



# Entergy Services, Inc.

The statements contained in this Appendix are made subject to the Reservation of Rights set forth in the RFP and subject to the terms and acknowledgements set forth in the Proposal Submission Agreement. See Appendix A to RFP- Glossary of Terms for the definitions of capitalized terms used herein.





The statements contained in this Appendix are made subject to the Reservation of Rights set forth in the RFP and subject to the terms and acknowledgements set forth in the Proposal Submission Agreement. See Appendix A to RFP- Glossary of Terms for the definitions of capitalized terms used herein.

# SUMMARY:

ESI's credit evaluation procedures provide for a two step calculation of potential required collateral.

The first step is a calculation of Maximum Supplier Exposure for each Bidder. This value is only communicated inside the credit evaluation team and has no impact on the ranking or selection of proposals.

The second step occurs after the selection of proposals to the primary award list and the secondary award shortlist. At that time ESI will calculate the required collateral requirements, if any, for the selected proposals.

The results of the credit evaluation process are considered to be confidential and proprietary and will not be shared with Bidders, unless ESI is required to do so as further explained in Appendix F, Section 4.

## **PROCESS DESCRIPTION:**

In addition to the Economic Evaluation of the proposals, each proposal will be analyzed to assess potential credit issues by the Credit Factor Evaluator. The credit evaluation seeks to assure that the Bidder's credit situation combined with its proposal to ESI is in compliance with ESI's corporate risk management standards, and that any requirements for additional credit security associated with the proposal (e.g., collateral) are identified.

The primary objective of **ESI**'s credit evaluation is to ensure that ESI receives sufficient credit risk protection from a supplier who is awarded a proposal. For most Transactions, ESI's primary risk is that the supplier fails, for whatever reason, to deliver the power expected under the contract, which would cause ESI to have to replace the Capacity, energy, and Other Associated Electric Products, possibly at higher costs. The risk of higher costs for the replacement energy is driven by uncertainties such as future fuel price changes, market Heat Rate changes and the costs of self-supply options.

To identify this risk, ESI will apply uniform and consistent procedures to evaluate the credit quality of all Bidders, utilizing the expertise of ESI's corporate risk management group. AThe upper limit of a "Maximum Supplier Exposure" by counterparty credit rating applicable to the Entergy Operating Companies is presented in Figure E2-2 for each potential supplier offering proposals in response to this Fall 2004 RFP. This Maximum Supplier Exposure represents the total aggregate exposure to ESI from an individual supplier that will be accepted without additional collateral. This Maximum Supplier Exposure includes exposure from all of that supplier's existing transactions with the Entergy Operating Companies as of the time of the RFP.

After all Bidders have registered, the Credit Factor Evaluator will determine a Maximum Supplier Exposure for each Bidder. This determination will be based upon pre-established criteria that are uniformly applied to all Bidders taking into consideration the Credit Rating (and/or other financial indicators) of each Bidder. For companies that have a Credit Rating established by one or more nationally recognized Credit Rating agencies, the Credit Factor

Evaluator will consider these ratings in conjunction with public financial information to determine the Maximum Supplier Exposure.

Maximum Supplier Exposure will be a function of the supplier's Credit Rating and ESI's assessment of the supplier's financial condition, which may vary over the proposed contract term. For example, a supplier with a Credit Rating of AAA may be assigned a \$100 million exposure limit, regardless of the duration of the proposed contract term, whereas a supplier with non-investment grade credit may be assigned a Maximum Supplier Exposure of \$3 million. In addition, if a supplier's Credit Rating is sufficiently reduced at any time during the delivery term, ESI will have the right to require that additional collateral be provided at that time by the supplier. Conversely, less collateral may be required in the future if the supplier's Credit Rating is improved. Figure E2-2 presents an illustrative table that would be used by ESI's Credit Factor Evaluator in selecting Maximum Supplier Exposure for a Bidder. The Maximum Supplier Exposure determined for each Bidder will not be shared outside the credit evaluation team prior to the decision by the Operating Committee of which proposals to award. The credit rating has no impact on the selection of proposals.

For potential Transactions anticipated under this Fall 2004 RFP, the incremental supplier exposure associated with each proposal on the primary award list or secondary award shortlist will be calculated by comparing the cost of power under a proposal versus the potential replacement cost for that power assuming that that supplier failed to perform. The potential replacement cost will be based upon is initially determined from ESI's forecasted market prices for an equivalent power product in future years, based upon an assessment of forward market price information for power and fuel and expected price or Heat Rate volatility as appropriate to the product. The replacement cost assumptions, see Figure ESI will determine the initial risk exposure of all potential transactions as per Figures E2-1,3 or E2-4. All exposures will be recalculated at least quarterly to account for market movements and the attenuation of time remaining in the contract. This recalculation will be applied uniformly and consistently to all proposals and potential suppliers. equal to the initial exposure adjusted on a 1 for 1 basis for changes in NYMEX Henry Hub natural gas futures over the applicable Delivery Term and for the attenuation of time. If the incremental supplier exposure associated with a proposal exceeds the Maximum Supplier Exposure for a supplier, ESI will require additional collateral if the proposal is selected. The exposure will be recalculated at least quarterly to account for market movements and the attenuation of time remaining in the contract. For limited- and long-term contracts when appropriate, ESI may also net out the expected accounts receivable<sup>1</sup> due from ESI should the master agreement provide for such netting.

Figure E2-1 illustrates how replacement cost assumptions and collateral requirements will be applied for alternative products anticipated under this RFP. These replacement cost assumptions will be applied uniformly and consistently to all proposals and potential suppliers. This includes figure also outlines potential forms of remediation for excess supplier exposure, including other acceptable solutions suggested by Bidders.

If a supplier offers a proposal that will require additional collateral, the supplier will be informed during the negotiation process and asked to provide collateral. If a supplier is unwilling to offer

<sup>&</sup>lt;sup>1</sup> ESI pays monthly Capacity Payment and energy payment in arrears.

See Appendix A to RFP- Glossary of Terms for the definitions of capitalized terms used herein. The statements contained in this Appendix are made subject to the Reservation of Rights set forth in the RFP and subject to the terms and acknowledgements set forth in the Proposal Submission Agreement.

such additional collateral, the proposal may be eliminated from further consideration. ESI reserves the right to consummate Transactions with suppliers unwilling to offer collateral, but will select the proposal only in circumstances when it is clearly superior to similar product offerings even taking that fact into account.

It is possible that a supplier could offer multiple proposals that in the aggregate exceed the Maximum Supplier Exposure established by the Credit Factor Evaluator. Consequently, in the evaluation of the awarded proposals, the cumulative supplier exposure from all proposals in the portfolio will be determined, and provided to the negotiation team.

Although collateral is required from Bidders with exposure exceeding ESI's Maximum Bidder Exposure, the collateral requirement is not a perfect substitute for non-performance. ESI prefers that all counterparties fully perform under their contracts, rather than default and require ESI to exercise its right to the collateral. At the time of default, the collateral may not cover the entire difference between contract price and replacement cost. Additionally, collection of collateral may be costly and time consuming, which in the end results in higher costs for the Entergy Operating Companies. A default by a counterparty will also impede ESI's ability to carry out its planning process. Although ESI may procure replacement energy, it may not be possible to achieve the same price stability, fuel diversity, geographical diversity or other supply objectives that were achieved with the original contract. Notwithstanding the concerns listed above, ESI will calculate the potential collateral requirements as explained in Figure E2-3 and Figure E2-4.

It is ESI's view that the default rate among non-investment grade companies is significantly higher across all time horizons than for investment grade companies. In the selection of the overall supply portfolio, ESI may establish limits for the aggregate amount of exposure that the Entergy Operating Companies have to suppliers with weak Credit Ratings (*e.g.*, total exposure from all suppliers with non-investment grade Credit Ratings may be limited to an overall dollar amount).

- (a.) The credit collateral requirement for Day Ahead MUCCO, Intra-Day Peaking MUCCO, and Dispatchable MUCPA with a Delivery Term of three years will be calculated in two separate tranches. For the first year of the Delivery Term, the credit collateral requirement will be based on an exposure calculation that is based on the first contract year. In the event that pursuant to the terms of the Definitive Agreement, ESI does not elect to terminate such transactions for the second and third years of the Delivery Term for reasons related to the deliverability of the resource, then the credit collateral will be increased to include the credit collateral requirement based on the exposure calculation for the second and third years of the Delivery Term.
- (b.) The credit collateral requirement for the Three-Year Reserve Capacity MUCCO will be based on an exposure calculation that is based on the three year Delivery Term.

(c.) The credit collateral requirement for LD Products will be based on an exposure calculation that is based on the 1- or 3-year Delivery Term as applicable.



# Figure E2-1

# Credit Evaluation - Methodology for Determination of Incremental Supplier Exposure Associated with Proposal and Potential Required Mitigation

Power Purchase Product	Methodology for Performance Exposure Replacement Power Costs	Expected Credit Exposure Issues	Potential forms of Remediation for Excess Supplier Exposure
Multiple-Year Unit Capacity Purchase Agreements; and Multiple-Year Unit Capacity Call Options; and 7 x 16 and 5 x 16 "Into Entergy" Liquidated Damages (LD) Products.	Contract volume replaced at Indicative Forward Heat Rate Curve with allowance for volatility for years 1 – 3. The Indicative Forward Heat Rate Curve is based on Heat Rate volatility for indexed proposals, and also based on fuel price volatility of gas for fixed price proposals. See Figure E2-3.	Exposure from pre- existing transactions with any of the Entergy Operating Companies	<ul> <li>Parental Guaranty</li> <li>Letter of Credit</li> <li>Cash</li> <li>Independent Amount</li> <li>Lien on asset</li> <li>Performance bond</li> </ul>
7 x 8 "Into Entergy" Liquidated Damages (LD) Products.	Contract volume multiplied by stress of proposal price, consistent with S&P liquidity analysis. See Figure E2-4		<ul> <li>Other acceptable solutions suggested by Bidders</li> </ul>

## Figure E2-2 Credit Evaluation – Maximum Un-collateralized Supplier Exposure for Entergy Operating Companies Based Upon Evaluated Credit Rating Class\* (\$millions)

	Bidder Credit Rating				
	AAA thru	A+ thru A-	BBB+ thru	BBB-	Non-
	AA-		BBB		Investment
					Grade
Upper limit	100	100	75	50	3
of Maximum					
Supplier				•	
Exposure					
-		1			

\*The term of the Transaction and the financial condition of the Bidder may impact the Maximum Supplier Exposure.

#### Figure E2-3

# Credit Evaluation - Illustration of Calculation of Performance Risk Exposure for MUCCO, MUCPA, and On-peak (5 x 16, 7 x 16) LD Products

This Figure will be updated in the final Fall 2004 RFP on or about January 5, 2005.



- To calculate MUCCO exposure, look up product in above table and multiply product's exposure by the MW size
- For example, a 500MW Intra-Day Peaking MUCCO with a 3 year term would have an exposure of \$1.5M (500MW x \$3,000/MW)

#### All MUCPA Products and On-Peak (5x16 & 7x16) LD Products

BID HE	AT RATE	EXPOSURE	
Min HR	Max HR	(\$/MW-YR)	
0	6999	\$40,000	
7000	7249	\$30,000	
7250	7499	\$22,000	
7500	7749	\$15,000	
7750	7999	\$11,000	
8000	8999	\$7,500	
9000	9999	\$4,000	
10000	10999	\$2,500	
11000	12999	\$1,500	
13000	n/a	\$500	

- To calculate MUCPA exposure, look up exposure by MUCPA's heat rate in above table and multiply it by term and MW size
- For example, a 500MW unit with a 7200 HR bid for 3 years would have an exposure of \$45M (500MW x 3 years x \$30,000/MW-YR)

• Same process used for on-peak (5x16 & 7x16) LD products



#### Figure E2-4 Credit Evaluation - Illustration of Calculation of Performance Risk Exposure for Off-peak (7 x 8) LD Products

This Figure will be updated in the final Fall 2004 RFP on or about January 5, 2005.

The incremental supplier exposure will be calculated based upon a stressed market move. The analysis assumes that the contract is signed "at-market" and then applies a market price move; up by 30% in year 1 and 20% in years 2 and beyond. The difference in price is considered the exposure per MWh, which is multiplied by the contracted volume.

The example below assumes a 100 MW proposal at \$31.00/MWh for 3 years.

	6/1/05 - 5/31/06	6/1/06 - 5/31/07	6/1/07 - 5/31/08
Into-Entergy Price from Customer to ESI* (\$/MWh)	\$31.00	\$31.00	\$31.00
S&P Stress Rate	<del>30%</del> 15%	20%	20%
Stressed Market Price	<del>\$40.<b>30 \$</b>3</del> 5.65	\$37.20	\$37.20
Net Stress Amount	<del>\$9.30</del> -\$4.65	\$6.20	\$6.20
MW Size	100	100	100
Off-Peak Hours per year	2920	2920	2928
Volume of Off-Peak Energy (MWh)	292,000	292,000	292,800
	<del>\$2,715,600</del>		
Exposure (Net Stress x Volume)	\$1,357,800	\$1,810,400	\$1,815,360
\$6,341,36           TOTAL Summed Exposure         \$4,983,56	0		

\* The contract is assumed to be "At-Market" when it is signed

The required collateral also depends on pre-existing transactions between Bidder and the Entergy Operating Companies. If the Bidder already has a current un-collateralized exposure of \$8MM, overall exposure with the Bidder would be calculated as:

Overall Exposure = \$8MM (previous) + \$45MM (MUCPA example) = \$53MM

From Figure E2-2 <u>maximum</u> un-collateralized exposure for BBB- entity = \$50MM

If company financials support the Entergy Operating Companies extending the maximum \$50MM of open credit with this counterparty, then \$3MM (\$53MM - \$50MM) of additional collateral remediation would be necessary prior to entering into the Transaction.