## CARIS PHASE 2 PROJECT- REQUEST FOR BENEFIT/COST ANALYSIS

- 1. The undersigned developer of a regulated economic transmission project (the "Requestor") submits this request for the NYISO to conduct, pursuant to Section 15.3 of Attachment Y to the Open Access Transmission Tariff ("OATT"), an analysis of the benefits and costs ("Benefit/Cost Analysis") of a regulated economic transmission project that will interconnect with or be integrated into the existing New York State Bulk Power Transmission Facilities.
- 2. Requestor shall be responsible for all reasonable actual costs incurred by the NYISO for the Benefit/Cost Analysis. Such costs may include the cost of consultants and subcontractors retained by the NYISO, and the cost, if any, incurred by Transmission Owner(s) to supply analysis-related data when requested to do so by the NYISO.
- 3. When the scope and subject matter of two or more contemporaneous Benefit/Cost Analyses overlap to any material degree the NYISO, with the prior agreement of each affected Requestor, will conduct the overlapping analysis work on a consolidated basis and allocate the cost of such work equally to each affected Requestor.
- 4. This Request For Analysis must be accompanied by a refundable deposit of <u>\$25,000</u> payable to "The New York Independent System Operator, Inc." The Project Analysis Agreement will require Requestor to deposit additional money as needed to cover the actual cost of the Benefit/Cost Analysis. The NYISO will apply all deposits to the costs it incurs for the Benefit/Cost Analysis.
- 5. The NYISO will post on its website the following facts regarding this Request For Analysis: (i) a general description of the Benefit/Cost Analysis requested, (ii) the identity of the Requestor, and (iii) the date the NYISO received this Request For Analysis. The NYISO will also post the final results of this Benefit/Cost Analysis if Requestor seeks regulated cost recovery under Section 16 of Attachment Y to the OATT based upon the results of this Benefit/Cost Analysis.
- 6. Requestor shall submit to the NYISO, with this Request for Analysis, a Project Conceptual Package ("PCP") as described in the Congestion Assessment and Resource Integration Study procedure "Regulated Economic Projects: Specific Projects Submittal", which shall include information about the proposed transmission project, including but not limited to the following:
  - a. Requestor's Contact Information
  - b. Project Description;
  - c. Project Drawings;
  - d. Project Capital Costs;
  - e. Risk Profile;
  - f. Annual Revenue Requirements for Years 1-30;
  - g. Developer Business Information; and

- h. Any Other Reasonably Required Information to Aid NYISO in Understanding the Scope of the Project
- 7. The NYISO will acknowledge receipt of this Request For Analysis within ten (10) business days and at that time will also tell Requestor whether the information submitted in the PCP is adequate or, if not, what type of additional information needs to be submitted.
- 8. Following receipt of a complete Request For Analysis and PCP, the NYISO will meet with Requestor at a mutually agreeable time to discuss and determine the nature and scope of the Benefit/Cost Analysis, addressing any questions regarding the project description to ensure that all the technical parameters needed by the NYISO to perform the Benefit/Cost Analysis are understood. The analysis scope will be recorded in the Project Analysis Agreement.
- 9. Requestor may withdraw this Request For Analysis by terminating the Project Analysis Agreement in accordance with its Section 10.5 therein or, if the Project Analysis Agreement has not yet been executed, the Requestor may terminate this Request For Analysis by written notice to the NYISO. Upon termination, the NYISO will cease work on the Benefit/Cost Analysis and forward to Requestor either (i) an invoice for unpaid analysis work or (ii) a refund of that portion of the deposit not required to cover unpaid analysis work. The NYISO will forward all completed results and work papers, if any, to Requestor with the refund, if one is due, or upon receipt of full payment from Requestor for unpaid analysis work.
- 10. This Request For Analysis shall be submitted to <u>CARISSpecificProject@nyiso.com</u>. The currently designated representative of the NYISO is:

Name:	Tracy Landers

Title: Senior Engineer

Address: 10 Krey Blvd.

Rensselaer, NY 12144

Email: tlanders@nyiso.com

Telephone: 518-356-6267

Fax: 518-356-7524

11. Representative of Requestor to contact:

Name:	Lawrence Willick
Title:	Senior Vice President
Address:	400 Chesterfield Center, Suite 110
	St. Louis MO 63017
Email:	Willick @ Is power. com
Telephone:	636-532-2200
Fax:	636-532-2250

12. This Request For Analysis is submitted by:

	Requestor:	North America Transmission, LLC
	By (signature):	Anni
	Name of Representative (type or print):	Lawrence Willick
,	Title:	Senior Vice President
	Date:	May 5, 2010

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## CARIS PHASE 2 PROJECT- REQUEST FOR BENEFIT/COST ANALYSIS

#### PUBLIC DISCLOSURE VERSION

JULY 6, 2010

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## **Introduction and Executive Summary**

North America Transmission, LLC ("NAT"), a member of the LS Power Group, is pleased to submit this Benefit/Cost Analysis Request and required Project Conceptual Package ("PCP") for the Leeds/Athens PAR ("LAP") Project. The LAP Project consists of the addition of two 750 MVA Phase Angle Regulators ("PARs") to the Leeds-Pleasant Valley 345 kV transmission line and the addition of two 750 MVA Phase Angle Regulators to the Athens-Pleasant Valley 345 kV transmission lines. These four 750 MVA Phase Angle Regulators are proposed to be installed in the vicinity of the Leeds and Athens substations in Greene County, New York.

NAT is confident that the NYISO benefit/cost analysis will confirm that the LAP Project provides New York ratepayers with significant economic benefits. The project was identified and designed to reduce the congestion identified in the 2009 Congestion Assessment and Resource Integration Study (CARIS) Phase 1 report dated January 12, 2010, specifically the congestion which arises from the Leeds-Pleasant Valley constraint. The CARIS Phase 1 report identifies the Leeds-Pleasant Valley constraint as the top future constraint, responsible for approximately \$1.987 billion (nominal dollars) of future congestion, in addition to the over \$2 billion of historical congestion attributed to the constraint. NAT performed an extensive analysis of potential transmission projects to address this future congestion including several transmission line projects, and identified the LAP Project as the alternative providing the best production cost savings relative to the Leeds-Pleasant Valley constraint at the least relative cost. NAT's analysis estimates the LAP Project will provide over \$14 million per year (2015) in New York Control Area (NYCA)-wide production cost savings relative to an annual average revenue requirement of approximately \$8.6 million over the 30-year life of the project, including 10% contingency on capital costs. This estimated benefit/cost ratio of 1.67 is significantly higher than any of the generic options identified and analyzed in the CARIS Phase 1 report. In addition, NAT's analysis estimates the annual (2015) NYCA load payment reduction due to the project to be approximately \$159 million. Inclusion of this amount in the analysis results in a benefit/average cost ratio of 18.6. Furthermore, other project benefits, such as reduced environmental emissions, have not been quantified.

As the project consists primarily of high-voltage equipment and not extensive new transmission line construction, it can be completed in a relatively expedited schedule, and with less permitting risk and public opposition than a linear facility. The enclosed project schedule conservatively estimates a 2013 in-service date for the facility, but it may be possible to accelerate the project to be in service during 2012.

All the information requested in the document titled CARIS PROCEDURES - REGULATED ECONOMIC PROJECTS, SPECIFIC PROJECT SUBMITTALS dated April 7, 2010 for a PCP are included in this submittal.

## **Section 1 - Developer's Contact Information**

The LAP Project will be owned by Northeast Transmission Development, LLC ("NAT") or an affiliate. The contact is:

Lawrence Willick Senior Vice President LS Power Development, LLC 400 Chesterfield Center, Suite 110 St. Louis, MO 63017 Phone: 636-532-2200 Fax: 636-532-2250 E-mail:<u>lwillick@lspower.com</u>

## **Section 2 - Project Description**

## **Project Description**

The LAP Project consists of the addition of two 750 MVA Phase Angle Regulators to the Leeds-Pleasant Valley 345 kV transmission line and the addition of two 750 MVA Phase Angle Regulators to the Athens-Pleasant Valley 345 kV transmission lines. These four 750 MVA Phase Angle Regulators are proposed to be installed in the vicinity of the Leeds and Athens substations. The project will interconnect with the existing New York State Bulk Power Transmission Facilities by looping into the existing lines east of the existing Leeds Substation in Greene County, New York. The real estate requirement for the project is approximately 20 acres, and NAT has identified several suitable parcels. The general area for the project location in the vicinity of the Leeds and Athens substations is shown in Attachment 1 – Project Area Map.

## Major Equipment

The specific major equipment to be installed is four 345 kV, 750 MVA Phase Shifting Transformers with continuous and max no-load phase shift of 20 degrees. The project will also require bypass breakers, connecting bus work and disconnect switches; control wiring and protection; and the addition of dead-end towers and tap towers to accommodate looping in of the existing lines. A detailed list of major equipment is included in Attachment 5 – Project Financial Requirements - Capital Cost Estimate. The PAR substation will include data telecommunications and supervisory control equipment to provide the necessary control of the PARs as directed by NYISO, and to provide status information (MW, MVAr, kV, tap position, breaker and disconnect switch status, and revenue MW-hr/MVAr-hr) to the appropriate control area operators. Design and operation of data telecommunications will be in full compliance with NYISO and interconnecting utility requirements as well as applicable NERC Cyber-Security Standards. The protection will include line breakers and by-pass breakers for each PAR. In the event of a fault on the Leeds-Pleasant Valley or Athens-Pleasant Valley 345kV transmission line, the line breakers coming into the substation on faulted line would operate, isolating the

transformers from the fault. In the event of a fault on a PAR in the substation, the line breakers coming into the substation on the affected line would operate, isolating the lines from the fault. The faulted phase shifter can then be bypassed by closing the bypass breaker and opening switches on either end of the phase shifter and then re-closing the line breakers.

While the LAP project is described as consisting of the specific equipment listed above, it should be considered to include alternatives to this project proposal which may be identified by NYISO in its evaluation of the proposal, including alternative equipment size, location, and configurations.

# Financial Information

The capital costs estimate for the project is provided in Section 4 – Project Capital Cost and the estimated annual revenue requirements are provided in Section 6 - Annual Revenue Requirements

# Project Implementation Plan

Set out on the following page is an organizational chart identifying the responsibility within LS Power for development and asset management for the LAP Project. This is based on the approach LS Power has used for all of its projects, including transmission projects. There are three phases of the project including development (pre-construction), construction and operations. LS Power will have individual project managers with the responsibility for overall project activities during each of the project phases. While these project phases are well defined, there will be transition periods and extensive coordination among the different project managers. The project managers will be able to draw upon internal departments with functional expertise in areas such as engineering, environmental permitting, legal and accounting. These departments support numerous projects with several staff members.

Resumes of key personnel are included in Attachment 2.

NAT intends to be the owner of the proposed facility. Operational control is proposed to be transferred to the NYISO. Field operation, inspection, and maintenance, including hands-on operation of the PARs may be conducted by a qualified third-party contractor, or a utility with operations in the area, to the extent such utility has qualified personnel available and is willing to provide this service.



## Regulatory Approvals and Project Schedule

The primary regulatory approval to be obtained by NAT will be its applications to the Federal Energy Regulatory Commission for cost based rates for the LAP Project, as well as customary construction-related permits to be obtained in the ordinary course. Based on preliminary due diligence, the project is not expected to impact wetlands which will require a specific permit from the U.S. Army Corps of Engineers or any other federal permits. The project will require less than 1 mile of new 345 kV transmission line construction, and therefore is under the threshold for the Article VII certification process under the jurisdiction of the New York Public Service Commission. A major milestone schedule is included as Attachment 3. The enclosed project schedule conservatively estimates a 2013 in-service date for the facility, but it may be possible to accelerate the project to be in service during 2012. The critical path items include the completion of the benefit/cost analysis, beneficiary approval, and ordering and installation of long-lead time equipment. Negotiation and execution of an electrical interconnection agreement has the potential to become a critical path activity. NAT intends to request interconnection studies under Section 19B of the OATT, but would like to discuss this further with NYISO and the interconnecting utility.

# Other Requested Information

Based on load flow analysis completed by NAT, no System Upgrade Facilities are anticipated as a result of the installation of the project. An allowance is included in the project budget for the necessary studies and modifications to the protection and communication systems at the remote end substations.

NAT intends to become a Transmission Owner signatory to the ISO-Related Agreements. As such, a merchant transmission interconnection request may not be necessary for the project under Attachment X - Large Facilities Interconnection Procedures of the NYISO OATT, but rather Section 19B of the OATT, and will be submitted at the appropriate time.

## **Section 3 - Project Drawings**

Attachment 4 includes the following drawings:

- One-line Diagram; and
- Site Plan.

# Section 4 - Project Capital Costs

Attachment 5 includes a detailed capital cost estimate, including the quarterly cash flow of the project from the start of the project until the Commercial Operation Date.

## Section 5 - Risk Profile

NAT proposes traditional cost-based ratemaking for the project, and does not propose to be at risk for any cost overruns or share in any cost savings relative to the cost estimates presented herein. The project is in early stage development. The project cost estimate is a budgetary estimate, and has been developed through internal engineering estimates and assistance provided by only a single vendor without a competitive solicitation, and includes 10% contingency. It is possible that the actual project cost will be lower once the actual equipment procurement is performed as a result of a competitive bidding process, and to the extent the contingency amount is not spent, among other reasons. As stated above, NAT does not propose to share in any cost savings or any cost overruns relative to the estimated project cost.

If the project were to be approved by the NYISO and the benefitting LSEs, NAT does not foresee any reasons to cancel the project at this time. NAT would be willing to accept a provision which allows for cancellation of the project prior to financial closing, provided NAT could recover all of its prudently incurred costs and a cancellation charge.

NAT has identified a risk-mitigation proposal that it would be willing to discuss at the appropriate time. Due to the effect of depreciation under the traditional cost-of-service

approach, the revenue requirement of the project is higher in the earlier years, and decreases significantly over time, as identified in Attachment 5. Depending on how the benefits of the project change over time, this might result in an annual benefit/cost ratio which varies, and which may be much greater than 1.0 in some years and less than 1.0 in other years. In order to protect ratepayers from the risk of this impact, NAT would be willing to discuss a revenue requirement which is based on the actual project cost, but that would be levelized over time, provided such levelized revenue requirement would not change the total payments received by the project on a net present value basis, discounted at the project's weighted average cost of capital. NAT believes this approach would keep ratepayers whole on an NPV basis, but reduce the risk that the benefits in one year would be lower than the costs in any particular year. An example of how the levelized revenue requirement would compare to the traditional revenue requirement is shown in Attachment 5.

# Section 6 - Annual Revenue Requirements

Attachment 5 includes the estimated Annual Revenue Requirements for the first 30 years of project operations including assumptions. The Annual Revenue Requirement is presented for both the case where traditional utility ratemaking is employed, and with a levelized revenue requirement.

# Section 7 - Developer's Business Information

NAT is a member of the LS Power Group. The LS Power Group is a group of power generation and transmission companies with a strong track record of success. LS Power is an experienced developer of large-scale energy projects, including several transmission projects. LS Power is well regarded in the financial community and has executed several difficult projects. Since 2005 alone, LS Power has raised over \$13 billion of debt and equity for investment into its projects and portfolio of subsidiary companies, including \$3.4 billion for the construction of two largescale power generation facilities. Keys to our success include intensive community outreach, the ability to successfully resolve threshold issues, and a disciplined focus on execution.

Founded in 1990, LS Power has developed or managed over 20,000 MW of power generation. This includes approximately 7,200 MW of greenfield power generation assets developed by LS Power in the United States. Approximately three years ago, LS Power began to recognize the business opportunities related to the construction of new transmission infrastructure to support renewable generation and to relieve congestion on the grid. Since then, the development of transmission infrastructure has become a key business unit. LS Power has found that its expertise in the development of power generation facilities translates well to the development of large-scale transmission facilities. LS Power has a number of transmission projects under development, including one ready for construction in 2010 and one scheduled for construction in 2011. Although LS Power's efforts in the transmission space are relatively new, the advanced state of the transmission project pipeline speaks volumes for our capabilities.

## Southwest Intertie Project

LS Power began its development of large-scale transmission facilities in 2005 with the Southwest Intertie Project ("SWIP"). The SWIP is an approximate 570 mile, 500 kV transmission line traversing from southern Idaho to southern Nevada that is expected to have a Western Electricity Coordinating Council-approved path rating of approximately 2,000 MW. The SWIP is being developed in two phases. All required right-of-way grants and private easements have been secured for Phase 1 which is approximately 250 miles, and detailed design is complete. All major permits and approvals required for construction have been obtained. Federal environmental permitting is complete including all NEPA review, Endangered Species Act consultation, and approval of a detailed Construction, Operation and Maintenance Plan by the Bureau of Land Management. The Public Utilities Commission of Nevada has given the necessary approvals and all County Special Use Permits have been obtained. Recently, LS Power has signed agreements with NV Energy which finalize the commercial arrangements for Phase 1. Under these agreements, NV Energy will subscribe the capacity of a portion of the SWIP. After these agreements receive all necessary approvals, the SWIP-South will be ready to begin construction later this year with expected operation in 2012. All Phase 2 approvals are expected to be received by 2011 with expected operation by the end of 2013.

# Cross Texas Transmission

Cross Texas Transmission, LLC ("Cross Texas"), a subsidiary of LS Power, was originally selected in March 2009 by the Public Utility Commission of Texas ("PUCT") to construct, operate and maintain a portion of the Competitive Renewable Energy Zone ("CREZ") Transmission Plan within Texas, which is being developed to enable the delivery of renewable resources. The transmission service providers were selected through a competitive process including incumbent utilities and new entrants. The PUCT determined Cross Texas to be one of the new entrants best qualified to develop, own, and operate a portion of participate in the CREZ Transmission Plan.

The Cross Texas facilities consist of over 200 miles of double circuit 345 kV transmission line and associated equipment (e.g. substation, series compensation, etc.) to be located in the Texas Panhandle with an estimated capital cost of approximately \$400 million. Additionally, Cross Texas will process interconnection requests for power generators and build transmission facilities necessary to connect such power generators to its system. Cross Texas has received approval of a Code of Conduct and as such is a regulated utility in the State of Texas.

Cross Texas has been conducting community outreach and preparing necessary permit applications since its original selection by the PUCT in 2009. This has included opening a local office, public open meetings, community and stakeholder presentations, landowner identification and mapping, preliminary geotechnical investigations, evaluation of conductor and tower designs, and routing and environmental analysis. Cross Texas filed its first Certificate of Convenience and Necessity ("CCN") application with approval anticipated in November 2010. The CCN includes the necessary routing and environmental analysis and is the primary approval prior to commencement of construction. The planning for the Cross Texas project was completed by the Electric Reliability Council of Texas and approved by the PUCT beginning in 2005 through 2008, and the cost of the project will be recovered through socialization of the cost for all applicable electricity users in Texas. Therefore the CCN permits are the final PUCT approval prior to obtaining real estate, financing, and constructing the project. Construction is expected to begin in 2011 with commercial operation in 2013.

# Additional Transmission Development

LS Power is pursuing other transmission development opportunities including the Overland Transmission Line ("Overland"), the Wyoming-Colorado Intertie Project ("WCI") and the LaSalle Transmission Project.

Overland is an approximate 560 mile,  $\pm$  500 kV DC line between southeast Wyoming and Idaho with 2,000 – 3,000 MW of transfer capability. A BLM application was filed in February 2009 and development activities have been initiated including coordination with stakeholders, public outreach/involvement, a routing alternatives study, evaluation of overall system design and cost parameters, and the WECC path rating process.

LS Power acquired the rights to the WCI Project from AES Trans-Elect, LLC in April of 2009. WCI is an approximate 180 mile, 345 kV line between southeast Wyoming and northeast Colorado with approximately 850 MW of transfer capability. WCI is a public-private partnership with the Wyoming Infrastructure Authority and Western Area Power Administration. WCI has filed and received approval of its Open Access Transmission Tariff. The Open Access Transmission Tariff for the WCI Project was approved by the Federal Energy Regulatory Commission in May 2009.

LaSalle is an approximately 160-mile transmission line proposed to connect three existing 345kV substations operated by the PJM Regional Transmission Operator. These three substations are the Pontiac-Midpoint substation near Pontiac, Illinois; the Reynolds substation near Reynolds, Indiana; and the Dumont substation near North Liberty, Indiana. The project is intended to facilitate a significant amount of renewable energy into the PJM operated market, as well as provide economic and reliability benefits. The project could be operational as early as 2014.

## Other Requested Information

At this time, LS Power does not own or operate any projects in the State of New York.

NAT and the affiliates above have not been involved in any litigation or past lawsuits related to its performance regarding the development projects listed above.

NAT and its affiliates above do not have credit ratings from any rating agencies at the time.

NAT is a newly established company without any existing operations. As such, it does not have any revenue for the last three years.

Names and experience of the key technical team are provided in Attachment 2.

## **Section 8 - Project Economics**

NAT is confident that the NYISO benefit/cost analysis will confirm that the LAP Project provides New York ratepayers with significant economic benefits. The project was identified and designed to reduce the congestion identified in the 2009 Congestion Assessment and Resource Integration Study (CARIS) Phase 1 report dated January 12, 2010, specifically the congestion which arises from the Leeds-Pleasant Valley constraint. The CARIS Phase 1 report identifies the Leeds-Pleasant Valley constraint as the top future constraint, responsible for approximately \$1.987 billion (nominal dollars) of future congestion, in addition to the over \$2 billion of historical congestion attributed to the constraint. NAT performed an extensive analysis of potential transmission projects to address this future congestion including several transmission line projects, and identified the LAP Project as providing the best production cost savings relative to the Leeds-Pleasant Valley constraint at the least relative cost. NAT's analysis estimates the LAP Project will provide over \$14 million per year (2015) in New York Control Area (NYCA)-wide production cost savings relative to an annual average revenue requirement of approximately \$8.6 million over the 30-year life of the project, including 10% contingency on capital costs. This estimated benefit/cost ratio of 1.67 is significantly higher than any of the generic options identified and analyzed in the CARIS Phase 1 report. In addition, NAT's analysis estimates the annual (2015) NYCA load payment reduction due to the project to be approximately \$159 million. Inclusion of this amount in the analysis results in a benefit/average cost ratio of 18.6. Furthermore, other benefits of the project, such as reduced environmental emissions, have not been quantified.



# <u>Legend</u>

Existing 345 kV









Attachment 2 – Resumes of Key Personnel

## PAUL G. THESSEN President

Employment 2008 – Present	LS POWER DEVELOPMENT, LLC <u>President</u> – Lead the team responsible for developing new fossil generation and transmission projects for LS Power. Also oversee engineering and construction management functions for LS Power.
2001 – 2008	<b>Executive Vice President</b> - Responsible for managing all new project development activities for LS Power including, identifying and implementing market/business opportunities, project conceptualization, environmental/regulatory permitting, public relations, fuel supply and transportation arrangements, electrical interconnection and transmission arrangements, long term power sales arrangements and project economics. Led the team that is developing multiple coal-fired, natural gas-fired and wind generation facilities representing approximately 10,000 MW of generating capacity, along with a 500 mile, 500 kV transmission line. Recent success includes completion of development, financing and start of construction of (i) a 665 MW coal-fired generation project in Arkansas in March 2006 and (ii) a 900 MW coal-fired generation project in Texas in August 2007.
1999-2001	<u>Vice President, New Business Development</u> – Responsible for identifying and pursuing new business opportunities. Responsibilities included identifying target markets, project conceptualization, strategic planning, conducting financial analyses and marketing and securing long- term power sale agreements for new, large-scale power generation facilities. Managed conceptualization and development of multiple projects. Served in an oversight role providing guidance to project development team to assist in resolving project development related issues.
1996-1999	<u>Assistant Vice President</u> – Responsible for coordinating all project development activities including siting, environmental/regulatory permitting, conceptual engineering, financial analysis, community

development activities including siting, environmental/regulatory permitting, conceptual engineering, financial analysis, community relations and contractual arrangements for multiple natural gas-fired power generation facilities in the U.S. Managed internal staff and multiple outside engineering, environmental and public relations consultants. Developed detailed financial proformas to support project financing. Also participated in marketing and negotiation of long term power sales agreements. While serving in this role, successfully completed the development and financing of two natural gas fired power generation projects representing a total capital investment of approximately \$1 billion and 2,000 Megawatts of capacity.

1993-1996 <u>**Project Manager**</u> – Responsible for coordinating project development activities for multiple natural gas-fired power generation facilities in the U.S. Supervised completion of regulatory approval process involving an

#### Attachment 2 - Resumes of Key Personnel

environmental impact statement and over two dozen approvals from various federal, state and local regulatory bodies for two power generation projects. Testified before the state public service commission to support an application for certificate of public convenience and necessity. Negotiated and implemented complex set of contracts for natural gas supply, transport and storage involving six contracting parties. Participated in EPC, electrical interconnection, steam sales, local community and financing negotiations for multiple power generation facilities. Activities resulted in the successful development and financing of two - \$200 million, 245 Megawatt power generation facilities. Also served as project liaison between development and construction teams and developed responses to numerous electric utility requests for proposals for new generating capacity.

- 1992-1993 <u>Assistant Project Manager</u> Developed and implemented site selection criteria for green-field, natural gas fired power generation facilities and identified and secured sites for such facilities. Identified potential thermal energy users and secured thermal energy sales contracts. Developed proposals in response to utility solicitations for new generating capacity. Performed conceptual engineering and other project development related tasks for numerous power generation facilities.
- EducationUNIVERSITY OF MISSOURI ROLLARolla, MissouriB.S. in Electrical EngineeringDecember, 1991Graduated SUMMA CUM LAUDE with a GPA of 3.957

<u>Employment</u>	
<i>Chief Financial Officer</i> LS Power Group 2004 to Present	<ul> <li>Responsible for all LS Power Group financing activity, ranging from greenfield construction financing to corporate acquisition financing.</li> <li>Involved in raising over \$11 billion in debt and equity since 2005 for project financings and acquisitions in the power sector.</li> <li>Responsible for all LS Power Group tax and accounting matters.</li> <li>Member of Investment Committee for private equity funds controlled by LS Power.</li> </ul>
<i>Executive Vice President</i> Comverge, Inc. 2001 – 2004	<ul> <li>Created long term recurring-revenue business with electric utilities (Comverge is an energy load management company serving power companies).</li> <li>Originated and structured largest sales contracts in Comverge history:</li> <li>Electric capacity contracts in excess of \$100 million that were critical in attracting outside equity investment</li> <li>Landmark transactions with PacifiCorp, San Diego Gas &amp; Electric and New England ISO</li> <li>Co-Arranged \$20 million placement of venture capital financing.</li> <li>Executed Comverge's first acquisition of an existing load management system.</li> </ul>
Executive Director, Corporate Finance (2000-2001) Region Head, Project Finance-Americas (thru 1999) UBS Warburg LLC 1995 - 2001	Managed 10-person team within Debt Capital Markets Joint Venture, and subsequently as part of Corporate Finance – Power & Pipelines Coordinated Group's structured finance coverage of the power sector. Originated and managed key mandates relating to merger & acquisition advisory, public and private equity, and public and private debt.
Vice President, Investment Banking Division Goldman, Sachs & Co. 1991 - 1995	Member of Structured Finance Group with diverse experience in domestic and international structured financings (project, lease, asset-backed). Team leader on wide variety of assignments including public and private debt and equity financings, divestitures and "inside the fence" transactions.

Vice President, Investment	Project and lease finance product coverage across all
Banking Division (1990 -	industries plus general corporate coverage of
1991)	Independent Power Industry.
Associate, Investment Banking Division (thru 1989) Salomon Brothers Inc. 1986 - 1991	Capital Markets Group experience (1986 – 1988) focused on customized financings including securitizations and derivative-based structures.

Economics and Systems Analyst Long Island Lighting Company 1982 - 1984 Capital budgeting analysis and certain rate case financial modeling.

#### **Education**

Masters of BusinessInvestment Banking and Finance Clubs.Administration - FinanceInvestment Banking and Finance Clubs.The Wharton SchoolInvestment Banking and Finance Clubs.University of PhiladelphiaFour Year Full-Tuition Scholarship. Treasurer of1986Four Year Full-Tuition Scholarship. Treasurer ofElectrical EngineeringAthletic Association.The Cooper Union School of<br/>EngineeringFour Year Full-Tuition Scholarship. Treasurer of1982Investment Banking and Finance Clubs.

Attachment 2 - Resumes of Key Personnel

# **MARK BRENNAN**

Senior Vice President & Treasurer

## **Employment**

Senior Vice President & Treasurer Vice President & Treasurer	Responsible for all treasury and cash management, accounting and financial reporting for all of the companies' power projects.
Controller & Asst. Treasurer	Participated in the management of 36 independent power generation projects under construction or in operations
LS Power Development, LLC LS Power, LLC LS Power Corporation October 1997 to Present	representing over 23,000 MW in all markets within the U.S. Participated in the financing of 5 separate power generation projects representing a capital investment of over \$4.5 billion. Participated in an additional 7 separate financings and/or refinancings representing a capital investment of over \$4.5 billion. Participated in accounting due diligence reviews of
Assistant Controller Journal Register Company	companies consisting of over 50,000 MW of generation. Responsible for consolidation and financial reporting of a publicly held newspaper publishing company.
August 1995 to October 1997	Participated in the company's initial public offering including preparation of financial section of the prospectus.
Staff Accountant Manager Senior Manager KPMG LLP January 1988 to July 1995	Participated in and managed numerous audits of private and publicly traded manufacturing and distribution companies. Participated in a number of merger and acquisition transactions.

## **Education**

Bachelors of Science in Commerce- Accounting Rider University December 1987 Graduated Magna Cum Laude.

## **Professional Affiliations**

New Jersey Society of Public Accountants American Institute of Certified Public Accountants Attachment 2 – Resumes of Key Personnel

SCOTT A. CARVER

Senior Vice President and Associate General Counsel

# Employment

Senior Vice President & Associate General Counsel Vice President & Senior	Responsible for the management of day-to-day legal affairs, related to the development and construction of independent power projects
Counsel Senior Counsel	Participate in the management of independent power projects in operations or under construction throughout the U.S.
2001 to Present	Provide due diligence review of generation assets with respect to permitting, real estate and other matters.
	Manage litigation associated with permitting and development of energy projects throughout the U.S.
	Responsible for managing and directing government affairs activities of the company.
	Provide counsel with respect to energy regulatory proceedings throughout the U.S. and at the FERC.
	Participate in the financing and refinancing of generating projects under construction or in operations.
	Assist in the preparation and submittal of applications for permits and approvals for energy projects throughout the U.S.
	Perform specific project level siting for new generation taking into account land availability, infrastructure considerations, and other factors.
	Participate in the negotiation and drafting of various commercial arrangements, including power purchase agreements, construction contracts and transactional agreements.
	Provide counsel with regard to company formation and corporate governance issues.
Senior Associate Bennett & Yoskin Princeton, NJ 1998-2001	Counsel for developers, lenders and public entities involved in real estate development projects and environmental regulatory compliance and permitting issues.
Senior Associate Scarinci & Hollenbeck Secaucus, NJ 1991-1998	Practice devoted primarily to environmental regulatory compliance, permitting and transactional matters.
<i>Associate</i> Hannoch Weisman Trenton, NJ 1989-1991	Member of the Government and Administrative Affairs Department working on administrative law proceedings in the New Jersey Office of Administrative Law and monitoring and drafting proposed regulations and legislation.

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# **Education**

Juris Doctor May 1989	Washington College of Law, American University Washington, DC Administrative Law Journal, Staff
<i>B.A.</i>	Colby College-Waterville, Maine
May 1986	Government Major with concentration in Public Policy

# **Bar Admissions and Professional Affiliations**

New Jersey Bar-Admitted December 1989 U.S. District Court, District of New Jersey-Admitted December 1989 Member, New Jersey State Bar Association-Environmental Law Section Member Representative, Electric Power Supply Association Attachment 2 - Resumes of Key Personnel

# LAWRENCE J. WILLICK

Senior Vice President

#### **Employment**

LS Power Development, LLC Lead transmission development efforts throughout the U.S. LS Power, LLC Participated in the management of 28 independent power projects in operations or under construction representing August 1996 to Present approximately 20,000 MW in all markets within the U.S. Responsible for commercial aspects of electrical Senior Vice President interconnection and transmission arrangements for over 50 Vice President generation development projects, including over 38 generator Assistant Vice President interconnection requests, 12 sets of transmission service Director. Development requests, and negotiation of 12 electrical interconnection agreements. Project Manager Analyst Conducted due diligence review of over 200 generators representing over 100,000 MW of generation with respect to electrical interconnection, transmission and deliverability. Participated in negotiation of seven long-term power purchase agreements to execution. Responsible for preparation of proposals for long-term power purchase agreements. Oversight of regulatory efforts including monitoring of regulatory proceedings at the state and federal level, preparation of regulatory filings, and participation in contested cases. Participated in the financing of five large generating projects under construction or in operations representing a capital investment over \$2.5 billion. Performed specific project level siting for new generation. Performed regional siting analysis for new generation. Performed power market analysis. The UNIMAR Group, Ltd. Coordinated development of commercial and industrial 1991 to August 1996 marketing consulting projects for investor-owned electricity Project Manager and natural gas utility clients in 25 states. Market Research Analyst

## **Education**

Masters in Business Administration A.B. Freeman School of Business Tulane University May 1992 Masters program included emphasis in finance and strategic management. Beta Gamma Sigma Business Honor Society. Graduate Fellowship. 5-year MBA.

#### **Education Continued**

Bachelors of Science in Engineering Tulane University May 1991

Engineering

Summa Cum Laude. Minor in Mathematics. Deans' Honor Scholarship. National Merit Scholarship. Dean's List.

Studied one year of engineering curriculum during Junior Year Abroad Program. Completed Engineering Tripos IB.

## **Community Activities**

Cambridge University Fall 1989-Spring 1990

Board of Directors, Bais Abraham

Attachment 2 - Resumes of Key Personnel

Page 10 of 15

Senior Vice President - Tax

## **Employment**

Senior Vice President of Tax	Oversees the income, property, sales & use and other ta	х
LS Power Development, LLC	compliance for the over 170 companies controlled of	r
July 2001 to Present	managed by LS Power and related entities including th companies that owned thirty-six power plants.	e

Responsible for identifying tax issues, tax structuring, and reviewing contracts with respect to the M&A, development, and financing work of LS Power and related entities. Over 23,000 MW purchased and developed.

Senior ManagerServed partnership, corporate, and individual clients in a<br/>variety of industries including power generation, oil & gas,<br/>gaming, and mining. Services included income and estate tax<br/>compliance, research and planning.

## **Education**

Bachelor of Business Administration Texas Tech University May 1986 Degrees in Accounting and Finance.

## **Professional Affiliations**

Montana Certified Public Accountant

Attachment 2 – Resumes of Key Personnel

# ANDREW R. DERA

Vice President – Engineering and Construction

## **Employment**

Vice President Director, Engineering & Construction	Led and participated in the development and construction of independent power projects utilizing combustion turbine and coal-fired technologies.
Engineering Manager Project Engineer LS Power Development, LLC LS Power, LLC	Developed and executed strategies for soliciting proposals and contracting for the engineering, procurement, and construction of multiple generation projects and related infrastructure.
February 1999 to Present	Provided asset management support to operating generation projects, including energy marketing activities, scheduling, annual budgeting.
	Ensured implementation of and compliance with the requirements of project documents such as environmental permits, construction contracts, power purchase agreements, and credit agreements during project construction and operation.
	Engaged and managed outside consultants providing support of project development.
	Conducted merger and acquisition due diligence review of generation assets including site visits, interviews with plant management, review of operating and maintenance records, and development of economic models.
	Conducted due diligence review for the siting of new generation projects.
	Prepared and assisted in the preparation and submittal of applications for environmental permits.
<i>Mechanical Engineer</i> Sargent & Lundy, LLC January 1996 to February 1999	Led and participated in the development and design of gas and coal-fired generating projects.

## **Education**

Masters in Business Administration Rutgers Business School Rutgers University December 2003

Bachelors of Science in Mechanical Engineering Masters program included emphasis in finance.

Attachment 2 – Resumes of Key Personnel Rensselaer Polytechnic Institute December 1995

# **Professional Affiliations/Licensing**

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American Society of Mechanical Engineers Licensed Professional Engineer – New Jersey

#### **RICHARD ROLOFF**

Vice-President – Project Finance

#### **Employment**

Vice-President – Project Finance Associate Analyst LS Power Development, LLC LS Power Equity Partners, LLC August 2003 to Present

Structure long-term power sales agreements, partnership arrangements, and intermediate-term power and gas commodity transactions to hedge output and support financing of LS Power portfolio companies.

Raise debt and equity financing for construction of power projects and acquisition of operating portfolios of power, gas, and related assets and businesses.

Raised \$1,000 million in debt financing to construct the LS Power-developed Sandy Creek Energy Station, a 898 MW coal-fired generating facility under construction in Waco, Texas.

Executed interest rate swaps to hedge Sandy Creek's economic exposure to long-term rates, with notional amounts exceeding \$350 million.

Assisted with successfully raising \$100 million in taxexempt bonds from the state of Texas to lower the cost of construction borrowing at Sandy Creek.

Participated in the successful negotiation of long-term power sales agreements for 250 MW to 2 separate electric cooperatives, and municipal organizations located in Texas.

Raised \$817 million in debt with 34 year maturity to refinance Plum Point Energy Station. Debt was rated AAA by Standard & Poor's.

Raised \$750 million in debt financing to construct the LS Power-developed Plum Point Energy Station, a 665 MW coal-fired generating facility located in Arkansas.

Participated in the successful negotiation of long-term power sales agreements for 378 MW to 4 separate investor owned utilities, electric cooperatives, and municipal organizations located in Arkansas.

Raised \$150 million in debt financing to support the acquisition of the 550 MW Ontelaunee Power generating station.

Negotiated natural gas supply agreement for Ontelaunee Power generating station, a 550 MW combined cycle facility located in Pennsylvania.

Raised \$432 million to refinance project debt of LSP-Kendall Energy, a 1,060 MW combined cycle generating facility located in Illinois.

Conducted due diligence in support of acquisition of over 11,000 MW of generating capacity.

# **Education**

Bachelors in Business Administration School of Business and Public Management George Washington University May 2003

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Magna Cum Laude. Dual major in Finance / International Business. President's Scholar. Dean's List. Attachment 2 - Resumes of Key Personnel

## JAMES NEAL CHAPMAN, P.E.

**Transmission Engineer** 

Employment	6
Transmission Engineer LS Power Development, LLC January 2010 to Present	Technical review of transmission line design standards and materials.
	Oversight of engineering consultants on new transmission line projects.
	Develop transmission line maintenance procedures.
Consulting Transmission Line Design Engineer/ Transmission Maintenance Engineer	Responsible for developing and maintaining transmission maintenance and operations budgets for 7000+ miles of existing 110kV and above transmission lines.
Ameren Services August 1999 through 2009	agencies to manage mutually agreeable plans for transmission corridor development.
	Served as project manager on new transmission lines.
	Developed cost estimates and schedules for interconnecting generation facilities through the MISO and PJM ISOs.
	Provide technical guidance on conductor rating methodologies.
	Provide technical guidance on transmission design standards and guidelines.
<i>Co-Op/Engineer I</i> City Utilities of Springfield	Engineered relocations of 69KV and lower distribution facilities.
Summer-Fall 1995 & 1996	Develop and maintain customer feeder network database.
	Helped develop distribution standards.
Education	
Rachelors of Science in	Bachelors of Science in Fleatrical Engineering

Bachelors of Science in Engineering University of MO-Rolla May 1999

Bachelors of Science in Electrical Engineering.

**Professional Affiliations and Groups** 

IEEE IEEE – PES Vice-Chairman of the Overhead Conductors and Accessories working group in IEEE Past Affiliations and Groups

Project Advisor for EPRI projects Project Advisor for NEETRAC projects

## **Professional Registration**

Licensed Professional Engineer in the State of Missouri

## Attachment 3 - Major Milestone Schedule

# LAP Project Preliminary Schedule

		20	10			20	11			20	12			20	13	
PERMITS AND APPROVALS	Q1	Q2	Q3	Q4												
CARIS PHASE 2 STUDY																
NYISO Study																
Beneficiary Approval																
FEDERAL ENERGY REGULATORY COMMISSION																
Incentive Rate Filing						1										
Tariff																
PROJECT AGREEMENTS																
Real Estate																
Electrical Interconnection																
Procurement and Construction Contract Execution																
NYISO Transmission Owner Agreements																
PROJECT FINANCING																
Financing						[										
ENGINEERING / PROCUREMENT / CONSTRUCTION																
Engineering																
Order Equipment																
Site Prep							•									
Civil/Structural																
Equipment Delivery																
Commissioning																
NYISO Transmission Owner Agreements PROJECT FINANCING Financing ENGINEERING / PROCUREMENT / CONSTRUCTION Engineering Order Equipment Site Prep Civil/Structural Equipment Delivery Commissioning																





ost Estimate
- Capital Co
Attachment 5

			Struc	sture Costs				
Poles								
Description		Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
POLE, WOOD EQUIVALENT, 80' - 2310#		EA	16	\$4,000	\$64,000	320	\$48,000	\$112,000
POLE,WOOD EQUIVALENT,120' - 4140#		EA	12	\$7,000	\$84,000	300	\$45,000	\$129,000
Clossallis							전 같은 것은 것은 것은 것은 것은 것은 것은 것을 가지 않는다.	전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전
Description	Type	Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
CROSSARM, 30' AND OVER	Steel	EA	8	\$1,500	\$12,000	80	\$12,000	\$24,000
Anchors								
Description		Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
ANCHOR, COMPLETE WITH ROD, WIRE, ETC.		EA	16	\$400	\$6,400	160	\$24,000	\$30,400
Other								
Description		Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
BRACES		F	1	\$20,000	\$20,000	80	\$12,000	\$32,000
MINOR MATERIAL	10%		-		\$18,640			\$18,640
Total Structure Cost					\$205,040	940	\$141,000	\$346,040
Notes: The new tapping structures are proposed as thre	ee-pole ste	el tapp	ing structure	es and the line	s to the proposed subst	ation are single	circuit steel h-frame	structures.

			Condu	uctor Costs				
Conductor								
Description	Type	Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
WIRE,954MCM,ALUMINUM (1)	ACSS	FΤ	30000	\$2.35	\$70,500	600	\$90,000	\$160,500
Conductor Hardware								
Description		Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
PORCELAIN INSULATORS		EA	1248	\$15	\$18,720			\$18,720
POLYMER INSULATORS		EA	24	\$150	\$3,600			\$3,600
HARDWARE		L	1	\$20,000	\$20,000			\$20,000
SHIELD WIRE		FT	6000	\$0.50	\$3,000			\$3,000
DEADENDS		EA	96	10		096	\$144,000	\$144,000
GUARD STRUCTURES (TEMPORARY)		EA	4	30		120	\$18,000	\$18,000
MINOR MATERIAL	10%	LT	-		\$11,582			\$11,582
DAMAGE, CONSTRUCTION, INCLUDES CLEANUP		LT	-		\$12,000			\$12,000
Total Conductor Cost					\$139,402	1,680	\$252,000	\$391,402
Notes: Assumes annroximately 1 200 feet for two tans of	of each lin	es or f	our lines tota	I double bund	led ACSS or ACSR			

NUMES: ASSUMES APPROXIMATERY 1, ZUU TEET FOR TWO TAPS OF EACH TIMES OF TOUR LINES TOTAL, double bundled ACSS or ACSR. The new lines will be rated for the greater of 3000A capacity or the capacity of the existing segments, so as not to be a limiting element on the line. Shield wire may be OPGW.

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Instruction	District         Other         Unit         Material and Labor         Iem S         Signology         Sig	Destention         Destention         Destention         Destention         Destention           Sect NOLC HOUSE AND CONFONENTS         EA         1         \$55.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$530.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000         \$541.000 </th <th></th> <th></th> <th>A CONTRACT</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>			A CONTRACT						
Serricing Star NGL         Exploring International Difference         Internation Difference         Internation Difference         Internation Difference         Internation         Internation         Serricing Serricing         Internation         Serricing Serricing         Internation         Serricing Serricing         Serricing Sericing         Serricing Sericing <th< th=""><th>ARE FARIENCIATIONS         Imit         Quart         Section         Section</th><th>Sterption         Unit         Quantity         Units         <thunits< th="">         Units         Units</thunits<></th><th>bstation</th><th></th><th></th><th></th><th></th><th></th><th>_</th><th></th><th></th></th<>	ARE FARIENCIATIONS         Imit         Quart         Section	Sterption         Unit         Quantity         Units         Units <thunits< th="">         Units         Units</thunits<>	bstation						_		
MARE RELOTIONES         EA         4         \$5,55,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$53,200,000         \$50,0	MITCL HOUSE AND COMPONENTS         EA         4         \$5550,000         \$532,0000         \$532,0000         \$532,0000         \$532,0000         \$532,0000         \$532,0000         \$533,0000         \$533,0000         \$533,0000         \$533,0000         \$533,0000         \$533,0000         \$530,0000	Matrix House Random Status         EA         4         39,550,000         588,000         589,000         599,000	scription		Unit	Quantity	Unit \$	Material and Labor			Item \$
MITCOL FUES         DOMPONENTS         EA         1         \$250,000         \$250,000         \$250,000         \$50	MITCOLIDUES         EA         1         \$250,000         \$500,	OK         Control         S250,000         S260,000         S2	ASE ANGLE REGULATORS		EA	4	\$9,550,000	\$38,200,000			\$38,200,000
OK AND FENCING         OK AND FENCING         Acres         EA         4         \$560,000 <th< td=""><td>DCK AND FERDICING         Acres         EA         12         \$50,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$61,000</td><td>CKAND FERVICING       Areas       EA       12       \$500000</td><td>DNTROL HOUSE AND COMPONENTS</td><td></td><td>EA</td><td>-</td><td>\$250,000</td><td>\$250,000</td><td></td><td></td><td>\$250,000</td></th<>	DCK AND FERDICING         Acres         EA         12         \$50,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$60,000         \$61,000	CKAND FERVICING       Areas       EA       12       \$500000	DNTROL HOUSE AND COMPONENTS		EA	-	\$250,000	\$250,000			\$250,000
Key Circlo III REFAKERS (4 additional in above)         EA         4         \$260,000         \$10,000	Bit CHRCUTT In REAKKERS (4 additional in above)         E         4         \$260,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,040,000         \$1,000	BENC IRCUIT BREAKERS (4 additional)         EA         4         \$250,000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$51,0000         \$50,000	DCK AND FENCING	Acres	EA	12	\$50,000	\$600,000			\$600,000
GKV DIFCUMETERING COMBO UNIT         SET         4         \$56,000	Struct Inferrence       Set       4       \$56,000       \$260,000       \$60,000	Bit     4     \$55,000     \$250,000     \$56,000     \$	5KV CIRCUIT BREAKERS (4 additional in above)		EA	4	\$260,000	\$1,040,000			\$1,040,000
Bit Notest         Set of the state of	Site Struct       Set       4       \$4,000       \$16,000 <t< td=""><td>Rest     SET     4     \$4000     \$16000     \$16000     \$16000     \$16000     \$16000     \$16000     \$160000     \$160000     \$1600000     \$1600000     \$16000000000000000000000000000000000000</td><td>5KV PT/CT METERING COMBO UNIT</td><td></td><td>SET</td><td>4</td><td>\$65,000</td><td>\$260,000</td><td></td><td></td><td>\$260,000</td></t<>	Rest     SET     4     \$4000     \$16000     \$16000     \$16000     \$16000     \$16000     \$16000     \$160000     \$160000     \$1600000     \$1600000     \$16000000000000000000000000000000000000	5KV PT/CT METERING COMBO UNIT		SET	4	\$65,000	\$260,000			\$260,000
ATION SERVICE TRANSFORMER         EA         1         \$40,000	ATION SERVICE TRANSFORMER         EA         1         \$40,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000         \$41,000	ATION SERVICE TRANSFORMER         EA         1         \$40,000         \$41,396,600	5KV SURGE ARRESTORS		SET	4	\$4,000	\$16,000			\$16,000
Bit Not Disconnect SwrtrCH         SET         8         \$50,000         \$400,000	BitV DISCONNECT SWITCH         SET         8         \$500,000         \$400,000	Bit         Discrimination         Set	ATION SERVICE TRANSFORMER		EA	-	\$40,000	\$40,000			\$40,000
Kit         District Seme included above)         FT         5000         \$300,000         \$3130,600         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         \$313,61,000         <	SKN BUS (some included above)       FT       5000       \$600       \$300,000	SKV BUS (some included above)       F1       5000       \$500       \$300,000	5KV DISCONNECT SWITCH		SET	∞	\$50,000	\$400,000			\$400,000
NOR MATERIAL         10%         1         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$241,396,600         \$241,396,600         \$241,396,600         \$241,396,600         \$241,396,600         \$241,396,600         \$241,396,600         \$241,306,600         \$240,000         \$256,000         \$	NOR MATERIAL     10%     1     x530,600     \$290,600     \$290,600       Rel Substition Cost     still     \$41,396,600     \$41,396,600       lest Substition Cost     \$41,396,600     \$41,396,600       lest Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and fiscomect suitches and connecting buswork.     \$41,396,600       rtrol wing and protection; PST paralleling control scheme, and station arbors are also included.     \$41,396,600     \$41,396,600       rtrol hous and Components includes SCADARTU equipment, installed, including costs for bypass breakers and fiscomect suitches and connecting buswork.     \$41,396,600       rtrol hous and Components includes SCADARTU equipment, assuming fiber optic communication system or equivalent, to enable control as directed by troot paration to the NYSO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all troot paration to the NYSO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all troot paration of the data telecommunications will be in full compliance with all troot parations of the data telecommunication system or equivalent, to enable control as directed by troot paration of the data telecommunication system or equivalent, to enable control control science.     \$41,396,000       Rel Onto     Rate Unit     Rate Unit     Material     Material     Material       ISO And Construction     And Construction     And Nous     Sado,000     Sado,000       Sci Edion     Sado,000	NOR MATERIAL         10%         1         \$290,600         \$290,600         \$290,600         \$290,600         \$290,600         \$241,396,000         \$231,410,000         \$234,410,000	5KV BUS (some included above)		Ŀ	5000	\$60	\$300,000			\$300,000
Items       \$41,396,600       \$41,396,600       \$41,396,600         Items: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and cisconnect switches and connecting bus/ort/.       \$41,396,600       \$41,396,600         Items: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and cisconnect switches and connecting bus/ort/.       \$41,396,600       \$41,396,600         Items: Vendor estimate for PARs and other equipment, astarina abors are also included.       Items: and station arbors are also included.       \$41,396,600         Items: Total dependents information to the NYISO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all iso, NEC, and FERC requirements.       Items is a station of the data telecommunications will be in full compliance with all iso.         ISO, NERC, and FERC requirements.       Aare Unit       Quantity       Unit \$\$       Material       Material       Items \$\$         Inscription       A 0%       Vrs       2       \$3,410,000       \$165,000       \$165,000       \$3,500,000         OILERING       A 0%       Vrs       2       \$3,410,000       \$165,000       \$265,000       \$265,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000	Ial Substation Cost     341,396,600     341,396,600     341,396,600       tes: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and domecting buswork.     \$41,396,600     \$41,396,600       tes: Vendor estimate for PARs and other equipment, installed, including costs for an early of including.     \$41,396,600     \$41,396,600       tes: Vendor estimate for PARs and other equipment, installed, including costs for an early of included.     \$41,306,600     \$41,306,600       tes: Vendor estimate for PARs and other equipment, installed included science and components included SCADARTU equipment, assuming fiber optic communication system or equivalent, to enable control as directed by ISO, NERC, and FERC requirements.     \$41,000     \$41,000       TSO, NERC, and FERC requirements.     Anternal     Man Hours     \$3,410,000     \$13,440,000       ISO ENDINE     Anton     Anton     Anton     \$3,410,000     \$15,600     \$15,600       OBIECTION     Anton     Anton     Anton     \$3,410,000     \$16,600     \$15,600     \$15,600       ONEERING     Cal Anton     Anton     Anton     \$3,410,000     \$15,600     \$15,600     \$16,6000       ONEERING     Cal Anton     Anton     S3,410,000     \$16,600     \$16,600     \$16,600       ONEERING     Cal Anton     Anton     \$3,410,000     \$16,600     \$16,6000     \$16,600       ONEERIN	Ial Substation Cost     \$41,396,600     \$41,396,600     \$41,396,600       It with grant protection: PST paralleding control storms and station and brance of the paralleding control storms.     \$41,396,600     \$41,396,600       It with grant protection: PST paralleding control storms.     Installed, including construction     \$41,396,600     \$41,396,600       It with grant protection: PST paralleding control storms.     Installed, includies SCADARTU equipment, assuming ther optic communication system or equivalent, to enable control as directed by TSO, and EERC requirements.     Ath 200,000     \$41,300,000       ISO, NERC, and FERC requirements.     Other Engineering, Procurement, Construction     Ath 400,000     \$3410,000     \$3410,000       ISO, NERC, and FERC requirement. Construction     Ath 75     2     \$3,410,000     \$3410,000     \$3460,000       ISO, NERC, and FERC requirement. Construction     Ath 70     Nan Hours     \$3,410,000     \$340,000       ISO, NERC, and construction     Ath 70     Nan Hours     \$3,410,000     \$3,410,000       ISO, ISO, ISO, ATH Construction     Ath 70     \$3,410,000     \$3,410,000     \$3,410,000       ISO, ISO, ISO, ATH ALLEY     Ath 70     \$3,410,000     \$3,65,000     \$3,65,000       ISO, ISO, ISO, ISO, ATH ALLEY     Ath 70     \$3,410,000     \$3,66,000     \$3,66,000       ISO, ISO, ISO, ISO, ISO, ISO, ISO, ISO,	NOR MATERIAL	10%		-		\$290,600			\$290,600
tes: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and disconnect switches and connecting buswork. Item virtual and protection: PST paralleling control scheme:, and station arbors are also included. Item of House and the new NANKTU equipment, assuming there optic communication system or equivalent, to enable control as directed by ISO and to provide status information to the NYISO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all ISO, NERC, and FERC requirements.  ISO and to provide status information to the NYISO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all ISO, NERC, and FERC requirements.  ISO, NERC, and FERC requirements.  Other Engineering, Procurement, Construction  Other Engineering, Procurement, Construction  Other Engineering, Procurement, Construction  State 1000  State 1000  Diffic ATION  State 100  State 1000  Diffic ATION  State 100  Diffic ATION  State 100  State 1000  Diffic ATION  State 100  State 1000  Diffic ATION  State 100  State 100  S	tes: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and disconnect switches and connecting buswork. Intol wining and protection: PST paralleling control scheme, and station arbors are also included. Intol wining and protection: PST paralleling control scheme, and station arbors are also included. TSO and top provide status includes SCADARTU equipment, assuming fiber optic communication system or equivalent, to enable control as directed by TSO and top provide status includes SCADARTU equipment, assuming fiber optic communication system or equivalent, to enable control as directed by TSO NERC, and FERC requirements. TSO NERC, and FERC requirement, <b>Construction</b> A10% Yrs 2, 3,410,000 B1000 S186,000 CALATION Scription CELATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0, 10,000 S186,000 TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0, 10,000 S186,000 TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0, 10,000 S186,000 TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0,000 S186,000 TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0,000 S186,000 TALETION TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0,000 S186,000 TOPECATIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0,000 S186,000 TALETION TALETION TOTAL Engineering, Procurement, Construction Costs and Other Engineering, Procurement, Construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars. TALETIONS AT LEEDS, ATHENS, PLEASANT VALLEY 0,000 TOPECATIONS AT LEEDS, ATHENCEATION 0,000 TOPECATI	tes: Vendor estimate for PARs and other equipment, installed, including costs for bypass breakers and disconnect switches and connecting buswork. Introl House and Components includes SCADARTU equipment, assuming fiber optic communication system or equivalent, to enable control as directed by ISO and to provide status information to the NYISO and connecting utilities. Design and operation of the data telecommunications will be in full compliance with all ISO, NERC, and FERC requirements. <u>Other Engineering, Procurement, Construction restring, Restring Restring, Restring, Restring Restring, Restring Restring, Restring Restring, Restring Restring, Procurement, Construction Restring, Restring Restring, Restr</u>	tal Substation Cost					\$41,396,600			\$41,396,600
Instrumenting, Frounding in the construction         Rate         Unit         Material         Man Hours         Labor \$         Item \$           CATOTION         A:0%         Yrs         2         \$33,410,000         \$33,40000         \$33,440,000         \$34,40,000         \$34,40,000         \$34,40,000         \$35,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$34,40,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,410,000         \$33,6000         \$365,000         \$365,000         \$365,000         \$365,000         \$365,000         \$365,000         \$365,000         \$365,000         \$365,000         \$360,000         \$360,000         \$360,000         \$360,000         \$360,000         \$360,000         \$360,000         \$360,000         \$360,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000         \$366,000	International construction       Rate       Unit       Material       Man Hours       Labor \$       Item \$         ScalaTion       4.0%       Yrs       2       \$33,410,000       \$33,000       \$33,440,000         ICINEERING       4.0%       Yrs       2       \$33,410,000       \$33,000       \$33,440,000         ICINEERING       Annow       4.0%       Yrs       2       \$33,410,000       \$33,000       \$33,440,000         ICINEERING       Annow       Annow       \$33,410,000       \$33,410,000       \$33,440,000       \$33,440,000       \$33,440,000         ICINEERING       Annow       Annow       \$33,410,000       \$33,410,000       \$33,440,000       \$35,65,000       \$35,66,000       \$35,65,000       \$35,65,000       \$35,65,000       \$35,65,000       \$35,65,000       \$35,65,000       \$35,66,000       \$35,65,000       \$35,66,000<	Instruction         Rate         Unit         Material         Man Hours         Labor \$         Item \$           CALATION         4.0%         Yrs         2         \$3,410,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,567,000         \$3,567,000         \$3,567,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,570,000         \$3,56,000         \$3,570,000         \$3,56,000         \$3,56,000         \$3,570,000         \$3,56,000         \$3,	bos Continue Decomments Constant	Other	Engin	leering, F	Procureme	nt, Construction	<u> </u>		
Scription         Rate         Unit         Quantity         Unit \$         Material         Man Hours         Labor \$         Item \$           CALATION         4.0%         Yrs         2         \$3,410,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$165,000         \$160,000         \$16,000         \$16,000	scriptionRateUnitUnitMaterialMan HoursLabor \$Item \$CALATION4.0%Yrs2\$3,410,000\$3,440,000\$3,440,000\$3,440,000IGINEERING0.01\$3,410,000\$3,410,000\$36,000\$165,000\$165,000\$265,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$36,000\$36,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$165,000\$36,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$36,000\$36,000\$36,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$36,000\$36,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$36,000\$36,000DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY\$3,410,000\$36,000\$36,000\$36,000Difersering, Procurement, Construction<	Scription         Rate         Unit         Quantity         Unit         Material         Man Hours         Labor         Item \$           CALATION         4.0%         Yrs         2         0.0         \$3,410,000         \$3,440,000         \$3,410,000         \$3,440,000         \$3,410,000	her Engineering, Procurement, Construction								
CalaTION         CalaTION         CalaTION         CalaTION         4.0%         Yrs         2         \$3,410,000         \$3,440,000         \$3,440,000         \$165,000         \$160,000         \$160,000         \$160,	ICALATION         AI         0%         Yrs         2         \$3,410,000         \$30,400,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,56,000         \$3,56,000         \$3,56,000         \$3,56,000         \$3,56,000         \$3,56,000         \$3,570,000	ICALATION         4.0%         Yrs         2         \$3,410,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,440,000         \$3,65,00	scription	Rate	Unit	Quantity	Unit \$	Material	Man Hours	Labor \$	Item \$
IGINEERING       IGINEERING       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$265,000	IGINE FRING       ICINE FING       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$265,000	IGINERING       ICINERING       \$165,000       \$165,000       \$165,000       \$165,000       \$165,000       \$265,000       <	CALATION	4.0%	Yrs	2		\$3,410,000		\$30,000	\$3,440,000
DDIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY       \$265,000       \$265,000         tal Other Engineering, Procurement, Construction Costs       \$3,410,000       \$3,410,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$3,60,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$460,000       \$3,870,000         test: Escalations to the protection and communication systems at the remote end substations.       \$3,410,000       \$45,150,000       \$46,000,000         b-Total Engineering, Procurement, Construction       man Hours       Labor \$       Item \$         gineering, Procurement, Construction       \$45,150,000       \$46,000,000       \$46,000,000	DDIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY       \$265,000       \$265,000         tal Other Engineering, Procurement, Construction Costs       \$3,410,000       \$3,410,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$3,60,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$46,000       \$3,870,000         test: Escalations to the protection and communication systems at the remote end substations:       \$3,410,000       \$3,410,000       \$3,410,000       \$45,150,000         b-Total Engineering, Procurement, Construction       Material       Man Hours       Labor \$       Item \$         berring, Procurement, Construction       \$45,150,000       \$46,000,000       \$46,000,000       \$46,000,000	DIFICATIONS AT LEEDS, ATHENS, PLEASANT VALLEY       \$265,000       \$265,000       \$265,000         tal Other Engineering, Procurement, Construction Of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$460,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$460,000       \$3,870,000         test: Escalation of all materials and construction systems at the remote end substations.       Sub-Total Engineering, Procurement, Construction       \$45,150,000       \$46,000,000         b-Total Engineering, Procurement, Construction       Material       Man Hours       Labor \$ 856,000       \$46,000,000         gineering, Procurement, Construction       545,150,000       \$45,150,000       \$46,000,000       \$46,000,000	GINEERING							\$165,000	\$165,000
tal Other Engineering, Procurement, Construction Costs        \$3,410,000       \$3,370,000       \$3,370,000         tes: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$3,60,000       \$3,370,000         tes: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$460,000       \$3,870,000         udes modifications to the protection and communication systems at the remote end substations.       Sub-Total Engineering, Procurement, Construction       \$46,000,000       \$46,000,000         b-Total Engineering, Procurement, Construction       man Hours       Labor \$       Item \$         gineering, Procurement, Construction       tetn \$       \$45,150,000       \$46,000,000	tal Other Engineering, Procurement, Construction Costs       i       \$3,410,000       \$3,470,000       \$3,870,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       \$460,000       \$3,870,000       \$3,870,000         test: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.       Sub-Total Engineering, Procurement, Construction       \$46,000       \$3,870,000         b-Total Engineering, Procurement, Construction       Material       Man Hours       Labor \$       Item \$         gineering, Procurement, Construction       material       Man Hours       \$45,150,000       \$46,000,000	Image: Intercent in the image of the second of the second construction of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.         Image: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.         Image: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars.         Image: Escalation of all material material       Material       Material       Material       Item \$         Image: Escalation of all material material       Image: Escalation       Material       Man Hours       Item \$         Image: Endineering, Procurement, Construction       Image: Escalation       \$45,150,000       \$46,000,000       \$46,000,000         Image: Endineering, Procurement, Construction       Image: Escalation       Image: Escalation       \$45,150,000       \$46,000,000	<b>JDIFICATIONS AT LEEDS, ATHENS, PLEASANT V</b>	ALLEY				_		\$265,000	\$265,000
tes: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars. Indee modifications to the protection and communication systems at the remote end substations. Sub-Total Engineering, Procurement, Construction	tes: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars. Indee modifications to the protection and communication systems at the remote end substations. <b>Sub-Total Engineering, Procurement, Construction</b> <b>b-Total Engineering, Procurement, Construction</b> <b>defineering, Procurement, Construction</b> <b>gineering, Procurement, Construction</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b> <b>station</b>	tes: Escalation of all materials and construction of structures, conductor, substation at a rate of 4.0% from current 2010 dollars to average year of construction dollars. Index modifications to the protection and communication systems at the remote end substations. Sub-Total Engineering, Procurement, Construction b-Total Engineering, Procurement, Construction gineering, Procurement, Construction Sub-Total Engineering, Procurement, Construction Construct	tal Other Engineering, Procurement, Construction	n Costs				\$3,410,000		\$460,000	\$3,870,000
Sub-Total Engineering, Procurement, Construction         b-Total Engineering, Procurement, Construction       Material         b-Total Engineering, Procurement, Construction       Material         gineering, Procurement, Construction       Material         gineering, Procurement, Construction       \$45,150,000	Sub-Total Engineering, Procurement, Construction         b-Total Engineering, Procurement, Construction       Sub-Total Engineering, Procurement, Construction         gineering, Procurement, Construction       Material       Man Hours       Labor \$ 46,000,000	Sub-Total Engineering, Procurement, Construction         b-Total Engineering, Procurement, Construction       Sub-Total Engineering         b-Total Engineering, Procurement, Construction       Material       Man Hours       Labor \$ 16,000,000         gineering, Procurement, Construction       1       \$45,150,000       \$46,000,000       \$46,000,000         Labor Struction       1       245,150,000       Accountered and the struction       Struction       Struction       Struction	tes: Escalation of all materials and construction of st ludes modifications to the protection and communica	tructures, o ation systen	onduct ıs at th	tor, substati ie remote e	on at a rate or nd substation	f 4.0% from current 201 s.	0 dollars to avera	ige year of construc	tion dollars.
b-Total Engineering, Procurement, Construction b-Total Engineering, Procurement, Construction between the state of the sta	b-Total Engineering, Procurement, Construction b-Total Engineering, Procurement, Construction between the state of the sta	b-Total Engineering, Procurement, Construction b Marcial Man Hours Labor \$ Item \$ affine times and the statement, Construction 5850,000 \$45,150,000 \$45,150,000 \$46,000,000 b \$46,000,000 b b b b b b b b b b b b b b b b		Sub-Tota	l Eng	lineering	, Procurem	ent, Construction			
gineering, Procurement, Construction	gineering, Procurement, Construction     Material Man Hours Labor \$ Item \$ 45,150,000   845,150,000   \$46,000,000   \$ 46,000,000   \$ 46,000,000   \$ 45,0000,	gineering, Procurement, Construction         Image of the state	b-Total Engineering, Procurement, Construction								
gineering, Procurement, Construction \$45,150,000 \$45,150,000 \$46,000,000 \$46,000,000	gineering, Procurement, Construction \$46,000,000 \$45,150,000 \$46,000,000	gineering, Procurement, Construction           \$45,150,000   \$850,000   \$46,000,000 Land Development Costs						Material	Man Hours	Labor \$	Item \$
		Land Development Costs	gineering, Procurement, Construction		-			\$45,150,000		\$850,000	\$46,000,000

Land Development Description CLEARING,RIGHT-OF-WAY, INCLUDES ACCESS SITE PROPERTY TITLE INSURANCE, LEGAL COSTS EASEMENTS Total Land Development Note: Includes site preparation/grading.

Item \$
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\$480,000
\$318,000
\$160,000
\$160,000
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\$1,000,000

Cost \$42,000 \$480,000 \$318,000 \$160,000

Unit \$ \$14,000 \$8,000

Quantity 3 60

Unit Acre Acre \$8,000

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Acre

			Misce	illaneous				
Miscellaneous								
Description		Unit (	Quantity	Unit \$	Material		Labor \$	Item \$
PROJECT MANAGEMENT		Mnth	17	\$25,000			\$425,000	\$425,000
PROJECT DEVELOPMENT & PERMITTING							\$1,500,000	\$1,500,000
OTHER COSTS					\$2,133,000			\$2,133,000
TAXES					\$3,473,000			\$3,473,000
AFUDC					\$6,275,000			\$6,275,000
CONTINGENCY AT 10%					\$5,851,000			\$5,851,000
Total Miscellaneous Cost								\$19,657,000
Note: Taxes includes sales/use tax and mortgage recor	ding tax. /	<b>AFUDC</b>	calculated p	per constructio	n drawdown schedu	le.		

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	Total Project	Description	Total Project	
	Total Project	Description	Total Project	

#### Attachment 5 - Project Financial Requirements Capital Cost Drawdown Schedule All figures in USD 000s unless otherwise indicated

Construction Month #	[period]		1	2	3	4	5	6
Uses of Cash								
Construction Material & Labor	[\$]	\$46,000	\$2,706	\$2,706	\$2,706	\$2,706	\$2,706	\$2,706
Project Management	[\$]	425	25	25	25	25	25	25
Real Estate	[\$]	1,000	1,000	-	-	-	-	-
Development / Permitting	[\$]	1,500	1,500	-	-	-	-	-
Taxes	[\$]	3,473	356	195	195	195	195	195
Other Costs	[\$]	2,133	2,133	-	-	-	-	-
AFUDC	[\$]	6,275	25	61	81	101	121	142
Contingency	[\$]	5,851	789	312	313	315	317	319
Total Uses	[\$]	\$66,657	\$8,534	\$3,298	\$3,320	\$3,342	\$3,364	\$3,386

#### Attachment 5 - Project Financial Requirements Capital Cost Drawdown Schedule All figures in USD 000s unless otherwise indicated

Construction Month #	[period]		7	8	9	10	11	12
Uses of Cash								
Construction Material & Labor	[\$]	\$46,000	\$2,706	\$2,706	\$2,706	\$2,706	\$2,706	\$2,706
Project Management	[\$]	425	25	25	25	25	25	25
Real Estate	[\$]	1,000	-	-	-	-	-	-
Development / Permitting	[\$]	1,500	-	-	-	-	-	-
Taxes	[\$]	3,473	195	195	195	195	195	195
Other Costs	[\$]	2,133	-	-	-	-	-	-
AFUDC	[\$]	6,275	162	183	428	472	515	558
Contingency	[\$]	5,851	321	322	321	319	318	317
Total Uses	[\$]	\$66,657	\$3,408	\$3,430	\$3,675	\$3,717	\$3,759	\$3,800

#### Attachment 5 - Project Financial Requirements Capital Cost Drawdown Schedule All figures in USD 000s unless otherwise indicated

Construction Month #	[period]		13	14	15	16	17
Uses of Cash							
Construction Material & Labor	[\$]	\$46,000	\$2,706	\$2,706	\$2,706	\$2,706	\$2,706
Project Management	[\$]	425	25	25	25	25	25
Real Estate	[\$]	1,000	-	-	-	-	-
Development / Permitting	[\$]	1,500	-	-	-	-	-
Taxes	[\$]	3,473	195	195	195	195	195
Other Costs	[\$]	2,133	-	-	-	-	-
AFUDC	[\$]	6,275	600	643	686	728	770
Contingency	[\$]	5,851	316	315	314	312	311
Total Uses	[\$]	\$66,657	\$3,842	\$3,884	\$3,925	\$3,966	\$4,007

#### **Revenue Calculations**

Calculations			
Rate Base		[\$	] 66,657
WACC Calculat	ion		
	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

Operations Year #	[period]	1	2	3	4	5	6	7	8	9	10
Pata Paga											
Opening Rate Base	[\$]	\$66.657	\$64 325	\$61.077	\$57.072	\$55,000	\$52.140	\$40.412	\$46 780	\$44.244	\$41 724
Book Depreciation	[\$]	(2.222)	(2 222)	(2 222)	(2 222)	(2 222)	(2 222)	(2 222)	(2 222)	(2 222)	(2 222)
Deferred Taxes	[\$]	(110)	(1,026)	(2,222)	(751)	(628)	(515)	(411)	(2,222)	(208)	(208)
Closing Rate Base	[\$]	\$64,325	\$61,077	\$57,972	\$55,000	\$52,149	\$49,412	\$46,780	\$44,244	\$41,724	\$39,204
Equity / Total Capitalization	[%]	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Allowed ROE Rate	[%]	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Allowed ROE	[\$]	\$4,830	\$4,624	\$4,390	\$4,166	\$3,951	\$3,745	\$3,547	\$3,356	\$3,170	\$2,984
Interest Expense	[\$]	\$2,213	\$2,132	\$2,052	\$1,971	\$1,891	\$1,810	\$1,730	\$1,649	\$1,569	\$1,488
Depreciation	[\$]	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222
Revenue Requirement	[\$]	\$9,264	\$8,978	\$8,664	\$8,359	\$8,064	\$7,777	\$7,499	\$7,228	\$6,961	\$6,695
Taxes											
Book Income Taxes	[\$]	3,169	3,034	2,880	2,733	2,592	2,457	2,327	2,202	2,080	1,958
Trad'l Utility Ratemaking	[\$]	12,433	12,012	11,543	11,092	10,656	10,234	9,826	9,430	9,041	8,652
O&M Costs											
Operating Costs	[\$]	\$200	\$1,066	\$1,082	\$1,098	\$1,114	\$1,131	\$1,148	\$1,165	\$1,183	\$1,201
Property Taxes	[\$]	\$1,207	\$1,146	\$1,088	\$1,032	\$979	\$927	\$878	\$830	\$783	\$736
Total Costs	[\$]	\$1,407	\$2,212	\$2,170	\$2,130	\$2,093	\$2,059	\$2,026	\$1,996	\$1,966	\$1,936
Total Rev. Requirement	[\$]	\$13,840	\$14,224	\$13,713	\$13,222	\$12,749	\$12,293	\$11,852	\$11,425	\$11,006	\$10,589

#### **Revenue Calculations**

Calculations			
Rate Base		[\$	66,657
WACC Calculat	ion		
	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

Operations Year #	[period]	11	12	13	14	15	16	17	18	19	20
Rate Base											
Opening Rate Base	[\$]	\$39.204	\$36.684	\$34,165	\$31.645	\$29,125	\$26.605	\$24.085	\$21,565	\$19.046	\$16.526
Book Depreciation	[\$]	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)
Deferred Taxes	[\$]	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)
Closing Rate Base	[\$]	\$36,684	\$34,165	\$31,645	\$29,125	\$26,605	\$24,085	\$21,565	\$19,046	\$16,526	\$14,006
Equity / Total Capitalization	[%]	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Allowed ROE Rate	[%]	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Allowed ROE	[\$]	\$2,798	\$2,613	\$2,427	\$2,241	\$2,055	\$1,869	\$1,683	\$1,498	\$1,312	\$1,126
Interest Expense	[\$]	\$1,408	\$1,328	\$1,247	\$1,167	\$1,086	\$1,006	\$925	\$845	\$764	\$684
Depreciation	[\$]	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222
Revenue Requirement	[\$]	\$6,428	\$6,162	\$5,896	\$5,629	\$5,363	\$5,097	\$4,831	\$4,564	\$4,298	\$4,032
Taxes											
Book Income Taxes	[\$]	1,836	1,714	1,592	1,470	1,348	1,226	1,104	982	861	739
Trad'l Utility Ratemaking	[\$]	8,264	7,876	7,488	7,100	6,711	6,323	5,935	5,547	5,158	4,770
O&M Costs											
Operating Costs	[\$]	\$1,219	\$1,237	\$1,255	\$1,274	\$1,293	\$1,313	\$1,332	\$1,352	\$1,373	\$1,393
Property Taxes	[\$]	\$689	\$641	\$594	\$547	\$499	\$452	\$405	\$357	\$310	\$263
Total Costs	[\$]	\$1,907	\$1,878	\$1,849	\$1,821	\$1,793	\$1,765	\$1,737	\$1,710	\$1,683	\$1,656
Total Rev. Requirement	[\$]	\$10,171	\$9,754	\$9,337	\$8,920	\$8,504	\$8,088	\$7,672	\$7,257	\$6,841	\$6,426

#### **Revenue Calculations**

Calculations			
Rate Base		[\$	] 66,657
WACC Calcula	tion		
	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

Operations Year #	[period]	21	22	23	24	25	26	27	28	29	30
Rate Base											
Opening Rate Base	[\$]	\$14.006	\$12.075	\$10.734	\$9.392	\$8.050	\$6,708	\$5.367	\$4.025	\$2.683	\$1.342
Book Depreciation	[\$]	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)
Deferred Taxes	[\$]	291	880	880	880	880	880	880	880	880	880
Closing Rate Base	[\$]	\$12,075	\$10,734	\$9,392	\$8,050	\$6,708	\$5,367	\$4,025	\$2,683	\$1,342	(\$0)
Equity / Total Capitalization	[%]	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Allowed ROE Rate	[%]	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Allowed ROE	[\$]	\$962	\$841	\$742	\$643	\$544	\$445	\$346	\$247	\$148	\$49
Interest Expense	[\$]	\$603	\$523	\$443	\$362	\$282	\$201	\$121	\$40	\$0	\$0
Depreciation	[\$]	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222
Revenue Requirement	[\$]	\$3,787	\$3,586	\$3,407	\$3,227	\$3,048	\$2,868	\$2,689	\$2,510	\$2,370	\$2,271
Taxes											
Book Income Taxes	[\$]	631	552	487	422	357	292	227	162	97	32
Trad'l Utility Ratemaking	[\$]	4,418	4,138	3,893	3,649	3,405	3,160	2,916	2,672	2,468	2,304
O&M Costs											
Operating Costs	[\$]	\$1,414	\$1,435	\$1,457	\$1,479	\$1,501	\$1,523	\$1,546	\$1,570	\$1,593	\$1,617
Property Taxes	[\$]	\$227	\$201	\$176	\$151	\$126	\$101	\$76	\$50	\$25	(\$0)
Total Costs	[\$]	\$1,641	\$1,637	\$1,633	\$1,630	\$1,627	\$1,624	\$1,622	\$1,620	\$1,618	\$1,617
	741	00.050	Az ===	A5 507	AE 070	45.000	A 4 505	A.1 500	A 1 000	A 1 000	
i otal kev. Requirement	[\$]	\$6,059	\$5,775	\$5,527	\$5,279	\$5,032	\$4,785	\$4,538	\$4,292	\$4,086	\$3,921

Example Revenue Requirement - Levelized Rates

Calculations			
Rate Base		[\$	] 66,657
WACC Calcula	ation		
Theo oulour	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

Operations Year #	[period]	1	2	3	4	5	6	7	8	9	10
Pate Base											
Opening Rate Base	[\$]	\$66 657	\$64.325	\$61.077	\$57 972	\$55,000	\$52 149	\$49 412	\$46 780	\$44 244	\$41 724
Book Depreciation	[\$]	(2.222)	(2,222)	(2.222)	(2,222)	(2.222)	(2.222)	(2.222)	(2,222)	(2,222)	(2,222)
Deferred Taxes	[\$]	(110)	(1,026)	(883)	(751)	(628)	(515)	(411)	(314)	(298)	(298)
Closing Rate Base	[\$]	\$64,325	\$61,077	\$57,972	\$55,000	\$52,149	\$49,412	\$46,780	\$44,244	\$41,724	\$39,204
Equity / Total Capitalization	[%]	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Allowed ROE Rate	[%]	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Allowed ROE	[\$]	\$4,830	\$4,624	\$4,390	\$4,166	\$3,951	\$3,745	\$3,547	\$3,356	\$3,170	\$2,984
Interest Expense	[\$]	\$2,213	\$2,132	\$2,052	\$1,971	\$1,891	\$1,810	\$1,730	\$1,649	\$1,569	\$1,488
Depreciation	[\$]	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222	2,222
Revenue Requirement	[\$]	\$9,264	\$8,978	\$8,664	\$8,359	\$8,064	\$7,777	\$7,499	\$7,228	\$6,961	\$6,695
Taxos											
Book Income Taxes	[\$]	1,736	1,768	1,800	1,832	1,864	1,896	1,927	1,959	1,991	2,023
Levelized Rates	[\$]	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082
O&M Costs											
Operating Costs	[\$]	\$200	\$1,066	\$1,082	\$1,098	\$1,114	\$1,131	\$1,148	\$1,165	\$1,183	\$1,201
Property Taxes	[\$]	\$1,207	\$1,146	\$1,088	\$1,032	\$979	\$927	\$878	\$830	\$783	\$736
Total Costs	[\$]	\$1,407	\$2,212	\$2,170	\$2,130	\$2,093	\$2,059	\$2,026	\$1,996	\$1,966	\$1,936
Total Rev. Requirement	[\$]	\$10,490	\$11,294	\$11,252	\$11,213	\$11,176	\$11,141	\$11,109	\$11,078	\$11,048	\$11,019

Example Revenue Requirement - Levelized Rates

Calculations			
Rate Base		[\$]	66,657
	-41		
WALL Calcul	ation		
	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

Operations Year #	[period]	11	12	13	14	15	16	17	18	19	20
Data Data											
Rate Base	(¢1	\$30,204	\$26 694	\$24.46E	\$24 G45	¢20.425	\$26.60F	\$24.09F	\$04 EGE	\$10.046	\$16 E06
Opening Rate Base	[\$]	\$39,204	a)0,004	a) (2, 222)	(2,222)	\$Z9,120	\$20,000	\$24,000	¢∠1,000	\$19,040	\$10,520
	[4]	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)	(2,222)
Deterred Taxes	[\$]	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)	(298)
Closing Rate Base	[\$]	\$36,684	\$34,165	\$31,645	\$29,125	\$26,605	\$24,085	\$21,565	\$19,046	\$16,526	\$14,006
Equity / Total Capitalization	[%]	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Allowed ROE Rate	[%]	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Allowed ROE	[\$]	\$2,798	\$2,613	\$2,427	\$2,241	\$2,055	\$1,869	\$1,683	\$1,498	\$1,312	\$1,126
Interest Expense	[\$]	\$1,408	\$1,328	\$1,247	\$1,167	\$1,086	\$1,006	\$925	\$845	\$764	\$684
Depreciation	[\$]	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
Revenue Requirement	[\$]	\$6,428	\$6,162	\$5,896	\$5,629	\$5,363	\$5,097	\$4,831	\$4,564	\$4,298	\$4,032
Taxes											
Book Income Taxes	[\$]	2,055	2,087	2,119	2,151	2,182	2,214	2,246	2,278	2,310	2,342
Levelized Rates	[\$]	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082	9,082
O&M Costs											
Operating Costs	[\$]	\$1,219	\$1,237	\$1,255	\$1,274	\$1,293	\$1,313	\$1,332	\$1,352	\$1,373	\$1,393
Property Taxes	[\$]	\$689	\$641	\$594	\$547	\$499	\$452	\$405	\$357	\$310	\$263
Total Costs	[\$]	\$1,907	\$1,878	\$1,849	\$1,821	\$1,793	\$1,765	\$1,737	\$1,710	\$1,683	\$1,656
Total Rev. Requirement	[\$]	\$10,989	\$10,960	\$10,932	\$10,903	\$10,875	\$10,847	\$10,820	\$10,792	\$10,765	\$10,739

Example Revenue Requirement - Levelized Rates

Calculations			
Rate Base		[\$	66,657
MACC Calaul	ation		
WACC Calcula	ation		
	Marginal Cost	Ratio	Weighted Cost
Debt	7.00%	50.00%	3.50%
Equity	14.75%	50.00%	7.38%
WACC		100.00%	10.88%

\$6,708         \$5,367           (2,222)         (2,222)           880         880           \$5,367         \$4,025           50.00%         50.00%           14.75%         14.75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	7         \$4,025           2)         (2,222)           0         880           5         \$2,683           %         50.00%           %         14.75%           5         \$247           1         \$40           2         2,222           9         \$2,510	\$2,683 (2,222) 880 \$1,342 50.00% 14.75% \$148 \$0 2,222 \$2,370	\$1,342 (2,222) 880 (\$0) 50.00% 14.75% \$49 \$0 2,222 \$2,221
\$6,708         \$5,367           (2,222)         (2,222)           880         880           \$5,367         \$4,025           50.00%         50.00%           14.75%         14.75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	7         \$4,025           2)         (2,222)           0         880           5         \$2,683           %         50.00%           %         14.75%           5         \$247           1         \$40           2         2,222           9         \$2,510	\$2,683 (2,222) 880 \$1,342 50.00% 14.75% \$148 \$0 2,222 \$2,370	\$1,342 (2,222) 880 (\$0) 50.00% 14.75% \$49 \$0 2,222 \$2,221
(2,222)         (2,222)           880         880           55,367         \$4,025           50.00%         50.00%           14.75%         14.75%           \$201         \$121           2,222         2,222           2868         \$2,689	2) (2,222) 0 880 5 \$2,683 % 50.00% % 14.75% 6 \$247 1 \$40 2 2,222 9 \$2,510	(2,222) 880 \$1,342 50.00% 14.75% \$148 \$0 2,222 \$2,370	(2,222) 880 (\$0) 50.00% 14.75% \$49 \$0 2,222 \$2,221
880         880           55,367         \$4,025           50,00%         50,00%           14,75%         14,75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	0         880           5         \$2,683           %         50.00%           %         14.75%           6         \$247           1         \$40           2         2,222           9         \$2,510	880 \$1,342 50.00% 14.75% \$148 \$0 2,222 \$2,370	880 (\$0) 50.00% 14.75% \$49 \$0 2,222 \$2,221
\$5,367         \$4,025           50.00%         50.00%           14.75%         14.75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	\$2,683           %         50.00%           %         14.75%           6         \$247           1         \$40           2         2,222           9         \$2,510	\$1,342 50.00% 14.75% \$148 \$0 2,222 \$2,370	(\$0) 50.00% 14.75% \$49 \$0 2,222 \$2,271
50.00%         50.00%           14.75%         14.75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	%         50.00%           %         14.75%           5         \$247           1         \$40           2         2,222           9         \$2,510	50.00% 14.75% \$148 \$0 <u>2,222</u> <b>\$2,370</b>	50.00% 14.75% \$49 \$0 2,222 <b>\$2,271</b>
14.75%         14.75%           \$445         \$346           \$201         \$121           2,222         2,222           \$2,868         \$2,689	%     14.75%       5     \$247       1     \$40       2     2,222       3     \$2,510	14.75% \$148 \$0 2,222 <b>\$2,370</b>	14.75% \$49 \$0 2,222 <b>\$2,271</b>
\$445 \$346 \$201 \$121 2,222 2,222 \$2,868 \$2,689	6         \$247           1         \$40           2         2,222           9         \$2,510	\$148 \$0 	\$49 \$0 
\$201 \$121 2,222 2,222 \$2,868 \$2,689	1 \$40 2 2,222 9 \$2,510	\$0 2,222 <b>\$2,370</b>	\$0 2,222 <b>\$2,271</b>
2,222 2,222 \$2,868 \$2,689	2 2,222 9 <b>\$2,510</b>	2,222 <b>\$2,370</b>	2,222 <b>\$2,271</b>
\$2,868 \$2,689	\$2,510	\$2,370	\$2,271
2,533 2,565	5 2,597	2,613	2,613
9,082 9,082	2 9,082	9,082	9,082
\$1,523 \$1,546	\$\$1,570	\$1,593	\$1,617
\$101 \$76	6 \$50	\$25	(\$0)
\$1,624 \$1,622	2 \$1,620	\$1,618	\$1,617
10,707 \$10,704	\$10,702	\$10,701	\$10,699
51 51	.523 \$1.54( \$101 \$7 ,624 \$1,622 ,707 \$10,704	,523 \$1,546 \$1,570 \$101 \$76 \$50 ,624 \$1,622 \$1,620 ,707 \$10,704 \$10,702	.523 \$1.546 \$1.570 \$1.593 \$101 \$76 \$50 \$25 .624 \$1.622 \$1.620 \$1.618 .707 \$10,704 \$10,702 \$10,701