

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**ENERGY DIVISION**

**Item 16 I.D. # 5120  
RESOLUTION E-3965  
December 15, 2005**

**R E S O L U T I O N**

Resolution E-3965. San Diego Gas & Electric (SDG&E) Company requests approval of three new renewable resource procurement contracts: SES Solar Two (Stirling), MM Prima Deshecha Energy (Algonquin), and Covanta Otay 3 (Covanta). These contracts are approved without modifications.

By Advice Letter 1727-E. Filed on September 22, 2005.

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**SUMMARY**

**SDG&E's three renewable contracts comply with the Renewable Portfolio Standard (RPS) procurement guidelines and are approved**

SDG&E's request for approval of three renewable resource procurement contracts is granted pursuant to D.04-06-014 and subsequent letter by the CPUC's Executive Director on June 30, 2004. The energy acquired from these contracts will count towards SDG&E's Renewable Portfolio Standard (RPS) requirements.

<b>Generating facility</b>	<b>Type</b>	<b>Term Years</b>	<b>MW Capacity</b>	<b>Location</b>
Stirling	Solar	20	300 - 900	Imperial Valley, CA
Algonquin	Landfill Gas	15	15	Orange County, CA
Covanta	Landfill Gas	20	3.75	San Diego, CA

Deliveries from the power purchase agreements (PPAs) are priced below the 2004 market price referent (MPR) and thus do not require supplemental energy payments (SEPs) from the California Energy Commission (CEC).

**Confidential information about the contracts should remain confidential**

This resolution finds that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

**BACKGROUND**

**The RPS Program requires each utility to increase the amount of renewable energy in its portfolio**

The California Renewables Portfolio Standard (RPS) Program was established by Senate Bill 1078, effective January 1, 2003. It requires that a retail seller of electricity such as PG&E purchase a certain percentage of electricity generated by Eligible Renewable Energy Resources (ERR). The RPS program is set out at Public Utilities Code Section 399.11, et seq. Each utility is required to increase its total procurement of ERRs by at least 1% of annual retail sales per year so that 20% of its retail sales are supplied by ERRs by 2017.

The State's Energy Action Plan (EAP) called for acceleration of this RPS goal to reach 20 percent by 2010. This was reiterated again in the Order Instituting Rulemaking (R.04-04-026) issued on April 28, 2004<sup>1</sup>, which encouraged the utilities to procure cost-effective renewable generation in excess of their RPS annual procurement targets (APTs) for 2004, in order to make progress towards the goal expressed in the EAP.

For 2004 the Commission established an APT for each utility, which consists of two separate components: the baseline, representing the amount of renewable generation a utility must retain in its portfolio to continue to satisfy its obligations under the RPS targets of previous years; and the incremental procurement target (IPT), defined as at least one percent of the previous year's total retail electrical sales, including power sold to a utility's customers from its DWR contracts. D.04-06-014 established a 2004 APT for SDG&E of 423 GWh<sup>2</sup>.

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<sup>1</sup> [http://www.cpuc.ca.gov/Published/Final\\_decision/36206.htm](http://www.cpuc.ca.gov/Published/Final_decision/36206.htm)

<sup>2</sup> D.04-06-014, Appendix B (pg. 5)

### **R.04-04-026 established procurement guidelines for the RPS Program**

The Commission has issued a series of decisions that establish the regulatory and transactional parameters of the utility renewables procurement program. On June 19, 2003, the Commission issued its "Order Initiating Implementation of the Senate Bill 1078 Renewable Portfolio Standard Program," D.03-06-071. On June 9, 2004, the Commission adopted its Market Price Referent methodology<sup>3</sup> for determining the Utility's share of the RPS seller's bid price, as defined in Public Utilities Code Sections 399.14(a)(2)(A) and 399.15(c). On the same day the Commission adopted standard terms and conditions for RPS power purchase agreements in D.04-06-014 as required by Public Utilities Code Section 399.14(a)(2)(D). Instructions for evaluating the value of each offer to sell products requested in a RPS solicitation were provided in D.04-07-026.

### **SDG&E requests approval of three new renewable energy contracts.**

On September 22, 2005, SDG&E filed AL 17275-E requesting Commission approval of three renewable procurement contracts: Stirling, Algonquin, and Covanta. These PPAs result from SDG&E's July 1, 2004 solicitation for renewable bids, which was authorized by D.04-06-014 and subsequent letter by the Executive Director on June 30, 2004.

The Commission's approval of all 3 PPAs will contribute significantly towards SDG&E's renewable procurement goals. In 2004, the year of this RPS solicitation, SDG&E's incremental procurement target (IPT) was 150 GWh. The PPAs will contribute an incremental aggregate of 743 GWh per year.<sup>4</sup>

### **SDG&E requests final "CPUC Approval" of PPAs**

SDG&E requests the Commission to issue a resolution containing the findings required by the definition of "CPUC Approval" in Appendix A of D.04-06-014 and incorporated in each PPA so that each of SDG&E's contracts for these renewable resources can remain in effect.<sup>5</sup>

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<sup>3</sup> D.04-07-029

<sup>4</sup> The California Energy Commission is responsible for determining the RPS-eligibility of a renewable generator. See Public Utilities Code Sect. 399.12 and CPUC decision D.04-06-014.

<sup>5</sup> As provided by D.04-06-014, the Commission must approve the Agreements and payments to be made thereunder, and find that the procurement will count toward PG&E's RPS procurement obligations, as either incremental procurement or procurement for baseline replenishment in order for an executed RPS PPA to be binding on the parties.

Specifically, SDG&E requests that the Commission issue a resolution that:

1. The agreements in their entirety, including payments to be made by SDG&E, subject to CPUC review of SDG&E's administration of the Agreement.
2. Any procurement pursuant to these agreements are procured from an eligible renewable energy resource for purposes of determining SDG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law;
3. Any procurement pursuant to this Agreement constitutes incremental procurement or procurement for baseline replenishment by SDG&E from an eligible renewable energy resource for purposes of determining SDG&E's compliance with any obligation to increase its total procurement of eligible renewable energy resources that it may have pursuant to the California Renewables Portfolio Standard, CPUC Decision 03-06-071, or other applicable law;
4. The two new MPRs for years 2011 and 2012 as calculated by the Energy Division and SDG&E's calculation of blended MPRs for 2011 and 2012 as shown in Appendix C.

**PG&E's Procurement Review Group participated in review of the contracts**

In D. 02-08-071, the Commission required each utility to establish a "Procurement Review Group" (PRG) whose members, subject to an appropriate non-disclosure agreement, would have the right to consult with the utilities and review the details of:

1. Overall transitional procurement strategy;
2. Proposed procurement processes including, but not limited to, RFO; and
3. Proposed procurement contracts before any of the contracts are submitted to the Commission for expedited review.

The PRG for SDG&E consists of: California Department of Water Resources (DWR), California Energy Commission (CEC), the Commission's Energy Division, Natural Resources Defense Council (NRDC), Union of Concerned Scientists (UCS), Office of Ratepayer Advocates (ORA), and The Utility Reform Network (TURN).

SDG&E provided its PRG with reports on the progress of its 2004 RPS solicitation on several occasions.<sup>6</sup>

- August 26, 2004 - SDG&E presented the results of its July 1, 2004 RPS solicitation.
- February 15, 2005 - SDG&E described the process by which it evaluated the Offers and provided its preliminary Shortlist.
- May 19, 2005 - SDG&E provided a status report on its negotiations with the short-listed bidders.
- July 18, 2005 - SDG&E summarized its recommendations of projects for which it proposed to enter into contracts and the status of negotiations
- September 9, 2005 - SDG&E provided the PRG with an overview of the projects it considered most likely to proceed to final agreement. This presentation included the negotiated terms and conditions of the PPAs.

The PRG members expressed general satisfaction with the manner in which SDG&E arrived at its 2004 RPS shortlist and the resulting PPAs. Specifically, the PRG either supported or did not oppose the approval of the 3 renewable procurement contracts that SDG&E is asking for Commission approval via AL 1727-E. Appendix C provides a summary for each meeting, the major issues discussed, and changes which SDG&E made as a result of the PRG meetings.

Although Energy Division is a member of the PRG, it reserved its conclusions for review and recommendation on the contracts to the resolution process. Energy Division had to review the modifications independently, and allow for a full protest period before concluding its analysis.

## **NOTICE**

Notice of AL 1727-E was made by publication in the Commission's Daily Calendar. SDG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section III-G of General Order 96-A.

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<sup>6</sup> While the Energy Division is a member of the PRG, its representatives did not attend any of the briefings before it had issued the draft 2004 MPR for public comment, which occurred on February 4, 2005.

**PROTESTS**

Advice Letter AL 1727-E was not protested.

**DISCUSSION**

**Description of the projects**

The following table summarizes the substantive features of the PPAs:

<b>Generating Facility</b>	<b>Type</b>	<b>Term Years</b>	<b>Price</b>	<b>MW Capacity</b>	<b>Location</b>
Stirling*	Solar	20	See confidential Appendix-A	300 - 900	Imperial Valley, CA
Algonquin**	Landfill Gas	15		15	Orange County, CA
Covanta	Landfill Gas	20		3.75	San Diego, CA

\*Stirling consists of 3 phases: Phase 1 (300 MW for 20yrs.), Phase 2 - Option (300 MW for 20yrs.) and, Phase 3 - Right of first refusal (300 MW - terms and conditions TBD)

\*\* Algonquin has a 15 year term with a 5 year option to extend.

**PPAs are consistent with SDG&E's CPUC adopted 2004 RPS Plan**

California's RPS statute (SB 1078) requires the Commission to review the results of a renewable energy resource solicitation submitted for approval by a utility. The Commission will then accept or reject proposed PPAs based on their consistency with the utility's approved renewable procurement plan (Plan).<sup>7</sup> SDG&E's 2004 RPS plan was approved on June 28, 2004. As determined by statute, it includes an assessment of supply and demand to determine the optimal mix of renewable generation resources, consideration of compliance flexibility mechanisms established by the Commission, and a bid solicitation setting forth the need for renewable generation of various operational characteristics.<sup>8</sup>

<sup>7</sup> Pub. Util. Code Section 399.14(c)

<sup>8</sup> Pub. Util. Code Section 399.14(a)(3)

The proposed PPAs are consistent with SDG&E's approved 2004 RPS plan because (1) the PPAs fit with identified renewable resource needs and (2) they were achieved through SDG&E's adherence to its Solicitation Protocol, which is the primary component of the 2004 RPS plan.

#### PPAs fit with identified renewable resource needs

In its approved 2004 RPS plan, SDG&E stated that it did not have a preference for a particular product or technology type over the 2005 - 2010 timeframe. In order to meet the 20% renewable target by 2010, SDG&E would require incremental energy deliveries from newly contracted resources at an average rate of approximately 450 GWh per year. The PPAs under consideration propose to deliver about 723 GWh (4.2% IPT) of as-available and peaking renewable generation per year by 2010 and 1371 GWh (7.9% IPT) by 2014.<sup>9</sup> See Appendix D for a detailed discussion of the IPT contribution from the three proposed PPAs.

#### PPA selection consistent with RPS Solicitation Protocol

The proposed PPAs are consistent with the RPS plan because they were achieved through SDG&E's adherence to its Solicitation Protocol.

1. SDG&E generally followed the RPS Solicitation schedule set forth in its Solicitation Protocol, but ultimately, the schedule for concluding negotiations was necessarily extended.
2. SDG&E performed an initial screening process to determine if each bid met the criteria of the RFO. The bids must have been received on time and all bids must have been completed with prices, terms, transmission costs, etc. Bids not received in a timely manner (unless there was a technical difficulty and notification was received by SDG&E prior to the deadline) were disqualified. Once SDG&E had a list of viable projects, SDG&E began to narrow the field of bidders for its short list using the Least-Cost Best-Fit bid evaluation methodology.

A number of the highest-ranked bids, sufficient in number to achieve 20% by 2010, were placed on SDG&E's short list on August 24, 2004 and were presented to

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<sup>9</sup>Increase in GWh between 2010 and 2014 is due to Stirling - Phase 2 (300 MW) coming on-line in 2012.

SDG&E's PRG. On December 13, 2005, SDG&E notified the Commission's Executive Director that it had finalized its shortlist.

### **Bid evaluation process consistent with Least-Cost Best Fit (LCBF) decision**

The LCBF decision<sup>10</sup> directs the utilities to use certain criteria in their bid ranking. It offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence serious negotiations. Much of the bid ranking criteria described in the LCBF decision is incorporated in SDG&E's Solicitation Protocol and is discussed below.

#### Bid Price (with PTC)

SDG&E used the average bid price (\$/MWh) with Production Tax Credits (PTC), if any, as provided by the bidder. SDG&E used the price without PTC if no PTC was given. SDG&E evaluates the bid price and indirect costs, such as the costs to the utility transmission system caused by interconnection of the resource to the grid or integration of the generation into the system-wide electrical system.

#### Consideration of Transmission Adders

In evaluating each bid for the least cost, SDG&E added transmission costs in the one of the following three ways:

1. The transmission costs provided to the bidder by the interconnected utility;
2. The interconnected utilities' cluster study if the project did not provide the transmission costs;
3. Transmission cost studies prepared by SDG&E. If the project was not specifically identified in the cluster study, then transmission costs were included in the project that were in the closest cluster study of the interconnecting utility.

SDG&E evaluated the projects to determine whether they accurately fit into the SDG&E cluster study dated June 23, 2004. They determined that bids received did not fit the portfolio of resources used as the basis for SDG&E's cluster study and decided to perform studies on each bid received. Once the studies were complete the transmission costs were added to each bid pursuant to D.04-06-013. Bidders

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<sup>10</sup> D.04-07-029

who were in the CAISO queue, and had their transmission studies completed by the date of the issued RFO, received priority on transmission upgrades. Although renewable projects were in the CAISO queue, none of the projects had completed interconnection studies.

As explained in its RFO, SDG&E's ability to procure from resources bid from locations in the Imperial Valley area are contingent upon SDG&E successfully being able to license and construct a new 500 kV line from the Imperial Valley area to San Diego by 2010. As such, the PPAs for resources in the Imperial Valley are contingent upon SDG&E providing each seller with a notice to proceed with construction once the conditions precedent related to SDG&E's ability to proceed with construction of a new 500 kV have been met.

Because transmission studies for projects located in the Imperial Irrigation District ("IID") were not available, SDG&E used IID's transmission tariff rate to derive the average transmission wheeling costs for projects located within IID's service territory. The average transmission wheeling costs, if any, was then added to the bidder's price.

### Portfolio Fit

Portfolio fit considers how well an offer variation's features match SDG&E's portfolio needs. SDG&E did not perform a detailed analytical analysis of best-fit and congestion. Given the size of the resources compared to SDG&E's overall portfolio and future needs, SDG&E determined that a detailed analytical analysis was not necessary. The underlying projects are expected to commence deliveries between 2006 and 2012. SDG&E's RPS plan shows that at that time, there is at least moderate need for generation during all periods of the day. Because these deliveries are anticipated to occur at a time when SDG&E is experiencing moderate need, the acceptance of these intermittent deliveries should not result in significant remarketing costs.

In addition, the Stirling project, which is located in Imperial Valley, is contingent upon completion of new transmission. Should new transmission not be constructed in the time necessary to effect delivery of Stirling's project, SDG&E will further evaluate other solutions along with congestion and deliverability risks and make a final determination as to whether to proceed with the PPA at that time.

SDG&E does plan on performing both a full best-fit and congestion analysis as part of its 2005 RFO evaluation process.

### **Consistency with Adopted Standard Terms and Conditions**

The Commission set forth standard terms and conditions to be incorporated into RPS agreements in D.04-06-014. Standard Terms and Conditions identified in Appendix A of that decision as “may not be modified” have not been modified.

During the course of negotiations, the parties identified a need to modify some of the standard terms in order to reach agreement. These terms had all been designated as subject to modification upon request of the bidder in D.04-06-014. See Appendix A for more details.

### **Contract prices are below the 2004 MPR**

The levelized contract price for 2 of the projects do not exceed the 2004 MPR.<sup>11</sup> Furthermore, the contract price payments are below the MPR and *per se* reasonable as measured according to the net present value calculations explained in D.04-06-015 and D.04-07-029. The net present value of the sum of payments to be made under each of the PPAs is less than the net present value of payments that would be made at the market price referent for the anticipated delivery.

One proposed project contemplates commercial operation in years 2011 or 2012. The Commission did not, in its previous Resolution, consider projects with 20 year terms beginning in 2011 or 2012 because these dates were not contemplated by SDG&E at the time the MPRs were initially calculated. Two supplemental MPRs are necessary to provide the project the flexibility to achieve COD in 2011 or 2012. The Energy Division, pursuant to CPUC Code Section 399.15(c), provided SDG&E, via email, with the supplemental MPRs.

SDG&E’s calculation of the blended MPR utilizes the method the Commission adopted in D.04-07-029 issued on July 8, 2004.<sup>12</sup> Blended MPRs for years 2011 and 2012 are based on supplemental MPRs calculated by the Energy Division, which is subject to Commission approval.

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<sup>11</sup> 2004 MPR Resolution E-3942

<sup>12</sup> Finding of Fact #26 and Conclusion of Law #6.

Appendix B demonstrates that the levelized contract payments, which have been adjusted for the appropriate project on-line date, are below the 2004 MPR.

No supplemental energy payments are necessary for the proposed PPAs.

### **Qualitative factors were considered during bid evaluation**

SDG&E considered qualitative factors as required by D.04-07-029. Minority/low-income areas and environmental stewardship were not factors in SDG&E's ranking process because those factors were not applicable to the offers. SDG&E did, however, consider its own service territory and resource diversity in its ranking. Ultimately, qualitative factors did not impact the overall ranking of the bids.

### **PPAs are viable projects**

SDG&E believes that the projects selected are viable because:

#### Project Milestones

Each PPA identifies the agreed upon project milestones, including, interconnection agreement, project financing, construction start and commercial operation deadlines.

#### Financeability of resource

One proposed PPA will not depend on third party financing. For the remaining proposed PPAs, SDG&E believes that the projects selected have a reasonable likelihood of being financed and completed as required by the PPAs and will be available to deliver energy by the guaranteed commercial operation date.

#### Production tax Credit

The existing federal production tax credit, as provided in Section 45 of the Internal Revenue Code of 1986, as amended, would substantially benefit both the buyer and the seller under the PPAs. Two of the projects are expected to make use of either Production Tax Credits ("PTC") or Investment Tax Credit ("ITC"), whichever is applicable.

#### Sponsor's creditworthiness and experience

Each bidder was required to provide credit-related information as part of its bid. SDG&E has reviewed this information and is satisfied that each of the parties to the

PPAs possesses the necessary credit and experience to perform as required by the party's PPA.

### **Confidential information about the contracts should remain confidential**

Certain contract details were filed by SDG&E under confidential seal. Energy Division recommends that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

### **COMMENTS**

"Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding."

All parties in the proceeding have stipulated to reduce the 30-day waiting period required by PU Code section 311(g)(1) to **17 days**. Accordingly, this matter was placed on the Commission's agenda **10 days** prior to the Commission meeting scheduled for December 1, 2005. By stipulation of all parties, comments shall be filed no later than **10 days** following the mailing of this draft resolution.

### **FINDINGS**

1. SDG&E filed Advice Letter 1727-E on September 22, 2005, requesting Commission review and approval of three new renewable energy contracts: Stirling (solar thermal), Algonquin (landfill gas), and Covanta (landfill gas).
2. The RPS Program requires each utility, including SDG&E, to increase the amount of renewable energy in its portfolio to 20 percent by 2017, increasing by a minimum of one percent per year. The Energy Action Plan (EAP) called for acceleration of this goal to reach 20 percent by 2010.
3. Wind energy facilities are RPS-eligible renewable energy resources.

4. D.04-06-014 established a 2004 APT for SDG&E of 150 GWh<sup>13</sup>.
5. D.04-06-014 also directed the utilities to issue renewable RFOs, consistent with their renewable procurement plans, between June 30, 2004 and July 15, 2004.
6. SDG&E issued its RFO on July 1, 2004.
7. D.04-06-014 set forth standard terms and conditions to be incorporated into RPS PPAs.
8. The two supplemental MPRs calculated by Staff and used by SDG&E to derive blended MPRs for 2011 and 2012 are appropriate.
9. Levelized contract prices below the MPR are considered *per se* reasonable as measured according to the net present value calculations explained in D.04-06-015 and D.04-07-029.
10. Blended contract prices below the blended MPR are considered *per se* reasonable as measured according to the net present value calculations explained in D.04-06-015 and D.04-07-029.
11. D.04-07-029 adopted least-cost, best-fit criteria which the utilities must use in their selection process after the RFO has been closed.
12. The Commission required each utility to establish a Procurement Review Group (PRG) to review the utilities' interim procurement needs and strategy, proposed procurement process, and selected contracts.
13. SDG&E briefed its PRG regarding these contracts on August 26, 2004, February 15, 2005, May 19, 2005, July 18, 2005, and on September 9, 2005. The members of SDG&E's PRG either supported or did not oppose the approval of this contract.
14. Certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should not be disclosed. Accordingly, the confidential appendices, marked "[REDACTED]" in the redacted copy, should not be made public upon Commission approval of this resolution.
15. The proposed contract prices are below the 2004 MPRs released in Resolution E-3942.

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<sup>13</sup> D.04-06-014, Appendix B (p. 5)

16. The Commission has reviewed the three proposed contracts and finds them to be consistent with SDG&E's approved 2004 renewable procurement plan.
17. Procurement pursuant to the PPAs is procurement from an eligible renewable energy resource for purposes of determining SDG&E compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.
18. Procurement pursuant to the PPAs constitutes incremental procurement or procurement for baseline replenishment by SDG&E from an eligible renewable energy resource for purposes of determining SDG&E's compliance with any obligation to increase its total procurement of eligible renewable energy resources that it may have pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.
19. Any indirect costs of renewables procurement identified in Section 399.15(a)(2) shall be recovered in rates.
20. AL 1727-E should be approved without modifications.

**THEREFORE IT IS ORDERED THAT:**

1. Advice Letter AL 1727-E is approved without modifications
2. This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on December 15, 2005; the following Commissioners voting favorably thereon:

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STEVE LARSON  
Executive Director

**APPENDIX A - REDACTED**

**APPEXDIX B - REDACTED**

**APPEXDIX C - REDACTED**

**APPEXDIX D - REDACTED**