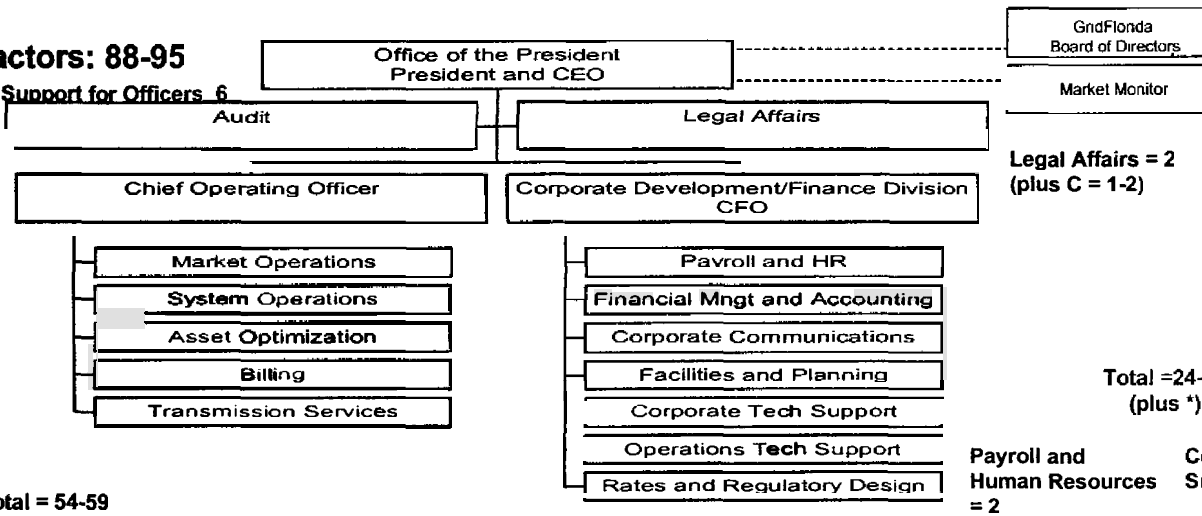
- Benchmarked estimates and model against other RTOs and ISOs
- Received and reviewed as is data from TECO, FP&L, and FPC
- Interviewed transmission owner SMEs from TECO, FP&L and FPC regarding estimates, roles, and outsourcing
- Interviewed Accenture SMEs regarding estimates, roles, and outsourcing
- Received input regarding organizational structure and key executives from the Hay Group

GridFlorida

Organization Model for Release 1 with Sum Totals and Breakdowns

Headcount Range: 87-93 ***
Contractor Range: 1-2
Headcount Range w/ Contractors: 88-95

Total Officers plus Clerical Support for Officers 6



Total = 8 Board Members

Total = Board Members 3 ****

Legal Affairs = 2 (plus C = 1-2)

Total =24-25 (plus *)

Payroll and Human Resources = 2

Financial Mngt & Accounting = 5

Corporate Communications = 1

Facilities and Purchasing = 1

Corporate Technical Support = 6

Operations Tech Support = 5*

Rates and Regulatory Design = 2-3

Admin-2

Total = 54-59 (plus * and **)

Market Operations = 6

System Operations = 23-26

Asset Optimization = 15-17

Billing = 4

Transmission Services = 4

Admin- 2

Note:

C = Contractors

* Outsource Service

** Under Asset Opt, Work Defn and Work Exec outsource #s are not included since these groups outsource large #s of people for engineering, construction, and maintenance.

*** This total does not include the GridFlorida Board of Directors or the Market Monitor Board of Directors or employees.

**** Market Monitor Organization model and sizing was not analyzed as a part of the Blueprint.

GridFlorida

Organization Model for Release 1 with Sum Totals and Breakdowns

Headcount Range: 87-93 ***
Contractor Range: 1-2
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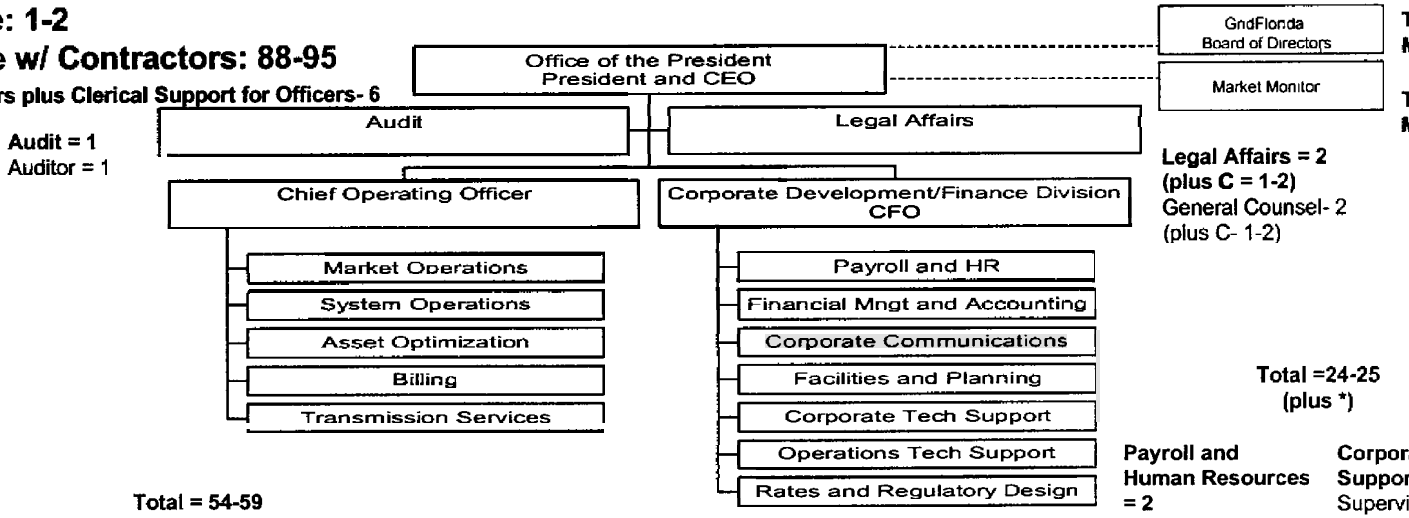
Total Officers plus Clerical Support for Officers- 6



Total = 8 Board Members****

Total = Board Members 3

Audit = 1
Auditor = 1

Legal Affairs = 2
(plus C = 1-2)
General Counsel- 2
(plus C- 1-2)

Total =24-25
(plus *)

Total = 54-59
(plus * and **)

Market Operations = 6
Director- 1
Scheduling- 5
Tagging- *
Forecasting- 0
Market Facilitation- 0

System Operations = 23-26
Director- 1
Real-time Operations- 10-12
Grid Security and Reliability Mngt- 6
Operations Engineering- 5
Operations Support (training & procedures)- 1-2

Asset Optimization = 15-17
Director- 1
Network Planning- 10
Work Definition- 2-3 **
Work Execution- 2-3 **

Billing = 4
Supervisor- 1
Metering & Measurement Data- 0
Settlements & Billing- 3
Contract Mngt- 0

Transmission Services = 4
Supervisor- 1
Account Mngt- 2
Communication Mngt- 0
Customer Training- 1

Admin- 2

Payroll and Human Resources = 2
Payroll- 1
Human Resources- 1

Financial Mngt & Accounting = 5
Finance-5

Corporate Communications = 1
Communications Coordinator- 1

Facilities and Purchasing = 1
Facilities and Supply Chain- 1

Corporate Technical Support = 6
Supervisor- 1
Application Mngt- 2
Workstation Support- 2
Help Desk- 1

Operations Tech Support = 5*
Supervisor- 1
Application Dev & Main-2*
Networks & Ops Sys- 0*
Database Support- 2*
Telecomm- 0*

Rates and Regulatory Design = 2-3
Tariff and Rate Design- 1
Regulatory Affairs- 1-2

Note:

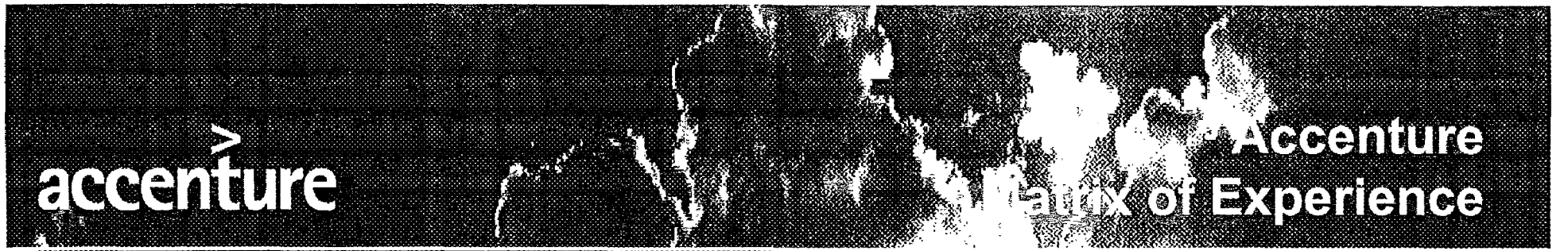
C = Contractors

* Outsource Service

** Under Asset Opt, Work Defn and Work Exec outsource #s are not included since these groups outsource large #s of people for engineering, construction, and maintenance.

*** This total does not include the GridFlorida Board of Directors or the Market Monitor Board of Directors or employees.

**** Market Monitor Organization model and sizing was not analyzed as a part of the Blueprint.



	ERCOT	PJM Interconnection LLC	Power Pool of Alberta	British Columbia Hydro (ISO)	ISO New England	Grid South	Southwest Power Pool
RTO Market Design Roles							
Market Design/Rules Filing		A					
Business Capability/Process Design	A	A		A	A	A	A
Infrastructure Requirements	A			A	A	A	A
Organization & Job Design	A	A		A	A	A	A
RTO Implementation Project Roles							
Program Management	A	A		A	A	A	A
Project Management	A	A	A	A	A	A	A
Scope Definition	A	A	A	A	A	A	A
Change Control	A	A	A	A	A		A
Solution Provider Recommendation	A	A	A	A	A	A	
Integration	A	A	A		A	A	A
Testing	A	A	A		A		A
System & Market Operations Applications							
OASIS		A		A			
Scheduling	A	A	A		A		A
Tagging		A					A
Metering, Validating & Profiling	A		A				A
Contract Management	A		A	A	A		
Security Coordination	A						A
ATC		A					A
Congestion Management	A	A					A
Market Participant Interface/Portal	A	A	A	A	A		A
Losses	A	A					A
Settlements and Billing	A	A	A		A		A
Markets (Energy, A/S, Imbalance)	A	A	A	A	A		A

This matrix represents highlights of Accenture's client experience and expertise in RTOs/ ISOs/ TransCos in North America.

Docket No. 001148-EI
Docket No. 000824-EI
Docket No. 010577-EI
GridFlorida Companies Witness Holcombe
Exhibit No. ___ (BLH-2)
Matrix of Accenture's RTO Experience

Table 1

Analysis of Incremental Cost Impact on GridFlorida Users of Accenture's Estimated End State Start-up Costs

Line No.	Project/Component	(1) Start-up Cost $(000)	(2) Alloc Factor (Appendix 1)	(3) GridFlorida User Cost Assessments FPL Retail	(4) TEC Retail	(5) FPC Retail	(6) Others	(7) Impact of Cost Off-sets: ( ) denotes net reduction FPL Retail	(8) TEC Retail	(9) FPC Retail	(10) Others	(11) Net Cost Responsibility on GridFlorida Users FPL (3) + (7)	(12) TEC (4) + (8)	(13) FPC (5) + (9)	(14) Others (6) + (10)
1	Operationalizing the Business Project	9,645	d	5,342	1,085	2,101	1,116	-	-	-	-	5,342	1,085	2,101	1,116
2	Organization & People Project	8,751	d	4,847	984	1,907	1,013	-	-	-	-	4,847	984	1,907	1,013
3	Facilities Project	5,420	d	3,002	610	1,181	627	(588)	-	-	(47)	2,414	610	1,181	580
4	System Operations	23,189	d	12,845	2,608	5,052	2,684	(10,171)	-	-	(814)	2,674	2,608	5,052	1,870
5	Market Operations	14,881	d	8,243	1,674	3,242	1,722	-	-	-	-	8,243	1,674	3,242	1,722
6	Commercial Operations	8,645	d	4,789	972	1,884	1,001	-	-	-	-	4,789	972	1,884	1,001
7	Customer Interface	4,033	d	2,234	454	879	467	-	-	-	-	2,234	454	879	467
8	Asset Optimization	2,540	d	1,407	286	553	294	-	-	-	-	1,407	286	553	294
9	Corporate Services Project	4,119	d	2,282	463	897	477	-	-	-	-	2,282	463	897	477
10	Transition & Conversion Project	1,421	d	787	160	310	164	-	-	-	-	787	160	310	164
11	Technical Architecture Project	6,081	d	3,368	684	1,325	704	-	-	-	-	3,368	684	1,325	704
12	Integration Test & Simulation Project	3,351	d	1,856	377	730	388	-	-	-	-	1,856	377	730	388
13	Program Mgmt. & Monitor Co Start-up	3,515	d	1,947	395	766	407	-	-	-	-	1,947	395	766	407
14	Incentives for Internal Resources	600	d	332	67	131	69	-	-	-	-	332	67	131	69
15	Expenses for Internal Resources	1,535	d	850	173	334	178	-	-	-	-	850	173	334	178
16	Expenses for External Resources	4,082	d	2,261	459	889	472	-	-	-	-	2,261	459	889	472
17	Non-Project Payroll	12,034	d	6,666	1,354	2,622	1,393	-	-	-	-	6,666	1,354	2,622	1,393
18	Board & Executive Management Salary	3,912	d	2,167	440	852	453	-	-	-	-	2,167	440	852	453
19	Subtotal	117,754		65,225	13,244	25,656	13,628	(10,759)	-	-	(861)	54,466	13,244	25,656	12,767
20	Contingency @ 20% on subtotal	23,551		13,045	2,649	5,131	2,726	(2,152)	-	-	(172)	10,893	2,649	5,131	2,553
21	Total Costs Incurred To Date (May 2000)	9,041	d	5,008	1,017	1,970	1,046	-	-	-	-	5,008	1,017	1,970	1,046
22	Total	150,346		83,278	16,910	32,758	17,400	(12,911)	-	-	(1,033)	70,367	16,910	32,758	16,367
23						Total =	150,346			Total =	(13,944)			Total =	136,402

Definitions:

Column (1)	Start-up costs estimated in 2003 dollars. Accenture's start up estimate reflects the total scope of all work to achieve an END STATE, full scope RTO
Column (2)	Cost Assessment Factor is an allocation basis found in Appendix 1 This allocation is based on the 12-CP load for each utility
Column (3 - 6)	Estimated Costs are allocated to each group based off the load ratio found in Appendix 1 - GridFlorida Cost Assessment Factor Calculation
Column (6) (10) (14)	The "Others" are non-retail loads or wholesale firm transmission customers.
Column (7 - 10)	Some of Accenture's estimated start-up costs in Column (1) currently are in the rate base of the jurisdictional utilities These costs are not incremental to customers (ratepayers)
Column (11 - 14)	Net Cost Responsibility is the incremental costs subject to future cost recovery from the customers of GridFlorida

Table 2

Analysis of Incremental Cost Impact on GridFlorida Users of Accenture's Estimated Annual (First Year) GridFlorida Operating Expenses

Line No.	Operating Expense Item	(1) GridFlorida Annual Expense $(000)	(2) Alloc Factor (Appendix 1)	(3) GridFlorida User Cost Assessments FPL Retail	(4) TEC Retail	(5) FPC Retail	(6) Others	(7) Impact of Cost Off-sets: ( ) denotes net reduction FPL Retail	(8) TEC Retail	(9) FPC Retail	(10) Others	(11) Net Cost Responsibility on GridFlorida Users FPL (3) + (7)	(12) TEC (4) + (8)	(13) FPC (5) + (9)	(14) Others (6) + (10)
1	O&M - FPL Divest. Assets	57,113	a	52,882	-	-	4,231	(52,882)	-	-	(4,231)	-	-	-	-
2	- TEC Divest Assets	17,300	b	-	17,300	-	-	-	(17,300)	-	-	-	-	-	-
3	Salaries & Benefits	25,375	d	14,055	2,854	5,529	2,937	(2,531)	60	(188)	(264)	11,524	2,914	5,340	2,673
4	Contractors	806	d	446	91	176	93	-	-	-	-	446	91	176	93
5	Lease Back Arrangements - FPL	21,000	a	19,444	-	-	1,556	(19,444)	-	-	(1,556)	-	-	-	-
6	- TEC	2,100	b	-	2,100	-	-	-	(2,100)	-	-	-	-	-	-
7	Legal & Consulting Services	4,000	d	2,216	450	872	463	-	-	-	-	2,216	450	872	463
8	Control Cntr Facilities & Bldg Serv	1,796	d	995	202	391	208	(1,663)	489	-	(133)	(668)	691	391	75
9	HQ Facilities & Building Services	638	d	353	72	139	74	-	-	-	-	353	72	139	74
10	Disaster Recovery Facility	298	d	165	34	65	34	(31)	-	-	(2)	134	34	65	32
11	Computer Services/Project Dev. Cost	2,065	d	1,144	232	450	239	-	-	-	-	1,144	232	450	239
12	Insurance- general	2,000	d	1,108	225	436	231	-	-	-	-	1,108	225	436	231
13	Storm Fund - FPL Divest Assets	7,700	a	7,130	-	-	570	(4,259)	-	-	(341)	2,870	-	-	230
14	- TEC Divest. Assets	770	b	-	770	-	-	-	-	-	-	-	770	-	-
15	Telecommunications	798	d	442	90	174	92	(694)	-	-	(56)	(252)	90	174	37
16	Board of Directors	480	d	266	54	105	56	-	-	-	-	266	54	105	56
17	Meetings, Travel, Seminars	500	d	277	56	109	58	(66)	-	-	(5)	211	56	109	53
18	Market Monitoring Fees	1,692	d	937	190	369	196	-	-	-	-	937	190	369	196
19	Payroll Administration	245	d	136	28	53	28	-	-	-	-	136	28	53	28
20	Benefits Administration	480	d	266	54	105	56	-	-	-	-	266	54	105	56
21	Financial & Operational Auditing	1,800	d	997	202	392	208	-	-	-	-	997	202	392	208
22	Employee Training Budget	270	d	150	30	59	31	(36)	-	-	(3)	114	30	59	28
23	Misc. Fees	25	d	14	3	5	3	-	-	-	-	14	3	5	3
24	FERC fees	1,000	d	554	112	218	116	(554)	(112)	(218)	(116)	-	-	-	-
25	Communication/Community Relation	500	d	277	56	109	58	-	-	-	-	277	56	109	58
26	Misc. office expenses	500	d	277	56	109	58	-	-	-	-	277	56	109	58
27	Subtotal	151,251		104,531	25,262	9,863	11,596	(82,161)	(18,963)	(406)	(6,706)	22,370	6,298	9,457	4,890
28	Contingency @ 20%	30,250		20,906	5,052	1,973	2,319	(16,432)	(3,793)	(81)	(1,341)	4,474	1,260	1,891	978
29	Total	181,501		125,437	30,314	11,836	13,915	(98,593)	(22,756)	(487)	(8,047)	26,844	7,558	11,348	5,868
30						Total =	181,501			Total =	(129,883)			Total =	51,618

Definitions:

Column (1)	Estimated annual expense for first full year of operations
Column (2)	Cost Assessment Factor is an allocation basis found in Appendix 1. This allocation is based on the 12-CP load for each utility.
Column (3 - 6)	Estimated operating expenses are allocated to each group based off the load ratio found in Appendix 1 - GridFlorida Cost Assessment Factor Calculation
Column (6) (10) (14)	The "Others" are non-retail loads or wholesale firm transmission customers
Column (7 - 10)	Some of the estimated operating expenses in Column (1) currently are in the rate base of the jurisdictional utilities These costs are not incremental to customers (ratepayers).
Column (11 - 14)	Net Cost Responsibility is the incremental costs subject to future cost recovery from the customers of GridFlorida

Appendix 1

Cost Assessment Factor Calculation

Line No.	Allocation Factor:		TRANSMISSION USER FPL RETAIL	TEC RETAIL	FPC RETAIL	OTHERS (*) (Wholesale)	TOTAL
1	a	FPL Pricing Zone					
2		2003 Avg. 12 CP Load, MW	17,000	-	-	1,360	18,360
3		Load Ratio:	93%	-	-	7%	100%
4							
5	b	TEC Pricing Zone					
6		2003 Avg. 12 CP Load, MW	-	3,452	-	-	3,452
7		Load Ratio:	-	100%	-	-	100%
8							
9	c	FPC Pricing Zone					
10		2003 Avg. 12 CP Load, MW	-	-	6,687	2,192	8,879
11		Load Ratio:	-	-	75%	25%	100%
12							
13	d	Grid-wide					
14		2003 Avg. 12 CP Load, MW	17,000	3,452	6,687	3,552	30,691
15		Load Ratio:	55%	11%	22%	12%	100%

(*) Load ratio share responsibility for these transactions is assigned to the utility control area that includes the load (where the transaction sinks, not the source)